	Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	**State of West Virginia** **Centralized Request for Proposals** **Info Technology**

Proc Folder: 945310 **Doc Description:** REQUEST FOR PROPOSAL-ENTERPRISE SURVEILLANCE SYSTEM **Proc Type:** Central Master Agreement			**Reason for Modification:**
Date Issued	**Solicitation Closes**	**Solicitation No**	**Version**
2021-11-18	2022-01-18 13:30	CRFP 0511 MIS2200000001	1

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

01/31/22 11:16:06
WV Purchasing Division

VENDOR

Opened to Determine Contents

Vendor Customer Code:

Vendor Name : Sunquest Information Systems, Inc.
Address : 3300 East Sunrise Drive
Tucson, AZ 85718
USA
Street :
City :
State : **Country :**
Principal Contact : Jodee Wagner
Vendor Contact Phone: +1 614 315 6425 **Extension:**

FOR INFORMATION CONTACT THE BUYER
Crystal G Hustead
(304) 558-2402
crystal.g.hustead@wv.gov

Vendor Signature X Jodee Wagner **FEIN#** **DATE** 1/28/2022

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

THE STATE OF WEST VIRGINIA PURCHASING DIVISION FOR THE AGENCY, WEST VIRGINIA DEPARTMENT OF HEALTH AND HUMAN RESOURCES, OFFICE OF MANAGEMENT INFORMATION SERVICES (OMIS), IS SOLICITING PROPOSALS TO ESTABLISH A CONTRACT FOR ENTERPRISE SURVEILLANCE SYSTEM PER THE ATTACHED DOCUMENTS.

QUESTIONS REGARDING THE SOLICITATION MUST BE SUBMITTED IN WRITING TO CRYSTAL.G.HUSTEAD@WV.GOV PRIOR TO THE QUESTION PERIOD DEADLINE CONTAINED IN THE INSTRUCTIONS TO VENDORS SUBMITTING BIDS

ONLINE RESPONSES ARE PROHIBITED FOR THIS SOLICITATION

INVOICE TO	SHIP TO
HEALTH AND HUMAN RESOURCES MANAGEMENT INFORMATION SERVICE ONE DAVIS SQUARE, RM 211 CHARLESTON WV 25301 US	HEALTH AND HUMAN RESOURCES MANAGEMENT INFORMATION SERVICE 321 CAPITOL ST, STE 200 CHARLESTON WV 25301 US

Line	Comm Ln Desc	Qty	Unit of Measure	Unit Price	Total Price
1	Enterprise Surveillance System				

Comm Code	Manufacturer	Specification	Model #
81111511			

Extended Description:
Enterprise Surveillance System

SCHEDULE OF EVENTS

Line	Event	Event Date
1	VENDOR QUESTION DEADLINE	2021-12-28
2	MANDATORY PRE-BID MEETING	2021-12-07

	Document Phase	Document Description	Page 3
MIS2200000001	Final	REQUEST FOR PROPOSAL-ENTERPRISE SURVEILLANCE SYSTEM	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions sunquest

Enterprise Surveillance System
CRFP Number: MIS2200000001
West Virginia Department of Health and Human Resources
Response to Request for Proposal

Original Proposal

Technical Proposal
January 28, 2022

Sunquest Information Systems, Inc.
3300 E. Sunrise Dr.
Tucson, AZ 85718

Contact: Jodee Wagner
Senior Enterprise Account Executive
Direct: 614.315.6425

Email: Jodee.wagner@sunquestinfo.com

Michael Simpson
President, Chief Executive Officer
Sunquest Information Systems, Inc.

Contents

ATTACHMENT B: COVER, VENDOR INFORMATION, EXECUTIVE SUMMARY 7
1. Cover Letter 7
2. Vendor Information 9
2.1. Payment Address 9
2.2 Legal Notice Address..........9
3. Executive Summary Sunquest WorldCare 11
4. Subcontractor Letters 13
5. (SECTION 8): CERTIFICATION AND SIGNATURE PAGE 14
DESIGNATED CONTACT..........14
6. ADDENDUM ACKNOWLEDGEMENT FORM..........15
ATTACHMENT C: VENDOR QUALIFICATIONS AND EXPERIENCE 17
1. Organization Overview 17
1.1. Vendor Overview 17
2. Mandatory Qualifications 18
3. Existing Business Relationships With the State 20
4. Business Disputes..........21
5. References 21
5.1 Vendor (Prime) References Form 21
6. Financial Stability 25
6.1 Dun & Bradstreet (D&B) Ratings..........25
6.2 Financial Capacity 26
ATTACHMENT D: PROJECT ORGANIZATION AND STAFFING APPROACH 27
1. Initial Staffing Plan 27
<Response>..........28
2. Use of State Staff 30
3. Key Staff, Resumes, and References..........33
<Response>..........34
3.1 Resumes..........34
Table 18: Resumes for Proposed Key Staff..........34
3.2 References 39
ATTACHMENT E: INITIAL WORK PLAN 41

ATTACHMENT F: MANDATORY REQUIREMENTS....54
<Response> Please Note this table is also included as Appendix 2 at the end of this document....54
ATTACHMENT G: BUSINESS SPECIFICATIONS APPROACH....66
1. Overview of Business Approach....66
<Response> Detailed Specifications and Mandatory Requirements....70
2. Contact Tracing....71
Contact Tracing Overview....71
<Response> Detailed Specifications and Mandatory Requirements....75
3. Case Investigation and Management....79
Case Investigation Overview....80
<Response> Detailed Specifications and Mandatory Requirements....83
4. Contact and Case Integration....86
Contact and Case Integration Overview....86
<Response> Detailed Specifications and Mandatory Requirements....87
5. Outbreak Management....88
<Response> Detailed Specifications and Mandatory Requirements....91
6. Reporting and Analytics....95
Reporting and Analytics Overview....95
<Response> Detailed Specifications and Mandatory Requirements....98
ATTACHMENT H: TECHNICAL SPECIFICATIONS APPROACH....100
1. <Response> Approach to System Architecture & Integration....100
2. Data Sources, Delivery, and Display....104
<Response> Detailed Specifications and Mandatory Requirements....109
3. Data Quality....111
<Response>....111
<Response> Detailed Specifications and Mandatory Requirements....112
4. Infrastructure....113

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response> Detailed Specifications and Mandatory Requirements 118
5. Security Management 121
<Response> Approach to Security 121
<Response> Detailed Specifications and Mandatory Requirements 129
ATTACHMENT I: IMPLEMENTATION SPECIFICATIONS APPROACH 135
1. Project Management Methodology 135
<Response> 135
<Response> Detailed Specifications and Mandatory Requirements 142
1.1 Work Plan 153
Overview 154
Build 159
Deploy 163
Go-Live 163
Monitor and Control 164
Schedule Control 164
Quality Control 164
Change Control 164
Scope Control 164
Risk & Issues Control 165
Communications Control 165
Project Closure 165
Project Acceptance 165
Project Lessons Learned 166
Project Audit 166
Survey 166
Release Resources 166
1.2 Issue Management 166

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

<Response> 166
1.3 Risk Management 169
Risk Management Activities 170
1.4 Quality Management 175
<Response> 176
1.5 Change Management 180
1.6 Organizational Change Management 185
1.7 Training Approach 187
<Response> Training Approach Summary 188
<Response> Detailed Specifications and Mandatory Requirements 191
2. Implementation Methodology 201
2.1. Requirements Analysis and Solution Design Methodology 202
<Response> 203
2.2. Solution Configuration Methodology 205
<Response> 206
2.3 Data Conversion Strategy, Approach, and Timeline 209
<Response> 209
3. Deployment Methodology 209
<Response> 210
3.1 Implementation/Rollout Planning 210
<Response> 211
3.2 Implementation Methodology and Timeline 211
<Response> 211
3.3 Issues, Challenges, and Risks 212
<Response> 212
3.4 Lessons Learned 213
<Response> 213

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

4. Testing 214
<Response> 216
<Response> Detailed Specifications and Mandatory Requirements 222
ATTACHMENT J: MAINTENANCE AND OPERATIONS SPECIFICATIONS APPROACH 232
1. Operations 232
<Response> Detailed Specifications and Mandatory Requirements 240
2. Solution Backup, Disaster Recovery, and Failover 244
<Response> 244
<Response> Detailed Specifications and Mandatory Requirements 246
ATTACHMENT K: TERMS AND CONDITIONS RESPONSE TEMPLATE 248
1. State Customary Terms and Conditions 248
2. Mandatory Requirements and Terms 249
3. Commercial Materials 250
<Response> 250
4. Exceptions 250
Attachment 1 Detailed Specifications Spreadsheet 265
Attachment 2 Mandtory Requirements Spreadsheet 266

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT B: COVER, VENDOR INFORMATION, EXECUTIVE SUMMARY

1. Cover Letter

January 28, 2022

Crystal Hustead
Buyer
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

Sunquest Information Systems, Inc. ("Sunquest") intends to bid in response to the Request for Proposal (RFP) to West Virginia Department of Health and Human Resources for an Enterprise Surveillance System.

Enclosed you will find the responses to the requirements contained in the RFP and I am confident that you will determine that Sunquest is well-positioned to address and support your operational goals while supporting current and future workflow and industry requirements.

I will be your Sunquest contact, and am the person responsible for the Vendor responses. I will be the person DHHR and Purchasing Division should contact for questions and/or clarifications.

The team and I hope to be given the opportunity to move to the next step in your selection process.

Jodee Wagner, MLT (ASCP)
Senior Enterprise Account Executive
Sunquest Information Systems, Inc.
3300 E. Sunrise Dr.
Tucson, AZ 85718
Phone: 614.315.6425
Email: Jodee.wagner@sunquestinfo.com

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Original Signature of Signatory Authorized to Legally Bind the Company / Date

/ 28 JAN 22

Michael Simpson — Date

Name (Typed or Printed)	Michael Simpson
Title	President, Chief Executive Officer
Company Name	Sunquest Information Systems, Inc.
Physical Address	3300 E. Sunrise Drive, Tucson, Arizona 85718
State of Incorporation	Pennsylvania Corporation

1. All statements and information prepared and submitted in response to this RFP are current, complete, and accurate.
2. The proposed solution for the project meets the requirements of this RFP.
3. The Vendor will comply with all federal and state laws, rules, and regulations that are inforce currently or anytime during the term of a resulting contract.
4. The Vendor understands that proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.
5. The company represented here is an authorized dealer in good standing of the products and services included in this response.
6. The Vendor and its principals are eligible to participate in this transaction and have not been subjected to suspension, debarment, or similar ineligibility determined by any federal, state or local governmental entity; are in compliance with the State's statutes and rules relating to procurement; and are not listed on the federal government's terrorism watch list asdescribed in Executive Order 13224. Entities ineligible for federal procurement are listed at https://www.sam.gov/portal/SAM/#1.
7. Prior to award, the Vendor affirms it will have all current approvals, licenses, or other qualifications needed to conduct business in West Virginia.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

2. Vendor Information

Complete the following information regarding the Vendor's information, including: primary contact for any questions pertaining to the Vendor's payment address to which the
State should send payments under the Contract, legal notice address to which the
State should send legal notices for any potential future agreements, and individuals responsiblefor the Vendor's response.

2.1. Payment Address

In Table 10, the Vendor should provide the address to which the State should send payments.
Complete the following information regarding the Vendor's information, including: primary contact for any questions pertaining to the Vendor's payment address to which the
State should send payments under the Contract, legal notice address to which the
State should send legal notices for any potential future agreements, and individuals responsiblefor the Vendor's response.

Table 10: Payment Information

Payment Information:			
Name:	Sunquest Information Systems	Title:	Accounts Receivable
Address:	Wells Fargo Bank, N.A. 1525 W. WT Harris Blvd.		
City, State and ZIP Code:	Charlotte, NC 28262-8522		
Phone:	520-570-2000	Fax:	
Email:	billingdept@sunquestinfo.com		

<Response> The primary contact for any questions pertaining to Sunquest's payment address is billingdept@sunquestinfo.com.

2.2 Legal Notice Address

In Table 11, the Vendor should provide the name, title, and address to which theState should send legal notices.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

Table 11: Legal Notice Information

Legal Notice Information			
Name:	Anne Rounds	Title:	Director of Client Contracts
Address:	3300 E. Sunrise Drive		
City, State and ZIP Code:	Tucson AZ. 85718		
Phone:	520-570-2681	Fax:	
Email:	Anne.Rounds@sunquestinfo.com		

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

3. Executive Summary Sunquest WorldCare

Sunquest will address the requirements, goals, and visions described by the West Virginia Department of Health and Human Resources with our Commercial off the Shelf solution - the WorldCare EDSS.

For over 20 years, Sunquest has been working closely with public health departments to support their efforts to investigate the incidence of communicable diseases efficiently, trace contacts, track transmission to identify vectors, and proactively prevent outbreaks. Our Sunquest WorldCare Disease Surveillance solution enables Health Departments to implement more effective strategies to promote and protect community health and maintain compliance with public health mandates. In addition, Sunquest has provided Laboratory Diagnostic solutions for 40+ years. We are experts in interoperability and integration between disparate systems.

Sunquest has an in-depth understanding of Electronic Laboratory Reporting (ELR), Electronic Medical Records (EMRs) and health IT standards because of our Laboratory Diagnostic background. This experience in both the Public Health and Laboratory diagnostic realms positions us extremely well to support better integration of Healthcare IT and Communicable Disease systems, which will be needed for the future. Sunquest is proud to have been involved in the CDC Data Modernization Initiative dating back to the release of the Tuberculosis Message Mapping Guide (MMG) v2.0 in 2007.

We recognize the extreme challenges that all health departments have faced throughout the pandemic. From staffing issues, to incredible volume surges of cases and lab records, to IT systems that have failed at the most inopportune times; we have worked hand in hand with existing clients utilizing WorldCare, to ensure that they received the best possible support both in normal times, and in times of dire need such as the COVID pandemic. Clients such at the California Department of Health and Wisconsin Department of Health Services relied upon our solution and resources to meet the extreme challenges brought on by the pandemic. Sunquest has been able to deliver our clients a scalable solution that managed these incredible volumes of cases and new users. Our clients' WorldCare Disease Surveillance solutions withstood all this additional stress to the system and provided uninterrupted availability.

As you will see in this RFP response, Sunquest is proposing a fixed-fee implementation and a 'white glove' approach to address the staffing and resource availability issues that all state health departments are facing. Sunquest will provide all the resources at our availability, to ensure that the West Virginia Department of Health only needs to commit the minimum on people resources as is possible throughout the implementation so staff can focus on pandemic response.

Sunquest can help the West Virginia Department of Health and Human Resources achieve each of their goals and vision laid out in the RFP by implementing the WorldCare Disease Surveillance solution.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest

- The WorldCare Disease Surveillance solution provides the features and functionalities laid out in the RFP that will allow West Virginia to replace each existing disparate system listed within the RFP, including Outbreak Management. We describe each aspect of this in more detail in our full response to RFP.
- As previously referenced, WorldCare is an extremely flexible and scalable solution. This has been proven in concept throughout the COVID pandemic. Our largest client, the California Department of Public Health, is a real-world example of how WorldCare was able to scale up quickly and efficiently to meet the extreme increases in volume and users.
- WorldCare is an extremely configurable solution. It will provide users the ability to streamline and automate workflows, configure reports, add/modify data as required to meet future disease threats, and will provide the tools required to promote electronic reporting. Additional technical details will be provided on how WorldCare will enable users to meet each goal.
- Sunquest as an organization, is an industry leader in interfacing and integration. Specifically, with the WorldCare Disease Surveillance solution, we have integrated with many ancillary vendors and individual IT solutions. We allow our clients to continue to utilize all of the benefits and features of existing IT solutions, and in many cases, enhance this experience with additional benefits of interoperability. An example of this is our work integrating or exchanging data with immunization registries. In the nation of Qatar, we partnered with STC to provide Qatar the integration between systems that was required. In Wisconsin, WorldCare users query the Wisconsin Immunization Registry and populate patient vaccination history through a web service without the need for full systems integration.
- Sunquest will host the WorldCare Electronic Disease Surveillance System (EDSS) in Amazon Web Services secure site(s) and secure secondary geo-redundant site(s) within the continental United States. Software as a Service (SaaS) offers to the State the confidence of vendor-provided services in system maintenance and disaster recovery.
- Sunquest will incorporate all applicable current and future coding standards and formats and legislated or program necessary data and transport requirements to ensure that the WorldCare EDSS remains current in its ability to accept and appropriately employ new standards and requirements as they occur, including and to respond to the changing healthcare environment.

WorldCare was built for specific purpose of Electronic Disease Surveillance and Outbreak Management. The West Virginia Department of Health and Human Resources can be confident that Sunquest will meet the approved Service Level Agreements and Performance standards, and that Sunquest has privacy, security, and auditing policies and procedures to assure the Data Security, Privacy and Confidentiality of West Virginia's data.

We look forward to your review of the RFP, and a potential partnership in the future.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

4. Subcontractor Letters

For each proposed subcontractor, the Vendor should attach to Attachment B: Title Page, Executive Summary, and Subcontractor Letters, a letter from the subcontractor, signed in ink by an authorized signatory legally binding the subcontractor, which includes the following information:

The subcontractor's legal status, federal tax identification number, DUNS number, and principal place of business address.

- The name, phone number, fax number, email address, and mailing address of a personauthorized to legally bind the subcontractor to contractual obligations.
- A description of the work the subcontractor will perform.
- A statement of the subcontractor's commitment to perform the work if the Vendor isselected.
- A statement that the subcontractor has read and understands the RFP, and will complywith the requirements of the RFP.
- A statement that the subcontract will maintain any permits, licenses, and certificationsrequirements to perform its portion of the work.

<Response>

Sunquest does not propose the use of subcontractors. All vendor activities will be performed by Sunquest employees.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

5. (SECTION 8): CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; that I understand the requirements, agree to comply with all mandatory requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for reviewand consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Sunquest Information Systems, Inc.	+1 520 570 2000 /
(Company)	(Contact Phone/Fax Number)
Michael Simpson **President, Chief Executive Officer**	**January 28, 2022**
(Representative Name, Title)	(Date)

Michael Simpson, President, Chief Executive Officer

DESIGNATED CONTACT

The Vendor appoints the individual identified in this section as the Contract Administrator and the initial point of contact for matters relating to this contract.

Jodee Wagner, Senior Enterprise Account Executive	3300 East Sunrise Drive, Tucson, AZ 85718
(Printed Name, Title)	(Address)
+1 614 315 6425	**Jodee.Wagner@sunquestinfo.com**
(Phone Number)/(Fax Number)	(Email Address)

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Department of Administration Purchasing Division
2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130
State of West Virginia Centralized Request for Proposals
Info Technology

6. ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: MIS2200000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below.

Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

[X] Addendum No. 1	[ ] Addendum No. 6
[X] Addendum No. 2	[ ] Addendum No. 7
[ ] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Sunquest Information Systems, Inc.

Company

Authorized Signature: Michael Simpson

28 JAN 2022

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT C: VENDOR QUALIFICATIONS AND EXPERIENCE

1. Organization Overview

This section of the Vendor's Technical Proposal should include details of the Vendor and subcontractor overview. The Vendor's Technical Proposal should include: organization overview, corporate background, Vendor's experience in the public sector, and certifications.

1.1. Vendor Overview

Provide all relevant information regarding the general profile of the Vendor.

Vendors are NOT to change any of the pre-filled cells in the following tables.

Table 12: Vendor Overview

Vendor Overview	
Company Name	Sunquest Information Systems, Inc.
Name of Parent Company (If Applicable)	Roper Technologies, Inc.
Industry (North American Industry Classification System [NAICS])	541512
Type of Legal Entity	Computer Systems Design Services
Company Ownership (e.g., Private/Public, Joint Venture)	Public Corporation
Number of Full-Time Employees	697
Last Fiscal Year Company Revenue	$ 177,383,000
Last Fiscal Year Company Net Income	$ 45,678,442
% of Revenue From State and Local Government Clients in the UnitedStates	5%
% of Revenue From IT Design and Implementation Services	$ 14,346,250
Number of Years in Business	42 years
Number of Years Vendor has been Providing the Type of Services Specified in the RFP	23 years

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Number of Employees Providing the Type of Services Specified in the RFP	Over 70 employees are focused on the Public Health sector
Headquarters in the United States	Tucson, Arizona
Locations in the United States	Calabasas, California

1.2 Subcontractor Overview (if applicable)

<Response> Not Applicable Sunquest does not propose the use of subcontractors. All vendor activities will be performed by Sunquest employees

2. Mandatory Qualifications

This section details the mandatory qualifications. The Vendor must complete this section to demonstrate that it has the experience needed to meet requirements set forth in this RFP. The table below lists each mandatory qualification; the Vendor must note whether it meets the qualification and provide narrative demonstrating fulfillment of the requirement. The Vendor must list each project experience separately and completely every time it is referenced.

Table 14: Mandatory Qualifications

Mandatory Qualification Item(s)	Vendor Meets?		Provide A Brief Narrative To Demonstrate Fulfilment of Requirement
The Vendor must demonstrate experience within the last three (3) years as the prime contractor for at least three (3) federal, state, local government or private healthcare entities where a public health surveillance system is currently being or has been implemented.	**YES**		Sunquest has provided WorldCare solutions and services to health departments in the U.S. and Canada. Currently, the WorldCare Disease Surveillance and Outbreak Management system is deployed and operational for our public health clients: • California - (Dates of Service: 2008 – present) • Wisconsin - (Dates of Service: 2008-Present). • Canadian Province of

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

			Alberta -(Dates of Service: 2010-Present) • County of Los Angeles, CA – Dates of Service: 1999-Present • County of San Diego, CA counties - (Dates of Service: 2003-Present)
The Vendor must demonstrate at least three (3) years' experience in disease surveillance solutions.	**YES**		For twenty-three years, Sunquest Information Systems® has worked very closely with public health departments in the development and deployment of a number of mission critical instantiations of our offered commercial, off the shelf (COTS) communicable disease and environmental surveillance and case management system. We have implemented the WorldCare solution to a client base that includes three U.S. states (California, Wisconsin, and Montana), a Canadian province (Alberta), local jurisdictions in the U.S. (Los Angeles and San Diego Counties), and in Qatar, Queensland, and Australia Capital Territory, Australia. The Sunquest team has gained unrivalled experience in addressing the differing needs of users including field personnel, epidemiologists, case managers, investigators, and other public health stakeholders at the local,

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

			state/provincial and national level. Each module of the suite of software has been engineered in close collaboration with public health professionals to equip them with the most powerful and flexible tools available in meeting their specific needs in various complex local and federal surveillance implementations.
The Vendor must include at least three (3) references from projects performed within the last three (3) years that demonstrate the Vendor's abilityto perform the scope of work described in the RFP. Vendors may only use one (1) reference per project performed. The State strongly prefers three (3) references from different state engagements where a public health disease surveillance system is currently being or has been implemented. Please note, because this item is a mandatory requirement,it will not be scorable.	**YES**		Please see reference forms below.
The Vendor must have at least three (3) years' experience in operating a public health disease surveillance system similar to the State's in compliance with all federal and state regulations.	**YES**		Sunquest has provided public health disease surveillance software for over 20 years.

3. Existing Business Relationships With the State

Describe any existing or recent (within the last five (5) years) business relationships the Vendor or any of its affiliates or proposed Subcontractors have with the State, the State's counties, and/or the State's local municipalities.

<Response>

While Sunquest has done business with hospitals in West Virginia, it has not done business with the State,

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Counties or local municipalities.

4. Business Disputes

Provide details of any disciplinary actions and denote any that are pending litigation or Terminated for Cause or Convenience and associated reasons. Also denote any other administrative actions taken by any jurisdiction or person against the Vendor. List and summarize all judicial or administrative proceedings involving your sourcing activities, claims ofunlawful employment discrimination, and anti-trust suits in which you have been a party within the last five (5) years. If the Vendor is a subsidiary, submit information for all parent companies. If the Vendor uses Subcontractors, associated companies, or consultants that will be involved in any phase of this project, each of these entities will submit this information as part of the response.

<Response>
Business disputes, if any, are confidential, however there are no current business disputes that would impact or hinder Sunquest's ability to deliver the system described in this proposal.

5. References

5.1 Vendor (Prime) References Form

Include at least three (3) references from projects performed within the last three (3) years that demonstrate the Vendor's ability to perform the scope of work described in this RFP. The Vendor should provide three (3) different clients/projects in order to demonstrate its experience.

The Vendor should include a project description, contract dates, and contact information (customer points of contact, addresses, telephone numbers, and email addresses). The Vendor should explain whether it performed the work as a prime contractor or as a subcontractor.

<u>**The Vendor is NOT to change any of the pre-filled cells in the following tables.**</u>

<u>**The Vendor may add additional reference tables as necessary.**</u>

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Table 15: Vendor Reference 1

Vendor Information			
Vendor Name: **Sunquest Information Systems, Inc.**		Contact Name:	Mike Cojanis
		Contact Phone:	520-307-1286
Customer Information			
Customer Organization: **California Department of Public Health**		Contact Name:	Deniz Dominguez
		Contact Title:	Surveillance Program Manager
Customer Address:		Contact Phone:	805-4035594
		Contact Email:	Deniz.dominguez@cdph.ca.gov
Project Information			
Total Vendor Staff:	8		
Project Objectives: Enhance to add new functionality within application			
Project Description: System deployed. Upgrade to newest version of WorldCare			
Vendor's Involvement: Implementation, Project Management, and Training			
Project Benefits: Come into compliance with CDC regulations for Tuberculosis reporting			
Key Personnel			
Name: N/A		Role: N/A	
Name: N/A		Role: N/A	
Project Measurements:			
Estimated one-time costs:		Actual one-time costs:	
Not available at this time.			
Original value of Vendor's contract:		Actual total contract value:	
Not available at this time.			

Estimated Start & Completion Dates:	From:	10/01/21		To:	01/31/22
Actual Start & Completion Dates:	From:	10/01/21		To:	02/19/22
Reason(s) for difference between Estimated and Actual dates: COVID Omicron surge volumes; client decided to push slightly due to internal bandwidth/resource issues					

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

If the Vendor performed the work as a Subcontractor, the Vendor should describe the scope of subcontractedactivities: N/A

Table 15: Vendor Reference 2

Vendor Information			
Vendor Name:		Contact Name:	Mike Cojanis
Sunquest Information Systems, Inc.		Contact Phone:	520-307-1286
Customer Information			
Customer Organization:		Contact Name:	Amy Bittrich
Wisconsin Department of Health		Contact Title:	Surveillance Systems Supervisor
Customer Address:		Contact Phone:	608-261-6857
		Contact Email:	Amy.bittrich@wi.gov
Project Information			
Total Vendor Staff:	10+		
Project Objectives: Establish Contact Tracing software			
Project Description: Implement Contact Tracing solution			
Vendor's Involvement: Provision of software, Implementation, Project Management, Training			
Project Benefits: Enhance departments ability to automate contact tracing workflow			
Key Personnel			
Name: N/A		Role: N/A	
Name: N/A		Role: N/A	
Project Measurements:			
Estimated one-time costs:		Actual one-time costs:	
Reason(s) for change in one-time cost: Not available at this time.			
Original value of Vendor's contract: N/A		Actual total contract value:	
Reason(s) for change in value: N/A			

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Estimated Start & Completion Dates:	From:	09/01/20	To:	12/08/20
Actual Start & Completion Dates:	From:	09/01/20	To:	12/08/20
Reason(s) for difference between Estimated and Actual dates: N/A				
If the Vendor performed the work as a Subcontractor, the Vendor should describe the scope of subcontractedactivities: N/A				

Table 15: Vendor Reference 3

Vendor Information		
Vendor Name:	Contact Name:	Mike Cojanis
Sunquest Information Systems, Inc.	Contact Phone:	520-307-1286
Customer Information		
Customer Organization:	Contact Name:	Jennifer Nelson
County of San Diego Health and Human Services	Contact Title:	Sr. Epidemiologist
Customer Address:	Contact Phone:	619-674-5656
San Diego CA	Contact Email:	Jennifer.nelson2@sdcounty.ca.gov
Project Information		
Total Vendor Staff:	10+	
Project Objectives: Streamline import/export of data		
Project Description: Create Data Warehouse		
Vendor's Involvement: Software, Implementation, Project Management, Training		
Project Benefits: Create efficiencies in ingestion and reporting of data		
Key Personnel		
Name: N/A	Role: N/A	
Name: N/A	Role: N/A	
Project Measurements:		
Estimated one-time costs: N/A	Actual one-time costs: N/A	
Reason(s) for change in one-time cost: Not available at this time.		

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Original value of Vendor's contract: N/A	Actual total contract value: N/A
Reason(s) for change in value: N/A	

Estimated Start & Completion Dates:	From:	4/01/21		To:	11/30/21
Actual Start & Completion Dates:	From:	04/01/21		To:	11/30/21
Reason(s) for difference between Estimated and Actual dates: N/A					

If the Vendor performed the work as a Subcontractor, the Vendor should describe the scope of subcontractedactivities: N/A

5.2 Subcontractor References (if applicable)

If the Vendor's proposal includes the use of subcontractor(s), provide three (3) references for each subcontractor. The State prefers references that demonstrate where the Prime and Subcontractors have worked together in the past. The Vendor may add additional subcontractor reference tables as necessary.

<Response>

Not applicable. Sunquest does not propose the use of subcontractors. All vendor activities will be performed by Sunquest employees

6. Financial Stability

The Vendor should provide the following components for this section:

6.1 Dun & Bradstreet (D&B) Ratings

The Vendor should provide the industry standard D&B ratings that indicate its financial strengthand creditworthiness, assigned to most U.S. and Canadian firms (and some firms of other nationalities) by the U.S. firm D&B. These ratings are based on a firm's worth and composite credit appraisal. Additional information is given in credit reports (published by D&B) that contain the firm's financial statements and credit payment history.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response>

D&B Rating dated 2022: 1R-4

6.2 Financial Capacity

The Vendor should supply evidence of financial stability sufficient to demonstrate reasonable stability and solvency appropriate to the requirements of this procurement.

<Response>

Sunquest Information Systems, Inc. is wholly-owned by Roper Technologies, Inc, which offers a large portfolio of software companies with a strong vision for advancing the health system with technology solutions. Roper was founded in the late 1800s and has been a public company for nearly 30 years.

Roper is a diversified technology company with annual revenues of $5.4 billion. Roper operates businesses that design and develop software (both license and software-as-a-service) and engineered products and solutions for a variety of niche end markets. Our strong operating capabilities enable us to convert end-market potential into profitable growth and cash flow in order to create value for our investors. Roper is a component of the S&P 500, Fortune 1000 and Russell 1000 Indexes and trades on the New York Stock Exchange under the symbol ROP.

In the following table, please list credit references that can verify the financial standing of your company.

Table 17: Credit References

Institution	Address	Phone Number
InterSystems Corporation	One Memorial Drive One Memorial Drive Cambridge, MA. 02142	(617) 621-0600
Tech Data - AVT Technology Solutions LLC	8700 S. Price Rd., Tempe, AZ. 85284	(800) 409-1483
Digi-Trax	650 Heathrow Drive - Lincolnshire, IL 60069-4025	(800) 356-6126
Wells Fargo Bank, NA	150 Fayetteville Street, Suite 600 - Raleigh, NC 27601	

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT D: PROJECT ORGANIZATION AND STAFFING APPROACH

Instructions: The Vendor should employ staffing strategies are to ensure all requirements andservice levels are met to the satisfaction of DHHR. The evaluation of the Vendor's staffing approach shall be based on the ability of the Vendor to satisfy the requirements stated herein. Therefore, the Vendor should present detailed information regarding the expertise of the proposed staff and an Initial Staffing Plan.

For ease of formatting and evaluation, ***Attachment D: Project Organization and Staffing Approach*** provides the required outline for the Vendor's response to staffing. The Vendor's response to the following should not exceed 25 pages, excluding key personnel resumes and theforms provided in this attachment.

Please refer to ***Appendix 3: Staff Qualifications, Experience, and Responsibilities*** of the RFPfor the details pertaining to staff qualifications, experience, and responsibilities.

1. Initial Staffing Plan

As part of the Vendor's bid response, the Vendor should provide an Initial Staffing Plan. In addition to the requirements described in ***Attachment F: Mandatory Requirements*** and ***Appendix 1: Detailed Specifications***, the Vendor's narrative description of its proposed InitialStaffing Plan should include the following:

A succinct description of the Vendor's proposed project team and should exhibit the Vendor's ability and capability to provide knowledgeable, skilled, and experienced personnelto accomplish the scope of work, requirements, and specifications of the ESS as described in this RFP.

A detailed proposal for providing all resources necessary to fulfill the requirements asspecified in this RFP. This includes details covering not only key staff but support staff.

Organization charts for implementation and maintenance stages showing both the Vendorstaff and their relationship to DHHR staff who will be required to support the project. The organization chart should denote all key staff for this project, and a summary of each key member's high-level responsibilities.

A narrative describing tools and processes used to screen available staff to fill positions. In addition, a narrative describing the process for replacing key staff within defined timeframes, and procedures for backfilling key staff during any transition.

Resumes (not to exceed two (2) pages each) for the key staff and support staff members assigned to this project including their licenses, credentials, and experience. DHHR considersthe key staff resumes as a key indicator of the Vendor's understanding of the skill sets required for each staffing area.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

A letter of intent for each proposed staff member not currently employed by the Vendor.Each letter of intent should be signed by the named individual, indicating that the individualis willing to accept employment if the Vendor is awarded the contract.

A description and diagram of the proposed staffing for each phase of the project.

Identification of subcontractor staff, if applicable.

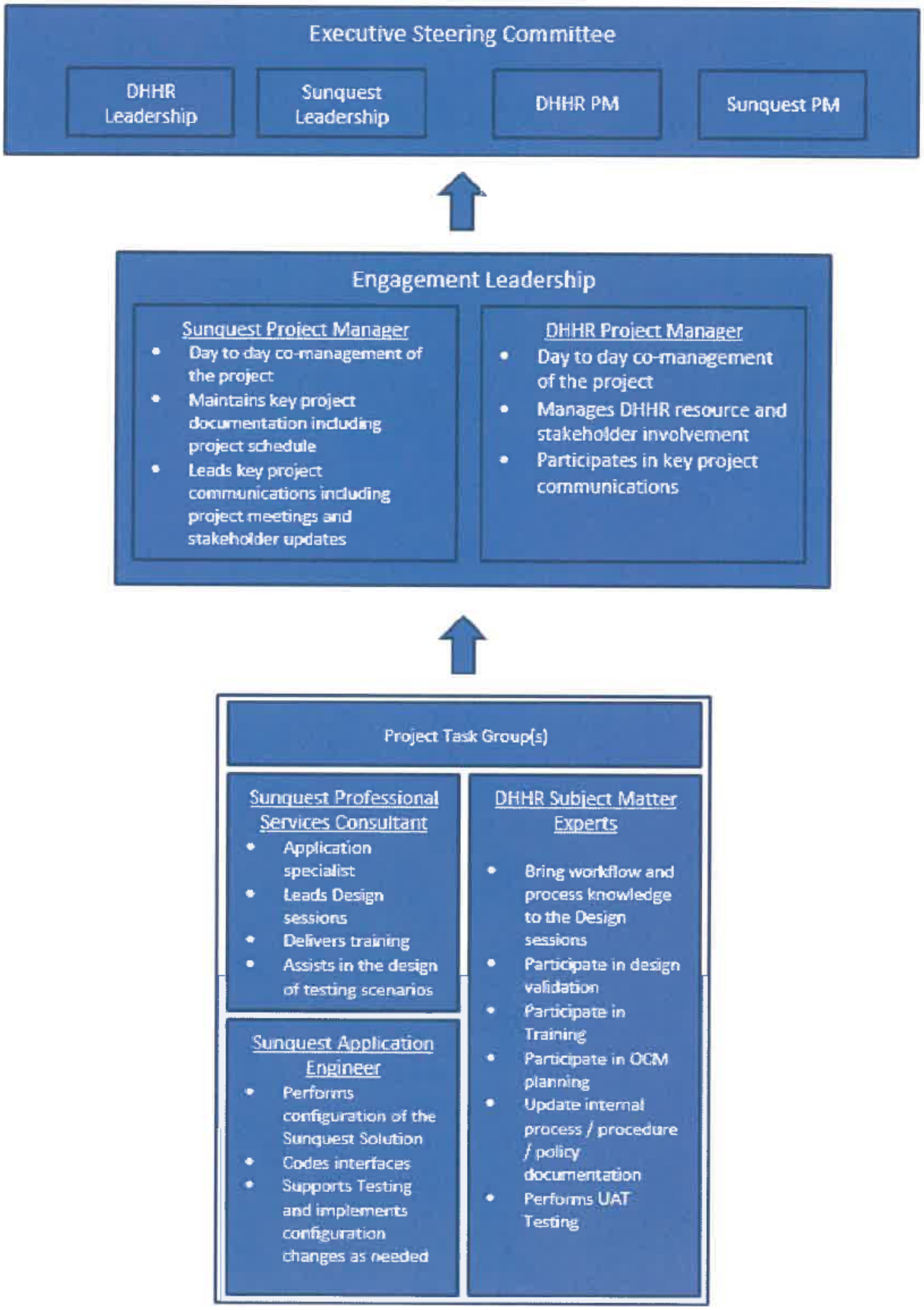
<Response>

The key members of the Sunquest project team involved throughout the implementation will be a Sunquest Project Manager, a Professional Services Consultant, and an Application Engineer. Technical resources including the Infrastructure Architect, Installation Engineer, and Interface Lead will be involved in specific phases of the project, and available as needed throughout the engagement. Please refer to section 3.1 for representative descriptions of the types of resources Sunquest will have involved in the DHHR project. The Sunquest proposal does not include the use of subcontractors at this time.

Sunquest is committed to staffing the DHHR implementation with all of the resources with the necessary bandwidth needed to support a successful implementation of the Sunquest Solution. Sunquest uses a just-in-time resource allocation methodology. One of the advantages of our resource allocation methodology is that it allows us the flexibility to scale up the project team with supporting resources during project phases where it is needed. For more information about our just-in-time resource allocation methodology, please see section 3.1.

Sunquest believes in a project organization structure that is collaborative, with points of match-up between Sunquest and DHHR resources at multiple levels of the project. The chart below illustrates the general organizational structure of the Sunquest project team, and how they correspond to DHHR resources, as well as the high-level responsibilities for each position.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Sunquest maintains a skills matrix for employees in the Implementation department. The skills matrix is used with information about a resource's experience and education as well as current project bandwidth to determine the staff available to the assigned to the DHHR project. Implementation resource teams also follow well-defined on-call procedures to account for scheduled and unscheduled absences. This ensures that all projects have the attention of resources with the required skill sets throughout the project timeframe, while still allowing for holidays and illness. In the case that a permanent resource replacement is needed, the process for initial resource assignment is followed.

2. Use of State Staff

Describe the required staffing of business and technical resources DHHR should provide to support the creation of all deliverables. Specifically, the Vendor should address the following:
The nature and extent of DHHR support required, in terms of staff roles and percentageof time available
Assistance from DHHR staff and the experience and qualification levels required
staffing for both implementation and maintenance and operations phases
DHHR may not be able or willing to provide the additional support the Vendor lists in this part of its proposal. The Vendor therefore should indicate whether its request for additional support isa requirement for its performance. If any part of the list is a requirement, the State may reject theVendor's proposal, if DHHR is unwilling or unable to meet the requirements.

<Response>
Sunquest will need DHHR staff's support in defining and validating requirements, reviewing and approving project documents in accordance with an agreed upon Project Schedule, and participating in System and User Acceptance Testing in accordance with a mutually agreed upon Project Schedule. The draft Project Schedule included in Attachment E activities where DHHR staff will be involved.

For preliminary planning purposes, please see below a description of key project roles whose involvement will ensure project success, followed by a chart with desired percentage involvement for each role during each phase of the project. It is possible for one staff member to have multiple roles in the project. Sunquest and DHHR Project Managers will discuss staffing requirements in detail and will make final determinations during project initiation and planning.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Roles	Responsibilities
Project Sponsor (PS)	▪ Key driver of project success and advocate of project within organization. ▪ Establishes strategic direction, objectives and scope for the project. ▪ Expected to define business problems, identify expected benefits and set expectations. As key judge of project success must articulate the vision for the project. ▪ Works with Project Managers to determine project priorities ▪ Hold project manager accountable for meeting objectives, producing deliverables, conducting reviews, and communication changes to all impacted areas. ▪ Escalation point when roadblocks occur for project manager and team
Project Manager (PM)	▪ Ensures the overall success of the project ▪ Review the overall Project Plan presented by Contractor, for the tasks and schedules assigned to Client. Provide Contractor with written approval of tasks and schedules assigned to Client or modifications necessary to reach agreement ▪ Manages, controls and directs all Client personnel engaged in the project daily to ensure project goals and objectives are met ▪ Manage to project priorities ▪ Acts as a catalyst to resolve project problems and conflicts, escalating to Project Sponsor as required by the Risk Management Plan ▪ Provide written approval or reason for denial of all deliverables within the timeframe allocated in the Schedule ▪ Collaborate with Contractor to resolve deviations and issues relating to the Project Charter and Project Plan ▪ Communicates project status to management and stakeholder team ▪ Notify Contractor's PM, immediately, when appropriate action from Contractor is required to prevent or rectify deviations from Project Management Plan and resolve issues from Client team to prevent deviations ▪ Administer Change Management Process in collaboration with Contractor ▪ Ensures project progress is adequate to ensure successful delivery of goals and objectives ▪ Applies lessons learned for each project phase

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Subject Matter Experts **(SMEs)**	▪ Has deep knowledge of the state's Public Health protocols and procedures ▪ Provides information and expertise on subjects to support the project. ▪ Identifies CLIENT requirements. ▪ Validates CLIENT requirements, workflows, and system configuration meets CLIENT needs. ▪ At least one SME will be needed for each program area. For example, the state's TB Controller may be the designated SME for configuration of TB, and the ELR Coordinator may be the designated SME for onboarding of the labs.
Product Testers **(PTs)**	▪ Performs user acceptance testing and validation. ▪ Provide written results of testing. ▪ Document any test script failures and variations in detail. ▪ At least one tester will be needed for each program area.
Product Trainers **(PTRs)**	▪ Attend Train-the-Trainer sessions. ▪ Review training plan. ▪ Provide training to remaining users. ▪ Provide feedback regarding desired product features to enhance the system. ▪ The Client will determine the number of Product Trainers.
HelpDesk/Support Personnel **(HD)**	▪ Helpdesk support at post go-live. ▪ Reports product issues to Support. ▪ Maintains system configurations/definitions. ▪ Coordinates maintenance releases with Sunquest Support.

Project Stage	DHHR Staff					
	PS	PM	SMEs	PTs	PTRs	HD
Initiate	5%	100%	25%			
Analyze	5%	100%	25%			
Design	5%	100%	20%	10%		

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Build	5%	100%		15%		
System Test	5%	100%		20%		
UAT	5%	100%		25%		
Implementation	5%	100%				
Training	5%	100%			25%	
Transition to Operations	5%	100%				50%

3. Key Staff, Resumes, and References

Key staff consist of the project's senior leadership for the ESS project. These resources are responsible for providing leadership, and creating the standards and processes required for the successful implementation, operation, and maintenance. Resumes for key staff named in the Vendor proposal should indicate the role of the staff on the ESS project and demonstrate how each staff member's experience and education will contribute to the successful implementation of the ESS. The Vendor should make the proposed key staff available for an in-person interviewupon DHHR's request.

To ensure successful transition to the operations phase, the implementation activities should beled by key staff identified in the list below:

- Account Manager
- Project Manager
- Business Lead
- Technical Lead
- Implementation Manager
- Quality Assurance Manager

The qualifications, experience, and responsibilities for each key staff role are definedin ***Appendix 3: Staff Qualifications, Experience, and Responsibilities***.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response>

The Sunquest Implementation department consists of over 80 employees ranging in expertise including Project Management, Systems Implementation, Interfacing and Data Migration, and Sunquest Solution module use and implementation.

Sunquest supports this number of concurrent projects through just-in-time project team assignment, resource utilisation tracking and management, and well-defined on-call processes. Project technical resources are assigned to any engagement only after contracting has been completed. By delaying the assignment of project resources and not reserving resources for a particular engagement while still in the Sales process, we are better able to address all projects when they are ready to start.

The Implementation department tracks the utilization of its team members on a weekly basis to ensure that no resource is over-assigned and to better identify resources with the bandwidth to be assigned to newly starting projects. Implementation resource teams also follow well-defined on-call procedures to account for scheduled and unscheduled absences. This ensures that all projects have the attention of resources with the required skill sets throughout the project timeframe, while still allowing for holidays and illness.

Sunquest practices just-in-time resource assignment, and will identify specific individuals who will be assigned to the DHHR engagement as soon as we are selected.

Upon contract award, Sunquest is happy to introduce DHHR to the assigned Sunquest project team and provide any educational or work experience information needed. The table below has been populated with position summaries representative of the resources available to Sunquest to be assigned to the DHHR engagement.

3.1 Resumes

The Vendor should complete Table 18 and embed resumes of all proposed key staff to thissection of the proposal. Each resume should demonstrate experience relevant to the position proposed. If applicable, resumes should include work on projects cited under the Vendor's corporate experience, and the specific functions performed on such projects.

<Response>

Table 18: Resumes for Proposed Key Staff

Sunquest Title	Proposed Role	Experience in Proposed Role
Principal Professional	Account Manager	**Education**:

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Services Consultant		• B.S. in Medical Microbiology and Immunology • Trained in Infectious Disease Epidemiology at a US School of Public Health • Completed additional courses on continuing education in public health **Professional Experience:** • *Sunquest Information Systems (formerly Atlas Medical), Public Health Division, 2011 – Present* • *State Division of Public Health, 1994 – 2011* **Past Professional Licenses/Certifications/Memberships** • Registered Microbiologist (NRCM), • American Medical Informatics Association, National Tuberculosis Controllers Association
Director of Project Management	Project Manager	**Education:** • Master of Business Administration, Concentrations in MIS and Finance **Professional Experience:** • Sunquest Information Systems, Inc., Director Project Management, 2021 – present • Sunquest Information Systems, Inc., Director Anatomic Pathology Consulting, 2020 – 2021 • Sunquest Information Systems, Inc., Manager Project Initiation, 2014 – 2020 • Sunquest Information Systems, Inc., Manager Project Management, 2012 - 2014
Manager Project Management	Project Manager	**Education**: • B.S Computer Science **Professional Experience:** • Sunquest Information Systems, Inc, Program Manager Public Health, 2007 – Present

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		• IBM/Tivoli Systems, Senior Project Manager, 1996 – 2002 **Past Professional Licenses/Certifications/Memberships** • PMP (Project Management Professional) Certificate, Project Management Institute • Health Care Management and Leadership Certificate • Master's Certificate in Project Management
Manager Project Management	Business Lead	**Education**: • B.S Computer Science **Professional Experience:** • Sunquest Information Systems, Inc, Program Manager Public Health, 2007 – Present • IBM/Tivoli Systems, Senior Project Manager, 1996 – 2002 **Past Professional Licenses/Certifications/Memberships** • PMP (Project Management Professional) Certificate, Project Management Institute • Health Care Management and Leadership Certificate Master's Certificate in Project Management
Manager Application Engineers	Technical Lead	**Education:** • B.S. in Math and Computer Science **Professional Experience:** • Sunquest Information Systems, Inc., Manager Application Engineers, 2014 - Present
Manager Project Management	Implementation Manager	**Education**: • B.S Computer Science **Professional Experience:** • Sunquest Information Systems, Inc, Program Manager Public Health, 2007 – Present • IBM/Tivoli Systems, Senior Project

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		Manager, 1996 – 2002 **Past Professional Licenses/Certifications/Memberships** • PMP (Project Management Professional) Certificate, Project Management Institute • Health Care Management and Leadership Certificate Master's Certificate in Project Management
Director Quality and Regulatory Affairs	Quality Assurance Manager	**Education**: • B.S in Physics and Material Science and Engineering • Master of Engineering in Material Science **Professional Experience:** • Sunquest Information Systems Inc., Director of Quality and Regulatory Affairs, 2016 – present • UNIConnect, Director of Quality and Compliance, 2015 – 2016 • Nexus Orthopedics Group, Director of Quality and Regulatory Affairs, 2010 – 2015 • Sorenson Development Group, Director of Quality and Applied Technologies, 2002 - 2010
VP Client Services	Operations Manager	**Education**: • Bachelor of Science, Industrial Engineering **Professional Experience:** • Sunquest Information Systems, Inc, Vice President Client Services, 2021 to present • Microsoft, Principal PM Manager, FastTrack for Azure (FTA), 2019 - 2021 • Caradigm, Vice President of Customer Engagement and Europe, 2015 - 2018 • K2 Ventures LLC, Owner / Operator, 2009 – 2014 • KCR Consulting, Inc Project Director, 2000 – 2009
Manager Project	Documentation Management	**Education**:

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest

Management	Lead	• B.S Computer Science **Professional Experience:** • Sunquest Information Systems, Inc, Program Manager Public Health, 2007 – Present • IBM/Tivoli Systems, Senior Project Manager, 1996 – 2002 **Past Professional Licenses/Certifications/Memberships** • PMP (Project Management Professional) Certificate, Project Management Institute • Health Care Management and Leadership Certificate Master's Certificate in Project Management
Principal Professional Services Consultant	Test Manager	**Education**: • B.S. in Medical Microbiology and Immunology • Trained in Infectious Disease Epidemiology at a US Medical School of Public Health • Completed additional courses on continuing education in public health **Professional Experience:** • *Sunquest Information Systems (formerly Atlas Medical), Public Health Division, 2011 – Present* • *State Division of Public Health, 1994 – 2011* **Past Professional Licenses/Certifications/Memberships** • Registered Microbiologist (NRCM), • American Medical Informatics Association, • National Tuberculosis Controllers Association
Chief Information Officer	Information Security Architect / Privacy Data Protection Officer	**Professional Experience:** • CliniSys, Chief Information Officer, 2022 – present • CliniSys, Head of Group IT & Security, 2019 – 2022

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		• InfoRisk Global Ltd., Director, 2017 – 2019 Professional Licenses/Certifications/Memberships • Certified Information Security Manager (CISM), ISACA, 2018 • Certified Information Privacy Manager (CIPM), 2017 • Certified Information Privacy Professional – Europe (CIPP/E), IAPP, 2017

3.2 References

The Vendor should provide three (3) references for which each proposed key staff candidate has successfully demonstrated meeting the requirements of the RFP. The name of the person to be contacted, phone number, client name, address, brief description of work, and date (month and year) of employment should be given for each reference. These references should be able to attest to the candidate's specific qualifications. The reference given should be a person within a client's organization and not a co-worker or a contact within the Vendor's organization.

Vendors should use the format provided. Please repeat the rows and tables as necessary.

<Response>

Due to the practice of just-in-time resource assignment, Sunquest is unable to identify specific individuals who will be assigned to the DHHR engagement at this time. Upon contract award, Sunquest is happy to introduce DHHR to the assigned Sunquest project team and provide any educational or work experience information needed.

Table 19: Key Staff References

Key Personnel Reference Form					
Key Personnel Name:	*To be provided at staff assignment*	**Proposed Role:**			
Reference 1					
Client Name:		**Client Address:**			
Contact Name:		**Contact Title:**			
Contact Phone:		**Contact E-mail:**			
Project Name:	**Start Date:**	**MM/YYYY**	**End Date:**	**MM/YYYY**	

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Project Description:						
Project Role and Responsibilities:						
Reference 2						
Client Name:		**Client Address:**				
Contact Name:		**Contact Title:**				
Contact Phone:		**Contact E-mail:**				
Project Name:			**Start Date:**	**MM/YYYY**	**End Date:**	**MM/YYYY**
Project Description:						
Project Role and Responsibilities:						
Reference 3						
Client Name:		**Client Address:**				
Contact Name:		**Contact Title:**				
Contact Phone:		**Contact E-mail:**				
Project Name:			**Start Date:**	**MM/YYYY**	**End Date:**	**MM/YYYY**
Project Description:						
Project Role and Responsibilities:						

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT E: INITIAL WORK PLAN

Instructions: The Vendor should provide an Initial Work Plan and Work Breakdown Structure (WBS) by project phase and task group. Each task group is defined in ***Section 4.5: Project Task,Payment Milestones, and Deliverables*** of this RFP.

This Work Plan and Work Breakdown Structure (WBS) should show all task details with responsibilities, timelines, durations, milestone dates, deliverable dates, and Vendor personnel hours by deliverables for each project phase, State personnel hours by phase deliverable, and allcritical dependencies for the project's milestones and deliverables. The Initial Work Plan shouldbe provided as an attachment to the Vendor's Technical Proposal and tabbed as such in the submission. The Vendor should also provide an electronic version of the Microsoft Project® version in the Vendor's electronic submission of the Technical Proposal.At a minimum, the Vendor's proposed Work Plan should include the following:

- Detailed tasks and timelines, outlining the major project phases planned by the Vendor. These should include, at a minimum, the timeline and tasks associated with **full deploymentof functionality**
- The WBS
- The project schedule for all project deliverables and milestones
- Identification of resources assigned the responsibility for each deliverable within theWBS to the level at which control will be exercised
- Identification of deliverables that require a more prompt State acceptance than describedin the RFP, including the proposed acceptance period for the deliverable

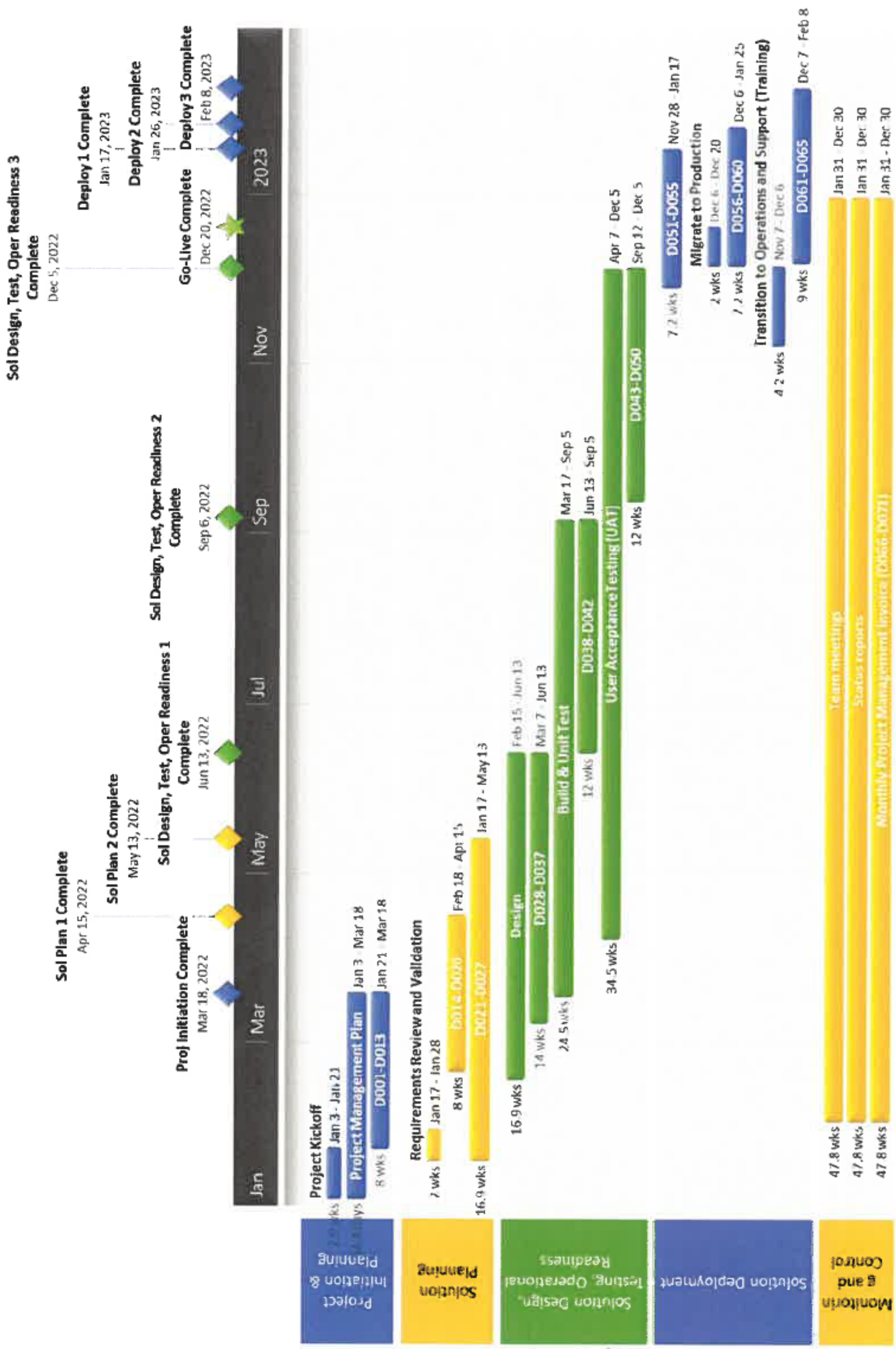
<Response>

The attached DRAFT MS Project Schedule proposes a one-year implementation schedule incorporating our best practices approach and methodology for implementation of WorldCare. The schedule has been customized to include the deliverables outlined in the RFP at various stages of implementation and considers the review process and required timelines indicated in the RFP. Required resources are specified in the Resource Sheet.

Please Note: This is a draft plan using start date of Jan 1, 2022. The plan will be revisited and adjusted at project initiation.

The following visual summarizes the high-level proposed plan on a timeline:

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

West Virginia Department of Health & Human Resources - Enterprise Surveillance System RFP
Initial Work Plan

Task Name	Resource Initials	Predecessors	Duration	Start* (actual start date to be modified)	Finish
West Virginia Enterprise Surveillance System (ESS)			**287.5 days**	**Jan 3 '22**	**Feb 8 '23**
Task Group 1: Project Initiation and Project Management Plan			**54.5 days**	**Jan 3 '22**	**Mar 18 '22**
Project Kickoff & Planning			**54.5 days**	**Jan 3 '22**	**Mar 18 '22**
SQ Internal Kickoff Meeting			**14.5 days**	**Jan 3 '22**	**Jan 21 '22**
Define resources	SQ-PM,SQ-SL,SQ-TL		2 days	Jan 3 '22	Jan 4 '22
Discuss implementation methodology	SQ-PM,SQ-SL,SQ-TL		1 day	Jan 3 '22	Jan 3 '22
Initial Consultation			**8 days**	**Jan 5 '22**	**Jan 14 '22**
Preliminary kickoff with leaders	WV-PM,SQ-PM,SQ-SL,SQ-TL	5,6	1 day	Jan 5 '22	Jan 5 '22
Kickoff Planning	WV-PM,SQ-PM	5,6,8	7 days	Jan 6 '22	Jan 14 '22
Formal Kickoff meeting with all stakeholders	WV-Team,SQ-Team	9	1 day	Jan 17 '22	Jan 21 '22
Project Management Plan Deliverables (D001-D013)			**40 days**	**Jan 21 '22**	**Mar 18 '22**

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Define acceptance criteria	WV-PM,SQ-PM	10	5 days	Jan 21 '22	Jan 28 '22
Create initial draft	SQ-PM	12	10 days	Jan 28 '22	Feb 11 '22
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	13	5 days	Feb 11 '22	Feb 18 '22
Client feedback	WV-PM	14	10 days	Feb 18 '22	Mar 4 '22
Revisions; final submission	SQ-PM	15	5 days	Mar 4 '22	Mar 11 '22
Final approval	SQ-PM	16	5 days	Mar 11 '22	Mar 18 '22
Payment Milestone 1: Project Initiation Complete		**17**	**0 days**	**Mar 18 '22**	**Mar 18 '22**
Task Group 2: Solution Planning			**84.5 days**	**Jan 17 '22**	**May 13 '22**
Set up required environments for Analysis	SQ-AE	10SS	2 wks	Jan 17 '22	Jan 28 '22
Install WorldCare in required environments	SQ-AE	20	1 day	Jan 31 '22	Jan 31 '22
Requirements Review and Validation			**10 days**	**Jan 17 '22**	**Jan 28 '22**
Review/validate business requirements	WV-Team,SQ-Team	10SS	10 days	Jan 17 '22	Jan 28 '22
Review/validate functional requirements	WV-Team,SQ-Team	10SS	10 days	Jan 17 '22	Jan 28 '22
Review/validate staffing requirements	WV-Team,SQ-Team	10SS	10 days	Jan 17 '22	Jan 28 '22
Review/validate architectural requirements	WV-Team,SQ-Team	10SS	10 days	Jan 17 '22	Jan 28 '22
Review/validate data migration requirements	WV-Team,SQ-Team	10SS	10 days	Jan 17 '22	Jan 28 '22
Solution Planning 1 Deliverables (D014-D020)			**40 days**	**Feb 18 '22**	**Apr 15 '22**
Define acceptance criteria	WV-PM,SQ-PM	22,14	5 days	Feb 18 '22	Feb 25 '22
Create initial draft	SQ-PM,SQ-SL	29	10 days	Feb 25 '22	Mar 11 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	30	5 days	Mar 11 '22	Mar 18 '22
Client feedback	WV-PM,WV-SME	31	10 days	Mar 18 '22	Apr 1 '22
Revisions; final submission	SQ-PM,SQ-SL	32	5 days	Apr 1 '22	Apr 8 '22
Final approval	WV-PM	33	5 days	Apr 8 '22	Apr 15 '22
Payment Milestone 2: Solution Planning 1 Complete		**34**	**0 days**	**Apr 15 '22**	**Apr 15 '22**
Solution Planning 2 Deliverables (D021-D027)			**84.5 days**	**Jan 17 '22**	**May 13 '22**
Define acceptance criteria	WV-PM,SQ-PM	22SS	5 days	Jan 17 '22	Jan 21 '22
Create initial draft	SQ-PM,SQ-SL	30FS+2 wks	10 days	Mar 25 '22	Apr 8 '22
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	38	5 days	Apr 8 '22	Apr 15 '22
Client feedback	WV-PM,WV-SME	39	10 days	Apr 15 '22	Apr 29 '22
Revisions; final submission	SQ-PM,SQ-SL	40	5 days	Apr 29 '22	May 6 '22
Final approval	WV-PM	41	5 days	May 6 '22	May 13 '22
Payment Milestone 3: Solution Planning 2 Complete		**42**	**0 days**	**May 13 '22**	**May 13 '22**
Task Group 3: Solution Design, Testing and Operational Readiness			**209.5 days**	**Feb 15 '22**	**Dec 5 '22**
Design			**84.5 days**	**Feb 15 '22**	**Jun 13 '22**
Set up required environments for Design			**12 days**	**Feb 15 '22**	**Mar 2 '22**
Install and set up hosted environment	SQ-AE	21FS+2 wks	7 days	Feb 15 '22	Feb 23 '22
Install & configure WorldCare in required environments	SQ-AE	47	1 wk	Feb 24 '22	Mar 2 '22
Design Infrastructure (Environments Strategy)	SQ-TL	47	20 days	Feb 24 '22	Mar 23 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Pre-design Training	SQ-TR,WV-SME	48	2.5 days	Mar 3 '22	Mar 7 '22
Design User Defined Forms & Business Rules			**40 days**	**Mar 7 '22**	**May 2 '22**
Disease Group Priority 1	WV-SME,SQ-AE,SQ-SL	50	10 days	Mar 7 '22	Mar 21 '22
Disease Group Priority 2	WV-SME,SQ-AE,SQ-SL	52	10 days	Mar 21 '22	Apr 4 '22
Disease Group Priority 3	WV-SME,SQ-AE,SQ-SL	53	10 days	Apr 4 '22	Apr 18 '22
Disease Group Priority 4	WV-SME,SQ-AE,SQ-SL	54	10 days	Apr 18 '22	May 2 '22
Design ELR Interface	SQ-SL,SQ-TL,WV-IS	50	20 days	Mar 7 '22	Apr 4 '22
Design ECR Interface	SQ-SL,SQ-TL,WV-IS	50	20 days	Mar 7 '22	Apr 4 '22
Design External Application Integrations (GIS, WVSIIS, eHARS, EDRS, ESSENCE, CareWare, WVHIN, PowerBI, Bridge DB)	SQ-SL,SQ-TL,WV-IS	50	30 days	Mar 7 '22	Apr 18 '22
Design data migration	SQ-SL,SQ-TL,WV-IS	50,52	30 days	Mar 21 '22	May 2 '22
Design Custom WorldCare Reports	SQ-SL,SQ-TL,WV-IS,SQ-AE,WV-TR	55	10 days	May 2 '22	May 16 '22
Solution Design, Testing, and Operational Readiness 1 Deliverables (D028-D037)			**70 days**	**Mar 7 '22**	**Jun 13 '22**
Define acceptance criteria	WV-PM,SQ-PM	51SS	1 day	Mar 7 '22	Mar 8 '22
Create initial draft	SQ-PM,SQ-SL	51SS	10 days	Mar 7 '22	Mar 21 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	51FF,56FF,57FF,58FF,59FF,60FF	5 days	May 9 '22	May 16 '22
Client feedback	WV-PM,WV-SME	64	10 days	May 16 '22	May 30 '22
Revisions; final submission	SQ-PM,SQ-SL	65	5 days	May 30 '22	Jun 6 '22
Final approval	WV-PM	66	5 days	Jun 6 '22	Jun 13 '22
Payment Milestone 4: Solution Design, Testing, and Operational Readiness 1 Complete		**67**	**0 days**	**Jun 13 '22**	**Jun 13 '22**
Build & Unit Test			**122.5 days**	**Mar 17 '22**	**Sep 5 '22**
Set up required environments for Build			**35 days**	**Mar 17 '22**	**May 4 '22**
Install and set up hosted environments	SQ-AE	48FS+2 wks	1 wk	Mar 17 '22	Mar 23 '22
Install and set up interfaces and integration points	SQ-AE,SQ-IT	71	30 days	Mar 24 '22	May 4 '22
Install & configure WorldCare in required environments	SQ-AE	71	30 days	Mar 24 '22	May 4 '22
Build & Unit Test User Defined Forms & Business Rules			**40 days**	**Jun 13 '22**	**Aug 8 '22**
Disease Group Priority 1	SQ-AE	71,67,52	10 days	Jun 13 '22	Jun 27 '22
Disease Group Priority 2	SQ-AE	75	10 days	Jun 27 '22	Jul 11 '22
Disease Group Priority 3	SQ-AE	76	10 days	Jul 11 '22	Jul 25 '22
Disease Group Priority 4	SQ-AE	77	10 days	Jul 25 '22	Aug 8 '22
Build & Unit Test ELR Interface	SQ-AE	71,67,56	30 days	Jun 13 '22	Jul 25 '22
Build & Unit Test ECR Interface	SQ-AE	71,67,57	30 days	Jun 13 '22	Jul 25 '22
Build & Unit Test External Application Integrations (GIS, WVSIIS, eHARS, EDRS, ESSENCE, CareWare, WVHIN, PowerBI, Bridge DB)	SQ-AE	71,67,58	30 days	Jun 13 '22	Jul 25 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Build & Unit Test data migration	SQ-AE	59,71,67	30 days	Jun 13 '22	Jul 25 '22
Build & Unit Test Custom WorldCare Reports	SQ-AE	75	20 days	Jun 27 '22	Jul 25 '22
Solution Design, Testing, and Operational Readiness 2 Deliverables (D038-D042)			**60 days**	**Jun 13 '22**	**Sep 5 '22**
Define acceptance criteria	WV-PM,SQ-PM	74SS	1 day	Jun 13 '22	Jun 14 '22
Create initial draft	SQ-PM,SQ-SL	74SS	10 days	Jun 13 '22	Jun 27 '22
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	74FF,79FF,80FF,81FF,82FF,83FF	5 days	Aug 1 '22	Aug 8 '22
Client feedback	WV-PM,WV-SME	87	10 days	Aug 8 '22	Aug 22 '22
Revisions; final submission	SQ-PM,SQ-SL	88	5 days	Aug 22 '22	Aug 29 '22
Final approval	WV-PM	89	5 days	Aug 29 '22	Sep 5 '22
Payment Milestone 5: Solution Design, Testing, and Operational Readiness 2 Complete		**90**	**0 days**	**Sep 5 '22**	**Sep 5 '22**
User Acceptance Testing (UAT)			**172.5 days**	**Apr 7 '22**	**Dec 5 '22**
Set up required environments for Testing			**20 days**	**Apr 7 '22**	**May 4 '22**
Install and set up hosted environment	SQ-AE	71FS+2 wks	10 days	Apr 7 '22	Apr 20 '22
Install and configure WorldCare	SQ-AE	94	10 days	Apr 21 '22	May 4 '22
Prepare UAT use cases / business scenarios	SQ-Team, WV-Team	103SS+15 days	10 days	Oct 3 '22	Oct 17 '22
Set up required environments for Training			**20 days**	**May 5 '22**	**Jun 1 '22**
Install and set up hosted environment	SQ-AE	94FS+2 wks	10 days	May 5 '22	May 18 '22
Install and configure WorldCare	SQ-AE	98	10 days	May 19 '22	Jun 1 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

WorldCare Testers Training (Pre-UAT)	SQ-TR,WV-Team, WV-TR	99,90	5 days	Sep 5 '22	Sep 12 '22
UAT individual components			**10 days**	**Sep 12 '22**	**Sep 26 '22**
UAT User Defined Forms and Business Rules			**10 days**	**Sep 12 '22**	**Sep 26 '22**
Disease Group Priority 1	SQ-Team, WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
Disease Group Priority 2	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
Disease Group Priority 3	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
Disease Group Priority 4	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
UAT ELR Interface	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
UAT ECR Interface	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
UAT External Application Integrations (GIS, WVSIIS, eHARS, EDRS, ESSENCE, CareWare, WVHIN, PowerBI, Bridge DB)	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
UAT data migration	SQ-Team,WV-Team	100	10 days	Sep 12 '22	Sep 26 '22
UAT Custom WorldCare Reports		100	10 days	Sep 12 '22	Sep 26 '22
UAT Integrated solution (end-to-end testing)			**30 days**	**Sep 26 '22**	**Nov 7 '22**
Cycle 1 (Client UAT and submit issues)	SQ-Team,WV-Team	101	15 days	Sep 26 '22	Oct 17 '22
SQ Resolve issues and provide new release	SQ-Team	113	2 wks	Oct 17 '22	Oct 31 '22
Cycle 2 (Client test fixes)	SQ-Team,WV-Team	114	5 days	Oct 31 '22	Nov 7 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

UAT/Go-Live approval	WV-PM	115	0 days	Nov 7 '22	Nov 7 '22
Solution Design, Testing, and Operational Readiness 3 Deliverables (D043-D050)			**60 days**	**Sep 12 '22**	**Dec 5 '22**
Define acceptance criteria	WV-PM,SQ-PM	101SS	1 day	Sep 12 '22	Sep 13 '22
Create initial draft	SQ-PM,SQ-SL	118	10 days	Sep 13 '22	Sep 27 '22
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	101FF, 112FF	5 days	Oct 31 '22	Nov 7 '22
Client feedback	WV-PM,WV-SME	120	10 days	Nov 7 '22	Nov 21 '22
Revisions; final submission	SQ-PM,SQ-SL	121	5 days	Nov 21 '22	Nov 28 '22
Final approval	WV-PM	122	5 days	Nov 28 '22	Dec 5 '22
Payment Milestone 6: Solution Design, Testing, and Operational Readiness 3 Complete		**123**	**0 days**	**Dec 5 '22**	**Dec 5 '22**
Task Group 4: Solution Deployment			**199.5 days**	**May 5 '22**	**Feb 8 '23**
Set up Production Environment			**11 days**	**May 5 '22**	**May 19 '22**
Set up hosted environments	SQ-AE	95	1 day	May 5 '22	May 5 '22
Install and configure WorldCare	SQ-AE	127	10 days	May 6 '22	May 19 '22
Prepare cutover plan	SQ-PM,SQ-SL,SQ-TL	122	5 days	Nov 28 '22	Dec 5 '22
Provide Acceptance Testing Approval	WV-PM	123	1 day	Dec 5 '22	Dec 6 '22
Deployment 1 Deliverables (D051-D055)			**36 days**	**Nov 28 '22**	**Jan 17 '23**
Define acceptance criteria	WV-PM,SQ-PM	129SS	1 day	Nov 28 '22	Nov 29 '22
Create initial draft	SQ-PM,SQ-SL	132	10 days	Nov 29 '22	Dec 13 '22
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	133	5 days	Dec 13 '22	Dec 20 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest

Client feedback	WV-PM,WV-SME	134	10 days	Dec 20 '22	Jan 3 '23
Revisions; final submission	SQ-PM,SQ-SL	135	5 days	Jan 3 '23	Jan 10 '23
Final approval	WV-PM	136	5 days	Jan 10 '23	Jan 17 '23
Payment Milestone 7: Deployment 1 Complete		**137**	**0 days**	**Jan 17 '23**	**Jan 17 '23**
Migrate to Production			**10 days**	**Dec 6 '22**	**Dec 20 '22**
WorldCare configurations	SQ-AE	130	10 days	Dec 6 '22	Dec 20 '22
Interface feeds	SQ-AE	130	10 days	Dec 6 '22	Dec 20 '22
Integrations	SQ-AE	130	10 days	Dec 6 '22	Dec 20 '22
Data Import in Production	SQ-AE	130	10 days	Dec 6 '22	Dec 20 '22
Infrastructure monitoring	SQ-AE	130	10 days	Dec 6 '22	Dec 20 '22
Go-Live Complete		**144**	**0 days**	**Dec 20 '22**	**Dec 20 '22**
Deployment 2 Deliverables (D056-D060)			**36 days**	**Dec 6 '22**	**Jan 25 '23**
Define acceptance criteria	WV-PM,SQ-PM	139SS	1 day	Dec 6 '22	Dec 7 '22
Create initial draft	SQ-PM,SQ-SL	147	10 days	Dec 7 '22	Dec 21 '22
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	148	5 days	Dec 21 '22	Dec 28 '22
Client feedback	WV-PM,WV-SME	149	10 days	Dec 28 '22	Jan 11 '23
Revisions; final submission	SQ-PM,SQ-SL	150	5 days	Jan 11 '23	Jan 18 '23
Final approval	WV-PM	151	5 days	Jan 18 '23	Jan 25 '23
Payment Milestone 8: Deployment 2 Complete		**152**	**0 days**	**Jan 25 '23**	**Jan 25 '23**
Transition to Operations and Support			**21 days**	**Nov 7 '22**	**Dec 6 '22**
Train the Trainers (User Training - WorldCare)	SQ-TR,WV-Team,WV-TR	116	12 days	Nov 7 '22	Nov 23 '22
Train End Users (initial session)	SQ-TR,WV-	155	5 days	Nov 23 '22	Nov 30 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

	Team,WV-TR				
Train the Operations & Support staff	SQ-TR,WV-Team,WV-TR	156	4 days	Nov 30 '22	Dec 6 '22
Project Closure			**10 days**	**Dec 20 '22**	**Jan 3 '23**
Project Acceptance	WV-PM	145	2 wks	Dec 20 '22	Jan 3 '23
Post Project Review/Lessons Learned	WV-Team	145	2 wks	Dec 20 '22	Jan 3 '23
Product documentation audit	SQ-PM,WV-PM	145	2 wks	Dec 20 '22	Jan 3 '23
Release resources	SQ-PM	145	2 wks	Dec 20 '22	Jan 3 '23
Deployment 3 Deliverables (D061-D065)			**45 days**	**Dec 7 '22**	**Feb 8 '23**
Define acceptance criteria	WV-PM,SQ-PM	147	1 day	Dec 7 '22	Dec 8 '22
Create initial draft	SQ-PM,SQ-SL	148	10 days	Dec 21 '22	Jan 4 '23
SQ Internal reviews; submit to client; schedule walkthrough	SQ-Team	165	5 days	Jan 4 '23	Jan 11 '23
Client feedback	WV-PM,WV-SME	166	10 days	Jan 11 '23	Jan 25 '23
Revisions; final submission	SQ-PM,SQ-SL	167	5 days	Jan 25 '23	Feb 1 '23
Final approval	WV-PM	168	5 days	Feb 1 '23	Feb 8 '23
Payment Milestone 9: Deployment 3 Complete		**169**	**0 days**	**Feb 8 '23**	**Feb 8 '23**
Task Group 5: Project Monitor and Control			**240 days**	**Jan 3 '22**	**Dec 2 '22**
Weekly Team Meeting	SQ-Team,WV-Team		12 mons	Jan 3 '22	Dec 2 '22
Weekly Status Reports	SQ-Team,WV-Team		12 mons	Jan 3 '22	Dec 2 '22

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Monthly Status Report	SQ-Team,WV-Team		12 mons	Jan 3 '22	Dec 2 '22
Steering Committee Meeting	SQ-Team,WV-Team		12 mons	Jan 3 '22	Dec 2 '22
Monthly Implementation Project Management Invoice Deliverables (D066-D071)	SQ-Team,WV-Team		12 mons	Jan 3 '22	Dec 2 '22
Payment Milestone: Monthly Implementation Project Management Invoice		**176**	**0 days**	**Dec 2 '22**	**Dec 2 '22**

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT F: MANDATORY REQUIREMENTS

Instructions: The mandatory requirements must be met by the Vendor as a part of the submittedproposal. Failure on the part of the Vendor to meet any of the mandatory requirements may result in disqualification of the proposal, at the sole discretion of the State. The term "must," stipulates and identifies a mandatory requirement. The Vendor is to demonstrate compliance with mandatory requirements in its proposal. If the Vendor's proposal meets the mandatory requirements, it may be included in the next part of the technical evaluation of this RFP. For mandatory requirements that necessitate a future action, the Vendor will respond in ***Attachment K: Terms and Conditions*** with an attestation that it will meet all mandates. For mandatory requirements that involve documentation, Vendors should include that documentation with their technical proposal. Any documentation for mandatory requirements not supplied with their technical proposal must be submitted prior to contract execution. When appropriate Vendors must provide narrative responses in the area below.

Hierarchy Level: The hierarchy level column defines relationships between parent and child specifications. DHHR refers to parent specifications as specifications that rely on the content of asubset of related specifications (children) to fully define the scope of the requirement. DHHR refers to child specifications as specifications that rely on additional context provided by a

higher-level specification (parent) to fully define the scope of the specification. A hierarchy value of 1 denotes the highest-level specification. Any greater hierarchy value denotes a child specification. For example, a hierarchy level 2 is a child to the nearest prior hierarchy level 1. Asanother example, a hierarchy level 3 is a child to the nearest prior hierarchy level 2 specification,which is in turn a child to the nearest prior hierarchy level 1 specification. See the diagram belowfor an illustration of a hierarchy relationship:

Hierarchy Level 1 Specification,
Hierarchy Level 2 Specification
Hierarchy Level 3 Specification

See the attached Microsoft Excel® file titled, "Attachment F – Mandatory Requirements" at the end of this document as Appendix 2.

<Response> Please Note this table is also included as Appendix 2 at the end of this document.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Mandatory Requirements				Vendor Response			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR001	1	The vendor must be incorporated as a business in any state for at least three years.	Locations	Will Meet	Attachment B - Title Page, Executive Summary, and Subcontractor Letters	1	17
MR002	1	The Vendor, all business partners, subcontractors, independent contractors, and other entities supporting the Vendor in delivery of the services defined in this contract must perform all work associated with this contract within the continental United States or U.S. Territories, as established in requirements related to handling of federal tax information (FTI) contained in Internal Revenue Service (IRS) Publication 1075, Section 5.3 Access to FTI via State Tax Files or Through Other Agencies under the authority granted by United States Code §6013(p)(4)(C). At no time shall information governed by privacy laws and regulations be used, maintained, transmitted, or caused to be transmitted outside of the United States.	Locations	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR003	1	The Vendor must host the Enterprise Surveillance System (ESS) and maintain a secure site(s) and secure secondary geo-redundant site(s) within the continental United States. Off-site is defined as a physically separate location based on current industry best practices. These facilities must be located in the continental United States, as established in requirements related to handling of federal tax information (FTI) contained in Internal Revenue Service (IRS) Publication 1075, Section 5.3 Access to FTI via State Tax Files or Through Other Agencies under the authority granted by United States Code §6013(p)(4)(C).	Locations	Will Meet	Attachment H - Technical Specifications Approach	2	97
MR004	1	Prior to contract execution, the Agency will conduct a review of all hardware, software, and communication components. The Vendor must ensure compatibility with the most current West Virginia Office of Technology (WVOT) supported versions and standards.	Compatibility	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR005	1	The Vendor must agree to incorporate all applicable current and future coding standards and formats and legislated or program necessary data and transport requirements to ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and appropriately employ new standards and requirements as they occur including, but not limited to:	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR006	2	RxNorm	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR007	2	Health Level 7 (HL7)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR008	2	Systematic Nomenclature of Medicine (SNOMED)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR009	2	Patient Protection and Affordable Care Act (PPACA)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR010	2	Logical Observation Identifiers Names and Codes (LOINC)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR011	2	International Classification of Diseases - Version 10 (ICD-10)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR012	2	Health Insurance Portability and Accountability Act (HIPAA) v5010	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR013	2	Health Information Technology for Economic and Clinical Health Act (HITECH)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR014	2	Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS)	Compatibility	Will Meet	Attachment G – Business Specifications Approach	1	67
MR015	1	The Vendor must provide facilities for the recovery of Design, Development, and Implementation (DDI) or operations activities in the event of a disaster that disrupts DDI or operations as described in the Vendor's Disaster Recovery and Business Continuity Management Plan which will be developed by the Vendor and approved by the Agency. The Vendor must provide resources necessary to:	Disaster Recovery	Will Meet	Attachment H - Technical Specifications Approach	1	97
MR016	2	Recover critical services and data in accordance with the Recovery Time Objective (RTO) and Recovery Point Objectives (RPO) to be approved by the Agency and documented in the Disaster Recovery and Business Continuity Management Plan	Disaster Recovery	Will Meet	Attachment H - Technical Specifications Approach	1	97
MR017	2	Meet the approved Service Level Agreements listed in Appendix 5: Service Level Agreements & Performance Standards	Disaster Recovery	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130

		Mandatory Requirements		*Vendor Response*			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR001	1	The vendor must be incorporated as a business in any state for at least three years.	Locations	Will Meet	Attachment F - Mandatory Requirements		
MR002	1	The Vendor, all business partners, subcontractors, independent contractors, and other entities supporting the Vendor in delivery of the services defined in this contract must perform all work associated with this contract within the continental United States or U.S. Territories, as established in requirements related to handling of federal tax information (FTI) contained in Internal Revenue Service (IRS) Publication 1075, Section 5.3 Access to FTI via State Tax Files or Through Other Agencies under the authority granted by United States Code §6013(p)(4)(C). At no time shall information governed by privacy laws and regulations be used, maintained, transmitted, or caused to be transmitted outside of the United States.	Locations	Will Meet	Attachment F - Mandatory Requirements		
MR003	1	The Vendor must host the Enterprise Surveillance System (ESS) and maintain a secure site(s) and secure secondary geo-redundant site(s) within the continental United States. Off-site is defined as a physically separate location based on current industry best practices. These facilities must be located in the continental United States, as established in requirements related to handling of federal tax information (FTI) contained in Internal Revenue Service (IRS) Publication 1075, Section 5.3 Access to FTI via State Tax Files or Through Other Agencies under the authority granted by United States Code §6013(p)(4)(C).	Locations	Will Meet	Attachment F - Mandatory Requirements		
MR004	1	Prior to contract execution, the Agency will conduct a review of all hardware, software, and communication components. The Vendor must ensure compatibility with the most current West Virginia Office of Technology (WVOT) supported versions and standards.	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR005	1	The Vendor must agree to incorporate all applicable current and future coding standards and formats and legislated or program necessary data and transport requirements to ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and appropriately employ new standards and requirements as they occur including, but not limited to:	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR006	2	RxNorm	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR007	2	Health Level 7 (HL7)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR008	2	Systematic Nomenclature of Medicine (SNOMED)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR009	2	Patient Protection and Affordable Care Act (PPACA)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR010	2	Logical Observation Identifiers Names and Codes (LOINC)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR011	2	International Classification of Diseases - Version 10 (ICD-10)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR012	2	Health Insurance Portability and Accountability Act (HIPAA) v5010	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR013	2	Health Information Technology for Economic and Clinical Health Act (HITECH)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR014	2	Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS)	Compatibility	Will Meet	Attachment F - Mandatory Requirements		
MR015	1	The Vendor must provide facilities for the recovery of Design, Development, and Implementation (DDI) or operations activities in the event of a disaster that disrupts DDI or operations as described in the Vendor's Disaster Recovery and Business Continuity Management Plan which will be developed by the Vendor and approved by the Agency. The Vendor must provide resources necessary to:	Disaster Recovery	Will Meet	Attachment F - Mandatory Requirements		
MR016	2	Recover critical services and data in accordance with the Recovery Time Objective (RTO) and Recovery Point Objectives (RPO) to be approved by the Agency and documented in the Disaster Recovery and Business Continuity Management Plan	Disaster Recovery	Will Meet	Attachment F - Mandatory Requirements		
MR017	2	Meet the approved Service Level Agreements listed in Appendix 5: Service Level Agreements & Performance Standards	Disaster Recovery	Will Meet	Attachment F - Mandatory Requirements		
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

MR019	1	The Vendor must comply with the baseline security controls for moderate impact information systems as recommended by the National Institute of Standards and Technology (NIST), Code of Federal Regulations.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130
MR021	1	The vendor must provide secure data encryption while data are at rest and in transit.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130
MR022	1	The Vendor must include in the Security Plan applicable NIST SP 800-53 security control responsibilities noting which security controls are inherited by the Vendor, implemented by the Agency, or shared by both parties. The Security Plan must be maintained by the Vendor and outline the following:	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR023	2	Non-compliant and required security controls	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR024	2	Applied mitigations	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR025	2	Plan to correct deficiencies	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR026	2	Cyber security procedures and management plans	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR027	1	The Vendor must agree to incorporate all requirements mandated through Federal and State regulations and legislation, including new reporting requirements. The Vendor must ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and employ new standards and requirements as they occur. Formalized change control will be used for all such changes, during all phases of the project as defined in the Change Management Plan.	Federal and State Regulatory Changes	Will Meet	Attachment G - Business Specifications Approach	6	96
MR028	1	The Vendor must provide right of access to systems, source code, and facilities to the Agency or its designee and federal personnel to conduct audits and inspections. The Vendor must provide access to data, systems, and documentation required by auditors and inspectors.	Right of Access	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR029	1	The Vendor will operate the Enterprise Surveillance System (ESS), perform all functions described in the RFP, and continue all operations from the date of acceptance of each release, including any optional additional periods or extensions.	Operations	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR030	1	The Vendor must perform according to approved Service Level Agreements (SLAs) and identified Key Performance Indicators (KPIs) with associated metrics in the areas listed in Appendix 5: Service Level Agreements & Performance Standards.	Compliance with Service Level Agreements	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR031	1	The Vendor must deduct any amount due from future payments if the agreed upon SLAs are not met. The Agency reserves the right to seek any other remedies under the Contract.	Compliance with Service Level Agreements	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR032	1	The Vendor must use industry-standard professional project management standards, methodologies, and processes to ensure the project is delivered on time, within scope, within budget, and in accordance with the Agency's quality expectations. The Agency utilizes the Project Management Institute (PMI) PMBOK methodology.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR033	1	The Vendor must provide project status information to the Agency and the Enterprise Surveillance System (ESS) Project Management Office (PMO) within the required timeframes and in the agreed-upon format, as defined in the approved Project Management Plan.	Status Reporting	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR034	1	The Vendor must update deliverables at the request of the Agency to align with changes in approach or methodology, or to include new or updated information that was not available at the time the deliverable was initially submitted and approved.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	149

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

MR019	1	The Vendor must comply with the baseline security controls for moderate impact information systems as recommended by the National Institute of Standards and Technology (NIST), Code of Federal Regulations.	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR021	1	The vendor must provide secure data encryption while data are at rest and in transit.	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR022	1	The Vendor must include in the Security Plan applicable NIST SP 800-53 security control responsibilities noting which security controls are inherited by the Vendor, implemented by the Agency, or shared by both parties. The Security Plan must be maintained by the Vendor and outline the following:	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR023	2	Non-compliant and required security controls	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR024	2	Applied mitigations	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR025	2	Plan to correct deficiencies	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR026	2	Cyber security procedures and management plans	Security	Will Meet	Attachment H - Technical Specifications Approach	4	120
MR027	1	The Vendor must agree to incorporate all requirements mandated through Federal and State regulations and legislation, including new reporting requirements. The Vendor must ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and employ new standards and requirements as they occur. Formalized change control will be used for all such changes, during all phases of the project as defined in the Change Management Plan.	Federal and State Regulatory Changes	Will Meet	Attachment F - Mandatory Requirements		
MR028	1	The Vendor must provide right of access to systems, source code, and facilities to the Agency or its designee and federal personnel to conduct audits and inspections. The Vendor must provide access to data, systems, and documentation required by auditors and inspectors.	Right of Access	Will Meet	Attachment F - Mandatory Requirements		
MR029	1	The Vendor will operate the Enterprise Surveillance System (ESS), perform all functions described in the RFP, and continue all operations from the date of acceptance of each release, including any optional additional periods or extensions.	Operations		Attachment F - Mandatory Requirements		
MR030	1	The Vendor must perform according to approved Service Level Agreements (SLAs) and identified Key Performance Indicators (KPIs) with associated metrics in the areas listed in Appendix 5: Service Level Agreements & Performance Standards.	Compliance with Service Level Agreements	Will Meet	Attachment F - Mandatory Requirements		
MR031	1	The Vendor must deduct any amount due from future payments if the agreed upon SLAs are not met. The Agency reserves the right to seek any other remedies under the Contract.	Compliance with Service Level Agreements	Will Meet	Attachment F - Mandatory Requirements		
MR032	1	The Vendor must use industry-standard professional project management standards, methodologies, and processes to ensure the project is delivered on time, within scope, within budget, and in accordance with the Agency's quality expectations. The Agency utilizes the Project Management Institute (PMI) PMBOK methodology.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
MR033	1	The Vendor must provide project status information to the Agency and the Enterprise Surveillance System (ESS) Project Management Office (PMO) within the required timeframes and in the agreed-upon format, as defined in the approved Project Management Plan.	Status Reporting	Will Meet	Attachment I - Implementation Specifications Approach	1	139
MR034	1	The Vendor must update deliverables at the request of the Agency to align with changes in approach or methodology, or to include new or updated information that was not available at the time the deliverable was initially submitted and approved.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	139

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

MR035	1	The Vendor must submit updated deliverables for Agency approval based on the Project Schedule approved by the Agency.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR036	1	The Vendor must submit substantive changes to deliverables identified in Appendix 2: Deliverables and Milestones Dictionary to the Agency for review and approval within thirty (30) calendar days of the proposed change.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR037	1	The Vendor must provide compliance support services to include providing up-to-date, accurate, and thorough documentation and reporting for regulatory and State compliance auditing.	Audit Compliance Support and Deliverables	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR038	1	The vendor must provide a solution as a software-as-a-service (SaaS) with current updates, releases, and patches.	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	229
MR039	1	The vendor must utilize cloud hosting in the United States with geo-redundant storage.	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	241
MR040	1	The vendor must provide technical and data design and architecture that meets industry best practices.	Technical	Will Meet	Attachment H - Technical Specifications Approach	1	99
MR041	1	The vendor must provide a solution that has been successfully implemented for communicable disease surveillance, in at least two states for a minimum of two years, to include, at a minimum:	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR042	2	Contact tracing	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR043	2	Case investigation	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR044	2	Case management	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR045		Outbreak management or integration with outbreak management system	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR046	1	The vendor must have the capacity to support:	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR047	2	1000 active users	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR048	2	600 concurrent users	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR049	2	50,000 lab results per day	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR050	2	2,500 cases reports per day	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR051	2	Increased users, lab results and cases in the event of pandemics and/or outbreaks.	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240

Sunquest

MR052	1	The vendor must support definitions of user with assigned levels of access including:	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR053	2	Viewing	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR054	2	Data entry	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR055	2	Editing	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR056	2	Auditing	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR057	1	The vendor must provide a 508 compliant, web-based, browser agnostic, User Interface (UI) with person- and case-centric view options, easy navigation, and robust search capabilities.	Technical	Will Meet	Attachment H - Technical Specifications Approach	3	108
MR058	1	The vendor must provide the capability to manage look up tables, within the system, containing identifiers and attributes for reporting organizations including:	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR059	2	Local health departments	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR060	2	Healthcare providers	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR061	2	Clinical Laboratory Improvement Amendments (CLIA) certified laboratories	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR062	1	The vendor must provide the ability receive data for:	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR063	2	State reportable diseases and conditions (http://dhhr.wv.gov/oeps/disease/Reporting/Documents/reportable_disease_chart.pdf)	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR064	2	National notifiable diseases and conditions (https://wwwn.cdc.gov/nndss/conditions/notifiable/2021/infectious-diseases/))	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR065	2	Newly identified diseases	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR066	2	And to process surveillance tasks using workflows based on pre-defined rules by:	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR067	3	Disease Type	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR068	3	Contact status	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR069	3	Case status	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR070	3	Jurisdiction	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR071	1	The vendor must provide multiple methods for data submission including web-based data entry; batch upload for pdf, jpg, gif, csv, tsv, and excel formats; html; aggregate reports; and the latest standard HL7 messages for electronic laboratory reports and electronic case reports.	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR072	2	Web-based data entry	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

MR073	2	And batch upload for:	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR074	3	Pdf	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR075	3	Jpg	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR076	3	Gif	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR077	3	Csv	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR078	3	Tsv	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR079	3	Excel formats	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR080	2	Html	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR081	2	Aggregate reports	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR082	2	Latest standard HL7 messages for:	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR083	3	Electronic laboratory reports (ELRs)	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR084	3	Electronic case reports (eCRs)	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR085	1	The vendor must utilize a standard message transport protocol for HL7 messages including, but not limited to:	Functionality	Will Meet	Attachment H - Technical Specifications Approach	2	107
MR086	2	PHINMS	Functionality	Will Meet	Attachment H - Technical Specifications Approach	2	107
MR087	2	SFTP	Functionality	Will Meet	Attachment H - Technical Specifications Approach	2	107
MR088	1	The vendor must have the ability to push a copy of the database to an Agency server in a SQL format at least twice daily.	Data and Reporting	Will Meet	Attachment G - Business Specifications Approach	6	96
MR089	1	The vendor must have the ability to migrate data from legacy systems to new solution.	Data and Reporting	Will Meet	Attachment I - Implementation Specifications Approach	1	149

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

MR090	1	The vendor must provide metadata, based on audit logs, to indicate changes in data and records including, but not limited to: users, actions, date, time, and changes such as new or updated records.	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR091	2	Date	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR092	2	Time	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR093	2	Users	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR094	2	And actions, including but not limited to:	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR095	3	Additions	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR096	3	Updates	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR097	3	Deletions	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR098	1	The vendor must provide the ability to provide bi-directional data exchange and/or integration with other systems internal and external to public health including, but not limited to:	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR099	2	Electronic health records	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR100	2	Laboratory information systems	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR101	2	Electronic death registry system (EDRS)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR102	2	Enhanced HIV/AIDS Reporting System (eHARS)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR103	2	Centers for Disease Control and Prevention (CDC)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR104	2	West Virginia Immunization Information System (WVIIS)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR105	2	West Virginia Health Information Network (WVHIN) health information exchange	Integration	will Meet	Attachment H - Technical Specifications Approach	2	108

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT G: BUSINESS SPECIFICATIONS APPROACH

Instructions: The Vendor should provide a narrative overview of how the proposed system will meet the business specifications. Use the response sections to provide specific details of the proposed approach to meet the business specifications in each subject matter area. Responses should reference specifications and relevant mandatory requirements using the appropriate IDs from ***Appendix 1: Detailed Specifications*** and ***Attachment F: Mandatory Requirements***.

DHHR also expects the Vendor to propose its approach for meeting any narrative included in ***Section 4: Project Specifications*** of this RFP. Responses in this section should be highlyfocused on the business processes and specifications and not simply provide generic or marketing descriptions of solution capabilities.

If the Vendor is proposing a phased implementation, the Vendor should indicate how that approach may or may not affect functionality. Additionally, the Vendor should indicate exception handling processes where appropriate and any dependencies on existing systems orcomponents of the new system to provide the specified functionality.

<Response>

1. Overview of Business Approach

WorldCare is a person-centric application that supports five types of records; client records, disease incident records, contact investigation records, outbreak records, group event records, and animal records.

WorldCare is extremely configurable by users with the appropriate security access. Dictionaries are accessible for configuration of business rules, data elements, algorithms, workflows and alerts. An unlimited number of new forms can be added or modified as needed with the user defined forms functionality. As the name implies, the user defined forms functionality allows users to define new forms without the need of programmers. User defined forms can be created in the application through user defined dictionaries, or outside the system using a Visio plug-in and shape stencil that allows the form to be created, reviewed, revised, and then imported into the system.

Each record in WorldCare has an Electronic Filing Cabinet (EFC). This feature allows attaching electronic documents to a record. Documents may be attached as either client-centric files or associated with a specific record type such as Disease Incident, Contact Investigation, Outbreak, Group Event, or Animal Report. A simple interface allows attachment of paper records scanned directly into the system or the attachment of files already in electronic format such as .PDF, .JPEG, .GIF, Excel Spreadsheets, Word Documents etc. The attached files can be organized under folders (referred to as Albums) within the EFC.

WorldCare accepts and stores Electronic Laboratory Result (ELR) messages transmitted in HL7 formats.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Upon accepting these messages, they are parsed and stored within the system in discrete data fields. Customized business and routing rules are applied to the messages to determine the correct usage of the new lab result. To configure routing rules, the system utilizes cross-reference dictionaries to map incoming messages to reportable conditions. This includes the processing of LOINC and SNOMED codes and permits using specialized vocabularies for individual reporting laboratories. For laboratories that only transmit locally coded data, the system allows the creation of new vocabularies based on a given lab's proprietary codes and maps them to reportable conditions.

Once an Electronic Lab Result (ELR) is accepted into WorldCare, it is analyzed, and depending upon the rules defined, the report may be:

• Automatically inserted as a new record or attached to an existing record, depending on whether a matching record was identified

• Sent to a Staging Area for manual review, generating automated potential matches and permitting manual search for matches. From Staging the report may be:

o Inserted as a new client record and disease incident record

o Associated with an existing client or disease incident record

o Merged with an existing incident record

o Suppressed as a duplicate report

o Rejected and logged as a malformed report

Once imported, a user can easily view a lab result within the disease incident record created by WorldCare. The electronically received lab reports can be viewed as a printable laboratory report within the record's Electronic Filing Cabinet (EFC) or viewed in the Laboratory Information section as separate data fields within the record, where the field values auto-populate.

Below is an example of the visual representation of an ELR received by WorldCare, followed by a screenshot of a populated laboratory section.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Print

Tuesday, September 23, 2014 LAB REPORT 2:12:57 PM

LabCorp
Laboratory Corporation of America

Order Status: Final

SENDING LAB LabCorp ([redacted]) 1447 York Court Burlington, NC 27215 (800) 222-7566	
ACCESSION # [redacted]	PLACER ORDER #
SPECIMEN COLLECTED DATE [redacted]	SPECIMEN RECEIVED DATE [redacted]
SPECIMEN SOURCE	RESULT
SPECIMEN NOTES	
REPORTED [redacted]	RESULTED [redacted]

PATIENT NAME [redacted]				
PATIENT ID #	D.O.B [redacted]	AGE [redacted]	GENDER [redacted]
ETHNICITY [redacted]	RACE [redacted]		
PATIENT ADDRESS [redacted]			
PATIENT PHONE # [redacted]	WORK PHONE #		
ORDERING FACILITY [redacted]	REFERRING PHYSICIAN [redacted]		

TEST ORDERED: [redacted]

RESULT	VALUE	UNITS	REFERENCE RANGES	ABNORMAL	RESULT STATUS
[redacted]				[redacted]	
[redacted]					

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Detailed Specifications and Mandatory Requirements.

MR005 – 14	1	The Vendor must agree to incorporate all applicable current and future coding standards and formats and legislated or program necessary data and transport requirements to ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and appropriately employ new standards and requirements as

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		they occur including, but not limited to: RxNorm Health Level 7 (HL7) Systematic Nomenclature of Medicine (SNOMED) Patient Protection and Affordable Care Act (PPACA) Logical Observation Identifiers Names and Codes (LOINC) International Classification of Diseases - Version 10 (ICD-10) Health Insurance Portability and Accountability Act (HIPAA) v5010 Health Information Technology for Economic and Clinical Health Act (HITECH) Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS)
MR058 – 61	1	The vendor must provide the capability to manage look up tables, within the system, containing identifiers and attributes for reporting organizations including: Local health departments Healthcare providers Clinical Laboratory Improvement Amendments (CLIA) certified Laboratories
MR062 – 070	1	The vendor must provide the ability to receive data for: State reportable diseases and conditions (http://dhhr.wv.gov/oeps/disease/Reporting/Documents/reportable_disease_chart.pdf) National notifiable diseases and conditions (https://wwwn.cdc.gov/nndss/conditions/notifiable/2021/infectious-diseases/)) Newly identified diseases And to process surveillance tasks using workflows based on pre-defined rules by: Disease Type Contact status Case status Jurisdiction

<Response> Detailed Specifications and Mandatory Requirements.

[MR005 – 14] – World Care is capable of incorporating information from multiple coding standard and formats based on current standards and regulations. Sunquest is committed to continuing to support our Clients with products that maintain this capability and adjust to updated or new standards and regulations as they are released.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[MR058-61] – Identifiers and attributes for Local Health Departments, Healthcare providers, and Laboratories are managed in their respective dictionaries (Jurisdiction, Reporting Source, Locations, and Laboratories).

[MR062-070] – The configurable nature of WorldCare provides the ability to receive data for all state reportable diseases and conditions, nationally notifiable diseases and conditions, and newly identified diseases.

Surveillance tasks can be processed using workflows based on pre-defined rules by disease type, contact status, case status, and jurisdiction. After the implementation and training phase, DHHR will be able to adapt the system according to changing conditions without the need to engage Sunquest staff.

2. Contact Tracing

Refer to the relevant business specifications located in Appendix 1: Detailed Specifications and pertinent narrative in Section 4: Project Specifications in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Case Investigation and Management below. The narrative response for this category should be organized using the appropriate subject matter area as per Appendix 1: Detailed Specifications.

<Response>

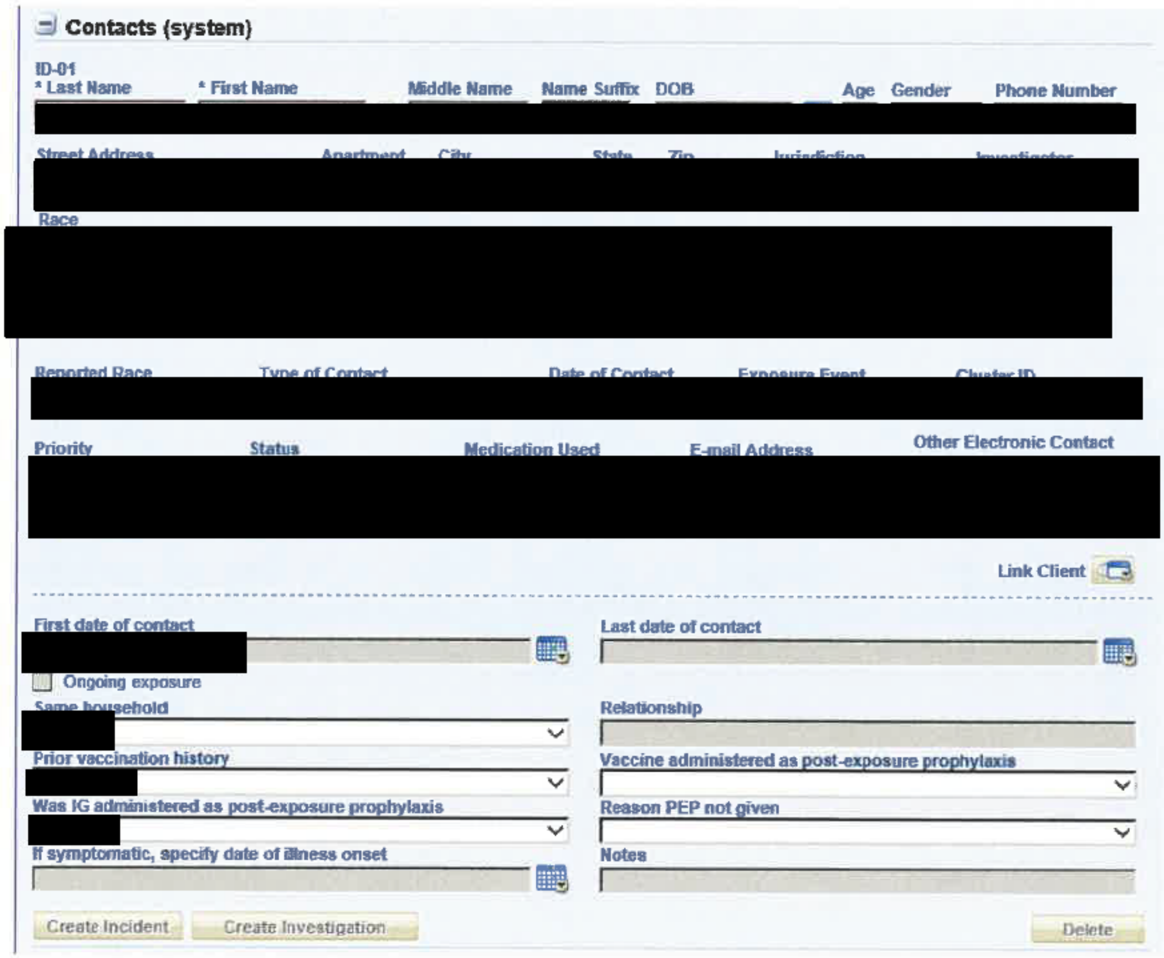
Contact Tracing Overview

Within WorldCare, contact tracing can be documented based upon the amount of investigation needed. For basic contact tracing, there is a contact management system defined section that can be added to any user defined form or tab within the system. This system defined section allows the user to select individuals already in the system or manually enter new contacts with a limited amount of information such as contact name, age, sex, address, type of contact, and date of contact. Also on this section, the user can assign the contact to an investigator and jurisdiction, assign a status and a priority, and add an exposure event or cluster ID. User defined fields can also be added to the predefined section in case a small subset of core fields need to be added for each contact, depending upon the disease being investigated.

Below is an example Contacts section within a Disease Incident record for a patient. Note that unlimited contacts can be added to this list, user defined fields can be added to each section, and the contacts can quickly have either Contact Investigation or Disease Incident records created for them by selecting the "Create Investigation" or "Create Incident" buttons. In these sections the user can track the contact's

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

demographics and jurisdictions, assign an investigator, note the type of contact, add a priority for the contact, and indicate the status of the contact investigation.

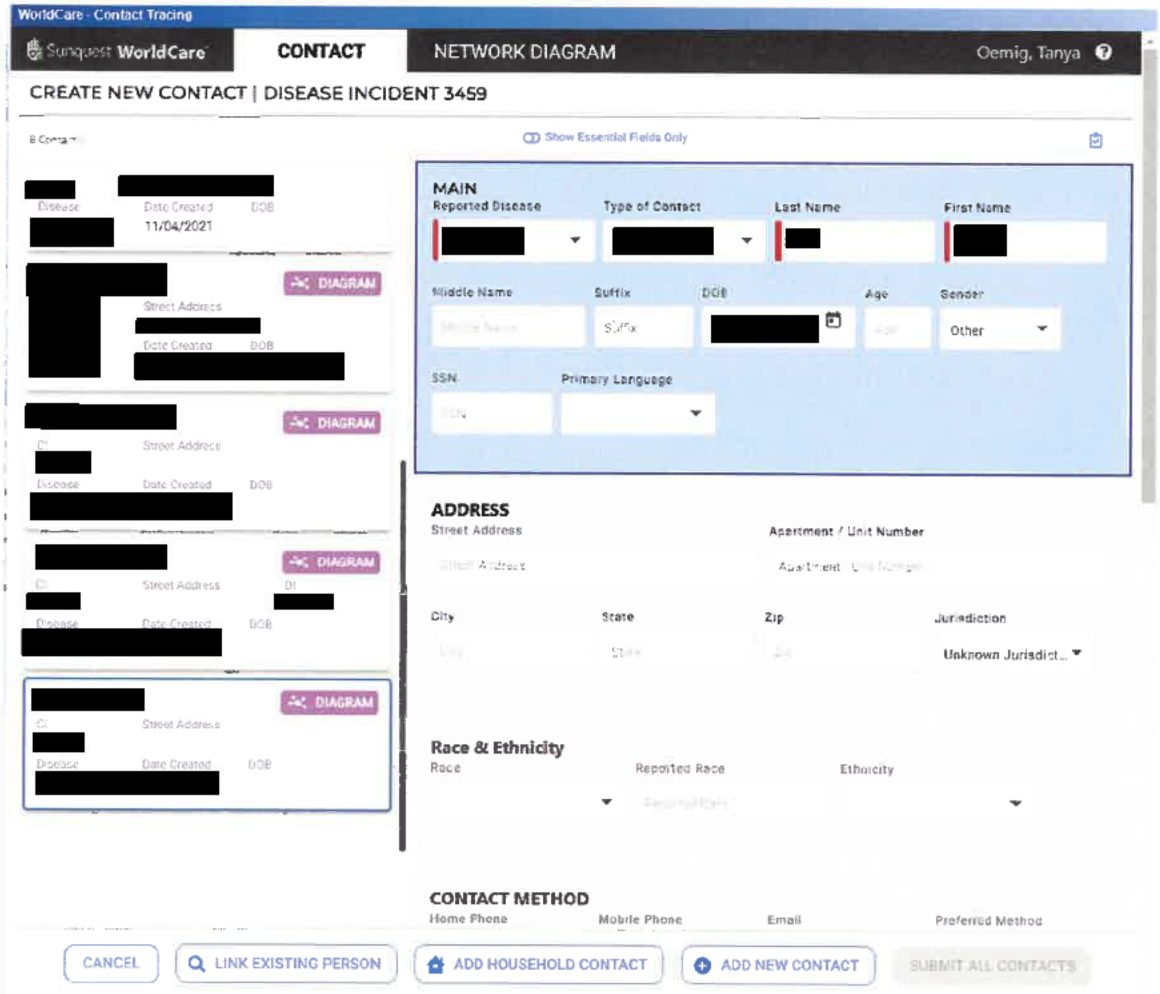


This basic contact follow-up can be used in simple contact tracing scenarios. However, in some situations more intensive contact tracing may be desired. WorldCare allows the user to open a Contact Investigation record for the contact, which provides the same level of functionality and in-depth investigation tools as within a disease incident. A contact investigation can be opened for a contact either from the Contacts section or from the Client Record of an individual by simply selecting the "Create Contact Investigation" button from either location. A contact investigation is defined in the same manner as a disease incident record, user defined forms can be created and defined as tabs, these tabs are then selected to be part of the contact protocol of forms that are core to the contact investigation for the disease selected.

A streamlined Contact Tracing module allows users interviewing a case to quickly enter contacts with

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

fewer fields and create Contact Investigation records simultaneously.



Detailed Specifications and Mandatory Requirements.

CT001 -CD012		The Vendor should provide capability for users to collect person-level contact data including: Demographics Risk factors Exposure type Exposure location Geographic

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

		Personal contact information including: Address Phone number(s) Email address Photographs Others as defined by DHHR
CT013		The vendor should provide capability to receive laboratory test reports and attached to existing contact.
CT014		The Vendor should provide the ability to perform validation of contact information formatting and alert user of invalid data.
CT015		The Vendor should provide capability for users to categorize and sort contacts per user defined characteristics.
CT016		The Vendor should provide capability to visually represent contact linkage via the contact web (Pin map).
CT017		The Vendor should provide the ability for users to classify contacts based on location and/or risk factors.
CT018		The Vendor should provide the ability to support algorithms to determine contact priority based on risk.
CT019		The Vendor should have the ability to sort contacts based on interview status and prioritize follow-up.
CT020		The Vendor should provide a public-facing symptom tracking interface.
CT021		The Vendor should provide alerts to public users based on symptom criteria.
CT022		The Vendor should provide alerts to system users based on symptom criteria.
CT023		The Vendor should provide capability to record multiple exposures for each contact.
CT024		The Vendor should provide the ability for users to create questionnaires for contact interviews.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

CT025		The Vendor should provide the ability for users to manage and track contact interview status.
CT026		The Vendor should provide the ability for users to type information/notes in free-form text box.
CT027-33		The Vendor should support the ability to record and track any instructional communications sent to contacts including: Phone Letter Email Fax SMS (text message) Others as defined by DHHR
CT034		The Vendor should provide the ability for users to set/modify contact exposure criteria.
CT035		The Vendor should support the ability to select and modify predefined intervention plans to include updated guidelines/metadata from CDC and other supporting information.
CT036		The Vendor should provide capability for users to send communications to care providers to identify contacts via interface with EHR systems.
CT037		The Vendor should provide the ability for users to upload lists of contacts from spreadsheets or other documents.
CT038		The Vendor should provide the ability for users to export lists of contacts in spreadsheet format.

<Response> Detailed Specifications and Mandatory Requirements.

[CT001-CD012] – WorldCare captures demographic and personal contact information in the system fields of the Client Record, which are shared with the Contact or Contact Investigation record. WorldCare uses an integrated third-party address standardization and geocoding service that can determine the Census Tract, Census Block, County FIPS, and Latitude and Longitude of addresses in the US. WorldCare provides a powerful platform for designing User Defined Forms (UDF) to create, modify, or remove unlimited new fields, sections, and forms. These UDFs collect data such as risk factors, exposure type, and exposure location relevant to the type of contact investigation. Each record in WorldCare has an Electronic Filing Cabinet (EFC). The user can directly scan and upload paper records into the EFC or can

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

browse and upload multiple electronic files, including photographs, in electronic format such as .PDF, .JPEG, .GIF, Excel Spreadsheets, and Word documents.

[CT013] – WorldCare receives laboratory test reports that may be attached to existing Contact Investigation records manually or automatically using pre-configured advanced auto-import rules.

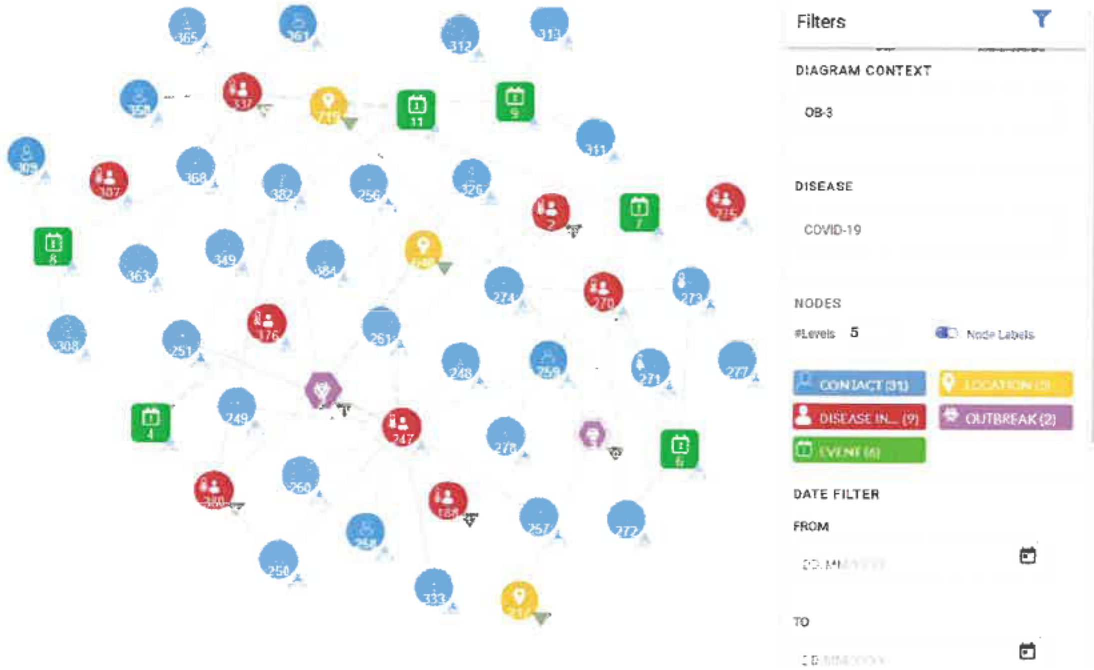
[CT014] – JavaScript business rules using application programming interfaces (APIs) can be configured to specify the field format, field validation, conditions required for investigation completion, etc. and provide warnings when the format, validation, or requirements are not met.

[CT015] – Contacts may be categorized by priority, contact type, exposure, investigation status, etc. Additional categorization (e.g. vaccination status) may be defined using the user defined form capabilities. Information displayed in many of the grids is sortable within a column.

Filters can also be applied.

[CT016] – The Network Diagram module visually represents the links and associations between Patients, Contacts, Outbreaks, Locations, and Events. Each node represents the relationship. The Nodes are differentiated by color coding and label (Record Type, ID, Icon, Symptomatic / Asymptomatic, etc.). Lines connecting the nodes represent the interconnections between the records, locations, and/or events.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



[CT017] – User defined and system sections and fields allow users to classify contacts based on location and/or risk factors.

[CT018] – WorldCare supports algorithms to determine contact priority based on risk by providing configurable Java script APIs that assign the priority of a record based on dependent data fields or through custom built reports with calculated priority assignment based on an algorithm within the report.

[CT019] – Users may select or prioritize records based on interview status using filters in Jurisdiction Review.

Users may sort records based on status using a sortable custom SSRS report.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Open Records Assigned to Investigator

ID	Type	Name	Disease	Status	Date Created	Date of Onset
[redacted]	DI	[redacted]	[redacted]	Open	05/11/2021	
[redacted]	DI	[redacted]	[redacted]	Assignment Accepted	01/01/2021	29/07/2021
[redacted]	DI	[redacted]	[redacted]	Assignment Accepted	17/06/2021	
[redacted]	CI	[redacted]	[redacted]	Open	11/06/2021	
[redacted]	DI	[redacted]	[redacted]	Under Investigation	09/06/2021	
[redacted]	DI	[redacted]	[redacted]	Follow-up In Progress	19/02/2021	

PREV NEXT

Total Assigned: 6
Disease Group: Viewing all diseases
Created by Tanya Oemig on Dec-28-2021 11:47 AM

[CT020] – The Public Portal is used by Contacts to submit questionnaire forms concerning their health after a potential contact with a person positive for a disease.

[CT021] – When the Contact answers all questions through the Public Portal and presses Submit, the Contact receives a "Thank you" message including a list of the additional days they are requested to fill in a questionnaire. If there is a problem with their submission, an error message is displayed. The thank you message can incorporate standard recommended further actions if the contact is experiencing symptoms.

[CT022] – Field alerts can be defined to send an email to identified system users when an investigator completes a symptom evaluation during an interview. Custom SSRS reports configured on a dashboard can identify contacts needing additional follow-up based on symptom criteria entered through the public portal or by an investigator during an interview.

[CT023] – WorldCare includes repeating or "Add List" sections that allow recording multiple exposures for each contact. To simplify viewing of these sections that allow an infinite number of instances, they can be displayed in a sortable grid view.

[CT024] – WorldCare provides a powerful platform for designing, creating, or modifying unlimited fields (questions), sections, and User Defined Forms (UDF) to be used as a questionnaire. All field changes are immediately reflected with the variable available for extract.

[CT025] – Users can manage and track contact interview status using the configurable process status field or a user defined field.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[CT026] – The text box field type allows users to type information/notes in free-form text boxes. Notes may be configured for automated inclusion of date, time, and username.

[CT027-33] – Instructional communications sent to the contacts can be documented in a user defined form. Content of the communication can be uploaded to the filing cabinet.

[CT034] – WorldCare is highly configurable and supports the ability for users to define contact exposure criteria.

[CT035] – Predefined intervention plans can be defined and selected using dropdown fields, checklists, task lists, and business rules. These plans, fields, and business rules can be modified to reflect updated guidelines/metadata from CDC and other supporting information.

[CT036] – Communication with EHR systems is typically from the EHR system to WorldCare. This is standard functionality. Communication through an interface to an EHR is possible.

[CT037] – Uploading lists of contacts is made possible by a simplified batch upload interface or a configurable import utility.

[CT038] – Exporting lists of contacts is possible through standard file formats, exports, user customized exports, and custom SSRS reports.

3. Case Investigation and Management

Refer to the relevant business specifications located in ***Appendix 1: Detailed Specifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area.
The Vendor should describe its approach to Case Investigation and Management below. The narrative response for this category should be organized using the appropriate subjectmatter area as per ***Appendix 1: Detailed Specifications***.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response>

Case Investigation Overview

To keep track of disease specific investigation processes, WorldCare permits the creation of a configurable workflow for every type of record in the system. The sequence of process statuses can be different for each disease or record type since unlimited workflows and statuses can be defined in the Workflow Trunk, Workflow Branch, and Process Status Dictionaries. There are an unlimited number of workflow trunks (or names) that can be defined and then an unlimited number of workflow branches (or statuses) that can be connected to each trunk. Which workflow goes with each disease and record type is defined in the Disease dictionary, so that a user with the correct security permissions can create and/or select a different workflow for each disease and/or record type. The Process Status helps to keep track of the activities completed for an investigation. The system can also be defined so that as new statuses are achieved more data elements are required thereby enforcing that all the most important information has been obtained before a record can be closed.

Workflows in WorldCare, configurable for each individual disease or family of diseases, may include any number of administrator defined Process Statuses relating to either the Local Health Department or State level. In WorldCare workflows, the statuses defined at any level of a case investigation seamlessly integrate. The right of a given user at any level to set each Process Status in a workflow is configurable by User Group. Typically, for a reportable condition, when a Local Health Department (LHD) has finished with a case, there are still process statuses remaining in the workflow which are relevant and assignable only at the State level. In practice, it can be useful for a workflow to also include "intermediate" statuses that allow for detailed interactions between the state and local levels, for example: 'Returned to LHD' and 'Sent to State'

Detailed Specifications and Mandatory Requirements

CI001-12	1	The Vendor should provide capability for users to collect person-level contact data including: Demographics Risk factors Exposure type Exposure location Geographic information Personal contact information including: Address Phone number(s) Email address Photographs Treating information

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		Diagnostics Others as defined by DHHR
CI013	1	The Vendor should support the ability to record and track case-related workflow activities.
CI014	1	The Vendor should provide capability to receive test reports and attach to existing case.
CI015	1	The Vendor should provide capability to receive new or updated test results and attach to existing cases.
CI016	1	The Vendor should provide capability to receive new or updated electronic case reports and attach to cases.
CI017	1	The Vendor should provide capability for pre-defined case-definition parameters to be established for distinct conditions.
CI018	1	The Vendor should provide the ability for users to create questionnaires for case interviews.
CI019	1	The Vendor should provide the ability to link questionnaires to case investigation.
CI020	1	The Vendor should provide the ability for users to set/modify case exposure criteria.
CI021	1	The Vendor should allow for configuration changes for disease case definition assignment or case auto closure.
CI022	1	The Vendor should provide capability to auto-suggest to close case, based on defined criteria.
CI023	1	The vendor should provide capability to identify when appropriate time periods have lapsed to close case based on pre-defined criteria.
CI024	1	The Vendor should provide capability for users to manually assign closure justification to a case.
CI025	1	The Vendor should allow for configuration changes for disease case definition assignment or case auto closure.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

CI026	1	The Vendor should support ability to add the intervention plan to an existing case record.
CI027	1	The Vendor should provide capability for users to create and save a customized intervention plan.
CI028	1	The Vendor should provide capability to automatically suggest an intervention plan, based on the disease or condition.
CI029	1	The Vendor should provide capability for users to select a recommended treatment plan.
CI030 - 33	1	The Vendor should provide capability to alert users of missed events including: (e.g., missed test, treatment, or vaccine). Missed test Treatment Vaccine Others as defined by DHHR
CI035	1	The Vendor should provide capability to alert users of follow-up test and other diagnostic results.
CI036	1	The Vendor should provide capability for users to configure an algorithm to have system automatically assign closure justification to case.
CI037 - 41	1	The Vendor should provide ability to include non-human test results with linkage to human cases for the following: Animal Food Water Others as defined by DHHR
CI042 - 46	1	The vendor should provide ability to send order sets to the following: Healthcare providers Case management providers Reporting organizations Others as defined by DHHR
CI047	1	The Vendor should provide capability for users to transmit recommendations to outside organizations or systems including: Healthcare providers Case management systems

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

		Reporting organizations Others as defined by DHHR
CI052	1	The Vendor should provide ability for administrator-level users to modify case investigation forms.
CI053	1	The Vendor should provide ability to maintain multiple disease-specific and condition-specific classification criteria.

<Response> Detailed Specifications and Mandatory Requirements.

[CI001-CI012] – WorldCare captures demographic and personal contact information in the system fields of the Client Record, which are shared with the Disease Incident record. WorldCare uses an integrated third-party address standardization and geocoding service that can determine the Census Tract, Census Block, County FIPS, and Latitude and Longitude of addresses in the US. WorldCare provides a powerful platform for designing User Defined Forms (UDF) to create, modify, or remove unlimited new fields, sections, and forms. These UDFs collect data such as risk factors, exposure type, and exposure location, treating information, diagnostics, etc. relevant to the type of disease incident. Each record in WorldCare has an Electronic Filing Cabinet (EFC). The user can directly scan and upload paper records into the EFC or can browse and upload multiple electronic files, including photographs, in electronic format such as .PDF, .JPEG, .GIF, Excel Spreadsheets, and Word documents.

[CI013] – WorldCare provides a powerful platform for designing User Defined Forms (UDF) to create, modify, or remove unlimited new fields, sections, and forms pertaining to case-related workflow activities.

[CI014] – WorldCare receives laboratory test reports that may be attached to existing Disease Incident records manually or automatically using pre-configured advanced auto-import rules.

[CI015] – WorldCare receives new and updated test results that may be attached to existing Disease Incident records manually or automatically using pre-configured advanced auto-import rules.

[CI016] – WorldCare receives new or updated electronic case reports (eCR) or provider submitted (web)

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

reports that may be attached to Disease Incident records manually or automatically using pre-configured advanced auto-import rules.

[CI017] – WorldCare can be configured with case definition parameters using a hierarchy of Incident Status Rules that automatically assign status values for a Disease Incident based on field values. These rules are applied each time an incident of that disease type is saved. Laboratory test types and results can be mapped to specific disease conditions and statuses and can be configured to ignore negative results.

[CI018] – WorldCare provides a powerful platform for designing User Defined Forms (UDF) to create questionnaires for case interviews.

[CI019] – User defined forms (questionnaires) configured as default tabs become part of a disease incident record through disease-specific tabs that display when the disease being reported is selected. User defined form questionnaires configured as stand-alone questionnaires may be added to a disease incident by selecting a case report from the electronic filing cabinet of the record.

[CI020] – All fields on a user defined form pertaining to case exposure criteria can be set/modified.

[CI021] –Incident Status Rules, laboratory test types and results, and workflow parameters set to auto-close a record can be configured and changed.

[CI022] – Custom business rules applied within a disease incident record can auto-suggest case closure.

[CI023] – SSRS reports can identify when appropriate time periods have lapsed to close a case based on configured criteria.

[CI024] – Process Status, Resolution Status, and Final Disposition fields allow users to manually assign closure justification to a case.

[CI025] – Case definition parameters, business rules, and auto closure configurations can be changed.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[CI026] – Intervention plans can be added to an existing case record using dropdown fields, checklists, task lists, and business rules.

[CI027] – Customized intervention plans can be created and saved using dropdown fields, text boxes, checklists, task lists, business rules, and forms and documents added to the electronic filing cabinet.

[CI028] – User defined forms configured with intervention plans using dropdown fields, checklists, task lists, and business rules as default tabs display when the disease being reported is selected.

[CI029] – Treatment plans can be selected using dropdown fields, checklists, task lists, and business rules.

[CI030-CI034] – Users can be alerted of missed events (tests, treatments, vaccines, others) from within a record through business rules that create popup warnings or through SSRS reports configured as reports run on demand or dashboards that display in near real time.

[CI035] – Users can be alerted of follow-up tests and other diagnostic results of multiple records by checking the Lab Results tab on the Case Load page. When electronic lab reports are attached to a disease incident record, the record is updated and the lab report is added to the electronic filing cabinet (EFC). Users may subscribe to email alerts for record updates or EFC updates and receive notification of results received through electronic lab reports.

[CI036] – Process Status, Resolution Status, and Final Disposition fields can be configured to automatically assign closure justification to a case through Incident Status Rules, business rules, and Advanced Auto-Import Rules.

[CI037-CI041] –Test results for animals, food, water, and others that are formatted according to the HL7 constrainable profile may be received electronically by the system and added to the electronic filing cabinet of a record. Users may also enter results manually. Non-human records (e.g. Environment- or animal-related) may be linked to human cases and contacts.

[CI042-CI046] – The message module can be configured to send order sets in the form of HL7 messages to healthcare providers, case management providers, reporting organizations, and others.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[CI047-CI051] – The Reporting Source and Location dictionaries store contact information of healthcare providers, reporting organizations, etc. This information can facilitate transmission of recommendations. In addition, reporting organizations others with a system login can be sent messages, including attachments, through the application.

[CI052] – The ability to modify case investigation forms is assigned by user group, allowing administrator-level users to be granted this permission.

[CI053] – Disease and condition-specific classification is configurable through dictionaries and user defined forms.

4. Contact and Case Integration

Refer to the relevant business specifications located in ***Appendix 1: Detailed Specifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Contact and Case Integration below. Thenarrative response for this category should be organized using the appropriate subject matter areaas per ***Appendix 1: Detailed Specifications***.

<Response>

Contact and Case Integration Overview

The WorldCare Surveillance system provides extensive contact tracing functionality from simple tracking of contact lists within a disease incident record for a patient, to complete contact investigation within contact investigation records specific to each contact. Even when using simple contact lists, complete risk factor data can be captured and priority of each contact can be assigned. Links between patients and contacts are always maintained even when associated to larger outbreaks. Clusters of patients and contacts can be defined using the Cluster ID. Contacts can be associated to an outbreak for non-human exposures such as foodborne or waterborne illness investigations.

Within WorldCare, contact tracing can be documented to varying degrees based upon the amount of investigation needed. For basic contact tracing, there is a contact management system defined section that can be added to any user defined form or tab within the system. This system defined section allows the user to select an unlimited number of individuals from the client registry or manually enter new contacts

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

with a limited amount of information such as contact name, age, sex, address, type of contact, and date of contact. Also on this section, the user can assign the contact to an investigator and jurisdiction, assign a status and a priority, and add an exposure event or cluster ID to the basic contact section, in this way associating the contact with an index case sharing the same exposure event or cluster ID.

Detailed Specifications and Mandatory Requirements

CC001	1	The Vendor should provide capability to generate a new case from a contact record.
CC002	1	The Vendor should provide ability for users to break linkage between contact and case.
CC003	1	The Vendor should provide capability for users to associate a contact or case with index case.
CC004	1	The Vendor should provide capability to alert users if anyone identified as a contact subsequently becomes a case through existing workflow rules.

<Response> Detailed Specifications and Mandatory Requirements.

[CC001] – New cases may be generated from a contact record by clicking on the Create Disease Incident button found on a linked contact instance or on the Investigation tab of a Contact Investigation record. Advanced auto-import rules can automatically create a disease incident for a contact if an incoming electronic lab report contains a test result that meets the case definition criteria.

[CC002] – Linkages between a case and a contact can be broken by deleting the contact instance. The client record is maintained, the person remains in the system, and other linkages are unaffected.

Linkages between a case and a Contact Investigation record can be broken by clicking the Unlink button in the linked case dialog of the record. The client and contact investigation records are maintained, the person remains in the system, and other linkages are unaffected.

[CC003] – Users can associate a contact or a case with an index case by checking the Index Case checkbox in a disease incident record. Contacts, Contact Investigation records, and Disease Incident records can be associated with the index case's Disease Incident record.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

[CC004] – A disease incident icon and disease incident ID navigational hyperlink alerts users that contacts have become cases.

5. Outbreak Management

Refer to the relevant business specifications located in ***Appendix 1: Detailed Specifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Outbreak Management below. The narrative response for this category should be organized using the appropriate subject matter areaas per ***Appendix 1: Detailed Specifications***.

<Response>

Outbreak Management Overview

Within WorldCare, Outbreak/Investigation records can be entered, updated, closed, deleted, retrieved and viewed as needed. Outbreak records, like contact investigation and disease incident records, have components that are both system defined and user defined.

An outbreak record can be linked to both contact investigations and disease incidents and any individuals linked this way are shown on the Outbreak screen within lists where the user can quick link to individual related records. Contacts can be directly linked to both disease incidents and outbreaks, and records can be linked to outbreaks either from individual records, or from the main outbreak page. Optionally, animal reports can be linked to outbreaks. Each outbreak record has its own Electronic Filing Cabinet (EFC), where users can upload electronic documentation related to the outbreak or save user defined forms not in the main workflow (including Jurisdiction-specific forms).

Condition-specific sets of user defined tabs, process statuses, resolution statuses, and task lists can be created for the workflow of any record type, including an outbreak. Tabs within the workflows are user defined and they can capture ANY information relevant to an incident, contact investigation, or outbreak of any condition, including signs and symptoms, case definitions, incubation periods, clustering, containment procedures, medications, questionnaires, etc., and additional data elements may be added by authorized personnel whenever required.

The flexibility provided by user defined tabs and forms allow outbreak protocols to be defined to fully meet client needs. New versions of all existing user defined tabs/forms in the system can be created in a single click, permitting the old versions, along with any associated case definitions, to be inactivated, saved and stored as desired.

Contacts can also be connected within the Outbreak Record. Note that there are three different types of contacts connected to the outbreak: contact investigations where the contact record is directly associated, incident contacts where the contact is indirectly associated through the disease incident of the patient they

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

are a contact to, and outbreak contacts where the contact may only be associated to the outbreak (e.g. A foodborne or waterborne outbreak where the exposure vehicle is not a person).

In WorldCare, individual event and outbreak records can be imported, manually created, processed, linked to, closed, searched, retrieved, viewed, updated, deleted, and merged, as required by the situation. All record types have unique numeric IDs.

WorldCare includes several Outbreak Reports and Exports. The Cumulative Report lists the number of Outbreaks of each type during a defined date range and the number of patient disease incidents associated with each disease outbreak type. The Outbreak Export allows a user to apply filters and specify relevant fields to be exported. The Outbreaks by Disease Report provides a list of Outbreaks meeting user criteria. If the reports in the system do not satisfy the report needs, custom SSRS reports may be developed, as described under Functional Requirement 8. Below is an example of an SSRS report created for an Outbreak.

WorldCare is capable of managing Outbreaks when a public health organization has determined that a known or suspected outbreak exists. WorldCare allows linking Disease Incidents and Contact Investigation records, people (contacts) without prior records, as well as Animal Reports to an Outbreak record. Outbreaks can be defined for a specific disease (e.g. COVID-19) or a group of diseases with an unspecified etiology (e.g. Respiratory Illness).

Detailed Specifications and Mandatory Requirements

OM001	1	The Vendor should provide capability to open, manage and close outbreaks.
OM002	1	The Vendor should provide the ability to link contacts and cases to outbreaks
OM003 - 6	1	The Vendor should provide the ability to assign outbreak definitions including: Disease Setting type Others as defined by DHHR
OM007	1	The Vendor should provide the ability to link a case/contact-specific intervention record to an outbreak.
OM008	1	The vendor should allow users to generate, edit and save outbreak plans.
OM009	1	The Vendor should provide capability to maintain a library of previous outbreak or event management plans.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

OM010 - 15	1	The Vendor should provide the ability to monitor, in real time, outbreak-related data including: Type of outbreak Number of tests ordered by care providers Chief complaints Emergency department visits Others as defined by DHHR
OM016 - 25	1	The Vendor should provide the ability for users to do the following to: Create metrics Define metrics Edit metrics Save metrics As the metrics relate to: Interventions Control Prevention Others as defined by DHHR
OM026	1	The Vendor should provide the capability to alert users of outstanding tasks in the outbreak management plan.
OM027	1	The Vendor should provide the ability to assign to each outbreak event, as derived from the original case, the following:
OM028	2	Record creation date
OM029	2	Unique record number
OM030	2	Others as defined by DHHR
OM031	1	The Vendor should provide the ability to trigger a case classification in condition identification and reporting, based on outbreak definition.
OM032	1	The Vendor should provide the ability to link to the environmental investigation system or import relevant environmental data as needed.
OM033 - 36	1	The Vendor should provide the ability to send test orders to the following: Healthcare providers

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		Laboratories Others as defined by DHHR
OM037 - 40	1	The Vendor should provide the ability to automatically link test results with requests for testing, based on the following: User-defined key User-defined code Others as defined by DHHR
OM041	1	The Vendor should provide the ability for users to create after-action reports.
OM042	1	The Vendor should provide the ability to maintain multiple outbreak-specific classification criteria.
OM043 - 56	2	The Vendor should provide the capability to capture outbreak-level data including the following: Demographics Risk factors Exposure type Exposure location Geographic information Personal contact information including: Address Phone number(s) Email address Photographs Treating information Diagnostics Others as defined by DHHR

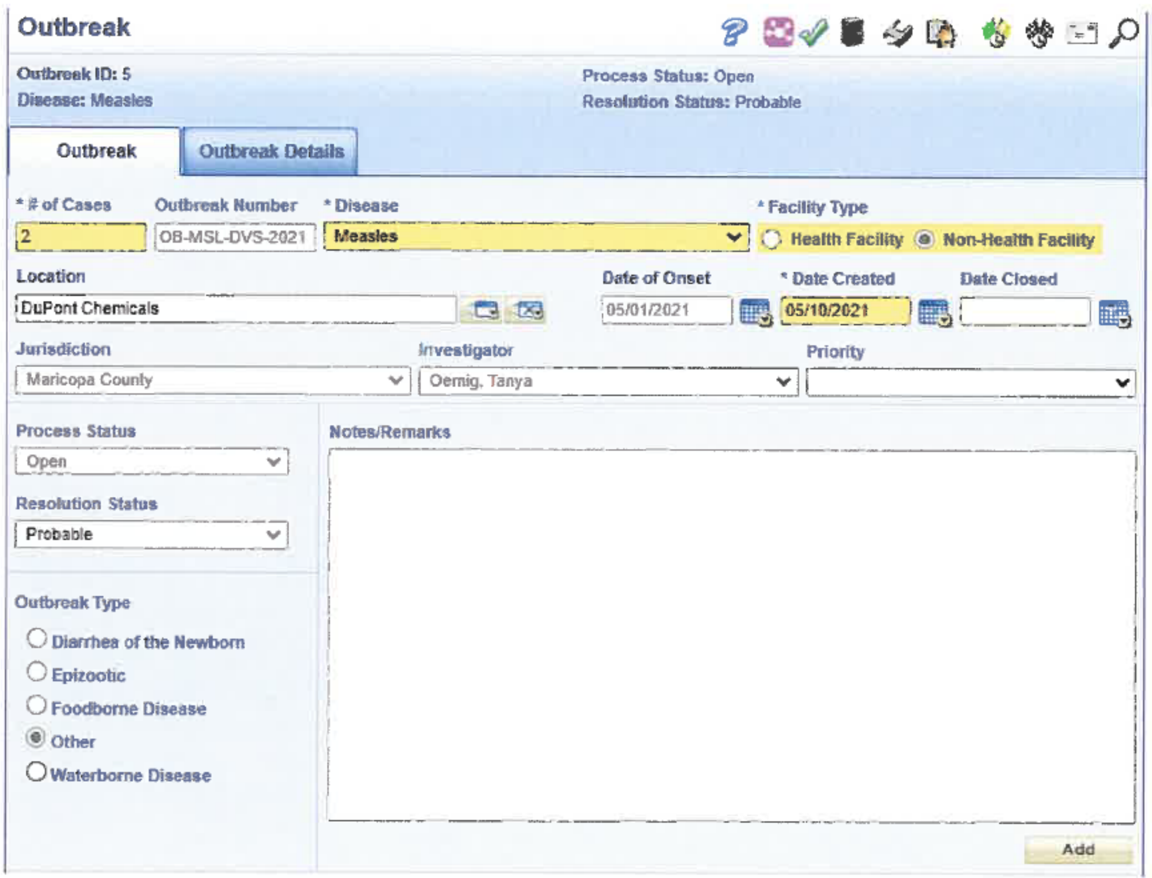
<Response> Detailed Specifications and Mandatory Requirements.

[OM001] – WorldCare contains an outbreak module that provides the capability of open, manage, and close outbreaks.

[OM002] – Contacts and cases can be linked to outbreaks from within the outbreak record, from the jurisdiction review page, from within the case or contact record, or through an import.

[OM003-OM006] – Users may assign outbreak definitions such as disease, setting type, and others.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



[OM007] – Disease Incident and Contact Investigation records may be linked to outbreaks.

[OM008] – Outbreak plans can be generated, edited, and saved by selecting using dropdown fields, checkboxes, task lists, and business rules on user defined forms.

[OM009] – User defined fields, sections, and forms for all record types are maintained in their respective dictionaries.

[OM010-OM015] – WorldCare's powerful platform for designing User Defined Forms (UDF) provides the ability to monitor outbreak-related data pertaining to type of outbreak, number of tests, chief

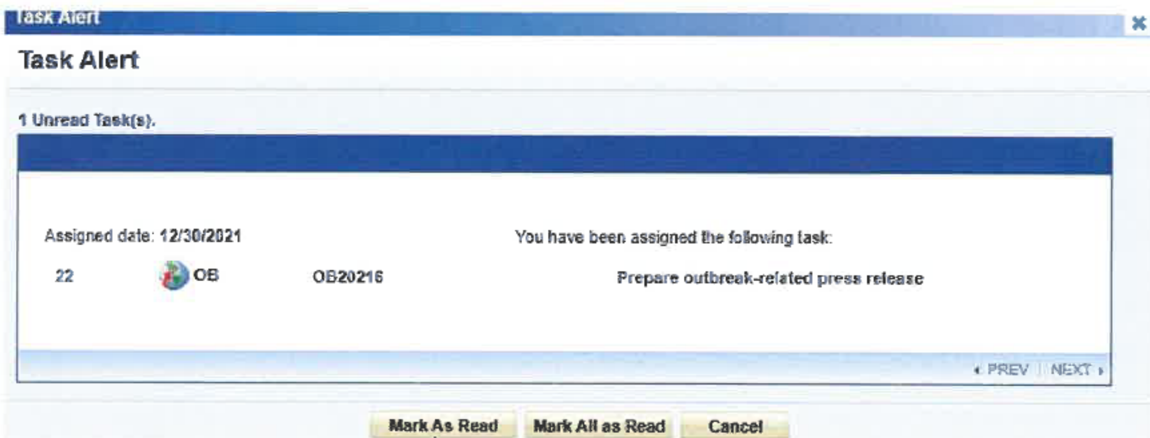
This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

complaints, emergency department visits and others.

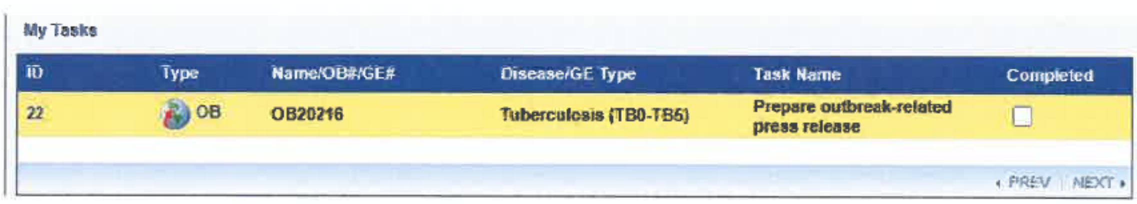
[OM016-OM025] – The ability to create, define, edit, and save metrics related to interventions, control, prevention, and others is provided through user defined forms associated with outbreaks.

[OM026] – Tasks in an outbreak management plan can be listed and assigned using the task list or customized using a user defined form.

When using the Task List feature, the assigned user is alerted via a popup.



The My Tasks portion of the user's case load reminds them of the outstanding task.

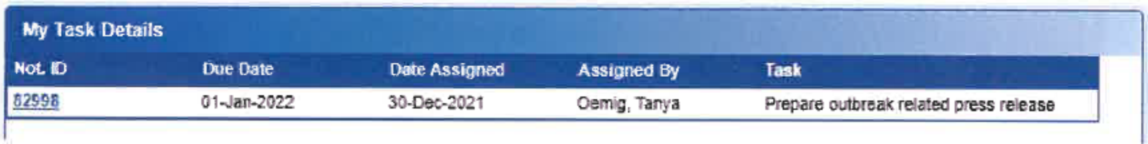


When using a user defined form, a user can be reminded of outstanding tasks through an SSRS report on the dashboard.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TASKS

ID	Task	Task Type	Priority	Assign To	Due Date
ID-001	Prepare outbreak relate...	Communicate	High	Oemig, Tanya	01/01/2022



My Task Details

Not. ID	Due Date	Date Assigned	Assigned By	Task
82598	01-Jan-2022	30-Dec-2021	Oemig, Tanya	Prepare outbreak related press release

[OM027-OM030] – Each Outbreak record includes a creation date and a unique record number. Up to three user defined forms can be configured as tabs with other fields that are not part of the standard Outbreak record.

[OM031] – WorldCare can be configured with case classification triggers in disease incident records based on an outbreak definition using a hierarchy of Incident Status Rules that automatically assign status values for a Disease Incident based on field values. These rules are applied each time an incident of that disease type is saved. Laboratory test types and results can be mapped to specific disease conditions and trigger case classification based on outbreak definition.

[OMO32] – Relevant data from the environmental investigation system can be imported using the Import Utility. Linking can be accomplished using a combination of scheduled SSRS reports and automated imports through the Import Utility API and Dataflow Pipeline. Custom integration can be considered through the change management process.

[OM033-OM036] – The Message Module can be configured to send test orders to healthcare providers, laboratories, and others as needed.

[OM037-OM040] – The Advanced Auto-Import Rules provide many fields that can be used to automatically link test results to the record with a matching test request based on a system field that may contain a user-defined key, user-defined code, or other.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[OM041] – Data necessary for after action reports may be collected on user-defined forms associated with the outbreak record. All relevant data may be exported for analysis or summarized in a standard way using an SSRS report. A narrative after-action report can be attached to the electronic filing cabinet of the outbreak record.

[OM042] – Outbreak-specific classification criteria is defined in the disease dictionary. Each condition in the dictionary can have its own Incident Status Rules and Advanced Auto-Import Rules, providing maintenance of multiple criteria.

[OM043-OM056] – All manner of outbreak-level data may be captured within the outbreak record and the linked Disease Incidents and Contact Investigation records as appropriate using system defined and user defined fields. Photographs and other pertinent attachments can be included in the electronic filing cabinet.

6. Reporting and Analytics

Refer to the relevant business specifications located in ***Appendix 1: Detailed Specifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Reporting and Analytics below. The narrative response for this category should be organized using the appropriate subject matter areaas per ***Appendix 1: Detailed Specifications***.

<Response>

Reporting and Analytics Overview

WorldCare has many predefined reports and exports that enable viewing and extracting data in a traditional manner. Available reports/exports are configurable by user group and allow various selections for limiting data output based on the user's interests. Templates can be saved for reports and exports run regularly.

Standard in-application exports have been created to allow users to export/download data in variety of formats, including tab-delimited, CSV, XML, Microsoft Excel and Microsoft Access. These exports include:

- Incident and Investigation Export (exports cases associated with clients in the application)

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- Animal Report Export
- User Defined Forms Export
- Outbreak Export
- Group Event Export
- User Case Load Export
- Vocabulary/Meta Data Exports

Data output can be limited based on the user's interest using various selections in the user-interface. Templates can be saved for exports run regularly.

Using the User Defined Forms (UDF) Export, users can export field values from any user defined form in the system. Output includes all fields for all instances of the Form attached to Clients, Records associated with Clients, Outbreaks, Group Events, Animal Reports, and Jurisdictions/Facilities the user has security access to.

Using the Custom Export, users can construct a tabular export file (Microsoft Excel) containing fields of their choosing from any system or user defined form. Users can limit the output to meet their interests using various criteria including the Record Type, Date Type, a Date Range, Record Status, and much more.

With the Animal Report module , an additional Animal Report Export exists on the Ranged Reports menu that allows exporting all main Animal Report data fields, and the User Defined Forms (UDF) export has an extra option for selecting the UDFs associated with Animal Reports.

WorldCare provides other visualization tools for analysis and reporting purposes. One such tool is the Real Time Graphs, which provides histograms on case numbers and incidence rates.

WorldCare also provides de-identified reports for extracting aggregated data that does not contain client identifiable information. De-identified reports are generated in an Excel pivot table, which allows a user to view aggregated data based upon different factors such as disease, age, gender, ethnicity, and race. The user can pare down the data reviewed based upon the typical report selection factors such as date type and date range, process status, reporting source, disease or disease group, jurisdiction and resolution status. Additionally, the de-identified reports function provides predefined reports of case counts and disease incidence rates by jurisdiction and statuses.

WorldCare Instant Export

The Instant Export feature provides a shortcut to export entries from compatible WorldCare grids into files of different formats. This feature is particularly useful for exporting search results such as a Client record search, a search within the user's Case Load, or a data dictionary search. The user can choose to export the data in a variety of formats including tab-delimited, CSV, XML, Microsoft Excel, or Microsoft Access.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The data output can be configured based on the user's interest using various selections; the user may choose to include some data elements in the export even if those elements are not displayed in columns in the grid.

SSRS Reports and Exports

For specially designed reports and exports, WorldCare employs Microsoft SQL Server Reporting Services (SSRS), an industry standard tool that enables users to create, manage, and publish reports. SSRS provides a full range of ready-to-use tools and services to help the user create, deploy, and manage reports, as well as programming features that enable customization of reporting functionality. With SSRS, interactive, tabular, graphical, or free-form reports from relational, multidimensional, or XML-based data sources can be created. Graphical reports can include various types of charts and geographical representations. Reports may also be designed with built-in calculations, and the report designer may also incorporate various types of interactive filters such as date ranges, cases statuses, and much more.

SSRS reports and exports can be created using a provided set of comprehensive database Views combined with SSRS. The database Views provide comprehensive access to the application's data such that trained users can build simple or complex reports. Any number of SSRS reports may be created to meet current and future reporting requirements.

Configurable buttons that link to SSRS reports/exports can be added to user defined forms or tabs where they can be run using the specific data entered for that record. Examples include: a patient specific contact list, or an outbreak specific Relative Risk calculation.

Detailed Specifications and Mandatory Requirements

RA001	1	The Vendor should provide the ability for users to create and regularly update epidemiologic curves.
RA002 - 12	1	The Vendor should provide capability for users to develop standard reports and ad-hoc reports by the following attributes: Demographics Geographic regions Disease Types Outbreaks Data sources Others as defined by DHHR And using the following template types: Pre-existing Saved

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to any third party(ies) without the prior written consent of Sunquest

		Customized
MR027	1	The Vendor must agree to incorporate all requirements mandated through Federal and State regulations and legislation, including new reporting requirements. The Vendor must ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and employ new standards and requirements as they occur. Formalized change control will be used for all such changes, during all phases of the project as defined in the Change Management Plan.
RA013	1	The Vendor should have the ability to implement all Message Mapping Guides for the Centers for Disease Control and Prevention (CDC) with the ability to code values within the export integration feature of the application.
MR088	1	The vendor must have the ability to push a copy of the database to an Agency server in a SQL format at least twice daily.

<Response> Detailed Specifications and Mandatory Requirements.

[RA001] – The application has a built-in epidemiologic curve report function that dynamically generates on demand based on transactional data in the system. Custom reports can be built for epidemiologic curve generation specific to user requirements and made available in the application, also generated on demand based on the changing transactional data in the application.

[RA002 - 12] - Ranged Reports can be run to export data based on disease/disease group, date ranges, and other filter criteria. Custom export is highly configurable and allows the user to select the fields relevant to their data analysis needs. Range Reports and Custom exports support saving of templates. Our application supports integration with SSRS. Sunquest will gather requirements and build a finite number of custom reports as part of the implementation process. Sunquest will provide training on building custom SSRS reports so DHHR can build and maintain additional reports. In addition to these custom reports and exports, the system includes several system reports that allow selection of configurable parameters and provide aggregate data.

[RA013] - Our application includes a CDC messaging module that facilitates mapping of system defined and user defined fields within the application to elements within the message mapping guide. Our module

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

allows mapping of disease or disease groups to specific message definitions. We support different message definition per trigger within the application (new record, updated record, deleted record). Outgoing message monitor within the application allows viewing of delivered messages. Many message mapping guides have been successfully implemented and are actively sending messages on production environments today. We continue to roll out message mapping definitions as the CDC defines new MMGs.

[MR027] – The Sunquest Solution is capable of addressing reporting requirements through a variety of methods as detailed in section 6 overview above. Sunquest agrees to incorporate any reporting requirements known during requirements validation into the implementation of the Sunquest Solution. New requirements can be added following formalized change control processes, as proposed by DHHR. The flexibility of reporting methods supported by the Sunquest Solution will also provide the ability to meet new reporting requirements identified after the completion of the implementation process.

[MR088] - The application runs on MS SQL. We can setup SQL transactional replication or SQL Always On availability group (AOAG) between our hosted solution and an on-premises server to accommodate this requirement. Note that SQL AOAG requires an enterprise SQL license and may increase hosting costs.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT H: TECHNICAL SPECIFICATIONS APPROACH

Instructions: Technical specifications include those that drive how systems should be designedand built in a way that provides for long-term use and reuse, in compliance with related standards (e.g., service-oriented architecture and State and federal adopted standards), as well asdefining the minimum set of technical capabilities expected from certain infrastructure components.

The Vendor should provide a narrative overview of how the proposed system will meet the specifications and narrative in this RFP. Use the response sections to provide specific details ofthe proposed approach to meeting the technical specifications in each subject matter area.

Responses should reference specifications and relevant mandatory requirements using the appropriate IDs from ***Appendix 1: Detailed Specifications*** and ***Attachment F: Mandatory Requirements***. DHHR also expects the Vendor to propose its approach for meeting any narrativein ***Section 4: Project Specifications*** in this RFP.

Responses in this section should be highly focused on the State business processes and specifications. If the Vendor is proposing a phased implementation, it should indicate how thatapproach may or may not impact functionality. Additionally, the Vendor should indicate exception handling processes where appropriate and any dependencies on existing systems or components of the new system to provide the specified functionality. Where necessary, pleaseinclude one (1) or more diagrams where necessary that detail the proposed design and the relationships between key technical components.

1. <Response> Approach to System Architecture & Integration

The Sunquest solution is deployed within Amazon Web Services (AWS) and leverages multi-threaded application components that can scale vertically and horizontally to accommodate increase usage demands.

Each deployment is monitored by our Network Operations Team (NOC) and key performance probes monitor vital telemetry such as disk, ram, and CPU utilisation. Upon a detection of a bottleneck, the infrastructure can easily be enhanced to accommodate additional load with minimal downtime. The flexible user interface is web based and allow user to link to new or changed systems.

With the Sunquest solution being deployed within AWS (Ohio Region), it provides an extremely highly available model with multiple redundancy at all levels.

The system is designed to operate 24x7x365. The solution will have disaster recovery as a standard feature including a georedundant secondary site within the continental United States. Disaster recovery is the ability for the application to withstand a regional failure of the datacenter and be able to resume operation within a stated period in an alternate location.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- Recovery Time Objective (RTO): The RTO of a solution is the targeted duration of time for which an application (which is inoperable due to environmental reasons) is restored to operation in an alternate location. – 4 hours
- Recovery Point Objective (RPO): The RPO indicates the longest duration of acceptable data loss should an application need to be recovered in a secondary location. The RPO requirement drives the frequency and the technology used to replicate the configuration, data and compute resources to the alternate location. – 1 hour

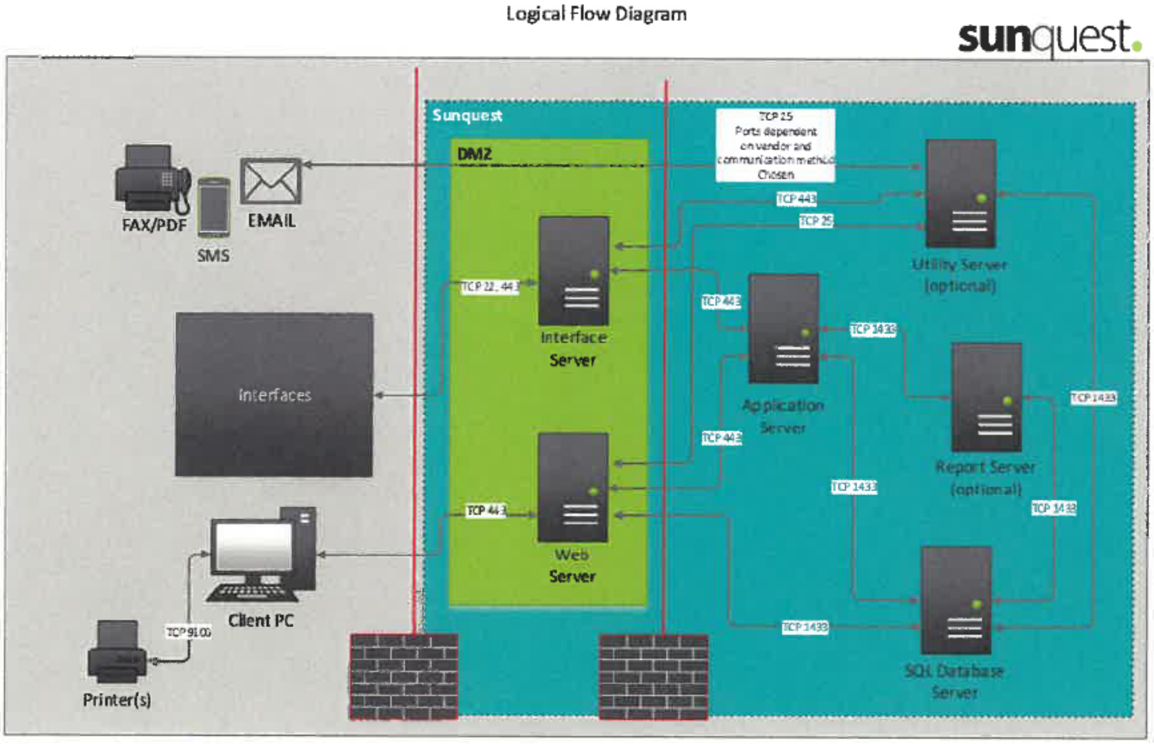
Sunquest WorldCare services are built to support multiple security mechanisms based on external/internal application needs. Supported security mechanisms are:

- Domain and IP based security
- Integrated Windows Authentication (IWA)
- Session based security
- OAuth Client Credential workflow
- Multi-factor Authentication (MFA) through Azure AD and ADFS

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Architecture Logical Flow

Sunquest WorldCare
Logical Flow Diagram



At its foundation, the architecture is based upon an n-tier design, providing for both increased security and scalability by separating the tiers. It consists of following tiers:

- User Interface Layer – Runs under the ASP.NET framework within IIS, hosting Asp.NET forms and Web APIs and serving up HTML, CSS, and JavaScript for a rich, browser-based user experience. In this tier, the ASP.NET framework also manages the data binding and unbinding, application and session cache, and system security. As demands increase, multiple servers can be added for scalability. All code is written in either VB.NET, C#.NET.
- Application/Data Access Layer – Runs under the ASP.NET framework within IIS. Unlike the User Interface, this tier is specifically configured to allow the user interface to communicate with applications objects served up with WCF calls. This tier prevents direct data access from the user interface and applies application specific business rules and data validation. As demands increase, multiple servers can be added for scalability. All code is written in either VB.NET, C# .NET.
- Database – In this tier, separate SQL Servers are installed that host the application cache, session cache, and reporting requirements, along with the actual transactional data.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

WorldCare provides flexible deployment options for these APIs based on:

- Message Submitter API – SOAP based web service to received ADT messages or any other messages in text or XML format with support for base64 encrypted content.
- Document Repository API – WCF service to receive eICR messages as per HL7 v3.0 CDA Retrieve Form for Data Capture & eICR MU3 standard.
- ELR Import API – SOAP based web service to import HL7 Lab Results into WorldCare.
- Import Web API – SOAP based web service to receive custom XML based messages. WorldCare provides option for defining the schema, matching and validation. This API is used for creating updating records within WorldCare in real-time.

Web services/APIs supports standard XML for communication. In general, WorldCare system has standardised approaches to sending and receiving data using the following message standards:

Message Specification	Description	Direction
HL7 2.3.X/2.5.1/2.7 (R01 Results)	Electronic Laboratory Reports	Inbound
HL7 ADT (Q21, Q22, A28, A31, A40)	EMPI Registry Integration	Query Response
HL7 2.5.1 Case Report (R01)	Exchange of information between jurisdictions/agencies	Outbound
HL7 3.0 CDA Retrieve Form for Data Capture (RFD)& eICR MU3 standard	Enables EHR/EMR Gateway to collaborate with providers	Query Response
HL7 2.5.1 (Q11, K11)	Enables acquisition of immunisation information	Query Response
XML	Custom Message based integration	Inbound & Outbound
Plain Text	Custom Message based integration	Inbound & Outbound

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third part(ies) without the prior written consent of Sunquest.

The solution supports transmission of patient and/or case data in XML, HL7 or flat file format to external systems using the WorldCare Messaging Module functionality.

- Imports:
  - Importing of data is provided by two mechanisms:
  - Batch File Upload, which is a highly simplified and control import utility for quick creation of patients and corresponding cases. It is primarily used for importing lists obtained from school outbreaks, travel manifests, and other data lists provided by reporting providers.
  - Import Utility that allows the end-user to create "import templates" that define all aspects of import rules including patient/case matching criteria, action criteria, field mapping, and vocabulary mapping. This tool is used to take complex data flat files or XML data files and import them into the patient, case investigation, contact, outbreak and group event forms within the system.
- Exports:
  - Standard in application reports have been created to allow the users to export data in variety of formats, including tab-delimited, CSV, XML, Excel, and Access. These reports include:
    - Disease Incident Export (Case Reports)
    - User Defined Field Export (User definable case investigation or surveillance forms)
    - Outbreak Export
    - Group Event Export
    - Contact Investigation Export
    - Custom Line list Export
    - User Case Load Export
    - Vocabulary/Meta Data Exports
- Apart from the above exports, database views are available to extract data from the system via ODBC and standard report writers.

2. Data Sources, Delivery, and Display

Refer to the relevant technical specifications located in ***Appendix 1: Detailed Specifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Data Sources, Delivery, and Display below. The narrative response for this

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest

category should be organized using the appropriate subjectmatter area as per ***Appendix 1: Detailed Specifications***.

<Response>

The WorldCare solution is a fully customizable web-based application designed for data collection, workflow management, and outcome management.

Using the online web portal, Healthcare Providers can report incidents in various predefined categories. Once submitted to the Health Department, a user (generically referred to as an Investigator) can be assigned to a case facilitating case management and handoff. The ability to assign investigators based on their role combined with the configurable workflows and case statuses facilitates signoff processes.

Workflows are configurable processes the Health Department designs by creating any number of workflow statuses (i.e. Case States) and by specifying the order in which a case goes through from creation to completion. For example, a Case of a certain type can be configured with the following hypothetical States: Entered » Assigned » In Progress » In Review » Closed. Certain States can be required; meaning, the case must be assigned that state at least once in its lifecycle. Additionally, configurable rules can be associated with various Case States; for example, certain fields become required when the case is assigned a particular Case State. Furthermore, any number of Case Resolutions and Dispositions can be configured to capture the outcome of a case.

To guide the progress of an incident, individual tasks can be organized in task lists associated with a case. Each task can be individually assigned to an investigator facilitating collaboration between users, teams, and organizations.

Immutable chronological Case Notes are captured for each case in a designated field. Each note is stamped with the date and time of the note and the name of the user responsible for that note. Notes can be easily reviewed and printed if desired.

The proposed solution promotes self-sustainability allowing our clients to independently adapt to changing data collection and workflow needs; our clients can build, amend, and expand the solution as needed and when desired without engaging vendors. The following are examples of configurable components through its built-in design studio:

- Types of incidents that can be reported including an optional free text field for further description.
- Predefined workflows and customizable rules based on the type of incident being reported.
- Various case priorities, resolution and outcome statuses.
- Any number of electronic user-defined forms. Predefined forms can be configured based on the type of incident to streamline data collection whilst any number of supplemental forms can be optionally attached to a case to augment the case report.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- Structured geo-codable Locations (where the incident took place) assigned using a Location Registry.
- The health authority or organization responsible for handling the case (i.e. jurisdiction).
- An electronic filing cabinet to attach any number of supplemental files and/or images.
- A rules engine along with in-application and outbound notifications and alerts.

Detailed Specifications and Mandatory Requirements

DS001 - 6	1	The Vendor should provide the functionality to import and export data (bi-directional reporting) in standard formats with external partners including, but not limited to, the following: healthcare providers, laboratories, WVHIN and the CDC. Healthcare providers Laboratories West Virginia Health Information Network (WVHIN) Centers for Disease Control and Prevention (CDC) Others as defined by DHHR
DS007	1	The Vendor should provide capability to populate form fields using information received from reporting organizations.
DS008	1	The Vendor should provide the ability to merge and standardize data into a uniform format.
DS009	1	The Vendor should have the ability to push a copy of the ESS database to a DHHR database in a SQL format at least twice daily.
DS010	1	The Vendor should have the ability to notify appropriate users of available data.
DS011	1	The Vendor should provide the capability to modify data submission format based on reporting organization's requirements.
DS012	1	The Vendor should have the ability to perform regular data processing procedures.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

DS013 - 19	1	The Vendor should provide acknowledgements of incoming messages or data submissions, including the following: (e.g., received, not received, and errors). Received Not Received And with information regarding the quality of the data including: Errors Warnings Others as defined by DHHR
DS020	1	The Vendor should have the ability to report data stream and job failures.
DS021	1	The Vendor should have the capability to allow users to define protocols for contacts, cases, and laboratory reports for acceptance or transfer from other public health jurisdictions.
DS022	1	The Vendor should have the ability to detect and respond to unusual data submission patterns to prevent delayed system performance.
DS023	1	The Vendor should provide the ability for users to maintain a repository of communication contacts with attributes such as healthcare providers, media, laboratories, and other partners involved in surveillance activities.
DS024 - 29	1	The Vendor should provide the ability to integrate with state's enterprise data warehouse to monitor data based on user-defined criteria including: Syndromic data Diagnostic testing Absenteeism Over-the-counter medication sales Others as defined by DHHR
DS030	1	The Vendor should support manual logging of data-sharing errors.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

DS031	1	The Vendor should support methods to collect feedback concerning communication.

MR071 - 084	1	The vendor must provide multiple methods for data submission including web-based data entry; batch upload for pdf, jpg, gif, csv, tsv, and excel formats; html; aggregate reports; and the latest standard HL7 messages for electronic laboratory reports and electronic case reports. Web-based data entry And batch upload for: Pdf Jpg Gif Csv Tsv Excel formats Html Aggregate reports Latest standard HL7 messages for: Electronic laboratory reports (ELRs) Electronic case reports (eCRs)
MR085 - 87	1	The vendor must utilize a standard message transport protocol for HL7 messages including, but not limited to: PHINMS SFTP
MR098 - 105	1	The vendor must provide the ability to provide bi-directional data exchange and/or integration with other systems internal and external to public health including, but not limited to: Electronic health records Laboratory information systems Electronic death registry system (EDRS) Enhanced HIV/AIDS Reporting System (eHARS) Centers for Disease Control and Prevention (CDC) West Virginia Immunization Information System (WVIIS) West Virginia Health Information Network (WVHIN) health information exchange

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response> Detailed Specifications and Mandatory Requirements.

[DS001 – 6] - WorldCare consumes ELR (ORU^R01) messages and electronic case reports (eCR) according to published standards. Most search screens allow instant export of search results to various formats (including excel, csv, access). The Messaging Module allows automated exports of records (e.g. CDC messaging). Disease Incident Exports allow export of incident records. The Custom Export allows additional customization of record exporting including User Defined form data. The Import utility allows import of record data to user defined and system fields.

[DS007] - ELR data populates system fields including person demographics, investigation, and laboratory sections. Electronic case reporting (eCR) is similar to ELR and allows population of User Defined Form data. Record data can also be uploaded using the import utility.

[DS008] - The system allows the merging of disease incidents, contact investigations, group events, outbreaks, locations, reporting sources and persons.

[DS009] - SQL log shipping, SQL replication, or SQL distributed availability group can be configured for offsite database access.

[DS010] - SSRS subscriptions can be configured to notify users of available data.

[DS011] - Custom transformations and interfaces can be built per incoming data feed to meet the specified requirements. This custom work will be defined and processed through change management.

[DS012] - ELR and eICR data import runs continuously and automatically. The Import Utility allows manual importing on demand.

[DS013 – 19] – Sunquest can provide MLLP sockets that allow for ACK/NAK.

[DS020] - Errors, warnings and informational notifications are stored in the Logging database. SSRS reports can be written for filtering and accessing Logging database information.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[DS021] – During ELR/eCR import, Address Standardization allows the system to assign a Jurisdiction (based on Patient Address, Provider Address, or Ordering Facility Address with the preference configurable by disease). Records can be assigned to a secondary jurisdiction or transferred between primary jurisdictions using the same application. The system can be configured to require the receiving jurisdiction in a transfer to accept or reject the transfer. An "Out of State" Jurisdiction can be configured to assign all records which do not fall into the home state. Those records can then be exported and sent to the appropriate Jurisdiction. Records sent by out of state jurisdictions can be imported using the import utility.

[DS022] - Sunquest's Network Operations Center constantly monitor all hosted client solutions to ensure performance and availability of the system is maintained. This monitoring includes the flow of data into the system from external sources as well as within the system itself.

[DS023] - Location and report source dictionaries provide the ability to record phone number, fax, email, address, and other information for doctors, laboratories, and other facilities.

[DS024 – 29] - Sunquest provides custom ETL process and SSIS integration to send data from the application to the State's data warehouse.

[DS030] – The Call Log feature allows users to enter information external to a record. This feature could be used to indicate data-sharing errors.

[DS031] – The Call Log feature allows users to enter information external to a record. This feature could be used to collect feedback concerning communication.

MR071 - 084 – WorldCare provides multiple methods for data submission. Registered internal and external users may enter data through web-based forms. Files of multiple formats can be uploaded to the electronic filing cabinet of records. Data in spreadsheets can be imported through the Import Utility. The system also processes ELRs and eCRs. It will accept batch uploads in the file formats you have requested.

MR085 – 87 – Sunquest supports standard message transport protocols for HL7 messages including

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest

PHINMS and SFTP. Files are routed to in an inbox and processed by the application independent of the method they are received.

MR098 – 105 Data exchange and integration with other systems is done through standard ELR and eCR functionality, the Messaging Module, the Import Utility, or custom interface. For example, Sunquest WorldCare processes incoming reports from laboratory systems and electronic health records and has implemented successful integrations and exchanges with death registries, immunization registries, REDCap, the CDC National Notifiable Diseases Surveillance System (NNDSS), and other systems.

3. Data Quality

Refer to the relevant technical specifications located in ***Appendix 1: Detailed Specifications*** andpertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilitiesin this area. The Vendor should describe its approach to Data Quality below. The narrative response for this category should be organized using the appropriate subject matter area asper ***Appendix 1: Detailed Specifications***.

<Response>

Data quality assurance begins with product development and verifications to build integrity and validation within the application. Sunquest Design and Development process describes the activities and tasks required to safely design and maintain Sunquest products. Software Development Life Cycle (SDLC) is an iterative development process that is executed by core innovation team members with the support of release team members. Verification activities are conducted after a requirement is translated into functional software by developers to demonstrate that design outputs meet design inputs. Verification and Validation activities are continuously conducted throughout the SDLC to identify defects and maintain reliability of products. All products releases require executive approval from department heads prior to becoming Generally Available.

Data input validation is based on multiple criteria configured during initial implementation. Required fields, field input formatting, policy number validation, among many other validations are available to enable. Once desired validation rules are defined, error messages enabling end-users to resolve issues are presented during applicable workflows in the GUI. Data validation can also be enabled for interfaced electronic messages so that all data coming into the system are complete and able to be performed.

WorldCare audit logs all successful transactions of type Insert, Update, Delete, Export, View Details, etc., including the following parameters:

- User or System account ID
- Date/time stamp

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- IP address
- Type of transactions
- Device info

Failed transactions are logged in the logging database with error code.

Detailed Specifications and Mandatory Requirements

DQ001	1	The Vendor should provide Data Quality Management for all data coming into the solution.
DQ002	1	The Vendor should develop processes to maintain data integrity, consistency, accuracy, and timeliness of the solution data.
DQ003	1	The solution should provide a tool that continually monitors the data quality within the solution and internal analytic applications.
DQ004	1	The solution should support audit and control processes that identify, report, and summarize errors in the data.
DQ005	1	The Vendor should maintain a process to identify and track all errors and discrepancies found in the solution pursuant to Service Level Agreements (SLAs).
DQ006	1	The Vendor should provide recommendations for proposed resolution/fixes for identified issues within a timeline approved by DHHR and pursuant to Service Level Agreements (SLAs).
DQ007	1	The solution should support data integrity through system controls for software program changes and promotion to production.

<Response> Detailed Specifications and Mandatory Requirements.

[DQ001] - ELR/eICR data validation occurs during import. Invalid data in non-required fields can be

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ignored, or the whole message can be ignored, and an error thrown. Data validation includes Date validation, SSN validation. Manual data entry can be validated using custom JavaScript business rules.

[DQ002] - Custom dashboards and/or SSRS reports can be built for administrators to review incoming data to achieve the goal of "integrity, consistency, accuracy, and timeliness of the solution data."

[DQ003] - Custom dashboards and/or SSRS reports can be developed to monitor data quality.

[DQ004] – Actions related to records are audited in many ways including searches, access, and changes.

[DQ005] – Sunquest uses a web-based software for managing technical software issues in accordance with the SLA. Clients are given accounts to the issues management software and will be able to submit cases to Sunquest Support, prioritize them according to their urgency, and receive online updates as the issues are investigated and resolved.

[DQ006] – Sunquest Support follows the SLA timelines in responding to issues submitted by clients. A technical support engineer first acknowledges the issue, works with the client to understand how to reproduce it, and works with other Sunquest technical resources to resolve the issue. Resolution will include proposed fixes or workarounds until a permanent resolution is determined.

[DQ007] - Software Program changes are deployed to Test/Staging environment before promotion to production. Client is encouraged to validate fixes and ensure no impact on critical workflows before going live.

4. Infrastructure

Refer to the relevant technical specifications located in Appendix 1: Detailed Specifications and pertinent narrative in Section 4: Project Specifications in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Infrastructure below. The narrative response for this category should be organized using the appropriate subject matter area as per Appendix 1: Detailed Specifications.

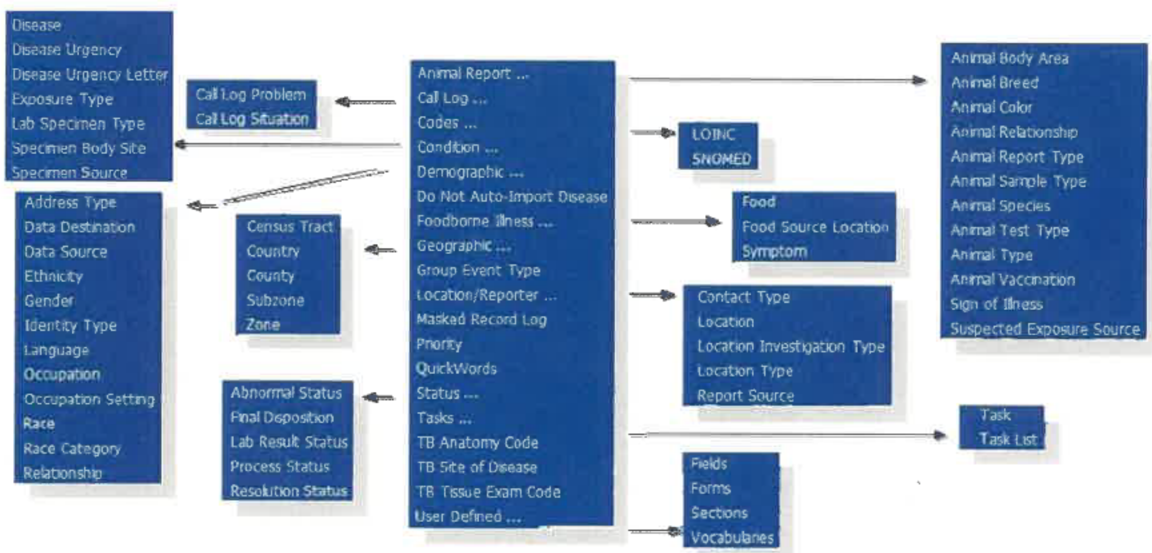
<Response>

The flexible infrastructure of WorldCare enables system users with proper authority to modify existing forms or create completely new ones, and then associate these custom-designed forms with the desired

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

public health protocols. For example, authorized users can update the system to reflect changes in the State's data collection and reporting requirements as well as update or implement new evidence-based models. This flexibility to configure WorldCare allows the system to meet your needs while also extending the system to support other important areas of case management currently and into the future.

WorldCare is a highly configurable system which provides user accessible dictionaries for configuration of business rules, data elements, algorithms, workflows and alerts. The graphic below illustrates the menu structure for dictionaries:



User Defined menu options give access to the user defined data dictionaries. These dictionaries allow the user to create user defined fields, sections, forms and vocabularies which can then be associated to diseases as part of the record workflows for each disease. Business rules can also be defined in these user defined dictionaries and associated to the user defined fields and forms, enabling assignment of required fields, conditionally required fields, active validation of data, case definition validation, and auto-calculation and population of values based on relevant data entered into other fields.

WorldCare is extremely configurable by users with the appropriate security access. For those users, an unlimited number of new forms can be added or modified, as needed, with the user defined forms functionality. As the name implies, the user defined forms functionality allows users to define new forms without the need of programmers. User defined forms can be created in the application through user defined dictionaries, or outside the system using a Visio plug-in and shape stencil that allows the form to be created, reviewed, revised and then imported into the system.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

WORLDCARE ALERT MODULE

With Alert, users can choose to receive an e-mail to alert them to the events that are of interest to them and their program area. WorldCare Alert can automatically send an e-mail alert to users of new incident records, outbreaks, or animal reports; changes to a status of a case; changes to the values of selected user defined fields in a record; addition of files within the Electronic Filing Cabinet (EFC) including new lab results; or the occurrence of a threshold exceeding event.

Alerts can be created, updated, retrieved, viewed and inactivated as needed by the user who created them, or by the intended recipient(s) of the alert. With all alerts, the user, if authorized, can view the specific content of the alert, and acknowledge receipt of the alert. WorldCare Alert also saves a complete historical audit trail including electronic notification events and receipt acknowledgements.

WorldCare Alert operates based on several configurable dictionaries, the most important of which are:

- The Threshold Analysis dictionary, where threshold alerts are defined.
- The Alert Groupings dictionary, where alerts for various combinations of Condition and Jurisdiction Groups are defined for incident records, outbreaks, and animal reports, and each alert is associated with the desired alert message and list of fields to send with the alert.
- The WorldCare Alert Message dictionary, where as many configurable alert messages as needed are defined.

Within the WorldCare system, alert templates can be created and maintained within these dictionaries, including the subject heading, basic message, and data fields to display within the alerts.

Detailed Specifications and Mandatory Requirements

IN001	1	The solution should have the ability, using deterministic and probabilistic matching algorithms, to automatically deduplicate, merge and create records.
IN002	1	The Vendor should provide administrator-level users with the ability to unmerge merged records.
IN003	1	The Vendor should provide administrator-level users with the capability to set deterministic and probabilistic matching criteria and thresholds.
IN004 - 8	1	The Vendor should provide form-builder capability for users to: Upload and reuse existing forms Develop new questionnaires Develop new letter templates

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

		Others as defined by DHHR
IN009 - 14	1	The Vendor should provide a searchable document repository for frequently used information including: Outbreak management plans Treatment protocols Best practice documentation Templates for internal and external communications Others as defined by DHHR
IN015	1	The Vendor should provide survey functionality including development of questionnaires and the ability to receive and analyze survey responses.
IN016	1	The Vendor should support reminders of incomplete questionnaires and non-responses.
IN017	1	The Vendor should provide help text with field descriptions and definitions in the user interface.
IN018	1	The Vendor should provide auto-complete/auto-suggest word functionality (i.e., IntelliSense functionality).
IN019	1	The Vendor should provide a user interface that is mobile friendly.
IN020	1	The Vendor should support multiple languages in the user interface.
IN021	1	The Vendor should provide offline capability for data entry.
IN022	1	The Vendor should provide capability for users to manage lookup tables within the application.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

IN023	1	The Vendor should allow users the ability to override a workflow to move on to next step, even if elements are determined to be missing.
IN024 - 29	1	The Vendor should provide SMS capability for automated messaging to the public when monitoring symptoms related to: Monitoring Symptom updates Reminders Notifications Others as defined by DHHR
IN030 - 34	1	The Vendor should provide SMS capability for automated messaging to DHHR users for: Alerts of assigned tasks Notifications related to information changes in the system Reminders Others as defined by DHHR
IN035 - 40	1	The Vendor should provide functionality for automated messaging through social media for: Monitoring Notifications Reminders Alerts Others as defined by DHHR
IN041 - 45	1	The Vendor should support multiple distribution methods for internal communications including: Email Phone Short message service (SMS) Others as defined by DHHR
IN046	1	The Vendor should provide users with the ability to create/edit and send alert messages.
IN047	1	The Vendor should provide the ability to track distribution/receipt of education materials.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

IN048	1	The Vendor should provide the capability to allow users to set up and modify rules to provide differential views.
IN049	1	The Vendor should have a business intelligence tool with dashboard and visual analytic capabilities for surveillance system and workflow analytics.
IN050	1	The Vendor should provide capability for administrator-level user configuration for logic changes.
IN051	1	The Vendor should provide an Application Programming Interface (API).
IN052	1	The Vendor should have the have ability to integrate with GIS web service for address validation and jurisdiction boundaries.
IN053	1	The Vendor should provide integration with data reporting and visualization applications such as Microsoft Power BI or Tableau.
IN054	1	The Vendor should provide the capability to interface with public alert networks.
IN055	1	The Vendor should provide the ability to integrate with an outbreak management system.

<Response> Detailed Specifications and Mandatory Requirements.

[IN001] – Deterministic matching rules (system or custom configured) identify potential case matches from incoming electronic results and case reports. Based on the rule definition, the incoming result or case report may be inserted as a new record or attached to an existing record. Electronic Lab Results (ELRs) are subject to duplicate suppression to prevent creation of duplicate cases. The Duplicate Person Check is an automated process for marking patients as potential merge candidates. If records are determined to be duplicates of one another, they may be merged using the Merge functionality.

[IN002] – Records that have been merged may be unmerged by users granted access to that functionality,

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

for example administrator-level users.

[IN003] – Administrator-level users may be given the capability to set deterministic matching criteria.

[IN004-IN008] – Administrative-level users may be given form-builder capability to upload and reuse existing forms, develop new questionnaires, develop new letter templates, etc.

[IN009-IN014] – The user-defined forms (UDF) functionality combined with the electronic filing cabinet can serve as a document repository for outbreak management plans, treatment protocols, best practice documentation, templates for internal and external communications, etc. Locating a UDF to load in the electronic filing cabinet uses type-ahead searching in a dropdown list. Attaching a document saved in a directory uses Windows File Explorer searching.

[IN015] – WorldCare provides a powerful platform for designing User Defined Forms (UDF) to create questionnaires. These forms can be imported into several record types, making them suitable to be used to receive and analyze survey responses.

[IN016] – WorldCare supports reminders of incomplete questionnaires and non-responses through reports, dashboards, and task lists.

[IN017] – System forms contain a link to context-sensitive help. When a user clicks on the help icon, a popup window provides background information and instructions on completing the form. User-defined forms include field types "Instruction" and "Caption." These fields allow configurable help text, descriptions, and definitions visible to users on the form itself.

[IN018] – Dropdown fields in WorldCare allow auto- selection/completion through typeahead searching.

[IN019] – WorldCare is a web-based system supported by commonly used browsers, allowing mobile-friendly entry using laptops and tablets.

[IN020]- "Globalization and Localization" is an inherent component to support world-ready applications that can be localized into one or more languages. WorldCare Technical Architecture uses "Globalization and Localization" components of Microsoft .NET framework to support localized user interfaces and regional data for all users. WorldCare in the current state supports localization for the labels on the system defined data entry forms and it can be extended to the entire application.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[IN021] – An offline mode is in development.

[IN022] – All dropdown, radio button, and checkbox field options are controlled by a dictionary or vocabulary. Users with appropriate access may manage these dictionaries and vocabularies. Entries may be changed, inactivated, or added.

[IN023] – Business rules can be configured to allow a user to acknowledge a warning but move on to the next step.

[IN024-IN029] – WorldCare provides email capability for messaging to the public when monitoring symptoms. An enhancement to provide SMS capability may be pursued using the change management process.

[IN030-IN034] – WorldCare provides email capability for messaging to system users. An enhancement to provide SMS capability may be pursued using the change management process.

[IN035 – IN040] – A WorldCare product enhancement could provide functionality for publishing notifications to multiple social platforms.

[IN041-IN045] – Internal communication is broadcasted through an in-application message alert that can be distributed based on the users, user groups, jurisdiction groups, or all users. Files can be attached to these message alerts. The user dictionary allows collection of user email address and phone number to facilitate other modes of communication.

[IN046] – The message alert page allows authorized users to create/edit and send in-application alert messages.

[IN047] – Users receiving educational materials distributed using a message alert must indicate if they read the message. This acknowledgment is stored on the message alert page. To track educational materials for contacts, cases, during outbreaks, or people participating in a group event, fields can be added to a record to document the distribution/receipt. Electronic versions of educational materials may be uploaded to the electronic filing cabinet of a record.

[IN048] – The logged in landing page of the application and dashboard views are configured by user group.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[IN049] – Surveillance and workflow analytics may be displayed on a dashboard or menu-accessible reports.

[IN050] – Logic rules that govern auto-importing, status changes, field requirements, etc. may be changed by administrator-level users.

[IN051] – Application Programming Interfaces (APIs) are used to simplify business rules and record imports.

[IN052] – WorldCare has powerful built-in geocoding abilities. The application provides integrated address geocoding and standardization. Addresses are geocoded and standardized using the configured geocoding service (via Melissa Data) with Census Tract, Census Block, County FIPS, and Latitude and Longitude saved with the record. The Census Tract dictionary maps the Census Tracts and Census Blocks to their corresponding Jurisdiction.

[IN053] – WorldCare integrates with Microsoft's SQL Server Reporting Services but development is underway to allow the database to better work with Power BI and others. Exporting data to use in other statistical analysis software is a common activity and easily managed within WorldCare.

[IN054] – Sunquest will provide a requirements gathering phase to determine the capability and method of interfacing with public alert networks.

[IN055] – WorldCare contains an outbreak module that functions as an outbreak management system. Sunquest will provide a requirements gathering phase to determine necessity, capability, and method of integration with an external outbreak management system.

5. Security Management

Refer to the relevant technical specifications located in ***Appendix 1: Detailed Specifications*** andpertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Security Management below. The narrative response for this category should be organized using the appropriate subject matter areaas per ***Appendix 1: Detailed Specifications***.

<Response> Approach to Security

Sunquest has implemented administrative, physical and technical security controls to protect Sensitive

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Data in accordance with applicable laws including but not limited to Europe's GDPR, HIPAA, UK DPA, and the APPs. These controls are reviewed and updated regularly by the Sunquest Security Council ("SSC"), which consists of Sunquest executives and subject matter experts.

Sunquest has implemented the ISO/IEC 27001 standards as the foundation for its security policies and security controls as described in this ISMS. In accordance with ISO/IEC 27001 and HIPAA, Sunquest separates these controls into the following safeguards:

- Administrative safeguards are administrative actions, and policies and procedures, to manage the selection, development, implementation, and maintenance of security measures to protect ePHI and to manage the conduct of the Party's workforce in relation to the protection of that information.
- Physical safeguards are physical measures, policies, and procedures to protect a covered entity's or business associate's electronic information systems and related buildings and equipment, from natural and environmental hazards, and unauthorized intrusion.
- Technical safeguards are the technology and the policy and procedures for its use that protect ePHI and control access to it.

The Information Security Management System document (ISMS), which will be provided upon request, describes the policies implemented by Sunquest to: a) protect the products and services provided to Clients throughout the world, b) ensure the business continuity of Sunquest and c) achieve and maintain International Organization for Standardization (ISO/IEC) 27001 certification. The policies set forth in the ISMS are designed to manage and minimize the risk associated with the use of Sunquest information technology. SOC 2 Type II reports are also available and may be provided upon request.

The Sunquest Information Security Officer ("ISO") is responsible for the operational implementation, management, and sustainment of information security, both internally and for hosted Client solutions. The Sunquest Privacy Officer ("PO") is responsible for ensuring that information security practices and operations within Sunquest conform to all applicable regulatory requirements for the protection of Sensitive Data.

Sunquest is certified to ISO/IEC 27001:2013, ISO9001:2015, ISO 13485:2016. Certificates and SOC2 report and attestation letters are available if needed.

Sunquest software is designed to integrate with and support the Customer's security policies within this environment. Sunquest contracts to provide its customers with training and support necessary to administrate and operate these systems in a secure manner. Sunquest may provide advice on the optimum configuration of customer hosted Sunquest solutions but is not able or authorized to implement or monitor the security of these systems on the customer's behalf. At all times the customer's control and authority over their environment is paramount

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

SM001	1	The Vendor should deliver a Security, Privacy, and Confidentiality Plan within 30 calendar days of contract startup.
SM002	1	The Vendor should submit an updated Security, Privacy, and Confidentiality Plan to DHHR for review and approval 30 business days prior to the start of solution operations.
SM003	1	The Vendor should perform a review of the Security, Privacy, and Confidentiality Plan annually and submit to DHHR for review and approval within 30 calendar days of the review.
SM004	1	The Vendor should submit substantive change(s) to the Security, Privacy, and Confidentiality Plan for review and approval within 30 calendar days of the proposed change(s).
SM005	1	The Vendor should maintain a DHHR-approved Security, Privacy, and Confidentiality Plan that details how the solution complies with applicable DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM006	1	The solution should maintain an audit trail that can be used to identify unauthorized attempts to access the solution and log the IP address from where the intrusion attempt occurred, in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM007	1	The solution should provide an audit of all attempts to access or use sensitive data, consistent with Health Insurance Portability and Accountability Act (HIPAA), Centers for Disease Preparedness and Prevention (CDC) , and other DHHR, State, and federal laws and regulations.
SM008	1	The solution should have the ability to prevent, monitor, and detect malicious software and code.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party/ies without the prior written consent of Sunquest.

SM009 - 12	1	The solution should have the ability to provide security incident reporting and mitigation mechanisms according to state and federal requirements and in accordance with DHHR's Incident Reporting and Response Policy including, but not limited to: Terminating access and generating a report when a potential security violation is detected Preserving and reporting specified audit data when a potential security violation is detected Others as defined by DHHR
SM013	1	The Vendor should ensure that any and all security and privacy breaches, incidents, and/or unauthorized disclosures are reported according, to state and federal requirements and in accordance with DHHR's Incident Reporting and Response Policy.
SM014	1	The solution should have the ability to log all authorized solution user activity and correlate, analyze, and report on all logged user events and associated data.
SM015	1	The solution should have the ability to provide a report of authorized solution user activity as determined by DHHR in the Design, Development, and Implementation (DDI) phase.
SM016	1	The solution should provide an audit trail of record changes, including authorized solution user, date, and time of change.
SM017	1	The solution should have the ability for audit trails to allow information on source documents to be traced through the processing stages to the point where the information is finally recorded.
SM018	1	The solution should have the ability to trace data from the final place of recording back to its source of entry.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third part(ies) without the prior written consent of Sunquest.

SM019	1	The Vendor should ensure that any and all security and privacy breaches, incidents, and/or unauthorized disclosures are reported according, to state and federal requirements and in accordance with DHHR's Incident Reporting and Response Policy.
SM020	1	The solution should limit data sharing to only those entities and individuals located in the United States and/or U.S. territories that maintain a current data sharing agreement with DHHR consistent with DHHR-required agreements and security and privacy policies and procedures.
SM021	1	The solution should have the ability to control access rights to data and system functions based on authorized solution user role-based access.
SM022	1	The Vendor should work with DHHR to define the process for access to the solution in the Design, Development, and Implementation (DDI) phase.
SM023	1	The solution should support role-based user access.
SM024	1	The solution should provide an interactive, adjustable time-out feature for authorized solution user inactivity in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM025	1	The solution should provide alerts to authorized solution users that inactivity will result in being timed out after the specified period of inactivity in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM026	1	The solution should have the ability to enforce password policies for length, character requirements, and required updates in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

SM027	1	The solution should store passwords in encrypted form in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM028	1	The solution should permit system administrators to reset authorized solution user passwords.
SM029	1	The solution should allow authorized solution users to reset their own passwords at any time by following system-defined standards in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM030	1	The solution should block pop-ups, spam, advertisements, and malware.
SM031	1	The solution should have the ability to remove or disable systems, services, components, and modules as defined by DHHR.
SM032	1	The solution should have secure transmission and data integrity controls to detect improper modification of transmitted information.
SM033	1	The solution should use Secure Sockets Layer (SSL) certificates that are consistent with State and federal requirements for data in transit.
SM034	1	The solution should have the ability to restrict release of sensitive data.
SM035	1	The solution should support data integrity by preventing and detecting unauthorized alteration or destruction.
SM036	1	The Vendor should collaborate with DHHR to determine a security approach that integrates with other solution components to supply role-based single-sign-on access.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

SM037	1	The Vendor should maintain procedures that ensure all emergency and non-emergency production system changes follow a DHHR-approved change control process, including a risk analysis.
SM038	1	The solution should support record, database, table, and field-level access.
SM039	1	The solution should have the ability to provide authorized solution users access to view and audit records of changes to free-form text data fields by capturing information including, but not limited to: The name of the authorized solution user who updated a field The date and time a field was updated Others defined by DHHR
SM043	1	The solution should have data encryption standards in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.
SM044	1	The Vendor should provide documentation on how the solution governs the confidential nature of information about patients and their health information.
SM045 - 51	1	The Vendor should be prepared to demonstrate how the solution supports regulations governing the safeguard of information about patients including, but not limited to: Names Addresses Medical data, including diagnosis and past history of disease or condition Test results Treatment plans Others as defined by DHHR, State, and federal security and privacy policies
SM052	1	The solution should disable accounts after three consecutive invalid log in attempts and protect against further user authentication attempts using a DHHR approved lock-out mechanism.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

SM053	1	The Vendor should supply, on an annual basis, a report of the results of a security risk assessment, including all tools used for the assessment, and an action plan detailing the approach for remediation of security risk vulnerabilities.
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.
MR019	1	The Vendor must comply with the baseline security controls for moderate impact information systems as recommended by the National Institute of Standards and Technology (NIST), Code of Federal Regulations.
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.
MR021	1	The vendor must provide secure data encryption while data are at rest and in transit.
MR022 - 26	1	The Vendor must include in the Security Plan applicable NIST SP 800-53 security control responsibilities noting which security controls are inherited by the Vendor, implemented by the Agency, or shared by both parties. The Security Plan must be maintained by the Vendor and outline the following: Non-compliant and required security controls Applied mitigations Plan to correct deficiencies Cyber security procedures and management plans
MR052 - 56	1	The vendor must support definitions of user with assigned levels of access including: Viewing Data Entry Editing Auditing
MR090 - 97	1	The vendor must provide metadata, based on audit logs, to indicate changes in data and records including, but not limited to: users, actions, date, time, and changes such as new or updated records. Date Time Users

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		And actions, including but not limited to: Additions Updates Deletions

<Response> Detailed Specifications and Mandatory Requirements.

[SM001] – Sunquest will provide their Information & Security Management System (ISMS) document and a Security Plan.

[SM002] – Sunquest will submit an updated Information & Security Management System (ISMS) and a Security Plan document.

[SM003] – Sunquest will review their Information & Security Management System (ISMS) document annually and provide an updated version.

[SM004] – Sunquest will provide revised Information & Security Management System (ISMS) documents as appropriate.

[SM005] – Sunquest will provide their Information & Security Management System (ISMS) document and a Security Plan.

[SM006] – The logging database records all failed login attempts and captures information from the transaction including the incoming IP address for the login attempt.

[SM007] –Audited actions in the system include searching, viewing, changing records, and accessing a record through inclusion on a system report.

[SM008] – A security and vulnerability prevention application will be used throughout the environment.

[SM009-SM012] – Sunquest uses Crowdstrike Falcon as part of our hosted architecture. In addition to Falcon the environment servers will be monitored using the tool Site24x7 and applicable alerts configured to notify Sunquest resources of any issues with the environment.

Sunquest established baseline metrics are applied to all AWS production environments. When an alert is

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

raised, incidents are automatically created within these solutions to provide Sunquest resources the ability to manage, monitor and report on incidents within the environment. In addition, all activity within the AWS VPC is audited via AWS CloudTrail which is configured to ship log data into a separate AWS-LOGGING account which has strict access controls in place. VPC FlowLogs are also configured as default as part of the Account Vending Machine used to create any new AWS account. VPC FlowLogs provide a record of all traffic into and out of the Virtual Private Cloud in which the WorldCare system is deployed

[SM013] – Sunquest policies and procedures include an Incident Response process (WI_101 Incident Response). This process includes working with the Sunquest and Roper legal teams to determine the reporting requirements.

[SM014] – Authorized user activity is audited and logged. The audit trail can be searched, analyzed, and reported.

[SM015] – Reports of user activity can be provided during all project phases.

[SM016] – The audit trail of record changes includes the user, date, and time of change.

[SM017] – Electronic documents received from external sources are available in their "as submitted" form. All changes made through the processing stages are audited, whether done manually or through and automated process.

[SM018] – The audit review provides the ability to trace data from the final place of recording back to its source of entry.

[SM019] – Sunquest policies and procedures include an Incident Response process (WI_101 Incident Response). This process includes working the Sunquest and Roper legal teams to determine the reporting requirements.

[SM020] – Data access policies may be enforced that limit access to production data and personal health information to only those entities and individuals located in the United States and/or US territories that maintain a current data sharing agreement with DHHR.

[SM021] – Access rights to data and system functions are controlled by user group and user accounts.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[SM022] – During the requirements-gathering phase, Sunquest will facilitate discussions with DHHR that define the process for access to the system during all phases of the project. Additionally, during the design phase of the project the system design document will detail all of the methods available to access the solution.

[SM023] – WorldCare supports role-based user access through user groups and user accounts.

[SM024] – DHHR can determine the timeout length after user inactivity for configuration by Sunquest.

[SM025] – DHHR can configure the warning time prior to user timeout due to inactivity.

[SM026] – Configuration settings configured by DHHR enforce password length, character requirements, and duration.

[SM027] – Passwords are stored in encrypted form.

[SM028] – System administrators may reset user passwords.

[SM029] – Users may reset their own passwords on their profile page. Password configuration settings are enforced.

[SM030] – The Sunquest Solution is compatible with multiple internet browsers. The Sunquest proposal assumes that the browser currently used by DHHR will be compatible with the Sunquest Solution. Browser security settings and management are controlled by the client.

[SM031] – Sunquest will enable/disable services, components, and modules according to the contractual agreement.

[SM032] – Our standard deployment includes a communication server with Cerberus SFTP installed (third party software). SFTP protocol and security built into Cerberus SFTP ensure secure data transmission and logging of actions against malicious activity.

[SM033] – The Sunquest Solution uses SSL certificates. Sunquest would need references to specific state and federal requirements to supply documentation of our compliance.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[SM034] – Access rights to data are controlled by user group and user accounts.

[SM035] – Access rights to data are controlled by user group and user accounts. All data-related activities are audited.

[SM036] – Application supports single-sign-on (SSO) access through MS Azure, ADFS 2.0, and custom store. User accounts are created in the application, including security settings, and configured with the SSO account details.

[SM037] – Sunquest standard policies and procedures require Client validation and approval for all production system changes. Sunquest is happy to work with DHHR to confirm that these policies and procedures include a DHHR-approved change control process.

[SM038] – Data access at all levels, down to the field-level, is controlled by user groups, user accounts, and business rules.

[SM039-SM042] – Free-form textbox fields include the name of the user who entered the text and the date and time the text was entered. Additional information, such as the entered text and IP address of the user, is available in the audit log.

[SM043] – Sunquest Systems are protected from external monitoring by default system security configurations. The Systems are configured to limit the sharing of resources and to prevent unauthorized access or unintended data transfers. Sunquest identifies key System boundaries and uses managed interfaces at boundary entry and exit points to secure Sensitive Data. Where access to or over external or public networks is necessary, Sunquest configures secure communication tools including firewalls, VPNs, or SSH tunneling protocols. Sunquest secures access to its networks utilizing a "deny all, permit by exception" policy. Sunquest utilizes encryption protocols compliant with or superior to NIST Special Instruction 800-111 to secure Sensitive Data transmitted over insecure or public networks. Sunquest collaborative computing devices are controlled using data at rest encryption and security policies to restrict unauthorized access to Sensitive Data. Encryption keys, passwords, and certificates are securely stored and managed. Systems are configured to automatically terminate remote connections due to a period of inactivity and session integrity is secured utilizing secure authentication protocols.

[SM044] – As stated in the System Administrator Guide, the WorldCare security schema is built around the following components: User Group, Disease Group, Jurisdiction Group, and Report Source. Together,

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

these items enable System Administrators to determine the following:

Which features users can access

Which records users have access to

Which incidents are visible based on a users' geographic location

Which records are visible based on a user's health care facility.

[SM045-SM051] – Access to data within a record is determined by a user's User Group, Disease Group, Jurisdiction Group, and Report Source. By disabling the view of records by default and requiring a search, access to Names and Addresses can be limited to only the records relevant to the user's task.

[SM052] – The number of unsuccessful login attempts leading to a disabled account is configurable. The length of lock-out time is also configurable.

[SM053] – Sunquest agrees to perform an annual security risk assessment. The report from this assessment shall be supplied to DHHR, including all tools used for the assessment, and a detailed action plan and approach for remediation of security risk vulnerabilities.

[MR018] - Sunquest will provide their Information & Security Management System (ISMS) document.

[MR019] - As a foundation for its security controls, Sunquest uses the Special Publication 800-53T published by the National Institute of Standards and Technology (NIST). Subpart C--SECURITY STANDARDS FOR THE PROTECTION OF ELECTRONIC PROTECTED HEALTH INFORMATION. Sunquest is certified to ISO27001:2013. The Sunquest Information Security Management System (ISMS) document outlines the policies and practices to protect Electronic Protected Health Information.

[MR021] - Sunquest systems are protected from external monitoring by default system security configurations. The Systems are configured to limit the sharing of resources and to prevent unauthorized access or unintended data transfers. Sunquest identifies key System boundaries and uses managed interfaces at boundary entry and exit points to secure Sensitive Data. Where access to or over external or public networks is necessary, Sunquest configures secure communication tools including firewalls, VPNs, or SSH tunneling protocols. Sunquest secures access to its networks utilizing a "deny all, permit by exception" policy. Sunquest utilizes encryption protocols compliant with or superior to NIST Special Instruction 800-111 to secure Sensitive Data transmitted over insecure or public networks. Sunquest collaborative computing devices are controlled using data at rest encryption and security policies to

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

restrict unauthorized access to Sensitive Data. Encryption keys, passwords, and certificates are securely stored and managed. Systems are configured to automatically terminate remote connections due to a period of inactivity and session integrity is secured utilizing secure authentication protocols.

[MR022 – 026] - As a foundation for its security controls, Sunquest uses the Special Publication 800-53T published by the National Institute of Standards and Technology (NIST). Subpart C--SECURITY STANDARDS FOR THE PROTECTION OF ELECTRONIC PROTECTED HEALTH INFORMATION. Sunquest is certified to ISO27001:2013. The Sunquest Information Security Management System (ISMS) document outlines the policies and practices to protect Electronic Protected Health Information.

[MR052 – 056] – the WorldCare security schema is built around the following components: User Group, Disease Group, Jurisdiction Group, and Report Source. The User Group determines which features users can access and the level of activity within records such as Viewing, Data Entry, Editing, and Auditing.

[MR090-97] – The application maintains audit data including record ID, record type, action type, action date time, user IP, username, field name, old value, and new value. Action types include but are not limited to insert, update, delete, and view record.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT I: IMPLEMENTATION SPECIFICATIONS APPROACH

Instructions: The Vendor should provide a narrative overview of how the proposed system willmeet the specifications and narrative in this RFP. Use these response sections to provide specificdetails of the proposed approach to meeting the implementation specifications in each process area. Be advised, while some sections only require narrative around specifications others may also contain pointed questions. Responses should reference specifications and relevant mandatory requirements using the appropriate IDs from ***Appendix 1: Detailed Specifications*** and ***Attachment F: Mandatory Requirements***.

Responses in the sections below should be focused on DHHR business processes and requirements. DHHR also expects the Vendor to propose its approach for meeting the narrativeincluded in this RFP.

The Vendor is required to respond to the headings below to provide detail regarding theVendor's methodology for each project management component.

1. Project Management Methodology

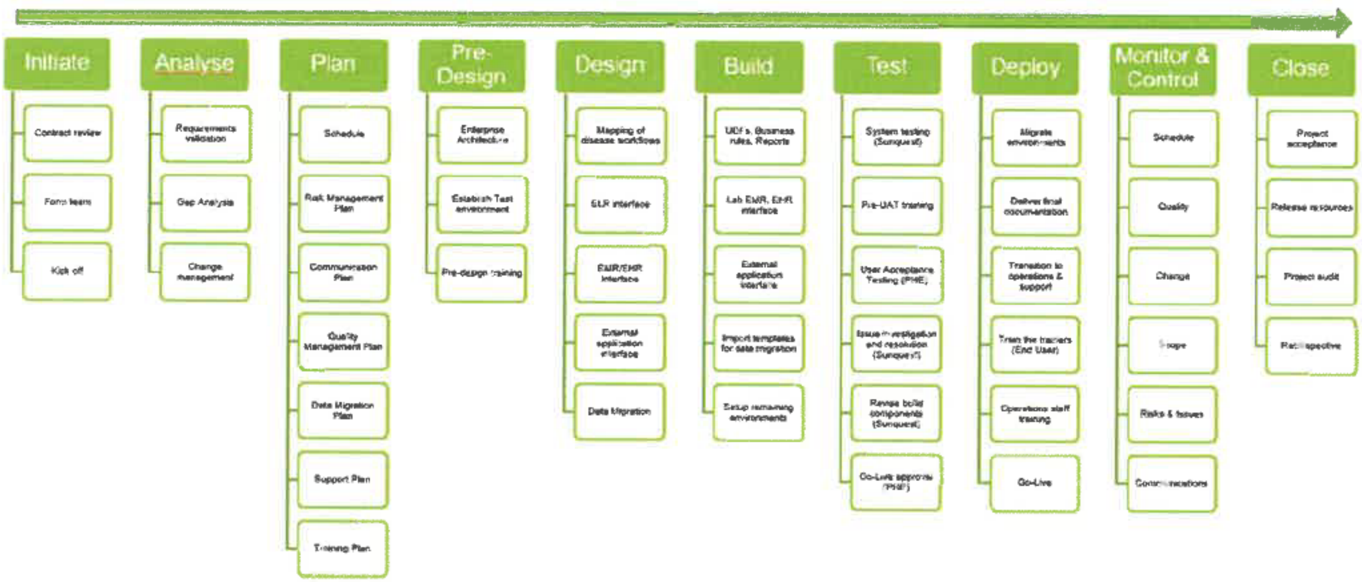
The Vendor's proposal should describe the Vendor's methodology, tools, and techniques used tosupport projects from requirements through finished deliverables, including deployment of the new solution, project management, checkpoints, and periodic status reporting. The proposal should describe policies and procedures employed to ensure timely completion of tasks in a quality fashion.

<Response>

Our offering includes executing a standard implementation methodology using a best practices approach based on PMI® standards, that can be customized to meet the business and budgetary needs of each customer. Details are offered in the sections below. The entire project is governed by five sets of activities; initiation, planning, execution, monitor and control, and closure, that are defined in the Project Management Plan (PMP) to plan and execute a successful project. The diagram below outlines the Sunquest Project Implementation Methodology, which is described in detail in later sections.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

Deployment: Implementation Methodology



Detailed Specifications and Mandatory Requirements.

PM001	1	The solution should align with DHHR's vision for the to-be ESS environment.
PM002	1	The solution's initial data load should consist of all current data contained within the existing surveillance systems at the time of the implementation of the Enterprise Surveillance System (ESS) .
PM003	1	The Vendor should store and maintain all project documentation in an agreed upon document repository such as a SharePoint location.
PM004	1	The Vendor should make all project documentation accessible to all stakeholders identified by DHHR.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

PM005	1	The Vendor should conduct deliverable walk-throughs for all project deliverables prior to their submission, unless otherwise approved in writing by DHHR.
PM006	1	The Vendor should work with DHHR to develop acceptance criteria for each project deliverable.
PM007	1	The Vendor should submit each project deliverable to DHHR in final form and be ready for signature approval.
PM008	1	The Vendor should submit each project deliverable to DHHR in accordance with each date in the project schedule.
PM009	1	The Vendor should work with DHHR's project manager regarding all project related activities.
PM010	1	The Vendor should submit all meeting materials to DHHR 24 hours prior to each meeting.
PM011	1	The Vendor should capture meeting minutes at each meeting.
PM012	1	The Vendor should distribute meeting minutes within 48 hours after a meeting occurs.
PM013 - 19	1	The Vendor should provide DHHR weekly reports of testing status, including, but not limited to: Metrics on the number of tests completed Number of deferred or canceled tests Results of the tests executed Defects identified by severity level Corrective actions taken Others as defined by DHHR
PM020 - 25	1	The Vendor should provide DHHR with weekly, monthly, and quarterly project status reports to include: General project status information Milestone review

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		Issues and risks Project metrics Others as defined by DHHR
PM026	1	The Vendor should utilize a change management methodology that is based on industry standards and best practices and is approved by DHHR.
PM027 - 32	1	The Vendor should propose a change management methodology including, but not limited to: Approach across all project phases Roles and responsibilities Tools necessary to support change management Reporting Others as defined by DHHR
PM033	1	The Vendor should propose an organizational change management methodology in support of the Enterprise Surveillance System (ESS) implementation.
PM034	1	The Vendor should conduct requirements analysis sessions with DHHR during which the Vendor will review, refine, and seek approval for all requirements included in this Request for Proposal (RFP)
PM035 - 38	1	The Vendor should work with DHHR to design the system in accordance with the following design phases: Preliminary System Design Detailed System Design Final System Design
PM039	1	The Vendor should be responsible for all costs associated with requirements analysis and solution design.
PM040	1	The solution should be developed and implemented in accordance with the project work plan.
PM041	1	The Vendor should detail their approach to both requirements validation and joint application design in support of requirements analysis and solution design activities.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

PM042	1	The Vendor should maintain a requirements traceability matrix (RTM) throughout the lifecycle of the project as defined in the Deliverables.
PM043	1	The Vendor should provide all stakeholders identified by DHHR access to the requirements traceability matrix (RTM).
PM044 - 51	1	The Vendor should document in the requirements traceability matrix (RTM) where each requirement is accounted for within the following areas: Design documentation Workflows Communications Test conditions Test scenarios Test cases Others as defined by DHHR
PM052	1	The Vendor should demonstrate through the requirements traceability matrix (RTM) that all documented and approved specifications have been traced throughout the design lifecycle.
PM053	1	The Vendor should work with DHHR to fully understand the scope, purpose, and implications of each Request for Proposal (RFP) specification.
PM054	1	The Vendor should identify and work with DHHR to resolve gaps between the Vendor and DHHR's understanding of a specification.
PM055	1	The Vendor should propose and execute a plan for a phased approach to the solution's implementation, including all of the solution's components and modules.
PM056	1	The Vendor should design the solution using an iterative development approach.
PM057	1	The Vendor should review and test in logical functional groups of system components or modules.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

PM058	1	The Vendor should ensure that all design documentation is kept current throughout the contract.
PM059	1	The Vendor should support all data migration related activities.
PM060	1	The Vendor's data migration strategy should minimize risk and the disruption to other enterprise solutions affected with the solution's design and implementation.
PM061	1	The Vendor should be responsible for the data cleansing of all data being migrated from the existing surveillance systems and converted to the new solution.
PM062 - 65	1	The Vendor should propose an industry standard data migration and conversion methodology that includes but is not limited to: Data analysis techniques Checks and balances for ensuring data quality and accuracy Data conversion tool sets
PM066	1	The Vendor should complete a full analysis of DHHR disease surveillance enterprise to understand what source solutions and corresponding data will need to be integrated into the solution.
PM067	1	The Vendor should complete an assessment of the as-is and to-be environment to understand what reports will be needed in support of operations.
PM068	1	The Vendor should develop and obtain DHHR approval of all reports identified as needed in support of operations.
PM069	1	The Vendor should be prepared to work with DHHR to identify and integrate data from DHHR-identified surveillance systems.
PM070	1	The Vendor should propose and manage a process by which data from additional solutions can be identified and integrated into the Enterprise Surveillance System (ESS).

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third part(ies) without the prior written consent of Sunquest.

PM071	1	The solution should have the ability to support quality measures as defined by DHHR.
PM072	1	The solution should support workflow development by the Vendor based on new processes defined by DHHR according to business needs as identified in the Change Management Plan.

MR004	1	Prior to contract execution, the Agency will conduct a review of all hardware, software, and communication components. The Vendor must ensure compatibility with the most current West Virginia Office of Technology (WVOT) supported versions and standards.
MR032	1	The Vendor must use industry-standard professional project management standards, methodologies, and processes to ensure the project is delivered on time, within scope, within budget, and in accordance with the Agency's quality expectations. The Agency utilizes the Project Management Institute (PMI) PMBOK methodology.
MR033	1	The Vendor must provide project status information to the Agency and the Enterprise Surveillance System (ESS) Project Management Office (PMO) within the required timeframes and in the agreed-upon format, as defined in the approved Project Management Plan.
MR034	1	The Vendor must update deliverables at the request of the Agency to align with changes in approach or methodology, or to include new or updated information that was not available at the time the deliverable was initially submitted and approved.
MR035	1	The Vendor must submit updated deliverables for Agency approval based on the Project Schedule approved by the Agency.
MR036	1	The Vendor must submit substantive changes to deliverables identified in Appendix 2: Deliverables and Milestones Dictionary to the Agency for review and approval within thirty (30) calendar days of the proposed change.
MR089	1	The vendor must have the ability to migrate data from legacy systems to new solution.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response> Detailed Specifications and Mandatory Requirements.

[PM001]

As part of the initial Analysis phase, Sunquest will set up several workshops with the state stakeholders to review, discuss, and validate project requirements, goals, and future vision. The purpose of these workshops is to understand the current state and pain points prior to understanding the project requirements and how they relate to the state's future goals and vision. (For more detail on this process please see response to PM034).

[PM002] Review data import section

As part of the initial requirements analysis and data migration planning, Sunquest will discuss the requirements and timeline for initial data load. Factors such as quantity and quality of current data will be reviewed and analyzed and the teams will determine an optimal approach for the initial load of existing data.

[PM003] The Sunquest Project Manager and DHHR Project Manager will determine a shared file location that ensures access by all required project stakeholders and participants. All project documentation will be maintained in this location for the length of the engagement.

[PM004] Sunquest will work with the DHHR Project Manager to ensure that all project stakeholders have access to the shared file location where project documentation is stored. DHHR is responsible for identifying project stakeholders and providing a list to the Sunquest Project Manager within 30 days of project start. DHHR is also responsible for communicating any changes to the stakeholder list to the Sunquest Project Manager.

[PM005] As part of the Project Deliverable approval process, Sunquest will conduct a walkthrough of each deliverable prior to its submission for approval. The walkthrough will be delivered to the required approvers for that deliverable. Minor updates to add clarity to the deliverable may be made after the walkthrough based on discussions or questions during the meeting. If, during a walkthrough, it is determined that a deliverable requires major changes or adjustments an additional walkthrough will be held prior to submission for approval.

[PM006] The Sunquest Project Manager and the DHHR Project Manager will collaborate on the list of acceptance criteria for each deliverable. Acceptance criteria need to be approved by DHHR and Sunquest

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

at least 10 business days prior to the deliverable walkthrough session. Sunquest is willing to review and evaluate for use any deliverable templates or formats that DHHR recommends or prefers to be used.

[PM007] Once a deliverable has been created, the acceptance criteria approved, and the walkthrough sessions completed with no major changes required, the deliverable will be finalized and submitted to the DHHR Project Manager for approval workflow. Once approved, Sunquest will be notified, and a copy of the signed deliverable will be stored in the project's shared file location. If a deliverable fails to receive approval, DHHR will provide Sunquest with an explanation as to why approval was not given, and Sunquest will modify the deliverable to resolve the identified issue. Depending on the nature of the modifications, the deliverable may be subject to an additional walkthrough before re-submission for approval.

[PM008] The finalized project schedule will contain tasks and dates for each step of deliverable approval including acceptance criteria approval, deliverable walkthrough session, finalized deliverable submission, and deliverable approval.

[PM009] Sunquest believes that the project management for the implementation of our products is a collaborative and cooperative process between the Sunquest Project Manager and the Client Project Manager. Sunquest considers this collaboration along with open and regular communication to be key success factors to any client engagement.

[PM010] As part of the Communication Plan, the Sunquest Project Manager will provide any relevant materials to meeting participants 24 hours prior to the meeting. If the relevant materials are part of the documentation stored in a shared location, the Sunquest Project Manager will provide a list of document names and a link to their shared location.

[PM011] The Sunquest Project Manager will be responsible for ensuring that meeting minutes are captured at each meeting. Meeting minutes will include, but are not limited to, meeting participants, main discussion points, and action items.

[PM012] Meeting minutes will be distributed to all meeting invitees within 24 hours. Meeting minutes will also be stored in the project documentation within the shared file location.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[PM013 - 19] Sunquest will work with DHHR to define the metrics to be contained within the weekly testing status reports.

[PM020 – 25] The Sunquest Communication Plan includes weekly project status meetings with the Sunquest and DHHR Project Managers, and key project resources. Project status meetings cover a general project status update, milestone review, review and update of current issue list and risk register, as well as any other agreed-to project metrics. The Sunquest Project Manager will ensure that meeting minutes are recorded and shared with the meeting participants within 24 hours, and stored in the shared file location for project documents. In addition, the Sunquest Communication Plan includes Monthly and Quarterly executive project updates. The Sunquest template for the executive project overview includes Red/Amber/Green coding along with a short explanatory statement for overall project health, project schedule, project scope, and project risks. The executive summary also includes a list of issues or risks needing executive review, deliverables / milestones completed since the last report, and deliverables / milestones prioritized for the next reporting period. For an engagement the size of that proposed by DHHR, Sunquest also institutes an Executive Steering Committee (ESC) as part of the governance structure. The ESC meets monthly or quarterly, depending on project phase and needs, and includes a presentation from the Sunquest Project Manager covering project status, milestones, issues and risks, and other agreed-to project metrics.

[PM026]

As part of the Project Management Plan, Sunquest will provide a Change Management Plan which proposes the process used during the project to manage all change requests introduced throughout the project lifecycle. The plan will need to be reviewed by the client, revised if needed to accommodate client specific procedures, and approved by the client. For further details, please refer to section 1.5-Change Management.

[PM027 – 32]

As part of the Project Management Plan, Sunquest will provide a Change Management Plan which proposes the process used during the project to manage all change requests introduced throughout the project lifecycle. The plan will need to be reviewed by the client, revised if needed to accommodate client specific procedures, and approved by the client. For further details, please refer to section 1.5-Change Management.

[PM033]

Sunquest considers detailed workflow definition and robust training to be key to successful organizational

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

change management. The Sunquest Solution Lead will collaborate with the Client change management team to understand current processes and to define future state workflows. Using standard role definitions and best practices, Sunquest will collaborate with the Client to recommend roles and responsibilities to optimize the use of the Sunquest Solution and future state workflows. Additionally, Sunquest will partner with the Client to ensure that a robust training plan is defined for each role and ensure that key users are fully prepared to make optimal use of the Sunquest Solution.

Sunquest also believes that early and frequent change communication to be key to successful organizational change management. Sunquest will work with DHHR to identify a full list of stakeholders impacted by the implementation of the Sunquest Solution, to ensure all impacted stakeholders are engaged in deployment planning, and to develop a communication plan that accounts for all levels of change and impacted parties. Details from the organizational change management plan will also be accounted for in relevant sections of the training plan and deployment plan.

[PM034]

As part of the initial Analysis phase, Sunquest will set up several workshops with the state stakeholders to review, discuss, and validate project requirements. The purpose of these workshops is to ensure the solution as planned will meet all the state requirements for ESS.

A template provides the planned topics for the workshops that are typically planned as part of the project Kickoff event.

During these discussions some gaps may be identified that will be documented, prioritized, and processed through Change Management. The outcome of these sessions will be described in a Rapid Review Report. The Future State section of the Rapid Review Report will include configuration specifications such as:

- Disease Groupings
- User Personas (Data Entry, Investigator, Supervisor, Epidemiological Analytics, etc.)
- Communicable Disease Investigation Workflows
- Interfaces
- Integrations
- Historical Data Migration
- Custom Reports
- Gap Analysis

The report will serve as the final scope definition document and will be submitted to client stakeholders

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

for review and approval prior to proceeding with the configurations.

[PM035-38] Following the Analysis phase, Sunquest will conduct several design workshops to design various aspects of the solution. Sunquest's approach to design and design documentation will adhere to DHHR's Preliminary, Detailed, and Final design phases.

[PM039] Sunquest's fixed implementation fees will include all costs associated with requirements analysis and solution design.

[PM040] As part of the Project Management Plan, a project work plan will be provided by Sunquest outlining the work breakdown structure in work packages that detail project tasks, dependencies, work effort and duration timelines, milestones and resources required to satisfy all project deliverables. The work plan draft is submitted by the Sunquest Project Manager, revised, and finalized in collaboration with the client Project Manager, and baselined upon approval. The project will then be executed in accordance with the baselined plan with all progress reporting against the baseline date.

[PM041]

Requirements Validation

At completion of Project Kickoff, sessions will be set up for Sunquest and the client stakeholders to review, discuss, and validate business, functional, architectural, data migration, and resource/staffing requirements, and determine whether the solution as proposed meets all the requirements. (For more detail refer to response to PM034)

During the Requirement Review and Validation process, some gaps may be identified that will be prioritized by the Project Team and documented. Any variances from the Proposal, identified as mandatory scope, that must be addressed prior to Production roll out are addressed through the Change Management process.

Design

Pre-design Training

The Design phase will start with a series of on-site training sessions to provide enough understanding of the system to identify the design requirements for forms and business rules development. These sessions will start with a WorldCare Surveillance overview, best practices in forms design followed by some hands-on forms and design and configurations to familiarize stakeholders with this

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

collaborative process, that will continue after the Joint Application Design (JAD) sessions until all required forms, business rules and reports are configured in the system.

Design / Joint Application Design (JAD)

There will be a series of JAD workshops that focus on the design of all application configurations and interfaces. The sessions will be categorized as follows:

- Mapping of Disease Workflows to WorldCare – This consists of configuring the application in accordance with the business processes and workflows for each disease category, and will include design documents for:
  - Dictionaries
  - Security
  - User Defined Forms (UDFs)
  - Business Rules
  - Reports

- Integration and Interfaces - Each interface will require finalized specifications prior to configuration. A User Acceptance Testing and Deployment strategy will be defined and planned for each interface.

  - Electronic Laboratory Result (ELR) interfaces – Sunquest will provide and review the specification for HL7 2.5 ELR interface with the client ELR stakeholders.

  - External Applications Interfaces -- Importing from external applications can be done on demand as needed through the Import Utility or using Web Import API where data can be automatically imported in WorldCare from external applications. Exporting to external applications will be done in accordance with the formatting specifications. Possible methods are: using the Custom Export, SSRS reports, and/or the Messaging module. As part of the design workshops, the team will review the import/export requirements for external applications and determine the methodology for data transmission and testing.

  - EHR Interfaces – Sunquest will provide and review the specifications for EHR interfaces with the client stakeholders, and determine the testing and onboarding methodology with the health systems that are ready to participate.

- Data Conversion/Migration – Data conversion and migration will need to be designed in accordance with the business needs of different programs. During the design phase, the system and data being converted for each program (within the scope of each phase) will be defined and documented.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The outcome of the Design phase will be a series of design documents. These documents will be reviewed and approved by the client before proceeding with configurations.

[PM042] As part of the Project Management Plan, Sunquest will develop and maintain a Requirements Traceability Matrix (RTM) in collaboration with the state's Project Manager. RTM will list all agreed upon project requirements from the proposal as well as those identified and approved from the Analysis phase and will be used to obtain project acceptance at conclusion of the project.

[PM043] Once the Requirements Traceability Matrix (RTM) has been developed and approved by Project Managers, it will be stored in a shared location and read access will be provided to all stakeholders identified by DHHR.

[PM044-51] The Project Managers will discuss and determine the most appropriate tool and format for the Requirements Traceability Matrix (RTM), so that related documents such as design documentation, workflows and test documents are easily accessible from RTM. Sunquest has recently utilized and had success with using Microsoft Teams for RTM. This option will be explored at project start.

[PM052] The Requirements Traceability Matrix (RTM) will include links to approved requirements and design documents as well as associated test results to demonstrate all functional requirements have gone through detailed design, development, and quality assurance.

[PM053] As part of requirements analysis and validation, Sunquest will review all requirements and responses in the RFP with DHHR stakeholders to ensure there is complete clarity on the purpose and scope of requirements and to see if the proposed solution would indeed meet the full intent of each requirement.

[PM054] One of the goals of the requirements analysis and validation exercise is to identify and discuss any gaps in the proposed solution and determine how to go forward with those gaps. All identified gaps will be documented and prioritized and if deemed as mandatory scope, they will be added to scope through Change Management process.

[PM055]

Our best practice for implementation of the WorldCare solution is through a two-phased project approach that will be discussed and analyzed with the client at project start to ensure it is practical and aligns with the

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

client's plans.

Phase 1 serves as a pilot validation/proof of concept phase, where a pilot candidate (e.g. COVID disease management program only) will be selected for the initial configuration of the system. By limiting the business requirements and stakeholders to a smaller group, the scope of the initial implementation can be kept small, enabling the project team to accomplish the following objectives:

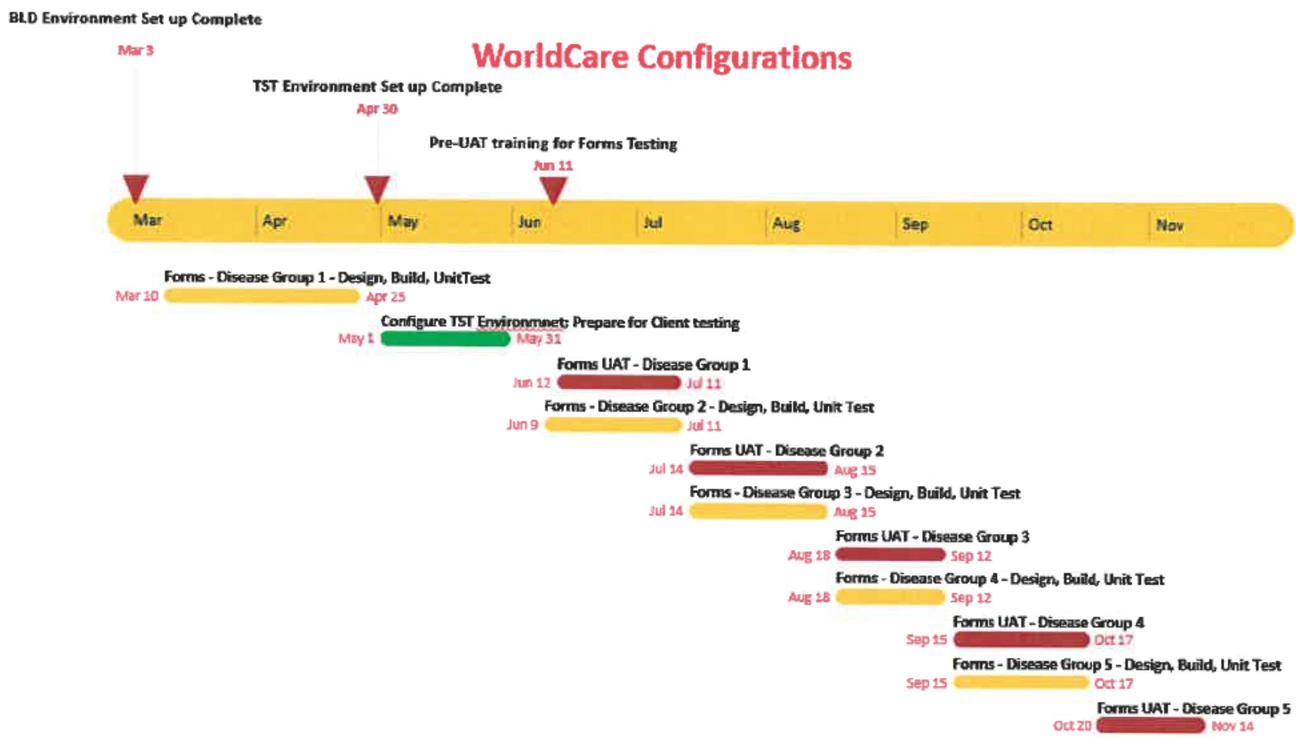
- Be operational within a few months of project start; demonstrate success quickly.
- Establish and employ a best practices approach for forms and reports design to be used for subsequent programs.
- Separate software customizations from standard functionality allowing for customizations to be developed in parallel to the initial implementation of the Pilot program; and
- Train the customer staff so they can maintain configurations post go-live, and so that they can provide training to new users in the future.

Phase 2 consists of implementation of all agreed upon customizations as well as remaining diseases and interfaces.

[PM056]

Sunquest takes an iterative approach to configuration of diseases by grouping similar diseases together and working on design, build, and test of disease groups iteratively until all diseases have been configured and approved for operations. The following diagram demonstrates this approach on a timeline:

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



[PM057]

As part of project Analysis workshops, Sunquest gains an understanding of the client's functional organization and work groups. This informs the project team on appropriate categorization of system configuration components, especially the grouping of diseases and how to go about configuring and testing them in the system in accordance with the client's workgroups and workflows.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[PM058] Design documents will need to be submitted and approved by client prior to proceeding with development. Throughout implementation and configuration, any deviations from the original design will be reflected in the design documents and the design documents will be finalized at the end of the project and submitted to client as final deliverables.

[PM059] Sunquest will collaborate with client staff to design, build, and test data imports into WorldCare. Client will be responsible for preparation, formatting, and ensuring the integrity of source data. Sunquest will be responsible for importing the data and ensuring proper mapping of fields. Client will approve test data imports prior to Sunquest conducting data imports in the production system.

[PM060] Sunquest will consider the client's current state of operations in its data migration strategy and will carefully plan the imports around the data that is actively used by other enterprise solutions to prevent disruptions to active records and investigations.

[PM061] – Sunquest staff will provide support and technical assistance for data cleansing of data being migrated from the existing surveillance systems. To the extent that data cleaning requires changes, merges, or deletions, it is important that DHHR be the decision-maker regarding such data cleaning.

[PM062-65] – Sunquest staff will provide a data migration and conversion plan for DHHR review and approval. The data migration plan will describe and specify data analysis techniques, checks and balances for ensuring data quality and accuracy, and data conversion tool sets.

[PM066] – The data migration plan will include an analysis and description of the data sources and a determination of the corresponding data to be integrated.

[PM067] – Sunquest will collaborate with DHHR to assess and plan what reports will be needed.

[PM068] – Sunquest will seek input and approval from DHHR for each phase of report development: analysis, design, build, test, and deployment.

[PM069] – Sunquest will seek input and approval from DHHR for each phase of system integration: analysis, design, build, test, and deployment.

[PM070] – Sunquest will analyze the DHHR workflow and data collection needs during the design and implementation phase. With over twenty years' experience across a diverse range of health department implementations, Sunquest can provide insight into opportunities for integration.

[PM071] The Quality Management Plan will define the quality goals and measures for the project including those defined by DHHR.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[PM072] With every new implementation, a change in clients' business processes is expected. As part of the Analysis phase, the future state business processes will be defined and documented by DHHR business analysts or change managers and will be utilized by Sunquest to map into the WorldCare solution workflows.

[MR004] Sunquest agrees to participate in the review of the proposed hardware, software, and communication components of the Sunquest Solution prior to the execution of the final contract. Sunquest agrees to ensure all components meet or exceed the requirements within the most current West Virginia Office of Technology supported versions or standards.

[MR032] Our offering includes executing a standard implementation methodology using a best practices approach based on PMI® standards, that can be customized to meet the business and budgetary needs of each customer. The entire project is governed by five sets of activities; initiation, planning, execution, monitor and control, and closure, that are defined in the Project Management Plan (PMP) to plan and execute a successful project. The diagram below outlines the Sunquest Project Implementation Methodology.

[MR033] Sunquest will provide project status information and reports within the mutually agreed upon timeframes and format that are documented in the Communications Management Plan at project start. Typically Sunquest provides status meeting minutes, weekly or monthly status reports, and steering committee presentations to communicate project status to various stakeholders throughout the project lifecycle.

[MR034] Sunquest will maintain the deliverables throughout the project life cycle and update them as needed to reflect a change in decisions or approach and to add details that are uncovered after delivery of documents. At project conclusion/closure the final version of all deliverables will be provided to the Agency highlighting the changes since approval of the deliverables.

[MR035] Sunquest and client Project Managers will collaborate and agree on a schedule for submission and approval of deliverable updates.

[MR036] Proposed changes to deliverables will be accommodated by Sunquest within thirty (30) calendar days of the requested changes. Sunquest will ensure sufficient detail and clarity is provided to meet the proposed changes and to ensure approval without additional need for changes.

[MR089] – The Import Utility is built into application for migrating data from legacy systems into the new system. During the design phase, the system and data being converted for each program (within the scope of each phase) will be defined and documented.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

1.1 Work Plan

The Vendor's proposal should supply a narrative describing the Vendor's proposed processes and methodologies for providing the scope of work described in this RFP. The proposal should include any assumptions as well as the Vendor's approach to meeting the Initial Work Plan. TheVendor should include detail sufficient to give DHHR an understanding of how the Vendor's knowledge and approach will:

Manage the work

Guide work execution

Document planning assumptions and decisions

Facilitate communication among stakeholders

Define key management review as to content, scope, and schedule

The Vendor should also submit an Initial Work Plan in Attachment E: Initial Work Plan that demonstrates that the Vendor has a thorough understanding of the scope of work and project requirements.

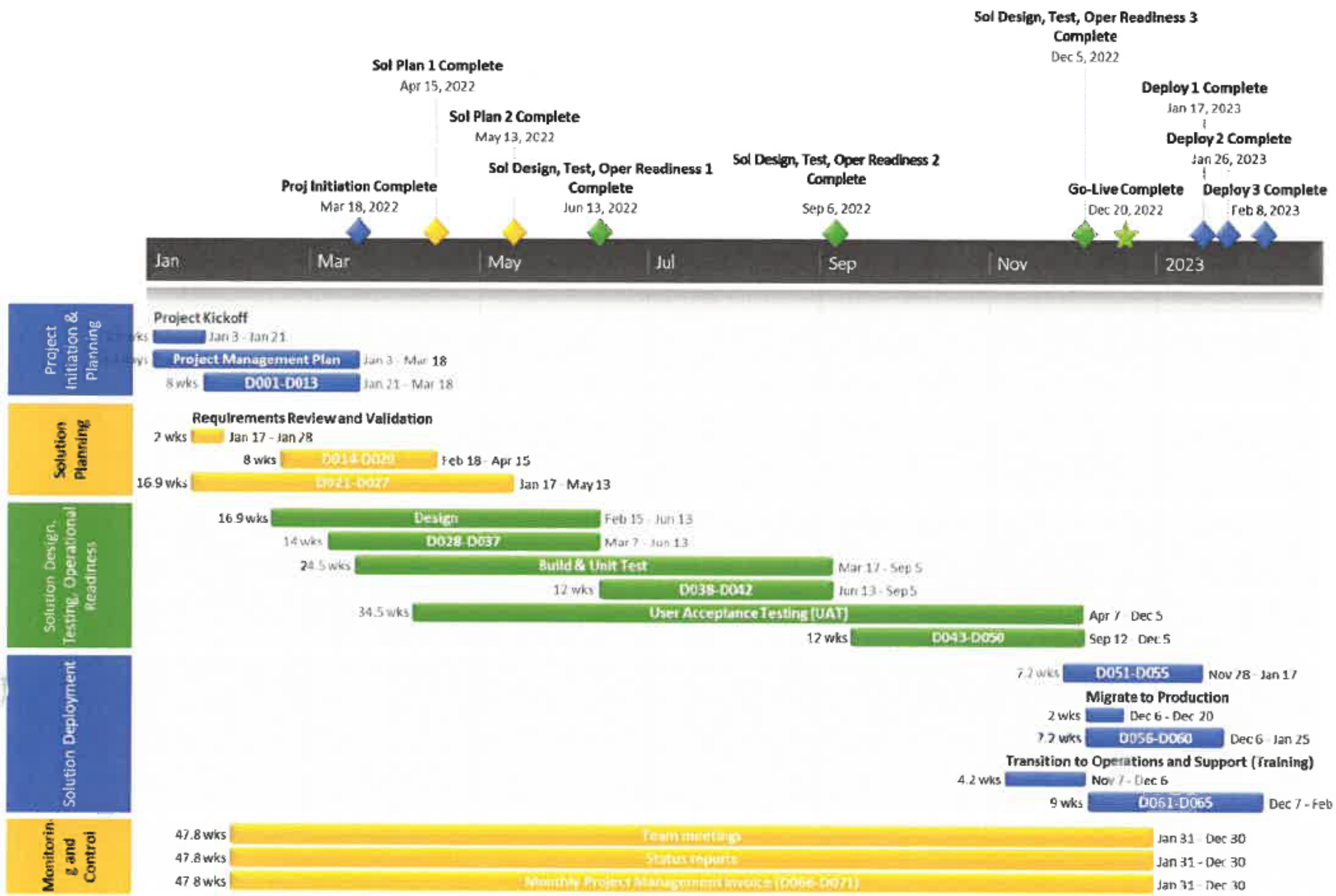
<Response>

An initial DRAFT work plan using Microsoft Project has been included in Attachment E. The DRAFT MS Project Schedule proposes a one-year implementation schedule incorporating our best practices approach and methodology for implementation of WorldCare. The schedule has been customized to include the deliverables outlined in the RFP at various stages of implementation and considers the review process and required timelines indicated in the RFP. Required resources are specified in the Resource Sheet.

Note: This is a draft plan using start date of Jan 1, 2022. The plan will be revisited and adjusted at project initiation.

The following visual summarizes the high-level proposed plan on a timeline:

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



Overview

Our offering includes executing a standard implementation methodology using a best practices approach based on PMI® standards, that can be customized to meet the budgetary needs of each customer. The entire project is governed by five sets of activities; initiation, planning, execution, monitor and control, and closure, that are defined in the Project Management Plan (PMP) to plan and execute a successful project.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Initiate

Sunquest is highly experienced at rapid project initiation. Once a letter of award is issued, an internal "kickoff" call will be held immediately between the project teams, where assigned resources will be discussed and agreed implementation methodology will be reviewed. Next, team project managers and appropriate staff will begin working with the client on a preliminary kick off meeting to introduce the team leaders and go over the plan to ensure all teams are aligned on next steps. Soon after the letter of award being issued, a formal kick-off meeting will be held with key project stakeholders.

A Project Kickoff is held between the Sunquest and the client key stakeholders. The purpose of the kickoff is to discuss the Project Charter and Project Implementation Methodology to set expectations and verify the implementation approach during the Planning phase.

Analyze

Requirements Review and Validation

At completion of Project Kickoff, sessions will be set up for Sunquest and the client stakeholders to review, discuss, and validate business, functional, architectural, data migration, and resource/staffing requirements, and determine whether the solution as proposed meets all the requirements.

Gap Analysis

During the Requirement Review and Validation process, some gaps may be identified that will be prioritized by the Project Team and documented. Any variances from the Proposal, identified as mandatory scope, that must be addressed prior to Production roll out are addressed through the Change Management process.

Plan

The Sunquest Project Manager develops a Project Management Plan (PMP) using a best practices approach based on the PMBOK® (Project Management Body of Knowledge) standard to plan and execute a successful project.

The PMP defines each aspect of the project: communication, scope, schedule, change control, resources, risks, dependencies, quality, and stakeholder management.

The Sunquest Project Manager collaborates closely with the client Project Manager to complete the development of the planning documents in accordance with the mutually agreed upon schedule.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The following information provides an overview of the disciplines included in the PMP:

Project Schedule

The Project Schedule will outline the work breakdown structure in work packages that detail project tasks, dependencies, work effort and duration timelines, milestones and resources required to satisfy all project deliverables. The Project Schedule draft is submitted by the Sunquest Project Manager, revised, and finalized in collaboration with the client Project Team, and baselined upon approval with all progress reporting against the baseline date.

Risks Management Plan

The Risks Management Plan defines how the stakeholder team will identify, analyze, respond to, manage, and track risks and issues that are introduced throughout the project lifecycle. A specific Risks/Issues log will be drafted by Sunquest at the planning phase when the project teams have had a chance to review and discuss the requirements for the project. The Risks/Issues log will be monitored and maintained throughout the project with the goal of no risks turning into issues.

Communication Management Plan

The Communication Plan defines the project stakeholder team, governance, roles and responsibilities, communication requirements, communication channels, escalation process, information distribution, meeting types, frequency, and management, as well as all reporting requirements.

Change Management Plan

The Change Management Plan defines the process used during the project to manage all change requests introduced throughout the project lifecycle.

Quality Management Plan

The Quality Management Plan defines a quality goal for the project and a roadmap for achieving that goal. The plan defines preparation activities, testing approach and planning activities, use cases, test cases, roles and responsibilities for testing by Sunquest and the customer, and the completion and system acceptance criteria for the project.

Training Plan

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The Training Plan outlines the training sessions and training approach to prepare the appropriate resources to perform their respective responsibilities within the project. The plan includes training content, pre-requisites, target participants, duration, and logistical requirements.

Data Migration Plan

The Data Migration Plan defines:

- requirements for formatting of source data;
- methodology for data import and data validation;
- data mapping requirements including data conversion rules (if applicable) and field mappings; and
- tools and methods to correct erroneous data if required.

Support Plan

The Support Plan defines the services provided by Sunquest's Technical Support department, including, but not limited to:

- Issue reporting, intake, and resolution process
- Defect priority and definitions
- Service Level Agreement
- Roles and responsibilities
- Escalation process
- Production revisions
- Maintenance builds

Project Execution

Enterprise Architecture / Establishment of Test Environments

The hosted environment is planned and set up by Sunquest shortly after project start and will include at least three environments: Test, Production and ELR (for testing of Electronic Lab Results).

Software Installation

The required Operating System and other software components for the latest version of WorldCare is installed in the Test environment. Next, the latest version of WorldCare is installed and configured in the client' Test environment. This environment will be accessible by the customer team upon initiation of Joint Application Design (JAD) sessions, and as the system gets configured for the Pilot program after the design sessions. During Phase 2, the software gets upgraded to a newer version that will include the

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

product enhancements that Sunquest and the client agree upon during Phase 1.

Pre-design Training

The Design phase will start with a series of on-site training sessions to provide enough understanding of the system to identify the design requirements for form and report development. These sessions will start with a WorldCare Surveillance overview, best practices in forms and reports design followed by some hands-on forms and reports design and configurations to familiarize stakeholders with this collaborative process, that will continue after the Joint Application Design (JAD) sessions until all required forms, business rules and reports are configured in the system.

Design / Joint Application Design (JAD)

There will be a series of JAD workshops that focus on the design of all application configurations and interfaces. The sessions will be categorized as follows:

- **Mapping of Disease Workflows to WorldCare** – This consists of configuring the application in accordance with the business processes and workflows for each disease category, and will include design documents for:
    - Dictionaries
    - Security
    - User Defined Forms (UDFs)
    - Business Rules
    - Reports

- **Integration and Interfaces**

Each interface will require finalized specifications prior to configuration. A User Acceptance Testing and Deployment strategy will be defined and planned for each interface.

- Electronic Laboratory Result (ELR) interfaces – Sunquest will provide and review the specification for HL72.5 ELR interface with the client ELR stakeholders.

- External Applications Interfaces -- Importing from external applications can be done on demand as needed through the Import Utility or using Web Import API where data can be automatically imported in WorldCare from external applications. Exporting to external applications will be done in accordance with the formatting specifications. Possible methods are: using the Custom Export, SSRS reports, and/or the Messaging module. As part of the design workshops, the team will review the import/export requirements for external applications and determine the methodology for data

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

transmission and testing.

- EHR Interfaces – Sunquest will provide and review the specifications for EHR interfaces with the client stakeholders, and determine the testing and onboarding methodology with the health systems that are ready to participate.

- **Data Conversion/Migration** – Data conversion and migration will need to be designed in accordance with the business needs of different programs. During the design phase, the system and data being converted for each program (within the scope of each phase) will be defined and documented.

The outcome of the Design phase will be a series of "To-Be" documents. These documents will be reviewed and approved by the client before proceeding with configurations.

Build

As design documents are finalized, reviewed, and approved, the configuration of each category under Design will commence:

- **Forms and Business Rules Configuration** -- Forms and business rules will be configured in WorldCare in accordance with the approved UDF design documents and submitted to the client testers for user acceptance testing.

  Note: Business Rules that adhere to the recommended best practices and employ the out-of-the-box functions are included as part of the initial implementation throughout both phases of the project. The Business Rule functions specifications and expected behavior are documented and published as part of product releases. Business Rule Best Practices are also documented and are covered as part of the Business Rules training program. Requests for Business Rules that cannot leverage out-of-the-box functions will need to go through Change Management.

- **Reports Development** -- SSRS Reports will be developed in accordance with the approved Report design documents and submitted to the client testers for user acceptance testing.

- **Interfaces Configuration:**

- Electronic Laboratory Results (ELR) Interface
  Once the ELR Test environment is set up and tested, Sunquest will setup and test the connectivity with the laboratories and set up the Lab Interface Project (LIP) cross reference table. The onboarding of the laboratories will begin when at least a few disease categories have been configured in WorldCare in the Test environment.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The onboarding will be done iteratively. Sunquest will be able to work with a few labs simultaneously. The Sunquest Project Manager, the client ELR Coordinator, and Sunquest Technical Lead will work together to schedule the onboarding of the laboratories throughout the project life cycle.

During the configuration stage, onboarding will consist of establishing connectivity to each interface feed, developing transformations for laboratories that are sending non-compliant messages, and unit testing. Unit testing will consist of laboratories sending test messages to the ELR Test environment, Sunquest analyzing the messages and providing feedback to the laboratories, and the laboratories adjusting their interface until messages pass unit testing.

- External Applications Interface
  Sunquest will develop and unit test the imports and exports with external applications in accordance with the design specification and testing methodology specified in the Design phase.

- EHR Interfaces
  Sunquest will develop and unit test the imports and exports with EHR interfaces in accordance with the design specification and testing methodology specified in the Design phase.

- **Data Migration Configurations** -- Once forms have been created and the system is ready for the legacy data, the import templates and any other data conversion tools will be developed. Sunquest will specify the data import format (in the form of an Excel spreadsheet), in collaboration with the client staff. The source data will undergo any necessary conversion. Sunquest will suggest a number of queries that will provide metrics to be used in reconciliation reports (e.g. number of patients, number of cases, number of cases by disease, race, ethnicity, etc.).

Test

- **System Testing** -- Upon completion of configurations, system testing will commence and will be performed iteratively as diseases are configured in the system. System testing will be managed by Sunquest with some participation from the client team and will be of the following types:
  - WorldCare Diseases Workflow Testing -- Regression testing of disease configurations by following the procedures in the Quality Management Plan.
  - ELR Integration Testing -- Testing the mapping of lab reports to appropriate patients and disease incidents in the ELR Test environment. This requires a specific set of test messages to be sent by the labs being onboarded to the ELR Test environment. ELR Integration Testing will be done iteratively

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

as labs are being onboarded. Sunquest will be able to work with a few labs simultaneously during integration testing. This will be done in accordance with an agreed upon schedule developed earlier in collaboration with the client ELR Coordinator.

- External Applications Integration Testing -- Sunquest will execute integration testing using system test methodology, sample test messages, and expected outcomes documented in the Quality Management Plan for each interface included in the scope of the project.

- EHR Integration Testing – This will be similar to ELR Integration testing but involves working with Health providers instead of laboratories.

- Data Migration Testing -- Small test import files will be created and imported to verify that the import templates and data files result in correct importation (Pre-start load test).

Technical issues resolution during system testing will be managed by Sunquest using Sunquest's online IssueTrak system. IssueTrak accounts will be provided to the client staff, allowing them to access the latest status information on all issues. Sunquest will provide weekly status reports outlining testing status to the client during system testing. Weekly status meetings will be held for Sunquest and the client staff to review testing outcomes, prioritize issues, and identify defects that must be resolved prior to User Acceptance Testing. Sunquest will resolve all blocking and high priority issues. If defect resolutions result in configuration changes and adjustments, all such adjustments will be made and documented.

- **Pre-UAT Training and Assistance** – An on-site User and System Administrator training will be provided to the client staff participating in UAT prior to UAT start. End-User training provides a comprehensive, yet compact, instruction to users of the system. This training typically provides the capacity to search for and enter customer data, record activities performed, and referrals made, document customer progress, produce certain administrative and customer-oriented reports and records, and manage records. System Administrators also receive training on core End-User functionality. System Administrator training prepares agency application administrators to configure system settings, create accounts, maintenance and development of new Forms and Business Rules, produce administrative reports, and other actions that require technical training.

- **User Acceptance Testing (UAT)** – During the planning and design stages, Sunquest will assist the client staff to develop a UAT Plan that will include: use cases or actual business scenarios and workflows to be tested by the client users, the testers' roles and responsibilities, testing timeline/phases, and communication protocols such as issues reporting and resolution during the UAT phase.

  The Test environment will be set up by Sunquest and will mirror the Production environment, with representative data for each area being tested. Upon completion of System Testing, UAT will be

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

performed in the Test environment by the client staff.

UAT will commence immediately after training. As with system testing, UAT will be of the following types:

- WorldCare Diseases Workflow Testing – There will be at least two cycles of User Acceptance Testing. The first cycle will be a comprehensive test run by the client testers executing all test cases in accordance with the UAT plan. During the first test cycle, all show-stopping issues are identified and reported by the client to Sunquest. If defect resolutions require configuration changes and adjustments, all such adjustments will be made and documented. If defect resolutions require a revision to WorldCare, a revision release will be provided with all show-stopping issues resolved. The second cycle of UAT will consist of the client testing the defect fixes.

- ELR Integration Testing -- This will be similar to the system testing process. The only difference is that there will be a production/live feed from the labs being onboarded to the ELR Test environment. The users will test the mapping of live lab reports to appropriate patients and to disease incidents in the ELR Test environment.

- External Applications Integration Testing – This will be similar to the system testing process. The only difference is that there will be a production/live feed from the health systems being onboarded to the Test environment.

- Data Migration Testing -- Upon satisfactory test imports (i.e. approval of pre-start load test reconciliation reports and documents), entire data sets will be imported into the test system. Sunquest staff will assist the client project team to perform data queries on the imported data and visually inspect a select number of records to verify a successful import. Import templates and import files will be adjusted as necessary until tests determine a successful import.

Technical issues resolution during UAT will be managed by Sunquest using Sunquest's online IssueTrak system. IssueTrak accounts will be provided to the client staff that will allow them to report issues during their testing and will give them access to the latest status information on all issues. Weekly status meetings will be held for Sunquest and the client staff to review UAT status and outcomes, prioritize issues, and identify defects that must be resolved prior to going live.

UAT/Go-Live Approval – Upon completion of User Acceptance Testing, Sunquest will submit a User Acceptance Test form to the client that verifies the User Acceptance Test Plan has been fully executed and confirms the system is ready for "Go Live" and can be made available for Production use.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Deploy

- **Migrate to Production** – Sunquest will migrate the application configurations, ELR feeds, and interfaces to Production, and will run and verify data uploads in Production. Sunquest will also assist the client project team to conduct an end-to-end final validation of operational workflows and will create a knowledge base that includes all documentation developed throughout the project life cycle.

- **Deliver Final Documents** -- Sunquest will provide the documentation required to set up and maintain the WorldCare application including but not limited to:

  - Project Management Plan
  - Training materials
  - System Administrator/User Guides
  - User Defined Forms Best Practices
  - Business Rules Best Practices
  - Support Guide

- **Transition to Operations and Support** – Through a number of onsite training, knowledge transfer and go-live assistance sessions Sunquest will prepare the client Operations and Support staff to support WorldCare. The training will start about a month prior to go-live while UAT is still in progress and will include:

  - Train-the-trainer: In collaboration with the client staff, Sunquest will coordinate and conduct End-User training sessions. These sessions are aimed at training the client Trainers who will subsequently train the remaining users.

  - Operations Staff Training – Sunquest will provide comprehensive training to the client Operations staff that will enable them to maintain the configurations in Production. The following training sessions will be provided: End-User, System Administrator, UDF Design & Best Practices, UDF Development, Business Rules Design and Best Practices, Business Rules Development, Custom SSRS Reports Design and Best Practices, Report Builder.

Go-Live

Upon approval of the User Acceptance Test form and completion of Transition to Operations, the system will be deemed live and ready for use.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Monitor and Control

Schedule Control

The Project Schedule will be regularly monitored by the Sunquest Project Manager who will provide updates in accordance with the agreed upon Communications Plan, typically on a weekly basis, and reports progress against baseline dates. Any change to baseline dates that impacts major milestones or risks the overall project completion date requires Project Sponsor approval from both the client and Sunquest before being modified.

Quality Control

During the User Acceptance Testing phase, the testing progress and results will be monitored daily with any issues reported in IssueTrak triaged and addressed accordingly. Sunquest's Project Manager will monitor testing results to ensure the agreed upon quality goals set forth in the User Acceptance Test Plan are met and maintained throughout the project.

Change Control

All project changes are processed via the change management process defined in the Change Management Plan.

Scope Control

The control of scope is regarded as a success factor for virtually any project. Scope control is the determination of what work should be completed and delivered within the terms of the contract agreement. The key to managing scope is defining project activities and project boundaries, and then managing all deviation from that definition.

It is the Sunquest Project Manager's responsibility to manage scope and bring forward scope issues with the client Project Manager. When a change is identified that will impact the project scope, cost or schedule, a formal Change Request will be logged to capture basic information such as details of the required change, the required decision-makers, and the date the request was made.

Change Requests may involve significant project changes and will therefore require supporting details and an assessment of the impact the change may have on the project's schedule, cost, and/or quality. This will be documented in a standard change request template. Change Requests will then be evaluated and approved (or rejected) by The client.

Changes to the scope, which are change requests, must go through the Change Management process.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Risk & Issues Control

No project is without risk. Successful projects bring in the deliverables as specified on time, within budget, and to the client' satisfaction. Problems occur when the project schedule has slipped, the budget is exhausted, or requirements remain unfulfilled. The goal of risk management is to reduce the overall project risk to an acceptable level. Our risk management approach ensures the project team:

- Understands the risks;
- Establishes mitigation strategies for each of the risks; and
- Implements a plan to manage the risks.

Communications Control

Status Communication -- The Project Teams will meet in accordance with the Communication Plan, typically on a weekly basis via teleconference. Sunquest will document minutes and action items from these meetings, that also serve as regular status updates to the Project Team. In addition, the Sunquest Project Manager provides a monthly status report for the overall project that is distributed to executive management.

Technical Communication -- Sunquest provides a third-party web-based product, IssueTrak, which logs all implementation issues including questions, defects, and future enhancement requests. The IssueTrak system is accessible via the web and provides the Project Teams the ability to enter and track progress and run reports against all reported issues. Sunquest also accepts reported issues and requests through email, phone and fax if necessary, for urgent communications; however, all issues must eventually be submitted via IssueTrak for monitoring and communication purposes. IssueTrak use begins with system implementation and continues through the entire product use lifetime, as it is the tool also used to support the system once transitioned to Production.

Project Closure

Project Acceptance

In accordance with the Project Schedule and terms of the contract, during the week(s) following Go Live commencement, the system will be monitored and Sunquest will continue to resolve and triage any issues identified with the system. At this time the client will complete and return a Project Acceptance letter validating completion of the project.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Project Lessons Learned

As part of Sunquest's commitment to on-going growth and improvement, Project Lessons Learned is an integral part of the project process. Sunquest conducts reviews at certain milestones throughout the project and at project conclusion to analyze project variances and document changes that need to occur to improve future phases or projects.

Project Audit

Sunquest conducts a project documentation audit to ensure that all required documentation was produced and filed appropriately for future reference and use for new projects.

Survey

Sunquest will request the client to complete a Customer Survey to provide Sunquest with additional feedback on Sunquest team performance and product assessment.

Release Resources

The Sunquest Professional Services project team shall be released from the project.

1.2 Issue Management

The Vendor's proposal should describe the Vendor's process for issue management including: issue logging, resolution, tracking of unresolved problems, escalation procedures, closeout, and reporting practices. The Vendor should describe its proposed approach for integration of issue management across subcontractors, if applicable, as well as other State and Vendor project stakeholders. The Vendor should also detail any planned use of an automated solution to supportissue management.

<Response>

Sunquest's process for issue management is a collaborative process where issues are raised, assessed, and tracked as part of regular project communications. Sunquest defines an issue as a problem, sometimes a risk that has occurred, that has materialized and needs to be addressed to avoid jeopardising the successful completion of the project. Issues may potentially affect project schedule, cost and/or quality.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Issue identification is the process of discovering those issues which will negatively impact project quality, cost and/or schedule. All project team members are responsible for identifying issues related to the project. Issues will be addressed as soon as they are identified and resolved as soon as possible. Project team members may also communicate issues to the Project Manager by email, telephone or ad hoc meetings.

When a new issue is raised, it is documented in the project issue log using the attributes outlined in the table below. Issue attributes are documented by the Issue Owner with assistance from the Project Managers.

Issue Attribute	Description
Project	Web-CMR/ELR
Issue ID	A unique number used to identify the issue.
Issue Title	A brief sentence or phrase that summarises the issue.
Date Reported	The date that the issue was recognised as a project issue.
Assigned To	The project team member responsible for responding to the issue and tracking issue status. The Project Manager assigns the issue.
Planned Resolve Date	The planned date that the issue should be resolved, based on the agreed upon action to address the issue.
Date Resolved	The date that the issue is resolved.
Status	A value that indicates the status of the risk. Possible values are new, open and closed.
Creator	The name and organisation of the person who identified the issue.
Create Date	The date that the issue was recognised as a project issue.
Issue Description	A concise definition of the issue.
Issue Tracking	Document any events/actions/comments related to the issue.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Issue Resolution	Document action taken to resolve issue. The Project Manager and PSC sign off on successful resolution of issues' strategies and actions.

Sunquest utilizes Excel to record and track all project issues. The Issue Log is stored in a shared location and is available to all project participants to view and is available to the Project Managers to edit and update.

The Project Manager will review all open issues weekly, and present current statuses at the monthly PSC meeting.

Issues will be monitored closely in conjunction with the project schedule to reduce the risk of Project Schedule slippage.

The Issue Owner is responsible for planning appropriate issue response action and for tracking the status of the issue and the response activity. The Issue Owner reports any changes in issue status to the Project Manager.

The Issue Owner, with the approval of the Project Manager, determines the appropriate issue response strategy from the options below.

- Research – Additional research will be taken prior to determining the appropriate response strategy.
- Accept – If the project can continue and be successful with the anticipated impact of the issue or if there is no practical way to avoid or mitigate the issue, the project may choose to accept the issue and expend no further resources managing it other than tracking the issue status.
- Transfer – Transfer the issue to a third party. If the issue occurs, the third party suffers the impact instead of the project. Typically accomplished via insurance.
- Mitigate – Issue mitigation involves taking steps to reduce the impact of the issue. These steps can include actions to be taken immediately and/or contingency plans to be implemented to alleviate or resolve the issue.

Based on the issue response strategy selected, the issue owner, with the approval of the Project Manager, determines the action plan to be taken. Often a simple list of one or more action items, with responsibilities and due dates identified, will be an adequate plan. Some high severity issues may require more elaborate planning. These are recorded in the Response Strategy.

The Project Managers escalate issues to the PD and the Project Steering Committee (PSC) depending on issue priority

The method of issue escalation is as follows:

- High, medium and low severity issues are reported to the Project Sponsor in regular project status reports.
- High severity issues are reported to the PSC during Steering Committee Meetings.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The issue is considered resolved once Project Managers and PSC sign off the actions executed to resolve the issue. A key part of managing issues within the project(s) is dealing with the issues in a timely manner.

1.3 Risk Management

The Vendor's proposal should describe the Vendor's risk management practices, the expectedrisk areas, and mitigation plans. In addition, the response should elaborate on the Vendor's internal risk management plan. This should include reference to the use of any specific methodologies, as well as any specific tools being used.

The risk management plan should outline the process, by which, cyber risk management activities are conducted to identify, assess, communicate, and manage shared cyber risk. TheVendor should provide this prior to the first implementation of the Vendor's hosted solution.

<Response>

This Project Risk & Issue Management Plan provides the methods that the project team will use to identify, analyse, respond to, and manage risks and issues throughout the life of the projects.

A risk is any future uncertainty, liability or vulnerability that may jeopardize the successful completion of the project. Risks may potentially affect project schedule, cost, and/or quality.

An issue is a problem that has materialized and needs to be addressed and resolved quickly and effectively to avoid jeopardizing the successful completion of the project. Issues may potentially affect project schedule, cost and/or quality.

The Issue management cycle is similar to Risk management as depicted with the exception of the identification phase; issues have already materialised, and risks have not yet materialised.

Risk and Issue management includes the following major components:

- Risk analysis – identifying, documenting and prioritising
- Risk action planning and tracking – developing a plan of action to mitigate each identified risk, and tracking progress against the plan
- Risk escalation – providing appropriate visibility of risks to management
- Risk resolution – taking actions to mitigate the risk.

The objective of this Project Risk & Issue Management Plan is to continuously identify, assess, monitor and document. The following is an overview of the document:

- The risks and issues faced by the project(s)
- The estimated probability of each risk

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- The risk trigger indicates when the risk has materialised
- The consequences in terms of impact on project schedule, cost, and quality if the risk events should occur or issues are not resolved
- The priority of each risk and issue for response action and escalation
- The owner of each risk and issue
- The plan of action for responding to each risk and issue
- The thresholds and procedures for escalating risks and issues
- The resolutions to each of the risks and issues.

The scope of the Project Risk & Issue Management Plan is to address all risk and issue management activities throughout all the phases of the project life cycle. The Project Risk & Issue Management Plan will be updated accordingly during all the phases of the project life cycle.

Risk Management Activities

Risk analysis includes the steps necessary to identify and prioritise risks.

Risk identification is the process of discovering those risks which could negatively impact project quality, cost, and/or schedule. It would be impossible to identify all possible risks to the project, therefore, emphasis is on identifying risks that are at least somewhat likely to occur and that could have a significant impact on the project. All project team members are responsible for identifying potential risks to the project. All risks will be reviewed by the Project Manager. Project team members may also communicate risk candidates to the Project Manager.

Project risks can come from many and varied sources. Project team members must be vigilant in recognising and documenting potential risks so that they can be properly evaluated for project impact. Some common risk sources include:

- The technology used on the project; changes in requirements; design errors, omissions, and misunderstandings
- The legal and regulatory environment in which the project is executed
- Relationships between the organisations involved in the project
- Sufficiency and allocation of project resources including budget and funding
- Unrealistic or conflicting stakeholder expectations
- Insufficient skilled staff
- Mandated implementation date
-

The Project Manager, with participation as needed by applicable project team members, determines which risk candidates constitute actual risks to the project. A risk is a potential event that would have a negative impact on the success of the project if the event was to occur. The following considerations support the determination of "Is it a risk?":

- Impact: What is the estimated impact to the project schedule, cost or quality if the risk event should

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

occur? Risks with little or no impact may not warrant inclusion in the Risk Management process.

- Probability: What is the estimated likelihood of the risk event occurring? If there is little or no probability of the risk event occurring, the risk may not warrant inclusion in the Risk Management process. An event that is certain to occur is not a risk but rather a problem or issue.
- Time frame: A risk is a potential future event that could impact the project. Events that may occur after the project is completed, but not during the project, are not considered risks to the project.
- Risk candidates that are judged to meet the three criteria described above are included in the project Risk Management process and issued a Risk ID.
-

Risk attributes are described in the table below. Risk attributes are documented by the Risk or Issue Owner with assistance from the Project Manager.

Risk Attribute	Description
Project	Project name
Risk ID	A unique number used to identify the risk. The Risk ID is assigned sequentially by the PM. The format of the ID is as follows : R-XXX-YYMM-001 • R – risk or issue • XXX – a three-character identifier in which the risk is identified • YYMM – the year and month the risk is identified • 001 – a three-digit sequential number
Risk Title	A brief sentence or phrase that summarises the risk.
Priority	A value to indicate the criticality of the risk to the project. Possible values are high, medium and low.
Probability	A value to indicate the likelihood of occurrence. Possible values are high, medium and low.
Status	A value that indicates the status of the risk. Possible values are new, open and closed.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Weeks	When the risk is at a status of open this value will indicate the number of weeks that the risk or issue has been open.
Trigger	A description of the action(s) that initiated the risk.
Impact	A description of how the project will be affected.
Response/Mitigation	A description of the plan to mitigate or respond to the identified risk.
Creator	The name and organisation of the person who identified the risk.
Create Date	The date that the risk was recognised as a project risk and the Risk Management Form was created.
Owner	The project team member responsible for responding to the risk issue and tracking status. The Project Manager assigns the risk.
Assign Date	The date the risk is assigned to the owner.
Risk Description	Additional information if necessary. A concise definition of the risk using the sentence structure Concern, Likelihood and Consequence; for example: "Mandated unrealistic implementation date will likely lead to significant missing functionality in the system implementation".
Impact Description	Elaboration of the Consequences if the risk is manifested; for example, the increased costs, delayed schedule, reduced quality and/or unrealised scope that could occur if the risk occurs.
Additional Risk Context/Analysis	Any context or information discovered during the analysis of the risk.
Additional Risk Tracking	Document any events/actions/commitments related to the risk strategy and response plan, i.e. approvals from PSC.
Risk Resolution	The Project Manager and PSC sign off on successful execution of risk mitigation strategies and response plans.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Impact Assignment

Risks and issues are assigned an impact rating based on the estimated negative impact on project cost, schedule and/or quality.

- High - One or more of the following:
  - Project cost increase of 10% or more
  - Project schedule increase of 10% or more
  - Schedule predicts missing formal public milestone
- Medium - None of the above High criteria, one or more of the following
  - Project cost increase of 5% to 10%
  - Project schedule increase of 5% to 10%
- Low - None of the above Medium criteria, one or more of the following:
  - Project cost increase of less than 5%
  - Project schedule increase of less than 5%

Probability Assignment

Risks are assigned a probability rating based on the estimated likelihood of a risk event occurring.

- High – Greater than 60%
- Medium – Greater than 30% and less than or equal to 60%
- Low – Less than 30%

Time Frame

Risks are assigned a Time Frame. The time frame is based on target resolution date, the time to take action to successfully respond to the risk.

- Short – Less than 6 months
- Medium - Greater that 6 months and less than 1 year
- Long - Greater than 1 year

Exposure

Risk exposure is determined from the risk attributes Impact and probability and is used in conjunction with the time frame to prioritise the risks for mitigation and escalation.

Priority

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Risk priority is determined from the exposure and time frame and is used to prioritise the risk. Risks with "High" priority, have the highest priority for risk response activity and escalation, followed by "Medium" and then "Low" priority risks.

Risk Action Planning and Tracking

The Owner is responsible for planning appropriate risk response action and for tracking the status of the risk or issue and the response activity. The Owner reports any changes in risk or issue status to the Project Manager.

Risk Action Planning

The Owner, with approval of the Project Manager, determines the appropriate risk and issue response strategy and action plan to implement the response strategy. Often a simple list of one or more action items, with responsibilities and due dates identified, will be an adequate plan. Some high severity risks or issues may require more elaborate planning.

Risk Response Strategy

The Owner, with the approval of the Project Manager, determines the appropriate risk and issue response strategy from the options below:

- Research – Additional research will be taken prior to determining the appropriate strategy.
- Accept – If the project can continue and be successful with the anticipated impact of the risk or issue, or if there is no practical way to avoid or mitigate the risk or issue, the project may choose to accept the risk or issue and expend no further resources managing it other than tracking the risk or issue status.
- Avoid – Risk avoidance involves taking steps to reduce the probability of the risk.
- Mitigate – Risk and issue mitigation involves taking steps to reduce the impact of the risk or issue. These steps can include actions to be taken immediately, and/or contingency plans to be implemented if a risk event occurs and becomes an issue.
- Monitor – Risk and issue monitoring involves monitoring alternative steps taken to mitigate the risk or issue to reduce the impact. These steps can include actions to be taken immediately and/or contingency plans to be implemented if a risk event occurs.

When appropriate, a risk or issue response strategy can include transfer, avoidance and/or mitigation actions.

Risk Tracking

Currently an Excel spread sheet will be used to record and track all project risks. This project management repository is available to all project participants to view but is available to the Project Manager to edit and update.

The Project Manager will review all open risks weekly and present current statuses at the monthly PSC meeting.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Risks will be monitored closely in conjunction with the project schedule to reduce the risk of Project Schedule slippage.

Risk Escalation

The Project Manager escalates risks to the Project Sponsors and the PSC depending on risk severity

The method of escalation is as follows:

- All risks are reported to the Project Sponsor in regular project weekly status meetings and monthly status reports.
- All High risks are reported to the Project Steering Committee during Steering Committee meetings.

Risk Resolution

The risk is resolved once Project Manager and Steering Committee sign off on the actions to be executed to mitigate the risk. A key part of managing risks within the project(s) will be making changes and adjustments to the project(s) to maintain tolerable risk levels.

1.4 Quality Management

The Vendor's proposal should describe the Vendor's approach to ensure the quality of the solution, and include details on the management of requirements through traceability matrices, configuration management activities, organizational readiness, and deliverables and artifacts. The Vendor's approach should also detail information on the proposed quality metricsas well as the Vendor's approach to managing solution defect and issue tracking. More specifically, the Vendor's approach to quality management should include, at a minimum,the following elements:

- Management of the solution specifications. This includes identification of inconsistenciesbetween the specifications, project deliverables, and/or artifacts.
- Management of the Requirements Traceability Matrix (RTM) that will be used for specifications management. This includes detail on how the quality management approachwill support and maintain the traceability between the specification and the proposed solution.
- Management of configuration management activities including, but not limited to, thecontrol and monitoring of the software library.
- Management of practices and procedures that will be followed for reporting, tracking,and resolving problems or issues identified in the solution's development, transition, and maintenance.
- The Vendor's approach to business process changes resulting of requests from DHHR.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- The Vendor's approach to an organizational readiness assessment of DHHR's organization. This may include a gap analysis and recommendations for organization changerequired to support the solution's implementation in the DHHR environment. This assessment should be approved a minimum of three (3) months prior to the solution's deployment.
- The Vendor's approach to the quality of work products developed and delivered by theVendor and the Vendor's subcontractors, if applicable.
- The Vendor's proposed quality management approach should include detail on how the Vendor plans to deliver signature-ready project deliverables. The Vendor should assume theState will complete its review of signature ready deliverables within 10 business days.
- The Vendor's approach to how quality metrics and measurements will be identified,collected, and analyzed to ensure that quality goals, including management and DHHR solution goals, are being met. It should also describe the types of project metrics used.
- The Vendor's organizational structure, and the roles and responsibilities of Vendor staffas they relate to quality management.
- The Vendor's description of the processes and approach to manage solution defect and issue tracking solution for tracking and resolution of items and, if applicable, how the qualitymanagement approach will support corrective action plans (CAPs) being developed to address more significant issues.

<Response>

The Quality Management Plan defines a quality goal for the project and a roadmap for achieving that goal. The plan defines preparation activities, testing approach and planning activities, use cases, test cases, roles, and responsibilities for testing by Sunquest and the customer, and the completion and system acceptance criteria for the project.

The Project Quality Management Plan is created during the Planning Phase of the project. Its intended audience is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out the plan.

At the highest of levels, Quality Management involves planning, doing, checking, and acting to improve project quality standards. PMI PMBOK breaks the practice of Quality Management into three process groups: Quality Planning (QP), Quality Assurance (QA) and Quality Control (QC). The following sections define how this project will apply each of these practice groups to define, monitor and control quality standards for the implementation of the Sunquest Solution.

Quality Management Approach

The purpose for managing quality is to validate that the project deliverables are completed with an

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

acceptable level of quality. Quality management assures the quality of the project deliverables and the quality of the processes used to manage and create the deliverables.

This is accomplished through the following steps:

Quality Planning

The project will adhere to PHI (Protected Health Information) and CDC (US Center for Disease Control and Prevention) guidelines and specifications for implementing an integrated solution providing:

A disease surveillance solution to support the ongoing systematic collection, analysis, and interpretation of outcome-specific data for use in planning, implementing and evaluating public health policies and practices.

In the Quality Planning this occurs throughout the initial requirements gathering to ensure the appropriate policies and guidelines are followed and maintained throughout the implementation. Further checks are put in place throughout the application design sessions. These standards will be further monitored as they are implemented and signed off by DHHR during the User Acceptance Testing process.

Define Project Quality

The integrated solution places a great deal of emphasis on the quality and content of deliverables, including engineering quality into the software products as they are developed. Project quality is defined

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

by the acceptance criteria that is developed during the requirement gathering and design phase.

Rigorous quality standards will be applied to ensure top quality in all deliverables produced for this project. By applying these quality standards, working collaboratively with the DHHR teams, and ensuring all draft and final deliverables are subject to internal quality assurance reviews, the project team will meet or exceed the requirements and expectations for all project deliverables.

Measure Project Quality

The SCRUM process will be utilized by the project team to generate a feedback loop that assures quality. The feedback will be shared through standard meetings with DHHR and through ad-hoc meetings and demonstrations when configuration is ready to be reviewed and shared.

Quality Assurance

Quality assurance will be based on acceptance testing as part of the SCRUM process prior to any release to DHHR. This comprehensive process achieves the following quality objectives:

- Early identification and resolution of problems, issues, and risks.
- Adherence to established performance processes and standards.
- Achievement of a defined level of product and service quality.
- Continuous process improvement and implementation of lessons learned.

Implementation of procedures for in-process reviews help to ensure that generated data is evolving as required and that the project team has incorporated changes as required.

Processes that are included as part of internal quality assurance (QA) teams include:

No.	Process	Evaluation Methods	Success Criteria
1	Project Management Process	Status review and Project meetings Steering Committee meetings	The Project management processes are adopted and implemented as per PMI standards
2	Training	Feedback from participants End of training assessments to evaluate retraining requirements Mechanism to address no	End users are proficient to perform operations on the respective modules

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		shows, non-participative trainees	
3	Support	Feedback on resolution of reported issues and Turnaround time for resolution	Support is provided in accordance with SLAs
4	Acceptance	Test case reports provided during UAT Test status review meetings	Planned test cases are executed and results are documented
5	Project Documentation	Pre-delivery session for agreeing document content Submission of draft documentation Joint review of documentation Acceptance of documentation after a review period	Documentation is produced as per agreed standards, timelines and necessary approvals
6	Build	Internal QA checklists compliance Peer Review	Build is deployed with minimal iterations
7	Deployment / Go Live	Deployment checklist compliance Successful completion of testing	Deployment is completed with minimal iterations

Additional Comments

During Requirements Gathering individual requirements, including any relevant specifications, will be documented by the Sunquest team. The requirements and any associated details are tracked through the requirements traceability matrix (RTM) and related deliverables. If testing outcomes or 3rd party requirements necessitate a change to the initial specification, the specification is updated and stored in the designated project documentation location.

The quality management approach will apply to the management of the RTM in the information it contains and in the approval of the baseline RTM as a project deliverable. The RTM will be baselined at

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agree to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

the end of requirements gathering and will follow the procedure for project deliverable acceptance with a review session prior to sign off from DHHR stakeholders. Throughout the project the RTM will be updated with information as other project phases or deliverables are completed. The RTM will also be reviewed by the Project Managers on a regular cadence.

The Sunquest Solution does not use a Software Library, with the configuration of product features housed within the application itself. Configuration of the Sunquest Solution will be tied back to requirements and documented within the RTM.

Please refer to section 1.2 Issue Management of this response for the management practices around the reporting, tracking, and resolving of issues for this engagement.

Sunquest is open to discussing with DHHR any changes to Sunquest business processes requested by DHHR. The approach to addressing these requests will depend on the nature of the requested change.

Sunquest's approach to an organizational readiness assessment consists of activities covered in our organizational change management approach and go-live approval checklists. Please refer to section 1.6 Organization Change Management for additional details about our approach. Sunquest uses go-live approval checklists to document and track all deliverables and approvals required prior to the initiation of go-live activities. These checklists are drafted early in the project timelines and include standard items based on best practices and lessons learned, as well as DHHR requirements, items from the Organizational Change Management plan, and can include items from the RTM. Go-live approval checklists are used to ensure that all stakeholders have identified their needs early in the process, and that the project tasks and schedule account for these needs in the lead up to go-live.

Sunquest agrees to DHHR's proposed process for delivering signature ready project deliverables. Within our detailed project schedule each deliverable will have tasks associated with the creation and internal review prior to the deliverable review meeting, and final approval. Sunquest has accounted for 10 business days for DHHR review of the final deliverable within the project timelines.

Sunquest's Implementation methodology has quality metrics and measurements identified and agreed to during requirements gathering. This process allows the involvement of all stakeholders and often uncovers meaningful metrics generated from requirements discussions. Sunquest's standard is to track the number of issues found during each round of testing and are happy to discuss other metrics that would be meaningful to DHHR.

1.5 Change Management

The Vendor's proposal should describe the Vendor's approach for change management including, but not limited to, methodologies, tools, and processes required to appropriatelymanage and document changes to the system (e.g., impact analysis, change requests.)

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response>

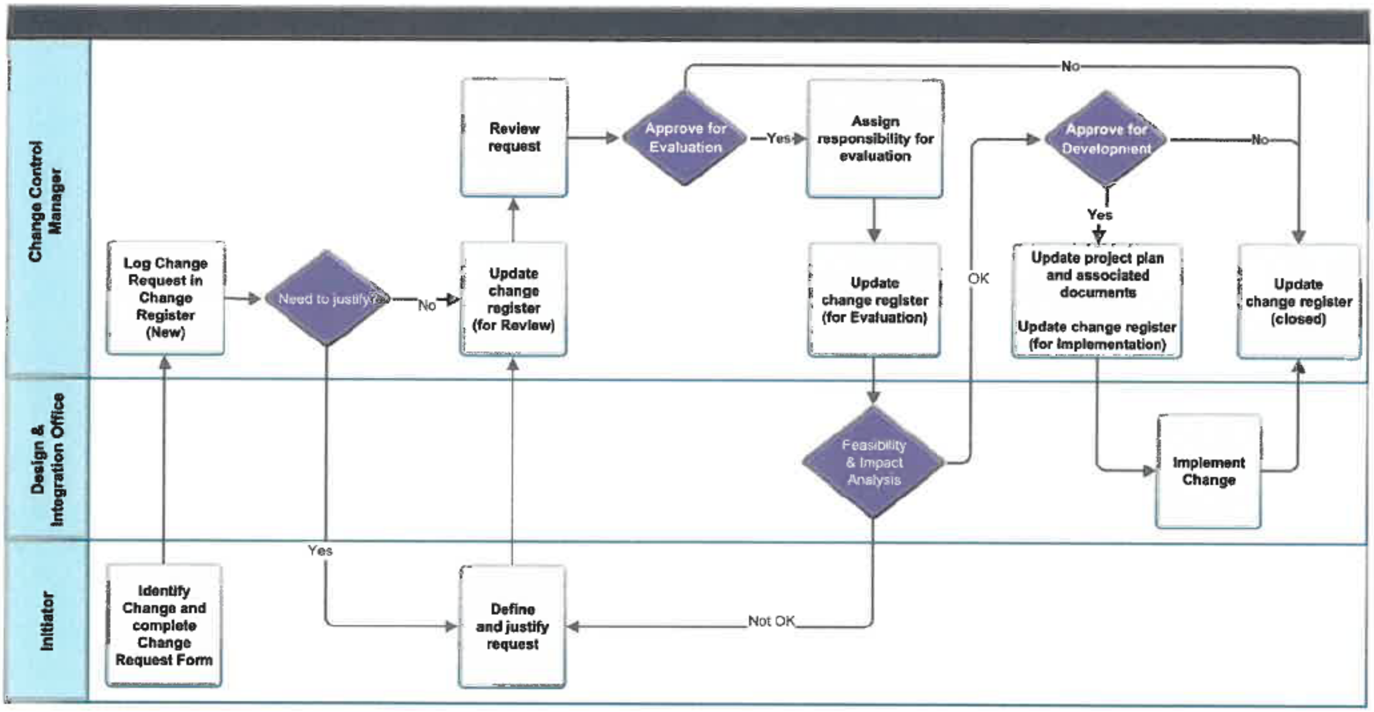
The Change Management process has been designed to make sure this approach is followed for all changes. By using this approach methodology, the Project Team will prevent unnecessary changes from occurring and focus its resources only on beneficial changes within the project scope.

There are several types of changes which may be requested and considered for the Project. Depending on the extent and type of proposed changes, proper documentation and communication of these changes will be required to include any approved changes into the project plan and ensure all stakeholders are notified. Types of changes include:

- Scheduling Changes: changes which will impact the approved project schedule. These changes may require fast tracking, crashing, or re-baselining the schedule depending on the significance of the impact
- Budget Changes: changes which will impact the approved project budget. These changes may require additional funding, releasing funds which would no longer be required, or adding to project or management needs to reserve. May require changes to the cost baseline as well
- Scope Changes: changes which are necessary and impact the project's scope which may be the result of unforeseen requirements which were not initially planned for or even an agreed enhancement. These changes may also impact budget and schedule. These changes may require revision of project documentation as necessary.

The project managers must ensure that any approved changes are communicated to the project stakeholders. Additionally, as changes are approved, the project manager will ensure that the changes are captured in the project documentation where necessary. These document updates must then be communicated to the project team and stakeholders as well.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.



Below are basic change management steps.

Change identification and registration

Steps to change identification and registration

- change request is raised
- change request is logged in change control register
- Change control Register will be maintained with other project documentation in a location accessible by all required project team members.

Change requests arise from a need to change a controlled deliverable. The reasons for a new change request include but are not limited to:

- design confirmation change
- an enhancement to original requirements of specification
- as a result of an issue, where the issue has been investigated and the recommendation is for a change
- identified separately as part of analysis undertaken between existing business processes

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

All required changes must be raised by completing a Change Request Form. This is generally completed by a project team member or the Project Manager(s).

All changes are logged in the Change Control Register and allocated a change request number.

Change definition and justification

Steps to change definition and justification are:

- change request defined and justified by the initiator
- cost implications discussed with internal stakeholders

A change can exist at two levels:

- the change request affects multiple areas within the project, impacts project delivery and requires the approval of the customer and/or Project Sponsor before work can begin. The change requested will result in a change to scope, cost or schedule
- the change request has a smaller impact to the project or is smaller in terms of work effort required than major scale requests. The Project Manager will approve the request before assigning work.

Approval for evaluating the change

Steps to approving the change for evaluation are:

- approval to conduct an evaluation
- assign responsibility for evaluation

The Project Manager(s) will approve the request for evaluation before assigning the task

Change Evaluation

Steps to change evaluation are:

- full evaluation on feasibility and available options
- impact on other tasks/deliverables of the project

A change evaluation aims to identify all areas affected by the proposed change. The details within each of these affected areas are required:

- dependencies with other scheduled project activities
- estimated effort to complete the change (resource, costs)
- impact on quality

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- benefits resulting from the change
- required completion dates
- training
- user awareness
- Release/configuration information

Change authorization, postponement or rejection Steps to change authorization, postponement or rejection are:

- project manager submits recommendation
- DHHR finally approves the change
- change register is updated with final decision

Update project plan

Steps to updating the project plan are:

After approval of the change

  - Identify tasks that must be updated/added to project schedule based on impact analysis or/and the new proposed dates
  - update project tasks if needed
  - add project task if needed
  - update budget and resource table accordingly
  - Share the new plan with all stakeholders

Change implementation

Steps to change implementation are:

- implement change in line with requirement specifications, in time and in budget
  - Test the change accordingly; the type of testing depends on the nature of change and can be
    - Internal testing
      - Unit
      - Functional
      - Regression
      - Data Conversion
      - Smoke

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

        - Impact
        - SOA
        - Security & Penetration
        - Performance/Load
        - Integration Testing
    - Client related testing
        - Integrated Workflow
        - Disease Workflow
        - Vaccination Workflow
        - Localization
        - ELR
        - EHR
        - Data Migration
        - Reports
- change request closed once complete
- change register is updated with final details including close date

1.6 Organizational Change Management

The Vendor's proposal should describe the Vendor's methodology, tools, and techniques for communicating and accomplishing organizational change management for DHHR. The proposalshould discuss how the Vendor can assist DHHR in communicating, training, and implementingorganizational change to DHHR.
The Vendor's proposed methodology should at a minimum address the following areas:

- The Vendor's organizational change management methodology
- Determination of the impact of this change
- Methods of responding to the change, process harmonization, and approach towardspotential resistance
- Method for ensuring a successful change management program
- Lessons learned regarding change management challenges as they will impact thisproject

<Response>

Sunquest Organizational Change Management methodology is a collaborative process with DHHR and all project stakeholders, with a focus on clear and detailed documentation of future state workflows, application of standard role definitions, robust training, and regular communication with impacted resources. The Sunquest project lead will collaborate with the DHHR change management team to understand current processes and workflows, and to define detailed future state workflows. Using these

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

future state workflows, Sunquest and DHHR can identify the scale of change that implementation of the Sunquest Solution will bring to each group of users, process area, or stakeholder being impacted. Identifying the types and scale of change will also highlight areas needing additional focus. Additionally, Sunquest will support DHHR during their review and possible update of internal policy and procedure documentation.

Based on the scope of the Sunquest Solution being implemented, the future state workflows, and resourcing information provided by DHHR, Sunquest will use standard role definitions and best practices to recommend roles and responsibilities needed in the DHHR team to optimize the post-live use of the Sunquest Solution and defined future sate workflows. Sunquest will work with the DHHR change management team to identify which roles can be combined under a single individual, and which roles may require more than one individual to sufficiently perform. Each role identified by Sunquest and DHHR will have a defined training plan to ensure that resources are fully prepared for optimal use of the Sunquest Solution prior to first product use.

Sunquest also believes that early and frequent change communication to be key to successful organizational change management. Sunquest will work with DHHR to identify a full list of stakeholders impacted by the implementation of the Sunquest Solution, to ensure all impacted stakeholders are engaged in deployment planning, and to develop a communication plan that accounts for all levels of change and impacted parties.

Sunquest believes that the key factors in providing a positive change experience include the involvement of key process stakeholders in all project phases, detailed communication and robust training around future state workflows, and thorough User acceptance testing. While we believe the decision-making authority of DHHR project sponsors to be a tool available to us in the change management process, we have found more success collaborating with Client resources to pave the way for a smooth transition to the future state with the Sunquest Solution.

Lesson Learned	Impact	Mitigation Strategy
Key stakeholders or Subject Matter Experts may not be available to participate in protocols and procedures review or Joint Application Design	Schedule delay	During the initiation phase, Project Sponsor to ensure subject matter experts are assigned to the project in accordance with resource requirements specified
Subject Matter Experts may not be available to participate in all training sessions identified for their role	Schedule delay	During the Initiation phase, role definitions are confirmed, and Client resources identified so training can be scheduled accordingly.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Communication issues due to the large Stakeholder Team	Schedule delay	Project Manager to ensure the Communication Plan includes communication requirements from each Stakeholder group, and each group's lead defines an internal communication plan to ensure thorough communication occurs across and within each group or department.
End Users are resistant to change in workflow or procedures	Schedule delay	Design sessions include discussions about current pain points as well as positive aspects of the current system. Demos and Q&A sessions offered repeatedly throughout project timeline to understanding and feedback about the change.

1.7 Training Approach

The Vendor's proposal should present a narrative description of the Vendor's proposed approachto completion of the training throughout the contract, including the Vendor's proposed:
Approach to the completion of the training deliverables (as listed in ***Appendix 2: Deliverables and Milestones Dictionary***), including methodology for updating deliverablesthroughout the lifecycle of the project.

- Approach to development, maintenance, and implementation of the TrainingManagement Plan, including methodologies addressing:
- Assessment of internal and external training needs, including gap analysis
- Approach to user training, supporting all business processes as identified in theRFP
- Delivery of end-user training throughout the solution's implementation
- Development and use of online tutorials, online help, online policy and proceduremanuals, and hard copy user manuals for the delivery of training
- Development and use of live, web seminar, and video-based training
- The target audiences for training, including DHHR staff, Vendor staff, clients,providers, and third-party stakeholders who work in the system
- Plan to provide and/or leverage existing State training facilities to perform end-user training detailed in this section.
- Tools the Vendor will use to support training
- The planned curriculum for each system user role and audience
- Initial training schedule
- Version control and maintenance of training documentation

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- Training evaluation, including the use of evaluation survey tools to determinewhether the trainings produced the expected results
- Initial and ongoing training outcomes tracking and reporting, including information such as, but not limited to, the number of training sessions, type of training, training locations, number of trainees, and information regarding the actualtraining results and recommendations for follow-up training
- Approach to "train-the-trainer" activities during the Operations Phase.
- Approach to role-based training during both implementation, and maintenance andoperations
- Approach to development of training materials
- Approach to training evaluations

<Response> Training Approach Summary

Sunquest provides a comprehensive training program that covers each aspect of the project to support the setup and ongoing maintenance of DHHR's ESS application. The training includes administration of the system software as well as problem resolution training to ensure Users will become acquainted with error messages, on-line support, corrective actions, and best practices with respect to the components of the System that can be customized by or at the direction of Users. The training program is structured to empower customer autonomy to minimize lifetime operational costs.

The training program will be based on the following approach:

- What to train – Identify the training need and project context
- How to train – Identify the training methodology and delivery
- Where to train – Determine location and logistics
- When to train – Plan the training schedule
- Who to train – Identify the training groups
- How well we trained – Training Evaluation Surveys

Deliverables

- System and User Documentation - provided within the application as online help and can also be provided as searchable PDFs. On request, Sunquest can work with a professional printer/binder to provide hard copies of these lengthy documents.
- Training Materials – Sunquest produces training documentation for each training session, complete with student exercises. Each set of training documents is customized for that training session by the expert Sunquest Trainer performing the training. Documents are provided electronically prior to the training session for client review and approval. The Sunquest Project

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Manager will work with the DHHR Project Manager to devise a storage location and version control method suited to the project.

- Training Report – The Training Summary Report is produced from the results of the Training Evaluation Surveys. The contents of the report include information such as the number of attendees, type of training, location, time and date of training, etc. Additional information can be added by request.
- Training Schedule – The Training Schedule is created by the Sunquest Project Manager as part of the Training Management Plan.

Detailed Specifications and Mandatory Requirements.

TR001	1	The Vendor should provide a sandbox training environment for authorized solution users within the solution that uses de-identified data and is compliant with the Health Insurance Portability and Accountability Act (HIPAA), DHHR, and other State and federal regulations.
TR002	1	The Vendor should develop and maintain a sandbox environment for training that mirrors production.
TR003	1	The solution's training environment should have the capacity to support all components of the solution.
TR004	1	The Vendor should ensure that no aspect of training uses protected health information (PHI), personally identifiable information (PII), and that the training materials and environments are compliant with the Health Insurance Portability and Accountability Act (HIPAA), DHHR, and other State and federal regulations.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TR005	1	The Vendor should provide the necessary training and ongoing support to all DHHR authorized solution users participating in data conversion validation and user acceptance testing (UAT) of the solution components, reporting options, and data structure.
TR006	1	The Vendor should provide initial and ongoing training and associated reference documentation to authorized solution users for the duration of the contract, at the request of DHHR.
TR007	1	Throughout the duration of the contract, the Vendor should provide regular training sessions for authorized solution users on updated or new functionality and/or business processes related to the solution, at the request of DHHR.
TR008	1	The Vendor should track and provide confirmation of attendance at all training sessions and report on which versions of training materials were presented at the training.
TR009	1	The Vendor should provide evaluation feedback forms to training participants at the end of each training and provide summaries of these evaluations to DHHR with recommendations for changes, if applicable.
TR010	1	The Vendor should provide hands-on, in-person, remote, and/or online training.
TR011	1	The Vendor should provide DHHR-approved, training and/or guide books addressing all components of the solution and provide to DHHR at least four (4) copies of each book for distribution as well as online electronic copies.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TR012	1	The Vendor should ensure that all DHHR-approved training documentation for the solution is posted where authorized solution users can access it on demand.
TR013	1	The Vendor should propose a role-based training approach.
TR014	1	The Vendor should develop training materials that support each training.
TR015	1	The Vendor should provide as-is necessary the training venues and equipment to best ensure the training's success.
TR016	1	The Vendor should provide user acceptance testing (UAT) training.
TR017	1	The Vendor should provide train-the-trainer training sessions.
TR018	1	The Vendor should support all aspects of training that DHHR and Vendor agree are key towards the trainings delivery.
TR019	1	The solution's training environments should be reflective of real-world data.
TR020	1	The solution's training environments should include end-to-end training on processes during applicable phases of the project.

<Response> Detailed Specifications and Mandatory Requirements.

[TR001]

All training activities will be conducted in a separate training environment, set up and maintained for the sole purpose of training. The environment will mimic all components of DHHR's ESS production environment. Sunquest will work with DHHR staff to ensure the training dataset utilizes de-identified

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

data that represents a realistic DHHR dataset.

[TR002]

The training environment will be initially set up with the base application configurations. As the implementation proceeds, the training environment will be updated to ensure the environment reflects the production configurations and customizations.

[TR003]

The training environment will mimic all application components of DHHR's ESS production environment. Sunquest may use other test environments outside of the dedicated training environment to conduct certain specific types of training outside of the primary application itself, while ensuring that all training conducted, in any environment, follows the requirements regarding deidentified data.

[TR004]

All Sunquest employees are required to complete annual HIPAA/PII/PHI training and understand the importance of using only deidentified or test patient data during all training sessions and documentation. As additional federal regulations affecting the Sunquest software are established, Sunquest strives to quickly incorporate the appropriate modifications into the software providing that the modifications are technically feasible, commercially reasonable, and can be implemented without degradation of the system or its performance.

Sunquest has implemented administrative, physical and technical security controls to protect Sensitive Data in accordance with applicable laws including but not limited to Europe's GDPR, HIPAA, UK DPA, and the APPs.

[TR005]

A "train-the-trainer" approach is incorporated in all Sunquest training from the start to enable the core project team with designated trainers to deliver quality training to all users. This training is designed to prepare the users to independently conduct User Acceptance Testing.

Training includes use of the Import Utility tool, which encompasses creation of import templates for mapping the data, as well as viewing and validating imported data in the system.

[TR006]

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Sunquest's client training strategy is to provide continuous training and knowledge transfer to DHHR staff at major stages of implementation.

Sunquest will prepare training materials tailored to West Virginia's ESS configurations. The exercises used in training sessions are provided within the training manual. Other trainers attending these sessions may adapt the training manual and deliver for their own use. Sunquest will provide all presentation tools, User and System Administrator training materials in electronic format to the DHHR staff for review and approval prior to conducting.

The table below describes all courses offered by Sunquest, their contents, duration and estimated timeline for delivery. Sunquest will provide all training for DHHR Trainers. Full day training sessions will be from 8am-4pm. Half day sessions will be from 8am-12noon. The Sunquest Project Manager will schedule each type of training where it is needed for the duration of the project. Each training class may be offered multiple times, depending on project needs. The Training Schedule will be outlined in the Training Management Plan. Dates below are based on Project Start of January 3, 2022.

Training Class	Audience	Content and Duration and Estimated Timeline

System Administrator	• DHHR Super Users
	• Operations
		• Manage users
		• Maintain dictionaries
		• Configure system settings
		• Manage records
		• Duration: 2 days
		• Timeline
		    ○ Pre-UAT: Sept 5 - Sept 12
		    ○ Deployment: Nov 7 – Dec 6

User	• DHHR Surveillance & Outbreak users	• Search for and enter client data
		• Record activities performed, referrals made, and document client progress
		• Document outbreaks and group events
		• Produce certain administrative and client-oriented reports and records
		• Duration: 3 days
		• Timeline
		    ○ Pre-UAT: Sept 5 - Sept 12
		    ○ Deployment: Nov 7 – Dec 6

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Provider Portal	• Hospital & Clinic staff (no EMR)	• Create a record for a new patient
		• Create a record for a patient already in the System
		• Retrieve aggregate data submitted to the System
		• Duration: 0.5 day
		• Timeline
		  ○ Pre-UAT: Sept 5 - Sept 12
		  ○ Transition to Operations: Nov 7 – Dec 6

UDF Design & Best Practices	• Operations	• Introduction to UDF design
		• Duration: 0.5 day
		• Timeline
		  ○ Pre-Design: March 3 – March 4
		  ○ Transition to Operations: Nov 7 – Dec 6

UDF Development	• Operations	• Guided development of UDFs • Duration: 2 days • Timeline ○ Transition to Operations: Nov 7 – Dec 6
Business Rules Design & Best Practices	• Operations	• Introduction to Business Rules • Duration: 0.5 day • Timeline ○ Transition to Operations: Nov 7 – Dec 6
Business Rules Development	• Operations	• Guided development of Business Rules for UDFs • Duration: 3 days • Timeline ○ Transition to Operations: Nov 7 – Dec 6

Custom SSRS Reports Design and Best Practices	• Operations	• Introduction to SQ database structure
		• Introduction to SSRS reporting features
		• Duration: 1 day
		• Timeline
		  ○ Pre-Design: March 3 – March 4
		  ○ Transition to Operations: Nov 7 – Dec 6

Report Builder	• Operations	• Guided development of SSRS reports • Duration: 3 days • Timeline ○ Transition to Operations: Nov 7 – Dec 6

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Electronic Lab Reporting	• Operations	• Fundamentals of electronic lab reporting (ELR)
		• Configuration of SQ ELR-related dictionaries and tables
		• Advanced Auto Importing rules
		• Duration: 2 days
		• Timeline
		  ○ Pre-UAT: Sept 5 - Sept 12
		  ○ Deployment: Nov 7 – Dec 6

Electronic Case Reporting	• Operations	• Fundamentals of Electronic Case Reporting functionality
		• Connecting an EMR through the EHR Gateway
		• Duration: 2 days
		• Timeline
		  ○ Pre-UAT: Sept 5 - Sept 12
		  ○ Deployment: Nov 7 – Dec 6

Helpdesk & Troubleshooting	• Support	• Document user-reported issues • Review of Sunquest user guides • Report issues to Sunquest • Duration: 0.5 day • Timeline ○ Transition to Operations: Nov 7 – Dec 6 •
Ongoing Training (Post Go-Live)	• Operations • Surveillance Users/Testers	• iMentor Program • Timeline ○ Post Go-Live
Upgrade Training on new version functionality	• Surveillance Users/Testers • Operations • Super Users	• Training provided as part of an Upgrade project • Timeline ○ As part of a future Upgrade Project, prior to UAT

TR007

New functionality may be added to the WorldCare application through an Upgrade Project, as new major versions are released. As a part of the Upgrade project, Sunquest will provide training on the new functionality in preparation for User Acceptance Testing. This training will be conducted in a similar fashion as training during the Implementation Project, using a train-the-trainer strategy to prepare the DHHR staff for UAT and production use.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TR008

Sunquest can provide either a physical sign-in sheet (if in-person training is conducted) or an electronic attendance record (available via Teams) for all training sessions.

As training documentation is provided before each session, records of training documentation versions are easily determined and can be tracked if requested.

TR009

Sunquest provides Training Evaluation Surveys to each student at the end of each training session. The forms should be delivered directly to the Sunquest Project Manager when complete, who will review each form and produce a Training Evaluation Summary document.

Examples of each are below.

sunquest.

Dear Customer,

Our goal at Sunquest Information Systems is to provide our clients with excellent service and product satisfaction. To maintain our service goals and to continuously improve the service and implementation of our products, we would appreciate you taking a few minutes of your valuable to time to complete this survey on the training session you recently attended.

Client name: XXXXX

Evaluator name(s) (optional): XXXXX

Training Class Attended: XXXXXX

Date of evaluation: XX/XX/XXXX

Trainer: XXXXX

General Training Evaluation	Very Satisfied/Excellent	Satisfied/Good	Somewhat Satisfied/Average	Somewhat Dissatisfied/Fair	Dissatisfied/Poor
Rate the speaker/instructor in terms of knowledge, organization and effectiveness.	5	4	3	2	1
To what extent were the objectives for the course achieved?	5	4	3	2	1
Rate your overall satisfaction with the program content.	5	4	3	2	1
Rate the course for clarity and organization of content.	5	4	3	2	1
To what extent were the handouts, training manual, and supporting documents useful?	5	4	3	2	1
Rate the contribution of this session to your overall knowledge of this subject.	5	4	3	2	1
Rate your level of expertise in this subject PRIOR to this session.	5	4	3	2	1
Rate your level of overall satisfaction for this course.	5	4	3	2	1

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Training Evaluation Summary (data is sample data only). Summary also includes tabs for comments provided in free text areas shown above (not visible in example below). The Sunquest Project Manager will work with the DHHR project manager to ensure the report contains all the information required by the project.

TRAINING EVALUATION SUMMARY

sunquest.

Client name : XXXXX

Training Class Attended : XXXXXX

Date(s) : XXXXXX

Date of evaluation : XX/XX/XXXX

	QUESTIONS	Very Satisfied/ Excellent		Satisfied/Good		Somewhat Satisfied/ Average		Somewhat Dissatisfied/ Fair		Dissatisfied/ Poor	
	General Training Evaluation										
1	Rate the speaker/instructor in terms of knowledge, organization and effectiveness.	19	83%	1	4%	1	4%	0	0%	0	0%
2	To what extent were the objectives for the course achieved?	19	83%	1	4%	1	4%	0	0%	0	0%
3	Rate your overall satisfaction with the program content.	19	83%	3	13%	1	4%	0	0%	0	0%
4	Rate the course for clarity and organization of content.	19	83%	4	17%	1	4%	0	0%	0	0%
5	To what extent were the handouts, training manual, and supporting documents useful?	19	83%	3	13%	1	4%	0	0%	0	0%
6	Rate the contribution of this session to your overall knowledge of this subject.	19	83%	4	17%	1	4%	0	0%	0	0%
7	Rate your level of expertise in this subject PRIOR to this session.	12	52%	2	9%	7	30%	1	4%	0	0%
8	Rate your level of overall satisfaction for this course.	20	87%	3	13%	0	0%	0	0%	0	0%
	INDIVIDUAL TOTALS FOR THE COURSE	127	81%	18	11%	12	8%	0	0%	0	0%

TOTAL COURSE RESPONSES	157
OVERALL COURSE SATISFACTION	92%

Number of People Scheduled for the survey:	88
Number of People Responding to the survey:	23
Actual Number of participants:	23

NOTE: The Satisfaction Score is the average of the totals #s of the individual total responses

TR010

While most Sunquest training is best delivered on-site, there may be times when being on-site is not possible. Many training sessions can be just as efficiently given remotely, over meeting facilitator software such as Microsoft Teams.

Sunquest will work with the DHHR team to determine when on-site training is preferable and possible, and when remote training is necessary or preferred. These decisions will depend upon the type of training, length of training, and any public health concerns or travel restrictions.

In addition, Sunquest provides the option to access iMentor, a learning library of recorded mini-sessions addressing various parts of the WorldCare application, which can be used to provide introductions of the application to new DHHR staff members needing basic introductory training before embarking on their learning journey with a DHHR ESS trainer.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TR011

The Sunquest WorldCare Application comes with both a User Guide and a System Administrator Guide. These guides are available as both "online help" (accessible from within the application) and can be provided individually as searchable electronic documents (PDF format). These guides are updated to cover new functionality with every major release.

As these documents are quite large, Sunquest clients typically prefer to receive the electronic version and make them available to users via an internal shared document site. The electronic versions are easily searchable by keywords, and users may navigate from the Table of Contents.

If DHHR prefers to also receive these documents in printed form, Sunquest can accommodate this by engaging a professional printer/binder to provide copies of these documents.

TR012

The Sunquest Project Manager will work with the DHHR Project Manager to ensure that all electronic copies of training, end user and system administrator documentation are stored in an easily accessible location.

Additionally, the End User Guide and System Administrator Guide are available online from within the application itself, providing direct and seamless access for all authorized users of the system.

TR013

Sunquest WorldCare Training is categorized based on the roles of user groups within the organization.

The table below outlines the distinct role-based groups of students expected to attend the various sessions offered during this implementation and beyond. These groups are based on the range of features used by each person in these groups. These descriptions do not necessarily correspond to user roles defined in the system software. The duties described in these groups may cross multiple roles.

Target Audience	Description	Recommended Training Class

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Super Users	This group represents the members of the project team. By learning all software functions and capabilities, this group will become product champions able to impart their knowledge to other users. They will also be in an educated position to make decisions on functionalities and business rules that affect the DHHR WorldCare software set up and use.	• System Administrator
Surveillance Users, Surveillance Testers	This group represents user staff in the DHHR Divisions of Epidemiologic Evaluation, Infectious Disease Epidemiology, STD and HIV and Tuberculosis Elimination. By learning the WorldCare software functions and capabilities, this group will be able to assist with system software testing as well as confidently perform their day-to-day work in the system.	• User
Trainers	This group represents staff who will train DHHR system software users at all levels.	• User
Hospital & Clinic Staff (No EMR)	This group represents staff of hospitals & clinics who would be using limited functionality of the software or web portal for data entry	• Provider Portal
Operations	DHHR staff responsible for maintaining or adding configurations to WorldCare post go-live (e.g. additional forms, reports, onboarding of new hospital laboratory or EMR interfaces)	• User • System Administrator • Installation • UDF Design & Best Practices
	Note: SQ Custom SSRS Report, SQ Report Builder, SQ ELR, and SQ EHR Gateway are in-depth training for experienced users with technical skills. Sunquest recommends that these trainings be scheduled after the Operations staff have gained practical experience in WorldCare, preferably 2-3 months post go-live.	• UDF Development • Business Rules Design & Best Practices • Business Rules Development • Custom SSRS Reports Design and Best Practices • Report Builder • Electronic Lab Reporting • EHR Gateway

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Support	This group represents staff who will constitute the first line of support for DHHR end users when a problem arises.	• User • Helpdesk & troubleshooting • Provider Portal

[TR014]

For every training session provided during the project, Sunquest will prepare training materials tailored to West Virginia's ESS configurations. The exercises used in training sessions are provided within the training manual for that session. DHHS trainers attending these sessions may adapt the training manual and deliver for their own use. Sunquest will provide all presentation tools, User and System Administrator training materials in electronic format to the DHHR staff for review and approval prior to conducting training.

[TR015]

Training sessions may be provided at a DHHR location, offsite at a location arranged by Sunquest, or be provided via web conference sessions if appropriate or necessary. On-site training lasting several hours is usually delivered in a computer lab with participants having individual, simultaneous access to an internet connected computer or laptop.

In person training facilities should include:

- Enough seating for the planned number of attendees
- Tables to accommodate the planned number of attendees comfortably
- If the room is destined for a large audience, a sound system with a microphone (preferably wireless)
- Connectivity to the training servers wired (preferred) or wireless
- A whiteboard, an eraser, and a set of assorted pens
- If the type of session is seminar or class, each student should bring their own laptop computer.
- A projection system and a screen. The projector should be able to display a resolution of 1024x768
- Enough power outlets to support computers, projectors, and the trainer equipment
- Sign in sheet

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[TR016]

A "train-the-trainer" approach is incorporated in all Sunquest training from the start to enable the core project team with designated trainers to deliver adequate training to new users. This training is designed to prepare the users to independently conduct User Acceptance Testing.

[TR017]

Sunquest's strategy is to provide continuous training and knowledge transfer to West Virginia DHHR staff at major stages of implementation. A "train-the-trainer" approach is incorporated in all Sunquest training from the start to arm the core project team with designated trainers to deliver quality training to all users.

[TR018]

The Sunquest Project Manager will work directly with the DHHR Project Manager to develop the Training Management Plan. Based on the needs of the DHHR user base, the Training Management Plan will identify the training objectives for the ESS implementation project, describe the train-the-trainer strategy, identify roles, assign appropriate training sessions for each defined role, and outline the training schedule. This Training Plan will be a living document throughout the life of the project and used to ensure that the training needs of DHHR users are met.

[TR019]

Sunquest will work with DHHR project team to ensure the training dataset utilizes de-identified data that represents a realistic DHHR dataset.

[TR020]

In each training session throughout the project, the instructor and the participants work through scenario-based exercises tailored to the Program's standard workflows, using the forms and reports developed after the initial training with the Programs' Subject Matter Experts (SMEs).

Sunquest will recommend that specific training sessions be held later in the project, some even after going live on the WorldCare application, to ensure users have sufficient practical experience using the application before delving into the more technical aspects of certain administrative functions. The timing of all training sessions will be outlined in the Training Management Plan.

2. Implementation Methodology

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The Vendor should respond to the headings below and describe the overall approach for thefollowing areas of system development life cycle (SDLC) and support. The response shouldinclude what the Vendor believes will be an effective process for each component and flow between each of the areas listed below.

2.1. Requirements Analysis and Solution Design Methodology

The Vendor's proposal should describe the Vendor's approach to requirements analysis and thedesign of the solution. This should include in the response a description of what the Vendor believes will be an effective system architecture and design methodology.

During the solution's design, the Vendor should conduct requirements analysis, during which theVendor reviews, refines, and seeks approval for all preliminary requirements included in this RFP, and add requirements where gaps are identified through a detailed analysis exercise. The result should be a final set of detailed requirements to be used for building the ESS. These requirements should be the basis for the Vendor to create usage scenarios and detailed business process workflows.

During the solution's design, the Vendor should develop detailed specifications that demonstrate that the solution meets the IT needs to support business processes. The system requirements and logical description of the entities, relationships, and attributes of the data documented during the requirements analysis should be further refined and allocated into system specifications that are organized for implementation.

The solution design and its multiple components should be developed in conjunction with the Project Work Plan as follows:

• The first component should be a Preliminary System Design, which outlines the overall functions that will be developed or configured, their interactions, components, and high-level architecture.

• The second component should be a DSD, which will include the planned implementation details of the design for each component, interactions, and place in the overall technical architecture.

• The third component should be the Final System Design, which will give the actual implementation details of each component and sub-component from a functional and technical perspective, including the final architecture implementation.

The Vendor's proposal should also describe its approach to conducting requirements validation sessions. The Vendor's proposal should also include the number and topics of the sessions to be held in support of the requirements validation sessions.

The Vendor's proposed approach to requirements analysis and solution design should also include detail on the following:

• Process for identifying and resolving gaps between the Vendor's and DHHR's understanding of an RFP specification.

• How the solution's design will include collaborative design with functional and technical subject matter experts.

• How the Vendor intends to obtain DHHR's approval on RFP specifications.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

• Design documentation for all project deliverables delivered during the Solution Planning and Solution Design, Testing, and Operations task groups.

The Vendor should propose an approach describing how the ESS design will integrate with other surveillance components and the DHHR enterprise. The Vendor should also propose how design decisions will be coordinated across all functional areas.

<Response>

Sunquest is highly experienced at rapid project initiation. Once a letter of award is issued, an internal "kick-off" call will be held immediately between the project teams, where assigned resources will be discussed and agreed implementation methodology will be reviewed. Next, team project managers and appropriate staff will begin working with the DHHR on a preliminary kick off meeting to introduce the team leaders and go over the plan to ensure all teams are aligned on next steps. Soon after the letter of award being issued, a formal kick-off meeting will be held with key project stakeholders.

A Project Kick-off is held between the Sunquest and DHHR key stakeholders. The purpose of the kick-off is to discuss the Project Charter and Project Implementation Methodology to set expectations and verify the implementation approach during the Planning phase.

ANALYSIS

- Requirements Review and Validation - At completion of Project Kick-off, sessions will be set up for Sunquest and the DHHR stakeholders to review, discuss and validate business, functional, architectural, data migration and resource/staffing requirements, and determine whether the solution as proposed meets all the requirements.
- Gap Analysis - During the Requirement Review and Validation process, some gaps may be identified that will be prioritised by the Project Team and documented. Any variances from the Proposal, identified as mandatory scope, that must be addressed prior to Production roll out are addressed through the Change Management process.

PROJECT PLANNING

The Sunquest Project Manager develops a Project Management Plan (PMP) using a best practices approach based on the PMBOK® (Project Management Body of Knowledge) standard to plan and execute a successful project.

The Sunquest Project Manager collaborates closely with the DHHR Project Manager to complete

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

the development of the planning documents in accordance with the mutually agreed upon schedule.

PROJECT EXECUTION

The following details apply to a standard, fully integrated implementation of the proposed Sunquest Solution (and all of its modules) for surveillance of all diseases.

- Enterprise Architecture/Establishment of Test Environments - The hosted environment is planned and set up by Sunquest shortly after project start and will include at least three environments: Test (sandbox), UAT, and Production
- Software Installation - The required Operating System and other software components for the latest version of the Sunquest Solution is installed in the Test environment. Next, the latest version of the Sunquest Solution is installed and configured in the DHHR Test environment. This environment will be accessible by designated DHHR staff

Department of Health Test team upon initiation of Joint Application Design (JAD) sessions.

Pre-Design Training - The Design phase will start with a series of on-site training sessions to provide enough understanding of the system to identify the design requirements for form and report development. These sessions will start with a Sunquest Solution overview, best practices in forms and reports design, followed by some hands-on forms and reports design and configurations to familiarise stakeholders with this collaborative process, that will continue after the Joint Application Design (JAD) sessions until all required forms, business rules and reports are configured in the system.

- Design/Joint Application Design (JAD) - There will be a series of JAD workshops that focus on the design of all application configurations and interfaces. The sessions will be categorised as follows:
    - Mapping of Disease Workflows to Sunquest WorldCare – This consists of configuring the application in accordance with the business processes and workflows for COVID-19 and will include design documents for:
        - Dictionaries
        - Security
        - User Defined Forms (UDFs)
        - Business Rules

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- Reports
  - Integration and Interfaces

Each interface will require finalised specifications prior to configuration. A User Acceptance Testing and Deployment strategy will be defined and planned for each interface.

- Electronic Laboratory Result (ELR) interfaces -- Sunquest will provide and review the specification for HL7 2.5 ELR interface with the DHHR ELR stakeholders.
- External Applications Interfaces -- Importing from external applications can be done on demand as needed through the Import Utility or using Web Import API, where data can be automatically imported in the Sunquest Solution from external applications. Exporting to external applications will be done in accordance with the formatting specifications. Possible methods are using the Custom Export, SSRS reports, and/or the Messaging module. As part of the design workshops, the team will review the import/export requirements for external applications and determine the methodology for data transmission and testing.

  - Data Conversion/Migration – Data conversion and migration will need to be designed in accordance with the business needs of different programs. During the design phase, the system and data being converted (within the scope of each phase) will be defined and documented.

The outcome of the Design phase will be a series of "To-Be" documents. These documents will be reviewed and approved by DHHR before proceeding with configurations.

2.2. Solution Configuration Methodology

During the Configuration Phase, the Vendor's system design team should take the detailed logical information documented in the System Design Phase and transform it into an executableform to ensure that all individual components of the automated system/application function correctly and interface properly with other components.
The Vendor's proposal should describe the Vendor's system configuration methodology. Theresponse should include a description of what the Vendor believes will be an effective systemconfiguration methodology (e.g., Waterfall, Agile) for both the Vendor and DHHR during theimplementation of the proposed solution.
The Vendor's proposal should present a narrative description of the Vendor's proposed approachto solution configuration, including the Vendor's proposed:

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- Software solution, including a description of the solution's ability to accommodate the current and future business and technical needs of DHHR. The solution should also describethe methodology and approach for the following:
- Regular system maintenance, performance optimization, resource capacityutilization, capacity planning, and capacity expansion
- Compatibility of all hardware, software, and communications componentsinstalled for use DHHR staff with the most current West Virginia Office of Technology (WVOT)-supported versions.
- Methodology and approach for implementing and maintaining solution documentation,including data structures, entity relationship diagrams, user manuals, and all other documentation related to the ESS platform, operating system, and programming language
- Methodology and approach to preparing, maintaining, and distributing user documentation for each business process, including a description of how it is to be used as the basis for User Acceptance Testing (UAT) and training, as well as the use of final versionsfor training before the start of operations
- Methodology and approach to programming and unit testing on all system functions toensure that a single component can function correctly on a standalone basis
- Methodology and approach ensuring that the configured solution meets design criteria
- Methodology and approach ensuring installation and enhancement or modification of thecomponents of the proposed solution meet the specifications DHHR developed and approved.

<Response>

BUILD

As design documents are finalised, reviewed and approved, the configuration of each category under Design will commence:

- Forms and Business Rules Configuration -- Forms and business rules will be configured in the Sunquest Solution in accordance with the approved UDF design documents and submitted to DHHR testers for user acceptance testing.
- Reports Development -- SSRS Reports will be developed in accordance with the approved Report design documents and submitted to DHHR testers for user acceptance testing.

Interfaces Configuration:

- Electronic Laboratory Results (ELR) Interface - Once the ELR Test environment is set up and tested, Sunquest will setup and test the connectivity with the laboratories and set up the Lab Interface Project (LIP) cross reference table. The onboarding of the laboratory interface will begin when the diseases have been configured in the Sunquest Solution Test environment.
- External Applications Interface - Sunquest will develop, and unit test the imports and exports with

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

external applications in accordance with the design specification and testing methodology specified in the Design phase during Phase 2 of the project.

- Data Migration Configurations - Once forms have been created and the system is ready for the legacy data, the import templates and any other data conversion tools will be developed. Sunquest will specify the data import format (in the form of an Excel spreadsheet) in collaboration with DHHR staff. The source data will undergo any necessary conversion. Sunquest will suggest several queries that will provide metrics to be used in reconciliation reports (e.g., number of patients, number of cases, number of cases by disease, race, ethnicity, etc.).

TEST

- System Testing - Upon completion of configurations, system testing will commence and will be performed iteratively as diseases are configured in the system. System testing will be managed by Sunquest with some participation from the DHHR team and will be of the following types:
    - WorldCare Diseases Workflow Testing - Regression testing of disease configurations by following the procedures in the Quality Management Plan.
    - ELR Integration Testing - Testing the mapping of lab reports to appropriate patients and disease incidents in the ELR Test environment. This requires a specific set of test messages to be sent by the labs being onboarded to the ELR Test environment
    - External Applications Integration Testing - Sunquest will execute integration testing using system test methodology, sample test messages and expected outcomes documented in the Quality Management Plan for each interface included in the scope of the project.
    - Data Migration Testing -- Small test import files will be created and imported to verify that the import templates and data files result in correct importation (Pre-start load test).
- Pre-UAT Training and Assistance - An on-site User and System Administrator training will be provided to the DHHR staff participating in UAT prior to UAT start (if onsite training is not possible due to travel restrictions, live remote training will be utilized). End-User training provides comprehensive, yet compact, instruction to users of the system. This training typically provides the capacity to search for and enter customer data, record activities performed, referrals made, document customer progress, produce certain administrative and customer-oriented reports and records and manage records. System Administrators also receive training in core End-User functionality. System Administrator training prepares agency application administrators to configure system settings, create accounts, maintenance and development of new Forms and Business Rules, produce administrative reports and other actions that require technical training.
- User Acceptance Testing (UAT) - During the planning and design stages, Sunquest will assist the DHHR staff to develop a UAT Plan that will include use cases or actual business scenarios and workflows to be tested by the DHHR users, the testers' roles and responsibilities, testing timeline/phases, and communication protocols such as issues reporting and resolution during the UAT

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

phase. The Test environment will be set up by Sunquest and will mirror the Production environment, with representative data for each area being tested. Upon completion of System Testing, UAT will be performed in the Test environment by the DHHR staff. UAT will commence immediately after training. As with system testing, UAT will be of the following types:

- Sunquest WorldCare Diseases Workflow Testing – There will be at least two cycles of User Acceptance Testing. The first cycle will be a comprehensive test run by DHHR testers executing all test cases in accordance with the UAT plan. During the first test cycle, all show-stopping issues are identified and reported by DHHR to Sunquest. If defect resolutions require configuration changes and adjustments, all such adjustments will be made and documented. If defect resolutions require a revision to Sunquest WorldCare, a revision release will be provided with all show-stopping issues resolved. The second cycle of UAT will consist of the DHHR testing the defect fixes.
- ELR Integration Testing -- This will be similar to the system testing process. The only difference is that there will be a production/live feed from the labs being onboarded to the ELR Test environment. The users will test the mapping of live lab reports to appropriate patients and to disease incidents in the ELR Test environment.
- External Applications Integration Testing – This will be similar to the system testing process. The only difference is that there will be a production/live feed from the health systems being onboarded to the Test environment.
- Data Migration Testing -- Upon satisfactory test imports (i.e., approval of pre-start load test reconciliation reports and documents), entire data sets will be imported into the test system. Sunquest staff will assist the DHHR project team to perform data queries on the imported data and visually inspect a select number of records to verify a successful import. Import templates and import files will be adjusted as necessary until tests determine a successful import.

Technical issues resolution during UAT will be managed by Sunquest using Sunquest's online CRM system. CRM accounts will be provided to the DHHR staff that will allow them to report issues during their testing and will give them access to the latest status information on all issues. Weekly status meetings will be held for Sunquest and DHHR staff to review UAT status and outcomes, prioritise issues and identify defects that must be resolved prior to going live.

- UAT/Go-Live Approval - Upon completion of User Acceptance Testing, Sunquest will submit a User Acceptance Test form to the Australian Government Department of Health that verifies the User Acceptance Test Plan has been fully executed and confirms the system is ready for "Go Live" and can be made available for Production use.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

2.3 Data Conversion Strategy, Approach, and Timeline

The Vendor's proposal should describe what the Vendor believes to be an effective data migration and conversion strategy and approach for supporting migration of data from the current solutions (***Section 4.1: Background and Current Operating Environment***) to the proposed solution (***Section 4.3: To-Be Enterprise Surveillance System (ESS) Environment***). The Vendor's proposal should also describe how the Vendor will ensure data integrity and consistency through all phases of the project.

<Response>

Sunquest's Data Migration approach includes data migration tasks throughout the engagement timeline. During the Requirements Gathering phase, the technical and business needs for each dataset are detailed and documented. Once forms have been created and the system is ready for the legacy data, the import templates and any other data conversion tools will be developed.

Sunquest will specify the data import format (in the form of an Excel spreadsheet), in collaboration with DHHR staff. The source data will undergo any necessary conversion. Sunquest will suggest a number of queries that will provide metrics to be used in reconciliation reports (e.g., number of patients, number of cases, number of cases by disease, race, ethnicity, etc.).

Data Migration Testing starts with small test import files that will be created and imported to verify that the import templates and data files result in correct importation (Pre-start load test). Upon satisfactory test imports (i.e., approval of pre-start load test reconciliation reports and documents), entire data sets will be imported into the test system. Sunquest staff will assist the DHHR project team to perform data queries on the imported data and visually inspect a select number of records to verify a successful import. Import templates and import files will be adjusted as necessary until tests determine a successful import.

3. Deployment Methodology

The proposal should describe the Vendor's overall approach regarding the following areas of SDLC and support. The response should include what the Vendor believes will be an effectiveprocess for each component and flow between each of the following areas:

- Implementation/Rollout Planning
- Implementation Methodology and Timeline
- Issues, Challenges, and Risks
- Lessons Learned

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response>

During the Deployment phase, Sunquest will migrate the application configurations, ELR feed(s), and interfaces to Production and will run and verify data uploads in Production. Sunquest will also assist the DHHR project team to conduct an end-to-end final validation of operational workflows and will create a knowledge base that includes all documentation developed throughout the project life cycle. Sunquest will provide the documentation required to set up and maintain the WorldCare application including:

- o Project Management Plan
- o Training materials
- o System Administrator/User Guides
- o User Defined Forms Best Practices
- o Business Rules Best Practices
- o Support Guide

3.1 Implementation/Rollout Planning

The Vendor's proposal should describe the Vendor's methodology, tools, and techniques for implementation/rollout planning. The Vendor should include what specific staging, readiness anddeployment techniques it will use to determine the proper sequencing of deployment processes and functions required for successful implementation.

The Vendor's proposal should include, but not be limited to, details on its approach andmethodology for the following:

- Completing all Solution Deployment task group related deliverables
- Obtaining approval of all Solution Deployment task group related deliverables andmilestones
- Operational readiness and operational readiness testing (ORT)
- Emergency back-out strategy
- Pilot testing
- Confirming stakeholder readiness for new solution implementation

The Vendor's proposal should also include details on the Vendor's approach to supportingand/or supplying:

- System documentation
- User documentation
- Reports
- Report distribution schedule
- Production environment, including the final production schedule
- Data conversion
- Pre-implementation training
- Updates to project management plans for operations

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response>

Sunquest's methodology for Rollout Planning involves collaborative planning with all stakeholders well in advance of the go-live timeframe, documentation of technical and procedural changes, and review and approval by stakeholders. Drafting of the Roll-out Plan starts early in the project as aspects of solution design and organizational change are detailed and discussed. The Rollout Plan will contain technical details such as the Cutover Plan which details the technical steps the Sunquest team takes to promote the Sunquest Solution to production, as well as a list of operation changes that are made the day of go-live. Additionally, the Rollout Plan contains checklists of documents and approvals required prior to go-live, as well as technical and operational details of a back-out plan. The Rollout Plan will also contain pieces of the Training Plan and Organizational Change Management Plan, for items like end user training that occur in the lead-up to the go-live event. The Rollout Plan will go through the same review and approval procedure as other Project Deliverables, though it will likely have more rounds of review due to the enterprise-wide impact of the information it contains.

Prior to or as part of the transition to production use of the Sunquest Solution, DHHR will be provided with access to the in-application help and user documentation, Client-viewable system documentation, and updated versions of relevant Project Deliverables. The production environment will be part of the system architecture ahead of the go-live event, but access to this environment for all users will be granted based on detailed outlined in the Rollout Plan. Reports and associated distribution schedules are configured within the application and will be part of the configuration moved to products as detailed in the Rollout Plan.

3.2 Implementation Methodology and Timeline

The Vendor's proposal should describe an effective implementation and deployment strategy. Inaddition, the Vendor's proposal should include what the Vendor believes would be a realistic implementation approach and timeframe for the implementation of a solution that would meet DHHR's specifications. Please keep in mind DHHR desires a solution that can be implemented within one year or less. If some of the solution specifications are not part of the standard solution(available now or via configuration), please describe a proposed phasing methodology to deliverfull functionality. Please reference the Vendor's Initial Work Plan and WBS in ***Attachment E: Initial Work Plan***.

<Response>

The Sunquest proposal is for an implementation of the core Sunquest Solution and critical integrations to

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

be in production use within 12 months.

We have also accounted for the possibility that some integrations with 3rd parties will not be able to meet this timeframe and will require subsequent go-live events.

Additionally, Sunquest's methodology includes direct support of new systems by the implementation team for an agreed-to timeframe, typically 30 days, before the transition to operations and support. The total timeframe represented in the initial workplan in Attachment E is about fourteen months and accounts for all of these post-live activities.

3.3 Issues, Challenges, and Risks

DHHR is interested in any information that might help identify issues, clarify the specifications,reduce risk of the procurement, and identify issues and challenges of designing and implementing the proposed solution. Please highlight any concerns or recommendations in this section.

<Response>

The implementation of the Sunquest Solution encounters several risks that are standard for the implementation of large, complex software systems. Risks related to Client team bandwidth and sufficient project communication are risks for any implementation and the Sunquest implementation methodology has features to mitigate these risks where possible.

A risk that has greatly increased in probability in recent implementations is the impact to the project of an urgent outbreak that pulls Client resources away from the project. With the changing nature of new variants of COVID-19, the potential impact to project timelines may need to be considered. Discussions around project resourcing and the impact of an outbreak will be discussed during the Initiation and Planning phases of the project.

Interface projects require communication with multiple organizations (hospitals, laboratories) or external departments in the agency (e.g., contacts for immunization or death registry). It is often challenging to engage with and obtain commitment from external organizations. Sunquest and DHHR Project Managers will collaborate and identify required personnel for each integration project early and well in advance of the start of integration projects to ensure resources are available when needed.

One key factor to the success of the implementation of the Sunquest Solution is having the Client stakeholders and Steering Committee members engaged throughout the project timeline. Stakeholders are key resources in not only thorough requirements gathering, but in workflow validation and change adoption as well. Steering Committee members are key to clearing any impediments that the project may encounter. Sunquest would recommend that DHHR stakeholders and steering committee members be identified as early as possible in the project process.

In addition, Sunquest would recommend that DHHR have current state processes and procedures documented and available at the start of the project. This documentation helps bring the Sunquest team

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

up to speed quickly and helps facilitate future state discussions.

3.4 Lessons Learned

DHHR would find it helpful to understand what the Vendor sees as the successes and primary challenges in the implementation of similar systems. In order to gain this insight, DHHR wouldlike to draw upon the Vendor's experiences with similar projects. Please describe any lessons learned from the Vendor's relevant experience and how those lessons learned will impact theVendor's approach to this project.

<Response>

Key lessons learned from Sunquest's involvement in similar projects include the potential for additional scope that may be identified during requirements validation, ensuring the Client's project team is properly engaged, and that a well-defined deliverable review process is needed. Sunquest believes that thorough and detailed design sessions are key to a successful implementation of the Sunquest Solution. To support the work that is performed during the design sessions, Sunquest delivers prerequisite training to ensure that all stakeholders have the necessary knowledge about the Sunquest Solution to meaningfully participate in the design sessions. It is key that all requirements are detailed during the design sessions to prevent rework needed in later phases of the project. Some scope changes are expected to result from requirements validation. Sunquest and DHHR project managers will agree to and document a Change Management process that would include cost and schedule impact assessment, as well as a review and approval procedure for any scope changes identified throughout the project.

Sunquest's implementation methodology is highly collaborative and includes the involvement of Client resources at several stages throughout the project. To support this collaborative methodology, it is key that Client roles and resources are identified during the initiation phase of the project, and that Client resources have the bandwidth to fulfill their roles within the project. Lack of client resource involvement or bandwidth can lead to schedule delays.

A specific process that has led to lessons learned in past implementations is the review and acceptance of project Deliverables. With the implementation of a solution that impacts a high number of stakeholders, like the Sunquest Solution, each Deliverable often has a large number of mandatory approvers. When approvers are not able to complete their reviews in the allotted time, project delays can result. The DHHR has proposed a well-structured project Deliverable process which aligns with Sunquest's approach to approval management. Additionally, the approval process steps for each Deliverable will be represented within the project schedule and the Deliverable descriptions provided in this RFP will be reviewed and vetted by the Sunquest and DHHR Project Managers during Initiation and Planning phases.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

4. Testing

The primary purpose of the Testing Phase is to determine whether the designed or configured solution is ready for implementation. During the Testing Phase, formally controlled and focusedtesting is performed to detect errors, issues, and defects that need to be resolved.

DHHR envisions the stages of the Testing Phase occurring concurrently with the design and Configuration Phase, with testing for each development iteration. Testing should occur throughout the design and configuration process, and the initial planning for testing activities should occur early in the project. DHHR recommends that planning for the Testing Phase occuras early in the project as possible to ensure successful testing results.

DHHR defines the types of testing as follows:

- **Unit Testing:** Unit testing assesses and corrects the functionality of individual or small groups of code or modules. Unit testing ensures the various objects and components that make up the system are individually tested, and that errors are detected and corrected prior toexiting the development environment.
- **Integration Testing:** Developers perform integration testing after integrating completed components or modules into the overall system codebase. This testing ensures that the completed components or modules work at a level of efficiency acceptable to DHHR and thatexisting components and shared components have not been broken by the new module.
- **Iterative Functional Testing:** Iterative functional testing ensures that the componentsdeveloped for each logical iteration of the system meet all functional and technical requirements as defined and approved by DHHR.
- **System Integration Testing (SIT):** SIT assesses the functionality and interoperability ofthe solution and the multiple other systems and subsystems it interacts with, such as databases, hardware, software, rules engine, document management system, identity management system, workflow, interfaces, and web services, and their integration with infrastructure into an overall integrated solution. This test includes a test installation and configuration of the solution, with a subsequent functional regression test to confirm the installation's success.
- **Interface Testing:** Interface testing ensures the completeness of interface developmentand the readiness of developed interfaces for integration in the wider system.
- **Regression Testing:** Regression testing assesses the integrity of the solution subsequentto the deployment of new solution components and/or fixes.
- **End-to-End Testing:** End-to-end testing is a quality assurance testing methodology thatstrives to ensure correct functioning and performance of applications in production-like scenarios. This methodology checks if an application performs as designed on all levels andacross all subsystems. It is intended to encompass

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

testing for the solution's key business andfunctional processes in their entirety from their start through completion.

- **Security Testing:** The testing of functional, technical, infrastructure, and operationalsolution components to ensure the solution and operations meet all security requirements.
- **Performance Testing:** Performance testing ensures that the solution meets the minimumperformance service levels required by DHHR, in terms of query and page response times under simulated load for a number of users for multiple concurrent functions in a
- given period. Performance testing scenarios take into account expected peak period volumesfor application processing such as closing of open enrollment periods.
- **Usability/Accessibility Testing:** Usability testing ensures the solution user interfacedesign takes into account usability considerations for its target user groups.
- **Browser Testing:** Browser testing ensures that the solution operates in the most likelyconfigurations of browser versions and operating solutions. The Vendor is responsible forproviding the machine configurations to perform all necessary browser testing. Browser testing also includes the testing of mobile view and mobile browsers.
- **User Acceptance Testing (UAT):** UAT ensures that the developed system meets all expectations of DHHR and all solution users. UAT test scripts cover all facets of the system,and the Vendor should be responsible for drafting all UAT scenarios and cases per
- DHHR's direction. DHHR will be responsible for identifying the participants involved inUAT, for the overall execution of UAT scripts, and for any ad-hoc UAT testing.
- **Data Conversion Testing:** Data conversion testing ensures that data migrated from thecurrent solution are brought across to the new solution in a usable, complete, correct, and expected state.
- **Operational Readiness Testing (ORT):** ORT is performed to examine the operationalcapability of the solution and its associated processes and procedures. ORT focuses on the validation or verification of the processes involved primarily outside the system.
- **Parallel Testing:** Parallel testing is a method of comparing the activities and/or data ofthe old solution against that of the new solution. In order to reduce risk, the old and new solutions run simultaneously for some period after which, if criteria for the new solution ismet, the old solution is disabled.

The Vendor's proposal should describe the Vendor's understanding of the aforementioned testing types, and should include detail on the approach and methodology for the following:
All aforementioned testing types, as well as any others the Vendor plans to deploy

- Timing for execution of each testing type
- Usage of tools the Vendor proposes be used in support of each testing type
- Testing environments to be used in support of each testing type, and for all necessarytesting activities
- Validating the traceability of requirements throughout the testing process

The Vendor's proposal should include details on the Vendor's proposed source code management tool, as well as on the project repository that will be used to store usage scenarios,use cases, requirements, designs, test scenarios, test cases, test results, and other project artifacts.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

The Vendor's proposal should also present a narrative description that includes the following:

- Approach to completion of the Solution Design, Testing, and Operations task group'stesting-related deliverables.
- Approach to obtaining DHHR's approval of the testing-related project milestonesincluding the proposed acceptance criteria for each milestone.
- Approach to:
    - Working with federal partners, DHHR, and/or any other Vendors throughout all testing phases
    - Developing test cases and scripts to thoroughly test system functionality
    - Supplying documentation of each testing type
    - Preparing data for each testing type
- Details on the support the Vendor intends to supply during UAT, such as the Vendor'sapproach to:
    - Developing the UAT Plan, scripts, cases, timeline, and supporting processes
    - Preparing test data
    - UAT results analysis, identification of defect severity, and defect resolution
    - Defect tracking, repair, and reporting
    - UAT final report that includes:
        - A certification letter stating that UAT was successfully completed
        - A list of all defects and issues
        - A list of all resolved critical defects and/or issues
- The Vendor's proposal should include detail on the approach to ORT including:
    - ORT approach
    - ORT final report that includes:
    - A certification letter stating that UAT was successfully completed
    - A list of all defects and issues
    - A list of all resolved critical defects and/or issues.

<Response>

The Sunquest approach to testing is a well-developed and multifaceted approach, utilizing iterative rounds of testing and client approvals to ensure a comprehensive confirmation of system and application functionality and performance.

Storage of testing artifacts such as tracking documents, test plans, schedules, test cases etc. will be determined by the DHHR and Sunquest project teams at the commencement of the project.

Sunquest's Quality Assurance Team conducts extensive testing during the development of every release.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Thousands of test cases are documented and executed and can be made available for client use to base UAT test cases upon if desired.

Upon completion of configurations, system testing will commence and will be performed iteratively as diseases are configured in the system. System testing will be managed by Sunquest with some participation from the DHHR team and will be of the following types:

- WorldCare Diseases Workflow Testing -- Regression testing of disease configurations by following the procedures in the Quality Management Plan.

- ELR Integration Testing -- Testing the mapping of lab reports to appropriate patients and disease incidents in the ELR Test environment. This requires a specific set of test messages to be sent by the labs being onboarded to the ELR Test environment. ELR Integration Testing will be done iteratively as labs are being onboarded. Sunquest will be able to work with a few labs simultaneously during integration testing. This will be done in accordance with an agreed upon schedule developed earlier in collaboration with the DHHR ELR Coordinator.
- External Applications Integration Testing -- Sunquest will execute integration testing using system test methodology, sample test messages, and expected outcomes documented in the Quality Management Plan for each interface included in the scope of the project.
- EHR Integration Testing – This will be similar to ELR Integration testing but involves working with providers instead of laboratories.
- Data Migration Testing -- Small test import files will be created and imported to verify that the import templates and data files result in correct importation (Pre-start load test).

Technical issues resolution during system testing will be managed by Sunquest using Sunquest's online issue reporting system. Accounts will be provided to the DHHR staff, allowing them to access the latest status information on all issues. Sunquest will provide weekly status reports outlining testing status to DHHR during system testing. Weekly status meetings will be held for Sunquest and DHHR staff to review testing outcomes, prioritize issues, and identify defects that must be resolved prior to User Acceptance Testing. Sunquest will resolve all blocking and high priority issues. If defect resolutions result in configuration changes and adjustments, all such adjustments will be made and documented.

<u>User Acceptance Testing (UAT)</u>

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Sunquest will assist the DHHR staff to develop a UAT Plan in accordance with an agreed upon Project Schedule. The plan will include use cases or actual business scenarios and workflows to be tested by the DHHR users, roles and responsibilities, testing timeline/phases, and communication protocols such as issues reporting and resolution during the UAT phase.

The Test environment will be set up by Sunquest and will mirror the Production environment, with representative data for each area being tested. Upon completion of System Testing, UAT will be performed in the Test environment by the DHHR staff, with Sunquest support and assistance as needed.

UAT will commence immediately after training. As with system testing, UAT will be of the following types:

- WorldCare Diseases Workflow Testing -- Testing of disease configurations from the users and business process perspective, following the procedures in the UAT Plan.
- ELR Integration Testing -- This will be similar to the system testing process. The only difference is that there will be a production/live feed from the labs being onboarded to the ELR Test environment. The users will test the mapping of live lab reports to appropriate patients and to disease incidents in the ELR Test environment.
- External Applications Integration Testing –. This will be similar to the system testing process. The only difference is that there will be a production/live feed from the health systems being onboarded to the Test environment.
- Data Migration Testing -- Upon satisfactory test imports (i.e. approval of pre-start load test reconciliation reports and documents), entire data sets will be imported into the test system. Sunquest staff will assist the DHHR project team to perform data queries on the imported data and visually inspect a select number of records to verify a successful import. Import templates and import files will be adjusted as necessary until tests determine a successful import.

As with system testing, technical issues resolution during UAT will be managed by Sunquest using Sunquest's online issue reporting system. Accounts will be provided to the DHHR staff that will allow them to report issues during their testing, and will give them access to the latest status information on all issues. Weekly status meetings will be held for Sunquest and DHHR staff to review UAT status and outcomes, prioritize issues, and identify defects that must be resolved prior to going live. Sunquest will

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

resolve all blocking and high priority issues. If defect resolutions result in configuration changes and adjustments, all such adjustments will be made and documented.

Issue prioritization and resolution

During all phases of testing, issues will be prioritized and resolved based on the following scale:

- **High** – High priority issues reported during testing indicate they need to be resolved prior to production use. A High issue indicates the system is available for testing, but a primary workflow is significantly diminished or there is a substantial risk of data loss or corruption.
  - High priority issues reported during testing will be addressed in a planned release cycle in accordance with the Project Schedule.
  - If the issue is a ***"Show Stopper"***; an issue that prevents the DHHR user from proceeding with execution of remaining test cases, the DHHR user should indicate this during UAT, log it as such in the issue tracking system, and contact the designated DHHR Project Manager. Show Stoppers will be addressed in a revision outside the planned release cycle to ensure testing is completed within the allocated test cycle period. The final resolution timeline depends on the impact of the changes to be made.
- **Medium** – Important issue that needs to be resolved, but testing system is available and there is minimal risk of loss or corruption of data. Medium priority issues reported during testing may be considered for deferral to a future post-production release.
- **Low** – Issue has no significant impact on workflow. No risk of loss or corruption of data. Low priority issues will be deferred to a future post-production release.

Testing approval/acceptance

Sunquest will work with the DHHR team to determine acceptance criteria and outline those criteria in the appropriate planning documents. Once testing is completed, Sunquest utilizes an Acceptance Testing Acceptance Form (ATAF) to document 1) the scope of testing being accepted 2) any outstanding issues 3) client signature indicating acceptance.

Detailed Specifications and Mandatory Requirements.

TE001 - 17	1	The Vendor should conduct the following types of testing in support of the solution: Unit testing Integration testing Iterative functional testing System integration testing (SIT) Interface testing Regression testing

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		End-to-end testing Security testing Performance testing Usability/Accessibility testing Browser testing User acceptance testing (UAT) Data conversion testing Operational readiness testing (ORT) Parallel testing Other testing as identified by DHHR and/or Vendor
TE018	1	The Vendor should be prepared to assist DHHR with User acceptance testing (UAT).
TE019	1	The Vendor should be prepared to conduct User acceptance testing (UAT) in all cases whereby DHHR does not elect to conduct UAT.
TE020 - 27	1	The Vendor should complete regression testing subsequent to, but not limited to, the following: Deployment of new solution components Integration of each solution component into the primary solution Every migration of new build versions to each test environment Solution fixes Solution patches Solution releases Others as defined by DHHR
TE028	1	The Vendor should utilize a subset of system integration testing (SIT) scenarios representative of maximum functional and technical solution coverage for the purposes of regression testing.
TE029	1	The Vendor should obtain approval from DHHR on which system integration testing (SIT) should be used for regression testing.
TE030	1	The Vendor should utilize end-to-end test cases in support of regression testing.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TE031	1	The Vendor should perform security testing on functional, technical, and infrastructure components to ensure the solution meets all State, DHHR, and Federal security requirements.
TE032	1	The Vendor should propose security testing scenarios and/or cases to DHHR for their approval.
TE033	1	The Vendor's performance testing methodology should allow for performance tests to be representative of the expected peak period volumes for solution operation.
TE034	1	The Vendor's performance testing should occur on a production ready version of the solution.
TE035	1	The solution's performance testing environment should mirror the final production solution specifications.
TE036 - 44	1	The Vendor's usability/accessibility testing should include testing of the user interface for the following users: Internal users External users Power users Users with limited computer skills Prospective new users Users who will require solution training to complete their daily work Users with disabilities Others as defined by DHHR
TE045	1	The Vendor's usability/accessibility testing approach should account for testing for compliance with sections 504 and 508 of the Americans with Disabilities Act (ADA).
TE046	1	The Vendor's browser testing should be performed using a minimum of a subset of system integration test scripts that ensures maximum solution coverage.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

TE047	1	The Vendor should supply the data, environments, and test scripts necessary to support user acceptance testing (UAT).
TE048	1	The Vendor should work with DHHR to define user acceptance testing (UAT) cases representative of the full solution environment.
TE049	1	The Vendor should be responsible for working with DHHR to define the user acceptance test (UAT) scenarios DHHR deems as critical for UAT.
TE050	1	The Vendor should be responsible for drafting all user acceptance testing (UAT) cases.
TE051	1	The Vendor should review all user acceptance testing (UAT) results with DHHR, and a strategy for mitigation should be agreed upon for each defect based on the defect's severity, priority, and impact.
TE052	1	The Vendor should discuss and obtain DHHR's approval on data conversion exception tolerance levels prior to the commencement of data conversion testing.
TE053	1	The Vendor should review and obtain DHHR's approval of data conversion test results prior to commencement of production data conversion.
TE054	1	The Vendor should work with DHHR to define an operational readiness testing (ORT) approach that encompasses all DHHR and Vendor responsible solution operational processes and procedures.
TE055	1	The vendor should provide a user interface that has been tested for usability.

<Response> Detailed Specifications and Mandatory Requirements.

[TE001 – 017]

Quality Assurance Testing On Every Release

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Every release approved by Sunquest QA is comprised of several types and iterations of validation, verification, review and analysis by several stakeholders. The testing described below is done by the SQ Quality Assurance Team/Development Team, before the release is made available for client installation.

Testing Types	Objective	Approach
Unit Testing	Verify individual units of code and their interactions meet the design and behave as intended	User stories will be unit tested and the evidence is mentioned in the user story or tasks.
Functional Testing	The requirement being broken down into multiple user stories and will be verified as individual components.	All functional requirements will be covered by one or more test cases. The test cases will be linked to the user stories they cover to ensure traceability.
Feature Testing	A complete feature will be tested to meet the acceptance criteria of each user story.	Feature level workflow and Exploratory testing will be performed to evaluate the new features.
Final Regression	Regression testing to check that the new code changes do not negatively impact the existing developed and tested functionalities of the application.	Rolling Regression will be performed in this phase to ensure the code changes made do not impact others areas of the application.
Installation Testing	To ensure the upgrade and new installation is smooth. The upgrade procedure is properly documented	Verification of installation and upgrade scenarios related to all relevant applications will be performed using ignition tests.
Security Testing	To verify the robustness of the product against malicious access of sensitive information.	Testing will be done covering OWASP top 10 vulnerabilities through Acunetix Scans.
Performance Testing	Gather performance metrics on comparable workflows and compare against previous version . Establish baselines for new workflows.	Performance testing will be done at a workflow level. These tests will cover the basic and most frequently used workflows

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Validation Testing	Validation tests are identified to provide full feature and platform coverage as per Intended Use.	Validation team execute the intended use test cases in their test areas according to how they intend to use the features.
Integration Testing	Test cases related to Integration of other Sunquest products or components such as SSO, Communication Gateway and other integrations as per intended use with WorldCare will be executed by the Validation team.	The Integration of Internal products are tested

Sunquest Implementation Directed/Assisted Testing

- System integration testing (SIT)
  - This testing occurs throughout the project, as the different parts of the solution are installed and configured. Sunquest will work with the DHHR Team in the creation and execution of test cases for SIT.
- System Testing - Upon completion of configurations, system testing will commence and will be performed iteratively as diseases are configured in the system. System testing will be managed by Sunquest with some participation from the DHHR team and will be of the following types:
  - WorldCare Diseases Workflow Testing - Regression testing of disease configurations by following the procedures in the Quality Management Plan.
  - ELR Integration Testing - Testing the mapping of lab reports to appropriate patients and disease incidents in the ELR Test environment. This requires a specific set of test messages to be sent by the labs being onboarded to the ELR Test environment
  - External Applications Integration Testing - Sunquest will execute integration testing using system test methodology, sample test messages and expected outcomes documented in the Quality Management Plan for each interface included in the scope of the project.
- Interface testing—see "ELR Integration Testing"
- Regression testing—see "WorldCare Diseases Workflow Testing"
- End-to-end testing
  - Sunquest will work with DHHR to ensure that all processes are tested from entry into the system, routing through the system, resolution, closure and reporting. Sunquest Professional Services Consultants can assist in the creation of test cases for this comprehensive phase of testing.
- Security testing
  - Sunquest and third-party routinely conducts audits to include ISO 27001:2013, SOC 2, code

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

reviews, code analysis, penetration tests, and vulnerability scans. The ISO and SOC 2 are done annually and the certificate and attestation documents are available for client distribution. The code reviews, code analysis, penetration test, and vulnerability scans are confidential and proprietary and are not available for client distribution. The code review and code analysis are done before releasing the product for Generally Availability and at which time the code is frozen. Penetration tests are conducted on internal Sunquest systems at least quarterly and vulnerability scans are conducted daily.

Sunquest performs vulnerability scans using Nessus vulnerability scanner and Acunetix. Nessus is used to confirm that there are no vulnerabilities within the environment and Acunetix tests for Open Web Application Security Project (OWASP) Top Ten and is used during the SDLC as well as during the initial deployment of the client's environment

- **Usability/Accessibility testing, Browser testing** —Sunquest will work with the DHHR staff in the creation and execution of testing these various types of testing on their WorldCare solution based on requirements outlined in the Quality Management Plan.
- **User Acceptance Testing (UAT)** - During the planning and design stages, Sunquest will assist the DHHR Health staff to develop a UAT Plan that will include: use cases or actual business scenarios and workflows to be tested by the Australian Government Department of Health users, the testers' roles and responsibilities, testing timeline/phases, and communication protocols such as issues reporting and resolution during the UAT phase. The Test environment will be set up by Sunquest and will mirror the Production environment, with representative data for each area being tested. Upon completion of System Testing, UAT will be performed in the Test environment by DHHR staff. UAT will commence immediately after training.

  As with system testing, UAT will be of the following types:

  - Disease Workflow Testing – There will be at least two cycles of User Acceptance Testing. The first cycle will be a comprehensive test run by DHHR testers executing all test cases in accordance with the UAT plan. During the first test cycle, all show-stopping issues are identified and reported to Sunquest. If defect resolutions require configuration changes and adjustments, all such adjustments will be made and documented. If defect resolutions require a revision to Sunquest WorldCare, a revision release will be provided with all show-stopping issues resolved. The second cycle of UAT will consist of DHHR testing the defect fixes.
  - ELR Integration Testing -- This will be similar to the system testing process. The only difference is that there will be a production/live feed from the labs being onboarded to the ELR Test environment. The users will test the mapping of live lab reports to appropriate patients and to disease incidents in the ELR Test environment.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

  - External Applications Integration Testing – This will be similar to the system testing process. The only difference is that there will be a production/live feed from the health systems being onboarded to the Test environment.
  - Data Migration Testing -- Upon satisfactory test imports (i.e. approval of pre-start load test reconciliation reports and documents), entire data sets will be imported into the test system. Sunquest staff will assist the DHHR project team to perform data queries on the imported data and visually inspect a select number of records to verify a successful import. Import templates and import files will be adjusted as necessary until tests determine a successful import.
- Data conversion testing (Data Migration Testing)
  - Included as part of UAT above
- Operational readiness testing (ORT)
  - Sunquest will work closely with the DHHR team to plan and execute Operational Readiness testing. Review of affected operational processes and procedures will serve to inform both SQ and DHHR as to what types of test cases should be run to iron out any operational concerns.
- Parallel testing
  - Sunquest will support the DHHR team in the execution of parallel production testing.

[TE018]

The assigned Sunquest Professional Services Consultant (PSC) will support and assist the DHHR team during UAT. The role of the Sunquest PSC during UAT serves to provide system and application functionality expertise (point of contact for questions during UAT) and issue response and resolution tracking (along with the Project Manager).

[TE019]

Through over 20 years of assisting in UAT of the WorldCare application, Sunquest has determined that client-led UAT, and specifically execution by client users, is paramount in the successful implementation, testing, go-live and adoption/acceptance of the new system by the entire client user base. It is for this reason that Sunquest will work with the DHHR UAT team to ensure they are ready and capable of executing the UAT Plan as written.

[TE020 – 027]

The QA team performs Regression Testing on the entire application and ensures that the features developed in the previously approved release still perform and behave the same way after the new/updated features are complete. Changes may include feature enhancements, new features, and configuration changes. The QA team maintains the entire test suite for the application and executes it

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

fully during this testing phase. The Regression Test report is used by the QA team to monitor the pass/fail percentages during Regression Testing

For Regression Testing performed by the Sunquest Implementation Team, this testing is performed iteratively after the setup of each disease within the application.

[TE028]

Sunquest QA takes a comprehensive approach to Regression testing. Rather than using a subset of SIT test cases, Sunquest maintains the entire test suite for the application and executes it fully for all instances where Regression Testing is required.

For the regression testing conducted by the Sunquest Implementation Team, we will work with the DHHR team to identify appropriate test scenarios.

[TE029]

The scope of regression testing performed by the Sunquest Implementation Team can be outlined and test scenarios can be defined in the appropriate planning documents, where they can be approved by the DHHR team.

[TE030]

The regression testing performed by the Sunquest QA team during development tests all facets of the application and is determined by the functional capabilities of the application.

The scope of regression testing performed by the Sunquest Implementation Team can be outlined and test scenarios can be defined in the appropriate planning documents, where they can be approved by the DHHR team.

[TE031]

Sunquest and third-parties routinely conduct audits to include ISO 27001:2013, SOC 2, code reviews, code analysis, penetration tests, and vulnerability scans. The ISO and SOC 2 are done annually and the certificate and attestation documents are available for client distribution. The code reviews, code analysis, penetration test, and vulnerability scans are confidential and proprietary and are not available for client distribution. The code review and code analysis are done before releasing the product for Generally Availability and at which time the code is frozen. Penetration tests are conducted on internal Sunquest systems at least quarterly and vulnerability scans are conducted daily.

Sunquest performs vulnerability scans using Nessus vulnerability scanner and Acunetix. Nessus is used

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

to confirm that there are no vulnerabilities within the environment and Acunetix tests for Open Web Application Security Project (OWASP) Top Ten, and is used during the SDLC as well as during the initial deployment of the client's environment

[TE032]

Sunquest will outline Security Testing in the Security Plan, where DHHR will be able to provide feedback and approval.

[TE033]

Performance/Load testing ensures the application will perform well under the expected workload. The average response time, average save response time and average hits/minutes are measured as part of the performance benchmark for the main modules. The Sunquest QA Team uses the WAPT load testing solution to ensure the application will perform well under the production load. This performance is verified against the documented benchmarks for each major release and the report is shared. In addition to the WAPT tool, each module is manually verified for the proper responsiveness.

[TE034]

Performance testing is conducted on the build of the version that will be released to clients, to accurately reflect true application performance.

[TE035]

The latest performance testing (done on v19.3 just prior to release) was conducted on a database with 4 million records and concurrent users of varying amounts, from 10 up to over 500. Server specifications are reflective of actual AWS server configurations. This approach will continue with each subsequent major release.

[TE036 – 044]

Sunquest will work with DHHR to develop test scenarios that meet each of the types of usability testing listed. The majority of these will be addressed by thorough User Acceptance Testing.

[TE045]

Sunquest will work with the DHHR team to create test cases that address accessibility, including the

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

functionality our software leverages from using a standard, common, off-the-shelf browser, and how it can be utilized with ADA accessibility tools provided by the operating system, such as display magnification, increased font sizes and color contrast.

[TE046]

Sunquest QA does testing using various browsers and provides browser recommendations for best application performance. User Acceptance Testing can also include client user testing of browsers on client workstations. Sunquest can assist in the development of test cases to cover this testing.

[TE047]

Sunquest WorldCare implementation includes the setup and delivery of a dedicated User Acceptance testing environment that mirrors production. Sunquest will work with the DHHR team to ensure the dataset accurately reflects a realistic DHHR production dataset.

The test cases will be developed by DHHR project staff, with assistance from Sunquest, based on workflow standards and user identified workflows through the JAD sessions. These test cases are compiled and will be used for internal functional testing by both application teams as well as guide the User Acceptance Testing (UAT) for DHHR. Sunquest can provide a list of the test scripts executed by the Quality Assurance Team as guidance for the DHHR team in the development of the UAT test cases.

[TE048]

The test cases will be developed by DHHR project staff, with assistance from Sunquest, based on workflow standards and user identified workflows through the JAD sessions. These test cases are compiled and will be used for internal functional testing by both application teams as well as guide the User Acceptance Testing (UAT) for DHHR. Sunquest can provide a list of the test scripts executed by the Quality Assurance Team as guidance for the DHHR team in the development of the UAT test cases.

[TE049]

Sunquest will work closely with DHHR staff in the development of UAT test cases to ensure complete coverage of defined application workflows.

[TE050]

Sunquest's proven approach to UAT will aid and guide the DHHR staff in their efforts to develop UAT test cases that comprehensively touch all workflows. Client involvement in the development and

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations you agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

execution of the UAT test cases is an important step in the advancement of a thorough understanding of how the application works, and, in the end, the acceptance and adoption of the system itself.

[TE051]

Issue prioritization and resolution

During all phases of testing, issues will be prioritized and resolved based on the following scale:

- High – High priority issues reported during testing indicate they need to be resolved prior to production use. A High issue indicates the system is available for testing, but a primary workflow is significantly diminished or there is a substantial risk of data loss or corruption.
  - High priority issues reported during testing will be addressed in a planned release cycle in accordance with the Project Schedule.
  - If the issue is a "Show Stopper"; an issue that prevents the DHHR user from proceeding with execution of remaining test cases, the DHHR user should indicate this during UAT, log it as such in the issue tracking system, and contact the designated DHHR Project Manager. Show Stoppers will be addressed in a revision outside the planned release cycle to ensure testing is completed within the allocated test cycle period. The final resolution timeline depends on the impact of the changes to be made.
- Medium – Important issue that needs to be resolved, but testing system is available and there is minimal risk of loss or corruption of data. Medium priority issues reported during testing may be considered for deferral to a future post-production release.
- Low – Issue has no significant impact on workflow. No risk of loss or corruption of data. Low priority issues will be deferred to a future post-production release.

Technical issue resolution during UAT will be managed by Sunquest using Sunquest's online issue tracking system. Accounts will be provided to the DHHR staff that will allow them to report issues during their testing, and will give them access to the latest status information on all issues. Weekly status meetings will be held for Sunquest and DHHR staff to review UAT status and outcomes, prioritize issues, and identify defects that must be resolved prior to going live. Sunquest will resolve all blocking and high priority issues. If defect resolutions result in configuration changes and adjustments, all such adjustments will be made and documented.

[TE052]

Sunquest and DHHR will jointly develop a Data Migration Plan which will outline data migration

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

strategy, identify data sets and provide the opportunity to include data migration success criteria.

[TE053]

The Data Migration Plan will outline acceptance procedures to be followed prior to production data migration is to be conducted.

[TE054]

Sunquest will work with DHHR to develop ORT test cases that address any client-selected internal processes and procedures.

[TE055]

Useability testing is performed after enhancement and functional testing is complete, and prior to the end of the testing cycle, in order to obtain early feedback.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT J: MAINTENANCE AND OPERATIONS SPECIFICATIONS APPROACH

Instructions: Maintenance and Operations specifications ensure that the solution is fully functional and performing optimally until the end of the life cycle. The Vendor's response should include a narrative overview describing its approach to maintenance of its proposed solution, including updates to new versions of the Software as a Service (SaaS) products, and toconfigurations necessary to support changes in DHHR's business needs.

Use the response sections to provide specific details of the proposed approach to meeting the maintenance and operations specifications in each subject matter area. Responses should reference specifications and relevant mandatory requirements using the appropriate IDs from ***Appendix 1: Detailed Specifications*** and ***Attachment F: Mandatory Requirements***. DHHR alsoexpects the Vendor to propose its approach for meeting any narrative in ***Section 4: Project Specifications*** of this RFP.

1. Operations

Refer to the relevant maintenance and operations specifications located in ***Appendix 1: Detailed Specifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to operations below. The narrative response for this category should be organized using the appropriate subject matterarea as per ***Appendix 1: Detailed Specifications***.

<Response>

Service Maturity and Operational Capability

With Sunquest Client Support Services (CSS), you will experience World Class Service. Sunquest assigns a site coordinator to each of the clients that utilize our support services. The site coordinator proactively schedules regular client meetings to review and prioritize outstanding cases. This site coordinator is the primary point for escalation of client concerns, ensuring the client site is delighted with the support service that Sunquest provides.

Following completion of implementation of Sunquest solutions, clients have the ability to make use of Client Support 24/7/365, through access to a live support analyst that will assist them in resolving their issues. Sunquest understands that our support role is just the beginning when our clients go live with their solution. Sunquest takes client support seriously.

Through assigned owners of the support experience, CSS focuses on ensuring that the service partnership offered aligns with the client business needs. Our goal is to ensure delivery of the highest level of service possible with our Sunquest solution to the patients and the communities our client's serve.

ISO Certified

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Sunquest maintains an IT governance and management model certified to ISO. The Information Security Management System (ISMS) is certified to ISO/IEC 27001:2013, and the Quality Management System (QMS) and Business Management is certified to ISO 9001:2015 and ISO 13485. The Sunquest Information Security Management Systems (ISMS) document describes the policies implemented by Sunquest to a) protect the products and services provided to clients throughout the world, b) ensure the business continuity of Sunquest, and c) achieve and maintain International Organization for Standardization (ISO/IEC) 27001 certification.

Client Support

Throughout your interactions with Sunquest, you will be supported by all areas of the organization. You will interact with most frequently with:

- Sales Team: Overall account owner. Translates business needs and matches solutions to client strategies.
- Product Management: Overall product owner. Defines the roadmap for product strategy and development.
- Solution Adoption: Implements solutions purchased. Provides professional services and coordination of the day-to-day implementation of solutions.
- Executive Team: Owns the Executive relationship with clients. Provides the strategic roadmap for the organization and is the ultimate escalation point for clients.
- Product Development: Owns the development and testing of Sunquest solutions for release.
- Client Experience Support: Resolves issues on behalf of our clients. With a focused on delighting our clients, feedback is requested after every case is closed. Client training also report up through the Client Experience organization.

The transition from Solution Adoption/Implementation (support from the implementation project team) to standard 24/7 support provided by CSS takes place following the go-live or use of Sunquest software or functionality in a live/production environment, allowing for an appropriate amount of time to monitor for post go-live issues. After the transition occurs, the Sunquest Support teams will address all issues with Sunquest-created software.

The Support team may be reached via the following methods:

- Online: SUN (Sunquest User Network) Portal: https://community.sunquestinfo.com
- Live Chat: from the SUN home page
- Email: support@sunquestinfo.com
- Phone: 1 (877) 239-6337

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Every case opened with Sunquest Support is assigned an initial severity level based on the severity of the issue being experienced. Each severity level carries with it an expected communication cadence and level of attention. We prioritize cases based on the severity of the issue and will respond accordingly. We strive to respond to any issue raised as quickly as possible to ensure you have a working system.

Issue Resolution

Support Issues are categorized as follows:

- Critical Problems – Please call Sunquest Support rather than using the SUN portal to open a critical severity case. Critical problems include system interruptions or system downs that prevent normal use of the system. For example, a system down flag is reserved for problems that completely prevent normal use of the system
- Urgent Problems or High severity – Applies to problems that severely limit normal use of the system. For example, application interfaces are unavailable, patient reports cannot be printed, or test area issues that are jeopardizing a scheduled live event.
- Routine Problems or Medium / Low severity – Applies to problems that do not fall within the severity levels above or involve the test system as opposed to the live system. For example, maintenance updates and test system monitoring.

The Sunquest Development team follows the OWASP (Open Web Application Security Project) checklist/guidelines when conceiving, developing, acquiring, operating, and maintaining applications to implement and enhance secure software engineering. Please review the following checklist for details:

https://www.owasp.org/index.php/OWASP_Secure_Coding_Practices_Checklist

Troubleshooting, Tracking and Audit

Sunquest utilizes SecureLink connectivity software to access client systems for installation, troubleshooting, and support and maintenance services. The SecureLink software creates an on-demand VPN-over-SSH tunnel between the client server and Sunquest, ensuring that all traffic to and from the client's systems is encrypted. This connection is facilitated by the SecureLink gatekeeper, a small client application installed on one or more systems at the client site which controls access for Sunquest staff. The connection process works in this manner:

The SecureLink gatekeeper is installed on the client system and registered with the Sunquest SecureLink server, opening only the ports needed for the identified services.

In addition to facilitating the connection between Sunquest and the client's systems, the SecureLink gatekeeper also maintains detailed audit logs of Sunquest user connections and activity. Each user connection is logged with the user's first and last name, date, time, Sunquest case/project number, and reason for access. Any services accessed during that connection are logged, with keystroke logging for

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ssh/ telnet services, file details for ftp, and other details.

Access to the Sunquest SecureLink server is controlled by Sunquest's comprehensive security policy, and employees are only provided access if their job roles require it. Authentication to the server is controlled by Active Directory integration and limited by security group; the user's Sunquest domain account is required for access, and that user must also be approved for access to the security group. Employees are removed from this and all groups immediately upon termination, preventing unauthorized access to client systems.

Escalation

Clients may submit an escalation request at their discretion: Once an escalation is lodged, Sunquest Support will evaluate the escalation and proceed as needed depending on the type of escalation. If the escalation is requesting manager contact, that manager, or designee, will phone or email the contact associated with the escalated case in question.

In the event a client requires leadership intervention, Sunquest Client Experience Support has a designated manager on call 24 hours a day, 365 days a year. At any point during a case, a support specialist may reach the Manager on Call for assistance.

Change Requests

A Change Request (CR) is a request for a change to the Sunquest software code. Once the need for a code change has been determined and root cause analysis has been completed, it is assigned a unique CR identifier. The CR is sent to a cross-functional team called the Change Control Board (CCB).

Deploying changes in client systems, including patches and updates must first be loaded into a Development/ Test Area. This provides an environment where the new software can be tested and evaluated for new functionality prior to rolling it to the Production System. In addition, it provides a mechanism where tables and new screens can be built that will implement the new functionality provided in the release/update. Sunquest coordinates the upgrade via phone and email. Once testing is complete, a live date is scheduled and the client returns a signed Acceptance to move project live.

Detailed Specifications and Mandatory Requirements

OP001	1	The Vendor should maintain and ensure contract personnel staffing levels and competencies to support software applications, data integrity, analytics, user training, and contract administration pursuant to Service Level Agreements (SLAs).

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

OP002	1	The Vendor should supply key staff resumes to DHHR for review and approval prior to key staff beginning work under the contract.
OP003	1	The Vendor should supply resumes for key staff substitutions to DHHR for review and approval prior to key staff substitutions performing any work under the contract.
OP004	1	The Vendor should collaborate with DHHR to develop and maintain a process for authorized solution user support.
OP005	1	The Vendor should maintain and ensure contract personnel staffing levels and competencies to support software applications, data integrity, analytics, user training, and contract administration pursuant to Service Level Agreements (SLAs).
OP006 - 14	1	The Vendor should maintain adequate staff to perform operational functions including, but not limited to: Identify a primary and back-up point of contact for day-to-day operations Maintain effective communications of project updates and problem resolutions Maintain current documentation of operational processes and notify designated DHHR staff of operational issues and remediation plans within the designated timeframes pursuant to DHHR-defined Service Level Agreements (SLAs) Ensure quality control procedures are in place and utilized and that issues are resolved when identified through quality checks Adhere to project and report delivery timeframes Conduct business use analyses to prepare operational reports Work with DHHR to automate operational reports Others as defined by DHHR and pursuant to Service Level Agreements (SLAs)
OP015 - 30	1	The Vendor should maintain adequate staff to perform technical functions including, but not limited to: Maintain systems by researching and resolving problems Maintain system and network integrity and security Develop and maintain configuration and customization of the solution, solution tools, and rules engine Establish, manage, and maintain the solution data exchanges

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		Maintain file specifications for solution data exchanges Establish, manage, and maintain solution interfaces Assure that new processes/new technology installations minimize negative impact on the system and authorized solution users Provide regular status updates to DHHR on system issues and system updates Maintain a system of checks and balances such that the underlying data are consistent, complete, and accurate Develop and gather requirements Design, implement, and maintain solution architecture Monitor solution performance and resolve issues Analyze test plans, technical specifications, and test results Provide system documentation Others as defined by DHHR and pursuant to Service Level Agreements (SLAs)
OP031	1	The Vendor should participate in project meetings as directed by DHHR.
OP032	1	The Vendor should work collaboratively with DHHR to explain and support ESS Vendor-based operations and reporting to stakeholders, auditors, and other parties when necessary.
OP033 - 37	1	The Vendor should participate in audit activities including, but not limited to: Attending meetings Running reports Providing documentation Providing access to all system components and modules as requested by DHHR
OP038	1	The Vendor should support the State with data integration needs prior to and subsequent to the solution's implementation.
OP039	1	The Vendor should provide DHHR with a Data Management Plan as defined in Appendix 2 - Deliverables and Milestones Dictionary.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

OP040	1	The Vendor should agree to perform according to approved Service Level Agreements (SLA) and identified Key Performance Indicators (KPI) with associated metrics in the areas of system availability, performance, data quality, and problem management, and should consent to DHHR retaining a percentage of payment if agreed-upon metrics are not achieved.
OP041	1	The Vendor should develop, maintain, and implement a DHHR-approved System Operations Plan as defined in Appendix 2 - Deliverables and Milestones Dictionary.
OP042	1	The Vendor should pay and arrange for an annual Statement on Standards for Attestation Engagements, System, and Organization Controls (SOC) 1, Type II audit, using the most current version of the audit, which should cover work performed by the Vendor at the Vendor's facility and data center sites.
OP043	1	The Vendor should submit the annual Statement on Standards for Attestation Engagements, System and Organization Controls (SOC) 1, Type II audit report, using the most current version of the audit, to DHHR for approval with an action plan to remediate findings within a timeframe agreed upon by the Vendor and DHHR.
OP044	1	The solution should provide an authorized solution user test environment (sandbox) to test new workflows and reports prior to execution in production.
OP045	1	The solution should have test environments (sandboxes) that include metadata necessary to test new workflows and reports prior to execution in production.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

OP046	1	The solution should have a test environment (sandbox) that can be refreshed as requested by DHHR.
OP047	1	The solution should utilize the same hardware, operating system, and relational database management in the test environments (sandboxes) that are used in production.
OP048	1	The solution should have test environments (sandboxes) that mirror the production environment.
OP049	1	The solution should supply access to the user acceptance testing (UAT) environment for authorized solution users.
OP050	1	The Vendor should provide access for authorized solution users to all solution test environments as requested by DHHR.
OP051	1	The solution should have a development environment to develop and unit-test all software contained within the solution.
OP052	1	The solution's user acceptance testing (UAT) environment should have the ability to support all components of the solution.
OP053	1	The solution's unit test environment should have the ability to perform full-scale system integration testing (SIT) for the solution.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third part(ies) without the prior written consent of Sunquest.

OP054	1	The solution should have a unit test environment that mirrors production in hardware, software stack, and data volumes.
OP055	1	The solution should have a unit test environment that exists for all relevant components.
MR037	1	The Vendor must provide compliance support services to include providing up-to-date, accurate, and thorough documentation and reporting for regulatory and State compliance auditing.
MR046 -50		The vendor must have the capacity to support: 1000 active users 600 concurrent users 50,000 lab results per day 2500 cases reports per day
MR051		Increased users, lab results and cases in the event of pandemics and/or outbreaks.

<Response> Detailed Specifications and Mandatory Requirements

[OP001] Sunquest commits to maintaining staffing levels and competencies to support a successful engagement. Please refer to the SLA response section for any detailed comments on the SLAs.

[OP002] Upon contract award, Sunquest is happy to introduce DHHR to members of the Sunquest project team and provide education and work experience details upon request.

[OP003] If a key project role requires permanent resource substitution, Sunquest is happy to introduce

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

DHHR to the new resource and provide education and work experience details upon request.

[OP004] As part of the transition to standard Support processes, Sunquest will present to DHHR stakeholders with information on Sunquest Support practices. Sunquest will be happy to discuss any additional needs that DHHR feels are not covered by current procedures and best practices.

[OP005] Sunquest commits to maintaining staffing levels and competencies to support a successful engagement. Please refer to SLA response section for any detailed comments on the SLAs.

[OP006 – 14] Sunquest agrees to maintain for the timeframe of the engagement staffing levels adequate to support the successful implementation of the Sunquest Solution and meet or exceed all project deliverable quality and timeframe expectations. Please refer to the SLA response section for any detailed comments on the SLAs.

[OP015 – 30] Sunquest agrees to maintain for the timeframe of the engagement staffing levels adequate to support the successful implementation of the Sunquest Solution and meet or exceed all project deliverable quality and timeframe expectations. Please refer to the SLA response section for any detailed comments on the SLAs.

[OP031] During Project Initiation and Planning, the Sunquest and DHHR Project Managers will confirm and agree to a Communication Plan, including the types and cadences of project meetings.

[OP032] Sunquest agrees to work collaboratively with DHHR to explain and support Sunquest-based operations to DHHR stakeholders. Sunquest agrees to support DHHR with information and standard documentation for any interactions between DHHR and auditors and other parties if necessary.

[OP033 – 37] Sunquest is happy to participate in internal audits and will support external audits with information and documentation as requested.

[OP038] The Sunquest proposal includes integrations based on the information provided in this RFP. The specific integration needs will be discussed and detailed during the Requirements Gathering phase of the project. After the implementation of the Sunquest Solution, Sunquest will support the implemented integrations as covered by the negotiated support contract.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[OP039] During the Initiation and Planning phase of the project, Sunquest and DHHR Project Managers will finalize and agree to the scope and contents of all project Deliverables.

[OP040] Please refer to SLA response section for any detailed comments on the SLAs.

[OP041] During the Initiation and Planning phase of the project, Sunquest and DHHR Project Managers will finalize and agree to the scope and contents of all project Deliverables.

[OP042] Sunquest continues to engage in the SOC2 audit process. Sunquest also maintains an ISO 27001 certification and audit report that may also fulfill this requirement.

[OP043] Sunquest agrees to submit our annual SOC 2 or ISO 27001 audit report to DHHR with an action plan to remediate any findings. Sunquest will be happy to discuss timeframes associated with the action plan with DHHR.

[OP044] The Sunquest proposal includes an authorized user test environment (sandbox). This area is used, in part, to test workflows and reports prior to the promotion of these items to production.

[OP045] Sunquest will work collaboratively with DHHR to ensure that the test area (sandbox) contains data and metadata to thoroughly complete all documented testing scenarios.

[OP046] Sunquest Solution test areas can be refreshed upon request by authorized DHHR users.

[OP047] The Sunquest proposal includes that production and all non-production areas will be hosted by AWS, using the same operating system and relational database management in both types of areas.

[OP048] The Sunquest proposal includes test areas (sandboxes) that mirror production. If a test area becomes out of sync with production through normal test area activities, a refresh can be performed upon request.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

[OP049] Access will be supplied to the area used for User Acceptance Testing (UAT) to authorized users.

[OP050] DHHR can control access to any and each of the agreed-to test areas using user permission settings within the Sunquest Solution.

[OP051] The Sunquest proposal includes a development environment that can be used for unit testing all software within the solution. Sunquest is not currently planning any DHHR-specific development of our software based on the information presented in this RFP.

[OP052] Sunquest agrees that the test area used for User Acceptance Testing (UAT) will have the ability to support all components of the solution.

[OP053] Sunquest agrees that one of the test areas will be able to support full-scale system integration testing for the Sunquest Solution.

[OP054] The Sunquest proposal includes that production and all non-production areas will be hosted by AWS, using the same hardware and software stack. The environment used for unit testing will have data volumes that mirror production.

[OP055] The Sunquest proposal includes a unit test environment for all relevant components of the Sunquest Solution.

[MR037] Sunquest is happy to support DHHR in preparation for, or during any regulatory or State compliance audit by providing access to up-to-date, accurate, and thorough documentation or reporting.

[MR046-MR051 The system is proposed as an enterprise license as a service to support the number of users and cases as outlined in the RFP, with the capacity to grow within the hosted AWS environment, with no inherent limits of database or application performance in the event of pandemics and/or outbreaks.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

2. Solution Backup, Disaster Recovery, and Failover

Refer to the relevant maintenance and operations specifications located in ***Appendix 1: DetailedSpecifications*** and pertinent narrative in ***Section 4: Project Specifications*** in this RFP to cover solution capabilities in this area. The Vendor should describe its approach to Solution Backup, Disaster Recovery, and Failover below. The narrative response for this category should be organized using the appropriate subject matter area as per ***Appendix 1: Detailed Specifications***.

<Response>

The Sunquest WorldCare applications and databases are hosted in AWS and managed by Sunquest.

The Sunquest WorldCare application and databases are managed with separate backup policies in AWS. The frequency is setup on an automated schedule with hourly, daily and monthly backups. Sunquest encrypts all backups with AES 256-bit security.

In the event of a disaster or unavailability, Sunquest has implemented a formal Business Continuity Plan ("BCP"), which is designed to maintain internal and hosted Sunquest Software until full restoration can be completed. The BCP identifies essential business functions and services and provides recovery objectives, priorities, and metrics, as well as defines roles, responsibilities and assigned individuals with appropriate contact data. The BCP is tested at a minimum of once annually. Sunquest personnel deemed critical to the BCP receive training respective to their roles at least once annually to ensure that they execute the plans according to instruction.

Detailed Specifications and Mandatory Requirements

DR001	1	The solution should provide sufficient transaction logging and database back-up to allow it to be restored. If multiple databases are used for work item routing and program data, restoring the solution should ensure that databases are synchronized to prevent data corruption.
DR002	1	The solution should have the ability to perform online backups without interruption to production operations, according to a schedule agreed upon by DHHR.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

DR003	1	The solution should allow continued use of the system during back-up and perform back-ups during non-peak processing hours, to minimize the impact to operational activities.
DR004	1	The solution should support data freezing.
DR005	1	The Vendor should maintain an operational back-up power supply capable of supporting vital functions.
DR006	1	The Vendor should equip facilities with proper safeguards for fire prevention, fire detection, and fire suppression that are consistent with local fire codes.
DR007	1	The Vendor should equip fire detection and alarm systems with uninterruptable power supply.
DR008	1	The Vendor should have a remote backup facility that is georedundant to the primary data center.
DR009	1	The Vendor should conduct an annual disaster recovery exercise at a mutually agreed upon time and provide the results to the designated DHHR staff. DHHR staff should be invited to be included in these exercises.
DR010	1	The Vendor should store all backup copies in a DHHR-approved backup storage location for a period of time specified by DHHR.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

<Response> Detailed Specifications and Mandatory Requirements

[DR001] The system supports transaction and database backup functions provided by the underlying SQL database technology. These processes are automated on a scheduled basis.

[DR002] Backups are performed online on a scheduled basis

[DR003] The system remains available during backups and backup operations are scheduled for quiet hours to minimize impact.

[DR004] The Sunquest Solution provides the ability prevent updates to the database by either stopping any ELR feed or other inbound interface or shutting down access to the application for an individual user or all users.

[DR005] The solution will be hosted in AWS who are responsible for power. The AWS data center electrical power systems are designed to be fully redundant and maintainable without impact to operations, 24 hours a day. AWS ensures data centers are equipped with back-up power supply to ensure power is available to maintain operations in the event of an electrical failure for critical and essential loads in the facility.

[DR006] The solution will be hosted in AWS who are responsible for fire detection, prevention and suppression. AWS data centers are equipped with automatic fire detection and suppression equipment. Fire detection systems utilize smoke detection sensors within networking, mechanical, and infrastructure spaces. These areas are also protected by suppression systems.

[DR007] The solution will be hosted in AWS who are responsible for fire detection, prevention and suppression systems and their power supplies. AWS data centers are equipped with automatic fire detection and suppression equipment. Fire detection systems utilize smoke detection sensors within networking, mechanical, and infrastructure spaces. These areas are also protected by suppression systems. The AWS data center electrical power systems are designed to be fully redundant and maintainable without impact to operations, 24 hours a day. AWS ensures data centers are equipped with back-up power supply to ensure power is available to maintain operations in the event of an electrical failure for critical and essential loads in the facility.

[DR008] The solution will be hosted in AWS. We utilize alternate AWS regions within the US to provide DR capability.

[DR009] Sunquest utilize a cloud-based DR solution to provide protection of hosted client data and carry out routine checks and tests of the system.

[DR010] Sunquest utilize a cloud-based Backup and DR solution to provide protection of hosted client data which uses AWS services and multiple AWS regions for backup storage. EBS snapshots utilize AWS S3

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

which provides 11 9's of durability with snapshots replicated to a secondary DR region on a regular basis. Backup retention policies are standardized across our hosted clients.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

ATTACHMENT K: TERMS AND CONDITIONS RESPONSE TEMPLATE

Instructions

The Vendor should review ***Attachment K: Terms and Conditions Response Template*** before signing each provided signature block using **blue ink** in order to note the Vendor's acknowledgement and intent of compliance. The Vendor should identify any exceptions to the Terms and Conditions. If exceptions are not noted in ***Attachment K: Terms and Conditions Response Template*** of the RFP but raised during contract negotiations, the State reserves the right to cancel the negotiation if, at its sole discretion, it deems that to be in the best interests ofthe State.

RFP Terms and Conditions

RFP Terms and Conditions consist of provisions throughout this RFP. Moreover, these provisions encapsulate instructions, State and federal procedures, and the State's expectations of the Vendor when submitting a proposal. The Vendor should understand and strictly adhere to theRFP Terms and Conditions. Failure to follow any instructions within this RFP may, at the State'ssole discretion, result in the disqualification of the Vendor's proposal.

Please provide an authorized signature stipulating the Vendor's acknowledgement,understanding, and acceptance of these RFP Terms and Conditions.

28 Jan 2022

Michael Simpson / Signature of Authorized Personnel   Date

1. State Customary Terms and Conditions

The selected Vendor will sign a contract with the State to provide the goods and servicesdescribed in the Vendor's response. The following documents shall be included in any contract(s) resulting from this RFP:

- ***Section 3: General Terms and Conditions (attached PDF file Section_2_Instructions_To_Vendors_Submitting_Bids_and_Section_3_General_Terms_and_Conditions)***
- ***Section 7: Provisions Required For Federally Funded Procurements***
- ***Appendix 4: Service Level Agreements and Performance Standards***
- ***Appendix 7: IT Terms and Conditions***
- ***HIPAA Business Associate Agreement***

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Please provide a signature stipulating the Vendor's acknowledgement and complete review of these documents.

28 JAN 2022

Michael Simpson / Signature of Authorized Personnel **Date**

If the Vendor is <u>not taking exceptions</u> to any of the State Customary Terms and Conditions, then the Vendor needs to provide a binding signature stipulating its acceptance of these documents.

Michael Simpson / Signature of Authorized Personnel **Date**

2. Mandatory Requirements and Terms

The following items are mandatory terms and documents. Please be advised, the Vendor **should** provide its affirmative acceptance of these items in order to move forward withconsideration under this RFP.

Attachment F: Mandatory Requirements (attached Microsoft Excel® file, ***Attachment F*** – Mandatory Requirements)

In no event shall the State agree to terms that (a) require the State's indemnification of the Contractor; (b) waive the State's right to a jury trial; (c) establish applicable law anywhere other than the State of West Virginia, or jurisdiction in any venue other than the Thirteenth Judicial Circuit Court; (d) designate a governing law other than the laws of the State of West Virginia; (e) constitute an implied or deemed waiver of the immunities, defenses, rights, or actions arising out of the State's sovereign status or under the Eleventh Amendment to the United States Constitution; (f) limit the time within which an action may be brought; (g) require arbitration, (h) require the ability to defend lawsuit without the approval of the Attorney General's Office; or (i) pay attorney fees.

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- HIPAA Business Associate Agreement
  - *Appendix 5: Service Level Agreements and Performance Standards*

Vendors that are not able to enter into a contract under these conditions should not submit a bid.

Please provide an authorized signature stipulating the Vendor's acknowledgement, understanding, and acceptance of the Mandatory Requirements and Terms stipulated in thissection.

28 JAN 2022

Printed Name / Signature of Authorized Personnel Date

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

- HIPAA Business Associate Agreement
  - ***Appendix 5: Service Level Agreements and Performance Standards***

Vendors that are not able to enter into a contract under these conditions should not submit a bid.

Please provide an authorized signature stipulating the Vendor's acknowledgement, understanding, and acceptance of the Mandatory Requirements and Terms stipulated in thissection.

Printed Name / Signature of Authorized Personnel | Date

3. Commercial Materials

The Vendor should list any commercial and proprietary materials it will deliver that are easily copied, such as commercial software, and in which the State will have less than full ownership ("Commercial Materials"). Generally, these will be from third parties and readily available in theopen market. The Vendor need not list patented parts of equipment.

<Response>

Sunquest WorldCare Solution

4. Exceptions

The Vendor should indicate exceptions to the State's Terms and Conditions in this RFP. Anyexceptions should include an explanation for the Vendor's inability to comply with
such term or condition and, if applicable, alternative language the Vendor would find acceptable.Rejection of the State's Terms and Conditions, in part or in whole, or without any explanation, may be cause for the State's rejection of a Vendor's proposal. If an exception concerning the Terms and Conditions is not noted in this

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

response template, but raised during contract negotiations, the State reserves the right to cancel the negotiation, at its sole discretion, if it deems that to be in the best interests of the State.

The terms and conditions of a Vendor's software license, maintenance support agreement, and SLA, if applicable, will be required for purposes of contract negotiations for this project. Failureto provide the applicable Vendor terms, if any, as part of the RFP response may result in rejection of the Vendor's proposal.

Instructions: Identify and explain any exceptions to the State's terms and conditions using thetables provided below, adding tables, as needed. If no changes are listed, the Vendor is indicating that no changes to the Terms and Conditions are proposed, and that the Vendor intends to accept them as written if the Vendor's proposal is selected. Mandatory requirementsand terms noted in this RFP are non-negotiable.

- The Vendor may add additional tables, as appropriate.
- Do not submit Vendor's Standard Terms and Contracting Provisions in lieu of stipulating exceptions below.
- Making revisions to State statutes and regulations is prohibited.
- The State has no obligation to accept any exception(s).

6.1 Exception #1 – <Appendix 7: Information Technology (IT) Terms and Conditions – 1. Confidentiality>

Document Title (Reference Specific Contractual Document and Section in Which Exception is Taken)	Vendor's Explanation (Required for Any Rejection/Exception)	Vendor's Proposed Alternative Language (If Applicable) Cross-Reference to Specific Section of Vendor's Terms, If Any Provided As Part of the RFP Response
Appendix 7: Information Technology (IT) Terms and Conditions – 1. Confidentiality	Vendor is agreeable to the terms of this section 1.1 subject to discussion with Agency regarding the protection of Vendor's Confidential Information and damages. Vendor is agreeable to section 1.2 subject to discussion of reasonable limitations on individual employee confidentiality agreements.	Please see sections: (i) 1e (Definitions) Confidential Information; (ii) 14, Limitation of Liability; and (iii) 15, Confidentiality, of the attached Vendor's Terms and Conditions for SaaS, Third Party Software, and Maintenance Support Agreement for

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

		discussion.
NOTES/COMMENTS: <FOR STATE USE ONLY>		

6.2 Exception #2 – <Appendix 7 - Information Technology (IT) Terms and Conditions – 3. Commercial Materials, Licenses, Warranties, and Maintenance>

Document Title (Reference Specific Contractual Document and Section in Which Exception is Taken)	Vendor's Explanation (Required for Any Rejection/Exception)	Vendor's Proposed Alternative Language (If Applicable) Cross-Reference to Specific Section of Vendor's Terms, If Any Provided As Part of the RFP Response
Appendix 7: Information Technology (IT) Terms and Conditions – 3.0 Commercial Materials, Licenses, Warranties, and Maintenance	As requested, Vendor will be providing a Software as a Service (SaaS) and has presented the scope of services in Vendor's Terms and Conditions for SaaS.	Please see sections 2, Grant of Rights, 3, Support Services, and 4, SaaS and Software Use Restrictions of the attached Vendor's Terms and Conditions for SaaS, Third Party Software, and Maintenance Support Agreement for Vendor's standard SaaS terms.
NOTES/COMMENTS: <FOR STATE USE ONLY>		

6.3 Exception #3 – <General Terms and Conditions>

Document Title (Reference Specific Contractual Document and Section in Which	Vendor's Explanation (Required for Any Rejection/Exception)	Vendor's Proposed Alternative Language (If Applicable) Cross-Reference to Specific Section of

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

Exception is Taken)		Vendor's Terms, If Any Provided As Part of the RFP Response
General Terms and Conditions – 36. Indemnification	Vendor is agreeable to indemnification subject to further discussion regarding covered claims and liabilities. Vendor is generally agreeable to liability for direct and actual damages.	Please see Section 14, Limitation of Liability, of the attached Vendor's Terms and Conditions for SaaS, Third Party Software, and Maintenance Support Agreement for discussion.
NOTES/COMMENTS: <FOR STATE USE ONLY>		

6.4 Exception #4 – <Provisions for Federally Funded Procurements>

Document Title (Reference Specific Contractual Document and Section in Which Exception is Taken)	Vendor's Explanation (Required for Any Rejection/Exception)	Vendor's Proposed Alternative Language (If Applicable) Cross-Reference to Specific Section of Vendor's Terms, If Any Provided As Part of the RFP Response
Provisions for Federally Funded Procurements – 5.2.d.2	Vendor is agreeable to discussing reasonable direct damages in the event Vendor is solely responsible for failure to honor its contractual obligations and results in the need for the Agency to pursue re-awarding the contract.	
NOTES/COMMENTS: <FOR STATE USE ONLY>		

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to, any third party(ies) without the prior written consent of Sunquest.

6.5 Exception #5 – <Mandatory Requirements and Terms>

Document Title (Reference Specific Contractual Document and Section in Which Exception is Taken)	Vendor's Explanation (Required for Any Rejection/Exception)	Vendor's Proposed Alternative Language (If Applicable) Cross-Reference to Specific Section of Vendor's Terms, If Any Provided As Part of the RFP Response
Attachment K: Terms and Conditions Response Template – Section 4 (Mandatory Requirements and Terms)	Vendor agrees with Appendix 4 Service Level Agreements and Performance Standards subject to further clarification and agreement in the context of the project and services.	
NOTES/COMMENTS: <FOR STATE USE ONLY>		

PLEASE SEE VENDOR'S STANDARD END USER LICENSE AGREEMENT ("EULA") TERMS AND CONDITIONS, BELOW, IN RESPONSE

This document has been prepared by Sunquest Information Systems for the exclusive use of West Virginia Department of Health and Human Resources in connection with its Enterprise Surveillance System. The contents are subject to the confidentiality obligations You agreed to and shall not be discussed with, or disclosed in any form to any third party(ies) without the prior written consent of Sunquest.

PLEASE SEE VENDOR'S STANDARD END USER LICENSE AGREEMENT ("EULA") TERMS AND CONDITIONS, BELOW, IN RESPONSE TO SECTION 6, EXCEPTIONS, OF ATTACHMENT K: TERMS AND CONDITIONS TEMPLATE, WHICH REQUIRES VENDORS TO PROVIDE VENDOR SOFTWARE LICENSES AND MAINTENANCE AND SUPORT TERMS. THE BELOW EULA CONTAINS ADDITIONAL STANDARD TERMS AND CONDITIONS WHICH VENDOR WILL BE HAPPY TO DISCUSS AND CLARIFY.

VENDOR'S TERMS AND CONDITIONS FOR SAAS, THIRD PARTY SOFTWARE, AND MAINTENANCE SUPPORT AGREEMENT

END USER LICENSE AGREEMENT ("**EULA**") – DOC ID 01102022

This End-User License Agreement (the "**Agreement**") is a legal agreement concerning the license and use of the SaaS, Software, Third Party Software and Services (as defined herein) between you, the end user, ("**Client**"), and Sunquest Information Systems, Inc. ("**Sunquest**").

TERMS AND CONDITIONS

1. Definitions.

   a. "**Annual Usage Fee**" means the fees assessed for Usage for a twelve (12) month period.

   b. "**Affiliate**" means an entity that controls, is controlled by, or is under common control with either Party. As used herein, "control" means possession, direct or indirect, at the relevant time, of the power to direct or cause the direction of the management or policies of either Party, whether through the ownership of voting securities, by contract or otherwise.

   c. **"Authorized User"** means (i) a Client Affiliate, employee, agent or contractor authorized by Client to use the Software and/or SaaS, or those physicians who have current medical staff privileges to perform services within Client's facilities, (ii) any physician's office, clinic or other remote site (other than any other laboratory) that Client has authorized to access the SaaS subject to the registration procedures established by the Parties and the continuing payment of all fees and charges due and payable hereunder.

   d. "**Client Data**" means all data entered into, processed and resulting output data received through use of the SaaS by Client and its Authorized Users.

   e. "**Confidential Information**" means any information related to, disclosed by or on behalf of either Sunquest or Client, to the other which (i) if in written or other tangible form is marked as "confidential" or "proprietary" (ii) if disclosed orally, is identified at the time of the initial disclosure as confidential and is confirmed in writing to the receiving Party to be "confidential" or "proprietary" within thirty (30) days of such disclosure; (iii) is specifically deemed to be confidential by the terms of this Agreement; (iv) or reasonably appears to be confidential or proprietary because of the circumstances of the disclosure and the nature of the information itself. Confidential Information includes, but is not limited to: Trade Secrets (as defined by the Uniform Trade Secret Act), proprietary information; technical processes and formulas; source code and other Software, benchmark and performance test results; product designs; sales, cost, and other unpublished financial information; product and business plans; projections and marketing data; customer lists; the terms and conditions (but not the existence) of this Agreement, Client Data and any information that would reveal the identity, personal information, or protected health information (PHI) of any patient or employee of Client. Confidential Information does not include information (a) independently developed by the recipient without use or benefit of the discloser's Confidential Information; (b) that is or becomes generally known to the public through no act or omission of recipient; and (c) obtained by recipient from any third party not owing any confidentiality obligation to the discloser.

f. **"Documentation"** means the user guide(s), installation instructions, user alerts and other technical documentation, generally made available by Sunquest to its customers regarding the use of the applicable SaaS.

g. **"Live Operation"** means the first productive use by Client of the SaaS in a production environment.

h. **"Order Form"** means any document, including but not limited to a Quote Order Form, executed by both Parties specifying the products and services that Client uses, licenses, sublicenses and/or purchases from Sunquest in accordance with this Agreement.

i. **"Other Services"** mean all technical and non-technical services performed or delivered by Sunquest and/or a Sunquest Affiliate under this Agreement, including, without limitation, implementation services and other professional services, training and education services, but excluding the Support Services. Other Services will be as specified in an Order Form.

j. **"SaaS"** means the specific Sunquest internet-accessible applications and services described in a Scope of Work and an Order Form which are made accessible from and maintained by Sunquest in a hosted, virtualized, single instance and/or shared infrastructure environment. SaaS includes the associated Support Services described in this Agreement.

k. **"SaaS Subscription Term"** means the Initial SaaS Subscription Term (as hereinafter defined) and subsequent renewal term(s), if any, during which Client will have on-line access to and use of the SaaS.

l. **"Support Services"** mean the support services described herein.

m. **"Scope of Work"** means a document executed by the Parties which sets forth the description of Other Services, the SaaS, and related obligations to be performed by Sunquest under this Agreement.

n. **"Software"** means the software proprietary to Sunquest and Sunquest's Affiliates used in conjunction with the SaaS hereunder, including all Updates and Documentation provided hereunder.

o. **"System Requirements"** mean the Sunquest-specified Hardware, Software, Third Party Software, operating system configuration, network requirements and other hardware specifications for use of the SaaS, as modified from time to time by Sunquest.

p. **"Territory"** means the United States of America.

q. **"Third Party EULA"** means the end user license agreement that is attached to the Order Form or accompanies the Third Party Software or is otherwise published by the third party.

r. **"Third Party Software"** means the software owned by third parties which is sublicensed to Client by Sunquest and used in conjunction with the SaaS, including all updates, enhancements and related documentation as may be provided by the respective third parties under the terms of the Third Party EULA.

s. **"Update(s)"** means error corrections, modifications, improvements, extensions, and any functional changes or enhancements to the Software developed after the Effective Date which Sunquest makes generally available to its customers under Support Services. Updates exclude new products for which Sunquest generally charges a separate license or subscription fee.

t. "**Usage**" means Client's use of the SaaS for a maximum number of Authorized Users, patients, transactions, units, reports, records or other similar basis for a specified period, as designated in the applicable Order Form.

u. **"User System"** means any computer hardware, software, telecommunication, connections or other equipment necessary for Sunquest to interface with the Client's systems (i.e., a gateway, user workstations, etc.) or for Client and it's Authorized Users to access or use the SaaS from Client's or Authorized Users' facilities, in accordance with the System Requirements, all of which is owned and/or maintained by Client.

2. Grant of Rights.

   a. SaaS; Software: Subject to this Agreement and the applicable Order Form, Sunquest hereby grants to Client a non-exclusive, non-assignable, non-transferable, and limited right during the SaaS Subscription Term to access and use the SaaS and a license to the Software and related Documentation in conjunction with the SaaS, as specified in an Order Form and/or Scope of Work, within the Territory, and solely for Client's and its Authorized Users' internal business purposes.

   b. Third Party Software: Third Party Software as may be specified in an Order Form shall be sublicensed to Client by Sunquest solely for Client's and its Authorized Users' internal business purposes in conjunction with the SaaS under the terms and conditions of the respective Third Party EULA.

3. **Support Services**: During the SaaS Subscription Term and provided Client is current on its subscription fees, Sunquest will provide Support Services as follows:

   a. Provide help desk support for the SaaS, Software and any applicable Third Party Software on a twenty-four (24) hour per day, 365 days per year basis. Sunquest help desk support shall respond to any request for support services within one (1) hour for Critical Problems, within one and a half (1.5) hours for Urgent Problems and no later than the next business day for Routine Problems (all as hereinafter defined). Requests for support services may be made via phone, e-mail, live chat or a web portal. Sunquest and Client shall jointly determine the category of problem based on their professional discretion and the facts available.

      i. "Critical Problems" mean problems that completely prevent use of the SaaS or Software (i.e. the SaaS or Software is down or unavailable for use, or the problem poses a risk to patient care);
      ii. "Urgent Problems" mean problems that severely limit normal use of the SaaS or Software (i.e. inability to print reports); and
      iii. "Routine Problems" mean any problem not defined as a Critical Problem or Urgent Problem.

   b. Sunquest's or its licensor's response to Critical Problems, Urgent Problems or Routine Problems may be in person, via telephone conversation, via email through the support portal, or by communication with the Software. All requests for support services hereunder shall be documented by Sunquest with the time and date of the request for support services, the reason for the support services request, and an explanation of services performed by Sunquest or a Sunquest licensor to remedy a problem.

   c. Software Updates. Sunquest will provide to Client all Updates made by Sunquest or its licensor to the Software. If produced, updated Documentation will be made available to the Client before any changes to the Software are made.

d. Third Party Software Updates. Sunquest will provide to Client Third Party Software updates as may be made available to Sunquest by the respective Third Party Software vendor for provision to Client.

Sunquest is under no obligation to provide SaaS that has been: (i) altered or modified by Client or any third party without Sunquest's prior written approval or; (ii) specifically designated as "end of support" or similarly described (**"EOS"**). Notwithstanding the foregoing, Support for the EOS SaaS will continue for at least one (1) year after the EOS announcement. Sunquest is not responsible for: (w) procurement, support or maintenance of the User System; (x) the transmission of order and results information by Client or any Authorized User to the SaaS; (y) any Authorized User's access to the SaaS, or (z) any data supplied by Client or any Authorized User.

e. Client Responsibilities. In connection with Sunquest's performance of Support Services, Client will:

   i. Cooperate with Sunquest in loading Updates or any Third Party Software updates and using the same on Client's servers. Failure or refusal of Client to accept such Updates or Third Party Software updates and load them onto Client's servers shall be a material breach of the Agreement.
   ii. Ensure that Authorized Users are provided training and are familiar with the SaaS and Software prior to first use. Except as otherwise set forth in an Order Form, Sunquest has no obligation to provide training services.
   iii. Ensure Sunquest has access to the Software and Third Party Software twenty-four (24) hours a day seven (7) days a week in order to perform its obligations. Client understands and agrees that Sunquest shall not be held liable for failing to provide Support Services or be deemed in breach of this Agreement in the event Client fails to meet its obligations described in this Section 3 (f).

4. **SaaS and Software Use Restrictions**. Except as otherwise expressly permitted in this Agreement, Client and/or its Authorized Users may not, and may not allow any other person to, directly or indirectly:

   a. Copy or republish the SaaS or Software;
   b. Make the SaaS available to any person other than an Authorized User;
   c. Use or access the SaaS to provide service bureau, time-sharing or other computer hosting services to third parties;
   d. Modify or create derivative works based on the SaaS, Software or Documentation;
   e. Remove, modify or obscure any copyright, trademark or other proprietary notices contained in: (i) the software used to provide the SaaS; (ii) the Software; (iii) and/or Documentation.
   f. Reverse engineer, decompile, disassemble, or otherwise attempt to derive the source code of the Software or the software used to provide the SaaS;
   g. Use any of Sunquest's Confidential Information, Software or Documentation or access to the SaaS in order to create any product or service that is similar to or competitive with SaaS or Software;
   h. Alter in any way any source code and/or any controls that would enable or restrict access to the Software or Third Party Software;
   i. Export or transmit any of Sunquest's Confidential Information (as hereinafter defined) to any country to which such transmission is restricted by applicable regulations or statutes;

5. Client's Responsibilities.

   a. Assistance: Client shall provide commercially reasonable information and assistance to Sunquest to enable Sunquest to deliver the SaaS, the Support Services, and Other Services.

   b. Compliance With Laws: Client shall comply with all applicable local, state, national and foreign laws in connection with its use of the SaaS, including laws related to privacy, international communications, export controls, and the transmission of Client Data and personal and technical data. Client acknowledges that Sunquest and its licensors exercise no control over the content of the information transmitted by Client and its Authorized Users. Client shall not and shall ensure that its Authorized Users shall not upload any Client Data or use the same for Sunquest's or its licensors' provision of the SaaS hereunder without first obtaining all necessary permission from the owners of such Client Data.

   c. Client is solely responsible for collecting, inputting and updating all Client Data stored and used on the SaaS system.

d. Unauthorized Use; False Information: Client shall: (i) notify Sunquest immediately of any unauthorized use of any password or user ID or any other known or suspected breach of security; (ii) report to Sunquest immediately and use reasonable efforts to stop any unauthorized use of the SaaS that is known or suspected by Client or any SaaS Authorized User; and (iii) not provide false identity information to gain access to or use the SaaS.

e. Authorized Users: Client shall be solely responsible for its Authorized Users' use of the SaaS pursuant to this Agreement and enforcement of such terms against such Authorized Users. Sunquest shall not be liable for any loss of Client Data or other data or functionality caused directly or indirectly by the Authorized Users.

f. License From Client: Subject to the terms and conditions of this Agreement, Client shall grant to Sunquest, its licensors and Affiliates a limited, non-exclusive and non-transferable license to copy, store, configure, implement, perform, display and transmit Client Data solely as necessary to provide the SaaS, the Support Services, and Other Services to Client and its Authorized Users.

g. Data Audit, Testing. Prior to Live Operation, Client shall audit Client Data to ensure the integrity of Client Data, including the accuracy of Client's data entry into the SaaS. Sunquest shall not be responsible for, and Client shall have sole responsibility for, the accuracy and/or adequacy of information and data imported into the SaaS. Client will perform its own testing prior to Live Operation.

6. **Implementation.**

a. Promptly following execution of this Agreement, Sunquest and Client shall develop an implementation plan for the implementation and delivery of products and services set forth in the Order Form and/or in a Scope of Work ("**Implementation Schedule**"). Sunquest and Client shall cooperate in the timely performance of their respective tasks in the Implementation Schedule.

7. SaaS Subscription Term.

The initial term of the SaaS Subscription Term will be as set forth in the Order Form (**"Initial SaaS Subscription Term"**). Following the Initial SaaS Subscription Term, the SaaS subscription will automatically renew as set forth in the Order Form at Sunquest's then-current pricing and terms for the SaaS.

8. Order Forms; Fees and Payment.

a. Fees and applicable payment schedules for Client's purchase of SaaS, Software, Other Services or Third Party Software shall be set forth in an Order Form.

b. In the event Client wishes to increase the number of named users and/or workflows during the SaaS Subscription Term, Client will incur additional fees.

c. All fees shall be payable in U.S. dollars pursuant to the payment schedule set forth in an Order Form, shall be payable when invoiced and shall be due thirty (30) days from invoice date. For any on-site services provided by Sunquest, Client shall reimburse Sunquest for actual, reasonable travel, lodging and other incidental expenses incurred.

d. If Client's account is in arrears for sixty (60) days, Sunquest may, without prior notice, and notwithstanding the termination provisions of Section 12 (b) , place Client's account on hold until such time as Client's account is brought current ("Suspension"). During the Suspension, Client understands that no SaaS will be provided to Client, but that SaaS subscription fees shall continue to accrue.

e. If Client disputes, in good faith, any invoiced charge ("Disputed Charge"), Client shall pay the undisputed amount and notify Sunquest of the Disputed Charge in writing within fifteen (15) business days of the invoice date. Client shall not be required to pay interest on any reasonable and documented Disputed Charge(s).

f. All payments required by this Agreement are exclusive of federal, state, local and foreign taxes, duties, tariffs, levies and similar assessments.

9. Warranty.

a. Sunquest warrants that the SaaS and Software will conform substantially in accordance with the Documentation during the SaaS Subscription Term. If the SaaS or Software does not perform as warranted, Sunquest shall, within thirty (30) days of receipt of Client's notice of a warranty claim, (i) correct the discrepancy; (ii) provide a plan for correcting the discrepancy; or (iii) if (i) or (ii) cannot be accomplished, either Party may terminate the SaaS subscription and Software license(s) and Client will be refunded the prepaid annual fees through the end of the applicable year of the SaaS Subscription Term. The preceding warranty cure shall constitute Sunquest's entire liability and Client's exclusive remedy for warranty claims. EXCEPT AS SET FORTH ABOVE, SUNQUEST MAKES NO WARRANTY, REPRESENTATION, OR AGREEMENT WITH RESPECT TO THE SAAS, OTHER SERVICES, SOFTWARE, OR ANY OTHER PRODUCTS OR SERVICES PURCHASED HEREUNDER AND EXPRESSLY DISCLAIMS AND EXCLUDES TO THE FULLEST EXTENT PERMITTED BY LAW ANY IMPLIED AND EXPRESS WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NEITHER SUNQUEST NOR ITS LICENSORS REPRESENT THAT THE OPERATION OF THE SAAS OR SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE OR THAT ALL ERRORS WILL BE CORRECTED. CLIENT ACKNOWLEDGES THAT SUNQUEST DOES NOT CONTROL THE TRANSFER OF CLIENT DATA OVER COMMUNICATIONS FACILITIES, INCLUDING THE INTERNET, AND THAT THE SAAS SERVICES MAY BE SUBJECT TO LIMITATIONS, DELAYS, AND OTHER PROBLEMS INHERENT IN THE USE OF SUCH COMMUNICATIONS FACILITIES.

b. Client acknowledges and agrees that any warranties applying to the Third Party Software are limited to those, if any, offered in the Third Party EULA. Sunquest makes no warranties of any kind with respect to Third Party Software.

10. Rules-Based Services.

Client agrees and acknowledges that the content of any algorithms, and any corresponding results and actions, application configuration that impacts workflow, resulting, and ordering of diagnostic testing shall be solely Client's responsibility. While Sunquest may offer consulting, training and/or predefined algorithms and rules to implement certain parameters for processing patient test results, Client agrees that the final identified parameters shall at all times be determined by, and be the sole responsibility of, Client.

11. Indemnification.

a. Indemnification by Sunquest. If a third party(ies) makes a claim against Client that the SaaS or Software infringes any United States Patent, copyright or trademark, or misappropriates any trade secret, Sunquest shall defend Client and its employees, agents, contractors, and its licensors against such claim at Sunquest's expense and Sunquest shall pay all losses, damages, and expenses (including reasonable attorneys' fees) finally awarded to such party or agreed upon in a settlement agreement signed by Sunquest, to the extent arising from such claim. In such event, Sunquest may, at its sole option and expense and as Client's sole remedy in the event of a third party infringement claim hereunder, procure for Client the right to continue use of the SaaS and Software, modify the SaaS and Software in a manner that does not materially impair the functionality of the SaaS and Software, or terminate the SaaS Subscription Term and this Agreement and repay to Client any amount paid by Client with respect to the balance of the SaaS Subscription Term calculated from the date of termination through the end of the SaaS Subscription Term. Sunquest shall have no liability for any claim based on: (i) the Client Data; (ii) modification of the SaaS or Software not authorized by Sunquest; or (iii) use of the SaaS or Software other than in accordance with the Documentation and this Agreement.

b. Conditions for Indemnification. A Party seeking indemnification under this Section (the **"Indemnitee"**) shall: (i) promptly notify the other Party (the "**Indemnitor**") of the claim; and (ii) permit the Indemnitor to have sole control of the defense, compromise or settlement of the claim and give the Indemnitor information, reasonable assistance and authority to enable the Indemnitor to do so. An Indemnitee hereunder shall have the right to participate in the defense of any suit or proceeding through counsel at its own expense; however, such participation shall not include the right for Indemnitee to settle or compromise the claim or influence the Indemnitor's defense relating thereto.

12. Agreement Term and Termination.

    a. This Agreement shall be effective upon selecting "I Accept" below ("**Effective Date**").

    b. Either Party may terminate the SaaS subscription at the end of the Initial SaaS Subscription Term or any subsequent one-year renewal term by notifying the other Party at least sixty (60) days prior to the expiration of the SaaS Subscription Term. This Agreement may be terminated by either Party following termination of all SaaS subscriptions hereunder upon giving written notice of such termination to the other Party.

    c. Either Party may terminate the SaaS subscription and this Agreement in the event the other Party breaches a material provision of this Agreement and the breaching Party fails to cure such breach within sixty (60) days of the receipt of written notice of such breach from the non-breaching Party.

    d. Either Party may terminate the SaaS subscription and this Agreement, immediately in the event any assignment is made by the other Party for the benefit of creditors, or if a receiver, trustee in bankruptcy or similar officer shall be appointed to take charge of any or all of the other Party's property, or if the other Party files a voluntary petition under federal bankruptcy laws or similar state statutes or such a petition is filed against the other Party and is not dismissed within sixty (60) days.

13. Effects of SaaS Subscription Termination.

    a. Upon termination of this Agreement or expiration of a SaaS Subscription Term, Sunquest shall immediately cease providing the SaaS and all SaaS usage rights granted under this Agreement shall terminate. Further, Client shall have no further right to use any Software or Third Party Software used in conjunction with such SaaS as of the termination date, and Client shall return or certify destruction of all copies of such Software, Third Party Software, the Documentation relating to the terminated or expired SaaS and any Sunquest Confidential Information in Client's possession or under its control.

    b. If Sunquest terminates this Agreement due to a material breach by Client, then Client's liability for any fees, charges, payments or expenses due to Sunquest that accrued prior to the termination date and to become due during the remaining term of this Agreement, but for such termination, shall not be extinguished by termination, and such amounts shall be immediately due and payable on the termination date. If Client terminates this Agreement due to a material breach by Sunquest, then Sunquest shall immediately repay to Client all pre-paid amounts for any unperformed Other Services or SaaS scheduled to be delivered after the date of termination and Client shall not be obligated to make any further payments which would have come due hereunder following the date of termination.

    c. Sunquest shall return any Client Confidential Information in Sunquest's possession or under its control to Client upon termination of this Agreement. In the case of Client Data entered into, processed and resulting output data received through use of a SaaS which has expired or been terminated, Sunquest shall provide Client with written certification of destruction of the same. In the event that Client desires return of Client Data, Sunquest will use reasonable efforts to work with Client to extract such Client Data from a SaaS in accordance with Sunquest's then-current fees for the same. Sunquest shall not be required to return or destroy Client Confidential

Information that has been stored within application backups, provided such backups are securely stored and are overwritten in the normal course.

14. Limitation of Liability.

a. NEITHER PARTY SHALL IN ANY CASE BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, INDIRECT, EXEMPLARY OR PUNITIVE DAMAGES OR LIABILITIES FOR ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATING TO THIS AGREEMENT, INCLUDING ALL ORDER FORMS, ADDENDA OR AMENDMENTS HERETO, WHETHER IN CONTRACT OR TORT OR BY WAY OF INDEMNITY OR OTHERWISE, INCLUDING A BREACH THEREOF OR INCLUDING WITHOUT LIMITATION, DAMAGES OR LIABILITIES FOR LOST PROFIT, LOST REVENUE, LOSS OF USE, LOSS OF DATA, COSTS OF RECREATING LOST DATA, THE COST OF ANY SUBSTITUTE PROGRAM, SAAS OR DATA, OR CLAIMS BY ANY THIRD PARTY REGARDLESS OF WHETHER EITHER PARTY HAS OR GAINS KNOWLEDGE OF THE EXISTENCE OF SUCH DAMAGES OR LIABILITIES. IN NO EVENT WILL SUNQUEST BE LIABLE TO CLIENT AND/OR ANY THIRD PARTIES WITH RESPECT TO CLAIMS OF ANY NATURE RELATED TO THIRD PARTY SOFTWARE, HARDWARE OR THIRD PARTY SERVICES.

b. The SaaS or Software are not intended to provide medical advice, to determine or recommend an appropriate course of action for any individual patient, or to otherwise provide healthcare services. Only a licensed healthcare practitioner/medical care provider can make such determinations or recommendations or provide such advice or services. Client acknowledges and agrees that Sunquest is not a healthcare practitioner/medical care provider and that Sunquest does not assume any responsibility or liability for the consequences of any medical decision made by Client, its Authorized Users, Affiliates, or any other person with access to or use of information in or produced by the SaaS.

15. Confidentiality.

a. By virtue of this Agreement, the Parties may be exposed to or provided with certain Confidential Information of the other Party. Each Party will protect the other Party's Confidential Information from unauthorized dissemination and use with the same degree of care that each such Party uses to protect its own Confidential Information, but in no event less than a reasonable degree of care. Except as required by law, neither Party will use the other Party's Confidential Information for purposes other than those necessary to directly further the purposes of this Agreement and as may be required to report to its affiliates, legal, and financial advisors as long as any such persons are bound by confidentiality obligations no less strict than those provided in this Agreement. Except as otherwise expressly set forth in this Agreement, neither Party will disclose to third parties the other Party's Confidential Information without prior written consent of the other Party. Either Party may disclose the Confidential Information of the other Party to the extent required by law or order of a court or other governmental authority, provided that the recipient shall use reasonable efforts to promptly notify the discloser prior to such disclosure to enable the discloser to seek a protective order or otherwise prevent or restrict such disclosure.

b. The Parties agree that monetary damages may not be an adequate remedy if this Section 15 is breached and, therefore, either Party shall, in addition to any other legal or equitable remedies, be entitled to seek an injunction or similar equitable relief against such breach or threatened breach.

16. Ownership.

a. **Sunquest**. Ownership of, and title to, the SaaS, Software, and any deliverables developed or provided pursuant to Other Services and to Sunquest's Confidential Information, and all intellectual property rights embodied therein, are vested in Sunquest, its Affiliates and/or its licensors respectively. Copies of Software, any deliverables developed or provided pursuant to Other Services and of Sunquest's Confidential Information are provided to Client only to allow Client to exercise Client's rights hereunder. Client shall not take any action inconsistent with such title and ownership.

b. **Client**. Ownership of, and title to, the Client's Confidential Information and Client Data are vested in Client. Any Client Data provided to Sunquest will be used only to allow Sunquest to provide SaaS and Other Services under this Agreement. Sunquest shall not take any action inconsistent with such title and ownership.

17. General Terms.

a. **Entire Agreement**. This Agreement and any Order Form constitute the entire agreement between the Parties regarding the subject matter hereof and supersedes all previous communications of the Parties. The Agreement may be amended solely in a writing signed by both Parties. Terms contained in any purchase order are deemed rejected and shall be void unless specifically accepted in writing by the Parties. In the event of a conflict between the terms of an Order Form and this Agreement, the terms of the Order Form shall take precedence.

b. **Waiver and Severability**. The failure of either Party to enforce any breach or default under this Agreement does not constitute a waiver of that or any subsequent breach or default. Any provision in this Agreement deemed invalid or unenforceable will be limited to the extent necessary, and the other provisions of this Agreement will remain in full force and effect.

c. **Assignment**. Client may not assign this Agreement to any entity without Sunquest's prior written permission, which will not be unreasonably denied. Sunquest may assign this Agreement to its Affiliates or to any entity that acquires substantially all of its assets. Sunquest may employ subcontractors to perform services on behalf of Sunquest under this Agreement, provided that Sunquest shall be responsible for ensuring that any such subcontractors shall be bound by and comply with the limitations and restrictions of this Agreement.

d. **Government.** The SaaS and Software (i) were developed at private expense and are the proprietary information of Sunquest; (ii) were not developed with government funds; (iii) are trade secrets of Sunquest for all purposes of the Freedom of Information Act; (iv) are commercial items and thus, pursuant to Section 12.212 of the Federal Acquisition Regulations (FAR) and DFAR Supplement Section 227.7202, Government's use, duplication or disclosure of the Software or SaaS is subject to the restrictions set forth by Sunquest and the restrictions set forth in subparagraph c(1) and c(2) of Commercial Computer Software - Restricted Rights at 48 C.F.R. 52.227-19, as applicable. Furthermore, if the Software and/or SaaS are being licensed to U.S. Government end users, the Software and/or SaaS and related Documentation are "Commercial Items", as that term is defined at 48 C.F.R. §2.101, consisting of "Commercial Computer Software" and "Commercial Computer Software Documentation", as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.7202, as applicable. Consistent with 48 C.F.R. §12.211 through 12.212 or 48 C.F.R. §227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Computer Software Documentation is licensed (A) only as Commercial Items and (B) with only those rights as are granted to all other end users pursuant to the terms and conditions herein.

e. **Force Majeure**. If either Party cannot perform any obligation under this Agreement (other than the obligation to make payment) due to any cause beyond such Party's reasonable control, the Parties agree to give the affected Party additional time to perform, equal to the time of the delay.

f. **Non-Exclusive Service.** Client acknowledges that the SaaS is provided on a non-exclusive basis. Nothing shall be deemed to prevent or restrict Sunquest's ability to provide the SaaS or other technology, including any features or functionality first developed for Client, to other parties.

g. **Relationship**. The Parties agree that neither Party is the agent or representative of the other Party or that they are joint venturers or partners for any purpose. Except as provided in this Agreement, neither Party shall be responsible for the acts or omissions of the other Party or the other Party's personnel.

h. **Third Party Beneficiaries**. As applicable, the licensor of the Third Party Software is an intended third party beneficiary of this Agreement with respect to such Third Party Software.

i. **Compliance, Audits and Required Reporting**. During the term of this Agreement and for a period of up to four (4) years following termination, Sunquest or an independent auditor may audit the SaaS provided under this Agreement and/or request records to verify Client's compliance with the terms of this Agreement or with applicable regulations. Client agrees that if the audit reveals any noncompliance, Client will reimburse Sunquest for Sunquest's reasonable costs and expenses incurred, and Client will promptly cure any noted noncompliance, subject to then-current fees payable from the first date of noncompliance. In the event that any of the prices set forth herein reflect discounts, to the extent required by 42 C.F.R. § 1001.952(h) (the Anti-Kickback Statute discount safe harbor regulations) or other applicable laws and regulations, Client must fully and accurately reflect in cost reports or other submissions to federal healthcare programs all such discounts and, upon request by the Secretary of the U.S. Department of Health and Human Services or a state agency, must make available information provided to Client by Sunquest concerning the discounts.

j. **Notices**. Communications between the Parties must be in writing and either personally delivered or sent via a tracked delivery service addressed to the attention of the Legal Department at the addresses specified in the applicable Order Form and are effective upon receipt.

k. **Statistical Information.** Sunquest may anonymously compile statistical information related to the performance of the SaaS for purposes of improving the SaaS, provided that such information does not identify Client Data, SaaS Authorized Users or the Client's name.

l. **HHS Audit Right**. Until the expiration of four (4) years after the furnishing of services under this Agreement, Sunquest shall make available, upon written request of the Secretary (as defined in the HIPAA Business Associate Agreement), or upon request of the Comptroller General, or any of their duly authorized representatives, this Agreement and the books, documents and records of Sunquest that are necessary to certify the nature and extent of the costs for which Client seeks reimbursement. Sunquest further agrees that if Sunquest carries out any of the duties of this Agreement through a subcontract with a value or cost of ten thousand dollars ($10,000) or more over a twelve (12) month period with a related organization, such subcontract shall contain a clause to the effect that until the expiration of four (4) years after furnishing services pursuant to such subcontract, the related organization shall make available to the Secretary or the Comptroller General, as the case may be, or any of their duly authorized representatives, the subcontract, and such books and documents and records of such organization that are necessary to verify the nature and extent of such costs.

m. **Data Protection.** Sunquest shall, to the extent that Sunquest has access to, processes or stores Client Data, only use, store, disclose, or access Client Data: (i) in accordance with the terms of this Agreement, (ii) to the extent needed to provide SaaS, Support Services and Other Services to Client and (iii) in full compliance with any and all applicable federal and state laws and regulations. All transmissions of Client Data by Sunquest shall be performed using a secure transfer method.

n. **Survival.** The provisions of Sections 1, 4, 5(b), 8, 11, and 13 - 17, and any other provisions that by their nature should survive, shall survive any termination of this Agreement.

Attachment 1 Detailed Specifications Spreadsheet

Attachment 2 Mandtory Requirements Spreadsheet

Instructions for completion of Appendix 1 - Detailed Specifications

1. The Vendor should self-score each requirement listed in the ***Capability Assessment*** column of *Tab 3 - Specification & Responses*, using only the values that appear in the drop-down list.
2. ***Capability Assessment*** values are outlined below:
   1. "Will Meet": Vendor agrees to specification.
   2. Will Not Meet": Vendor declines to meet the specification.
3. All specifications should contain one of the values identified above. Any specification without a ***Capability Assessment*** response value will be considered to be "Will Not Meet."
4. In addition, the Vendor should provide the ***Attachment***, ***Section***, and ***Page Number(s)*** where their detailed narrative response for each specification resides, providing the DHHR with a crosswalk, ensuring that each specification is addressed. Be advised that the column has been pre-populated with the location that the DHHR anticipates the requirement response to reside, however it is up to the Vendor to update that column accordingly should the Vendor respond to a requirement in a different location.
5. ***Hierarchy Level***: The hierarchy level column defines relationships between parent and child specifications. DHHR refers to parent specifications as specifications that rely on the content of a subset of related specifications (children) to fully define the scope of the requirement. DHHR refers to child specifications as specifications that rely on additional context provided by a higher level specification (parent) to fully define the scope of the specification. A hierarchy value of 1 denotes the highest level specification. Any greater hierarchy value denotes a child specification. For example a hierarchy level 2 is a child to the nearest prior hierarchy level 1. As another example, a hierarchy level 3 is a child to the nearest prior hierarchy level 2 specification, which is in turn a child to the nearest prior hierarchy level 1 specification. See the diagram below for an illustration of a hierarchy relationship:

   -Hierarchy Level 1 Specification

       -Hierarchy Level 2 Specification

Tabs in this spreadsheet	
1. Worksheet Instructions	Instructions for completion of the RFP.
2. Worksheet Information	This tab including the information about the contents of this workbook.
3. Specification & Responses	Contains the specifications and all related data.
4. Code Values	Contains coded values for use in the specifications tab, and explanations as appropriate.

Columns on the specification Responses Tab			
Section	**Column**	**Description**	**Corresponding Code Values**
Specifications	*Req ID #*	The unique ID of the specification.	N/A
	Specification Text	The text of the specification.	N/A
Subject Matter Area	*N/A*	How the specification is categorized in the RFP	N/A
Vendor Response Area	*Capability Assessment*	Vendor is expected to indicate their compliance with the specification using one of the supplied values.	Vendor Response - Capability Assessment
	Attachment	Vendor is expected to provide a reference to the appropriate where more detailed information about the specification can be found. The expected template is identified for Vendor convenience.	Attachments
	Section and Page Reference	Vendor is expected to provide a reference to the appropriate Section and Page Number within the specified Attachment where more detailed information about the specification can be found.	N/A

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
CT001	1	The Vendor should provide capability for users to collect person-level contact data including:	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT002	2	Demographics	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT003	2	Risk factors	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT004	2	Exposure type	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT005	2	Exposure location	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT006	2	Geographic	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT007	2	Personal contact information including:	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT008	3	Address	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT009	3	Phone number(s)	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT010	3	Email address	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT011	3	Photographs	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT012	2	Others as defined by DHHR	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	72
CT013	1	The Vendor should provide capability to receive laboratory test reports and attach to existing contact.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	73
CT014	1	The Vendor should provide the ability to perform validation of contact information formatting and alert user of invalid data.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	73
CT015	1	The Vendor should provide capability for users to categorize and sort contacts per user defined characteristics.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	73
CT016	1	The Vendor should provide capability to visually represent contact linkage via the contact web (Pin map).	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	73
CT017	1	The Vendor should provide the ability for users to classify contacts based on location and/or risk factors.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	74
CT018	1	The Vendor should provide the ability to support algorithms to determine contact priority based on risk.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	74
CT019	1	The Vendor should have the ability to sort contacts based on interview status and prioritize follow-up.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	74
CT020	1	The Vendor should provide a public-facing symptom tracking interface.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	75
CT021	1	The Vendor should provide alerts to public users based on symptom criteria.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	75
CT022	1	The Vendor should provide alerts to system users based on symptom criteria.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	75
CT023	1	The Vendor should provide capability to record multiple exposures for each contact.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	75
CT024	1	The Vendor should provide the ability for users to create questionnaires for contact interviews.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	75
CT025	1	The Vendor should provide the ability for users to manage and track contact interview status.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	75
CT026	1	The Vendor should provide the ability for users to type information/notes in free-form text box.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT027	1	The Vendor should support the ability to record and track any instructional communications sent to contacts including:	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
CT028	2	Phone	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT029	2	Letter	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT030	2	Email	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT031	2	Fax	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT032	2	SMS (text message)	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT033	2	Others as defined by DHHR	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT034	1	The Vendor should provide the ability for users to set/modify contact exposure criteria.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT035	1	The Vendor should support the ability to select and modify predefined intervention plans to include updated guidelines/metadata from CDC and other supporting information.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT036	1	The Vendor should provide capability for users to send communications to care providers to identify contacts via interface with EHR systems.	Contact Tracing		Attachment G - Business Specifications Approach	2	76
CT037	1	The Vendor should provide the ability for users to upload lists of contacts from spreadsheets or other documents.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CT038	1	The Vendor should provide the ability for users to export lists of contacts in spreadsheet format.	Contact Tracing	Will Meet	Attachment G - Business Specifications Approach	2	76
CI001	1	The Vendor should provide capability for users to collect person-level contact data including:	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI002	2	Demographics	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI003	2	Risk factors	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI004	2	Exposure type	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI005	2	Exposure location	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI006	2	Geographic information	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI007	2	Personal contact information including:	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI008	3	Address	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI009	3	Phone number(s)	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI010	3	Email address	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI011	3	Photographs	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI010	2	Treating information	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI011	2	Diagnostics	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI012	2	Others as defined by DHHR	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI013	1	The Vendor should support the ability to record and track case-related workflow activities.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI014	1	The Vendor should provide capability to receive test reports and attach to existing case.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
CI015	1	The Vendor should provide capability to receive new or updated test results and attach to existing cases.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI016	1	The Vendor should provide capability to receive new or updated electronic case reports and attach to cases.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	80
CI017	1	The Vendor should provide capability for pre-defined case-definition parameters to be established for distinct conditions.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI018	1	The Vendor should provide the ability for users to create questionnaires for case interviews.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI019	1	The Vendor should provide the ability to link questionnaires to case investigation.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI020	1	The Vendor should provide the ability for users to set/modify case exposure criteria.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI021	1	The Vendor should allow for configuration changes for disease case definition assignment or case auto closure.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI022	1	The Vendor should provide capability to auto-suggest to close case, based on defined criteria.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI023	1	The vendor should provide capability to identify when appropriate time periods have lapsed to close case based on pre-defined criteria.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI024	1	The Vendor should provide capability for users to manually assign closure justification to a case.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI025	1	The Vendor should allow for configuration changes for disease case definition assigment or case auto closure.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	81
CI026	1	The Vendor should support ability to add the intervention plan to an existing case record.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI027	1	The Vendor should provide capability for users to create and save a customized intervention plan.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI028	1	The Vendor should provide capability to automatically suggest an intervention plan, based on the disease or condition.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI029	1	The Vendor should provide capability for users to select a recommended treatment plan.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI030	1	The Vendor should provide capability to alert users of missed events including: (e.g., missed test, treatment, or vaccine).	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI031	2	Missed test	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI032	2	Treatment	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI033	2	Vaccine	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI034	2	Others as defined by DHHR	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI035	1	The Vendor should provide capability to alert users of follow-up test and other diagnostic results.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI036	1	The Vendor should provide capability for users to configure an algorithm to have system automatically assign closure justification to case.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI037	1	The Vendor should provide ability to include non-human test results with linkage to human cases for the following:	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI038	2	Animal	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI039	2	Food	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
CI040	2	Water	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI041	2	Others as defined by DHHR	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI042	1	The vendor should provide ability to send order sets to the following:	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI043	2	Healthcare providers	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI044	2	Case management providers	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI045	2	Reporting organizations	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI046	2	Others as defined by DHHR	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	82
CI047	1	The Vendor should provide capability for users to transmit recommendations to outside organizations or systems including:	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CI048	2	Healthcare providers	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CI049	2	Case management systems	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CI050	2	Reporting organizations	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CI051	2	Others as defined by DHHR	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CI052	1	The Vendor should provide ability for administrator-level users to modify case investigation forms.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CI053	1	The Vendor should provide ability to maintain multiple disease-specific and condition-specific classification criteria.	Case Investigation and Management	Will Meet	Attachment G - Business Specifications Approach	3	83
CC001	1	The Vendor should provide capability to generate a new case from a contact record.	Contact and Case Integration	Will Meet	Attachment G - Business Specifications Approach	4	84
CC002	1	The Vendor should provide ability for users to break linkage between contact and case.	Contact and Case Integration	Will Meet	Attachment G - Business Specifications Approach	4	84
CC003	1	The Vendor should provide capability for users to associate a contact or case with index case.	Contact and Case Integration	Will Meet	Attachment G - Business Specifications Approach	4	84
CC004	1	The Vendor should provide capability to alert users if anyone identified as a contact subsequently becomes a case through existing workflow rules.	Contact and Case Integration	Will Meet	Attachment G - Business Specifications Approach	4	85
OM001	1	The Vendor should provide capability to open, manage and close outbreaks.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	88
OM002	1	The Vendor should provide the ability to link contacts and cases to outbreaks	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	88
OM003	1	The Vendor should provide the ability to assign outbreak definitions including:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	88
OM004	2	Disease	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	88
OM005	2	Setting type	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	88
OM006	2	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	88
OM007	1	The Vendor should provide the ability to link a case/contact-specific intervention record to an outbreak.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM008	1	The vendor should allow users to generate, edit and save outbreak plans.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM009	1	The Vendor should provide capability to maintain a library of previous outbreak or event management plans.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
OM010	1	The Vendor should provide the ability to monitor, in real time, outbreak-related data including:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM011	2	Type of outbreak	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM012	2	Number of tests ordered by care providers	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM013	2	Chief complaints	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM014	2	Emergency department visits	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM015	2	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	89
OM016	1	The Vendor should provide the ability for users to do the following to:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM017	2	Create metrics	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM018	2	Define metrics	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM019	2	Edit metrics	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM020	2	Save metrics	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM021	2	As the metrics relate to:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM022	3	Interventions	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM023	3	Control	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM024	3	Prevention	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM025	3	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM026	1	The Vendor should provide the capability to alert users of outstanding tasks in the outbreak management plan.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	90
OM027	1	The Vendor should provide the ability to assign to each outbreak event, as derived from the original case, the following:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM028	2	Record creation date	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM029	2	Unique record number	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM030	2	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM031	1	The Vendor should provide the ability to trigger a case classification in condition identification and reporting, based on outbreak definition.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM032	1	The Vendor should provide the ability to link to the environmental investigation system or import relevant environmental data as needed.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM033	1	The Vendor should provide the ability to send test orders to the following:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM034	2	Healthcare providers	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM035	2	Laboratories	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM036	2	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM037	1	The Vendor should provide the ability to automatically link test results with requests for testing, based on the following:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
OM038	2	User-defined key	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM039	2	User-defined code	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM040	2	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	91
OM041	1	The Vendor should provide the ability for users to create after-action reports.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM042		The Vendor should provide the ability to maintain multiple outbreak-specific classification criteria.	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM043	2	The Vendor should provide the capability to capture outbreak-level data including the following:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM044	2	Demographics	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM045	2	Risk factors	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM046	2	Exposure type	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM047	2	Exposure location	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM048	2	Geographic information	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM049	2	Personal contact information including:	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM050	3	Address	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM051	3	Phone number(s)	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM052	3	Email address	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM053	3	Photographs	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM054	3	Treating information	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM055	3	Diagnostics	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
OM056	3	Others as defined by DHHR	Outbreak Management	Will Meet	Attachment G - Business Specifications Approach	5	92
RA001	1	The Vendor should provide the ability for users to create and regularly update epidemiologic curves.	Reporting and Analytics	Will Meet	Attachment H - Technical Specifications Approach	6	95
RA002	1	The Vendor should provide capability for users to develop standard reports and ad-hoc reports by the following attributes:	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA003	2	Demographics	Reporting and Analytics	Will Meet	Attachment H - Technical Specifications Approach	6	95
RA004	2	Geographic regions	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA005	2	Disease Types	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA006	2	Outbreaks	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA007	2	Data sources	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA008	2	Others as defined by DHHR	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA009	2	And using the following template types:	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
RA010	3	Pre-existing	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA011	3	Saved	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA012	3	Customized	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
RA013	1	The Vendor should have the ability to implement all Message Mapping Guides for the Centers for Disease Control and Prevention (CDC) with the ability to code values within the export integration feature of the application.	Reporting and Analytics	Will Meet	Attachment G - Business Specifications Approach	6	95
DS001	1	The Vendor should provide the functionality to import and export data (bi-directional reporting) in standard formats with external partners including, but not limited to, the following: healthcare providers, laboratories, WVHIN and the CDC.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS002	2	Healthcare providers	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS003	2	Laboratories	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS004	2	West Virginia Health Information Network (WVHIN)	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS005	2	Centers for Disease Control and Prevention (CDC)	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS006	2	Others as defined by DHHR	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS007	1	The Vendor should provide capability to populate form fields using information received from reporting organizations.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS008	1	The Vendor should provide the ability to merge and standardize data into a uniform format.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS009	1	The Vendor should have the ability to push a copy of the ESS database to a DHHR database in a SQL format at least twice daily.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS010	1	The Vendor should have the ability to notify appropriate users of available data.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS011	1	The Vendor should provide the capability to modify data submission format based on reporting organization's requirements.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS012	1	The Vendor should have the ability to perform regular data processing procedures.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS013	1	The Vendor should provide acknowledgements of incoming messages or data submissions, including the following: (e.g., received, not received, and errors).	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS014	2	Received	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS015	2	Not Received	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
DS016	2	And with information regarding the quality of the data including:	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS017	3	Errors	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS018	3	Warnings	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS019	3	Others as defined by DHHR	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS020	1	The Vendor should have the ability to report data stream and job failures.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	106
DS021	1	The Vendor should have the capability to allow users to define protocols for contacts, cases, and laboratory reports for acceptance or transfer from other public health jurisdictions.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS022	1	The Vendor should have the ability to detect and respond to unusual data submission patterns to prevent delayed system performance.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS023	1	The Vendor should provide the ability for users to maintain a repository of communication contacts with attributes such as healthcare providers, media, laboratories, and other partners involved in surveillance activities.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS024	1	The Vendor should provide the ability to integrate with state's enterprise data warehouse to monitor data based on user-defined criteria including:	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS025	2	Syndromic data	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS026	2	Diagnostic testing	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS027	2	Absenteeism	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS028	2	Over-the-counter medication sales	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS029	2	Others as defined by DHHR	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS030	1	The Vendor should support manual logging of data-sharing errors.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DS031	1	The Vendor should support methods to collect feedback concerning communication.	Data Sources, Delivery and Display	Will Meet	Attachment H - Technical Specifications Approach	2	107
DQ001	1	The Vendor should provide Data Quality Management for all data coming into the solution.	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	109
DQ002	1	The Vendor should develop processes to maintain data integrity, consistency, accuracy, and timeliness of the solution data.	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	110
DQ003	1	The solution should provide a tool that continually monitors the data quality within the solution and internal analytic applications.	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	110

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
DQ004	1	The solution should support audit and control processes that identify, report, and summarize errors in the data.	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	110
DQ005	1	The Vendor should maintain a process to identify and track all errors and discrepancies found in the solution pursuant to Service Level Agreements (SLAs).	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	110
DQ006	1	The Vendor should provide recommendations for proposed resolution/fixes for identified issues within a timeline approved by DHHR and pursuant to Service Level Agreements (SLAs).	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	110
DQ007	1	The solution should support data integrity through system controls for software program changes and promotion to production.	Data Quality	Will Meet	Attachment H - Technical Specifications Approach	3	110
IN001	1	The solution should have the ability, using deterministic and probabilistic matching algorithms, to automatically deduplicate, merge and create records.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	115
IN002	1	The Vendor should provide administrator-level users with the ability to unmerge merged records.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	115
IN003	1	The Vendor should provide administrator-level users with the capability to set deterministic and probablistic matching criteria and thresholds.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN004	1	The Vendor should provide form-builder capability for users to:	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN005	2	Upload and reuse existing forms	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN006	2	Develop new quesionnaires	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN007	2	Develop new letter templates	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN008	2	Others as defined by DHHR	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN009	1	The Vendor should provide a searchable document repository for frequently used information including:	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN010	2	Outbreak management plans	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN011	2	Treatment protocols	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN012	2	Best practice documentation	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN013	2	Templates for internal and external communications	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN014	2	Others as defined by DHHR	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN015	1	The Vendor should provide survey functionality including development of questionnaires and the ability to receive and analyze survey responses.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
IN016	1	The Vendor should support reminders of incomplete questionnaires and non-responses.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN017	1	The Vendor should provide help text with field descriptions and definitions in the user interface.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN018	1	The Vendor should provide auto-complete/auto-suggest word functionality (i.e., IntelliSense functionality).	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN019	1	The Vendor should provide a user interface that is mobile friendly.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN020	1	The Vendor should support multiple languages in the user interface.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	116
IN021	1	The Vendor should provide offline capability for data entry.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN022	1	The Vendor should provide capability for users to manage lookup tables within the application.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN023	1	The Vendor should allow users the ability to override a workflow to move on to next step, even if elements are determined to be missing.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN024	1	The Vendor should provide SMS capability for automated messaging to the public when monitoring symptoms related to:	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN025	1	Monitoring	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN026	2	Symptom updates	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN027	2	Reminders	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN028	2	Notifications	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN029	2	Others as defined by DHHR	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN030	1	The Vendor should provide SMS capability for automated messaging to DHHR users for:	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN031	2	Alerts of assigned tasks	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN032	2	Notifications related to information changes in the system	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN033	2	Reminders	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN034	2	Others as defined by DHHR	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN035	1	The Vendor should provide functionality for automated messaging through social media for:	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
IN036	2	Monitoring	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN037	2	Notifications	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN038	2	Reminders	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN039	2	Alerts	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN040	2	Others as defined by DHHR	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN041	1	The Vendor should support multiple distribution methods for internal communications including:	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN042	2	Email	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN043	2	Phone	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN044	2	Short message service (SMS)	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN045	2	Others as defined by DHHR	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN046	1	The Vendor should provide users with the ability to create/edit and send alert messages.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN047	1	The Vendor should provide the ability to track distribution/receipt of education materials.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN048	1	The Vendor should provide the capability to allow users to set up and modify rules to provide differential views.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	117
IN049	1	The Vendor should have a business intelligence tool with dashboard and visual analytic capabilities for surveillance system and workflow analytics.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118
IN050	1	The Vendor should provide capability for administatior-level user configuration for logic changes.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118
IN051	1	The Vendor should provide an Application Programming Interface (API).	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118
IN052	1	The Vendor should have the have ability to integrate with GIS web service for address validation and jurisdiction boundaries.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118
IN053	1	The Vendor should provide integration with data reporting and visualization applications such as Microsoft Power BI or Tableau.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118
IN054	1	The Vendor should provide the capability to interface with public alert networks.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118
IN055	1	The Vendor should provide the ability to integrate with an outbreak management system.	Infrastructure	Will Meet	Attachment H - Technical Specifications Approach	4	118

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
SM001	1	The Vendor should deliver a Security, Privacy, and Confidentiality Plan within 30 calendar days of contract startup.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM002	1	The Vendor should submit an updated Security, Privacy, and Confidentiality Plan to DHHR for review and approval 30 business days prior to the start of solution operations.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM003	1	The Vendor should perform a review of the Security, Privacy, and Confidentiality Plan annually and submit to DHHR for review and approval within 30 calendar days of the review.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM004	1	The Vendor should submit substantive change(s) to the Security, Privacy, and Confidentiality Plan for review and approval within 30 calendar days of the proposed change(s).	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM005	1	The Vendor should maintain a DHHR-approved Security, Privacy, and Confidentiality Plan that details how the solution complies with applicable DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM006	1	The solution should maintain an audit trail that can be used to identify unauthorized attempts to access the solution and log the IP address from where the intrusion attempt occurred, in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM007	1	The solution should provide an audit of all attempts to access or use sensitive data, consistent with Health Insurance Portability and Accountability Act (HIPAA), Centers for Disease Preparedness and Prevention (CDC) , and other DHHR, State, and federal laws and regulations.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM008	1	The solution should have the ability to prevent, monitor, and detect malicious software and code.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM009	1	The solution should have the ability to provide security incident reporting and mitigation mechanisms according to state and federal requirements and in accordance with DHHR's Incident Reporting and Response Policy including, but not limited to:	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM010	2	Terminating access and generating a report when a potential security violation is detected	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM011	2	Preserving and reporting specified audit data when a potential security violation is detected	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM012	2	Others as defined by DHHR	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	126
SM013	1	The Vendor should ensure that any and all security and privacy breaches, incidents, and/or unauthorized disclosures are reported according, to state and federal requirements and in accordance with DHHR's Incident Reporting and Response Policy.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM014	1	The solution should have the ability to log all authorized solution user activity and correlate, analyze, and report on all logged user events and associated data.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
SM015	1	The solution should have the ability to provide a report of authorized solution user activity as determined by DHHR in the Design, Development, and Implementation (DDI) phase.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM016	1	The solution should provide an audit trail of record changes, including authorized solution user, date, and time of change.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM017	1	The solution should have the ability for audit trails to allow information on source documents to be traced through the processing stages to the point where the information is finally recorded.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM018	1	The solution should have the ability to trace data from the final place of recording back to its source of entry.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM019	1	The Vendor should ensure that any and all security and privacy breaches, incidents, and/or unauthorized disclosures are reported according, to state and federal requirements and in accordance with DHHR's Incident Reporting and Response Policy.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM020	1	The solution should limit data sharing to only those entities and individuals located in the United States and/or U.S. territories that maintain a current data sharing agreement with DHHR consistent with DHHR-required agreements and security and privacy policies and procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM021	1	The solution should have the ability to control access rights to data and system functions based on authorized solution user role-based access.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	127
SM022	1	The Vendor should work with DHHR to define the process for access to the solution in the Design, Development, and Implementation (DDI) phase.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM023	1	The solution should support role-based user access.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM024	1	The solution should provide an interactive, adjustable time-out feature for authorized solution user inactivity in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM025	1	The solution should provide alerts to authorized solution users that inactivity will result in being timed out after the specified period of inactivity in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM026	1	The solution should have the ability to enforce password policies for length, character requirements, and required updates in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM027	1	The solution should store passwords in encrypted form in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM028	1	The solution should permit system administrators to reset authorized solution user passwords.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM029	1	The solution should allow authorized solution users to reset their own passwords at any time by following system-defined standards in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
SM030	1	The solution should block pop-ups, spam, advertisements, and malware.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM031	1	The solution should have the ability to remove or disable systems, services, components, and modules as defined by DHHR.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM032	1	The solution should have secure transmission and data integrity controls to detect improper modification of transmitted information.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM033	1	The solution should use Secure Sockets Layer (SSL) certificates that are consistent with State and federal requirements for data in transit.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	128
SM034	1	The solution should have the ability to restrict release of sensitive data.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM035	1	The solution should support data integrity by preventing and detecting unauthorized alteration or destruction.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM036	1	The Vendor should collaborate with DHHR to determine a security approach that integrates with other solution components to supply role-based single-sign-on access.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM037	1	The Vendor should maintain procedures that ensure all emergency and non-emergency production system changes follow a DHHR-approved change control process, including a risk analysis.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM038	1	The solution should support record, database, table, and field-level access.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM039	1	The solution should have the ability to provide authorized solution users access to view and audit records of changes to free-form text data fields by capturing information including, but not limited to:	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM040	2	The name of the authorized solution user who updated a field	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM041	2	The date and time a field was updated	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM042	2	Others defined by DHHR	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM043	1	The solution should have data encryption standards in accordance with DHHR, State, and federal security and privacy laws, policies, and/or procedures.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM044	1	The Vendor should provide documentation on how the solution governs the confidential nature of information about patients and their health information.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	129
SM045	1	The Vendor should be prepared to demonstrate how the solution supports regulations governing the safeguard of information about patients including, but not limited to:	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM046	2	Names	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM047	2	Addresses	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM048	2	Medical data, including diagnosis and past history of disease or condition	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
SM049	2	Test results	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM050	2	Treatment plans	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM051	2	Others as defined by DHHR, State, and federal security and privacy policies	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM052	1	The solution should disable accounts after three consecutive invalid log in attempts and protect against further user authentication attempts using a DHHR approved lock-out mechanism.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
SM053	1	The Vendor should supply, on an annual basis, a report of the results of a security risk assessment, including all tools used for the assessment, and an action plan detailing the approach for remediation of security risk vulnerabilities.	Security Management	Will Meet	Attachment H - Technical Specifications Approach	5	130
PM001	1	The solution should align with DHHR's vision for the to-be ESS environment.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
PM002	1	The solution's initial data load should consist of all current data contained within the existing surveillance systems at the time of the implementation of the Enterprise Surveillance System (ESS) .	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
PM003	1	The Vendor should store and maintain all project documentation in an agreed upon document repository such as a SharePoint location.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
PM004	1	The Vendor should make all project documentation accessible to all stakeholders identified by DHHR.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
PM005	1	The Vendor should conduct deliverable walk-throughs for all project deliverables prior to their submission, unless otherwise approved in writing by DHHR.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
PM006	1	The Vendor should work with DHHR to develop acceptance criteria for each project deliverable.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	139
PM007	1	The Vendor should submit each project deliverable to DHHR in final form and be ready for signature approval.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	140
PM008	1	The Vendor should submit each project deliverable to DHHR in accordance with each date in the project schedule.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	140
PM009	1	The Vendor should work with DHHR's project manager regarding all project related activities.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	140
PM010	1	The Vendor should submit all meeting materials to DHHR 24 hours prior to each meeting.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	140
PM011	1	The Vendor should capture meeting minutes at each meeting.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	140
PM012	1	The Vendor should distribute meeting minutes within 48 hours after a meeting occurs.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	140
PM013	1	The Vendor should provide DHHR weekly reports of testing status, including, but not limited to:	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
PM014	2	Metrics on the number of tests completed	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM015	2	Number of deferred or canceled tests	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM016	2	Results of the tests executed	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM017	2	Defects identified by severity level	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM018	2	Corrective actions taken	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM019	2	Others as defined by DHHR	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM020	1	The Vendor should provide DHHR with weekly, monthly, and quarterly project status reports to include:	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM021	2	General project status information	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM022	2	Milestone review	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM023	2	Issues and risks	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM024	2	Project metrics	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM025	2	Others as defined by DHHR	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM026	1	The Vendor should utilize a change management methodology that is based on industry standards and best practices and is approved by DHHR.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM027	1	The Vendor should propose a change management methodology including, but not limited to:	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM028	2	Approach across all project phases	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM029	2	Roles and responsibilities	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM030	2	Tools necessary to support change management	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM031	2	Reporting	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM032	2	Others as defined by DHHR	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141
PM033	1	The Vendor should propose an organizational change management methodology in support of the Enterprise Surveillance System (ESS) implementation.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	141

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
PM034	1	The Vendor should conduct requirements analysis sessions with DHHR during which the Vendor will review, refine, and seek approval for all requirements included in this Request for Proposal (RFP)	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	142
PM035	1	The Vendor should work with DHHR to design the system in accordance with the following design phases:	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM036	1	Preliminary System Design	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM037	1	Detailed System Design	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM038	1	Final System Design	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM039	1	The Vendor should be responsible for all costs associated with requirements analysis and solution design.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM040	1	The solution should be developed and implemented in accordance with the project work plan.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM041	1	The Vendor should detail their approach to both requirements validation and joint application design in support of requirements analysis and solution design activities.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	143
PM042	1	The Vendor should maintain a requirements traceability matrix (RTM) throughout the lifecycle of the project as defined in the Deliverables.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM043	1	The Vendor should provide all stakeholders identified by DHHR access to the requirements traceability matrix (RTM).	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM044	1	The Vendor should document in the requirements traceability matrix (RTM) where each requirement is accounted for within the following areas:	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM045	2	Design documentation	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM046	2	Workflows	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM047	2	Communications	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM048	2	Test conditions	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM049	2	Test scenarios	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM050	2	Test cases	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM051	2	Others as defined by DHHR	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM052	1	The Vendor should demonstrate through the requirements traceability matrix (RTM) that all documented and approved specifications have been traced throughout the design lifecycle.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
PM053	1	The Vendor should work with DHHR to fully understand the scope, purpose, and implications of each Request for Proposal (RFP) specification.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM054	1	The Vendor should identify and work with DHHR to resolve gaps between the Vendor and DHHR's understanding of a specification.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM055	1	The Vendor should propose and execute a plan for a phased approach to the solution's implementation, including all of the solution's components and modules.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	145
PM056	1	The Vendor should design the solution using an iterative development approach.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	146
PM057	1	The Vendor should review and test in logical functional groups of system components or modules.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	147
PM058	1	The Vendor should ensure that all design documentation is kept current throughout the contract.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM059	1	The Vendor should support all data migration related activities.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM060	1	The Vendor's data migration strategy should minimize risk and the disruption to other enterprise solutions affected with the solution's design and implementation.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM061	1	The Vendor should be responsible for the data cleansing of all data being migrated from the existing surveillance systems and converted to the new solution.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM062	1	The Vendor should propose an industry standard data migration and conversion methodology that includes but is not limited to:	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM063	2	Data analysis techniques	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM064	2	Checks and balances for ensuring data quality and accuracy	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM065	2	Data conversion tool sets	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM066	1	The Vendor should complete a full analysis of DHHR disease surveillance enterprise to understand what source solutions and corresponding data will need to be integrated into the solution.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM067	1	The Vendor should complete an assessment of the as-is and to-be environment to understand what reports will be needed in support of operations.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM068	1	The Vendor should develop and obtain DHHR approval of all reports identified as needed in support of operations.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM069	1	The Vendor should be prepared to work with DHHR to identify and integrate data from DHHR-identified surveillance systems.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM070	1	The Vendor should propose and manage a process by which data from additional solutions can be identified and integrated into the Enterprise Surviellance System (ESS).	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148
PM071	1	The solution should have the ability to support quality measures as defined by DHHR.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	148

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
PM072	1	The solution should support workflow development by the Vendor based on new processes defined by DHHR according to business needs as identified in the Change Management Plan.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	149
TE001	1	The Vendor should conduct the following types of testing in support of the solution:	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE002	2	Unit testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE003	2	Integration testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE004	2	Iterative functional testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE005	2	System integration testing (SIT)	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE006	2	Interface testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE007	2	Regression testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE008	2	End-to-end testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE009	2	Security testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE010	2	Performance testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE011	2	Usability/Accessibility testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE012	2	Browser testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE013	2	User acceptance testing (UAT)	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE014	2	Data conversion testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE015	2	Operational readiness testing (ORT)	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE016	2	Parallel testing	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE017	2	Other testing as identified by DHHR and/or Vendor	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	219
TE018	2	The Vendor should be prepared to assist DHHR with User acceptance testing (UAT).	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
TE019	1	The Vendor should be prepared to conduct User acceptance testing (UAT) in all cases whereby DHHR does not elect to conduct UAT.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE020	1	The Vendor should complete regression testing subsequent to, but not limited to, the following:	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE021	2	Deployment of new solution components	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE022	2	Integration of each solution component into the primary solution	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE023	2	Every migration of new build versions to each test environment	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE024	2	Solution fixes	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE025	2	Solution patches	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE026	2	Solution releases	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE027	2	Others as defined by DHHR	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	223
TE028	1	The Vendor should utilize a subset of system integration testing (SIT) scenarios representative of maximum functional and technical solution coverage for the purposes of regression testing.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	224
TE029	1	The Vendor should obtain approval from DHHR on which system integration testing (SIT) should be used for regression testing.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	224
TE030	1	The Vendor should utilize end-to-end test cases in support of regression testing.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	224
TE031	1	The Vendor should perform security testing on functional, technical, and infrastructure components to ensure the solution meets all State, DHHR, and Federal security requirements.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	224
TE032	1	The Vendor should propose security testing scenarios and/or cases to DHHR for their approval.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE033	1	The Vendor's performance testing methodology should allow for performance tests to be representative of the expected peak period volumes for solution operation.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE034	1	The Vendor's performance testing should occur on a production ready version of the solution.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE035	1	The solution's performance testing environment should mirror the final production solution specifications.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE036	1	The Vendor's usability/accessibility testing should include testing of the user interface for the following users:	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE037	2	Internal users	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
TE038	2	External users	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE039	2	Power users	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE040	2	Users with limited computer skills	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE041	2	Prospective new users	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE042	2	Users who will require solution training to complete their daily work	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE043	2	Users with disabilities	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE044	2	Others as defined by DHHR	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE045	1	The Vendor's usability/accessibility testing approach should account for testing for compliance with sections 504 and 508 of the Americans with Disabilities Act (ADA).	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	225
TE046	1	The Vendor's browser testing should be performed using a minimum of a subset of system integration test scripts that ensures maximum solution coverage.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	226
TE047	1	The Vendor should supply the data, environments, and test scripts necessary to support user acceptance testing (UAT).	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	226
TE048	1	The Vendor should work with DHHR to define user acceptance testing (UAT) cases representative of the full solution environment.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	226
TE049	1	The Vendor should be responsible for working with DHHR to define the user acceptance test (UAT) scenarios DHHR deems as critical for UAT.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	226
TE050	1	The Vendor should be responsible for drafting all user acceptance testing (UAT) cases.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	226
TE051	1	The Vendor should review all user acceptance testing (UAT) results with DHHR, and a strategy for mitigation should be agreed upon for each defect based on the defect's severity, priority, and impact.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	227
TE052	1	The Vendor should discuss and obtain DHHR's approval on data conversion exception tolerance levels prior to the commencement of data conversion testing.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	227
TE053	1	The Vendor should review and obtain DHHR's approval of data conversion test results prior to commencement of production data conversion.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	228
TE054	1	The Vendor should work with DHHR to define an operational readiness testing (ORT) approach that encompasses all DHHR and Vendor responsible solution operational processes and procedures.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	228
TE055	1	The vendor should provide a user interface that has been tested for usability.	Testing	Will Meet	Attachment I - Implementation Specifications Approach	4	228

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
TR001	1	The Vendor should provide a sandbox training environment for authorized solution users within the solution that uses de-identified data and is compliant with the Health Insurance Portability and Accountability Act (HIPAA), DHHR, and other State and federal regulations.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	188
TR002	1	The Vendor should develop and maintain a sandbox environment for training that mirrors production.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	189
TR003	1	The solution's training environment should have the capacity to support all components of the solution.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	189
TR004	1	The Vendor should ensure that no aspect of training uses protected health information (PHI), personally identifiable information (PII), and that the training materials and environments are compliant with the Health Insurance Portability and Accountability Act (HIPAA), DHHR, and other State and federal regulations.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	189
TR005	1	The Vendor should provide the necessary training and ongoing support to all DHHR authorized solution users participating in data conversion validation and user acceptance testing (UAT) of the solution components, reporting options, and data structure.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	189
TR006	1	The Vendor should provide initial and ongoing training and associated reference documentation to authorized solution users for the duration of the contract, at the request of DHHR.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	189
TR007	1	Throughout the duration of the contract, the Vendor should provide regular training sessions for authorized solution users on updated or new functionality and/or business processes related to the solution, at the request of DHHR.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	192
TR008	1	The Vendor should track and provide confirmation of attendance at all training sessions and report on which versions of training materials were presented at the training.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	193
TR009	1	The Vendor should provide evaluation feedback forms to training participants at the end of each training and provide summaries of these evaluations to DHHR with recommendations for changes, if applicable.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	193
TR010	1	The Vendor should provide hands-on, in-person, remote, and/or online training.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	194
TR011	1	The Vendor should provide DHHR-approved, training and/or guide books addressing all components of the solution and provide to DHHR at least four (4) copies of each book for distribution as well as online electronic copies.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	195
TR012	1	The Vendor should ensure that all DHHR-approved training documentation for the solution is posted where authorized solution users can access it on demand.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	195
TR013	1	The Vendor should propose a role-based training approach.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	195

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
TR014	1	The Vendor should develop training materials that support each training.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	197
TR015	1	The Vendor should provide as-is necessary the training venues and equipment to best ensure the training's success.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	197
TR016	1	The Vendor should provide user acceptance testing (UAT) training.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	198
TR017	1	The Vendor should provide train-the-trainer training sessions.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	198
TR018	1	The Vendor should support all aspects of training that DHHR and Vendor agree are key towards the trainings delivery.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	198
TR019	1	The solution's training environments should be reflective of real-world data.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	198
TR020	1	The solution's training environments should include end-to-end training on processes during applicable phases of the project.	Training	Will Meet	Attachment I - Implementation Specifications Approach	1.7	198
OP001	1	The Vendor should maintain and ensure contract personnel staffing levels and competencies to support software applications, data integrity, analytics, user training, and contract administration pursuant to Service Level Agreements (SLAs).	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	237
OP002	1	The Vendor should supply key staff resumes to DHHR for review and approval prior to key staff beginning work under the contract.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	237
OP003	1	The Vendor should supply resumes for key staff substitutions to DHHR for review and approval prior to key staff substitutions performing any work under the contract.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	237
OP004	1	The Vendor should collaborate with DHHR to develop and maintain a process for authorized solution user support.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP005	1	The Vendor should maintain and ensure contract personnel staffing levels and competencies to support software applications, data integrity, analytics, user training, and contract administration pursuant to Service Level Agreements (SLAs).	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP006	1	The Vendor should maintain adequate staff to perform operational functions including, but not limited to:	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP007	2	Identify a primary and back-up point of contact for day-to-day operations	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP008	2	Maintain effective communications of project updates and problem resolutions	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP009	2	Maintain current documentation of operational processes and notify designated DHHR staff of operational issues and remediation plans within the designated timeframes pursuant to DHHR-defined Service Level Agreements (SLAs)	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
OP010	2	Ensure quality control procedures are in place and utilized and that issues are resolved when identified through quality checks	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP011	2	Adhere to project and report delivery timeframes	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP012	2	Conduct business use analyses to prepare operational reports	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP013	2	Work with DHHR to automate operational reports	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP014	2	Others as defined by DHHR and pursuant to Service Level Agreements (SLAs)	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP015	1	The Vendor should maintain adequate staff to perform technical functions including, but not limited to:	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP016	2	Maintain systems by researching and resolving problems	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP017	2	Maintain system and network integrity and security	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP018	2	Develop and maintain configuration and customization of the solution, solution tools, and rules engine	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP019	2	Establish, manage, and maintain the solution data exchanges	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP020	2	Maintain file specifications for solution data exchanges	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP021	2	Establish, manage, and maintain solution interfaces	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP022	2	Assure that new processes/new technology installations minimize negative impact on the system and authorized solution users	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP023	2	Provide regular status updates to DHHR on system issues and system updates	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP024	2	Maintain a system of checks and balances such that the underlying data are consistent, complete, and accurate	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
OP025	2	Develop and gather requirements	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP026	2	Design, implement, and maintain solution architecture	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP027	2	Monitor solution performance and resolve issues	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP028	2	Analyze test plans, technical specifications, and test results	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP029	2	Provide system documentation	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP030	2	Others as defined by DHHR and pursuant to Service Level Agreements (SLAs)	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP031	1	The Vendor should participate in project meetings as directed by DHHR.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP032	1	The Vendor should work collaboratively with DHHR to explain and support ESS Vendor-based operations and reporting to stakeholders, auditors, and other parties when necessary.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP033	1	The Vendor should participate in audit activities including, but not limited to:	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP034	2	Attending meetings	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP035	2	Running reports	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP036	2	Providing documentation	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP037	2	Providing access to all system components and modules as requested by DHHR	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP038	1	The Vendor should support the State with data integration needs prior to and subsequent to the solution's implementation.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	238
OP039	1	The Vendor should provide DHHR with a Data Management Plan as defined in Appendix 2 - Deliverables and Milestones Dictionary.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
OP040	1	The Vendor should agree to perform according to approved Service Level Agreements (SLA) and identified Key Performance Indicators (KPI) with associated metrics in the areas of system availability, performance, data quality, and problem management, and should consent to DHHR retaining a percentage of payment if agreed-upon metrics are not achieved.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP041	1	The Vendor should develop, maintain, and implement a DHHR-approved System Operations Plan as defined in Appendix 2 - Deliverables and Milestones Dictionary.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP042	1	The Vendor should pay and arrange for an annual Statement on Standards for Attestation Engagements, System, and Organization Controls (SOC) 1, Type II audit, using the most current version of the audit, which should cover work performed by the Vendor at the Vendor's facility and data center sites.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP043	1	The Vendor should submit the annual Statement on Standards for Attestation Engagements, System and Organization Controls (SOC) 1, Type II audit report, using the most current version of the audit, to DHHR for approval with an action plan to remediate findings within a timeframe agreed upon by the Vendor and DHHR.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP044	1	The solution should provide an authorized solution user test environment (sandbox) to test new workflows and reports prior to execution in production.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP045	1	The solution should have test environments (sandboxes) that include metadata necessary to test new workflows and reports prior to execution in production.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP046	1	The solution should have a test environment (sandbox) that can be refreshed as requested by DHHR.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP047	1	The solution should utilize the same hardware, operating system, and relational database management in the test environments (sandboxes) that are used in production.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications	1	239
OP048	1	The solution should have test environments (sandboxes) that mirror the production environment.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	239
OP049	1	The solution should supply access to the user acceptance testing (UAT) environment for authorized solution users.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
OP050	1	The Vendor should provide access for authorized solution users to all solution test environments as requested by DHHR.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
OP051	1	The solution should have a development environment to develop and unit-test all software contained within the solution.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
OP052	1	The solution's user acceptance testing (UAT) environment should have the ability to support all components of the solution.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240

Specifications				Vendor Response			
Spec ID #	Hierarchy Level	Specification Text	Subject Matter Area	Capability Assessment	Attachment	Section	Page #
OP053	1	The solution's unit test environment should have the ability to perform full-scale system integration testing (SIT) for the solution.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
OP054	1	The solution should have a unit test environment that mirrors production in hardware, software stack, and data volumes.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
OP055	1	The solution should have a unit test environment that exists for all relevant components.	Operations	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
DR001	1	The solution should provide sufficient transaction logging and database back-up to allow it to be restored. If multiple databases are used for work item routing and program data, restoring the solution should ensure that databases are synchronized to prevent data corruption.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR002	1	The solution should have the ability to perform online backups without interruption to production operations, according to a schedule agreed upon by DHHR.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR003	1	The solution should allow continued use of the system during back-up and perform back-ups during non-peak processing hours, to minimize the impact to operational activities.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR004	1	The solution should support data freezing.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR005	1	The Vendor should maintain an operational back-up power supply capable of supporting vital functions.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR006	1	The Vendor should equip facilities with proper safeguards for fire prevention, fire detection, and fire suppression that are consistent with local fire codes.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR007	1	The Vendor should equip fire detection and alarm systems with uninterruptable power supply.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR008	1	The Vendor should have a remote backup facility that is georedundant to the the primary data center.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR009	1	The Vendor should conduct an annual disaster recovery exercise at a mutually agreed upon time and provide the results to the designated DHHR staff. DHHR staff should be invited to be included in these exercises.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243
DR010	1	The Vendor should store all backup copies in a DHHR-approved backup storage location for a period of time specified by DHHR.	Solution Back-up, Disaster Recovery, and Failover	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	243

Vendor Response - Capability Assessment	
Capability Assessment	Description
Will Meet	Specification will be met by the Vendor
Will Not Meet	Specification will not be met by the Vendor

Response Templates	
Response Template	Description
Attachment A	Cost Workbook
Attachment B	Title Page, Executive Summary, Subcontractor Letters, and Table of Contents
Attachment C	Vendor Qualifications and Experience
Attachment D	Project Organization and Staffing
Attachment E	Initial Work Plan
Attachment F	Mandatory Requirements
Attachment G	Business Specifications Approach
Attachment H	Technical Specifications Approach
Attachment I	Implementation Specifications Approach
Attachment J	Maintenance and Operations Specifications Approach
Attachment K	Terms and Conditions

Instructions for Completion of Attachment F - Mandatory Requirements

1. The Vendor must note compliance with each mandatory requirement listed in the ***Vendor's Disposition*** column of *Tab 3 - Mandatory Req & Responses*, using only the values that appear in the drop-down list.
2. *Vendor's Disposition* values are outlined below:
    1. "Will Meet": Vendor agrees to the mandatory requirement.
    2. "Will Not Meet": Vendor declines to meet the mandatory requirement.
3. All mandatory requirements must contain one of the values identified above. Any mandatory requirement without a ***Vendor's Disposition*** response value will be considered to be "Will Not Meet."
4. If appropriate, the Vendor must provide the ***Attachment***, ***Section***, and ***Page Number(s)*** where their detailed narrative response for each mandatory requirement resides, providing the DHHR with a crosswalk, and ensuring that each mandatory requirement is addressed. Be advised that the ***Attachment*** column has been pre-populated with the location that the DHHR anticipates the narrative response to reside, however it is up to the Vendor to update that column accordingly should the Vendor respond to a mandatory requirement in a different location.

Tabs in this spreadsheet			
1. Worksheet Instructions	Instructions for completion of this RFP supplement.		
2. Worksheet Information	This tab including the information about the contents of this workbook.		
3. Mandatory Req Responses	Contains the mandatory requirements and all related data.		
4. Code Values	Contains coded values for use in the mandatory requirements tab, and explanations as appropriate.		
Columns on the specification Responses Tab			
Section	Column	Description	Corresponding Code Values
Mandatory Requirements	*Req ID #*	The unique ID of the mandatory requirement.	N/A
	Specification Text	The text of the mandatory requirement.	N/A
Type	*N/A*	How the specification is categorized in the RFP	N/A
Vendor Response Area	*Vendor's Disposition*	Vendor is expected to indicate their compliance with the specification using one of the supplied values.	Vendor Response - Disposition
	Attachment	Vendor is expected to provide a reference to the appropriate RFP attachment where more detailed information about the specification can be found. The expected attachment is identified for Vendor and State convenience.	Attachment
	Section and Page Reference	Vendor is expected to provide a reference to the appropriate Section and Page Number within the specified Attachment where more detailed information about the mandatory requirement can be found.	N/A

Mandatory Requirements				Vendor Response			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR001	1	The vendor must be incorporated as a business in any state for at least three years.	Locations	Will Meet	Attachment B - Title Page, Executive Summary, and Subcontractor Letters	1	17
MR002	1	The Vendor, all business partners, subcontractors, independent contractors, and other entities supporting the Vendor in delivery of the services defined in this contract must perform all work associated with this contract within the continental United States or U.S. Territories, as established in requirements related to handling of federal tax information (FTI) contained in Internal Revenue Service (IRS) Publication 1075, Section 5.3 Access to FTI via State Tax Files or Through Other Agencies under the authority granted by United States Code §6013(p)(4)(C) At no time shall information governed by privacy laws and regulations be used, maintained, transmitted, or caused to be transmitted outside of the United States.	Locations	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR003	1	The Vendor must host the Enterprise Surveillance System (ESS) and maintain a secure site(s) and secure secondary geo-redundant site(s) within the continental United States. Off-site is defined as a physically separate location based on current industry best practices. These facilities must be located in the continental United States, as established in requirements related to handling of federal tax information (FTI) contained in Internal Revenue Service (IRS) Publication 1075, Section 5.3 Access to FTI via State Tax Files or Through Other Agencies under the authority granted by United States Code §6013(p)(4)(C).	Locations	Will Meet	Attachment H - Technical Specifications Approach	2	97
MR004	1	Prior to contract execution, the Agency will conduct a review of all hardware, software, and communication components. The Vendor must ensure compatibility with the most current West Virginia Office of Technology (WVOT) supported versions and standards.	Compatibility	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR005	1	The Vendor must agree to incorporate all applicable current and future coding standards and formats and legislated or program necessary data and transport requirements to ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and appropriately employ new standards and requirements as they occur including, but not limited to:	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR006	2	RxNorm	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR007	2	Health Level 7 (HL7)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR008	2	Systematic Nomenclature of Medicine (SNOMED)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR009	2	Patient Protection and Affordable Care Act (PPACA)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR010	2	Logical Observation Identifiers Names and Codes (LOINC)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR011	2	International Classification of Diseases - Version 10 (ICD-10)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR012	2	Health Insurance Portability and Accountability Act (HIPAA) v5010	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR013	2	Health Information Technology for Economic and Clinical Health Act (HITECH)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR014	2	Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS)	Compatibility	Will Meet	Attachment G - Business Specifications Approach	1	67
MR015	1	The Vendor must provide facilities for the recovery of Design, Development, and Implementation (DDI) or operations activities in the event of a disaster that disrupts DDI or operations as described in the Vendor's Disaster Recovery and Business Continuity Management Plan which will be developed by the Vendor and approved by the Agency. The Vendor must provide resources necessary to:	Disaster Recovery	Will Meet	Attachment H - Technical Specifications Approach	1	97
MR016	2	Recover critical services and data in accordance with the Recovery Time Objective (RTO) and Recovery Point Objectives (RPO) to be approved by the Agency and documented in the Disaster Recovery and Business Continuity Management Plan	Disaster Recovery	Will Meet	Attachment H - Technical Specifications Approach	1	97
MR017	2	Meet the approved Service Level Agreements listed in Appendix 5: Service Level Agreements & Performance Standards	Disaster Recovery	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130
MR019	1	The Vendor must comply with the baseline security controls for moderate impact information systems as recommended by the National Institute of Standards and Technology (NIST), Code of Federal Regulations.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130
MR018	1	The vendor must have established privacy, security, and auditing policies and procedures documented in the Data Security, Privacy and Confidentiality Plan, Privacy Impact Analysis, and Security Plan to be approved by the Agency.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130

Mandatory Requirements				Vendor Response			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR021	1	The vendor must provide secure data encryption while data are at rest and in transit.	Security	Will Meet	Attachment H - Technical Specifications Approach	5	130
MR022	1	The Vendor must include in the Security Plan applicable NIST SP 800-53 security control responsibilities noting which security controls are inherited by the Vendor, implemented by the Agency, or shared by both parties. The Security Plan must be maintained by the Vendor and outline the following:	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR023	2	Non-compliant and required security controls	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR024	2	Applied mitigations	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR025	2	Plan to correct deficiencies	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR026	2	Cyber security procedures and management plans	Security	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR027	1	The Vendor must agree to incorporate all requirements mandated through Federal and State regulations and legislation, including new reporting requirements. The Vendor must ensure that the Enterprise Surveillance System (ESS) is current in its ability to accept and employ new standards and requirements as they occur. Formalized change control will be used for all such changes, during all phases of the project as defined in the Change Management Plan.	Federal and State Regulatory Changes	Will Meet	Attachment G - Business Specifications Approach	6	96
MR028	1	The Vendor must provide right of access to systems, source code, and facilities to the Agency or its designee and federal personnel to conduct audits and inspections. The Vendor must provide access to data, systems, and documentation required by auditors and inspectors.	Right of Access	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR029	1	The Vendor will operate the Enterprise Surveillance System (ESS), perform all functions described in the RFP, and continue all operations from the date of acceptance of each release, including any optional additional periods or extensions.	Operations	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR030	1	The Vendor must perform according to approved Service Level Agreements (SLAs) and identified Key Performance Indicators (KPIs) with associated metrics in the areas listed in Appendix 5: Service Level Agreements & Performance Standards.	Compliance with Service Level Agreements	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR031	1	The Vendor must deduct any amount due from future payments if the agreed upon SLAs are not met. The Agency reserves the right to seek any other remedies under the Contract.	Compliance with Service Level Agreements	Will Meet	Attachment K - Terms and Conditions Response Template	4	247
MR032	1	The Vendor must use industry-standard professional project management standards, methodologies, and processes to ensure the project is delivered on time, within scope, within budget, and in accordance with the Agency's quality expectations. The Agency utilizes the Project Management Institute (PMI) PMBOK methodology.	Project Management	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR033	1	The Vendor must provide project status information to the Agency and the Enterprise Surveillance System (ESS) Project Management Office (PMO) within the required timeframes and in the agreed-upon format, as defined in the approved Project Management Plan.	Status Reporting	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR034	1	The Vendor must update deliverables at the request of the Agency to align with changes in approach or methodology, or to include new or updated information that was not available at the time the deliverable was initially submitted and approved.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR035	1	The Vendor must submit updated deliverables for Agency approval based on the Project Schedule approved by the Agency.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR036	1	The Vendor must submit substantive changes to deliverables identified in Appendix 2: Deliverables and Milestones Dictionary to the Agency for review and approval within thirty (30) calendar days of the proposed change.	Deliverable Updates	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR037	1	The Vendor must provide compliance support services to include providing up-to-date, accurate, and thorough documentation and reporting for regulatory and State compliance auditing.	Audit Compliance Support and Deliverables	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR038	1	The vendor must provide a solution as a software-as-a-service (SaaS) with current updates, releases, and patches.	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	229

Mandatory Requirements				Vendor Response			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR039	1	The vendor must utilize cloud hosting in the United States with geo-redundant storage.	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	2	241
MR040	1	The vendor must provide technical and data design and architecture that meets industry best practices.	Technical	Will Meet	Attachment H - Technical Specifications Approach	1	99
MR041	1	The vendor must provide a solution that has been successfully implemented for communicable disease surveillance, in at least two states for a minimum of two years, to include, at a minimum:	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR042	2	Contact tracing	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR043	2	Case investigation	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR044	2	Case management	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR045		Outbreak management or integration with outbreak management system	Technical	Will Meet	Attachment C - Vendor Qualifications and Experience	2	18
MR046	1	The vendor must have the capacity to support:	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR047	2	1000 active users	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR048	2	600 concurrent users	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR049	2	50,000 lab results per day	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR050	2	2,500 cases reports per day	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR051	2	Increased users, lab results and cases in the event of pandemics and/or outbreaks.	Technical	Will Meet	Attachment J - Maintenance and Operations Specifications Approach	1	240
MR052	1	The vendor must support definitions of user with assigned levels of access including:	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR053	2	Viewing	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR054	2	Data entry	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR055	2	Editing	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131

Mandatory Requirements				*Vendor Response*			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR056	2	Auditing	Technical	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR057	1	The vendor must provide a 508 compliant, web-based, browser agnostic, User Interface (UI) with person- and case-centric view options, easy navigation, and robust search capabilities.	Technical	Will Meet	Attachment H - Technical Specifications Approach	3	108
MR058	1	The vendor must provide the capability to manage look up tables, within the system, containing identifiers and attributes for reporting organizations including:	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR059	2	Local health departments	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR060	2	Healthcare providers	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR061	2	Clinical Laboratory Improvement Amendments (CLIA) certified laboratories	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR062	1	The vendor must provide the ability receive data for:	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR063	2	State reportable diseases and conditions (http://dhhr.wv.gov/oeps/disease/Reporting/Documents/reportable_disease_chart.pdf)	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR064	2	National notifiable diseases and conditions (https://wwwn.cdc.gov/nndss/conditions/notifiable/2021/infectious-diseases/))	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR065	2	Newly identified diseases	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR066	2	And to process surveillance tasks using workflows based on pre-defined rules by:	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR067	3	Disease Type	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR068	3	Contact status	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR069	3	Case status	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR070	3	Jurisdiction	Functionality	Will Meet	Attachment G - Business Specifications Approach	1	68
MR071	1	The vendor must provide multiple methods for data submission including web-based data entry; batch upload for pdf, jpg, gif, csv, tsv, and excel formats; html; aggregate reports; and the latest standard HL7 messages for electronic laboratory reports and electronic case reports.	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR072	2	Web-based data entry	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR073	2	And batch upload for:	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR074	3	Pdf	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR075	3	Jpg	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR076	3	Gif	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR077	3	Csv	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107

Mandatory Requirements				Vendor Response			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR078	3	Tsv	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR079	3	Excel formats	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR080	2	Html	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR081	2	Aggregate reports	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR082	2	Latest standard HL7 messages for:	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR083	3	Electronic laboratory reports (ELRs)	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR084	3	Electronic case reports (eCRs)	Functionality	will Meet	Attachment H - Technical Specifications Approach	2	107
MR085	1	The vendor must utilize a standard message transport protocol for HL7 messages including, but not limited to:	Functionality	Will Meet	Attachment H - Technical Specifications Approach	2	107
MR086	2	PHINMS	Functionality	Will Meet	Attachment H - Technical Specifications Approach	2	107
MR087	2	SFTP	Functionality	Will Meet	Attachment H - Technical Specifications Approach	2	107
MR088	1	The vendor must have the ability to push a copy of the database to an Agency server in a SQL format at least twice daily.	Data and Reporting	Will Meet	Attachment G - Business Specifications Approach	6	96
MR089	1	The vendor must have the ability to migrate data from legacy systems to new solution.	Data and Reporting	Will Meet	Attachment I - Implementation Specifications Approach	1	149
MR090	1	The vendor must provide metadata, based on audit logs, to indicate changes in data and records including, but not limited to: users, actions, date, time, and changes such as new or updated records.	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR091	2	Date	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR092	2	Time	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR093	2	Users	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR094	2	And actions, including but not limited to:	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR095	3	Additions	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR096	3	Updates	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131
MR097	3	Deletions	Data and Reporting	Will Meet	Attachment H - Technical Specifications Approach	5	131

Mandatory Requirements				Vendor Response			
Req ID #	Hierarchy Level	Specification Text	Type	Vendor's Disposition	Attachment	Section	Page #
MR098	1	The vendor must provide the ability to provide bi-directional data exchange and/or integration with other systems internal and external to public health including, but not limited to:	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR099	2	Electronic health records	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR100	2	Laboratory information systems	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR101	2	Electronic death registry system (EDRS)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR102	2	Enhanced HIV/AIDS Reporting System (eHARS)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR103	2	Centers for Disease Control and Prevention (CDC)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR104	2	West Virginia Immunization Information System (WVIIS)	Integration	Will Meet	Attachment H - Technical Specifications Approach	2	108
MR105	2	West Virginia Health Information Network (WVHIN) health information exchange	Integration	will Meet	Attachment H - Technical Specifications Approach	2	108

Vendor's should not edit this worksheet.

Vendor Response - Disposition	
Vendor's Disposition	**Description**
Will Meet	Mandatory requirement will be met by the Vendor
Will Not Meet	Mandatory requirement will not be met by the Vendor

Attachments	
Response Template	**Description**
Attachment A	Cost Proposal
Attachment B	Title Page, Executive Summary, and Subcontractor Letters
Attachment C	Vendor Qualifications and Experience
Attachment D	Project Organization and Staffing Approach
Attachment E	Initial Work Plan
Attachment F	Mandatory Requirements
Attachment G	Business Specifications Approach
Attachment H	Technical Specifications Approach
Attachment I	Implementation Specifications Approach
Attachment J	Maintenance and Operations Specifications Approach
Attachment K	Terms and Conditions Response Template