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WV Purchasing Division

January 11, 2022

Attn: Crystal G. Hustead
Senior Buyer, State of West Virginia
Purchasing Division
2019 Washington Street East
Charleston, WV 25305
Email: crystal.g.hustead@wv.gov; Tel: 304.558.2402

Dear Ms. Hustead:

HealthEC would like to thank the State of West Virginia Bureau for Medical Services (BMS) for this opportunity to provide our response to your Solicitation # CRFI 0511 BMS2200000001 regarding procurement strategies for implementing a Medicaid Enterprise System (MES).

Enclosed please find a USB thumb drive containing an electronic version of HealthEC's response, which was faxed to your office on January 10, 2022. Please confirm receipt of this submission package to Robert.Osburn@HealthEC.com.

Should you have any questions or if we can provide additional information, please do not hesitate to contact me. Again, thank you for this opportunity.

Sincerely,

Robert H Osburn

Robert Osburn
Chief Operating Officer
615.585.8311
Robert.Osburn@HealthEC.com

# HealthEC Response to CRFI BMS2200000001 Medicaid Enterprise System (MES)

State of West Virginia
Department of Health and Human Resources
Bureau for Medical Services
January 11, 2022

Prepared by

HealthEC®

Contact Information
Robert Osburn
Chief Operating Officer
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# Title Page

| | |
|---|---|
| RFI Subject | Request For Information-Medicaid Enterprise System (MES) |
| RFI Number | CRFI 0511 BMS2200000001 |
| Vendor's Name | HealthEC, LLC |
| Business Address | 343 Thornall Street, Suite #630, Edison, NJ 08837 |
| Telephone Number | 732.271.0600 |
| Fax Number | 732.271.0271 |
| Name of Contact Person | Robert Osburn |
| Contact Telephone Number | 615.585.8311 |
| Contact Email Address | Robert.Osburn@healthec.com |
| Vendor Signature | |
| Date | January 11, 2022 |

# Legal Disclaimer

This response is a nonbinding expression of interest only and is not intended to create a binding commitment on either party unless and until a definitive agreement has been executed between the parties.

Information regarding potential future products and services, or future versions of existing products and services, are intended to outline HealthEC's general product direction, and should not be relied upon in making a purchasing decision or construed as a commitment or legal obligation to deliver any particular functionality unless specifically stated as included in this proposal.

Dated: January 11, 2022

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January 11, 2022

Attn: Ms. Crystal G. Hustead
Senior Buyer, State of West Virginia
Purchasing Division
2019 Washington Street East
Charleston, WV 25305
Email: crystal.g.hustead@wv.gov; Tel: 304.558.2402

Dear Ms. Hustead:

HealthEC would like to thank the State of West Virginia Bureau for Medical Services (BMS) for this opportunity to provide the attached response to your Request for Information regarding procurement strategies for implementing a Medicaid Enterprise System (MES).

As a global population health management (PHM) company based in Edison, New Jersey, HealthEC's mission is to help providers meet the Centers for Medicare & Medicaid Services' Triple Aim goals by boosting quality, improving member outcomes, and reducing costs by leveraging our industry-leading capabilities. Our platform integrates data from diverse sources and delivers the data granularity with dashboards and prescriptive analytics needed to facilitate a better understanding and more efficient view of the healthcare enterprise. We have successfully implemented our modular PHM platform for a multiplicity of clients, including managed care organizations (MCOs), state Medicaid and government entities, Federally Qualified Health Centers (FQHCs), accountable care organizations (ACOs), managed services organizations (MSOs), clinically integrated networks (CINs), integrated delivery networks (IDNs), Oncology Care Model (OCM) organizations, health plans, hospitals and health systems, payer organizations, and providers/practice groups in a variety of risk-structured and modular settings.

In 2019, HealthEC was named Best in KLAS for population health by KLAS Research and was recognized as the only vendor for having all social determinants of health (SDoH) capabilities. Using our proven, modular, commercial off-the-shelf (COTS) solution, HealthEC can integrate data from a multiplicity of sources — using our 400+ prebuilt extensions — and can equip BMS with the tools needed to better understand the complexities of its Medicaid population and the services provided. Additionally, our implementation timeframes and associated costs are unparalleled in the industry.

HealthEC has included a signed copy of the RFI Review Certification Form as well as signed copies of the Addendum Acknowledgement forms for Addendums 1, 2, and 3 following this letter.

Should you have any questions or if we can provide additional information, please do not hesitate to contact me. Again, thank you for this opportunity.

Sincerely,

Robert Osburn
Chief Operating Officer
615.585.8311
Robert.Osburn@HealthEC.com

# Request for Information
# CRFI BMS2200000001
# Medicaid Enterprise System (MES)

By signing below, I certify that I have reviewed this Request for Information in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this response for review and consideration on behalf of my organization.

HealthEC, LLC

(Company)

Robert Osburn, Chief Operating Officer

(Representative Name, Title)

Tel: 615.585.8311, Fax: 732.271.0271

(Contact Phone/Fax Number)

January 7, 2022

(Date)

**ADDENDUM ACKNOWLEDGEMENT FORM**
**SOLICITATION NO.:** BMS2200000001

**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)

| | | | |
|---|---|---|---|
| [✓] | Addendum No. 1 | [ ] | Addendum No. 6 |
| [ ] | 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.

HealthEC, LLC
Company

Robert H Osburn
Authorized Signature

January 7, 2022
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

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# Corporate Overview

Solely focused on the healthcare market, HealthEC, LLC (HealthEC) is on a mission to help its customers succeed with value-based care that is measurable and actionable. We have extensive experience integrating information from diverse sources to provide secure, quality data management solutions for a multiplicity of clients that include managed care organizations (MCOs), state Medicaid and government entities, Federally Qualified Health Centers (FQHCs), accountable care organization (ACOs), managed services organizations (MSOs), clinically integrated networks (CINs), integrated delivery networks (IDNs), Oncology Care Model (OCM) organizations, health plans, hospitals and health systems, payer organizations, associations, and providers/practice groups in a variety of risk-structured settings. With our breadth of healthcare market experience and innovative, modular platform, HealthEC can assist the Bureau for Medical Services (BMS) in achieving its Medicaid Information Technology Architecture (MITA) capability goals, such as improving efficiency and effectiveness of its Medicaid program; measuring outcomes and performance of both member and provider populations at a granular level by disease state; reducing costs, and improving the management of Medicaid, provider, and member data.

***HealthEC believes that the truest measure of an organization's ability to advance the objectives of its clients is the positive results achieved by its customers.***

HealthEC's leadership expertise dates to the 1990s with the founding of Med-Link, a pioneer in using web-enabled platforms for healthcare transaction processing that was eventually acquired by Emdeon/WebMD. In 2013, building on our expertise in data exchange, analytics, and workflow, HealthEC developed a full spectrum of solutions to help organizations deliver on the promise of value-based care — improving the quality of care for a population of patients/members through prevention, care coordination, and chronic care management while reducing the total cost of care. Today, HealthEC's staff of over 300 employees and contractors include customer success managers (CSMs), developers, engineers, implementation professionals, data analysts, trainers, and support personnel. Our highly knowledgeable employees have enabled our solution to parse, translate, process, and analyze millions of healthcare claims in a wide variety of industry-standard and proprietary formats to deliver the data granularity and prescriptive analytics our clients need to facilitate a better understanding of their healthcare ecosystems.

- In 2019, HealthEC was named Best in KLAS for PHM by KLAS Research and was cited as the only vendor to excel at strategic guidance, and in 2018 and 2019, KLAS recognized us for our exceptional leadership in PHM partnerships. Most recently, KLAS identified HealthEC as a top-rated PHM software vendor due to our social determinants of health (SDoH) capabilities. We have maintained similar rating numbers for 2020 and 2021.
- HealthEC was recently awarded a five-out-of-five-star rating in an overall assessment for Medicaid effectiveness by the *Medicaid Black Book*, published by Mostly Medicaid.
- A 2020 report from Chilmark Research, *Addressing Social Determinants of Health: IT Solutions to Engage Community Resources*, spotlights HealthEC as an effective solution in connecting healthcare providers with community partners, resulting in significant reductions in unnecessary care expenditures and improvements in patient health.
- HealthEC provides the electronic medical data warehouse that prices services for one of the largest claims clearinghouses in the north central United States.

## MEDICAID MANAGEMENT INFORMATION SYSTEM (MMIS) DATA EXPERIENCE

An East Coast state Medicaid agency partnered with HealthEC to develop a full-featured Medicaid data warehouse that integrated both claims and clinical data from a multiplicity of sources to provide a comprehensive view of both provider and member performance. The Medicaid data warehouse was constructed and implemented in a matter of months after the team migrated, scrubbed, crosswalked, and normalized the previous 10 years of Medicaid data in 12 weeks, saving the agency millions of dollars that would have been required for a self-developed solution. In January 2019, the Medicaid data warehouse was certified for reuse by the Centers for Medicare & Medicaid Services (CMS) on the first pass. To date, over 222 million claim lines have been analyzed, enabling the agency to drive policy changes and providing the necessary framework for other state Medicaid agencies to develop their own Medicaid data warehouse.

Another state Medicaid program utilizes HealthEC's platform to identify quality measures, address care gaps related to those quality measures, and support individualized member care strategies for providers participating in the Patient-Centered Medical Home (PCMH) and behavioral programs. As part of the platform, HealthEC constructed a data warehouse to store relevant data and report on the analytics of the programs served.

We also aggregate and normalize MMIS and other data to provide actionable information for organizations to support MCO oversight and contract compliance, health information exchange (HIE) data integration, and care coordination programs that integrate claims, clinical, and SDoH information.

## BUSINESS AREAS AND SUPPORTING DATA ELEMENTS

HealthEC's software-as-a-service (SaaS)-based, modular, multi-cloud solution can meet state reporting, quality, and care coordination needs, providing clients with a robust view of their healthcare ecosystem. Some of the challenges we can help with include:

- Addressing underlying health costs that drive higher insurance premiums in your State
- Overseeing your MCOs to enforce contract performance, access and delivery of care, and prospective and concurrent risk by member
- Addressing homelessness in your cities
- Evaluating the results of your value-based care program initiatives
- Curbing the opioid and controlled drug use crisis
- Analyzing disease state vulnerability by specific disease state and ZIP code

HealthEC's solution addresses the objectives of MITA Business Areas such as Care Management, Financial Management, Member Management, Operations Management, and Provider Management. Our CMS-certified modular Medicaid data warehouse for one of our Medicaid clients is in alignment with MITA's Information and Technical Architectures as well as CMS's Standards and Conditions for Medicaid IT.

Our platform ingests data from payer and clinical sources, which is often received in a myriad of different formats, and then normalizes, maps, and validates them. Proprietary algorithms are executed to organize the data into over 300 precalculated cubes to support care management, quality measures, and analytics reporting. The result is a complete member-centric, chronological view of claims, clinical, and lab history for each member. These combined data allow for streamlined access to actionable point-of-service, care coordination, PHM, and program administration information.

# Section 4.2 Questions

**4.2.1 Please describe any elements BMS should consider incorporating into its vision, planning, and implementation for a modernized, modular MES.**

HealthEC offers the following considerations to help ensure a successful implementation for a modernized, modular MES:

1. **Define clear goals and objectives.** Document clear goals and objectives for not only the BMS' envisioned initial stage of a Medicaid Enterprise System (MES) but also for its planned expansion into a mature, modular enterprise solution.
2. **Plan ahead.** Adopt a proactive approach to fulfilling MITA requirements and use the opportunity to align the State's goals with the changes that new technologies can offer while keeping in mind the goals and desired functionality of the mature system.
3. **Determine data needs and required stakeholders.** Examine your documented goals, objectives, and reporting requirements to determine what data are required. Once the data needs are determined, identify the stakeholders involved in MES operations and oversight to get their buy-in. The goal is to provide actionable and useful data with specific information and dashboards to different end users.
4. **Establish a data governance framework.** Data governance provides structure for decision-making, management, and accountability related to data, instills data quality, and facilitates smooth and effective data handling. A data governance team formulates rules and regulations to manage data issues and policy compliance, identifies data owners, and develops and implements the guidelines for access that determine who can perform certain functions with specific data. Enforcing governance at a high enough level prevents component systems from becoming inelastic and turning into data silos by ensuring that data standards are compatible across the enterprise, which in turn facilitates utility and collaboration among departments, making it easier to integrate new data sources into the platform post-implementation.
5. **Execute your strategy in stages.** Implementing your MES strategy in well-thought-out stages can help ensure a quicker return on investment (ROI), facilitates project sustainability, and allows flexibility in planned subsequent stages based on lessons learned. Moreover, a staged roll-out of an MES may facilitate the budgeting process, staff buy-in, and workflow adoption.

**4.2.2 In the projects you have been on, what was the optimal configuration of MES modules specific to functionality, integration of other solutions, and management of data?**

From HealthEC's perspective, it is important that modules capable of fulfilling various types of reporting, analytics, and care management activities be able to easily integrate into the MES. Such modules could draw data from the MES' enterprise data warehouse as well as integrate data sources not currently linked to the MES to provide flexible reporting that can be expanded to

include other sources and stakeholders as needs and reporting requirements across the Department of Health and Human Resources (DHHR) mature.

HealthEC helped one Medicaid program to expand the capability of its MMIS by providing modular tools that enable:

- Monitoring and oversight of long-term services and support
- Analysis and tracking of hospital admissions and follow-up activities
- Reporting and improvement of quality measure compliance by addressing care caps

Our modules also support individualized member care strategies for providers participating in the PCMH and behavioral programs.

**4.2.3 Describe Medicaid Enterprise solutions your organization provides or is developing that BMS should consider during its roadmap planning. BMS is interested in learning about the following:**

***1. The Medicaid Enterprise business processes or discrete functionalities targeted by the Medicaid Enterprise solution.***

HealthEC suggests that BMS consider including the following specialty modules in its MES roadmap planning.

## INTEGRATED MEMBER RECORDS MODULE

Our solution's unmatched ability to access and aggregate structured and unstructured electronic member healthcare information via HealthEC® eConnectors™ will allow BMS to integrate records from virtually any health data-related system across the healthcare ecosystem, including HIEs, registries, state census systems, or a legacy MMIS, to obtain demographic, admit/discharge/transfer (ADT), lab orders, vaccination, and other data. Our Integrated Records module collects data in real time or batch mode (scheduled or ad hoc) for incorporation into our platform via established interoperability protocols, interfaces, and secure connectivity.

HealthEC's solution provides patient matching via our enterprise master person index (EMPI) process, which manages patient information from across all sources of data and assigns a unique internal identifier. All member identifiers and demographic data are considered for match rules, depending on availability, from inbound sources, with patient-matching capabilities based on probabilistic algorithms that compare data of a given type using a comparison function specific to that data type. Our EMPI process can also use secondary data elements and apply fuzzy matching logic when standard matching criteria are not met.

Our solution adds value by being able to maintain externally referenceable identifiers, such as address information, other system identifiers, MRNs, and chart numbers from other inbound systems for seamless longitudinal data management. Conversely, our solution also has the native ability to utilize an external EMPI solution.

## MCO PERFORMANCE MONITORING MODULE

HealthEC's MCO Performance Monitoring module provides the information needed to oversee and enforce MCO contract performance, assist with MCO contracting, monitor care delivery and gaps, and measure prospective and concurrent patient risk. Our module helps clients to:

- Compare the performance of one MCO to another on established and/or unique quality measures
- Monitor near-real-time access and delivery of care
- Measure prospective and concurrent risk by patient
- Monitor MCO-comparable performance on KPIs and contracts
- Experience greater flexibility with Quality Improvement Program (QIP) programs
- Track Healthcare Effectiveness Data and Information Set® (HEDIS®) and Star measures by practice and provider in near-real time and manage performance
- Monitor and track claim denials, rejections, adjustments, appeals, etc., by diagnosis or provider
- Facilitate Uniform Data System (UDS) metrics tracking and monitoring by FQHC or any other type of provider in the network

## QUALITY REPORTING MODULE

Our Quality Reporting module hosts a library of over 500 prebuilt, industry-certified quality and utilization measures, including those required for CMS Core, electronic clinical quality measure (eCQM), HEDIS, Star Rating, UDS, Merit-based Incentive Payment System (MIPS), Health Homes, and OCM reporting. The ability to integrate data on a single platform and to apply data to quality measures enables providers to meet strategic, financial, and regulatory reporting requirements more efficiently.

Our system generates quality reports at the organization level, at the practice level based on the tax identification number (TIN), and at the provider level based on National Provider Identifier (NPI), with all reports drillable down to the individual patient level. Quality metrics are displayed with their description, numerator, denominator, exception, and exclusion rules. The health plan will have the ability to customize quality reporting by selecting parameters such as lines of business, coverage type, health plan, and time period to produce metrics for the desired population.

Quality metrics are available in near-real time, helping to drive improvements in quality measure performance that support value-based-payment and pay-for-performance models, as well as other alternative payment models.

HealthEC has received National Committee for Quality Assurance (NCQA) certification for multiple eCQMs, and we expect to be certified for multiple HEDIS measures in 2022. HealthEC maintains measure currency by subscribing to updates from Quality Payment Program (QPP) and NCQA. As new and/or updated measures are published, the HealthEC team follows our measure update/implementation process to develop/update and test approved measures for inclusion into our platform, so clients can use up-to-date measures.

## OPIOID & CONTROLLED DRUG USE ANALYTICS MODULE

HealthEC's robust and versatile Opioid and Controlled Drug Use Analytics module utilizes powerful analytics to triangulate opioid/controlled data across provider, member, and pharmacy to identify prescribing and fulfillment patterns for all controlled substances; help providers understand the combined cost of care (pharmacies, members, and providers); analyze data by geography, diagnosis, coverage type, drug class, specific drug, etc.; identify co-existing conditions and clinical

comorbidities that impact the dose and duration of opioid need; and facilitate care coordination for high-risk/rising-risk patients.

HealthEC's opioid data/controlled drug use analytics use complex algorithms and aggregated data to present relevant information via easy-to-read dashboards and reports that provide a detailed view across members, prescribers, and pharmacies. Patients are classified by pain level, type, and duration (acute or chronic, episodic, or around the clock) and then stratified using other available variables including such as pain tolerance, SDoH impact, comorbidities, or mental/behavioral health issues. Sophisticated reports provide program auditors, investigators, managers, and administrators with the necessary data to develop strategically aggressive plans that identify members for early intervention programs and track others through addiction treatment, identify irregularities in pharmacy fulfillment patterns, flag unusual encounter data by patient, and evaluate granular patient-specific data based on comorbidities or other clinical information.

## VALUE-BASED CARE (VBC) MODULE

Our analytics module — HealthEC® 3D Analytics™ — and our customizable, VBC-specific key performance indicators (KPIs), helps organizations to monitor performance, evaluate their eligibility for shared-saving incentives, enhance Triple Aim compliance, and make progress toward their goals by measuring performance against prior-period, payer-specific, and/or national benchmarks. Using easy-to-read dashboards or on-demand visualizations, data can be used to evaluate performance across different contracts and to re-evaluate value-based contracts for higher ROI. Our platform can help BMS to:

- Monitor performance on different contracting models and calculate the medical loss ratio (MLR) and percentage of premium under partial and full-risk capitation models.
- Assess the overall health of a covered patient population and identify high-risk, high-cost members and associated care gaps.
- Make informed, evidenced-based decisions when creating and executing a physician engagement strategy.
- Optimize contract negotiations with payers by using pre-adjudicated billing data for comprehensive reports that help providers understand performance and trends on contractual quality metrics.
- Track total cost of care, denial rates, utilization variation measurement, and performance management by patient cohorts to guide decision-making.

This module, combined with HealthEC's strategic advisory services, can help BMS achieve desired financial and performance outcomes in a value-based contract by:

- Evaluating readiness for VBC and performance under risk-sharing arrangements, assessing proposed contracts for the organization's level of risk exposure, determining the right performance track and when to select it, and supporting payer contract discussions.
- Defining financial and quality metrics and tracking key performance metrics and trends, high- and low-performing practices, and Hierarchical Condition Category (HCC) score trends to reduce costs, close communication gaps, and improve performance.
  Assisting in the development of standardized clinical care protocols.

## CARE/DISEASE MANAGEMENT MODULE

Based on established clinical guidelines, our care/disease management module, HealthEC® CareConnect®, automates the creation of personalized, patient-centric care plans and condition-specific workflows. Care teams are empowered with a comprehensive longitudinal patient care record, near-real-time ADT alerts, and assessment tools to more precisely identify and close care gaps.

Complex cases are identified and prioritized for caregivers using a combination of the Johns Hopkins Adjusted Clinical Groups® (ACG®) System, the NYU ER Algorithm for Preventable and Avoidable ER Visits, HCC coding, and HealthEC's proprietary algorithms. Key functions of our care management solution include:

- **Contacts/outreach.** Outreach history is document for care managers and supports them in implementing new outreach activities for selected patients.
- **Patient assessments.** The platform includes built-in. detailed assessments about the patient's health condition, disease management, SDoH, etc., to guide interviews. Responses are captured in the platform and are available to inform care planning and analytics.
- **Patient care plans.** Using evidence-based care gaps (from claims and/or clinical data) and data gathered through patient/disease assessments, an individualized treatment plan, CareConnect automatically creates a care plan that can be shared with the patient and other authorized providers. Care Plans include identification of problems, barriers, interventions, and goals; a self-management plan; and risk level stratification based on our rules engine.
- **Intervention scheduler.** The intervention scheduler manages regular auto-generated or manually created interventions based on the individual's care management needs.
- **Document upload.** Relevant documents, including clinical documentation, consents, continuity-of-care documentation, lab and radiology reports, etc., can be uploaded to the patient's record.

### *Chronic Care Management (CCM)*

HealthEC provides a scalable technology platform that meets CMS's requirements for CCM services while unifying communication and care coordination. The platform prompts and provides documentation for non-face-to-face services, including communication with the member and/or others via phone, Internet, secure messaging, and other Health Insurance Portability and Accountability Act (HIPAA)-compliant methods.

Using intelligently structured prompts, the system allows care teams to document activities, keep cumulative track of time spent, and review data from remote monitoring devices. HealthEC's CCM module empowers users to:

- Identify qualified patients through advanced healthcare analytics tools
- Create person-centered, electronic care plans based on physical, mental, cognitive, psychosocial, functional, and environmental assessments as well as an inventory of resources
- Organize and implement care through work lists and dashboards that provide:
  - Preventive care services
  - Medication reconciliation, with review of adherence and potential interactions
  - Care coordination with home- and community-based clinical service providers

- Transitional care management between and among healthcare providers and settings, including referrals to other clinicians and follow-ups after ER visits and facility discharges
- Community and social service resource access
- Systematic reassessment of medical, functional, and psychosocial needs

### SOCIAL DETERMINANTS OF HEALTH MODULE

CareConnect also has an end-to-end SDoH solution that recommends community services such as the Supplemental Nutrition Assistance Program (SNAP), Meals on Wheels, transportation, and behavioral health centers. We use the Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences™ (PRAPARE™) assessment for SDoH that screens for housing, employment, food insecurity, transportation, social and emotional health, and domestic violence. Using a public domain site called "Aunt Bertha," or a proprietary site of the State's choice, such as NowPow, the module incorporates validated local, regional, and statewide service guides and information resources for all the services that are part of the PRAPARE assessment, including housing, food insecurity, transportation, employment, and behavioral health centers.

Using assessment answers, the module auto-generates an individualized care plan so the care team can recommend interventions and suggest local community resources (by ZIP code) based on survey results. Interventions, pathways, and assessments, including the patient health questionnaire (PHQ)-9 for depression, are prebuilt or customizable based on client needs.

External assessments and data feeds containing SDoH information can also be ingested into the platform as a data source and can be used to identify patients with compliance issues. Data elements from all assessments, both built-in and external, are available for analytics and to inform care management activities.

***2. How the Medicaid Enterprise solution is packaged (i.e., commercial-off-the shelf (COTS) or proprietary; modular or tightly integrated; cloud or local).***

HealthEC's offering is a highly configurable and SaaS/commercial off-the shelf (COTS) product that is modular in nature and hosted in the cloud. Our solution, which makes use of open-source and standard technologies, is cloud agnostic; we could therefore deploy our solution in Google, Azure, AWS, Rackspace, in a private cloud, or even on-premises should a client request such an implementation.

The foundation of HealthEC's platform is our eConnectors module and our Universal Data Warehouse, which are mandatory parts of any system we install. Although our care/disease management (CareConnect) and analytics (3D Analytics) modules are designed to be tightly integrated, they may also be implemented separately. Specialty applications, such as those described in response to Question 1, require the installation of either 3D Analytics, CareConnect, or both.

***3. How the Medicaid Enterprise solution is priced (please include methodology only, e.g., Per Member per Month, fixed price per year, data usage—please do not provide actual purchase prices).***

Pricing for our SaaS platform is broken down into a one-time implementation fee based on the setup of the platform and the number and type of initial data sources to be onboarded. Receiving data in a standards-based format, such as ANSI X12 EDI (837 I/D/P, 835, etc.), Health Level 7®

(HL7®), Fast Healthcare Interoperability Resources® (FHIR®), etc., rather than a proprietary or nonstandard format, minimizes the cost and accelerates implementation. Once the platform is deemed ready, then the operational license, or subscription, commences.

The subscription cost is based on a per member, per month (PMPM) fee, which is charged monthly to the client. Support, maintenance, and platform upgrades are included in the client's monthly subscription charge. Additional interfaces to receive data from other sources can be added at any time at a per-interface cost.

***4. In how many states is your Medicaid Enterprise solution currently deployed, or expected to be deployed, and how long has it been in use.***

HealthEC has over 50 clients located in more than 38 states. HealthEC's modules are applicable to State Medicaid agencies as well as to HIEs, MCOs, ACOs, MSOs, CINs, OCM organizations, state government entities, hospital systems and payer organizations, associations, and FQHCs. All our clients use a combination of the various modules we suggest for inclusion in BMS' roadmap in our response to Question 4.2.3, #1. Among our current customers, we support three large state-level clients.

HealthEC introduced HealthEC® eConnectors™ module in 2009. Building on our expertise in data exchange, analytics, and workflow, HealthEC then developed a full spectrum of solutions to help organizations deliver on the promise of VBC:

- HealthEC® Universal Data Warehouse was launched in March 2014 and has been in use for 8 years.
- HealthEC® 3D Analytics™ was launched in March 2015 and has been in use for 7 years.
- HealthEC® CareConnect™ was launched in May 2016 and has been in use for 6 years.

***5. Configurations and customizations typically requested to adapt the product for use in a State Medicaid Program.***

HealthEC's modules are highly configurable, using predefined rules designed to accommodate large and small configuration changes. Aside from the specific data integrations required by customers, other typical customizations include:

- Health plans, coverage types, and lines of business
- Customized roles for role-based access
- Disease states
- HEDIS measures
- Sensitive data masking
- Rules engine
- Organization branding
- Active directory integration
- Email templates

***6. Technical architecture and processing capacity/scalability.***

HealthEC's PHM platform is a secure, SaaS, cloud-based solution that addresses the complex healthcare-related risk management, data aggregation, and analytics needs of our clients. There are many advantages to using SaaS, and we encourage BMS to consider using such a delivery model when procuring your modular MES.

**1. SaaS provides savings over standard software applications** that require local server and workstation software installation. Our cloud infrastructure is highly scalable and can respond to changes in demand automatically, while our modules require only an SSL-compliant web browser running on a supported operating system with a standard Internet connection for access. There is no server hardware to purchase and no configuration at the workstation, freeing IT department resources for other tasks.

**2. The time for implementation can be considerably shorter than that required for non-SaaS systems** since there is no need to consider compatibility issues with on-premises equipment or to troubleshoot other applications running on workstations. Our platform is highly configurable and features over 400 prebuilt extensions designed to integrate information from a multiplicity of data sources, which enables accelerated implementations and reduced costs as compared with some traditional, custom-coded solutions. In addition, for users who are well-versed in navigating web applications, the learning curve for use is less steep, speeding adoption and reducing time to benefit.

**3. A SaaS system hosted in the cloud is highly flexible.** The subscription service model used by HealthEC's SaaS platform enables clients to select and pay for only the components they need. Modules can be added/removed as an organization's requirements and goals change. Updates, upgrades, and support are included in the subscription price, as are new features and enhancements available as part of HealthEC's roadmap.

HealthEC's platform framework comprises a modular architecture utilizing standard hardware and software components. Our databases run on Microsoft® SQL with a star schema in a cloud ecosystem, and the platform is hosted within a secure Health Information Trust Alliance (HITRUST)-certified, HIPAA-compliant data server in a cloud environment to promote availability, accessibility, security, and privacy.

Designed to ingest, process, and analyze data that are too large and complex for traditional systems, our solution handles online analytical processing (OLAP) as well as traditional online transactional processing (OLTP) workloads. The cloud environment where the HealthEC production systems are hosted enables our platform to respond rapidly to increases in data exchange and user access. Auto-scaling is a built-in feature that allows our platform to horizontally scale service up or down based on configured performance metrics, such as CPU and/or memory usage, thread counts, queue length, and disk usage, without manual intervention. As resource requirements increase, new virtual machine (VM) instances are created dynamically to accommodate the increased loads, enabling the platform to seamlessly respond.

## A MULTI-CLOUD SOLUTION

By making use of standard and open-source technologies, our solution is cloud agnostic; we could therefore deploy our solution in Google, Azure, AWS, Rackspace, in a private cloud, or even on-premises, should a client request such an implementation.

***7. User-facing and self-service capabilities.***

HealthEC encourages BMS to seek intuitive, flexible solutions that allow end users to manipulate standard reporting for their own purposes as well as create custom reports and dashboards themselves.

All analytics reports included in HealthEC's modules are interactive and can be filtered and manipulated based on various dimensions and measures by users to customize displays. The platform does not require advanced technical skills to operate. Our reporting interface is laid out in a user-friendly grid format, with report categories along the left-hand side and reporting levels across the top. Reports and dashboards are created using a combined selection of horizontal and vertical axes, tabbed options, and selected parameters, and many reports and dashboards offer further stratification, ordering, and grouping directly within results. Users can therefore filter and manipulate reports based on their unique needs and access to data. HealthEC also makes use of Microsoft's Power BI to provide interactive visualizations for clients.

The platform also enables users, based on their assigned security role, to generate ad hoc and custom reports, build custom dashboards, and create specialized data tables.

**What sets HealthEC apart from the rest:** HealthEC's differentiator is its ability to track services where the lowest common denominators are the rendering provider NPI, the billing provider NPI, the site of service, the diagnosis (ICD-10), and the CPT® code that identifies the service or procedure performed by the rendering provider. For inpatient services, the data are parsed from the claim detail by the revenue code that describes the services rendered in the facility by each category as well as by diagnosis-related group (DRG) or whether the facility is contracted for payment on a fixed basis by length of stay (LoS) or with the plan on a per-diem basis.

This capacity — the ability to roll up or drill down to the lowest common denominator of any report — is unique to the HealthEC platform. The roll-up can be to the rendering provider, billing provider, disease state, plan, facility, ER, and class of drugs as well as to the services performed by in-network and out-of-network providers. The system is designed to create the appropriate filter to look at patient cohorts or selected plans.

## SELF-SERVICE

The platform also enables users, based on their assigned security role, to generate ad hoc and custom reports, build custom dashboards, and create specialized data tables.

To generate ad hoc or custom reports, dashboards, and data tables from available data sets, users can use the platform's Report Builder to drag and drop data fields onto a design grid, create joins, specify parameters, and create queries for any analyses or studies required. Created reports, tables, and dashboards can be saved and shared among authorized users.

All reports and dashboards, including ad hoc and customized dashboards, are exportable in a variety of formats (Excel, CSV, PDF, etc.) for import into an application of choice or for sharing purposes and are drillable down to the lowest common denominator.

***8. Interface support, flexibility, and extensibility to other stakeholders and State agencies.***

HealthEC's platform interface is both flexible and extensible, allowing BMS to assign the required access to BMS staff and other stakeholders. Role-based access is a key component of HIPAA's security rule, and HealthEC uses role- and facility-based access controls to define permissions for platform users so that they can log into the platform and access data and platform components according to various job responsibilities and facility assignments.

**Automatic customization of the interface.** System menus and various functionality can be enabled or disabled by role and facility, and all editable fields can be set to viewable or hidden for any role, thus providing an interface that is automatically tailored to each user's role and facility.

**Extensibility of our platform interface.** In the context of user access, a facility could refer to a geographic location or building, or it could refer to an agency, subdivision, department, or practice. Combining role-based access with facility-based access restricts users' access to only the data they require for their assigned roles for a specific facility, effectively allowing the segregation of data in the platform by agency, facility, practice, etc.

**Availability of standard and client-defined roles.** Clients can use the system's standard roles setup or define their own roles. Only users with the proper permissions, depending on their role, may access the necessary data and reporting for that role. Users with appropriate access to protected health information (PHI) have drill-down capability to the member level in reports.

**4.2.4 What do you see as the benefits and risks of including business process outsourcing (BPO) services together with technical services?**

This question is not applicable to HealthEC's solution.

**4.2.5 Describe your experience, if any, with CMS Outcomes-Based Certification or Streamlined Modular Certification.**

HealthEC's Medicaid data warehouse for an East Coast Medicaid agency was certified by CMS in 2019, prior to their implementation of "Outcomes-based Certification."

**4.2.6 What approaches to supporting consistency in business process functions and data architecture across multiple systems and vendors have you encountered?**

HealthEC recommends establishing a data governance structure across the MES that takes into consideration BMS' current data governance policies. This reinforces data quality and promotes efficient data utilization throughout the modular components that comprise the MES as well as throughout BMS should other systems require integration with the data.

In addition, we believe that it is the systems integrator's (SI's) responsibility to promote collaboration, drive efficiency, and coordinate communications among system vendors to ensure consistency, transparency, and accountability throughout the project. Transparency reduces the

risk of missed deadlines and the dissemination of inaccurate information that can cause errors, rework, and project delays.

**4.2.7 Please provide your recommended strategy for ongoing compliance with the CMS Interoperability and Patient Access final rule (CMS-9115-F). The rule can be found at the following location: https://www.cms.gov/files/document/cms-9115-f.pdf.**

Combining clinical data with claims will support West Virginia in complying with federal requirements in its efforts to achieve interoperability. The ultimate purpose of interoperability is to enable both providers and patients to access patient-specific data for care and personal use. Below is a summary from CMS-9115-F CFR Parts 422, 431, 438, and 457 as well as the Office of the National Coordinator for Health Information Technology's (ONC's) 21st Century Cures Act that BMS can consider including in their MES RFP:

- **The Patient API.** Allows members to access their healthcare data — both clinical and claims — using an app accessible via smartphone or other device of their choice using a secure, standards-based API that allows patients to easily access their claims and encounter information, including cost, as well as a defined subset of their clinical information through third-party applications of their choice.
- **The Provider Directory API.** This API gives members access to their health plan's participating provider directory. Making this information broadly available in this way will encourage innovation by allowing third-party application developers to access information so they can create services that help members find providers for care and treatment, as well as help clinicians find other providers for care coordination, in the most user-friendly and intuitive ways possible. Making this information more widely accessible is also a driver for improving the quality, accuracy, and timeliness of this information.
- **Privacy, security, and standards.** CMS, in partnership with ONC, has identified HL7 Ver. 4.0.1. for FHIR as the foundational standard to support data exchange via secure APIs. CMS is adopting the standards for FHIR-based APIs being finalized by the Department of Health and Human Services (HHS) in the ONC 21st Century Cures Act rule at 45 CFR 170.215. These requirements support the privacy and security of member information.

**4.2.8 Provide your strategy for compliance with the Health Insurance Portability and Accountability Act (HIPAA) and Federal Risk and Authorization Management Program (FedRAMP) Requirements. Information about HIPAA compliance can be found at the following location: https://www.hhs.gov/hipaa/for-professionals/privacy/index.html. Information about FedRAMP can be found on www.fedramp.gov.**

HealthEC's strategy for compliance with HIPAA and Federal Risk and Authorization Management Program (FedRAMP) requirements begins with our SaaS-based platform, which is hosted within a FedRAMP and HITRUST-certified cloud environment. Our cloud infrastructure meets HIPAA Administrative, Physical, and Technical requirements, with each of the individual technology components and resources comprising the HealthEC production systems meeting those standards as well. Our platform has also passed third-party penetration and vulnerabilities testing, which is performed annually.

HealthEC audits and monitors system operations 24 hours a day, 7 days a week, using multiple electronic monitoring systems to gather data on the security, health, and availability of our

production systems at the file, database, application, and network levels (**Table 1**). We continuously monitor transactions and file transmissions; access, attempted access, and changes to data items, including PHI; system and subsystem errors; network threats; utilization and uptime; hardware components, and more. Results are logged, reviewed, and maintained for historical purposes. Within the product, authorized users have access to an audit log that traces user activity, including username, login and logout time/date, role, modules and screens accessed, patients viewed, etc.

**Table 1: HealthEC Platform Security and Monitoring Tools**

| Security Level | Description |
|---|---|
| **Database Level** | All changes to data items, including PHI data items, are logged in an audit table. Before-and-after values are stored in this table to enable audits of data changes. |
| **File Level** | Files containing PHI data that have been transmitted to/from external entities are logged in the File Management System. Logged information includes the name of the file, the data transmitted, the source system/target system, etc. |
| **System Logs** | For tracking and reference purposes, the system logs transactions, and transmissions into flat files. |
| **Error Monitoring** | The system monitors and logs errors in the HealthEC audit and error subsystem for tracking purposes. |
| **Network** | Logs are aggregated and reviewed for the firewalls, routers, VPNs, servers, storage, and infrastructure using custom tools as well as standard tools. |
| **Database Level** | Application logs gather data on username, login time, duration, screens viewed, and PHI accessed. |
| **Application Level** | Application logs gather data on username, login time, duration, screens viewed, and PHI accessed. |
| **Security Maintenance** | The system maintains an audit trail of security maintenance performed by date, time, user ID, device, and location. Information is easily accessible for 365 days, and historical data are archived and maintained for seven (7) years. |

HealthEC has successfully completed Electronic Healthcare Network Accreditation Commission (EHNAC) accreditation by providing evidence that meets compliance criteria for HIPAA privacy policies and procedures related to the protection of PHI and personally identifiable information (PII). HealthEC has also developed tools to de-identify fields that contain PHI, in accordance with the “safe-harbor” methodology of the HIPAA Privacy Rule for de-identifying PHI/PII, which removes 18 types of identifiers, should clients desire this service.

Moreover, in alignment with HIPAA requirements:

- HealthEC utilizes role-based access controls to provide access to our platform. Users have access only to the data and PHI/PII information defined as required under their role. Our platform also supports facility-based data restrictions by role, allowing each user to be assigned a role and access to data based on their associated facility/facilities so that users are restricted to only the PHI data required for their role and facility.
- We use AES 256-bit encryption to encrypt passwords for authentication, and clients have the option of using multifactor authentication for logon to the platform. Our platform has a 20-minute default timeout period that can be customized per client.
- Data in motion and at rest, including PHI/PII, are AES 256 encrypted and data transfers utilize secure protocols.
- Our platform is available only via SSL-compliant browsers.

- Has a well-developed and documented business continuity/disaster recovery plan to provide continuation of critical business processes and the security of electronic PHI/PII.
- HealthEC follows a comprehensive approach to maintaining security throughout our organization and systems, stressing adherence to security standards:
  - HealthEC has Privacy and Security policies that meet applicable regulations (HIPAA, Health Information Technology for Economic and Clinical Health [HITECH], PCI, etc.), and we maintain privacy and security incident response and breach notification policies, which are documented in our business continuity/disaster recovery plan.
  - HealthEC mandates that anyone having access to PHI/PII/PCI sign a confidentiality agreement that references Privacy and Security responsibilities.
  - HealthEC trains employees on how to safeguard PHI/PII/PCI on an annual basis.
  - We maintain Business Associate Agreements with all of our clients.

**4.2.9 Provide your strategy for assisting states in achieving compliance with CMS, and federal rules, regulations, and guidance related to modularity, leverage, reuse, and outcomes achievement.**

Our approach includes the potential objectives and anticipated benefits listed below to help states achieve compliance with CMS and federal rules related to modularity, reuse, leveragability, and outcomes achievement.

- **Modularity and reuse.** HealthEC's proposed modules make use of open interfaces, industry standard–based architecture, and business rules that are separated from the underlying code. Our modules can be plugged into any data warehouse and their customization relies heavily on configuration of business rules rather than changes to code.
  - HealthEC constructed and implemented a modular Medicaid data warehouse for an East Coast Medicaid agency in 12 weeks; it was then certified by CMS for reuse on first pass, enabling our client to drive policy changes as well as provide the necessary framework for other state Medicaid agencies to develop their own Medicaid data warehouses.
- **Leveragability.** Our SaaS-based modules increase sharing, access to, and use of healthcare information to maximize, promote, and improve the use and reuse of State resources across the enterprise while minimizing unnecessary duplicity of BMS information databases by promoting leveraged use of services and functionality. Healthcare systems are regulated by dozens of federal and state agencies, and the Affordable Care Act (ACA) has added more agencies to the list. Having a platform that can evolve is key. As each of these agencies promulgates their own rules and regulations, HealthEC leverages the highly configurable nature of its modules to implement changes quickly and efficiently.
- **Outcomes achievement and performance measurement.** Our modules promote quality, cost-effective care by enabling BMS to track and evaluate the quality and cost effectiveness of services accessed by Medicaid members/beneficiaries and providers — with potential expansion to all West Virginia residents. Using HealthEC's analytics modules, West Virginia can improve patient and population health outcomes achievement, value-based program effectiveness, and quality measure compliance by integrating data from across the healthcare landscape, targeting outliers by disease state and acuity, and managing MCO/provider performance.

**4.2.10 What approaches do you suggest for Disaster Recovery processes in a modular MES that accounts for integration and communication across multiple partners?**

It is critical to consider disaster recovery as part of the State's planning of a modular MES before systems are selected and implemented. Our suggested approach includes selecting a capable SI with whom to collaborate on the development of a reliable disaster recovery process. Depending on the modular components of an MES, clients, in collaboration with their SI, may choose to use a centralized enterprise multi-environment (multi-cloud) disaster recovery strategy or they may prefer to rely on the individual vendors coordinating their system's backup and recovery strategies with a centralized monitoring application.

HealthEC's disaster recovery process uses cloud-enabled functionality to provide disaster recovery. Our cloud environment, in which HealthEC's production systems are hosted, spans multiple data centers within a single geographical region ("Availability Zones"). This means that the HealthEC production systems operate in an active-active, high-availability manner across several data centers distributed across a region with at least 10 miles between data centers. A full static backup is performed of each database daily, during off hours, with differential backups performed in between. Clients experience no downtime during backups, which are stored in Blob storage that is logically separated from the production environment.

In the unlikely event that there is an outage that affects all the data centers within a single region, the HealthEC production systems can be rebuilt in 48 business hours with customer data in a separate data center location where customer data are securely synchronized every 4 hours as part of HealthEC's disaster recovery procedures.

**4.2.11 What organizational change and communications management processes have you seen employed for a modernized, multi-vendor MES implementation? How would you help support the evolution of the Medicaid Enterprise as a whole?**

HealthEC recognizes the challenges of implementing a modernized, multivendor MES implementation. Setbacks may occur due to a lack of planning, poor communication, or ineffective training, which may result in a delayed implementation, lack of adoption by end users, or reduced ROI for the system as a whole. Managing organizational change involves several activities that will help the State start using innovative technology, discovering new operating efficiencies, and providing better services for State beneficiaries. Change management will necessarily incorporate strategy, technology, and human beings to effectively meet State goals.

Among the organizational change and communications management practices we have seen employed to facilitate the successful implementation and operations of a major systems implementation, we recommend the following:

- **Communicate change via the right people.** Immediate staff supervisors are often the closest to those who will use the system and can more effectively judge the method and frequency of communicating system changes to staff. However, leadership should also communicate with staff to provide overviews at the organizational level, strategic direction, and what the change means to everyone, not just a single unit or division.
- **Communicate often and via more than one modality.** Change should be addressed in email, newsletters, demonstrations, videos, blogs, meetings, and one-on-one with staff to

illustrate the capabilities and benefits of the system, the timing of implementation, how existing processes will change, etc. In addition, staff should receive communications about the anticipated changes multiple times so they can understand and integrate the idea of change into their routine. Repeated communication also provides increased opportunities for staff to learn about the changes and ask questions.

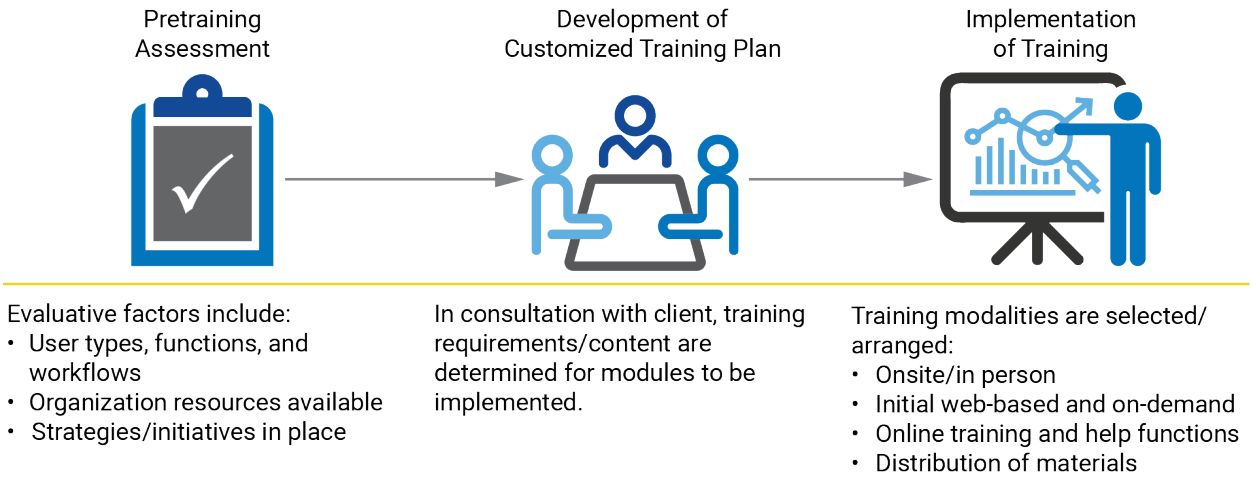
- **Address change at the individual level.** Be sure to address the meaning of the change for individual employees, how individual processes will change, and what those changes will mean to the organization as a whole.
- **Prepare for resistance and listen to feedback.** Most people resist change unless it benefits them specifically, and even then, it can take some time to adjust. Prepare answers for people who ask why the change is necessary and come up with ways to motivate employees to adopt new processes and methods that incorporate some of the feedback received from staff.

HealthEC keeps in close contact with clients during the implementation phases and after go-live to make sure that stakeholders are engaged, provide additional coaching and training, and to facilitate adoption of the platform. As part of each implementation, HealthEC performs a training assessment based on end-user functionality, process workflows, and other various factors. Elements that may impact instructional methods and content could include:

- Communication strategies
- Staff strategy for centralized functions
- Cost-saving initiatives and reporting requirements

Then, in consultation with the client, a customized training approach is developed so that staff can utilize the platform to its fullest potential, within the context of the MES, as shown in **Figure 1.** At these training sessions, the benefits of change, as well as the workflows necessary to product change, are discussed, and stakeholders are encouraged to talk through any individual process challenges.

**Figure 1: Development of Customized Training**




In addition, HealthEC has developed two user groups — one for clinical and one for analytics functionalities — with the purpose of bringing knowledgeable users together periodically to identify

and share best practices, identify needed new functionality, and to serve as a live forum for users and potential customers to learn about how HealthEC can favorably impact organizations.

**4.2.12 How does a multi-vendor environment change how you manage your own Design, Development, and Implementation (DDI) work? How should dependencies be identified, negotiated, and implemented in a multi-vendor environment?**

A successful multivendor collaboration that yields the seamless coupling of many complex software components is dependent on several methodologies. When working in a multivendor environment, consensus on the overall integration "contracts" among vendors is foundational. It is also helpful for vendors to adhere to the latest interoperability standards and provide reference architectures and ready-made APIs. As a good project partner, HealthEC will share its primary implementation architecture, proposed solution reference architecture, APIs, and healthcare transaction standards used. Finally, it is vital to have a framework in place by which to produce/quality check unified build, system integration, test, deployment, and maintenance and operations plans.

To identify and assign dependencies and accountability for project deliverables in a multivendor environment, HealthEC suggests that the SI develop a project-wide responsible, accountable, consulted, and informed (RACI) matrix that is agreed to by all vendors involved in the MES project. The RACI describes the various roles and deliverables for completing task, helps to illustrate dependencies, and provides transparency into the status of tasks. We also believe that a project-wide project work plan, which incorporates timelines for milestones, tasks, and deliverables for all vendors be created to manage the MES project centrally.

**4.2.13 Describe your experience, if any, with collaboration tool(s) such as or equal to Jira, Confluence, and IBM Rational Team Concert (RTC) or other tools to track items, which include, but are not limited to, project milestones, deliverables, and/or implementation testing. Do you recommend any specific approaches or tool(s) for collaboration in a multi-vendor environment? Does your company prefer using its own collaboration tool(s) to support an implementation, or do you prefer using collaboration tool(s) provided by a state and/or a systems integrator (SI)?**

HealthEC uses Jira® for agile project management and tracks all contractual requirements and changes throughout the entire SDLC by integrating scope and change management with Jira:

- **Scope management.** We involve stakeholders to identify, assess, respond to, monitor, and control project scope. Activities for controlling scope are designed to avoid and resolve issues and identify potential risks and unapproved or unintended scope changes to the project.
- **Change management.** Our change management process manages additions, deletions, or modifications to original project scope activities as defined by the RFP, contract, and/or other approved project scope documents.
- **Requirements management.** Every requirement that HealthEC is contracted to perform, including any existing contract requirements that are formally modified or canceled (deleted) and any new requirements that are added through the change management process, are tracked in Jira.

In a multivendor project, while individual vendors may choose to use their own collaboration tools to support their component(s) of the implementation, it is critical that the SI manage the overall

project using enterprise project tools that are able to integrate the various project activities that are happening at the same time. The SI may also wish to define a project-wide glossary for processes and phases so that all vendors are working from a common reference point. This is especially important when vendors use their own implementation methodologies.

In addition, communications planning by the SI to coordinate changes, issues, and updates among vendors across the entire project life cycle is essential to the ultimate success of the project. Each vendor should identify a single point of contact to coordinate communications and changes with the SI and to communicate project issues and changes back to their team.

**4.2.14 What roles and responsibilities have you seen for a system integrator (SI) in a modular systems environment? Was this role fulfilled by a separate vendor, incorporated with other services, or performed by the state Medicaid agency itself? What are the key success factors and risks to success related to using a SI?**

In HealthEC's experience, system integrators are responsible for delineating the modular architecture that defines the modules comprising the system and the design of each that allows them to interface with the system and work properly together with the other modules as a whole. Changes to modules or to the architecture of a multivendor, multi-modular system can have a ripple effect, leading to unpredictable results. Therefore, system integrators should consider all components in their initial draft of a system's modular architecture, which is typically drawn up at the beginning of a modular implementation project. The role and responsibilities of a SI, which includes establishing a project management office to monitor and oversee the project, creating an overarching work plan that includes all project dependencies, and coordination of the vendors providing the different modules, must start with a clear definition of a system's modular architecture. Any changes to the modular architecture must then be carefully considered and communicated to ensure a successful, on-time integration of all components.

**4.2.15 Describe your depth, breadth, and frequency recommendations for performing periodic vulnerability scans of production and development environments?**

HealthEC audits and monitors system operations, which includes our development, system integration test, user acceptance test, and production environments, 24 hours a day, 7 days a week, using multiple electronic monitoring systems to gather data on the security, health, and availability of environments. HealthEC performs internal vulnerability scans quarterly and annual penetration testing, by a third-party cybersecurity service, annually. Our third-party penetration testing covers open ports, network vulnerabilities, web application coding vulnerabilities, misconfiguration, unpatched systems, etc., and is performed on our servers, operating systems, databases, firewalls, and network devices across all environments.

**4.2.16 What processes, techniques, and solutions does your organization consider critical for delivering optimal data sharing throughout the MES?**

Cooperation among module vendors, accurate data, and consistent formats are key to optimal data sharing. Source data variations can impact the accuracy and utility of systems. HealthEC's experience with some data providers has shown the importance of a rigorous quality-checking process. The quality, format, and content of incoming data files may change unexpectedly over time, so they must be continuously checked for issues such as missing data and format changes,

even after initial intake parameters have been set. It is also crucial to get crosscheck information, such as member totals, member months, etc., from data vendors to verify the accuracy of information. Vendors contributing data must be willing to respond to questions and request for corrective measures from other vendors should irregularities occur.

**4.2.17 What standards and practices would you recommend with regards to key data governance, master data management, data stewardship, and data-sharing concerns? What approaches do you recommend for engaging business data owners separately from technical data system managers?**

HealthEC recognizes the multitude of master data governance and data management models and policies. As a result of our deep experience with data aggregation and mastering techniques, HealthEC has developed a built-in intelligent metadata and master data management system that automatically incorporates and tags metadata from the various siloed data sources ingested by the platform to identify the right set of data for various analytical and modeling purposes and to document data lineage and governance. We use proprietary parsers with built-in alerts and error management logs to integrate multiple sources of data in various formats and monitor the data using multiple rules that check for completeness and quality. Built-in rules identify and flag duplicate data items at various levels in the data quality process to enable proper data management, merging, and relationship management.

To promote high quality and availability of data, our metadata and master data management process then manages the data coming in from sources and matches them with the unique master identifiers contained in the solution's master data indices. All identifiers and demographic data, depending on availability, are considered for match rules to verify and confirm that as much relevant information as possible from across the various systems are attributed to each unique master identifier to support the capabilities of the system.

Our experience with clients across the healthcare ecosystem has enabled HealthEC to proactively mitigate many of the issues that may beset metadata management processes:

**System redesign and/or misalignment with other client data initiatives**. For each implementation, HealthEC and the client put together a complete list of business requirements, data governance policies, and system integration points that are required to fulfill project goals. Only then do we design and build the repository that drives the platform. This planning phase eliminates the sudden realization that additional data sources with differing requirements are needed to fulfill business goals, allowing us to optimally define data relationships and avoid redesign of the system.

**Creation of what is referred to as "yet another data silo" (YADS)**. Data governance is responsible for creating and enforcing policies, processes, and standards to establish master data records and manage mastered identity data within the platform. It is especially important to create and follow a mechanism for data governance at the enterprise level that considers the multiplicity of information systems contained within an organization's IT portfolio. Enforcing governance at a high level prevents component systems from becoming inelastic and turning into YADS by ensuring that data standards are compatible across the enterprise, which in turn facilitates utility and collaboration among departments.

We recommend that modules comprising the new MES follow BMS's overall data governance policies. HealthEC's data/information stewards traditionally work in alignment with clients' data governance standards to maintain data dictionaries and report-mapping/crosswalk documents for the solution that include business rules management, classification registries, data mapping with integrity, and historical analysis. When data are pulled into the platform, the system reports impacted business areas to check that the solution is up-to-date and supports required processes and reporting requirements. If changes to data handling are required as a result of BMS governance decisions, HealthEC can apply and propagate the updates systemwide.

As part of our ongoing maintenance, HealthEC schedules frequent touchpoints with clients to assess evolving needs and usability of the HealthEC platform. By proactively planning for growth, the platform remains responsive to business requirements, retains its elasticity in response to changes and requirements for further data sources, and is fully utilized by our customers.

**Data loss**. During our data intake process, data are checked for quality, and our automated, intelligent inbound processes can recognize line failures rather than rejecting entire files. After receipt, our data normalization process minimizes anomalies and allows data from even incomplete records to be available for mapping to master indexes. Our record-matching capabilities are based on probabilistic algorithms to compare data of a given type using a comparison function specific to the type of data being compared so that records are matched using the most reliable data. When important data are not available, we derive the data based on the presence of certain codes or dates in claims data. These processes allow us to use records that might otherwise be rejected, ensuring minimal loss of data.

By involving business data owners — in addition to technical data system managers — in the requirements gathering, data governance, and system testing, we find that they become very engaged in the process and results. When business data owners understand where the data come from, how the data interact with the platform, and how they are able to visualize and manipulate the data to discover hidden patterns that yield greater analytical insights into performance, population health, and financials, they are more apt to utilize a system to its fullest extent.

**4.2.18 Describe your company's current roles and responsibilities as a fiscal agent, if applicable, in a modular systems environment. Describe how you coordinate with other vendors to incorporate their services in a modular systems environment. What are the key success factors and risks for separating Fiscal Intermediary functions from technical functions?**

HealthEC does not serve as a fiscal agent for any state. Our modular offerings are designed to extend, enhance, and augment the utility of a state's MES.

**4.2.19 Describe the division of responsibilities on successful projects, in relation to a multi- vendor environment, between vendor and subcontractor Project or Portfolio Management Offices (PMO), and an Enterprise PMO provided by either BMS or a separate vendor?**

While each vendor involved in the MES project will likely have its own PMO, it is important to have an overarching PMO for a major implementation such as a modular MES that involves many components. An SI should be able to provide such a PMO, which would be instrumental in planning and carrying out the project. If BMS anticipates having multiple projects ongoing at the

same time, we would recommend the establishment of an Enterprise PMO (EPMO) that would integrate the MES project into your project portfolio. Consisting of BMS leadership and key decision makers, the EPMO would be responsible for aligning projects in terms of data governance and managing communications, risk, and resources among the various projects.

**4.2.20 Describe your recommended approach to addressing the complex relationships between a variety of vendors working on separate parts (or modules) of the overall Medicaid Enterprise System. To what degree do you recommend BMS require these approaches in any RFP(s) it issues?**

When working with new emerging technologies such as a modular MES, it is important that BMS formulate an optimal participatory approach among vendors that enables them to think through the complex issues related to a multivendor system. New incentives should be created and included in the RFP to get the desired outcomes; however, these incentives must by well thought out to avoid the risk of hastily architected and implemented solutions.

In the past, states and vendors have worked under fiscal incentives intended to speed work, rewarding the achievement of near-term goals and profitability at the cost of long-term objectives. Such incentives can derail the long-term health of a multivendor project by encouraging the application of short-term fixes by individual vendors that, when deployed, can cause a compounding ripple effect for the remaining vendors, who may need to adjust their modular components to accommodate unanticipated issues. Therefore, incentives must be structured to ensure that the behavioral dynamic among vendors is collaborative and cooperative, rather than competitive. Furthermore, it is essential to address the technological compatibility among components, vendor dependencies, project schedule maintenance, individual and group performance guarantees, as well as SLAs.

**4.2.21 What factors (technologies, development methodologies, frameworks, etc.) would you recommend BMS require in an RFP in order to accelerate the DDI of MES modules?**

HealthEC recommends that BMS seek an MES that relies mostly on configuration, rather than code updates, for customization. We also recommend that BMS opt to require the use of an Agile-based development methodology for the MES. Use of an Agile-based methodology lowers the risk to BMS, increases productivity, and facilitates project success through rapid review and configuration of business rules; readily reviewed test results; and detailed plans for training, data integration, and solution readiness preparation.

Agile development involves prioritizing and bundling requirements into a series of agile releases, with each release comprising the following components: design, configuration, development, and testing of baseline and gap functionality. As each release is completed and deployed, BMS can review the working solution to verify that their requirements are addressed. These frequent inspections further reduce risk by enabling BMS to actively monitor the progress of configuration on an ongoing basis rather than having to wait until user acceptance testing (UAT). This also enables vendors to be in a better position to seize opportunities that will help them to implement a higher quality product that reflects the current reality surrounding the project, whether that has to do with client requirements, project costs, resource allocation, etc.

**4.2.22 Describe ways you feel BMS should structure an RFP to encourage competition and innovation from Medicaid Enterprise solution bidders.**

As mentioned above in our response to Questions 4.2.20, because of the complex nature of an MES, the RFP should be structured to incent cooperation and collaboration rather than competition. The nature of the markets will provide the needed competition as well as the selection mechanism for each modules' innovative technologies. The RFP(s) should be structured to promote alignment among the different module vendors and with BMS with respect to providing a cohesive MES.

**4.2.23 What recommendations do you have for establishing procurement and implementation timelines that help deliver value sooner, reduce risk, maximize Federal Financial Participation (FFP), and achieve Outcomes-Based Certification or Streamlined Modular Certification?**

HealthEC recommends that BMS initially determine its desired MES outcomes by pulling together a team of experts from within your organization who will be able to articulate and prioritize the desired goals and timeline(s) for implementation related to your vision for a modernized MES. Contributing factors that will impact goals and timelines might include federal mandates related to certification requirements, financial considerations (delivering value, reducing risk), statewide modernization plans, etc.

Established goals can be program specific or applicable to BMS/DHHR as a whole, but once determined, system requirements necessary to support your goals, such as interface and usability considerations, data security and communication protocols, outputs such as reports, integration of legacy systems, etc., should be identified and documented.

Goals and requirements that are applicable across programs may inform the priority and timing of implementations, so it is important to develop a detailed requirements matrix to serve as a foundation for your procurement that incorporates the business need, objective, program, priority, and other relevant information. The utility of the matrix can then be extended as vendors are selected to fulfill requirements to include implementation activities such as testing, uses cases, and more.

BMS may also wish to convene a multidisciplinary internal review to maximize CMS federal match rates and available American Rescue Plan Act of 2021 (ARPA) funding and to map the solution to future CMS requirements that are already in law as well as regulations or services that have yet to be enacted.

**4.2.24 Describe the major trends in your Medicaid Enterprise solution category that you believe BMS should be aware of, including any product or approach changes that you believe will come to market within the next 12 – 24 months. How do your Medicaid Enterprise solution roadmaps stay current with such trends? If possible, please be specific regarding how these trends affect Medicaid, WVCHIP, or healthcare IT in West Virginia.**

The provision of healthcare will be impacted for years to come because of the COVID-19 pandemic. Not only will the delivery of care change, but we believe that states care organizations will increasingly adopt VBC strategies as the economy begins to recover. Examples of trends that we expect to see include:

**Increased use of remote monitoring and telehealth.** COVID-19 has caused providers to rapidly modify their methods of care delivery, with positive results for both patients and health providers. Telemedicine expands access to care and reaches more patients, improves workflows, and increases practice efficiency while reducing practice overhead. Remote monitoring can flag health issues before they become expensive hospital visits. Patient engagement increases due to the enhanced convenience and access.

- HealthEC is planning to incorporate secure, video-enabled communications within its care management module

**Decreased prescribing of low-value testing and care.** Diagnostic tests and care practices that provide little value to patients, such as performing surgery when physical therapy be work equally well or ordering labs for low-risk patients before a low-risk procedure, are typical in fee-for-service (FFS) payment models. This type of care has virtually disappeared during the pandemic. A VBC model, where doctors do what is best for their patients is a better way forward.

**Heightened interest in health equity.** The pandemic has clearly revealed that SDoH plays a large role in getting healthcare. Organizations will move to incorporate assessments for SDoH into their workflows to identify barriers to care that are at the core of health disparities. This is not limited to ethnicity, age, gender, disease state, geography, income, or accessibility.

**Increased need for data.** Healthcare organizations participating in VBC models require enhanced real-world data and sophisticated analytics to negotiate contracts and be successful. These groups will need increased access to aggregated data from across the healthcare ecosystem to provide the type of proactive care and hotspotting that will reduce expenses yet improve care for their patients. The demand for PHM platforms that include care coordination and analytics capabilities will increase as providers and care organizations navigate the new post-pandemic environment.

**4.2.25 Identify any innovations in your Medicaid Enterprise solution for addressing Medicaid Business Priorities (cost savings, performance efficiencies, improved care outcomes, etc.).**

HealthEC's solution addresses Medicaid Business Priorities in a variety of ways using our innovative toolset.

**Risk analytics.** Our platform has an integrated predictive analytics engine that identifies utilization patterns, high- and rising-risk patients, gaps in care, opportunities for care management optimization, physician performance patterns, patient trends, and total cost (by patient, practice, disease, payer, etc.). Our platform incorporates:

- Proprietary algorithms and publicly available, third-party systems like the Johns Hopkins ACG System for risk analysis, care planning, and disease management
- Quality performance evaluations by disease and measure
- Richly populated, flexible dashboards and reports that display details regarding enrollment changes; financial and contracting performance; utilization of services, resources, facilities, specialists, and pharmaceuticals; benchmarking across providers and practices against national, regional, or custom measures; ER metrics; and much more

**Measures reporting.** Our Quality Reporting module helps clients improve quality while promoting compliance with various regulatory and organization-specific performance guidelines. With over 500 industry-standard quality measures built into our base module, clients may choose to implement measures that fulfill requirements for ACO reporting for CMS; UDS reporting for FQHCs; and eCQM, CMS Core, Star, HEDIS, Meaningful Use, and MIPS reporting using the Group Practice Reporting Option (GPRO), which is an add-on module within our solution. Clients may also request incorporation of proprietary measures and other evidence-based benchmarks into the platform for use.

Quality metrics are available in near-real time, thus enhancing the ability to drive improvements in quality measure performance that simultaneously support multiple programs and models, such as value-based-payment and pay-for-performance models, in addition to other alternative payment models. For example, the system continuously monitors performance on measures and displays the added compliance required to meet the next benchmark and the additional counts required to improve scoring on Star Rating, HEDIS, and other program measures.

**VBC.** Using 3D Analytics and our customizable, VBC-specific KPIs, organizations can improve performance, qualify for shared-saving incentives, enhance Triple Aim compliance, and meet their strategic goals by measuring performance against prior-period, payer-specific, and/or national benchmarks. Using easy-to-read dashboards or on-demand visualizations, data can be used to evaluate performance across different contracts and to re-evaluate value-based contracts for higher ROI. Our platform can help organizations such as IPAs, ACOs, CINs, and IDNs to:

- Monitor performance on different contracting models and calculate the MLR and percentage of premium under partial and full-risk capitation models.
- Assess the overall health of a covered patient population and identify high-risk, high-cost members and associated care gaps.
- Make informed, evidenced-based decisions when creating and executing a physician engagement strategy.
- Optimize contract negotiations with payers by using pre-adjudicated billing data for comprehensive reports that help providers understand performance and trends on contractual quality metrics.
- Track total cost of care, denial rates, utilization variation measurement, and performance management by patient cohorts to guide decision-making.

Whether an organization is looking to transition to VBC or improve value-based initiatives, our platform, combined with HealthEC's strategic advisory services, can help organizations achieve desired financial and performance outcomes in a value-based contract by:

- Evaluating readiness for VBC and performance under risk-sharing arrangements, assessing proposed contracts for the organization's level of risk exposure, determining the right performance track and when to select it, and supporting payer contract discussions.
- Defining financial and quality metrics and tracking key performance metrics and trends, high- and low-performing practices, and HCC score trends to reduce costs, close communication gaps, and improve performance.
- Assisting in the development of standardized clinical care protocols.

**Financial analytics.** The solution provides KPIs across cost, quality, and utilization domains, allowing organizations to compare KPIs against customizable benchmarks. “Out-of-the-box” financial reports include utilization and cost tracking associated with referrals to specialists, both in-network and out-of-network, as defined by the organization. Reporting tools measure an organization’s performance against prior-period, payer-specific, or nationally published performance metrics and provide the ability to track total costs and cost per episode by CPT or inpatient revenue code by provider, practice, MDC, typical bundled payment, and/or episode of care as defined by CMS.

Intuitive, benchmarked dashboards also give clients the ability to monitor profit and loss for capitated, bundled, and value-based payment vs. FFS; track both utilization and cost for facility-based expenses and professional costs in aggregate; and analyze details for each contract/program. In addition, the system provides an action plan that enables the organization to bridge financial and quality gaps for the measurement period.

HealthEC’s predictive analytics tools evaluate the population’s predictive utilization of resources and costs by disease categories. The system calculates the potential of reducing costs by patient, panel, provider, and disease states and compares them against national, regional, and local benchmarks.

These data are aggregated into a normalized score and translated into a cost curve correlated to the predictive risk score. This enables targeted care coordination activity as well as prompts the involvement of the community-based allied provider and services. For the organization that has undertaken a risk-based arrangement, this cohort of patients’ actual clinical and utilization data can be compared to the actuarial analysis presented by the reinsurer to visualize variations and prepare the client for discussion on negotiating the exclusion criteria, stop loss per patient (disease and potential treatment specific) as well as assisting with managing the co-insurance or deductible for the self-insured or direct-to-employer offerings.

Risk adjustment factor (RAF) analysis is available to help clients maximize their HCC scores. The HCC dashboard can be filtered by lines of business, coverage type, health plan, provider, and time period. The dashboard is drillable, and data can be shown by provider with detailed member data by HCC.

**4.2.26 Identify any innovations in your Medicaid Enterprise solution for addressing technical risk management.**

All of HealthEC’s modules are prebuilt and fully functional out of the box, requiring only customization and configuration to meet client needs, reducing the technical risk of implementing our solution. Our platform uses predefined rules designed to accommodate large and small customizations. Changes to these rules do not require code changes, which reduces the time required to implement and/or to update the platform and makes responding policy changes quick and efficient.

**4.2.27 Describe 1 to 3 use cases where innovations in your Medicaid Enterprise solution would apply and the value your Medicaid Enterprise solution would add when applied to them.**

- An East Coast Medicaid program utilizes HealthEC's platform to track quality measures, address care gaps related to those quality measures, and support individualized member care strategies for providers participating in the State's PCMH and behavioral health programs. Combined, HealthEC's solution for these programs supports 102 unique organizations; 4,461 sites; and nearly 770,000 active members (1.4 million eligible members). As part of the platform, HealthEC constructed a data warehouse to store all relevant data and implemented analytics reporting for the programs served. Care coordinators use risk scores, which are calculated from weekly claims data cross-matched against a Chronic Illness and Disability Payment Systems (CDPS) + Rx database, to drive outreach to members.

  **Value Added: Improved Patient Outreach.** The increased availability of data through reports, demographics, clinical and claims-based data, ADT data, and more enables proactive patient outreach. Providers and clinical teams are better informed through longitudinal data, medical histories and medication lists prior to outreach and can provide a more customized approach to care plans.

- The same Medicaid program also uses HealthEC's innovative medication therapy management (MTM) module to improve therapeutic outcomes by optimizing responses to medication, managing treatment-related interactions or complications, and improving adherence to drug therapy. The module provides real-time updates on drug contraindications, drug disease interactions, and drug allergy reactions as well as an intuitive interface that guides you through collecting patient information, assessing prescriptions, developing a list of medication-related problems, and creating a medication action plan. Staff can easily search and segment MTM members through filters that include chronic conditions, primary provider, and ZIP code. As an added feature, alerts can be set for members with chronic disease, comorbidities, and those with high-risk levels.

  **Value Added: Connected, Actionable Data.** The program has achieved their goals of longitudinal, accurate data so that care teams can make data-driven decisions. Timely actions can be taken based on targeted medication reviews and patient roster files. Connected data means connected care, improved outcomes, and reduced expense for members and providers.

- HealthEC implemented our modular Medicaid data warehouse for another Medicaid agency, enabling them to track distribution of 51,000 qualifying beneficiaries across the state's 10 chronic-condition Health Homes, identify beneficiaries that are eligible for a specialized Health Homes program, track provider staffing against a required threshold by acuity, and document agency communications with beneficiaries. Our MTM and MCO performance monitoring modules were later implemented, delivering millions of dollars in overpayment savings in the first year of operation.

  **Value Added: Enhanced Administration of Key Programs.** The agency was able to track performance measures, year after year, for members with severe mental illness and document changes in patient outcomes and costs while increasing member communication and interventions. The agency was also able to track and monitor the performance and

delivery of care by MCOs and compare performance among MCOs in near-real time as well as track FFS Medicaid patients that are not typically included in MCO agreements.

**4.2.28 In the states where you have implemented, what have been some of the higher value outcomes? What performance metrics were you able to provide to substantiate this success?**

Below are some valuable outcomes for the states in which we have implemented our modules:

- Our partnership with one Medicaid agency revealed a mismatch between capitation payments and enrollee eligibility that resulted in an annual cost savings of $8 million.
  - We also enabled tracking of the performance and delivery of care by MCOs to their attributed populations, comparing performance between MCOs in real time, as well as tracking of FFS Medicaid patients that are not typically included in MCO agreements
- For another Medicaid agency, the increased availability of data through reports, demographics, clinical and claims-based data, ADT data, and more enabled initiative-taking patient outreach.
  - We also enabled monitoring of quality metrics and established practice standards that fueled downstream improvements to MCO and Medicare Shared Savings Program (MSSP) performance
- HealthEC helped a New York client that oversees the healthcare needs of individuals with intellectual and developmental disabilities, save over $4.1 million in 2020, with an annual average savings of $643 per beneficiary, by providing visibility into centralized data across multiple community health centers.
  - Using risk stratification, the client can focus on hotspotting, which resulted in a 37 percent reduction in ER visits and a savings of $53.62 PMPM in 2020.
- HealthEC centralized data from a myriad of systems for a New Jersey client and provides sophisticated reports and analytics to identify high-risk and high-cost members, track referral patterns, and monitor provider-specific quality and cost measures. Our tools enable the client to engage in clinical best practices and drive better outcomes through data-driven clinical decisions.
  - Using HealthEC's SDoH capabilities, client staff engaged in 1,250+ nonbillable encounters that dramatically improved health outcomes, resulting in shared savings of $5.03 million in the MSSP program for 2020
  - Analysis revealed that high-frequency ER patients were costing the customer $3 to $5 million in annual expenditures. Using HealthEC's risk stratification model that weighs patient health based on diagnosis, comorbidities, demographics, and health expenditures, the client was able to target high- and rising-risk patients who warranted closer medical attention as well as achieve a 100 percent quality score.

**4.2.29 Discuss any experiences you have had integrating your Medicaid Enterprise solution with legacy system management and lessons you have learned for implementing new Medicaid Enterprise solutions. Do you recommend any specific approach for modifying, interfacing with, and managing the legacy system while implementing a new Medicaid Enterprise solution?**

If possible, we suggest migrating data from the legacy MMIS into the new MES data warehouse to create a single repository of data. HealthEC is both skilled and experienced with migrating data from legacy systems into our platform, and our platform includes over 400 prebuilt extensions that can integrate data from any source to facilitate legacy-to-cloud migrations. As an example, HealthEC migrated, scrubbed, crosswalked, and normalized 10 years of Medicaid data to create a Medicaid data warehouse in 12 weeks for one of our Medicaid clients, saving them millions of dollars that would have been required for a self-developed solution. The Medicaid data warehouse was constructed, implemented, and then certified by CMS for reuse in less than five months, enabling our client to drive policy changes as well as provide the necessary framework for other state Medicaid agencies to develop their own Medicaid data warehouses. To date, over 222 million claim lines have been analyzed.

As part of the migration process, various levels of validation were performed once the data were moved into the appropriate database tables, including:

- Validation that all data fields had been moved successfully into system tables
- High-level verification of counts/calculations utilizing a comparison of data files and system tables
- Identification of missing required fields and formatting issues
  - This is important as some legacy MMIS systems contain denied or partially denied claims.
- Verification of all industry-standard codes (i.e., revenue, CPT®/HCPCS codes, diagnosis codes, DRG codes, etc.) and identification of those that are invalid
  - For example, some legacy MMIS systems have state or local codes that require special logic and conversion.

**4.2.30 What staffing levels, including experience and skillset, are typically required to implement your Medicaid Enterprise solution? What are the suggested state Medicaid agency staffing levels to support DDI and ongoing operations? How do these staffing requirements compare to other offerings in your Medicaid Enterprise solution?**

Key members supporting the implementation of our modules are supported by a knowledgeable team of analysts, programmers, and subject matter experts (SMEs) in areas such as data aggregation, quality measures, and care management. **Table 2** lists HealthEC positions, with key responsibilities, of staff that are typically required for implementation of our solution.

**Table 2: HealthEC Positions and Key Responsibilities**

| Role | Key Responsibilities |
|---|---|
| **Customer Success Manager** | Post-implementation, the CSM serves as the primary point of contact with the client's single point of contact (SPOC) and both the client's and HealthEC's executive sponsors for activities related to the following:<br>• Contract administration, correspondence between the client and HealthEC, dispute resolution, and status reporting to the client for the duration of the contract |

| Role | Key Responsibilities |
|---|---|
| | • Client feedback to HealthEC's product management and development teams for the best possible product experience |
| **Project Manager** | Provides management of the project from the HealthEC perspective and is the SPOC during the Implementation Phase of the execution of this statement of work (SOW) and is responsible for the following:<br>• Making daily project decisions that do not necessarily affect the overall scope and schedule of the project and is responsible for facilitating the project by using project management processes, organizing the project, and managing the teamwork activities consistent with the approved work plan<br>• Managing all HealthEC personnel who have roles and responsibilities to fulfill on the Implementation Phase of this SOW<br>• Scheduling and reporting project activities, coordinating use of personnel resources, identifying issues and solving problems, overseeing disaster recovery, and facilitating implementation of the system |
| **Technical Implementation Manager** | Provides guidance and makes key decisions on technical issues related to the project; serves as technical liaison between HealthEC's CSM and development team, and is responsible for the following:<br>• Managing the design, development, and testing activities of individual platform modules and interfaces<br>• Managing HealthEC's team of SMEs |
| **Subject Matter Experts** | • Testing and validation |
| **Trainer** | • Training Plan<br>• Training materials<br>• Train-the-trainer |
| **Advisors** | • Supports client<br>• SMEs for business objectives |

**Table 3** describes the level of BMS staff support needed to implement, operate, and maintain HealthEC's platform as well as the required technical skills.

**Table 3: State Staff Support and Required Technical Skills by Component(s)**

| Area of Responsibility | State Staff Support | State Staff Technical Skills |
|---|---|---|
| **Database, Extract/Transform/Load (ETL), Metadata Management Tools, Master Person Index, Data Enhancement Tools** | • Work with HealthEC to determine member, claims, provider, and practice interfaces, formats, and data elements necessary to successfully populate the platform<br>• Develop interfaces' file format that lists participating physicians/healthcare providers, and other social service providers in BMS's organization<br>• Provide support in the development of member file interfaces and business rules for master person index | • Experience in a governmental Medicaid/Medicare/healthcare environment<br>• Experience working with Medicaid eligibility, provider, claims, pharmaceutical, and clinical data interfaces<br>• Experience in metadata management |

| Area of Responsibility | State Staff Support | State Staff Technical Skills |
|---|---|---|
| | • Active participation and cooperation with HealthEC in the data integration process | |
| **Quality Rules Engine** | • Define and review business rules (in-network practice, facility, physician; member attribution; health plan categorization; risk engine; quality measure specifications; email templates)<br>• Analyze and document the requirements for business rules, reports, and workflows<br>• Confirm frequency and sample member population for reporting<br>• Review and approve design documents and system configuration<br>• Validate testing results | • Set of users, Knowledge of medical and business operations terminology<br>• Good analytical and writing skills |
| **User Management, Data Masking/ Virtualization Tools** | • Define and review user roles and security rules<br>• Identify and review user roles<br>• Identify and review fields to be masked (if beyond platform default fields) | • Knowledge of HIPAA and state privacy and security policies<br>• Operational experience or understanding<br>• Integration testing understanding or experience |
| **Predictive Analytics/Advanced Data Tools, Business Intelligence Tools, Data Visualization** | • Analyze and document the requirements for business rules, reports, and workflows | • Experience with Access, SQL, Excel, and/or Power BI<br>• Knowledge of Medicaid and Medicaid Children's Health Insurance Program (MCHIP) policies and programs<br>• Understanding of quantitative and/or qualitative analytic methods<br>• Understanding of visualization techniques |
| **Program Accountability Tools** | • Analyze and document requirements for business rules, reports, and workflows<br>• Review and approve design documents and system configuration and validate testing results | • Knowledge of Payment Error Rate Measurement (PERM), Transformed Medicaid Statistical Information System (T-MSIS), CMS federal reporting<br>• Experience with healthcare payment, risk-adjustment tools, and hospital cost reports or accounting |
| **Documentation and Data Governance** | • Review and approve deliverables<br>• UAT new platform versions<br>• Provide suggestions for improvements for future platform versions<br>• Participate in the planning, design, development, and deployment of new application modules and enhancements to existing applications | • Understanding of data warehouse architectures, logical and physical data models, application/ transactional interfaces, and data integration methods<br>• State operational experience or understanding (e.g., encounter data and claims adjudication processes and edits; state health policy, processes, and stakeholders) |

| Area of Responsibility | State Staff Support | State Staff Technical Skills |
|---|---|---|
| **Security and Disaster Recovery** | • Participate in establishing the system security plan and business continuity-disaster recovery (BCDR) plan<br>• Develop escalation and notification procedures | • Understanding of HIPAA privacy and security rules, National Institute of Standards and Technology (NIST), and HITECH frameworks<br>• State operational experience or understanding |

**4.2.31 Describe the System Development Lifecycle (SDLC) approach that you use for implementing your Medicaid Enterprise solution. Can your SDLC approach be incorporated into an environment that uses a traditional "waterfall" SDLC approach? What about "agile" methodologies to support the implementation of your Medicaid Enterprise solution? If so, how can this be accomplished?**

HealthEC's implementation approach aligns with the Project Management Institute's *Project Management Body of Knowledge® (PMBOK®) Guide*, process groups. Our software development life cycle (SDLC) is based on the Agile method — an iterative, incremental system development process that delivers value faster by emphasizing frequent deliveries of working software and client collaboration, and we use a standardized software development methodology (SDM) that reuses proven project artifacts and lessons learned from other deployments to maximize efficiency and reduce risk. However, our implementation methodologies are flexible and we can accommodate incorporation into a traditional waterfall approach.

HealthEC begins each engagement by conducting interviews with BMS user groups to create a holistic evaluation of your environment so that we can properly design the ETL processes, physical data models, and associated semantic models necessary to optimally architect the solution. We work with BMS to develop a project work plan with milestones, tasks, and deliverables and provide a project management plan, an insightful design, and go-forward plan.

As HealthEC and BMS teams move through SDLC iterations together, we review the results to verify that requirements are addressed or make improvements. This helps us to make faster, more informed decisions and better positions us to seize opportunities that help us implement a higher quality product that reflects the current reality surrounding the project, whether that has to do with BMS requirements, project costs, resource allocation, etc.

HealthEC comes to client engagements with a working solution that is already operational. By bringing a configurable, COTS software-based solution and an agile system development approach to implement our platform into an integrated solution, HealthEC minimizes risk for project delays and the use of BMS resources needed for reviews and approval of the system. Our goal is to deliver a functioning "minimum viable product" (MVP) that solves core user needs quickly; we then populate our environment with the required data.

**4.2.32 What is the typical duration of a project to implement your Medicaid Enterprise solution? How does this timeline break down across the planning and DDI phases?**

Overall, the typical timeframe for standing up our suggested modules with data feeds and core reporting is approximately 16 to 20 weeks. However, this timeline is dependent upon vendor cooperation in securing data feeds; the number, type, and format of data coming into the system;

and any custom configurations required by the client. Our modules can be implemented during MES DDI or afterward, depending on BMS preference.

**4.2.33 What do you see as the key cost drivers for implementing your Medicaid Enterprise solution? What recommendations do you have for managing MES costs and demonstrating outcomes that mitigate any unnecessary costs of a Medicaid Enterprise solution?**

Cost drivers for implementing any of our suggested modules include the integration of external interfaces from which data must be collected to populate platform. To manage these cost drivers, HealthEC recommends the following:

**Use the main MES data warehouse as the prime contributor to the HealthEC platform.** With most data coming from the MES data warehouse in the form of claims information, our platform will be able to take advantage of data that has already been cleansed and normalized. The timeline and cost for integration can be reduced by arranging for the data to come directly to HealthEC using our preferred format.

Once the initial integration of data is completed and depending on the modules implemented, our solution is able to support analyses that can quickly lower the cost of healthcare to the State, including:

- Providing KPI benchmarking and identification of where the State is performing over the benchmark
- Summarizing and trending spend by category, member, and diagnosis by site and type of service provided to members
- Calculating the ROI of benefits of programs
- Evaluating patient access to care
- Summarizing CPTs by payer fee schedules
- Comparing claim/claim line-level paid amount with proposed fee schedule/reference pricing by CPT/HCPCS
- Identifying patients contributing to overspend by diagnosis and patients with the greatest number of ER encounters for avoidable or low-acuity, nonemergent (LANE) reasons to provide hotspotting opportunities
- Reporting on admissions and readmissions by diagnosis and identifying those patients who did not receive primary care physician (PCP) follow-up after an ER encounter or hospital discharge
- Delivering data on predictive risk, predictive cost, and resource utilization patterns

**Integrate any additional data feeds desired/needed in phases based on priority.** Loading critical claims data first can help facilitate project sustainability as system ROI becomes apparent. Subsequent integration of other important data, such as clinical, SDoH, or behavioral information, in stages promotes implementation flexibility and cost savings based on lessons learned, provides increased specificity and enhanced reporting, and demonstrates the increased ROI available to stakeholders with the inclusion of multidimensional data.

**4.2.34 Using your Medicaid Enterprise solution as an example, what guidelines do you recommend for "phasing in" your modules and/or services? How do these guidelines maximize efficiency and/or minimize risk? What constraints would they place on DDI partners and BMS?**

HealthEC's configurable modules are fully functional out of the box, minimizing risk to BMS. Using configuration to customize our platform means that our implementation timelines are the most cost-effective option available with the fastest implementation time in the industry among equivocal competitors. For efficiency, we suggest a phased implementation based on functionality. If BMS opts to start with analytics modules, they can all be implemented at the same time. If BMS decides to implement a care management solution first, all modules pertaining to care management can be grouped and implemented at the same time. A phased implementation allows staff to become familiar with the platform and its capabilities during the first phase, prior to moving to the next phase of the implementation.

**Table 4** shows how each module relates to either analytics or care management.

**Table 4: Modules vs. Functionality**

| Module | Care Management | Analytics | Cross Functionality |
|---|---|---|---|
| Integrated Member Records Management | | | ✓ |
| MCO Performance Oversight and Analytics | | ✓ | |
| Quality Reporting | | ✓ | |
| Opioid & Controlled Drug Use Analytics | | ✓ | |
| VBC | | ✓ | |
| Care/Disease Management | ✓ | | |
| SDoH | ✓ | | |

**4.2.35 What do you believe would be the optimum duration and the minimum duration for DDI of your Medicaid Enterprise solution?**

HealthEC comes to this engagement with a working solution that is already implemented and operational. HealthEC's approach focuses on verifying BMS's business requirements and configuring our platform to meet BMS's needs. We clarify business requirements with BMS during the Requirements Phase by interviewing BMS experts, after which requirements are prioritized and bundled into a series of agile releases. Each release comprises the following components: design, configuration, development, and testing of baseline and gap functionality.

As HealthEC completes and deploys each release, BMS reviews the working solution and verifies that requirements are addressed. These frequent inspections further reduce risk by enabling BMS to actively monitor the progress of configuration on an ongoing basis rather than having to wait until UAT. By bringing a configurable, COTS software-based solution and an agile system development approach to implement our platform into an integrated solution, HealthEC minimizes risk for project delays as well as the use of BMS resources needed for reviews and approval of the system.

Our standard implementation can take up to five months based on various aspects related to the number of data feeds and how HealthEC extracts data from within a client environment and/or receives the data. This timeline can be reduced, as an example but not limited to, data coming directly to HealthEC in our format. We understand the need for an efficient implementation and our team will provide options that will help to improve the timeline if possible.

HealthEC's implementation is delivered via the following phases:

- Initiation Phase
- Planning Phase
- Requirements Phase (discovery, technical requirements, business use cases)
- Design and Development Phase
- Testing Phase (data integration and validation testing, system integration testing [SIT], UAT)
- Go-live and Training Phase
- Operations and Maintenance Phase

**4.2.36 List and describe the documentation developed by your company and/or the state Medicaid agency that is essential to DDI and operations of your Medicaid Enterprise solution.**

Our implementation process starts with conducting interviews with key BMS staff and user groups to create a holistic evaluation of your environment so that we can properly design the ETL process, physical data models, and associated semantic models to produce solutions that provide efficient workflows, improve access, align to business requirements, and meet clinical needs, regardless of system, care setting (inpatient, outpatient, ambulatory, pharma, ancillary testing, payers), or data format.

The following list represents the steps within our design process. We will collaborate with BMS to execute each step to arrive at a data-rich, future-proof, and insightful design and a supporting go-forward plan.

- Outline business objectives
- Identify and assess available data
- Define related business processes
- Establish analysis, reporting, visualization, and workflow requirements
- Determine data sources and data acquisition strategies
- Define data governance and regulatory considerations
- Create a high-level implementation plan

Our solution development process yields several documents that will serve as the foundation for a successful implementation (**Table 5)**.

**Table 5: Process Documents**

| Document | Document Descriptions |
|---|---|
| Project Work Plan | We will work with your team to establish a project work plan with milestones and tasks related to each of the abovementioned steps. |
| Concept of Operations | Aligned to CMS requirements, this document describes the system characteristics of the proposed platform from a *conceptual* perspective. This document also |

| Document | Document Descriptions |
|---|---|
| | describes the organization, mission, and objectives from an integrated systems point of view. It is a formal statement of the goals and objectives of the proposed system — including the strategies, tactics, policies, and constraints affecting them.<br>In addition, it compares the "As-Is" solution to the "To-Be" solution. |
| System Requirements Document | This document establishes a common understanding of the technical and nontechnical requirements that will be addressed by the overseeing business entity (BMS) and the project throughout the life cycle of the associated system. It provides a documented baseline for development so that the associated plans, work products, and activities are consistent with the requirements defined for that system. |
| System Design Document | This document provides a blueprint for how the system will be built. Design documents are incrementally and iteratively produced.<br>The System Design Document includes the ETL mapping of the data warehouse fields to their source fields. It also includes a detailed inventory (including the selection logic) of the reports and dashboards. |
| **Database Design Document** | This document defines the databases within the data warehouse. It provides entity relationship diagrams and defines the physical data models and associated semantic models.<br>It also distinguishes between dimension and fact tables, provides both table and field descriptions, and includes valid values where pertinent. |
| **BCDR Plan** | The BCDR Plan provides a framework for recovering from an internal or external emergency that may adversely affect the platform's ability to provide services to the user community. The plan establishes an integrated concept of operations, strategies, and tactics to guide preparedness and response activities to help ensure uninterrupted operations.<br>This plan also outlines technical incident handling and response processes for the system and describes how to manage incident response according to all pertinent federal, departmental, and agency requirements, policies, directives, and guidelines. |
| **User Guide** | This guide provides step-by-step instructions on how to use the application, complete with well-annotated screenshots. |

**4.2.37 Detail how your Medicaid Enterprise solution could support BMS in improving data analytics and reporting capabilities, data sharing initiatives, and overall confidence in health data.**

HealthEC's analytics module, 3D Analytics, has over 250 reports, dashboards, and heat maps built into its base solution spanning cost, quality, utilization, risk analytics, contract performance, federal and regulatory reports, pharmacy utilization, medication adherence, network analysis, and KPIs as well as a wide range of reports and dashboards that can be customized based on user role. HealthEC also makes use of HealthEC's Microsoft's Power BI to provide interactive visualizations. All reports are interactive and can be filtered and manipulated based on various dimensions and measures by users to customize displays, enabling end users to focus on the reporting important to their analyses.

Reports are generated at the organization, practice, and provider level based on rendering provider NPI, billing provider NPI, practice TIN, place of service, diagnosis (International

Classification of Diseases [ICD]-10) or procedure (Current Procedural Terminology® [CPT®]) code, revenue code, DRG, or per-diem code identifying the service or procedure performed by the rendering provider.

The platform does not require advanced technical skills or knowledge of programming languages to operate and is laid out in a user-friendly grid format, with report categories along the left-hand side and reporting levels across the top. Reports and dashboards are created using a combined selection of horizontal and vertical axes, tabbed options, and selected parameters. 3D Analytics supports word and code searches in fields for filtering and stratification as well as grouping of data. In addition, end users can select from drop-down lists, utilize checkboxes, or use sliders or dials to include/exclude criteria. This “ease of use” improves the capability of staff to perform in-depth analyses related to their area of focus.

Moreover, any report or dashboard created can be saved/exported in a variety of formats (CSV, Excel, PDF, etc.), enabling end users to import the data into another application for further analysis if desired. 3D Analytics supports word and code searches in fields for filtering and stratification as well as grouping of data. In addition, end users can select from drop-down lists, utilize checkboxes, or use sliders or dials to include/exclude criteria.

## AD HOC REPORT BUILDER/DASHBOARD CREATOR

Within 3D Analytics, users with appropriate role-based access can also design and develop self-service/ad hoc reports and analytical dashboards that can perform multidimensional analysis (with slice-and-dice and drill-down options, trends, sorting, prompts, filters, etc.) as well as segmentation analysis. End users can drag and drop data fields onto a design grid, create joins, specify parameters, and create queries for the analyses or studies required.

## DATA EXCHANGE

HealthEC’s analytics modules can share back data, including calculated measures, utilization, risk, etc., across BMS/DHHR systems and with external systems, such as HIEs, if desired, via web APIs or batch files. Data exchange can be in the form of directed exchange or query-based exchange. Our care management modules are also capable of sharing data via email, secure messaging, or even to an electronic medical record (EMR) system using HL7 or Consolidated Clinical Document Architecture (CCDA) format.

## CONFIDENCE IN HEALTH DATA

HealthEC staff have thousands of person-hours of health data ingestion and aggregation experience. All data ingested by the platform are scrubbed and normalized using industry best practices and a proprietary parsing logic based on our understanding of and familiarity with a wide variety of systems. Data are then quality checked to detect missing, unexpected, or anomalous values and discrepancies. Statistical summaries, such as means and standard errors, are generated to measure deviations, and comparative analysis of data before and after the import is performed to monitor and rectify any unforeseen errors/exceptions that may occur during the ETL process. Failures are addressed by engineers, and if required, client representatives are consulted on the resolution of the issue.

Once the data sets are normalized, they undergo segment- and element-level mapping, data-element and code-set translation, and interpretation logic to build rules. Our platform’s EMPI then

manages patient information across all sources of data and assigns a unique internal ID. Patient matching uses probabilistic algorithms and various identifiers, depending on availability, and stores and maintains externally referenceable identifiers from inbound sources so that our system is always synchronized with data sources; alternatively, our solution can also use an external EMPI solution.

HealthEC works with clients to produce required reporting to verify the capabilities of each module implemented. We also verify reporting results during UAT to gain client approval. HealthEC has received NCQA certification for multiple eCQMs and supports their use to promote data reporting integrity. We expect to be NCQA certified for multiple HEDIS measures in 2022.

**4.2.38 Describe or illustrate your data visualization capabilities.**

Our recommended SaaS modules include easily configurable reports, dashboards, and ad hoc reporting tools, enabling BMS staff to dig deep into comprehensive behavioral health data from across the State to view trends, compare their data to benchmarks, track and manage financial data, and comply with federal reporting requirements. Based on their assigned role and associated permission level, BMS users can build ad hoc/custom reports and dashboards to visualize data further or download the data from any report or dashboard to import into their application of choice (e.g., Microsoft Access™, MySQL, Power BI™, Tableau®, etc.), for their analyses and reporting offline. Reports and dashboards from within our solution can also be saved as image files or as PDFs for sharing. Our data visualizations comprise:

- Intuitive, customizable dashboards and widgets
- Flexible drill-down capabilities to the facility/practice, physician, payer, and patient level
- Identification of patterns and care intervention guidance
- Machine learning/artificial intelligence risk models that enable users to leverage predictive algorithms for cost and utilization, disease burden, inpatient utilization, and likelihood of hospitalization
- Risk, cost, utilization, quality metrics, and dashboards

**4.2.39 How does your Medicaid Enterprise solution improve the coordination of care, detect and prevent fraud, waste, and abuse to support Medicaid program integrity, and improve stakeholder access to state Medicaid Enterprise data?**

## COORDINATION OF CARE

HealthEC provides a scalable technology platform that unifies communication and care coordination. Our interoperable Care/Disease Management module, CareConnect, is driven by evidence-based care gaps that populate patient/member care plans, case management notes, disease registries, and population risk scores. Care plan elements and assessments are rules based, customizable, and dynamic. They support editing by users with the appropriate permissions based on configurable, roles-based access parameters. Key components include:

- **Contacts/outreach**. Care managers can view outreach history and initiate new outreach programs.
- **Assessments**. To document a patient's/member's health conditions, care managers can utilize detailed assessments, including those for SDoH and behavioral health, risk, and 25 chronic illness that are based on the definitions from the International Nursing Diagnosis (NANDA).
- **Patient/member care plan**. Care plans are auto-generated and loaded into the system based on the patient data ingested into the platform, including claims, clinical data, ADT feeds, ER visits, missed appointments, abnormal lab results, and missed screenings. Using evidence-based gaps from claims and clinical data and responses from the assessments, CareConnect automatically creates a care plan for each patient/member, stratifies risk levels for each disease using our intelligent rules engine, schedules interventions based on assessment outcomes, sends secure patient/member reminders to mobile and web user interfaces, displays complete patient/member demographic information, and supports the uploading of relevant documents.
- **Proactive notifications to patients/members**. Notifications are sent to patients/members who have upcoming appointments with PCPs/specialists. Patients/members are also alerted about lab screenings and medication reminders.
- **Rules-based and dynamic workflows.**: CareConnect provides rules-based workflows for transitional care management, CCM, complex case management, disease management, referral management, and SDoH that trigger dynamic care plans.
- **Referral Tracking:** Our system supports a bidirectional and closed-loop referral system wherein all the referrals are tracked from referral start, appointment scheduling, appointment met/not met, and outcome of the appointment. Health providers can keep track of patient referrals throughout the care continuum to improve and streamline communication among primary care physicians, specialists, and health providers involved in a patient's care. The care team can search for providers/specialists and record and update referral information; CareConnect's referral dashboard displays the list of referrals created for the member.
- **Identification of care coordination opportunities**: Care coordination opportunities are assessed using a combination of criteria that include:
  - Concurrent and prospective risk scores
  - Multiple chronic conditions
  - Procedures
  - Likelihood of hospitalization
  - 30-day readmission
  - SDoH
  - Future spending liability
  - ADTs

Transition of care summaries and care plan elements are communicated among providers as continuity-of-care documents (CCDs) and/or secure emails.

## PROGRAM INTEGRITY

To support program integrity efforts, HealthEC's intelligently designed, automated system uses proprietary algorithms to check for unusual patterns or combinations that may need further investigation, such as ensuring that a claim is for services delivered as noted in clinical data.

These algorithms identify scenarios that indicate potential fraud, waste, and abuse post adjudication. Reports generated by these algorithms, which can be added to any of our suggested modules, include:

- Payments made in excess of the fee schedule for in-network and out-of-network providers by diagnosis, CPT, and per diems
- Duplicate payments and payments made to providers in different states for the same date of service
- Payments for evaluation and management (E/M) codes made on Sundays with an office indicated as place of service
- Duplicate payments or multiple payments for the same date of service for identical services
- Payments for units or charges greater than two standard deviations
- Unusual patterns of CPTs by provider type and specialty
- Payments for admissions by diagnosis or major diagnostic category (MDC)
- ER payments for the same member with the same diagnosis to a different ER or the same ER with different dates of service
- Unmatched CPT and diagnosis codes or incorrect diagnoses for CPTs
- Outliers for providers, hospitals, durable medical equipment providers, home health providers, and suppliers on both units and claims payments
- Date of death vs. date-of-service claims
- Pharmacy and service shopping

## IMPROVED STAKEHOLDER ACCESS

HealthEC's platform is intuitive and easy to use. All that is required for access is a user logon, an SSL-compliant web browser, and Internet connectivity. Stakeholders can access the platform from any division, department, or location to stay current on care management and analytics.

Another strength of our platform is the ability to create a role-tailored experience for stakeholders that enables them to focus on work that is important for them. System menus and various functionality can be enabled or disabled by role, and all editable fields can be set to viewable or hidden for any role to provide a personalized experience for each stakeholder by role. BMS can create roles for stakeholders that permit just the right level of access, whether the end user is a member of BMS or an employee of another department/division with a need to see specific or limited information.

**4.2.40 Describe how your Medicaid Enterprise solution increases access and shared use of data with both the State and other vendors, improves healthcare quality management, and increases automation capabilities.**

HealthEC's eConnectors/Integrated Records module and our solution's unmatched ability to access and aggregate virtually all available structured and unstructured electronic patient healthcare information increase access to and shared use of data. Within our solution, proprietary algorithms are executed to organize these data into over 300 precalculated cubes to support care management, quality measures, and analytics reporting. The result is a complete patient-centric, chronological record of claims, clinical, and lab history for each member. These combined data enable streamlined access to actionable decision support and program administration information.

## THINK BEYOND MMIS DATA

Our nimble approach to data aggregation can provide BMS with expanded data for healthcare analytics and quality metrics, which will give the state a more accurate picture of its Medicaid population. Calculated data can also be shared with other vendor modules, adding value to their native functionality.

BMS may therefore wish to think beyond the benefits achieved with aggregating and analyzing MMIS data alone. **Table 6** provides some ideas of how your MES could be expanded to further positively effect Medicaid members and beyond.

**Table 6: Data Integration beyond MMIS Data to Consider and Their Impact**

| Opportunity | Impact |
|---|---|
| Aggregate and harmonize Medicaid member clinical and laboratory data from BMS Medicaid providers | With the addition of clinical data, the care management for population health capabilities will be improved by streamlining workflows for care managers, engaging beneficiaries, and optimizing quality and performance outcomes for providers. By consolidating and analyzing all relevant claims and clinical data in conjunction with SDoH, the platform will allow BMS to:<br>• Improve risk stratifying of member populations, identify gaps in care, and develop customized care coordination strategies by taking a holistic, comprehensive view of individual members and cohorts<br>• Further emphasize prevention, member self-management, continuity of care, and communication between providers and members<br>• Automate creation and tracking of referrals to social service and other community support organizations for housing, food, and education to address the social issues that impact health<br>• Measure provider performance and outcomes for members |
| Aggregate and harmonize data from human services programs other than BMS's Medicaid program:<br>• Medicaid – MMIS, pharmacy benefit manager (PBM), and eligibility and enrollment<br>• Behavioral health and substance use disorder treatment<br>• Immunization and communicable disease registries<br>• SNAP<br>• The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) and other maternal and child health programs<br>• Temporary Assistance for Needy Families (TANF) | Aggregation and integration of data from multiple services accessed by Medicaid beneficiaries, some of which are focused on SDoH, will positively impact the ability to manage and deliver the right combination of services, aid in modeling and analysis, and ultimately lead to improved outcomes. |
| Aggregate and harmonize data from external and national HIEs | Clinical data capture capabilities will be bolstered by further integration of regional HIEs operating in areas outside of the State where West Virginia residents access healthcare services. |

**4.2.41 If applicable, how does your Medicaid Enterprise solution improve access to end-users, such as a user's data or access to additional services?**

HealthEC's platform does not require software (other than a supported web browser that uses SSL) to be installed on the client workstation. It is a secure, SaaS, cloud-based solution that can fulfill an organization's healthcare-related care management, data aggregation, and data analytics needs. Authorized stakeholders have easy access using standard web browsers, such as Internet Explorer, Chrome, Microsoft Edge, Safari, or Firefox, or via our mobile apps (for providers and members) for smart devices. Our solutions can be accessed from desktops, laptops, tablets, and mobile smart devices and phones with Internet/cellular connectivity.

Without the need to install software, our web-enabled SaaS solution allows stakeholders to access our platform from anywhere using a compliant interface. Our platform supports role- and facility-specific permissions to access data based on various user responsibilities, where users have access only to the data defined as required under their role. System menus and various functionality can be enabled or disabled by role, and all editable fields can be set to viewable or hidden for any role to provide a personalized experience for each stakeholder, by role, which enables them to use the system without encountering a steep learning curve. We find that this increases stakeholder engagement naturally and translates to a higher rate of adoption, which will help BMS realize a quicker and higher ROI.

If an end user requires access to additional or different information, they can be slotted into a role with the required permissions. Alternatively, if the all the stakeholders assigned to a role need access to expanded or alternative data, the role itself can be reconfigured to provide the required level of access, which can then be limited by facility if necessary.

**4.2.42 How can your Medicaid Enterprise solution help address gaps in health outcomes? Please provide outcomes from other engagements, if applicable.**

Gaps in healthcare related to care access, SDoH, and health equity often result in preventable morbidity, mortality, and healthcare expenditures. HealthEC's platform can identify and measure health-related outcome indicators to assess progress in reducing barriers to care and minimizing gaps in health outcomes.

By aggregating data from across the healthcare ecosystem and using HealthEC's PRAPARE, behavioral, and other assessments, our platform can capture life circumstance metrics (LCMs) such as demographic and socioeconomic data, residential/household profiling, lifestyle, engagement, ethnicity, and language variables. These data can be used for predictive and population analytics that include:

- Estimating prevalence of health conditions
- Estimating demand for services
- Predicting risk, cost, and resource utilization
- Predicting ER use, hospital admission, and readmission
- HCC/RAF maximization
- Medication adherence rates
- Quality scoring
- LANE admissions and likelihood of hospitalization
- Segmentation of target populations
- Identification of patients for hotspotting and follow-up

Examples of outcomes from prior engagements for which HealthEC provided our platform and SDoH tools are summarized below.

**A Medicaid program that supports patient-centered medical homes and state behavioral organization** uses our platform to access aggregated data from diverse sources, identify care gaps linked to quality measures, and coordinate and track closure of these gaps. Providers have reported that the increased availability of data has increased proactive patient outreach, focusing on preventive, rather than acute, care to treat the "whole patient" and that the quality of care has improved as a result of monitoring quality metrics and established practice standards.

**Another of HealthEC's clients that supports the CMS Innovation Model for Integrated Care for Kids and Certified Community Behavioral Health Centers Demonstration programs** uses our platform to integrate case management with assessments and risk stratification to identify, prioritize, and treat patients with behavioral and physical health needs that could impact functioning in school communities and homes. HealthEC integrated NowPow, a personalized community referral program, and PatientPing, to track patient use of community-based resources, to monitor their patients' healthcare to minimize gaps in outcomes.

**A client consisting of providers that have banded together to improve the integration of behavioral and physical healthcare** uses HealthEC's platform to integrate care and health data from assessments and from multiple physician and community-based organizations to drive care management and analytics activities. Within one year of implementing our initial health plan agreement, providers realized the following improvements:

- Forty-five (45) percent increase in completed health risk assessments
- Forty-one (41) percent increase in completed health risk screenings
- Thirty-nine (39) percent increase in completed client care plans
- Thirty-two (32) percent increase in completed care transactions.

**A health department, in association with a nonprofit community care coordinator, wanted to improve population health in its county**. HealthEC integrated data from an HIE and a public health information network into our platform, providing access to more comprehensive patient data and promoting information sharing among all authorized providers, hospitals, and specialists. The county was able to identify the 10 percent of its population that represented 80 percent of hospital readmissions and nonurgent emergency department visits, risk stratify the group, and develop a strategy to address the high rate of readmissions and ER visits. Local community health workers also leveraged the platform to identify high-risk patients for in-home visits. SDoH and disease-based assessment tools were used to identify barriers and expedite access to resources while community health workers addressed the holistic care needs of residents across multiple disease processes and social issues. The county also worked with communities to create programs that promoted healthier choices like exercise programs, support groups, etc.

**4.2.43 Describe your experience with payment milestones during the DDI of your Medicaid Enterprise solution. In other DDI projects, were payments tied to deliverables, acceptance criteria, and/or other DDI milestones?**

HealthEC is known by its clients for negotiating equitable payment terms and conditions. Payment terms are milestone- and benchmark-based as well as being reflective of the level of effort required to achieve each milestone.

**4.2.44 Do you have a short demonstration of your approach and/or Medicaid Enterprise solution that you would like to present to BMS? If so, please describe the method of presentation for the demonstration and suggestions for who should attend. If BMS wishes to take part in a demonstration, they will reach out to the Respondent for further information.**

HealthEC would very much like to provide a demonstration of our recommended modules to BMS. We can provide such a demonstration via Microsoft Teams or a virtual meeting system of your choice. We recommend that anyone who is interested in the value our modules can provide to your MES, including administrative, clinical, and technical personnel, attend the demonstration.

**4.2.45 Is there additional information you would like to share with BMS related to the topics addressed in this RFI?**

At HealthEC, each client, as well as participating organizations, become partners in the design and implementation of the solution. This partnership does not end after deployment; rather, HealthEC continues working with and assisting clients to deliver on their goals and objectives as the capabilities of the platform emerge and data are analyzed, as programs are updated and expanded, and as a client's vision and strategic direction mature. As new technologies and opportunities present themselves, HealthEC will be there to help BMS devise, implement, refine, and augment strategies on ways to most efficiently utilize their MES modules to respond to today's challenging healthcare landscape while improving patient outcomes in a cost-effective manner.

HealthEC is proposing seven specialty modules for BMS to consider including in its modular MES roadmap planning:

- Integrated Member Records module
- MCO Performance Monitoring module
- Quality Reporting module
- Opioid & Controlled Drug Use Analytics module
- VBC module
- Care/Disease Management module
- SDoH module

Each module individually, as well as in combination with other modules, is designed to enhance and extend your MES and to provide vital data and analytics that can help West Virginia better understand the complex nature of its Medicaid population, as well as control costs, improve performance and quality of care, manage utilization, increase efficiency and compliance, and provide greater oversight of managed care programs and providers.

Using our modular COTS platform, HealthEC can integrate data from a multiplicity of sources, including legacy systems, and offers the most cost-effective option available with the fastest implementation time in the industry among equivocal competitors. We have a proven track record of being able to implement our modular solutions well within established timelines and on budget.

HealthEC would welcome the opportunity to demonstrate our platform for BMS and to provide further input with regard to best practices, potential solutions, emerging technologies, and market trends as your organization prepares to seek procurement of its MES.