

October 24, 2012

Department of Administration Purchasing Division Building 15 2019 Washington Street, East Charleston, WV 25305-0130

RE:

RFQ WEH13008

Due Date: 11/01/2012; 1:30 p.m.

Dear Ms. Wagner:

We welcome the opportunity to submit our proposal on the referenced RFQ. We are willing to comply with all work requirements, general contract requirements, and other terms and conditions specified in this RFQ.

We have received the RFQ and associated documents, and also have received the questions and answers.

We have no potential conflicts related to the RFQ and any other services related to this contract.

The primary point of contact for this proposal is Luther "Brad" Runyon, VP-Government and Major Accounts. He can be reached at 800-221-0244 x247.

Respectfully submitted,

Venkat Sharma

President

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WY PURCH SING DIVISION

Submitted by iMedX, Inc.

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Submitted by iMedX, Inc.

OVERVIEW

PURPOSE AND SCOPE: The West Virginia Purchasing Division is soliciting bids on behalf of Department of Health and Human Resources, Bureau for Behavioral Health and Health Facilities, Welch Community Hospital and any other state agency that desires to utilize this contract to establish an open-end contract for Professional Medical Dictation/Transcription Services. The Contract may be utilized by West Virginia State agencies and all political subdivisions of the State in all 55 counties.



• As a full-service medical and legal transcription service, we specialize in providing high quality and secure transcription services with excellent turnaround time. We have the capability of completely outsourcing a hospital, or transcription department work, such as Medical Records, ER, Imaging/Radiology, and Outpatient Clinics. We recognize that our customers have a mission to serve the public need efficiently and effectively. Understanding the

pressures to improve internal business processes to meet clients' turnaround times is nothing new to us. In the past, we have assisted hospitals, clinics, and state agencies achieve significant improvements in the transcription services provided to dictating physicians and medical service providers.

- Selecting the right transcription service provider is essential to achieving goals and minimizing potential risks. Since 1992, we have ample experience in high volume hospital accounts and can readily assimilate volume work into our existing business platform. In addition, we provided the required medical transcription services cited in this RFQ for Welch Community Hospital from 2001 to 2008. We recognize that transcription is a labor-intensive business. It is for this reason we believe people are the key to our service and quality.
- IMedX, Inc., has a proven track record of providing medical transcription services, has been in business for over 20 years and derives all of its gross income from providing transcription services throughout the United States.
- Management of this work will be performed by Chris Lally, VP-US Production, on a full-time basis. He is qualified in medical transcription functions, as well as overall management experience and training. He has over 15 years' experience in managing small and large office staff, consistently involved with sensitive and confidential material. His background and experience information is provided below, along with the other management team members' information.

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• The Management Staff of IMedX has for many years maintained positive, honest, and responsive communications with all of its clients, including doctors, lawyers, judges, and other professionals. We are not new to the level of confidentiality, security,, sincerity and professionalism required to perform large volume transcription of a highly sensitive material.

Our references are provided below.

GENERAL REQUIREMENTS

We shall respond to each specification in the Solicitation in the following section:

3.1.1 Professional Medical Dictation/Transcription Services

3.1.1.1 Vendor shall provide all supplies, postage, shipping and dictation equipment necessary for transcribing and dictating, and be responsible for all cost associated with the providing of said services within their office location, including a toll-free telephone number or local telephone number to receive dictation, providing access for a maximum 30 users.

iMedX shall supply all supplies, postage, shipping, and dictation equipment necessary for transcribing and dictating, and further acknowledge that we are responsible for all costs associated with providing of said services within our secure office location, to include providing a toll-free (800) telephone number or local telephone number for use by the hospital staff for 30 users or more.

3.1.1.2 Welch Community Hospital desires a vendor with a proven track record of providing medical dictation/transcription services. The vendor must have provided said services for at least five (5) years and must derive at least seventy-five percent (75%) of its gross income from this service.

iMedX has been providing medical dictation/transcription services for approximately 20 years. Nearly 100% of our gross income is derived from medical dictation/transcription services.

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3.1.1.3 Vendor shall provide references of at least three (3) hospital clients from whom the vendor has provided professional medical dictation/transcription services.

References for iMedX are listed below:

CLIENT	TIME PERIOD	SUMMARY
THOMAS	Open-ended	Teledictation of hospital
MEMORIAL	contract.	medical reports, which includes
HOSPITAL	Initially began	emergency room reports and
Charleston, WV	this work in	discharge summaries, as well
POC Debbie	2002.	as radiology/imaging reports.
Bennett	ľ	We connect to their system via
(304) 766-5383		a secure Cisco VPN connection
		and transcribe directly into the
		hospital's medical records
		system. Turnaround times of 24
		hours or less, 7 days a week.
Doctors Hospital	Open-ended	Acute care hospital reports.
Parkway+Tidwell	contract.	Turnaround times of 24 hours
510 West Tidwell	Started this	or less.
Houston, TX	work in 2006.	
77091-7091		
Tanya Smith, RHIA		
Director of Health Information		
Management tsmith@dhthou.com		
Phone: 281-618-		
8684		
Aurora Denver	Open-ended	Large acute cardio care facility
Cardiology	contract.	Large deate earlie earle racinty
Associates, PC	Started in	
1444 S Potomac St	2008.	
Suite 300	n × 84 3	
Aurora, CO 80012		
Wanda Strickland		
wstrickland@adcaca		
rdiology.com		
Phone: 303-705-		
4230		

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		T
Southwest Emergency Physicians 2400 S. Avenue A Yuma, AZ 85364 Nancy Turner nturner@yumaregio nal.org Phone: 928-336- 7505	Open-ended contract. Started this work in 2000.	Acute care ER reports.
North Shore-Long Island Jewish (NSLIJ) Health System 270-05 76th Avenue New Hyde Park, NY 11040 Josh Yedvab, Executive Director of Clinical Services jyedvab@lij.edu Phone: 516-465-8857	Open-ended contract. Started this work in 2006.	FPP.
VALLEY HEALTH SYSTEMS Various offices throughout West Virginia, Ohio, and Kentucky. POC Mandi Pitsenbarger (304) 525-3334	Approximately 600,000 lines per year	Open-ended contract since 2000.
WELCH COMMUNITY HOSPITAL Welch, WV POC Jennifer Justice (304) 436- 8642	Three-year contract began in July 2001. Transcribed under contract until 2009.	Teledictation via a toll-free telephone number into our central digital dictation system. Transcription of entire hospital medical reports, which includes the full range of hospital reports, to include operative reports, emergency room reports, x-ray reports, pathology reports, et cetera.

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WEST VIRGINIA DDS OFFICE Charleston and Clarksburg, WV POC Ken Lim (304) 343-5055	Three-year contract began in 2005. Previously performed this work the late 1990s, early 2000s.	Turnaround times of 24 hours or less, 7 days a week. Teledictation via a toll-free telephone number into our central digital dictation system. Transcription of entire range of DDS reports. Delivery is electronic via our TurboScribe® platform.
SOUTH CAROLINA DDS OFFICE Columbia, SC POC Ken Norris (803) 896-6393	Three year contract. Initially began this work in February 2004. Won the rebid for another 3-year contract.	Teledictation via a toll-free telephone number into our central digital dictation system. Transcription of entire range of DDS reports. Delivery is electronic via our TurboScribe® platform.

3.1.1.4 Vendor shall describe the names, experiences and qualifications of management and dictation/transcription staff to be utilized in the fulfillment of this contract.

Chris Lally, Sr. VP of US Transcription Operations: Chris has over 20+ years' experience in the Medical Transcription industry as a business owner/operator. Prior to joining iMedX, Chris held the position of Regional Operations Manager, VP of IT and Client Support, and Regional President for other national transcription services. Chris has a successful track record of contracting new business, managing the implementation process and delivering exceptional customer service to clients such as Tenet-Broadlane, The Cleveland Clinic Foundation, HCA, CHS, and Humility of Mary Health Partners to name a few. He will be responsible for all transcription operations and customer care support.

Patti Clements, Director of US Transcription: An experienced and accomplished Operations Manager, Patti was employed by MedQuist prior to joining iMedX where she oversaw the implementation process for all new clients in her territory and directed their account management once implemented. Patti provides strong customer service and support skills in implementation, technical and operational areas. Patti has experience with facilities ranging from small clinical environments up to 650 plus bed acute care facilities. Patti will be responsible for management and coordination of all transcription production matter.

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Khryss Campos, Director of Global Quality: An experienced and accomplished Quality Control Manger. Previously employed by major Transcription Services in the United States as their manager of quality worldwide. Khryss is a highly skilled transcriptionist with many years of experience in very large acute hospital care accounts, government accounts (to include DDS work) and clinical transcription accounts. She will be responsible for management of all QA functions.

Jeff Hopkins, Vice President of Engineering. Jeff leads all development initiatives at iMedX. Prior to joining iMedX, Mr. Hopkins held senior positions at Nuance, Dictaphone, L&H, and Inso Corporation. For approximately 25 years, Mr. Hopkins has worked in the field of natural language processing, working on technologies such as information retrieval, machine translation, medical fact extraction, and speech recognition. He holds a patent for work done in the field of automated grammar checking, and is named as inventor on several patent applications in the field of medical fact extraction technology. Mr. Hopkins has held management positions for over 15 years, leading multi-site software development groups. Most recently, Mr. Hopkins worked at Nuance and Dictaphone, leading the development of enterprise-level medical transcription platforms incorporating speech recognition technology to improve transcriptionist productivity. Jeff will be responsible for all IT and technical support functions.

Luther (Brad) Runyon, Vice President-Government and Major Accounts, has many years of experience as owner of a national transcription service, as well as at the Federal government level as an administrator of transcription and court reporters for well over 10 years. He will be responsible for administration of this contract and as the primary iMedX point of contact for contractual and administrative matters.

David Driskell, Customer Care Representative, will be the primary point of contact for customer care issues. He has over 15 years as a medical transcriptionist and senior CCR. David manages many acute care accounts and government accounts, to include DDS offices throughout the United States. Should there be an issue that needs escalated, he has escalation procedures that ensure the issue is pushed to the correct person who can positively respond to the issue in a timely and professional manner, to include bringing in senior level management 24/7/365.

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Projected Transcription Staff is as follows:

INITIALS	TITLE	EXPERIENCE	DUTIES
KM	Senior Team Leader	Over 15 years. CMT Certified.	Manages many acute hospital care accounts and government accounts.
LR	Team Leader	Over 10 years	Trained on the job. Manages many acute care hospital accounts and government accounts.
JS	Medical Transcriptionist	Over 10 years. CMT Certified	Transcribes acute care hospital accounts and DDS work.
BS	Medical Transcriptionist	Over 10 years.	Transcribes acute care hospital accounts and DDS work.
SP	Medical Transcriptionist	Over 10 years	Transcribes acute care hospital accounts and DDS work.
BJ	Medical Transcriptionist	Over 10 years	Transcribes acute care hospital accounts and DDS work.
RJ	Medical Transcriptionist	Over 10 years. CMT Certified	Transcribes acute care hospital accounts and DDS work.
IG	Medical Transcriptionist	Over 30 years.	Transcribes acute care hospital accounts and DDS work.
DD	Medical Transcriptionist	Over 10 years	Transcribes acute care hospital accounts and DDS work.
KB	Medical Transcriptionist	Over 10 years	Transcribes acute care hospital accounts and DDS work.

3.1.1.5 It is the sole responsibility of the vendor to employee trained and/or certified transcriptionist(s) in order to fulfill the requirements of the contract.

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iMedX hires only experienced transcription staff. Applicants must have at least 3 years' experience in acute hospital work, and a proven track record of dependability. Prior to hiring, the applicants must take a pass a transcription test, to include English grammar testing.

3.1.1.6 The system shall allow for continuous 24 hour operation.

Our system is available 24/7, regardless of weekends and holidays. Dictators may call in their reports at any time via a toll-free (to the caller) 800 number. We have system monitoring and full-service IT support 24/7/365. Customer care is available 24/7/365 via a toll-free 800 number. Transcription staff is scheduled 24/7 in sufficient numbers to ensure that turnaround times are met, and we ensure there is a Plan B in effect should extra support be required.

3.1.1.7 Dictation must be accepted 24/7/365 days a year via a toll-free telephone number or local telephone number.

As stated above, our system is available 24/7, regardless of weekends and holidays. Dictators may call in their reports at any time via a toll-free (to the caller) 800 number.

3.1.1.8 The system will allow voice files and data files to be transferred to any PC. Data and voice files must be encrypted while being transferred and while at rest on a server.

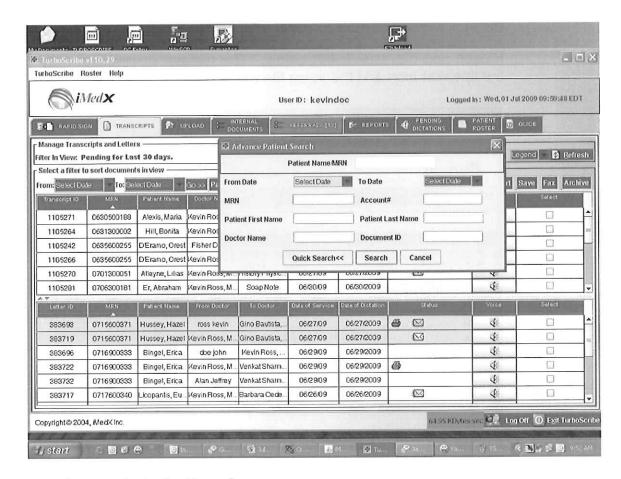
Our system allows voice files and data files to be transferred to any PC via the client-side software in TurboScribe[®]. This transfer is within a secure environment using 128 bit encryption. Data and voice files are encrypted while being transferred and while at rest on a server. In addition, our servers are behind Cisco firewalls utilizing 3DES and https security, and they are located in a secure data center in the Northeast US, the same data center utilized by major hospitals in that part of the United States.

3.1.1.9 The system must be able to locate reports by work type, date transcribed, dictator and ID number.

Our system does all the above, and then more. Every report dictated by the hospital is kept within the system for immediate retrieval either by the dictator or by an authorized staff member or by a hospital super user. The search system permits finding reports by all the above, as well as by date range, patient name, Further, any field that is captured in our system may be used to track/find reports.

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Please see the screenshot below.



Screenshot of a Search

3.1.1.10 The system shall allow dictators to prioritize their work.

Dictators may prioritize their work either as normal turnaround or as priority. While dictating, the dictator is prompted for a worktype. That worktype number system includes a worktype for STAT work. Once a job is so designated, it is elevated to the top of the listing of work to be transcribed and routed to a transcriptionist so that the required turnaround time is monitored and the report is returned within that turnaround time.

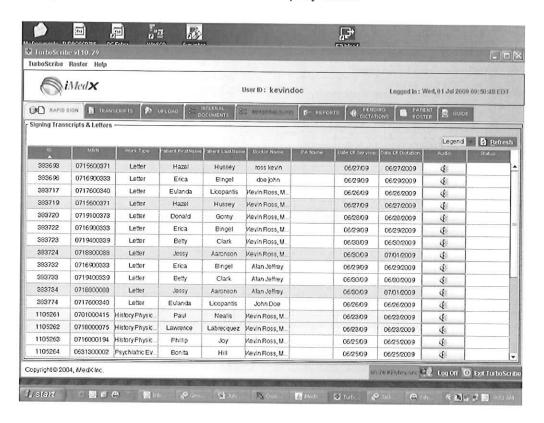
3.1.1.11 The system shall provide the ability to listen to voice header information regarding a dictation such as: type of report, dictated by and dictated on.

Our system presents the entire voice file to the dictator, authorized admin staff, and hospital super users so that not only the administrative

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information may be validated, but also the entire dictation may be reviewed and compare to what was transcribed. The voice file remains with the stored/archived document for future reference.

Please see the screenshot below. The dictator or reviewer may click on the speaker icon and the voice file will play back.



Screenshot of TurboScribe® Showing Speaker Icon

3.1.1.12 The system shall provide the dictator the ability to insert and delete dictation.

Our system provides that functionality through use of the telephone keypad. Press rewind. Listen to the report to the insertion point, then press record.

3.1.1.13 Vendor must provide a common document delivery software system for the facility and the outsourced vendor.

Our document delivery system, TurboScribe®, meets this requirement without a doubt. Through use of the TurboScribe® system, the hospital, its

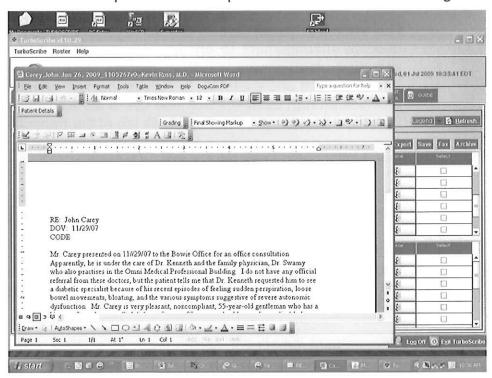
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staff, and the dictators all access the same data we do using our TurboScribe[®] platform. The system has a web interface and is secured via 128 bit encryption. We are willing to provide a demonstration to the staff at their convenience. For more information, please see our Work Plan.

3.1.1.14 Software utilized by vendor shall be compatible with all versions of Microsoft Word and Windows operating systems later than and including Microsoft Word 2003 and Windows XP to be compatible with the facilities existing software.

The TurboScribe® system is totally compatible with MS Word/Office 2000 and higher, to include MS Word/Office 2007. Additionally, our system functions appropriately with Windows operating systems. Please see the screen shot of a sample document opened in TurboScribe® utilizing MS

Word



3.1.1.15 Reports shall be transcribed and returned to the hospital within twenty-four (24) hours. This includes but is not limited to history, physicals, operative reports, x-ray reports, pathology reports, echocardiograms, letters and consults, etc. STAT report requests shall have a turnaround time of no more than ninety (90) minutes, history and physicals are to be transcribed and returned within eight

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(8) hours and discharge summaries are to be completed and returned within forty-eight (48) hours.

We have the staff and system that will meet or exceed these requirements. Our document delivery system, TurboScribe[®], provides completed reports online within minutes of the reports being uploaded to the hospital. Our process ensures that turnaround time (TAT) is monitored and controlled. Supervisors closely monitor the workload and make allocation adjustments routinely throughout the day to ensure that TAT requirements are not exceeded.

3.1.1.16 An accuracy rate of 98% is required as determined by sample review. Vendor shall be responsible for all necessary quality control procedures in this regard. Quality control reports will be provided to the Health Information Manager quarterly.

Our system provides Quality Control reports routinely. These reports are used by management to ensure that we meet and/or exceed the 98% accuracy requirement. We monitor the performance of each transcriptionist and each QA, to include the TAT at each step. Our system provides prompt feedback from the QA to the transcriptionist via a marked up/edited document in the FeedBack tab of the transcription software.

Our quality control procedures are as follows:

Daily routine quality review checks begin with the experienced transcriptionist. Reports are also checked by the supervisor.

Additionally, reports are automatically provided to our QA staff for review. If any doubt remains as to what the dictation calls for, an additional check will be made with associate medical staff, doctor/nurse, who will confirm the correctness of the transcription.

Management personnel constantly/daily monitor the incoming dictation and produced transcription so as to ensure that all dictation received is completed and transmitted/mailed within the prescribed time period. Logs are kept to verify this information and to determine our turnaround time for all dictation.

Management checks transcription for any gross errors. Repeated problems from the same transcriptionist are not tolerated. Corrective action will be taken in a timely manner, to include discharge/replacement if so required.

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Please see TAB 6 for our comprehensive iMedX QA Plan.

Our very best transcriptionists will be assigned to this project. We transcribed the medical reports for Welch Community Hospital for many years and fully understand what it takes to provide the type of world-class services the hospital needs and deserves. <u>Additionally</u>, our <u>Proofers are headed by a supervisor who has an MD degree from Marshall University</u>.

From among our staff we have people who have been transcribing medical reports for more than 15 years; have seven years' experience, along with nursing classes at a local university; or is an x-ray technician.

All transcriptionists have attended medical transcription and medical terminology classes. Each is fully qualified to perform the individual function assigned in regard to this contract.

The majority of transcriptionists are continuing their education through college attendance, and several have nearly completed their bachelor's degree in the medical administrative support services area. Additionally, one transcriptionist has an MA in English at this time.

We have professional staff who have experience and training in both the medical and legal fields. The depth of experience includes the entire range of hospital reports including the various medical subspecialties, endocrinology, gastroenterology, oncology, as. cardiology, orthopedics, urology, pathology, vascular, radiology, psychiatry, pulmonary, and nephrology, along with Federal disability agency reports, such as, Social Security Disability examinations, as well as transcription of legal proceedings, such as, depositions, hearings, arbitrations, and trials.

While transcribing the report, each transcriptionist has an on-line medical dictionary, drug dictionary, and non-medical dictionary available to confirm spelling and correctness of a term. These references stay available on-screen through use of windows in the Windows operating system and are immediately available. Once accessed, the transcriptionist just has to type in the word the way it sounds and the reference program immediately will either confirm the correctness or offer alternatives to be considered. Also, the references provide definitions that further clarify the correctness of the word/term. This eliminates manually looking up words/terms in books and other hard copy reference material.

Our transcriptionists are trained in security matters immediately upon hiring, and refresher training is conducted on a routine basis. Transcription staff receive ongoing training and refresher training regarding

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confidentiality/security so as to ensure their awareness of, and compliance with, the requirements of confidentiality in all the information processed. Additionally, management staff closely monitor all activities to further enhance and ensure that confidentiality of data is strictly adhered to. Our staff are familiar with, trained on, and adhere to the requirements of HIPAA, HITECH, and the <u>Privacy Act</u>.

Further, we provide internship training for local vocational educational institutions that provide medical transcription courses. This internship provided by us is an integral part of their academic requirements for graduation.

3.1.1.17 Vendor shall perform all work in a HIPAA (Health Insurance Portability Accountability Act) compliant facility/area which ensures confidentiality of all reports.

Security is our primary concern. This project will be managed from the Ohio office located in South Point, Ohio. The 10,000 square foot brick building owned by IMedX, Inc., is secured by means of access codes and surveillance cameras, as well as automated alarming via a central station



service. IMedX ensures that every necessary precaution is taken to safeguard all information.

IMedX is located in South Point, Ohio, in its own 10,000 square foot, single occupancy office building. Entry is through a secure front door opening to a foyer/lobby area. Further access is not permitted past the lobby without either being an employee or being escorted into the work areas. Security is a key element to our operations, and security training is conducted on a routine basis.

The office entrances are monitored electronic surveillance, 24 hours a day. The electronic surveillance includes both door/window monitors and motion detectors. When the office is unmanned, the electronic surveillance system will alert the local sheriff of any unauthorized access, who responds within minutes. and will alert management/owners, all within 15 seconds of



an alarm being activated. Should anyone illegally gain entry, in addition to

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the silent alerting of the sheriff and others, there is an audible loud, shrill alarm that is immediately triggered.

The first entry area into the building is into a foyer. Further entry requires passage through another locked door. In other words, there are two locked doors to go through before entering into the work area, an outside door and an inside door.

The Ohio State Patrol office is within one mile of the office. The local police office is within two miles of the office. Security checks are performed routinely when the building is not manned.

Additionally, our automation and transcription/dictation equipment are protected through surge and lightening protectors, as well as through the use of an uninterrupted power supply that provides for normal shutting down of equipment should the building power supply be interrupted, an added security measure against loss of data.

Surveillance cameras have also been installed throughout the facility to enhance our security functions. The cameras are connected to a 24-hour recorder that records all activity on videocassette tapes.

The manager has supervised classified documents control, up to and including top secret documents, for over 15 years in the federal government, as well as supervised automation/computer security. Personnel files are maintained in a locked/secure area. Transcribed reports are mailed as quickly as possible to eliminate access to printed sensitive documents left over from the previous day. Automation systems all have controlled access.

Our system checks and double-checks are set up so as to ensure documents go only where they are intended.

We maintain a 24-hour monitoring system through use of modems and dedicated telephone lines. The system automatically notifies the manufacturer when there is a suspected problem, and through use of a remote access system, the manufacturer's technical department in Florida accesses the dictation system, assesses the reported problem, and if necessary may make adjustments/repairs on the spot or calls in a local technician, who is located only minutes away.

As stated above, the digital dictation system is located in a secure data center located in the Northeast US (Connecticut), the same data center utilized by major acute care facilities in that part of the United States.

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The system uses mirrored hard drives to ensure that if one has a problem, there is a duplicate recording/record on another.

Additionally, we have installed a UPS system that will keep the dictation system alive during any emergency power outage and, if necessary, will shut the system down properly so as to avoid any loss of dictation/information. Should a problem occur where the system has a need to shut down, the SOS system will also alert the manufacturer's technical department and our management staff so that remedial action may be taken immediately.

Please see our Disaster Recovery Plan located at TAB 7.

3.1.1.17.1 Vendor must agree to and comply with Federal Regulations contained in Title XIII, Subtitle D of the American Recovery and Reinvestment Act of2009, Pub. L. No 111-5 that was passed into law in February of 2009. This act is made up of the Health Insurance Portability and Accountability Act of 1996 (HIPPA) and the Health Information Technology of Economic and Clinical Health Act (HITECH Act). Selected Vendor must sign WV HIPPA Business Associate Addendum. Vendors base of operation must be located in the jurisdiction that HIPAA/HITECH laws apply.

iMedX has read this specification, understands, and hereby agrees to comply. Our corporation is a US corporation, headquartered in Shelton, Connecticut, with the main production facility located in South Point, Ohio.

3.1.1.17.2 The vendor must have a compliance or security officer to oversee the entire HIPAA process.

iMedX has a compliance/security officer who is also the Director of Global Quality for the Corporation. That person will be available to the hospital staff 24/7. In addition, the Contract Manager, Luther (Brad) Runyon, VP-Government and Major Accounts, is available 24/7 regarding any contractual issues.

3.1.1.17.3 The vendor must conduct security risk assessments to identify potential areas of vulnerability.

iMedX conducts security risk assessments on a routine basis, and ensures that at the beginning of a new contract we discuss security issues

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with the client. Our compliance/security officer reviews all processes and procedures to ensure we remain compliant with HIPAA and HITECH requirements, as well as Privacy Act requirements. The client's involvement is an integral part of this initial review, and consultation with the client is maintained throughout the life of the contract.

3.1.1.17.4 Vendor must have a notification policy and procedure in the event of a breach. Federal law specifies which breaches must be reported, what information is required, and who must be notified.

iMedX will make appropriate notifications should a breach occur. Our Business Associate Agreements (BAA) spell out who is to be notified and when. We shall sign and comply with the BAA requirements for this contract or supply our own for your consideration. Security and confidentiality are of primary concern in everything we do. Patient data is always secured, while in transit or while resting.

3.1.1.18 Vendor shall adequately train all transcription staff in professional medical transcription to guarantee the production of work within the time frames and quality requirements set forth. All employees of the transcription service will be HIPPA/HITECH trained and have yearly refresher training. Proof of this training must be made available upon request.

iMedX conducts routine training in regard to HIPAA, HITECH, and Privacy Act requirements. We record the training and will provide proof is so requested.

3.1.1.19 Vendor must provide interface to hospital demographic information system (Easy Access or equal) to obtain patient demographic information.

We have a wealth of experience interfacing with hospital information systems, to include HL7 interfaces. The EZ-Access web browser interface for patient demographics can be integrated into our process. EZ-Access, a PATCOM product, securely facilitates the sharing of patient data and is entirely compatible with our secure document delivery system, TurboScribe[®]. We employ a host of IT staff who will work with the hospital IT staff to set up an interface that is secure and acceptable to the hospital.

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We generally institute a secure connection utilizing a VPN. Once the VPN tunnel is established, then our HL7 engine connects with the hospital's system using the appropriate data protocols. Tests are conducted to ensure that data is appropriately transmitted both ways (2-way transfer).

Please see our HL7 Interface document at TAB 8.

3.1.1.20 Vendor must have a secure web portal for the downloading of encrypted WORD or equal, documents for easy access by Medical Record's staff, providing access for a maximum thirty (30) users. Vendor must have the ability to load completed dictated reports straight into the Electronic Medical Record.

iMedX's secure document delivery system TurboScribe® provides a secure connection to our servers via an https, 128-bit encryption connection. The hospital staff, based upon their management hierarchy, will have access to completed medical reports, along with the voice file (first 90 days). The completed medical reports are Word documents, which may be downloaded, edited, faxed, electronically signed, printed, etc., as any other Word document. We can set up access for a minimum of 30 users, and add additional users should the facility so require. There is no maximum limit.

We can upload the completed documents directly into the Electronic Medical Record via our HL7 interface system, but it is our understanding from the prebid conference that the Electronic Medical Record system may not be available for at least six (6) months after the start date on this contract.

Our TurboScribe® secure document delivery system can deliver the completed documents to the staff's computer desktops, <u>or we can upload directly to a server on the hospital's network via a secure FTP connection using a VPN connection. We provide this type of secure delivery service to other clients and have done so for many years.</u>

Based upon Addendum No. 3 to this Solicitation, dated 10/24/2012, we understand that the facility would like to use a secure FTP upload of completed reports to a network folder using a VPN connection until they can move to the HL7upload. As stated above, we have the capability and years of experience in providing secure document delivery using this process and will do so for the facility. As an upgrade or possibly alternative secure method of delivery, we would like to offer to use our TurboScribe® secure document delivery system which will deliver the completed documents to the staff's

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computer desktops in real time. This is an enhanced value-added delivery system we can provide at <u>no cost to the facility</u>.

3.1.1.21 Vendor's system must meet HIPAA

http://www.hhs.gov/ocr/privacy/ and shall be HL7 (Health Level Seven International) http://www.hl7.org compliant for patient data download and transcribed report upload. Selected vendor must sign WV HIPAA Business Associate Addendum http://www.dhhr.wv.gov/bms/ProcurementNotices/Documents/HIPAA%20BAA20100802.pdf.

iMedX has read this specification, understands, and is and will remain compliant with the HL7 and HIPAA, as well as HITECH and Privacy Act, requirements. Additionally iMedX shall sign the WV HIPAA Business Associate Addendum and comply with its provisions.

3.1.1.22 Vendor must provide all dictation and transcription services as required in for the quoted price per line which is defined as 65 text characters with spaces.

iMedX has read this specification, understands, and will comply. Our system provides the characters with spaces count from MS Word and divides that total by 65 to arrive at the total line count "per document." The hospital will be able to verify on a "per document" basis the per line charges that are invoiced. For instance, a document that has 845 characters with spaces as counted by MS Word, will be billed at 13 lines (845/65 = 13). That information will appear as an attachment to our invoices, and is available on demand online in our TurboScribe® system.

Our quoted price will be a per line cost with a line defined as 65 text characters with spaces. That pricing will be listed on the Cost Proposal Sheet.

3.1.1.23 Vendor must provide a 24/7/365 days a year (including holidays) in office person to take stat calls. No cell phone or pager contact number for stats. Vendor must provide a local or a toll free number for customer service. Vendor's normal hours of operation shall be compatible with our Monday-Friday 8am-4pm Eastern Standard Time hours of operation.

As stated above, customer care is available 24/7/365 via a toll-free 800 number. STATs are generally designated at time of dictation. Should the turnaround time for a routine report need changed to STAT, a customer

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care representative shall be available to answer the toll-free telephone call from the facility and make that change immediately 24/7/365.

- 3.1.1.24 The system must meet the following requirements:
 - 3.1.1.24.1 Voice Processing System Equipment Overview
 - 3.1.1.24.1.1 The proposed system shall be a digital recording system that will service 30 total system users.

Our system is total digital recording and can manage well in excess of 30 concurrent system users for Welch Community Hospital.

3.1.1.24.1.2 The primary functionality of the system will be for dictation and transcription purposes; however, listen access through security levels will be required. Secondly, the system must automatically assign specific work types to Transcriptionist prior to a user defined delinquency status (ex. H&P's within 8 hours) being violated. This will ensure that the facility improves its overall report delinquency totals.

First, listen access is available based upon whatever security scheme the hospital wants to employ. Dictators can listen to their dictation. Administration staff may have access to certain dictation, and super users may have access to the entire system.

Secondly, work is assigned based upon turnaround time (TAT) protocols. Oldest jobs are assigned out first. Additionally, we have the ability to set up pools and pool scripts that further automate the job assignment process to specific transcriptionists. We have found that using the oldest job first in regard to TAT and with pools and pool scripts, delinquent reports are greatly reduced and eliminated.

3.1.1.24.1.3 The system must allow specific users to generate productivity reports, assign jobs, and perform job inquiries from any touch tone telephone.

This specification was deleted by Addendum No. 1 to the Solicitation.

- 3.1.1.24.2 System Operations-General Dictation Voice Access
 - 3.1.1.24.2.1 The vendor must have a unique dictator profile database.

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Our dictation system, which utilizes the Dictran voice server, provides the capability to set up each dictator individually with prompts and input fields relevant to that dictator or to that type of medical report. The data base will store each dictators identification information and will associate the dictator with relevant worktypes and relevant templates. For instance, radiology dictation is associated with the specific radiology templates and prompts for the relevant radiology information, and surgery dictation is associated with specific surgery templates and prompts for relevant surgery information.

3.1.1.24.2.2 The dictator database (dictation profile) must manage the way the system responds to each user.

As stated above, our dictation system, which utilizes the Dictran voice server, provides the capability to set up each dictator individually with prompts and input fields relevant to that dictator or to that type of medical report, along with the appropriate templates.

3.1.1.24.2.3 The vendor's unique dictator database must control the following dictation activities for each user:

3.1.1.24.2.3.1 User	logon (Valid ID and Password).
3.1.1.24.2.3.2 Prom	pt language.
3.1.1.24.2.3.3	User priority level.
3.1.1.24.2.3.4	Open jobs.
3.1.1.24.2.3.5	Inactivity logoff.
3.1.1.24.2.3.6	Message delivery.
3.1.1.24.2.3.7	Message auto-play.
3.1.1.24.2.3.8 Initial	activity (dictation, listen).
3.1.1.24.2.3.9 VOX	recording.
3.1.1.24.2.3.10 Pro	mpts (short or brief).
3.1.1.24.2.3.11 Rev	vind increment.
3.1.1.24.2.3.12	Feature conformation tones.
3.1.1.24.2.3.13	Listen access (enable/disable).
3.1.1.24.2.3.14	Listen mode accessible work types.
3.1.1.24.2.3.15	Listener messaging.
3.1.1.24.2.3.16	Job voice information header
3.1.1.24.2.3.17	Listen review order (FIFO/LIFO).

once system proficiency is obtained. 3.1.1.24.2.5 The system's prompts must be concatenated.

3.1.1.24.2.3.18

3.1.1.24.2.6 The system's dictation prompts must match departmental and user operation requirement by prompting the following users in

3.1.1.24.2.4 The system's prompts must be interruptible for user bypass

Listen query default (patient, physician, and subject)

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appropriate manner: GENERAL STAFF -"Please enter Physician I.D. and Work Type, and Patient Number."

3.1.1.24.2.7 The system must allow users to control the speed dictation when rewinding and listening to dictation while in dictation mode.

3.1.1.24.2.8 The system should allow users to insert and delete specific sections of dictation.

Our digital dictation system can perform all of the above functions as required, and is totally configurable so as to meet the hospital's requirements. Our user profile database is flexible enough to permit or not permit functions, to add or remove certain prompts, to allow or not allow access to certain levels.

The system goes many steps further in regard to report delivery functions in that through TurboScribe[®], authorized users can listen to the initial dictation recording while reading, modifying, printing, faxing, or even archiving the completed reports, all right online.

Prompts can be set up in any manner and/or order required by the hospital and are concatenated. Listening functions are fully available. Dictation methods, to include speeds, are assignable.

Our dictation system can meet or beat all of the above requirements.

- 3.1.1.24.3 System Operation General Transcription Voice Access
- 3.1.1.24.3.1 The system must have a unique Transcriptionist database (transcription profile). The transcription database must manage the way the system responds to each Transcriptionist.
- 3.1.1.24.3.2 The system's unique transcription database must control the following transcription activities for each Transcriptionist:
- 3.1.1.24.3.2.1 User Logon (Valid I.D. and Password).
- 3.1.1.24.3.2.2 Prompt language.
- 3.1.1.24.3.2.3 Self-assignment (enable/disable).
- 3.1.1.24.3.2.4 Skip job.
- 3.1.1.24.3.2.5 Job interrupt.
- 3.1.1.24.3.2.6 6 Intercom reception.
- 3.1.1.24.3.2.7 Transcription Messaging.
- 3.1.1.24.3.2.8 Flag jobs.
- 3.1.1.24.3.2.9 Inactivity logoff.
- 3.1.1.24.3.2.10 Prompts (short or brief).
- 3.1.1.24.3.2.11 Backspace increment.
- 3.1.1.24.3.2.12 Feature conformation tones.

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3.1.1.24.3.2.13 Transcriptionist hang-up (return/interrupt).

3.1.1.24.3.2.14 Job voice information header.

3.1.1.24.3.3 The system must automatically replay instruction prompts after a user defined time setting for the aid of first time users.

3.1.1.24.3.4 The system's prompts must be interruptible for user bypass once system proficiency is obtained.

3.1.1.24.3.5 The system's prompts must be concatenated.

3.1.1.24.3.6 The system must allow certain Transcriptionist to self assign jobs by:

3.1.1.24.3.6.1 Physician (author).

3.1.1.24.3.6.2 Patient.

3.1.1.24.3.6.3 Work type.

3.1.1.24.3.6.4 Job number.

3.1.1.24.3.6.5 Department.

3.1.1.24.3.6.6 Priority level.

3.1.1.24.3.6.7 Special designator. 3.1.1.24.3.6.8 User defined work category.

3.1.1.24.3.7 The system must allow all Transcriptionist to perform job inquiries from their transcription stations.

3.1.1.24.3.8 The system must allow each Transcriptionist to access his or her productivity statistics from the transcription voice terminal.

3.1.1.24.3.9 The system must allow Transcriptionist to control the speed of dictation, without distorting the voice, at a rate of +/-50%.

3.1.1.24.3.10 The system must have help prompts that are activated by the user.

The transcription platform, TurboFlow[®], has all of the above functions and even more. The transcriptionist is presented with the jobs in TAT order, and further designated by priority. The screens provide all information necessary to determine the dictator, the type of report, the appropriate formats/templates, etc.

Upon completion of transcription and proofing, the transcriptionists have a FeedBack tab that presents him/her with a marked up copy of the report showing what was edited/changed during proofing so that the transcriptionist has prompt and online visible feedback of any error in their transcription. Transcriptionists are required to review their feedback routinely.

We have the ability to assign work manually, automated through pools and pool scripts, automated through database profiles, etc. Depending upon the needs of the hospital and the workload, we can quickly and effectively

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assign work to meet current and changing demands, to include transcriptionist self assign.

Productivity feedback is also automatically provided to the transcriptionists online.

Dictation playback is controlled through use of a foot pedal and the ExpressScribe software, which is integrated into our transcription platform, TurboFlow[®]. The transcriptionist has full control over rate of speed.

Our transcription platform, TurboFlow[®], can meet and exceed all of the above requirements.

3.1.1.24.4 SYSTEM OPERATION-GENERAL LISTEN ACCESS

- 3.1.1.24.4.1 The system must have a unique listener data base (listener profile).
- 3.1.1.24.4.2 The listener database must manage the way the system responds to each listen only user. The system's unique listener database must control the following listen activities for each listen only users:
- 3.1.1.24.4.2.1 User logon (Valid I.D. and password)
- 3.1.1.24.4.2.2 Prompt language
- 3.1.1.24.4.2.3 Prompts (brief/long).
- 3.1.1.24.4.2.4 Accessible work types.
- 3.1.1.24.4.2.5 Inactivity logoff.
- 3.1.1.24.4.2.6 Listener Messaging.
- 3.1.1.24.4.2.7 Job voice information header.
- 3.1.1.24.4.2.8 Listen review order (FIFO/LIFO).
- 3.1.1.24.4.2.9 Listen query default (patient, physician, subject).
- 3.1.1.24.4.2.10 Rewind increment.
- 3.1.1.24.4.3 The system must automatically replay instruction prompts after a user defined time setting for the aide of first time users.
- 3.1.1.24.4.4 The system's prompt must be interruptible for user bypass once system proficiency is obtained.
- 3.1.1.24.4.5 The system's prompts must be concatenated/linked.
- 3.1.1.24.4.6 The system must automatically move to the next voice file upon completing the delivery of a voice file, unless the user desires to review the current file once again.
- 3.1.1.24.4.7 The system must have help prompts that are activated by the user.

Again, our system provides this functionality and more. In addition to the above, which is focused on the listen feature used through telephone call

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in, our system provides the listen functionality through our secure, 128 bit encrypted web based system, TurboScribe[®].

Not only are all the voice files presented on line in a GUI interface, but also the completed reports are available when they have been transcribed. In other words, the authorized user will have listen function only pre-transcription, and will have listen and read functionality post-transcription.

3.1.1.24.5 SYSTEM OPERATIONS-DATA REPORT MANAGEMENT AND INQUIRES

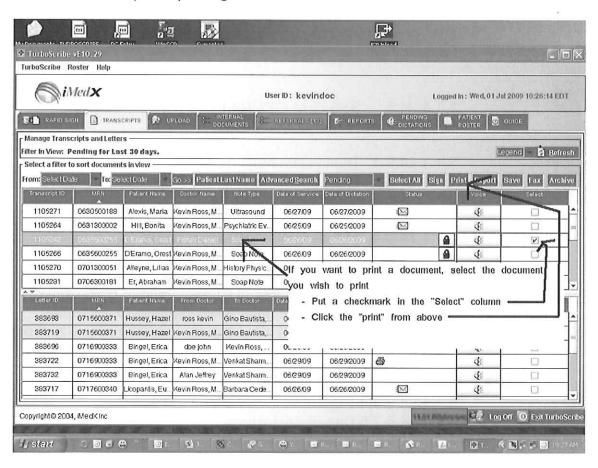
- 3.1.1.24.5.1 The system must have a report database.
- 3.1.1.24.5.2 The system must allow all generated reports to be archived to the systems hard drive.
- 3.1.1.24.5.3 The system must allow reports to be queued for output.
- 3.1.1.24.5.4 The system must allow users to define their management reports.
- 3.1.1.24.5.5 The system must allow users to define the data management headers of all user defined reports.
- 3.1.1.24.5.6 The system must allow inquiries to be printed.
- 3.1.1.24.5.7 The system must log the following data about each job.
- 3.1.1.24.5.7.1 Job number.
- 3.1.1.24.5.7.2 Author number.
- 3.1.1.24.5.7.3 Author name.
- 3.1.1.24.5.7.4 Department number.
- 3.1.1.24.5.7.5 Department name.
- 3.1.1.24.5.7.6 Work type number.
- 3.1.1.24.5.7.7 Work type name.
- 3.1.1.24.5.7.8 Statue.
- 3.1.1.24.5.7.9 Dictation station.
- 3.1.1.24.5.7.10 Dictation date.
- 3.1.1.24.5.7.11 Dictation time in EST.
- 3.1.1.24.5.7.12 Transcription date.
- 3.1.1.24.5.7.13 Transcription time in EST.
- 3.1.1.24.5.7.14 Lengths in pages.
- 3.1.1.24.5.8 The system must be able to automatically print reports based on user defined data and time settings.

Another instance where our platforms, TurboScribe[®] and TurboFlow[®] meet or exceed requirements. We not only provide all of the data fields and functionality above, but also we provide the online ability to auto print,

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auto fax, auto archive, search, compile reports, display reports, print reports, all on a preprogrammed basis or ad hoc.

See the sample manual print screen shown below. This process may also be automated to print upon signature/validation.



3.1.1.24.6 SYSTEM SUPPORT-SYSTEM TRAINING

- 3.1.1.24.6.1 On-site training for all system users.
- 3.1.1.24.6.2 System training must be administered by a system vendor employed customer support and training specialist.
- 3.1.1.24.6.3 Support and training specialist should be responsible for the orchestration of all training activities.
- 3.1.1.24.6.4 Visual support material to assist users in gaining optimum system operation skills.
- 3.1.1.24.6.5 Supply system operation manuals.
- 3.1.1.24.6.6 Support and training specialist should meet with department heads to determine system and user setup parameters.

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3.1.1.24.6.7 Support of individual user or group training sessions for all system users.

3.1.1.24.6.8 Remote support at any time after initial training.

This is an area where our system and our support staff really excel. For this project, in addition to the contract administrator, we will also be assigning a Customer Service (CS) Representative who is completely responsible for ensuring that the needs of the hospital are met. That CS Rep, in conjunction with the contract administrator, will coordinate the installation, set up, and training of all users of the system for Welch Community Hospital.

The CS Rep will coordinate all the IT support necessary to ensure proper installation of software, and proper interface with the hospital's Health Information System. The IT staff have the ability to set up the interface, and will need to coordinate with the hospital's IT staff to get the naming/field conventions to use to properly pass data from one system to another.

Training of the dictators and administrative staff will be handled in several phases, and based upon the hospital's scheduling. Additionally, the system has online Help and Instructions available to all users. We can do the training via GoToMeeting or similar software, or we can schedule onsite training, however the hospital prefers.

Support Staff, IT Staff, CS Reps, and the contract administrator are all available to the hospital either by telephone, fax, email, or instant messaging. Contact information will be provided to all appropriate personnel.

Paragraphs 4, 5, 6, and 7 of the Solicitation and General Terms and Conditions:

iMedX further agrees to the provisions of <u>paragraphs 4, 5, 6, and 7 of the Solicitation</u>, to include providing quarterly usage reports to the facility, as well as all general terms and conditions.

iMedX BACKGROUND

iMedX is a Connecticut-based healthcare services company that provides information technology and services to physician practices and hospitals. Our two customer categories are quite distinct – medical practices are run very differently from hospitals. As a result our services are tailored along two separate lines to appeal to these similar but separate entities. Our end results are the same; we add value by

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helping medical clinics and hospitals save time, lower costs and maximize revenues. Today, iMedX is one of the top ten (by revenue) transcription companies in the United States.

iMedX is based in Shelton, Connecticut, and has offices in Shelton, Connecticut, South Point, Ohio; Winter Spring, Florida, and San Antonio, Texas. iMedX provides high quality medical transcription services enabled by its technology products for medical documentation – TurboScribe® and TurboFlow®. TurboScribe® lets clinics and hospitals rapidly access and manage their transcriptions over the Internet. Doctors dictate into either a small digital recorder or through a telephone directly into the secure iMedX servers. TurboFlow® securely transmits the dictations to transcriptionists via iMedX's servers. iMedX's network of transcriptionists provides a virtually unlimited human resource pool and ensures scalability. The transcribed documents are secure, portable, and easily accessible from any location. The service is capable of seamlessly integrating with existing electronic medical record software for physicians or hospitals – using HL7 or any proprietary method. iMedX's TurboScribe® allows the physician to review transcriptions from anywhere via the Internet, and completely automates the process of signing, faxing, emailing, and storing completed transcriptions. This can make the entire transcription process 100% paperless.

iMedX hosts its applications and data storage within a state-of-the-art collocation hosting facility near New Haven, CT. The facility affords a high-security environment, including access control, and constant surveillance; constant power through the use of uninterruptable power supplies (UPS's) and an on-site generator; non-destructive fire suppression; environmental controls, such as air filtration and temperature control; redundant fiber-optic Internet providers; and a high-speed on-site network. Data storage is housed within our own locked cabinets, with restricted physical and network access. These functions allow for very high application availability, 24x7 remote monitoring, and high data security.

In addition, the Company has also developed TurboFlow[®], an Internet-based workflow platform for managing hospital transcriptions. With its unique blend of medical transcription software and services, combined with a strong network of medical transcriptionists, iMedX is well positioned to become a leading medical documentation services and technology company for the long term.

The benefits of TurboFlow®:

Access to the most current technology. With TurboFlow® you will always have the latest technology delivered seamlessly over the Internet.

Fully scalable solution. iMedX can scale a complete dictation system to fit the needs and budget of any organization — large or small.

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No hardware costs. All hardware and software is resident within out Internet Data Center. Physicians access the system remotely via the phone, digital recorder, or PC interface. All workflow is controlled remotely.

Instant remote access — **from anywhere.** On-site and remote users can easily access the system — for dictation, transcription, editing, and workflow reports, and you will also gain easy access to iMedX's network of transcription resources.

Complete security. All voice, text and data within the system is maintained to the highest security standards.

iMedX has a 20 year history of transcribing medical/HIM reports for government agencies, private practitioners, clinics, medical centers, and hospitals across the country. Several major hospitals have outsourced most, or all, of their work to iMedX. We are confident we can manage your transcription workload.

iMedX services over 700 clinics – large and small – all across the United States. Our TurboScribe® document delivery platform (see above under iMedX Technology) is immensely popular with physician practice manager and providers. iMedX's TurboScribe® has all the features needed for hospitals, clinics, and physician practice workflow, including review, edit, e-sign, and dual signatures for APRN's, PA's, attending physicians, and residents as appropriate.

WORK PLAN

For the volume of teledictation and transcription services required iMedX shall use its very best and most experienced personnel in all the key positions. We will conduct the work in five phases.

Phase I - Establish communication chains with key personnel

Phase II - Develop and distribute instruction brochure to all providers

Phase III - Assignment of current personnel Phase IV - Test required electronic services

Phase V - Begin production work

Phase I

Establish Communication Chains with Key Personnel.

iMedX manages each account using primary and secondary points of contact. We provide world-class services while maintaining close and personal contact with our clients. Our approach is that we become a personal assistant to our client for all services that we are hired to provide. For instance, should the staff have a question or a concern, the primary point of contact is Mr. Luther "Brad" Runyon, VP-Government

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and Major Accounts, for the corporation. He shall establish/maintain direct communications with the key personnel.

Phase II

Develop and Distribute Instruction Brochure to all Providers.

iMedX has on file instruction sheets and brochures used in the past to inform new dictators of the steps necessary to quickly and easily teledictate into our digital dictation system. The process is not new to us. We have provided this facility with a brochure in the past and shall obtain guidance from the staff and work with the key personnel to ensure the brochure remains acceptable prior to distributing to the dictators. The brochure is generally in the form of an instruction letter and is accompanied by a wallet card. The wallet card contains dictation instructions, telephone numbers, and the dictator ID number so that the dictator may have at his/her disposal a quick reference.

The brochure delineate the services provided, the toll-free access number, the prompts and how to respond to them, as well as give helpful hints on how to dictate and what pieces of information are required for all reports.

Phase III

Assignment of Personnel.

iMedX currently has within its organization a highly motivated, experienced, fully trained transcriptionist staff. We do not project a need to hire additional employees to adequately perform the work required by this RFP. Based upon our experience over the past 20 years, we feel confident that we can continue to perform the workload envisioned within this project, with the assurance that we will meet or exceed all turnaround time requirements. Below, we will further explain our plan and how this project will fit within our organization.

Phase IV

Test Required Electronic Services

iMedX utilizes the state-of-the-art digital dictation system TurboFlow/TurboScribe[®]. That equipment and software is within our secure facility and has more than sufficient storage capacity to meet the requirements of this solicitation.

iMedX utilizes only new PCs for its transcription work. The PCs are connected into a cohesive, secure office intranet, utilizing Cisco and 3Com Hubs/Switches and Network Interface Cards, along with Cisco firewalls. We already have sufficient equipment on hand. We will not need additional PCs or laser jet printers for our staff.

iMedX shall coordinate the electronic transfer of the files with the facility so that the files are transferred securely and in a manner acceptable to the hospital. We

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can use either HL7 interface into the facility's Electronic Medical Report system, secure delivery to the staff's computer desktop utilizing our TurboScribe® secure document delivery system, or even perform a secure FTP upload to a drive/server on the facility's network.

Phase V

Begin Production Work.

With all equipment and personnel on hand, communications established, and systems tested, we shall receive dictation and begin transcription production. Utilizing our tried and true system of work and process control, we will continue to provide the medical reports to the facility.

iMedX is a well-established, national provider of transcription services. We have the <u>secure facilities</u>, <u>equipment</u>, <u>and personnel</u> to provide the services required by this Solicitation. iMedX is a privately held corporation constituted under the laws of the State of Delaware, with corporate offices in Shelton, CT, and a production center in South Point, Ohio. We provide the full range of both medical <u>and</u> legal transcription services, and have done so for over 20 years.

Our management team is the best in the country. Our top staff has a wealth of experience in providing transcription services, legal and medical, in both the public and private sectors since 1992. This team is committed to excellence in all that we do! The VP-Government and Major Accounts has approximately 20 years of experience at the Federal level in administration and customer-oriented organizations. The VP of Customer Services of the corporation has many years of experience working with national and international clients while providing highly specialized products. The Department heads all have years of experience in providing both medical and legal transcription services throughout the United States at both the Federal and State level.

We also bring to the table highly experienced, well-trained transcriptionists who are part of work teams which are supported by:

- top quality proofreaders
- technically competent administrative support personnel
- state-of-the-art digital equipment
- secure, modern facilities
- o continuous training programs
- mentoring programs
- up-to-date technology

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OUR PHILOSOPHY

We fully realize that we are hired to assist our clients in serving their customers in the most efficient and effective manner possible. Our clients look to us to fully and completely handle the scope of work within our contract, and to do so while assisting them achieve maximum results with the lowest possible expenses. We further realize that our actions reflect back to our clients, and because of this, we highly emphasize professionalism, courtesy, and technical competence. In regard to State Government Offices, we are keenly aware of the pressures associated with providing ever-expanding services while experiencing decreasing numbers of staff and tight budgets.

iMedX operates with the philosophy that well-trained and educated employees are vital to our success. Not only do we highly screen all potential employees, but also we fully evaluate which employee to place on an account. Through this double screening process, iMedX, Inc., has developed the most effective, finely tuned work teams that provide nothing less than world-class services. We firmly believe that, without a doubt, people are the key to top quality services and total customer satisfaction.

OUR FIRST PRIORITY

Our first priority is providing <u>secure</u>, <u>world-class services</u> that you, our client, demand, and we do so in a professional, efficient, and effective manner. We have a track record of assisting our clients (Hospitals, Federal agencies, State agencies, medical centers, medical clinics, and private practitioners) achieve significant improvements in efficiency and productivity regarding the services we have been hired to provide.

SECURITY AND CONFIDENTIALITY

Security and confidentiality are of paramount concern to iMedX. Our offices are maintained within the confines of our privately owned 10,000 sf. secure facility.

Our staff is fully trained on, to include refresher training, privacy and security concerns. Each staff member signs a confidentiality statement which covers not only the *Privacy Act*, but also specific confidentiality concerns of our clients. Confidentiality and security has become more of a concern since enactment of HIPAA (the *Health Information Portability and Accountability Act*). Now, it is not just irresponsible to fail to adequately control confidential medical information, but also illegal. Our processes are set up so that we remain in strict compliance with all confidentiality and security requirements.

OUR SYSTEM

To reduce costs, provide professional services, and ensure efficiency, iMedX, Inc., uses the latest technology coupled with outstanding personnel who are committed to meeting all of our clients' needs. iMedX has developed a FOUR-PHASE SYSTEM of

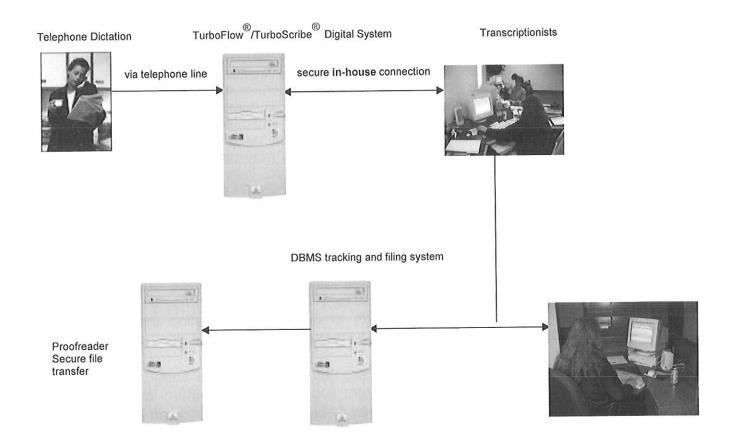
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providing the type of world-class transcription services that the facility requires. They are:

0	Phase I	Secure Voice Dictation
0	Phase II	Secure Transcription System
0	Phase III	Secure Delivery Procedures
0	Phase IV	Invoicing System with Audit Trail

Each Phase will be thoroughly discussed below. It is through this well-coordinated, structured approach to providing services that iMedX, Inc., has the ability to provide timely, professional, and quality-checked reports, while at the same time accurately and instantaneously knowing where each and every report is within our system. You will not call our office with a question about the status of a report and be told, "I'll have to research that and get back to you." Our administrative support staff have the ability to provide you with the exact status of any report at any point in the process.

The following chart depicts the manner in which the work will flow in this project utilizing iMedX's Four-Phase System:



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PHASE I - SECURE VOICE DICTATION

Prior to this new work beginning, each provider/dictator will receive a brochure/instruction sheet and wallet card detailing how to call into the system and dictate a report. The brochure/instruction sheet provides each dictator with the necessary information to log onto the system, enter the correct responses to prompts, and then dictate, edit, review, modify and close dictation. Nearly all new dictators successfully log onto the system and correctly dictate the first time attempted. Each provider/dictator shall receive a Logon ID Number that specifically identifies the person by name. The brochure/instruction sheet will be provided to the facility for approval upon award of the contract so as to ensure the providers may have them prior to the beginning date of the contract period.

Additionally, a help line via a toll-free telephone number is be available to all dictators. Any dictator or staff member may call the help line and receive assistance.

Using a standard, commonly available touch-tone telephone and a **toll-free** number accessible throughout the United States, providers/dictators call into our central dictation system 24 hours a day, 7 days a week. The system will audibly prompt the caller through the information to be entered. For instance, the first thing the caller will hear is, "Thank you for calling the Digital Voice System. Enter your User ID, followed by the pound key." Upon properly entering the ID number, the caller will then be prompted with "Enter the Group ID followed by the pound key," then "Enter work type, followed by the pound key." Upon properly entering the work type, the caller will be prompted with "Enter patient number followed by the pound key." After properly entering the patient number, the caller will hear a tone indicating that the system is ready to receive dictation. When the dictation is completed, the provider/dictator may either begin a new report or log off of the system. Upon completion of the dictation, the provider/dictator enters the exit code. The system will automatically give the provider/dictator the Job ID Number for each report. It is a unique number. That unique number specifically identifies each separate report called in, and the dictator may use this Job ID Number for reference or tracking purposes.



The dictation system automatically enters the report identifying information into a database system that is used to control the work assignment. The information entered into the database includes the dictator's ID number, the date and time called in, the work type, the claimant number, the length of the dictation, and several other types of administrative data used to control workflow. Through use of its SQL database management system, this system can provide reports to the facility indicating the dictation

received in the past 24 hours, or as far back as the facility would like to go.



Multiple callers may access the system at one time. Currently, there may be 64 concurrent accesses to the system for dictation, with the ability to easily and quickly expand. Hence, we have more than sufficient dictation capacity to meet or exceed the

Submitted by iMedX, Inc.

requirements of this solicitation. Busy signals do not occur. There are ample lines for dictators to call in on. However, our telephone service provides us with online access to telephone call records, which permit us to monitor the call history of our T-1 telephone lines.



The dictation is not erased upon completion of the transcription. When the report is signed off, it is transferred to a holding system that will maintain the voice recording for the length of time deemed necessary either by prudent work practices or based upon contractual requirements.

Service agreements with the manufacturer are maintained to ensure the system is available 24/7.

PHASE II - SECURE TRANSCRIPTION SYSTEM

Providers will be dictating into our digital voice recording servers located within our secure facilities. The software is provided by Dictran, a leader in digital voice recording. The servers are connected to T-1 lines for incoming voice recording. The T-1 lines are set up in a hunt group so that the system looks for an available open line and then routes the call to that line.

Once the voice file is recorded, it is then transcribed using TurboFlow[®], which is a secure Java based transcription system operating on Windows servers also.. TurboFlow[®] is the transcription/text portion of our total system. Transcriptionists can playback the voice file and transcribe the reports into MS Word, all within a secure environment. The text system stores the completed report with the associated voice file so that a proofer or the dictator may review/edit the completed report while listening to the original dictation.

The delivery portion of program, TurboScribe[®], which also operates on Windows servers, provides the secure electronic report delivery functioning. It has 128 bit encryption and is also Java based. A sample screen shot has been provided above. Providers and the facility staff will have access to this program, which is controlled by usernames and strong passwords. It is through this program that the providers will have instant access to their reports when they are completed, and not have to wait for them to be uploaded, downloaded, e-mailed, or sent to them via the US Postal Service. As soon as they are transcribed, the reports are available online, and in a secure environment.

All equipment is maintained in a very secure mode, behind Cisco firewalls and constantly protected with antivirus programs, and secured by username/pwd

Submitted by iMedX, Inc.

requirements. Further, the hard drives are partitioned and access to each partition is controlled on a need-to-access basis. If an employee does not need to access a certain partition of a hard drive, access is not granted.

iMedX does not view any dictation as "problem dictation." We expect that a certain percentage of dictators will use slurred speech, speak much faster than normal, take shortcuts, and for those with foreign accents, will have difficulty pronouncing our English words. This is what we expect and are prepared for. We fully realize that this is not a perfect world, and dictators do not dictate perfectly.

Our process begins with the supervisor assigning the work to our transcription staff, based upon the priorities established by the facility. The dictation system provides the Supervisor with the required management information so that the transcription work may be distributed in a manner so as to ensure its completion within the required turnaround times. The facility has the option to have any dictation marked as STAT and transcribed immediately. This change in status may occur either through a toll-free telephone call or via a fax request, or any other secure method the staff wish to use. Once we are notified that the facility wants a report changed to a STAT, the supervisor will immediately make the adjustments in workload distribution and a transcriptionist will immediately begin transcribing the STAT report. Our digital dictation system has the ability to send the reports for transcription in the order that the facility requires them, with the reports designated as STAT moving to the top of the list.

Medical transcriptionists use Microsoft Word on state-of-the-art Pentium PCs equipped with electronic references, to include Stedman's Electronic Medical Dictionary, Quick Look Electronic Drug Reference, American Heritage Electronic Dictionary and Stedman's SpellChecker for Microsoft Word. The electronic references stay available on-screen through use of separate windows in the Windows operating system and are immediately available. Once accessed, the transcriptionist just has to type in the word the way it sounds and the reference program immediately will either confirm the correctness or offer alternatives to be considered. Also, the references provide definitions that further clarify the correctness of the word/term. This eliminates manually looking up words/terms in books and other hard copy reference material.

Our transcriptionists are thoroughly familiar with, and highly trained on, the terminology used in the healthcare profession and the legal profession, including all body systems and human anatomy, prescription drugs, and medical, chiropractic and other professional healthcare procedures. Based upon our wealth of hospital transcription, our transcription staff have the ability to transcribe words and comprehend meanings of medical terminology from even the worst of dictation, whether it be by American or foreign dictators.

Should there be any incomplete, inaudible, or partial dictations, based upon the your guidance, we can either notify the dictator or notify the staff. Should you want us

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to transcribe incomplete or partial dictations, we will do so. Should one report be dictated in two separate dictations, we have the ability to merge those dictations into one report. There is no extra charge for these types of issues.

All of our transcription staff shall have at a minimum four years of medical transcription experience and shall be closely supervised by our most experienced staff, which is headed by a CMT (Certified Medical Transcriptionist). All transcriptionists are trained on the requirements of the Privacy Act and HIPAA requirements, as well as given period security briefings.

Our transcriptionists and QA staff all have and utilize Stedman's electronic references and spellcheckers to ensure high-quality reports.

Should a document need re-transcribing because it is inaccurate due to transcriber errors, there shall be no charge and we shall return that document within 24 hours of notification. We hereby acknowledge the importance of accuracy and timelines of the transcribed reports. Your agency is outsourcing this critical work and must have the documents available within your turnaround requirements so as to provide ongoing, professional patient care.

<u>Formatting of the Reports.</u> iMedX shall prepare the reports using the formats provided by the facility.

Proofreading. Upon completion of the transcription, the report is reviewed for quality assurance purposes. The QA Staff is headed by an MD. The QA staff will proofread the reports for accuracy and completeness. The proofreading will be accomplished while listening to the voice dictation file, and will include a check for format and completeness. Any and all errors are immediately corrected, and the transcriptionist and supervisor receive feedback so as to avoid similar problems in the future. The proofreader has at his/her disposal the same electronic references as do the transcriptionists. Those electronic references include an electronic medical dictionary, electronic drug reference, electronic English dictionary, and electronic spellchecker, as well as Internet access to applicable technical sites. Once the QA process has been completed, the report is permanently stored and made available to the Administrative Support staff for tracking and forwarding.

Management personnel also constantly/daily monitor the incoming dictation and produced transcription so as to ensure that all dictation received is completed and forwarded within the prescribed time period. Logs are kept to verify this information and to determine our turnaround time for all dictation. Daily staff meetings are held with all supervisors for the purpose of fine-tuning work flow processes and procedures. Emphasis is placed on determining more efficient methods to perform our transcription so that we continually provide our clients with world-class services. Repeated problems

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are not tolerated. Corrective action is taken in a timely manner, to include discharge/replacement of employees if so required.

The ability to merge split reports is built into the way we manage our information/reports. If, for whatever reason, the report must be dictated and transcribed in two sections or more, through use of our database management system and computer filing system we can quickly locate the original/previous report and make the necessary adjustments. Once the report is amended, we will forward it and invoice only for the previously unbilled portion. The database information will accurately identify whether it is the entire report or only the newly transcribed portion which should be invoiced.

Confidentiality/Security. Our transcriptionists are trained in security matters immediately upon hiring, and refresher training is conducted on a routine basis. Transcription staff receive ongoing training and refresher training regarding confidentiality/security so as to ensure their awareness of, and compliance with, the requirements of confidentiality in all the information processed. Additionally, management staff closely monitor all activities to further enhance and ensure that confidentiality of data is strictly adhered to. Our staff are familiar with, trained on, and adhere to the requirements of HIPAA, HITECH, and the Privacy Act.

iMedX's staff will sign a confidentiality statement upon notification of award of this contract. The original copy will be forwarded to the facility prior to beginning of contract. Any new or additional employees shall sign a statement of confidentiality and the original will be forwarded to the facility. iMedX hereby agrees that on the termination or expiration of this contract, it will not use any of such data or any material derived from the data for any purpose and, where so instructed by the facility, will destroy or render it unreadable.

Large Fluctuations in Volume of Work. iMedX has the ability to adjust to gross and/or minor changes in workload volume because: 1) we have a staff of over 200 transcriptionists, 2) we have experience in, and are quite comfortable with, managing heavy workloads based upon our other clients which include large acute care hospitals, and 3) we utilize the very latest equipment and software which enhance our abilities to produce a world-class product in an efficient manner. The key to our success in adapting to ever-changing workload requirements is our transcription staff of fully-qualified, professional, dedicated, and highly motivated transcriptionists. Additionally, our supervisors are trained to constantly monitor fluctuations in workload and make necessary adjustments in job assignments before they become a problem. We take the proactive approach.

Another key to our success in adapting to fluctuations in workload is in top management keeping in close contact with our clients. iMedX makes it a practice to routinely call our clients to discuss the services we are providing and any changes we

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have seen, request updated information from the client, and offer our assistance where it is needed. We do not sit back and wait for something to happen. From the very beginning, we establish and maintain a good working relationship with our client key personnel and go out of our way to ensure that we understand what is required and expected.

Quality control.

iMedX, Inc., has developed system checks and double checks to ensure that the dictation received is, in fact, transcribed and delivered to the correct location. We accomplish this through a well-defined process.

Step 1. Reports are assigned to transcriptionists only by well-trained and seasoned supervisors.

Step 2. Reports are automatically entered into our database management tracking system upon preparation.

Step 3. Tracking logs are maintained which give the exact location the report is in the transcription cycle.

Step 4. Completed reports are proofread and returned to the supervisor and transcriptionist.

Step 5. Our most experienced transcriptionists audit completed reports, double checking that the content and format are correct.

Step 6. Database audit trail documents are matched against the listing of electronic files to ensure there is an exact match.

Step 7. Backups of all reports and database information are automated and occur every 15 minutes throughout the day.

Step 8. Daily transmittal sheets are produced and maintained in the office. These sheets list all reports forwarded to our clients each day.

Step 9. Comeback copies and receipts are maintained for daily deliveries.

Step 10. Signed off reports are matched to the database tracking information to ensure that what was signed off was actually transcribed.

Step 11. The transmittal letters form the basis of our invoicing system, thereby assuring that the client is billed only for what was completed.

Step 12. Quality control meetings are held both in the office and with our clients to ensure everyone can discuss issues and has a part in resolving problems.

This system give us a total procedure review, brings us together as a team working on the process, and includes our client as an active participant in the quality review process. The facility staff will be asked to participate in such review processes. Ours is truly a team approach.

PHASE III - SECURE DELIVERY PROCEDURES

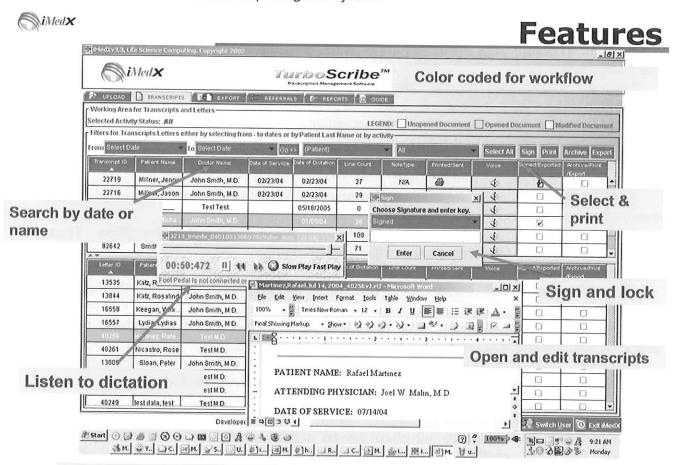
Secure Transfer of File. iMedX can provide completed reports in a secure manner. Utilizing a secure file transfer system, iMedX, Inc., will securely provide the

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completed reports, along with transmittal lists. There are options available to the facility. The transfer may be set up utilizing a secure VPN along with an FTP system, or any other process the facility may prefer to utilize

Our preferred method of providing the completed reports to the facility is through the TurboFlow[®]/TurboScribe[®] System by iMedX. Once the file is transcribed and quality-checked, it is immediately and securely available online. Most customers prefer to use TurboScribe[®] to review and edit the document as needed before triggering the export. Once in TurboScribe[®], the user has a rich feature set to manage the document and distribute to all authorized recipients in a paperless way. Please note that we will also provide means for the provider to listen to the original dictation.

Below is a screen shot depicting the system.



Fax & email to colleagues

www.imedx.com

Submitted by iMedX, Inc.

TurboScribe[®] Features

Ability to manage multiple physicians, locations. With our 'super-user' ID, a
medical records administrator, can view and correct transcripts for groups of
physicians, on one single view or screen.

• *Electronic sign-off capability*. Physicians can electronically approve and sign off on documents from any location. Once the document is signed, it cannot be altered. The final document may be directly uploaded into ERE.

- Eliminate the need to fax transcripts via our automated fax/email/display directly from the desktop, thus saving costs and improving administrative productivity.
- Listen to original dictations online. With one click you can play back the
 provider's dictation, in case there are any doubts on particular words, names,
 medical terms, or phrases.
- Easy, instantaneous, database-driven lookup and retrieval. You can pull up transcripts by patient name, physician, date ranges, etc.
- Save time through visual, color workflow cues. With one glance, you can see where in the workflow a particular transcript is.
- Use a digital recorder or telephone. Dictations are sent to our servers with one click of a button or a simple phone call.
- Automatically upload dictations. Dictate into the recorder and plug it in.
 Dictations are uploaded automatically to our servers via our EZUpload™
 software.

In any event, we have the secure facilities and systems/programs to make the file transfer user friendly and secure. Our systems include the use of Cisco Firewalls and secure VPN and FTP programs, along with Windows servers. We will work very closely with the facility personnel to ensure that whichever file transfer system they prefer is set up to function efficiently and securely.

PHASE IV - INVOICING SYSTEM WITH AUDIT TRAIL

iMedX uses a database management system to track all of its transcription. The reports are automatically entered into the database as they are prepared. The database has fields which identify the date typed, date dictated, dictator, transcriptionist, claimant/patient identification information, and other information necessary for administration of our system for tracking and invoicing. It is through this database system that we have the ability to immediately respond to questions regarding the status of completed reports, i.e., when was the report completed, when was it transmitted/printed/mailed, et cetera. With this information, we can find previously transcribed reports and reprint them, if so requested.

The invoices will be prepared utilizing the Daily Transmittal Sheets, which contain the audit trail information, as supporting documentation. In other words, attached to each invoice will be the Daily Transmittal Sheets which cover each day listed on the

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invoice. This procedure ensures that the facility can audit any and all invoices received, right down to the individual report. The total amount being invoiced is simply the line count total from the Daily Transmittal Sheets for that period of time.

The actual transcribed reports shall be maintained for whatever period of time required by facility. At the end of the retention period, iMedX shall destroy (erase) all electronic data and shred related documents, unless instructed otherwise by the staff.

Insurance, Confidentiality, Security, Destruction of Records and Loss Reporting:

We shall comply with all insurance, confidentiality, security, destruction of records, and loss reporting requirements. We have the appropriate insurance and Certificates of Insurance can be provided.

We fully appreciate that you are entrusting us with very sensitive and confidential information and we do not take this lightly. All of our systems are set up to be Privacy Act and HIPAA compliant. The information we received is used strictly for its intended purpose. Our staff are well trained on nondisclosure of information and well aware of the penalties that may be imposed for any violation.

Sensitive records are monitored and destroyed in accordance with client instructions. Electronic records are destroyed so that the information is no longer useable nor can it be reconstructed.

Personal Identifiable Information (PII) is safeguarded so as to prevent loss. Papers and electronic media do not leave this building. All data is stored on secured systems behind secure Cisco firewalls. Should any loss be reported, we shall fully comply with the requirements of the contract.

Ancillary/Incidental Transcription:

We shall remain prepared to take on any additional work that the agency may need from our services for ancillary/incidental onsite Agency transcription needs based upon the same charges and processes as all other work performed under this contract. We are willing to accept the terms of this requirement in the Solicitation.

COST

Our bid prices have been annotated on the Cost Proposal Form, which is attached at TAB 9.



VENDOR

I-Medx

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

4 Corporate Drive, Suite 380

Shelton, Ct 06484

Solicitation

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NUMBER

PAGE

WEH13008

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ROBERTA WAGNER

304-558-0067

HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL

454 MCDOWELL STREET WELCH, WV 24801

304-436-8710

DATE PRINTED D OPENING DATE: 30PM OPENING TIME 10/23/2012 AMOUNT . UNIT PRICE CAT. ITEM NUMBER UOP LINE QUANTITY NO OPEN-END BLANKET CONTRACT ************ MANDATORY PRE-BID MEETING 10/10/2012 AT 1:00 PM AT WELCH COMMUNITY HOSPITAL, 454 MCDOWELL STREET, WV 24801, ADMINISTRATIVE CONFERENCE ROOM *********** ***** 961-72 YR 2001 BLANKET CONTRACT FOR DICTATION/TRANSCRIPTION SERVICE THE STATE OF WEST VIRGINIA, DEPARTMENT OF HEALTH AND HUMAN RESOURCES, BUREAU FOR BEHAVIORAL HEALTH FACILITIES, WELCH COMMUNITY HOSPITAL, IS SOLICITING BIDS TO PROVIDE DICTATION/TRANSCRIPTION SERVICES AS PER THE ATTACHED SPECIFICATIONS. THE MODEL/BRAND/\$PECIFICATIONS NAMED HEREIN ESTABLISH THE ACCEPTABLE LEVEL OF QUALITY ONLY AND ARE NOT INTENDED TO REFLECT A PREFERENCE OR FAVOR ANY VENDORS WHO ARE BIDDING PARTICULAR BRAND OR VENDOR. ALTERNATES \$HOULD SO \$TATE AND INCLUDE PERTINENT FAILURE TO PROVIDE LITERATURE AND SPECIFICATIONS. INFORMATION FOR ANY ALTERNATES MAY BE GROUNDS FOR THE STATE RESERVES THE RIGHT REJECTION OF THE BID. TO WAIVE MINOR IRREGULARITIES IN BIDS OR SPECIFICATIONS OF THE WEST IN ACCORDANCE WITH SECTION 148-1-4(F)

TELEPHONE SIGNATURE

VIRGINIA LEGISLATIVE RULES AND REGULATIONS.

ADDRESS CHANGES TO BE NOTED ABOVE

DATE

Oct 24 2012 10:36am P001/005

ADDRESS CORRESPONDENCE TO ATTENTION OF:

WEH13008

Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

ROBERTA WAGNER 304-558-0067

Amadon

RFQ COPY TYPE NAME/ADDRESS HERE

HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL

SHIP

454 MCDOWELL STREET WELCH, WV 24801

304-436-8710

DATE PRINTED BID OPENING DATE OPENING TIME AMOUNT CAT NO UNIT PRICE ITEM NUMBER UOP QUANTITY LINE ADDENDUM NO. 3 1. TO MOVE THE BTD OPENING FROM 10/25/2012 TO 11/1/2012. 2. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALTFICATION OF YOUR BID. END OF ADDENDUM NO.

SIGNATUR TITLE

TELEPHONE

ADDRESS CHANGES TO BE NOTED ABOVE



SIGNATURE

RFQ COPY

i Med X, INC

TYPE NAME/ADDRESS HERE

WV PURCHASING ACA SECT Fax 304-558-4115 Oct 19 2012 04:13pm P001/005 State of west virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

4 Corporate Dr. Suite 380 Shelton, CT 04484

FEIN

WEH13008

ADDRESS CORRESPONDENCE TO ATTENTION OF

ROBERTA WAGNER 304-558-0067

HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL

454 MCDOWELL STREET WELCH, WV 304-436~8710 24801

DATE PRINTED 10/18/2012 BID OPENING DATE: 30PM OPENING TIME 10/25/2012 AMOUNT ITEM NUMBER UNIT PRICE UOP CHANTITY LINE ADDENDUM NO. 2 1. TO ATTACH A PAGE CONTAINING VENDOR QUESTIONS AND THE AGENCY RESPONSES INADVERTENTLY OMITTED FROM ADDENDUM NO 1. 2. TO MOVE THE BTD OPENING FROM 10/23/2012 TO 10/25/2012. | BID OPENING TIME REMAINS AT 1:30 PM. 3. TO PROVIDE THE ADDENDUM ACKNOWLEDGMENT. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID. END OF ADDENDUM NO. 2 961-72 YR 0001 BLANKET CONTRACT FOR DICTATION/TRANSCRIPTION SERVICE WEH13008 ***** TOTAL THIS IS THE END OF RFQ ****

TELEPHONE

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VENDOR

WV PURCHASING ACA SECT Fax 304-558-4115 Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

WEH13008

Oct 19 2012 04:06pm P001

ADDRESS CHANGES TO BE NOTED ABOVE

ROBERTA WAGNER 304-558-0067

ADDRESS CORRESPONDENCE TO ATTENTION OF

RFQ COPY TYPE NAME/ADDRESS HERE helton, CT 06484

HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL

454 MCDOWELL STREET WELCH, WV

304-436-8710 24801

DATE PRINTED 9ID OPENING DATE: 201 OPENING TIME 10/232012 CAT ITEM NUMBER UNIT PRICE AMOUNT QUANTITY UOP LINE NO ADDENDUM NO. 01 1. TO PROVIDE PRE-BID SIGN IN SHEETS FROM THE MANDATORY PRE-BID MEETING. 2. TO PROVIDE ANSWERS TO QUESTIONS RECEIVED FOR THIS SOLICITATION. 3. TO PROVIDE SAMPLE REPORTS AS A RESHONSE TO QUESTION NO. 8 4. TO PROVIDE A REVISED COST SHEET. 5. TO PROVIDE THE ADDENDUM ACKNWOLEDGMENT. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID. END OF ALDENDUM NO. 01 TELEPHONE SIGNATURE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

20-5095500

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: WEH13008

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 rec	ceived	l)	
[] Addendum No. 1	Ţ	J	Addendum No. 6
[] Addendum No. 2]]	Addendum No. 7
[] Addendum No. 3	[]	Addendum No. 8
[] Addendum No. 4	Ţ	J	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 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.

Company

Authorized Signature

Date

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

Revised 6/8/2012

RFQ No. WEH 13008

Purchasing Affidavit (Revised 07/01/2012)

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

Witness the Following Signature: Vendor's Name: Authorized Signature: State of Ohjo County of Lawrence, to-wit: Taken, subscribed, and sworn to before me this 23 day of October, 20/2. My Commission expires September 28th, 20/5. AFFIX SEAL HERE NOTARY PUBLIC Jumps 1.

WEH13008

WV-96 Rev. 9/11

ACCEPTED BY:

AGREEMENT ADDENDUM

In the event of conflict between this addendum and the agreement, this addendum shall control:

- 1. <u>DISPUTES</u> Any references in the agreement to arbitration or to the jurisdiction of any court are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims.
- 2. HOLD HARMLESS Any provision requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety.
- 3. GOVERNING LAW The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.
- 4. TAXES Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor or any other party.
- 5. PAYMENT Any references to prepayment are deleted. Payment will be in arrears.
- 6. INTEREST Any provision for interest or charges on late payments is deleted. The Agency has no statutory authority to pay interest or late fees.
- 7. NO WAIVER Any language in the agreement requiring the Agency to waive any rights, claims or defenses is hereby deleted.
- 8. FISCAL YEAR FUNDING Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.
- STATUTE OF LIMITATION Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any other party are deleted.
- 10. SIMILAR SERVICES Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted.
- 11. <u>FEES OR COSTS</u> The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void.
- 12. ASSIGNMENT Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement.
- 13. LIMITATION OF LIABILITY The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision limiting the Vendor's liability for direct damages to a certain dollar amount or to the amount of the agreement is hereby deleted. Limitations on special, incidental or consequential damages are acceptable. In addition, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.
- 14. RIGHT TO TERMINATE Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor. Agency agrees to pay Vendor for services rendered or goods received prior to the effective date of termination.
- 15. TERMINATION CHARGES Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term.
- 16. RENEWAL Any reference to automatic renewal is deleted. The agreement may be renewed only upon mutual written agreement of the parties.
- 17. INSURANCE Any provision requiring the Agency to purchase insurance for Vendor's property is deleted. The State of West Virginia is insured through the Board of Risk and Insurance Management, and will provide a certificate of property insurance upon request.
- 18. RIGHT TO NOTICE Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.
- 19. ACCELERATION Any reference to acceleration of payments in the event of default or non-funding is hereby deleted.
- 20. CONFIDENTIALITY -Any provision regarding confidentiality of the terms and conditions of the agreement is hereby deleted. State contracts are public records under the West Virginia Freedom of Information Act.
- 21. AMENDMENTS All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General.

STATE OF WEST VIRGINIA	VENDOR
Spending Unit:	Company Name://Medy/tuc.
Signed:	Signed: Willet How
Title:	Title: <u>Fresident</u>
Date	Date: 10 23-12

CERTIFICATION AND SIGNATURE PAGE

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

i Medx, INC	
(Company)	
Villa Man	
(Authorized Signature)	-
Venkyt Sparma	President
(Representative Name, Title)	
800-221-0244 x2	47 740-377-4559
(Phone Number)	(Fax Number)
10-23-12	
(Date)	

Rev. 07/12

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the West Virginia Code. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

D111010	
1.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preced-
	ing the date of this certification; or , Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or ,
	Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one number state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid, or,
3.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4.	Application is made for 5% resident vendor preference for the reason checked: Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7.	Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules. Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women and minority-owned business.
requir again or de	er understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the rements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty ast such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency ducted from any unpaid balance on the contract or purchase order.
author the re deem	ubmission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and orizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid equired business taxes, provided that such information does not contain the amounts of taxes paid nor any other information ned by the Tax Commissioner to be confidential.
Unde	er penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate ages during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.
	er: i Med Tuc. Signed: Julia Han
Date	: 10-23-12 Title: [sesident
99/00/75/75	



iMedX QUALITY ASSURANCE PROGRAM

iMedX's Quality Assurance (QA) Program is set in place to insure the highest quality transcription to our clients and patients we serve. Medical documents are legal documents. This makes the quality of the chart our number one priority. Therefore, our medical transcriptionists are required to maintain an accuracy score of 98%.

The purpose of our QA program is to provide quantifiable, credible, verifiable and measurable results that are designed to enhance the MT's skills and provide an improved product to our current and future clients. Medical transcription is not an exact science, and although technology plays a role in enhancing it, it does not happen solely by any machine. Medical transcription is an interpretation of the spoken medical language. Skills include a generous knowledge of English usage and grammar, understanding of medicine and the medical language, good listening and intuitive skills in capturing not only what was said, but what was meant to be said. MTs must have the ability to stay focused and to concentrate for long periods of time with attention to detail, and possess an eagerness for learning new information as the world of medicine changes every day. A QA program is a valuable educational tool for improving skills. Improved skills means improved performance and productivity, benefiting the MT, iMedX, and the client.

QA Review – Our medical transcriptionists are encouraged to send their charts in for further review to our quality editors if they have blanks, discrepancies, or questions about the content within a chart. Furthermore, an MT that is new to an account, new to the company or new to the platform will have to send 100% of their reports to Qa review until they have met the required quality standards to deliver directly to the client. After our QA team has reviewed the chart, the MT will receive feedback through an editing. This report is downloaded to every MT on a daily basis.

QA Audit Procedure – On a monthly basis, our MTs are randomly reviewed using client specifications and AHDI's (formerly AAMT) Book of Style as a guideline. We will make every effort to assist MTs who are having quality problems by setting goals and working with them. To insure iMedX is producing the highest quality transcription possible, failure to comply with our quality program will result in termination.

QA auditing is a vital part of MT mentoring and evaluating. The audit scores along with the error types identified allows the Team Leader to assess an MT's strengths and weaknesses. The TL should be discussing each and every audit with the individual MT in order to focus on those strengths and weakness and to assist the MT with materials, such as sample dictations, or guidelines from the Book of Style and/or client specifics. The TL will educate the MT on the importance of 98.00% or above accuracy and its effect on client satisfaction and the potential for termination if not improved. With good solid mentoring, which includes listening to the MT, and utilizing the evaluating tools that are available to them, any MT can become successful at iMedX.

QA Improvement Plan – If quality scores fall below 98%, the QA improvement plan outlines steps to follow in order to allow adequate opportunity for the MT to improve their QA scores.

Customer Quality Report – Customer quality audits, sometimes referred to as site audits, are performed based on contractual obligation. Some clients do not have quality auditing language in their contract. Contractually obligated client audit is an audit that is performed for an individual client based on contract stipulations; typically a minimum of 3% of total volume transcribed/dictated. Initial audits are usually done in a tightened mode where 10% of total volume is audited. Please refer to the attached sample for a customer quality audit report.



QUALITY ASSURANCE AUDITING PROCEDURE

Refer to a sample of a completed Quality Assurance Audit Review form (attached).

- 1. Obtain original files sent from the MT.
 - a. Vary days so that the same day is not always selected for this process.
 - b. Randomly select dictators and work types that have not been edited.
- 2. In order to obtain an appropriate sampling size, select a document or documents to equal the appropriate level of audit review. AHDI recommends a sampling size of 1% but iMedX uses the following sampling sizes:
 - a. Reduced sampling (1-3%)
 - b. Normal sampling (3-5%)
 - c. Tightened sampling (5-10%)

There are switching rules that govern when the sampling size must be changed. Select the documents from MTs and paste them into the QA template in Word. On the Quality Review Report form, indicate the voice file number (or numbers) and record the line count.

- 3. Proceed with the review (comparing 100% to voice) and record errors on the electronic version of the documents reviewed and the Quality Review Report. If a major error is discovered during this review, consideration will be given to returning a corrected report to the client. This will be assessed and determined by the Director of Transcription on a case-by-case basis.
- 4. To calculate the accuracy score of documents reviewed, iMedX follows the Accuracy Percentage method. Please refer to Page 6 for the details.
- 5. Complete Quality Review Report and route copies accordingly.
- 6. Review each MT once per month. If the Percentage of Accuracy falls below 98%, refer to the QA Improvement Plan on page 3 for additional required QA procedures.



QA IMPROVEMENT PLAN

According to IMedX's policies, all MTs shall maintain quality scores of 98% or above.

- Designated QA/audit staff will conduct a QA audit once per month from random reports and the results will be sent to the QA/Audit manager.
- 2. The QA/Audit manager reviews the audit and sends a copy of the Quality Review Report to the Team Leader and the Director of Global Quality. Refer to the attached QA Audit Review for a sample report.
- 3. The TL sends a copy of the audit results to the individual MT within two business days when the QA audit was performed. The Director of Transcription, Director of Global Quality and HR will receive a copy of the Quality Review Report. The MT is asked to respond to denote receipt and understanding of the audit results.
- 4. When quality scores fall below 98%, all of the reports of the MT will be assigned to a designated QA staff who will mentor the MT for one week. The QA will review and provide feedback to the MT on the reports created for that one week. After a week of mentoring, the MT will then be asked to work independently and audits will be performed on the reports completed for that week.
- 5. If the quality score is 98% or above, the QA mentoring will now be stopped.
 - a. Contact the MT to report the results of the QA audit.
 - b. Document this in the employee's personnel record.
 - c. Send a copy to the Director of Transcription.
- 6. If the quality score, however, is below 98%, the mentoring process described in step #4 will be repeated. In addition, the Team Leader will counsel the MT in areas that need improvement by providing additional samples of difficult dictators or complex procedures, and evaluate the need to modify the work types being sent to the MT, or account assignment. Additionally the Team Leader will set goals for the MT and jointly reviewing them on a daily basis. This discussion constitutes a verbal warning by the Team Leader.
 - a. This discussion should be documented in the MT's record in the form of a typed report dated and signed by the Team Leader with copies sent to the Director of Transcription and the Director of Global Quality. This documentation should also recap, as discussed, plans for improvement and an action plan.
- 7. If at the end of this period the quality score is still below 98%, and after all of the following steps have been accomplished, the MT will be terminated from IMedX.
 - a. Verbal warning had been earlier performed and documented.
 - b. Letter of warning had been sent to the MT explaining the consequences of continued low quality scores.
 - c. Additional audits were performed to offer the opportunity for improvement.
 - d. All documentation had been placed in the MT's file.
 - e. Per the direction of the Director of Transcription, the Team Leader will call and send a followup letter to inform the MT that they will be terminated as an employee of IMedX.



REVISED ERROR CATEGORY AND NEGATIVE POINT GUIDELINES

iMedX has a quality assurance program designed to assist the medical transcriptionist in attaining and maintaining an acceptable level of error-free documentation (98%). The grading system for errors has been established based on the importance of an error and its effect on the document and the risk it would place the patient at should the error cause a misinterpretation in treatment.

A recent review of our negative point guidelines has been undertaken and has been revised in accordance with a document in March 2005 "Quality MT" that talks about *Best Practices for Measuring Quality in Medical Transcription* issued by AHDI (formerly AAMT). AHDI (formerly AAMT) has made specific recommendations as to definition of errors and error values and has come up with the following detailed classifications:

Critical flaws, defined as those which impact patient safety: AHDI identifies the following: medical word misuse, incorrect drug or drug dosage, incorrect lab values or test names, omitted dictation, patient identification error. Major flaws, defined as those which impact document integrity: AHDI identifies the following: medical word misspelling, English word misspelling, incorrect verbiage, failure to flag a document when clearly indicated, abuse of flagging documents, protocol failures.

Minor flaws: AHDI identifies the following: grammar, punctuation, and typographical errors and formatting errors.

ERROR CATEGORIES	NEG PTS
CRITICAL ERRORS - AFFECTING PATIENT SAFETY	
Significantly Incorrect or Misused Term/Data/Abbreviation	3
Addition/Omission of Significant Words	3
Site Specific/Demographics Error (Specific to Client)	3
Creative Trans/Nonsense Phrase/Dictator Rephrasing	3
Medications/Dosages	3
Other	3
MAJOR ERRORS - AFFECTING DOCUMENT INTEGRITY	
Creative Transcription/Nonsense Phrase/Dictator Rephrasing	1
Incorrect/Added/Omitted or Misused Terms/Data/Abbreviation	1
Medical Word Misspelling	1
English Word Misspelling	1
Missing Blanks/Failure to Flag	1
Abuse of Blanks	1
Format/Template	1
Demographics/CC	1
Medications/Dosages	1
Incorrect Autocorrect/Word Expansion	1
Incorrect Gender of Patient	1
Other	1
MINOR ERRORS	
Incorrect/Misspelled Insignif. Word/Spellcheck	0.50



Dictator/Author/Signing/Attending Physician/Clinician	0.50
Incorrect Added/Omitted (us. ≥2 words) or Misused Terms/Data/Abbrev.	0.50
Creative Transcription/Nonsense Phrase/Dictator Rephrasing	0.50
Medical/English Typo	0.50
Incorrect Added/Omitted (us. <2 words) or Misused Terms/Data/Abbrev.	0.25
Medical/English Typo - Minor	0.25
Blanks Filled in by Reviewer (invalid blank)	0.25
Grammar/Punctuation/Style/Capitalization	0.25
Incorrect Gender of Others	0.25
Format	0.25
Other	0.25
Educational	0.00



HOW TO COMPUTE THE ACCURACY OF A REPORT/s

(as defined in the article Best Practices in 2005 by AHDI)

ACCURACY PERCENTAGE METHOD

Multiply Each Error by Point Value...

Total the Error Value Divided by Line Count = Total Error Fraction
Subtract Total Error Fraction from 1.0 = Accuracy Fraction
Multiply Error Fraction by 100 for Percentage Accuracy

Example:

- 1. Individual document
 - a. Report = 150 lines
 - b. Total error points = 2 points
 - c. 2/150 = 0.013
 - d. 1 0.013 = 0.987
 - e. 0.987 * 100 = 98.70%
- 2. Multiple documents
 - a. 16 documents totaling 720 lines
 - b. Total error points = 7.5 points
 - c. 7.5 / 720 = 0.0104
 - d. 1 0.0104 = 0.9896
 - e. 0.9896 * 100 = 98.96%



Quality Assurance Audit Review (sample form)

MT / QA:

[Name]

PERIOD COVERED:

[mm/dd/yy - mm/dd/yy]

DATE:

[Date]

This report is intended to provide you with a summary of the findings of a recent audit performed on your work performance. A total of ____ reports / lines were randomly selected for QA audit review. The information provided here is strictly confidential.

	VALUE		# ERRORS	TOTAL
TYPE OF ERROR	VALUE		# EKKOKS	IOIAL
CRITICAL ERRORS - AFFECTING PATIENT SAFETY	3	Х		=
Significantly Incorrect or Misused Term/Data/Abbreviation	3	X		=
Addition/Omission of Significant Words	3	X		=
Site Specific/Demographics Error (Specific to Client)	3	X	-	=
Creative Trans/Nonsense Phrase/Dictator Rephrasing	3	X	-	=
Medications/Dosages	3	X	8 1	=
Other	J	^		-
MAJOR ERRORS - AFFECTING DOCUMENT INTEGRITY	1	х		=
Creative Transcription/Nonsense Phrase/Dictator Rephrasing		X		=
Incorrect/Added/Omitted or Misused Terms/Data/Abbreviation	1			
Medical Word Misspelling	1	X		
English Word Misspelling	1	X		=
Missing Blanks/Failure to Flag	1	X		=
Abuse of Blanks	1	Х		
Format/Template	1	Х		
Demographics/CC	1	X		=
Medications/Dosages	1	Х		=
Incorrect Autocorrect/Word Expansion	1	Х		
Incorrect Gender of Patient	1	Х		=
Other	1	X		=
MINOR ERRORS				
Incorrect/Misspelled Insignif. Word/Spellcheck	0.50	Х		=
Dictator/Author/Signing/Attending Physician/Clinician	0.50	Х		=
Incorrect Added/Omitted (us. ≥2 words) or Misused Terms/Data/Abbrev.	0.50	Х		=
Creative Transcription/Nonsense Phrase/Dictator Rephrasing	0.50	Х		=
Medical/English Typo	0.50	Х	-	=
Incorrect Added/Omitted (us. <2 words) or Misused Terms/Data/Abbrev.	0.25	X	le 	=
Medical/English Typo - Minor	0.25	X		=
Blanks Filled in by Reviewer (invalid blank)	0.25	X	-	=
Grammar/Punctuation/Style/Capitalization	0.25	X	-	=
Incorrect Gender of Others	0.25	Х		=
Format	0.25	Х		=
Other	0.25	Х		=
Educational	0.00	X		=
TOTAL COUNT OF ERRORS				
TOTAL LINES				
ACCURACY				5.



Accuracy is computed via the "Accuracy Percentage Method"

- i. Multiple each error by its point value.
- ii. Total the error points.
- iii. Subtract total error points from lines in report.
- iv. Divide by lines in report.

1. INTERPRETATION OF SCORES

98.01% and above = Exceeds standard 98.00% = Meets standard Below 98% = Needs improvement

2. ERROR ANALYSIS

- a. Critical errors =
- b. Major errors =
- c. Minor errors =

PLAN OF ACTION	

4. REVISIT DATE: xx



DOCUMENT: [QA-2012-XXXXXX audit]

FROM: [XXXXX XXXXX]
TO: [Recipients]

DATE: [Date]

Customer Quality Report (sample report)

It is the aim of this report to provide the client with the findings of our most recent audit in order to measure the level of quality of reports submitted. The retrospective review method was utilized so that it captures the quality of the documents that were sent to the client. Our quality program has adopted the industry standards as recommended by AHDI (Association for Healthcare Documentation Integrity, formerly AAMT). The error categories and corresponding negative points were also based from AHDI's QA's best practices. A tightened sampling method (more than 10%) was employed for this audit. AHDI recommends a normal sampling rate of 3 to 5%.

This quality report reflects the performance for the audit period of [date].

1. AUDIT INFORMATION

For the month of December, there were a total of **906** voicefiles received, of which **122** transcripts and **839** letters were completed, for a total of 961 reports. The overall accuracy for the audit period of December 1-31 is 99.07%, which meets the accuracy requirement.

AUDIT PERIOD (Dec 1-31)	
TOTAL NUMBER OF VOICEFILES RECEIVED	906
TOTAL NUMBER OF REPORTS TRANSCRIBED	961
Total Reports Audited	146
% of reports audited	15.19%
TOTAL NUMBER OF LINES TRANSCRIBED	31,665
Total Lines Audited	3,225.30
% of lines audited	10.19%
Frequency of Errors	77
Negative Points Total	30
ACCURACY	99.07%

Accuracy is computed via the "Accuracy Percentage Method"

- v. Multiple each error by its point value.
- vi. Total the error points.
- vii. Subtract total error points from lines in report.
- viii. Divide by lines in report.

Given:

Total lines = 3225.30

Total negative points = 30.00

(3225.30 - 30)/3225.30 = 99.07%

2. ERROR ANALYSIS

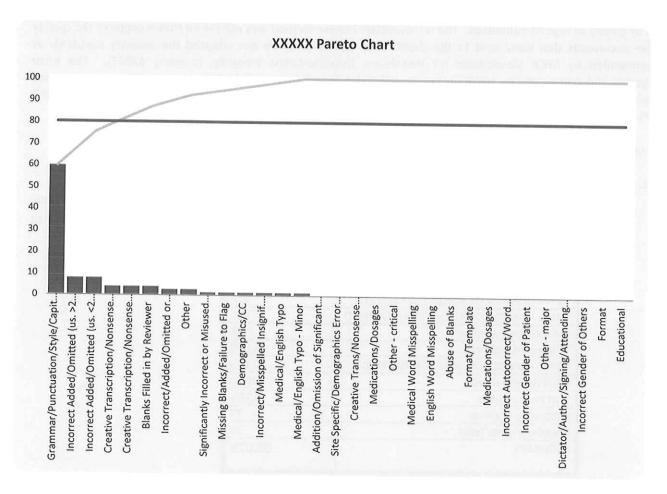
For this audit period, there were 77 errors found which had corresponding negative points of 30. The errors found were further categorized as per AHDI standards.

- d. Critical errors = 1 (1.30%)
- e. Major errors = 7 (9.09%)
- f. Minor errors = 69 (89.61%)



3. PARETO DIAGRAM

One of the tools that we utilize is the Pareto diagram. The Pareto diagram is an important tool in quality improvement efforts because of its ability to help focus attention on the area or areas where attention is warranted. By using this chart, the data is arranged in hierarchical order and allows the most significant problems to be corrected first.



The above Pareto chart clearly defines the area of "Grammar / Punctuation / Style" as the error category where the most errors are committed. Although these errors are considered non-critical in nature, as they do not pose a risk to patient safety, these errors still have an impact on the overall accuracy as well as the integrity of the document.

4. RECOMMENDATIONS

At the conclusion of this audit review, not only did this provide the accuracy of the team, but more importantly, it helped identify the individuals that are responsible for committing the errors. The next step is for each individual to develop an action plan that will take into consideration followup steps to measure progress and to clearly define outcomes based on the followup audits.



Disaster Recovery Plan

December 2006 Revised December 2007

iMedX Inc., Four Corporate Drive., Suite 380, Shelton, CT 06484

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Confidential

Policy Revision Date: Dec 2007

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DOCUMENT CHANGE HISTORY

Modifications made to this plan since the last printing are as follows:

	DOCUMENT CHANGE HISTORY				
Plan Version No.	Release Date	Summary of Changes	Section No./ Paragraph No.	Changes Made By	
1.0	8.23.06	Final Document Release with Content Changes	Entire Document	Subba	
2.0	12.10.07	Disaster Recovery Backups	8.5 Added	Subba	

1. Introduction

iMedX recognizing their operational dependency on computer systems, including the Local Area Network (LAN), Database Servers, Internet, Intranet and e-Mail, and the potential loss of revenue and operational control that may occur in the event of a disaster; authorized the preparation, implementation and Maintenance of a comprehensive disaster recovery plan.

1.1 Objectives

The objectives of this plan are:

- To ensure that maximum possible service levels are maintained
- To ensure the life/safety of all iMedX employees throughout the emergency condition, disaster declaration, and recovery process.
- To ensure that we recover from interruptions as quickly as possible
- · To minimize the likelihood and impact (risk) of interruptions
- To suspend all non-essential activities until normal and full organization functions have been restored.
- To reduce confusion and misinformation by providing a clearly defined command and control structure.
- Establishing high WAN/Internet connection reliability and fault tolerance.

1.2 Principles

The principles behind this plan are:

- · Disaster Recovery is just part of Business Continuity
- Risks are assessed for both probability and business impact

1.3 Plan review

It is iMedX policy to review the Disaster Recovery Plans every two years. The Corporate IT Services Manager is responsible for carrying out the review.

1.4 Plan Assumptions

iMedX's Business Continuity Plan was developed under certain assumptions in order for the plan to address a broad spectrum of disaster scenarios. These assumptions are:

- iMedx's recovery efforts are based on the premise that any resources required for the restoration of critical organization functions will reside outside of the primary facility.
- Any vital records required for recovery can be either retrieved or recreated from an off-site location and moved to the recovery facility within 24 hours.

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Policy Revision Date: Dec 2007

2. Declaration Initiatives

iMedx's decision process for implementing any of the three levels of recovery strategies to support the restoration of critical organization functions are based on the following declaration initiatives:

- Every reasonable effort has been made to provide critical services to iMedX's customers by first attempting to restore the primary facility and / or operate using intra-day procedures.
- After all reasonable efforts have failed to restore the primary facility, and using manual procedures severely degrades client support, iMedx would invoke a recovery strategy that requires the relocation of personnel and resources to an alternate recovery facility.
- If the outage will clearly extended past the acceptable period of time identified in the Recovery, a declaration of disaster will immediately be made.

3. Training and Testing

The Corporate IT Services Manager is responsible for ensuring that all personnel with responsibilities in this plan are made fully aware of those responsibilities and are capable of carrying them out. Regular tests of the plan will be run every six months. The Disaster Team meets once every six months to review their roles and responsibilities.

4. Recovery Strategies

In order to facilitate a recovery regardless of the type or duration of disaster, iMedX has implemented multiple recovery strategies. These strategies are categorized into three (3) levels. Each level is designed to provide an effective recovery solution equally matched to the duration of the emergency condition.

- LEVEL 1: SHORT-TERM OUTAGE (RIDE-OUT) INTRA-DAY
 A short-term outage is defined as the period of time iMedX does not require computerized operations, or where an outage window of the same day or less would not allow adequate time to restore / utilize automated recovery operations.
- LEVEL 2: MEDIUM-TERM OUTAGE (TEMPORARY) UPTO SIX WEEKS A medium-term outage is defined as the period of time that iMedX will execute its formal disaster recovery strategy, which includes actually declaring a disaster. A disaster may either be declared companywide or only for the effected department or building. The decision to declare a disaster will be based on the amount of time / expense that is required to implement the formal recovery and the anticipated impact to iMedX's organization over this period of time.
- LEVEL 3: LONG-TERM OUTAGE (RELOCATION) 6 WEEKS OR MORE
 A long-term outage is defined, as the period of time that iMedX will
 exceed the allowed occupancy time of its primary recovery strategy.
 During this phase of recovery iMedX will initiate a physical move of
 personnel and resources.

5. Risk assessment and prevention measures

iMedX Disaster Recovery Plans are based on an understanding of risks to iMedX property, people assets and records. The following table shows the main risks to all

iMedX data/Equipment.

Description	Likelihood and Impact	Detection, how will we know it has happened	Immediate Action	Later Action	Effect on Users	Mitigation and Contingency (currently in place)
Single Disk Failure	Medium	Nagios Warning	Replace failed disk in RAID volume.	Order new disks. Have existing disks destroyed.	No effect	Nagios monitoring of RAID volumes. Keep replacements drives available.
Multiple Disk Failure	Low	Nagios Warning	Replace failed disks in RAID volume. Restore from hot backup.	Order new disks. Have existing disks destroyed.	No effect (failover)	Nagios monitoring of RAID volumes. Keep replacements drives available.
Unauthorised modification of content	Low	Periodic Auditing of logs. Monitoring of application	Restore modified content.	Repair security breach. Determine root vulnerability.	Low effect on users.	Determine root vulnerability. Repair vulnerability.
Data loss	Low	Nagios Warning	Restore data from hot or offsite backup.	No later action necessary.	Users will not have access to their data.	Hot and offsite backups in place.
Software failure for each key piece of software used	Medium	Nagios Warning	Update/repair software.	Update/repair software.	Users will not have access to software.	Update software to latest stable version.
Multiple machine failure	Low	Nagios Warning	Repair machine, replace machine with hot backup machine.	Repair machine, replace machine with hot backup machine. Order new hot backup machine.	Low effect (failover). Performance will be compromised.	Monitor machine health with Nagios.
Software failure	Medium	Nagios Warning	Update/repair software.	Update/repair software.	Low effect or no access to software.	Update software to latest stable version.
Capacity overload	Medium/High	Nagios Warning	Bring on additional servers (hot backup servers) (5 hours).	Check power load of new servers. Allocated additional power as part of data center agreement.	Performance degradation.	Monitor capacity with Nagios.
Loss of building through fire, flood etc.	Low	Warning from hosting providers	Move application to backup data center (hot). (5 hours)	Move back to primary data center (when available).	No access to software.	n/a
Local network failure	Low	Nagios Warning	Repair network / replace switches (hot) or move to backup data center. (5-10 hours)	Replace failed hardware.	No access to software.	Hot backup data center in place as well as hot backup switches.
Power failure (generator down at data center)	Low	Nagios Warning, Warning from hosting provider.	Move application to backup data center (hot). (5 hours)	Move back to primary data center (when available).	No access to software.	Hot backup data center in place,
Loss of Internet Connection	Medium	Nagios Warning	Switch to (hot) backup T1 connection. (5 hours)	Switch back to primary T1 once enabled.	No access to software.	Hot backup T1 connection in place.
Human error: accidental deletion, destruction or damage	High	Report from users	Restore data from hot or offsite backup.	Verify the audit logs and event notification	Users will not have access to their data,	Training for records staff in use of software Back up allowing reconstitution of

						deleted electronic records by IT Manager
Other crime: theft, vandalism, arson	Medium	Report from internal/extern al people	Restore data from hot or offsite backup.	Identify the root cause and report to security team	Users will not have access to their data,	Auditable issue of keys and after hours passes to building
Computer crime: viruses, hackers	Medium	Alert from syslog server	Implement the ACL. Update the os/equipment patches.	Analyze the syslog, server logs	Remove the affected systems from network, Update the latest virus pattern	Firewall in place to protect network Routine testing of computer security measures by IT manager Regular back up of vital records and storage offline

5.1Threat Profile

Hazard:	Profile of Hazard:	First Response:	
Freezing Rain	Freezing rain is rain occurring when surface temperatures are below freezing. The moisture falls in liquid form, but freezes upon impact, resulting in a coating of ice glaze on exposed objects. This occurrence may be called an ice storm when a substantial glaze layer accumulates. Ice forming on exposed objects generally ranges from a thin glaze to coatings about an inch thick. A heavy accumulation of ice, especially when accompanied by high winds devastates trees and transmission lines. Sidewalks, streets and highways become extremely hazardous to pedestrians and motorists. During the winter citizens should be prepared to shelter themselves at home for several days possibly without power. Local shelters can be opened in areas where power is not affected but transportation to a shelter may be difficult.	Step 1: Monitor weather advisories Step 2: Notify on-site employees Step 3: Call local radio and TV stations to broadcast weather closing information for employees at home Step 4: Place closing sign on all doors Step 5: Arrange for snow and ice removal	
Tornadoes	Tornadoes are violent rotating columns of air, which descend from severe thunderstorm cloud systems. They are normally short-lived local storms containing high-speed winds usually rotating in a counter-clockwise direction. These are often observable as a funnel-shaped appendage to a thunderstorm cloud. The funnel is initially composed to nothing more than condensed water vapor. It usually picks up dust and debris, which eventually darkens the entire funnel. A tornado can cause damage even though the funnel does not appear to touch the ground.	Step 1: Monitor weather conditions Step 2: Notify employees of potential of severe weather Step 3: Power off equipment Step 4: Shut off utilities (power and gas) Step 5: Instruct employees to assume protective posture Step 6: Assess damage once storm passes Step 7: Assist affected employees	
In several areas of County, unusually heavy rains may cause "flash" floods. Small creeks, gullies, dry streambeds, ravines, culverts or even low lying round frequently flood quickly. In such situations, people are endangered before any warning can be given.		Step 1: Monitor flood advisories Step 2: Determine flood potential Step 3: Determine employees at risk Step 4: Pre-stage emergency power generating equipment Step 5: Assess damage	

Hazard:	Profile of Hazard:	First Response:	
Hurricanes	Even though location is not considered a coastal area, hurricanes do affect our area. Hurricane Hugo (1989) devastated most of the Carolinas, as it marched inland some 200 miles.	Step 1: Power-off all equipment Step 2: Listen to Hurricane advisories Step 3: Evacuate area, if flooding is possible Step 4: Check gas, water and electrical lines for damage Step 5: Do not use telephones, in the event of severe lightning Step 6: Assess damage	
Earthquakes	An earthquake is the shaking, or trembling, of the earth's crust, caused by underground volcanic forces of breaking and shifting rock beneath the earth's surface. The New Madrid Fault, which runs through the mountains of Tennessee, can/will cause considerable damage in the area, should it become active.	Step 1: Shut off utilities Step 2: Evacuate building if necessary Step 3: Account for all personnel Step 4: Determine impact of organization disruption	
Power Failures	Power failures occur in many parts of the county throughout the year. They can be caused by winter storms, lightning or construction equipment digging in the wrong location. For whatever the reason, power outages in a major metropolitan area can severely impact the entire community.	Step 1: Wait 5-10 minutes Step 2: Power-off all Servers after soft shut down procedure Step 3: Shut down main circuit located on the bottom floor Step 4: Use emergency phone line to make outgoing phone calls Step 5: Call power company for assessment Step 6: Locate sources of mobile power Step 7: Contact electrical company Step 8: Re-energize building Step 9: Power-on equipment	
Urban Fires In metropolitan areas, urban fires can, and do, cause hundreds of deaths each year and County is no exception. Even with strict building codes and exceptions, citizens still parish needlessly in fires.		Step 1: Attempt to suppress fire in early stages Step 2: Evacuate personnel on alarm, as necessary Step 3: Notify fire department Step 4: Shut off utilities Step 5: Account for all personnel Step 6: Search for missing personnel Step 7: Asses damage	

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5.2 Recovery Strategy Overview

iMedX's Business Continuity Recovery is based on the organization surviving the loss of facilities and/or key personnel and systems during a disaster.

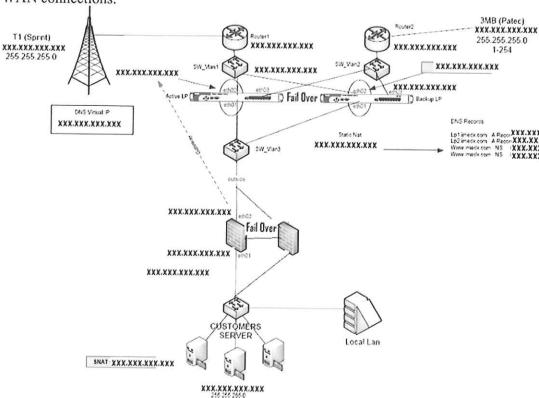
Once iMedX's ERT has determined that a declaration of disaster is required, the following sequence of events will occur:

Steps:	Instruction:	
1: Evacuate affected facility.	If the emergency requires an evacuation of employees, execute evacuation plan contained in the Emergency Procedures section.	
2: Go to staging area.	Follow building evacuation instructions.	
3: Determine length of outage.	Review written and verbal damage assessment reports from facilities and civil authorities and then estimate the amount of time the facility will be uninhabitable.	
4: Select disaster level.	Based on the estimated duration of the outage, declare the disaster event as eith a L1 (Less than 48hrs.), L2 (48hrs. to 6 weeks), or L3 (6 weeks or longer).	
5: Activate alternate facilities.	Contact alternate facilities identified in the Facilities section. Confirm their availability and alert them of estimated arrival time.	
6: Release personnel from the staging area.	Once the disaster level has been selected, release all personnel from the stagi area to their assigned recovery location. Non-essential personnel – Home Recovery Site Team – Alternate Facility End Users – Alternate Facility Command Center Staff – Alternate Facility Crisis Management Team – Alternate Facility	
7: RST establish Command Center.	RST personnel are the first to arrive at the alternate facility to setup and organize the command center prior to the arrival of the CMT and support personnel. The following representatives are required at the Command Center within 1-3 hours: • Crisis Management Team • Emergency Response Team Lead • Business Restoration Team Lead • Recovery Site Team Lead	
8: Establish situation desk.	At the command center, establish a dedicated line with operator to field all incoming calls. Announce command center phone number to all recovery participants.	
9: Review recovery matrix.	Review the Recovery Matrix Section on a department by department basis to determine who is most effected by the disaster. Group departments by recover resource requirements, time frames, and co-location requirements.	
10: Create technology shopping list.	Once the technology requirements of the effected department(s) are known, create a requirements list for the IT support staff.	

Steps:	Instruction:
11: Contact quick ship vendors.	Using the vendor quick-ship contacts or local sources located in the LAN Restoration section order replacement technology indicated on requirements list.
12: Retrieve electronic/hardcopy vital records,	Retrieve vital records from Iron Mountain or other locations as indicated in the Vital Records section. Have vital records shipped and staged at the alternate facility.
13: Setup replacement LAN.	The priority of Server restoration to support all other Business functions is: Core technology End-user servers
14: Activate short-term recovery strategies.	Instruct each department to initiate their short-term recovery strategies. These strategies will be used while the replacement LAN/WAN circuits are implemented.
15: Populate alternate facility.	Once the replacement LAN/WAN is functional, notify the BRT that departments can now begin executing their L2 recovery strategies.

5.3 Current Internet Connectivity Model:

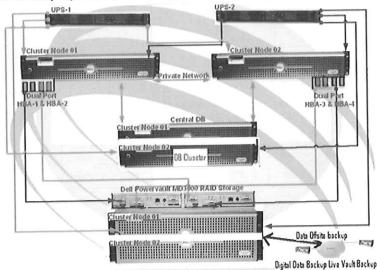
iMedX uses a host of products that ensure the highest level of WAN reliability, redundancy and maximum bandwidth for disaster recovery planning, including data mirroring and remote storage. These products holder of clustering technology which aggregates multiple data lines from separate ISPs and automatic failover of the downed WAN connections.



Note: Due to security we are not keeping the original values.

5.4 Current Application Architecture:

Application, DB and storage servers are configured in cluster environment for high availability. Data continuously replicated offsite using Iron Mountain digital method.



6. COMMAND CENTER INFORMATION

In the event of a disaster, one of the two locations listed will serve as the command center for coordinating recovery operations. The ASSIST Technical Recovery Team Coordinator will make the decision regarding which site to use. Selection of the command center location is a management decision based on the severity of the disaster.

- xxx 1405 County Road 1, South Point, OH
- xxx
 Four Corporate Drive, Shelton, CT

Note: Due to security we are not keeping the original values. This is for bid document once contracted is signed if necessary will provide the original data.

6.1 ALTERNATE PROCESSING FACILITIES

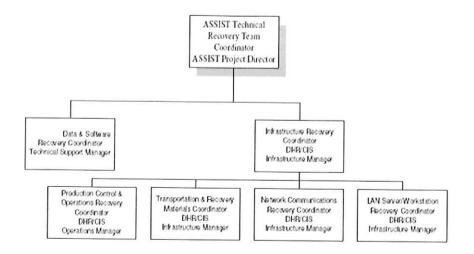
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We are in process of setting up the alternative data center in xxx location. It is in the implementation phase, targeted for Oct 1, 2009.

6.2 ASSIST TECHNICAL RECOVERY TEAM ORGANIZATION

This section of the plan describes the organizational structure and responsibilities of the ASSIST Technical Recovery Team.

In the event of a disaster, the ASSIST Technical Recovery Team's responsibility is to restore ASSIST data processing and ensure ASSIST information processing continuity. For the duration of the disaster, team members' primary duties are as listed herein. Note that these responsibilities may be redirected as mandated by the ASSIST Technical Recovery Team Coordinator. Additionally, members of the Technical Recovery Team are expected to continue performing their normal duties in a diminished capacity until such time that data processing has been restored to the primary processing site.



As part of the maintenance of this document, Technical Recovery Team Coordinator should provide the names and contact information for individuals identified by title. This information should be verified and updated as necessary to keep this information current. The ASSIST Technical Recovery Team Coordinator has responsibility for maintaining this information.

6.3 ASSIST TECHNICAL RECOVERY TEAM

This information should be verified and updated by the ASSIST Technical Recovery

Team Coordinator on a quarterly basis to assure it's continuing accuracy.

Role	Name	Contact Numbers
ASSIST Technical Recovery Team Coordinator	Assist Project Director	Office:
		Cell:
		Pager:
Alternate		Office:
		Cell:
		Pager:
Data & Software Recovery Coordinator	Tech Support Manager	Office:
		Cell:
		Pager:
Alternate		Office:
		Cell:
		Pager:
Infrastructure Recovery Coordinator	Infrastructure Manager	Office:
		Cell:
		Pager:
Alternate		Office:
		Cell:
		Pager:
Transportation & Recovery Materials Coordinator	HR Manager	Office:
		Cell:
		Pager:
Alternate		Office:
		Cell:
		Pager:

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Production Control & Operations	Operations Manager	Office:
Recovery Coordinator		Cell:
		Pager:
Alternate		Office:
Anernate		Cell:
		Pager:
Network Communications Recovery	Infrastructure Manager	Office:
Coordinator		Cell:
		Pager:
Alternate		Office:
Allernine		Cell:
		Pager:
LAN/WAN Server & Workstation Recovery Coordinator	Infrastructure Manager	Office:
Recovery Coordinator		Cell:
		Pager:
Alternate		Office:
Allemate		Cell:
		Pager:

Note: Due to security we are not keeping the original values. This is for bid document once contracted is signed if necessary will provide the original data.

6.4 ASSIST TECHNICAL RECOVERY TEAM COORDINATOR

The ASSIST Technical Recovery Team Coordinator directs the line functions of the plan and has the following responsibilities:

- Develop and implement a disaster recovery training program
- Develop and implement a comprehensive recovery exercise schedule
- Maintain the ASSIST Disaster Recovery Plan
- Coordinate periodic ASSIST Disaster Recovery Plan exercises for documented disaster recovery.
- Ensure that ASSIST recovery resources are stored at the designated off-site storage facility in accordance with policies
- In the event of a disaster, direct the activities of technical recovery support personnel, materials and equipment through the following coordinators:
- a) Data and Software Recovery Coordinator
- b) Infrastructure Recovery Coordinator
- Monitor ASSIST recovery functions and ensure the accuracy and quality of information technology systems being restored
- Review ASSIST recovery schedules to ensure application recovery is completed within the established recovery objectives
- Coordinate restoration of services to the primary site
- Communicate the status of recovery operations to the Director of CISP and/or the DHR Local Administration Team

6.5 DATA AND SOFTWARE RECOVERY COORDINATOR

Data and Software Recovery Coordinator is accountable for the restoration of ASSIST computer operations to normal, or as close to normal, as possible at the alternate processing facility. The Data and Software Recovery Coordinator will report to the ASSIST Technical Recovery Team Coordinator and has the following responsibilities:

- In the event of a disaster, direct activities of transportation, recovery materials, and operations through the following coordinators:
- a) Transportation and Recovery Materials Coordinator
- b) Production Control & Operations Recovery Coordinator
- Communicate with data center technical support staff to establish availability of the alternate processing facility
- Transfer of all necessary materials from off-site storage locations to the recovery site
- Restore, install, and test the required ASSIST software and data on the recovery system
- Restore production control and normal daily computer operations of ASSIST
- Perform the required restoration tasks in accordance with direction from the ASSIST Technical Recovery Team Coordinator for recovery of services at the primary site
- Communicate the status of recovery to the ASSIST Technical Recovery Team Coordinator

6.6 INFRASTRUCTURE RECOVERY COORDINATOR

The Infrastructure Recovery Coordinator is accountable for the restoration of Network Communications, LAN/WAN Server(s), and workstation(s). The Infrastructure Recovery Coordinator will report to the ASSIST Technical Recovery Team Coordinator and has the following responsibilities:

- In the event of a disaster, direct activities of network communications, servers and workstation recovery through the following coordinators:
- a) Network Communications Recovery Coordinator
- b) LAN/WAN Server and Workstation Recovery Coordinator
- •Coordinate communication with data center technical support staff and telecommunications teams to establish network connectivity to the alternate processing facility from all DHR county sites affected by the disaster
- Coordinate restoration and configuration of DB Server(s)
- Coordinate restoration and configuration of servers
- Coordinate restoration and configuration of workstations
- •Communicate the status of recovery to the ASSIST Technical Recovery Team Coordinator
- Perform the required restoration tasks in accordance with direction from the ASSIST Technical Recovery Team Coordinator for recovery of services at the primary site

6.7 TRANSPORTATION AND RECOVERY MATERIALS COORDINATOR

The Transportation and Recovery Materials Coordinator is accountable for the inventory and transportation of recovery resources to the alternate processing facility

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as needed to restore data processing. The Transportation and Recovery Materials Coordinator will report to the Data and Software Recovery Coordinator and Infrastructure Recovery Coordinator for the duration of the disaster. The responsibilities of the Transportation and Recovery Materials Coordinator include the following:

- Transport recovery material from the off-site storage locations to the alternate site in accordance with the requirements of the alternate site
- Transport material and personnel to the alternate site in accordance with recovery procedures as required
- Maintain current directions to and from the off-site storage location and the alternate processing site
- Transport materials and personnel to the primary site
- Perform periodic inventory inspections of the off-site storage locations to validate materials in storage are compliant with the inventory lists
- Organize the transported material (e.g., backup, reports, manuals, documentation) at the alternate site
- Ensure that backup are transported to and from the off-site storage vaults in accordance with the backup cart rotation schedules for the duration of the disaster
- Perform required restoration tasks relative to recovery material in accordance with direction from the Data and Software Recovery Coordinator when the contingency requirement no longer exists
- Communicate status of recovery to the Data and Software Recovery Coordinator and Infrastructure Recovery Coordinator

6.8 PRODUCTION CONTROL AND OPERATIONS RECOVERY COORDINATOR

The Production Control and Operations Recovery Coordinator is accountable for restoration of ASSIST Operations and Production Control at the alternate processing facility. The Production Control and Operations Recovery Coordinator will report to the Data & Software Recovery Coordinator and Infrastructure Recovery Coordinator for the duration of the disaster.

The responsibilities of the Production Control and Operations Recovery Coordinator include the following:

- Communicate ASSIST availability and status to the end user and site specific coordinators
- Support ASSIST processing requirements at the alternate site on a seven day, 24 hours basis
- Supervise computer operators and production control personnel
- •Ensure ASSIST is compatible with the systems software at the primary site in accordance with the requirements of the Data & Software Recovery Coordinator during restoration of services to the primary site
- •Communicate status of recovery to Data and Software Recovery Coordinator and Infrastructure Recovery Coordinator

6.9 NETWORK COMMUNICATIONS RECOVERY COORDINATOR

The Network Communications Recovery Coordinator is accountable for the

restoration of communications between the ASSIST Client workstations, LAN Servers and network at the alternate processing facility. The Network Communications Recovery Coordinator will report to the Infrastructure Recovery Coordinator for the duration of the disaster.

The responsibilities of the Network Communications Recovery Coordinator include the following:

- Communicate with data center technical support staff and telecommunications teams to establish network connectivity to the alternate processing facility from all DHR county sites affected by the disaster
- Install Windows NT/2K3 DB server hardware according to specifications.
- Restore and/or configure DB Server(s) to operational status
- Work with data center technical support to reestablish network communications from the primary processing site to all effected DHR county sites
- Verify the final communications configuration functionality during contingency operations and restoration of service to the primary site
- Communicate status of recovery to the Infrastructure Recovery Coordinator

6.10 LAN/WAN SERVER AND WORKSTATION RECOVERY COORDINATOR

The LAN Server/Workstation Recovery Coordinator is accountable for the restoration of the ASSIST Client software and functionality. The LAN Server/Workstation Recovery Coordinator will report to the Infrastructure Recovery Coordinator for the duration of the disaster.

The responsibilities of the LAN Server/Workstation Recovery Coordinator include the following:

- Restore and/or configure the ASSIST file servers
- Install and configure desktop workstation hardware according to specifications
- •Install the ASSIST software on both file servers and desktop workstations
- Provide end user technical support for LAN Servers and desktop workstations
- Communicate recovery status to the Infrastructure Recovery Coordinator

7. DISASTER DECLARATION

When a disaster strikes, damage must be assessed immediately to ensure that the proper course of action is taken. An emergency may range in severity from a power outage to an entire building being destroyed. It is necessary to have clear guidelines to determine the appropriate response based on the severity of the situation.

This section of the plan identifies the personnel authorized to declare a disaster, sets forth the criteria for disaster declaration, and provides an outline for making the decision to declare a disaster.

7.1 DISASTER DECLARATION AUTHORITY

The following list of individuals is authorized to declare a disaster and invoke the recovery response procedures put forth by this document. The individuals with this

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authority are listed in order of the chain of command. In the unfortunate event that any one of these individuals has been incapacitated, the next level will assume that person's authority for the declaration of a disaster.

- 1) DHR Commissioner or (CSTeam Precident)
- 2) DHR County Director or (Sales Precident)
- 3) DHR Operations/IT (Head R&D)
- 4) ASSIST Technical Recovery Team Coordinator or (IT Head)

7.2 DAMAGE ASSESSMENT GUIDELINES

The ASSIST Technical Recovery Team Coordinator or alternate should use the following forms to assess the damage and the severity of the situation.

- •Damage Assessment Checklist form (see Appendix A.1)
- Preliminary Assessment Checklist form (see Appendix A.2)

7.3 DISASTER DECLARATION CRITERIA

Upon completion of the damage assessment, if the estimated downtime is expected to exceed 48 hours, then a disaster should be declared and this plan activated.

7.4 DISASTER RECOVERY PLAN ACTIVATION

Once the decision has been made to declare a disaster and activate this plan, the ASSIST Technical Recovery Team Coordinator must then complete the Disaster Recovery Plan Activation Checklist as defined in Appendix A.3 in order to initiate recovery team response procedures.

8. RECOVERY TEAM RESPONSE PROCEDURES

This section of the plan documents the procedures for each of the ASSIST Technical Recovery Team Coordinators or their alternate to follow after a disaster has been declared. These procedures address each coordinator's area of responsibility, and are designed to provide step by step instructions for resource recovery response.

8.1 DATA AND SOFTWARE RECOVERY PROCEDURES

- 1) Establish contact with Data Center Technical Support to ascertain the following:
- •Is the Operating System available for use?
- Is the DB system with catalog restored available for use?
- •Is DB Connections available for use?
- 2) Contact the Transportation and Recovery Materials Coordinator to ensure that offsite data backups and documentation are available for use at the alternate processing facility.
- 3) Identify the required backup (latest version)
- 4) Restore ASSIST Data using the most current available SDLT/Digital vault backups as described in Section 5 and Appendix E (Disaster Recovery Jobs) of this plan: Contact the Network Communications Recovery Coordinator and verify connectivity to the database.
- 5) If last backup was before nightly processing, then repeat nightly processing jobs. If last backup was after nightly processing, then repeat on-line activity, if necessary.

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6) Communicate availability and status of data recovery to the ASSIST Technical Recovery Team Coordinator.

8.2 LAN/WAN SERVER AND WORKSTATION RECOVERY PROCEDURES

- 1) Establish contact with the DHR Equipment Team
- 2) Acquire file server equipment according to ASSIST hardware specifications as documented in Appendix A.3
- 3) Complete the physical configuration for file server machines and LAN/WAN
- 4) Install Operating system using installation materials available. Ensure that licenses are unique to the server being restored, as duplicate licenses can cause unpredictable results.
- 5) Install Backup Exec software using installation materials available.
- 6) Ensure that the ASSIST Client software has been successfully restored and/or installed on the file server.
- 7) Restore all server data from the most current available backups.
- 8) Verify that the ASSIST Client software distribution program and/or process are operational.
- 9) Communicate availability and status of Server recovery to the ASSIST Technical Recovery Team Coordinator.

8.3 ASSIST DESKTOP WORKSTATION RECOVERY PROCEDURES

- 1) Establish contact with the DHR Equipment Team
- 2) Complete the physical configuration of desktop workstations being restored
- 3) Install workstation Operating System
- 4) Complete the software configuration of desktop workstations being restored
- 5) Establish workstation communication to network
- 6) Verify that the ASSIST software distribution process is functional and that the ASSIST client software gets installed during initial server sign-on
- 7) Communicate availability and status of workstation recovery to the ASSIST Technical Recovery Team Coordinator

8.4 NETWORK COMMUNICATIONS RECOVERY PROCEDURES

- 1) Establish contact with the DHR Equipment Team
- 2) Physical configuration for Windows NT/2K3/ DB servers.
- 3) Verify connectivity between the ASSIST workstations and the DB servers.
- 4) Contact the Software and Data Recovery Coordinator and establish connectivity to the database.
- 5) Communicate availability and status of network communications recovery to the ASSIST Technical Recovery Team Coordinator.

8.5 DISASTER RECOVERY BACKUPS

Daily -Incremental backup of all the servers are performed on the media earmarked for daily backup.

Weekly - Every week full backup is performed in Tuesday, Friday &Sunday.

There are total Ten tapes were labeled with the below format, each working day one media is used for backup in the orderly manner. On the very beginning new month the first media (i.e. Labeled as iMedXW01D01) is used for backup. The backup media should be not be

reused more than 20 times.

iMedXW01D01	- First Week of daily backup contains Sunday, Monday and Tuesday
iMedXW01D02	- First Week of daily backup contains Wednesday, Thursday and Friday
iMedXW02D03	- Second Week of daily backup contains Saturday, Sunday and Tuesday
iMedXW02D04	- Second Week of daily backup contains Wednesday, Thursday and Friday
iMedXW03D05	- Third Week of daily backup contains Saturday, Monday and Tuesday
iMedXW03D06	- Third Week of daily backup contains Wednesday, Thursday and Friday
iMedXW04D07	- First Week of daily backup contains Saturday, Monday and Tuesday
iMedXW04D08	- First Week of daily backup contains Wednesday, Thursday and Friday

Monthly - Full backup of all the servers are performed on the media earmarked for monthly backup. There are twelve backup media, labeled with the below format. Every last working day of the month one media is used for backup in the orderly manner. On end of the six month, the first media (i.e. Labeled as iMedXM01D01) is used for backup. However, the M06D12 media is retained as a permanent half year backup.

iMedXM01D01	- First month backup contains January Full Backup
iMedXM01D02	- First month backup contains January Full backup and February Full Backup
iMedXM02D03	- Second Month February Full backup
iMedXM02D04	- Second Month March Full backup and February
iMedXM03D05	- Third Month March Full backup
iMedXM03D06	-Third Month April Full backup and March full backup
iMedXM04D07	- Fourth Month April Full backup
iMedXM04D08	- Fourth Month April Full backup and May full backup
iMedXM05D09	- Fifth Month May Full backup

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iMedXM05D10	- Fifth Month May Full backup and April full backup
iMedXM06D11	- Sixth Month June Full backup
IMEDXM06D12	- Sixth Month April Full backup and June full backup

For disaster recovery purpose we were keeping the one month full backup tape externally in either CTO/MD handover.

Soft backup – Soft Backup of all the critical data like source code & VSS data is taken, the data from the critical servers are copied onto other servers twice a day to ensure faster recovery and intermediate backups. Two scheduled times are allocated for soft backups. One in the after noon around 1.00PM every day and the other in the night around 8.00PM.

End of the every fourth day we were overwriting the soft backup. For redundancy purpose we were keeping the soft backups in different servers.

Most of the critical data is scheduled daily and weekly on Iron mountain digital backup system. Internally data was stored on Iron mountain digital valut system and as well as data stored off site livevault system. In case of failure we can restore the data from local vault system and as well as from remote vault system.

9. RESTORATION OF SERVICES AT PRIMARY SITE

This section of the plan identifies the procedures required to restore ASSIST data processing to the primary processing facility. The activities performed when returning to the primary site are similar to the activities performed when moving the data processing from the primary site to the alternate site. The first step in returning to the primary site is to gather the interested parties for a restoration of services meeting. This meeting should be the forum for determining the specific actions that need to be taken and the assignment of responsibilities. The sample meeting agenda is included in this document in A.3. NOTE: It is possible that when service is restored, the primary site may be at a different location than the original primary processing site. In such an instance, restoration planning must also consider specifics related to the new (primary) site.

9.1 POST-CONTINGENCY ASSESSMENT REPORT AND EVALUATION

A post-contingency status report must be prepared by the ASSIST Technical Recovery Team Coordinator and presented to the Local Administration Team after normal processing has resumed. Following their independent review, the Local Administration Team staff should meet with the ASSIST Technical Recovery Team Coordinator to evaluate the report's findings.

It is important to stress information concerning sections of this plan that need revision. While not an exception report, areas requiring change should receive the most attention. The report should include these topics:

1) Adequacy of the Disaster Recovery Plan.

•All subjects of the plan must be covered.

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- •Was recovery realized within the specified time?
- •Were the plan content and the ease of use adequate?
- 2) Efficiency of the Technical Recovery Team.
- 3) An analysis of team performance as a group and by individual members. Efficiency in performance and adequacy of results are the key ingredients in the analysis.
- 4) Effectiveness of the alternate site and recovery resources.
- 5) Included in this analysis must be the following questions:
- Was the alternate site accessible?
- Did the alternate site provide adequate computing resources for normal processing?
- Was there any contention for equipment?
- Was the operating environment stable?
- •Was adequate technical support provided?
- 6) Compliance with service level agreements by all parties. The key questions to address are the following:
- •Did agreements result in required services being provided in accordance with agreed to rates and conditions?
- •Were any non-contracted or not-agreed-to services required?
- 7) Effect of the disaster on system development or application modification projects.
- 8) List all systems in development or major revision that were affected by the disaster. Itemize any scheduling or deadline changes now required and describe the reasons for the changes.
- 9) Recommended changes to the Disaster Recovery Plan.

APPENDIX A - CHECKLISTS

The following checklists are included in this document:

A.1 – Damage Assessment Checklist

- A.2 Preliminary Assessment Checklist
- A.3 Disaster Recovery Plan Activation Checklist
- A.4 Restoration of Services Meeting Agenda
- A.5 Assist Disaster Recovery Plan Change Approval Form
- A.6 Vendors Contact List
- A.7 MANAGEMENT NOTIFICATION CHECKLIST

A.1 – DAMAGE ASSESSMENT CHECKLIST

	Action	Status	Comments
1	Identify what caused the outage and determine the extent of the damage to information technology resources using the Preliminary Assessment Checklist on the following page.		
2	Identify how long the problem has existed		
3	Summarize corrective measures already taken.		

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4	Estimate the time required for	
	recovery.	
5	Estimate the level of data processing	
	that can be maintained using the	
	alternate processing facility and its	
	effect on:	
	 Normal Daily operations 	
	•Delivery of services	
	•Online Response time	
	 Computing and Communications 	
	capacity	
6	Prepare and submit recommendations	
	for corrective action.	
7	Ensure that individuals with recovery	
	team assignments identified in Section	
	2 of this plan are notified and	
	accounted for.	
	 Data and Software Recovery 	
	Coordinator	
	 Transportation and Recovery 	
	Materials Coordinator	
	 Production Control and 	
	Operations Recovery Coordinator	
	 Network Communications 	
	Recovery Coordinator	
	•LAN Server/Workstation	
	Recovery Coordinator	
	 Support Personnel Coordinator 	
8	Communicate status of the situation to	
	the Local Administration Team.	1

A.2 - PRELIMINARY ASSESSMENT CHECKLIST

Resource	Questions	Comments
Power	Is power off?	
	If so, for how long?	
	When will you regain power?	
	Are all power sources affected?	
	If not, which power sources are affected?	
	What will be the quality and reliability of power when it is regained?	

Hardware	Was the hardware shut down	
	normally or was it a hard crash?	
	Which units, if any, are	
	functioning?	
	How quickly can replacement	
	units and/or parts be available?	
	Is a vendor/supplier involved?	
Software	Which software is affected?	
	How does the problem affect	
	processing?	
	What corrective measures are	
	being taken	
Data	What data is lost and how easily	
	can it be recovered?	
	How critical is the data?	
	What is the source of the data?	
Personnel	Personnel What is the current level	
	of staffing relative to the needs of	
	the emergency situation?	
	What is their physical and	
	mental condition?	
	Are special arrangements	
	needed?	
	Are special arrangements being	
	planned?	

A.3 – DISASTER RECOVERY PLAN ACTIVATION CHECKLIST

	Action	Status	Comments
1.	Identify an available location		
	for use as a command center.		
2.	Initiate contact of Technical		
	Recovery Team personnel		
	and inform them of the		1
	situation.		
3.	Contact the alternate		
	processing facility to inform		
	staff there that a disaster has		
	been declared. Determine		
	alternate site availability and		
	any scheduling or		
	prioritization issues.		
4.	Contact the DHR Local		
	Disaster Recovery Plan's		
	Local Administration Team		
	Leader or the highestranking		
	DHR official and	8	
	provide information		
	regarding the emergency		
	situation, the steps that have		
	been taken thus far.		

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A.4 – RESTORATION OF SERVICES MEETING AGENDA

Subject: Restoration of ASSIST Data Processing to Primary Processing Facility **Meeting Date:**

Attendees:

Items for Discussion:

- •Determine current processing points and status of data files
- •Technical team coordinators' reports
- •Lessons learned during restoration to the alternate processing site
- Errors and/or problems encountered during disaster recovery to be avoided during restoration

to the primary site

- •Report on how successful processing has been at the alternate site
- •Draft schedules for accommodating the move back to the primary site
- •Review ASSIST Technical Recovery Team assignments
- •Review the off-site storage inventories to verify required resources are available **Additional Discussion:**

A.5 – ASSIST DISASTER RECOVERY PLAN CHANGE APPROVAL FORM

Author:	Phone Number:
Date:	Version:

Confidential Policy Revision Date: Dec 2007

Date: Version: Description of change(s):
After Reviewing, Please Sign if You Approve of the Requested Changes Route for Approval:
ASSIST Technical Recovery Team Coordinator:
Data and Software Recovery Coordinator:
Infrastructure Recovery Coordinator:
Production Control and Operations Recovery Coordinator:
Network Communications Recovery Coordinator:
LAN Server/ Workstation Recovery Coordinator:
Transportation & Recovery Materials Coordinator:

A.6 - Vendors Contact List

S.	Service / Provider	Company	Contacts	Phones	Email	
----	--------------------	---------	----------	--------	-------	--

No			
1	1 Data T1 Line		
2	2 Voice PRI T1s & 2 Data T1		
3	Phone System/PBX		
4	Data/Voice Cabling, Power Supply		
5	Office Building Company		
6	AC		
7	Mover's		
8	ACT Support		
9	MySQL Enterprise Support		
10	Internet Loadbalancer Support		

Note: Due to security we are not keeping the original values. This is for bid document once contracted is signed if necessary will provide the original data.

A.7 - MANAGEMENT NOTIFICATION CHECKLIST

	the Management Team when notifying Recovery Team Leaders.
1.	Obtain initial damage assessment from Damage Assessment Team Leader and relay information to appropriate recovery team personnel.
2.	Provide information on the staging area (e.g., time and place to report):
3.	Primary phone number for the Management Team:
4.	Provide information on the condition of the CDC Headquarters building/Computer

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Center (e.g., habitable, inhabitable):

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Product Requirements Document

USER APPROVAL	
NAME:	
SIGNATURE:	
DATE:	
Please fax back to iMe	dX integration team at 203-683-0081

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Introduction

Purpose

This document contains the specification for establishing Health Level Seven (HL7) integrations between the iMedX HL7 interface engine and the client's EMR or HIS system (hereafter simply referred to as the EMR).

The IMedX HL7 interface engine includes the following functions:

Downloading patient demographics data from the client's EMR system.

 Uploading of unsolicited transcribed reports to the client's EMR system. Completed, transcribed documents, either in ASCII text or RTF format, will be sent in an ORU message to the client's EMR system.

Revision History

Rev	Date	Author	Comments
1.0	12/13/2010	Regunath	Initial Draft
2.0	03/23/2011	Regunath	Minor Updates
3.0			
4.0			
5.0			
6.0			

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Functional Requirements

Assumption

 The IMedX HL7 interface engine shall handle a message flow that is bidirectional and will send ORU messages to the client's EMR system as well receive ADT messages from the client's EMR system.

To facilitate the configuration of each integration, the client will provide:

- Network connection to support the virtual circuit that will be created between the IMedX HL7 interface engine and the iMedX databases.
- In-house and other vendor technical expertise during testing and installation to assist in troubleshooting and resolving unexpected problems.
- All the software and hardware necessary for the host/interface to communicate information to and from the Client's EMR system.
- Logmein or VNC remote communication software on the PC/server that will run the IMedX HL7 interface engine, to allow remote configuration and support during the installation and testing phase.

IMedX HL7 interface engine

- The IMedX HL7 interface engine shall handle a message flow that is bidirectional and will accept ADT (Admission, Discharge and Transfer) from the client's EMR system as well it sends the ORU (unsolicited Transcribed Reports) messages the client's EMR system.
- Once a message is successfully received by the IMedX HL7 interface engine, an ACK shall be sent to the client's interface engine's pre agreed port.
- The communication between the IMedX HL7 interface engine and the client's interface engine will use HL7 version 2.3 standards.
- The IMedX HL7 interface engine will listen to the pre-agreed client's interface engine's port and IP address for ADT messages.
- The client's interface engine shall send only one message at a time to the IMedX HL7 interface engine and will wait for the success acknowledgement message (henceforth called an ACK) from the IMedX HL7 interface engine.
- The iMedX HL7 engine supports the Minimum Lower Level Protocol (MLLP) for network environments. The messages from the client's interface engine shall have the specific start and end characters. Each Block character is defined by its hexadecimal value according to the following convention:
 - Each byte value is embedded in square brackets ("<>"). Hexadecimal values are represented with the prefix 0x or 0X and have to be between 00 and FF (decimal 255). Example:

<0x0B> (decimal 11)

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<0x D 1C> (decimal 28) <0x0> (decimal 13) Characters can be concatenated. Example: <0x1C><0x0D>

Default Setting for HL7 Service: <0x0B> as Start Block <0x1C><0x0D> as End Block

If the message received in the IMedX HL7 interface engine has the above mentioned start and end characters then all such messages are considered to be successfully received messages in IMedX HL7 interface engine end. For every successful message received, the IMedX HL7 interface engine shall build an acknowledgement message and send it across to the client's interface engine. Messages should be formatted as follows:

<VT>dddd<FS><CR>

VT = start of message (ASCII 11)

dddd = data segments

FS = end of message (ASCII 28)

CR = carriage return (ASCII 13)

- Access to the IMedX HL7 interface engine server from the client's interface engine will be via TCP/IP Ethernet network using a socket port connection.
- In situations as described in below, failed messages will be logged to an IMedX HL7 interface engine log file.

Message received successfully, fails to parse

- Message received successfully failed because of a mandatory field missing or any other business rules mismatch
- Message was not received successfully

Special Characters

HL7 defines character sequences to represent 'special' characters not otherwise permitted in HL7 messages. These sequences begin and end with the message's escape character (usually '\'), and contain an identifying character, followed by zero or more characters:

| Field Delimiter

^ Component Delimiter

& Sub-Component Delimiter

The other two special case characters defined in MSH-2 are:

~ Repetition Separator \ Escape Character

A simple example of this can be seen in the following OBX segments:

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OBX||1|||Current Medications DILANTIN & NORVASC

The OBX-5 field is defined by HL7 to contain data conforming to an ST data type. This should be a single string value. What we see in our message is the value DILANTIN & NORVASC. The '&' character is typically used as the sub-component separator in an HL7 message. By the rules of HL7 this message is not properly formatted. Since the '&' character in this case is meant to be part of the resulting text, it needs to be escaped. The correct representation of this message should be as follows:

OBX||1|||Current Medications DILANTIN \T\ NORVASC

When a receiving application reads this message, it should follow the rules of HL7, and convert the \T\ to the '&' character prior to importing this information into their system.

When implementing HL7 in the real world, it is very common to interface with a system that claims to be HL7 compliant, but they do not support the HL7 encoding sequences. The table below shows the HL7 Escape sequences, and how they are converted:

Character	Description Conversion
\E\	Escape character converted to escape character (e.g., '\')
IRI	Repetition separator converted to repetition separator character (e.g., '~')
ISI	Component separator converted to component separator character (e.g., '^')
\T\	Subcomponent separator converted to subcomponent separator character (e.g., '&')

Acknowledgement Messages:

- If the ACK message is not received by the client's interface engine within the 45 seconds (wait interval for ACK) agreed upon, then the client's interface engine shall resend the message. There may be three retries for any such message. No ACK messages shall be sent by the IMedX HL7 interface engine for any failure in reception of any messages. In the absence of an ACK, the client's interface engine would resend the message again after the fixed wait interval.
- The ACK message shall have the following format:
 MSH|^~\&|CLOVER|Hospitalname|Applicationname|Hospitalname|yyyymmddhhmmss||ACK^
 A04| unique_ HL_generatedID |Staging or Production flag||||||

MSA|status|MessageID from the received message||

 Sample Interface Acknowledgment Message: MSH|^~\&|CLOVER|HMI|IMEDX|HMI|20070602070205||ACK^A04|91149256925|T|2.2|| MSA|AA|9||||

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An ACK message shall have the MSH and the MSA headers. The IMedX HL7 interface engine shall have to take the message ID from the Message Control ID from the MSH segment of the message received and put it in to the MSA segment. Apart from this a unique "N" (numeric format) digit identifier has to be generated by IMedX HL7 interface engine and has to be put in to the unique_ HL_generatedID field.

An ACK message, all the fields in bold shall be hard coded and the following values shall be

picked up from a properties file or system. Staging or Production flag (P or S)

- Timestamp 0
- Status
- Message-ID from the received message

ADT Messages and Mapping Logic:

- The client's EMR system will provide the patient's demographic and visit data via ADT messages.
- The IMedX HL7 interface engine will parse the following HL7 message types though it will receive various types of messages.

Description	HL7 Message	Remarks
Inpatient Admission: Admit a Patient	A01	Admit
Inpatient Admission: Transfer a Patient	A02	Transfer
Inpatient Admission: Discharge a Patient	A03	Discharge
Outpatient Admission: Register a Patient	A04	Register
Inpatient Admission: Update a Patient Information	A08	Update the latest record based on the account #

- ADT messages that satisfy all the conditions below will be accepted by the interface.
 - The ADT message containing an Patient Id (MRN) for a patient
 - If the patient has multiple messages, the latest message information will be overriding the old information based on account number (PID-18 - first component)
- When the IMedX HL7 interface engine is unable to find the ADT information while generating the ORU message, it will send the user friendly email notification to the respective teams including inhouse MT.
- The field mappings for the ADT messages can be found in the Appendix A:
- Sample message is as follows:

MSH|^~\&|ADM||||201005131429||ADT^A08|922747|P|2.2|||AL|NE EVN|A08|201005131429

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PID|1|PSH0078544|M000078519|M79566|COLTHARP^CRAIG^^^^||19750703|M|^^^^^||6924 MINERAL RIDGE^^EL PASO^TX^79912||(915)588-

7223|(915)772-2272||M||V00001613777|637-09-9437||

NK1|1|COLTHARP^SHAWNETTE^^^^|WI^02 WIFE|6924 MINERAL RIDGE^^EL PASO^TX^79912|(915)588-7223|(915)474-8220|NOK

PV1|1|0|MRI

HOPD^^|EL|||SMITOR^SMITH^OLIVER^R^^^DC||||||1|||1||||CLI||40|||||||||||HOM|||PSH||REG|||201 005120829|||||

PV2|||MRI THORACIC SPINE W/O CONTRAST

OBX[1]TX[ADM.ADV.2^I would like more information on Advanced Directives?^ADM[[N][[]]]F

OBX|2|TX|ADM.ADV1^I have provided a copy of my Advanced Directive to PHS.^ADM||N|||||F

OBX|3|TX|ADM.ADV3^I would like to execute an Advanced Directive?^ADM||N|||||F

DG1|1|19|724.1|PAIN IN THORACIC SPINE||Other|||||||27

GT1|1||COLTHARP^CRAIG||6924 MINERAL RIDGE^^EL PASO^TX^79912|(915)588-7223|||||SP|637-09-9437||||CASA FORD|5815 MONTANA^^

ELPASO^TX^79925|(915)772-2272||FT|

IN1|1|AETNA||AETNA|PO BOX 981106^^EL PASO^TX^79998||(888)632-3862||||||||||COLTHARAP^SHAWNETTE^^^^|WI|||||||||20100512

|HOPD.SAMO||||||W154296756||||||^|||VERIFIED

UB2|||||11^20100512

Unsolicited Transcribed Reports (ORU^R01) and Mapping Logic:

- The IMedX HL7 interface engine will provide for the transcribed document to the client's EMR system via discrete messages. The message type shall be R01. Each message will consist of one OBR and one OBX segment.
- The document and ADT message will be mapped based on the patient account number (PID-18) or MRN (PID-3).
- If there is no account number (or a wrong account number) associated with the transcript, the system will send an e-mail notification to the respective teams, including in-house MTs, with all details so that the user/in-house MT will enter/correct it by using TurboScribe.

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 When the IMedX HL7 interface engine is unable to find the respective ADT information for a transcript while generating an ORU message, it will send a user friendly email notification with all details to the respective teams, including in-house MTs. In addition, the system will send a daily consolidated export failure to the team.

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- When the interface receives the appropriate ADT message for a pending export file(s), it'll
 automatically generate the ORU message and export it to the client's EMR system.
- The Observation Request (OBR) segment is used to transmit information specific to an order for a diagnostic study or observation, physical exam, or assessment. When observations are successfully completed, that is, when IMedX HL7 interface engine is ready to transmit the dictation information and the transcription report to the client's EMR, the inbound transaction includes the observation request segment (OBR) followed by the observation result (OBX) segment.
- The ORU field mappings for the ORU^R01 message can be found in the Appendix B.
- The sample ORU message is as follows:

MSH ^~\& IW 20100930143630 ORU^R01 20100930143630 P 2.2 AL NE
PID M000084123 V00001758028 OBR 1070492 201009291243 201009300835 HIM HIMDISC D SQUAREJ RAD
OBX 1 TX ~JN: X155799 ~~~~DISCHARGE SUMMARY~~DATE OF ADMISSION: 09/26/2010 ~~DATE OF DISCHARGE: 09/29/2010 ~~DATE O
F BIRTH: 10/09/1953~~ADMITTING DIAGNOSES~1. Elevated liver function tests.~2.
Bacteremia.~3. Diabetes.~4. Hyper tension.~5. Hypercholesterolemia.~~DISCHARGE DIAGNOSES~1. Liver function tests decreasing.~2. Fatty liver disease.
~3. Back pain.~4. Diabetes type 2.~5. Hypertension.~6. Hypercholesterolemia.~7. Obesity.~8. Bacteremia.~9.
Suspected upper respiratory infection.~~BRIEF SUMMARY~This patient with the above- mentioned comorbidities comes in comp
laining of back pain. Patient seen in ER. She said she had been outside with some cough prior to coming to the hospita
I. No major complaints. She was admitted for high LFTs. The patient had GI consulted, started on Levaquin. Her blood
cultures came back 1 out of 2 positive for which was sensitive to Levaquin. Her hepatitis panel, which was
ordered came back nonreactive.~~LABS~Her LFTs started decreasing upon arrival to the hospital, stopped the simvastatin.
GI suggested to do an MRCP. Patient wanted to do it outpatient. ~~DISPOSITION~At this point patient is being discharg
ed home. ~~FOLLOWUP~She is to followup in my office in 2 weeks, followup with Dr. Morales as scheduled for MRCP.~
patient was told to come back to the emergency room. Patient agreed with plan of care. Her home meds were going t
o be resumed except for the simvastatin for now. ~~~~
Date: Time:

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____~Jaime Square, M.D. ~~D: 09/29/10 12:43 ~T: 09/30/10 08:22~sm||

Appendix A:

IMedX HL7 interface engine will handle the fields that are highlighted in yellow.

MSH - Message Header

	Item#	Name	O P T	DT	Le	Remarks
1	00001	Field Separator	R	ST	1	colon <058>
2	00002	Encoding Characters	R	ST	4	;~\&
3	3 00003 Sending Application		0	HD	180	ADM
4	00004	Sending Facility	0	HD	180	e.g. A
5	00005	Receiving Application	0	HD	180	
6	00006	Receiving Facility	0	HD	180	
7	00007	Date/Time of Message	0	TS	26	
8	80000	Security	0	ST	40	
9	00009	Message Type	R	CM	7	ADT^A01/A02/A03/A04/A08
10	00010	Message Control	R	ST	20	Unique ID assigned by the client's Interface
11	00011	Processing ID	R	PT	3	T or P
12	00012	Version ID	R	ID	8	2.3
13	00013	Sequence Number	0	NM	15	
14	00014	Continuation Pointer	0	ST	180	
15	00015	Accept Acknowledgment Type	0	ID	2	
16	00016	Application Acknowledge Type	0	ID	2	

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Ite	em#	Name	OPT	DT	Le	Remarks
00	0017	Country Code	0	ID	2	

EVN – Event Type

Se q#	Item#	Name	OP T	DT	Le	Expected values for IMedX HL7 interface engine			
1	00099	Event Type Code	0	ID	3	ADT^A01/A02/A03/A04/A08			
2	00100	Date/ Time of Event	R	TS	26	Date of event			

PID - Patient Identification

Name	OP DT Ler		Len	Expected values for IMedX HL7 interface engine	Remarks
Set ID - Patient ID	0	SI	4		
Patient ID (External ID)	R	CX	20		
Patient ID (Internal ID)	R	CX	20	MRN (MPI#)	This info should be sent back on the ORU
Alternate Patient ID	0	CX	20		
Patient's Name	R	XPN	48	Patient's Name	This info should be sent back on the ORU
Mother's Maiden Name	0	XPN	48		
Date of Birth	R	TS	26	Patient's date of birth	
Sex	0	IS	1	Sex	
Patient Alias	0	XPN	48		
Race	0	IS	1		

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Name	OP T	DT	Len	Expected values for IMedX HL7 interface engine	Remarks
Patient Address	0	XAD	106		THE TANK AND A PARTY OF THE PAR
County Code	0	IS	4		
Phone Number – Home	0	XTN	40		
Phone Number - Business	0	XTN	40		
Language – Patient	0	CE	60		
Marital Status	0	IS	1		
Religion	0	IS	3		
Patient Account Number	0	CX	20	Account Number	This info should be sent back on the ORU
SSN Number - Patient	0	ST	16		
Drivers License – Patient	0	DLN	25		

PV1- Patient visit

Seq #	Item#	Name	OPT	DT	Len	In Use	IMedX HL7 interface engine field name	Remarks
1	00131	Set ID - PV1	0	SI	4	N		
2	00132	Patient Class	R	IS	1	Y	Patient class	O- Outpatient I - Inpatient
3	00133	Assigned Patient Location	0	PL			Room	Second component
4	00134	Admission Type	0	IS	2	Υ		
5	00135	Pre-Admit Number	0	CX	20	N		
6	00136	Prior Patient Location	0	PL	80	Υ		

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Seq #	Item#	Name	OPT	DT	Len	In Use	interface engine field name	Remarks
7	00137	Attending Doctor	0	XC N	60	Y	Doctor's Name	Second (Last name), Third (First name) and Forth (Middle name) component.
8	00138	Referring Doctor	0	XC N	60	Υ		
9	00139	Consulting Doctor	0	XC N	60	N		
10	00140	Hospital Service	0	IS	3	Υ		
11	00141	Temporary Location	0	PL	80	N		
12	00142	Pre-Admit Test Indicator	0	IS	2	N		
13	00143	Re-Admission Indicator	0	IS	2	N		
14	00144	Admit Source	0	IS	3	Y		
15	00145	Ambulatory Status	0	IS	2	N		
16	00146	VIP Indicators	0	IS	2	Y		
17	00147	Admitting Doctor	0	XC N	60			
18	00148	Patient Type	0	IS	2			
19	00149	Visit Number	0	CX	20			
20	00150	Financial Class	0	FC	50			
21	00151	Charge Price Indicator	0	IS	2			
22	00152	Courtesy Code	0	IS		2 N		
23	00153	Credit Rating	0	IS		2 N		
24	00154	Contract Code	0	IS		2 N		
25	00155	Contract Effective Date	0	DT		8 N		

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Seq #	Item#	Name	OPT	DT	Len	In Use	IMedX HL7 interface engine field name	Remarks
26	00156	Contract Amount	0	NM	12	N		
27	00157	Contract Period	0	NM	3	N		
28	00158	Interest Code	0	IS	2	N		
29	00159	Transfer to Bad Debt Code	0	IS	1	N		
30	00160	Transfer to Bad Debt Date	0	DT	8	N		
31	00161	Bad Debt Agency Code	0	IS	10	N		
32	00162	Bad Debt Transfer Amount	0	NM	12	N		
33	00163	Bad Debt Recovery Amount	0	NM	12	N		
34	00164	Delete Account Indicator	0	IS	1	Υ		
35	00165	Delete Account Date	0	DT	8	Υ		
36	00166	Discharge Disposition	0	IS	3	Υ		
37	00167	Discharged to Location	0	СМ	25	N		
38	00168	Diet Type	0	IS	2	N		
39	00169	Servicing Facility	0	IS	2	N		
40	00170	Bed Status	0	IS	1	N		
41	00171	Account Status	0	IS	2	Υ		
42	00172	Pending Location	0	PL	80	N		
43	00173	Prior Temporary Location	0	PL	80	N		
44	00174	Admit Date/Time	R	TS	26	Y	Admit date and time	
45	00175	Discharge Date/Time	0	TS	26	Y	Discharge date and time	
16	00176	Current Patient Balance	0	NM	12	N		

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Seq #	Item#	Name	OPT	DT	Len	In Use	IMedX HL7 interface engine field name	Remarks
47	00177	Total Charges	0	NM	12	N		
48	00178	Total Adjustments	0	NM	12	N		
49	00179	Total Payments	0	NM	12	N		
50	00180	Alternate Visit ID	0	СХ	20	N		
51	01226	Visit Indicator	0	IS	1	N		
52	01224	Other Health Care Provider	0	XC N	60	N		
53	90006	Case Classification (Category)	0	ST	2	Y		
54	90007	Case Classification (Type)	0	ST	2	Υ		
55	90022	Case Cancellation Indicator	0	ID	1	Υ		
56	90023	Movement Type Code	0	ST	2	Υ		
57	90024	Movement Type Text	0	ST	15	Υ		
58	90025	Planned Indicator of Movement	0	ST	1	Υ		

Appendix B:

•	Trigger Event		Description	•	LAB
•	MSH	•	Message header	•	Υ
•	PID	•	Patient identification	•	Υ
•	OBR	0	Order Details	•	Υ
0	OBX	•	Order Observation	•	Υ

IMedX HL7 interface engine will consider specific PID segments' fields, which are having remarks.

MSH Segment

	Item#	Name	OPT	DT	Len	Remarks
1	00001	Field Separator	R	ST	1	
2	00002	Encoding Characters	R	ST	4	^~\&

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2.37	Item#	Name	OPT	DT	Len	Remarks
3	00003	Sending Application	0	HD	180	Default Value : IMEDX
4	00004	04 Sending Facility		HD	180	Default Value : IMEDX
5	00005	Receiving Application	0	HD	180	
6	00006	Receiving Facility	0	HD	180	
7	00007	Date/Time of Message	0	TS	26	TIME SENT(Format :YYYYMMDDHHMM)
8	80000	Security	0	ST	40	
9	00009	Message Type	R	CM	7	Default Value: ORU^R01
10	0 00010 Message Control ID		R	ST	20	Unique ID assigned by IMedX HL7 interface engine
11	00011	Processing ID	R	PT	3	Default Value: P or T
12	00012	Version ID	R	ID	8	2.3
13	00013	Sequence Number	0	NM	15	

PID - Patient Identification - Required

IMedX HL7 interface engine will consider specific PID segments' fields, which are having remarks.

Se q#	Name	OPT	DT	Len	Remarks
1	Set ID - Patient ID	0	SI	4	
2	Patient ID (External ID)	0	CX	20	
3	Patient ID (Internal ID)	R	CX	20	This info will be taken from ADT message.
4	Alternate Patient ID	0	СХ	20	
5	Patient's Name	R	XPN	48	
6	Mother's Maiden Name	0	XPN	48	
7	Date of Birth	0	TS	26	
8	Sex	0	IS	1	
9	Patient Alias	0	XPN	48	
10	Race	0	IS	1	

Se q#	Name	OPT	DT	Len	Remarks
11	Patient Address	0	XAD	106	
12	County Code	0	IS	4	
13	Phone Number – Home	0	XTN	40	
14	Phone Number – Business	0	XTN	40	
15	Language – Patient	0	CE	60	
16	Marital Status	0	IS	1	
17	Religion	0	IS	3	
18	Patient Account Number	0	СХ	20	PT ACCT NUMBER ONLY COMPONENT PRESENT
19	SSN Number - Patient	0	ST	16	
20	Drivers License - Patient	0	DLN	25	

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Date: 23-Mar-2011

OBR - Required

IMedX HL7 interface engine will consider specific OBR segments' fields, which are having remarks.

Seq #	Name	OPT	DT	Le n	remarks
1	Set ID - Observation Request	0	ID	2	
2	Placer Order Number	0	СМ	75	
3	Filler Order Number	R	CM	75	UNIQUE REPORT NUMBER FROM IMEDX
4	Universal Service ID	0	СМ	75	
5	Priority	0	ID	2	
6	Requested Date/Time	С	ID	1	
7	Observation Date/Time	С	TQ	20	YYYYMMDDHHMM (ONLY PERTATINS TO PT ACCT TYPE No, will be present in ADT admit message). If it's not available, the system will be mapped here.

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Seq	Name	OPT	DT	Le	remarks
#			100	n	
8	Observation End Date/Time	С	СМ	20 0	YYYYMMDDHHMM (ONLY PERTATINS TO PT ACCT TYPE No, will be present in ADT discharge message). If it's not available, the system will be mapped here.
9	Collection Volume	0	TS	26	
10	Collector Identifier	0	CN	80	
11	Specimen Received Date/Time	0	CN	80	
12	Danger Code	0	CN	80	
13	Relevant Clinical Info.	С	CM	80	
14	Specimen Received Date/Time	0	TN	40	
15	Specimen Source	0	TS	26	
16	Ordering Provider	0	TS	26	
17	Order Callback Phone Number	0	TS	26	
18	Placer Field 1	0	TS	26	Default value "TRANSCRIPTION" will be mapped to this filed
19	Placer Field 2	0	CE	20 0	
20	Filler Field 1	R	CE	60	
21	Filler Field 2	С	CE	60	
22	Results Rpt/Status Chng - Date/Time	0	CN	80	
23	Charge to Practice	0	TN	40	
24	Diagnostic Serv Sect ID	0	TS	26	
25	Result Status	0	CE	20 0	
26	Parent Result	0	CE	60	
27	Quantity/Timing	0	CE	60	

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Seq #	Name	OPT	DT	Le	remarks
28	Result Copies To	0	CN	80	
29	Parent Number	0	TS	26	
30	Transportation Mode	0	CE	20	
31	Reason for Study	0	CE	60	
32	Principal Result Interpreter	R	CE	60	Physician userId. The client needs to provide the complete set of Physician userID's.
33	Assistant Result Interpreter	0	CN	80	
34	Technician	0	CE	60	
35	Transcriptionist	0	CN	80	Default value "IMEDX" will be mapped to this filed.
36	Scheduled Date/Time	0	CE	20 0	

OBX – Required

IMedX HL7 interface engine will consider specific OBX segments' fields, which are having remarks.

Seq #	Name	OPT	DT	Len	remarks
1	Set ID - Observational Simple	0	ID	2	Default Value: "1" will be mapped to this filed.
2	Value Type	0	СМ	2	Default value "TX" will be mapped to this filed.
3	Observation Identifier	0	СМ	75	
4	Observation sub-id	0	СМ	75	
5	Observational values	R	ID	65536	Transcription document - in ASCII/RTF format. A single OBX will contain entire ASCII/RTF Document.

WEH13008 Dictation/Transcription Services COST PROPOSAL

n•n	Estimated Quantity of Lines of Transcription*	Description of Service	Cost Per Line (65 text characters entered)**	Total Cost						
	300,000	Transcription Reports provided within 24 hours	\$ 0.0795	s 23, 850						
	40,000	Discharge Summaries provided within 48 hours	\$ 0.0795	\$ 3,180						
		STAT Reports provided within 90 minutes	\$ 0.0795	\$ 3,975						
	60,000	H & P Reports	\$0-0795	\$ 4,770						
	Contract will be awarded to a	he loverest recognition 1	Grand Total	s 35,775						
	The second of th	IF ICHICACT TACAMANA I								

Contract will be awarded to the lowest responsible vendor meeting all specifications. Vendor must provide all dictation and transcription services for

**A line of transcription is defined as 65 text characters entere	A
- Venkat Sharma	President
Name of Authorized Representative	The state of the s
\/ \/ d d	Title
Vendor Signature	10-24-12
	Date
Vendor Address 4 Corporate Dr. Suite:	380, Shorton, CT 06484
i Medx Inc. PoBox 28174 New Vendor Remit to Address	
800-721-0244 x 247 740-377-455 Telephone Fax	9 brunyon@imedx.com E-mail

^{*}Estimated # of Lines of Transcription services is only an estimate and is neither a guarantee of a minimum nor maximum quantity to be purchased during the life of this contract. Actual usage volumes will be dependent upon the facility's requirements.