

MEDxConnect™ Enhancement Catalysts

Creating Highly Effective Enterprises

In addition to our core solutions, the MEDxConnect product suite offers a variety of peripherals to enhance your enterprise efficiency and throughput. They augment and facilitate functions such as referring physician report access, digitization of documents, order creation, voice dictation and editor applications.

Communication Mediator Module (CM²)

Provides the communication between third party software applications to initiate and synchronize software

The CM² is the unilateral – bidirectional interface that exists between the MEDxConnect Virtual Worklist and existing 3rd party software applications. The interface shares pertinent patient information between the PACS review station and other software applications to allow synchronized communication between devices to occur. In the case of PACS image viewers – loading and display of the appropriate patient study is the basic communication link. Other data exchanges that can be passed between the system via the MEDxConnect API include: closing of the study, marking as read, dictated, saved and cancel reports. In addition, non-standard customized requirements can be addressed; such as sending secondary capture “snap shots”. These can be used to communicate annotations and other image manipulations in a standard DICOM communication protocol for optimization in proprietary systems.

- Launches of 3rd party application
- Capability to utilize diagnostic viewer of choice
- Communicates multiple commands between system i.e. open, closed, dictated
- Shares required demographic information for synchronization
- Single log-in for multiple applications
- Resolves non-stand imaging and demographic protocols issues

Data ID Conflict Resolution Module (DID)

Negotiates duplicate patient identifiers

The Data ID Conflict Resolution Module addresses the challenges that exist in medical environments where duplicate patient identifiers are present. When transferring data across multiple facilities, the requirement exists to ensure data integrity and accuracy where the data is being utilized. DID has the ability to return the data in its original format to the host system, tracks and logs the data conversion and its reversal, and transforms all patient data fields to ensure data identification collision does not occur.

Document Mediator Module (DM²)

Captures and attaches relevant documents

The DM² provides the ability to input any hardcopy document into the MEDxConnect system for improved access. This includes patient notes, physician orders, historical reports, and any other pertinent patient information—even when no electronic order entry is available.

When an older RIS system has documents, such as patient reports that are not available online, the DM² can be used to input them into the system. By utilizing the print command on an RIS client or any scanning device, an electronic document is created that can be input into the MEDxConnect system as historical data. The DM² finds the corresponding patient data and assists you in locating the relevant study. The DM² utilizes key patient identifiers such as name, patient id, accession number and exam type. The documents can be attached to the study as DICOM objects for permanent archiving. When a facility does not have an electronic ordering system, or RIS installed the DM² can be used to input paper documents into the MEDxConnect system. As a fail-safe, if an electronic system is down or not available to the MEDxConnect system, any existing documents from that system can be input using the DM².

Information Mediator Module (IM²)

Collects RIS demographic data entries

The IM² is a demographic input page that addresses the management of patient information in the absence of a RIS. Pertinent information required for current and future data tracking is available. The IM² contains patient demographics, exam types, procedure codes, patient history and other pertinent patient information. Use of the IM² will allow the user the ability to attain available information prior to and at the time of exam and to automate many processes in the MEDxConnect solution, including the OM² and AM² features.

The IM² offers users the following benefits:

- Ability to pre-fetch prior studies
- Ability to send patient status for exams – stat, ASAP
- Ability to alert physician of study information

Order Mediator Module (OM²)

Generates orders from DICOM images in the absence of a RIS

The Order Mediator Module (OM²) provides order information for new studies when an order is not available to the MEDxConnect system from an RIS system. The OM² creates an order within the M³ server, which includes all the information necessary for the MEDxConnect system to route and process according to customer requirements. In other words the result is the same as an RIS created order. In environments where the HL7 interface is not present, the order is automatically created by M³ from the DICOM header information when it receives studies without a corresponding order.

The OM² offers the benefits of:

- The ability to track orders in environments lacking order entry functionality
- The ability to maintain consistent workflow when existing order entry systems are temporarily unavailable
- The ability to modify existing orders and add to pending orders in M³

The OM² increases efficiency for the Healthcare Enterprise and thereby has the ability to reduce cost.

QA Editor Mediator Module (EM²)

Serves as a quality assurance and report editing platform for multiple vendor reporting systems with disparate databases

The module provides quality assurance and full transcription capabilities for the editing of reports from multiple dictation and voice recognition (VR) systems. Upon completion of a dictated report, the voice or text file is prepared for the editor. In addition to the standard capabilities available on the MEDxConnect enterprise solution, an editor-specific worklist provides the end-user with the ability to communicate with the radiologist, other editors, and administrators.

The transcriptionist has the ability to perform standard transcription functions (access to templates, spell check, foot pedal controls, user short cuts, etc.).

When the edited report is complete, it is deposited in the radiologist's unsigned queue on the VW.

Speech Mediator Module (SM²)

Optimizes the utilization of disparate transcription and voice recognition systems with multiple databases

The SM² interfaces with existing transcription and VR (voice recognition) systems for seamless and consistent report dictation for the interpreting physician. Gone are the days of finding the correct microphone and/or dialing phone numbers for multiple transcription services. The SM² interfaces with the existing on-site system and mediates where the data is to be sent and in what format. It translates, mediates and communicates various reporting formats and distributes them through the M³. Reporting configurations include report text, audio files, wave files and MP3 files.

- Maintains integrity of existing transcription/ VR system
- Eliminates the challenges of multiple transcription/ VR data bases
- Impacts radiologist efficiency and report accuracy and improves report turn-around time

The SM² in combination with the Compressus VW provides the radiologist the capability to sign-off on any report regardless of location origination or system utilized for report edits.

Voice Mediator Module (VM²)

Offers a versatile and superior voice dictation software based on the Nuance Dragon engine

The VM² is the integrated solution for fast, efficient diagnostic reporting on a MEDxConnect system. It provides the radiologist with the ability to generate diagnostic reports in cooperation with various third party diagnostic workstations. Radiologists create and submit reports from patient studies claimed on the MEDxConnect Virtual Worklist (VW) or create an addendum for previously submitted reports. As they dictate their reports, the VM² automatically converts the voice dictation to text, in real time. The VM² provides report processing, and the ability to create, edit, and share report macros.

The VM² offers users the following benefits:

- Coordinates with the Virtual Worklist (VW) for current and historical data
- Submits reports to the MEDxConnect M³ server, which routes the report to the appropriate radiology information system (RIS)
- Supports third-party workstations and auto-loads studies
- Uses the commercially available DragonNaturallySpeaking software to capture dictation and voice commands
- Supports a central voice file server so that voice profiles and report macros can be shared across multiple workstations

The Compressus Product, MEDxConnect is protected by U.S. Patent Nos. 7,836,081; 7,630,371; 7,801,382; and 7,653,252.

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