

The MEDITECH logo is displayed in a bold, white, sans-serif font in the upper left corner of the header image.The header image shows a group of medical professionals in a control room. One person is pointing at a large monitor displaying a medical scan, while others look on. The scene is dimly lit with blue tones, typical of a medical imaging environment.

## Integrating Imaging Throughout the Enterprise

MEDITECH's information system positions health care organizations to improve patient safety and efficiency. Our PACS Interface Suite unites an organization's information system and PACS into a cohesive clinical system that gives Imaging staff immediate access to key patient data and allows care providers to view diagnostic images, exam information, and interpretations directly through a patient's on-line medical record.

MEDITECH's PACS Interface Suite facilitates a two-way flow of information between our information system and a wide range of other vendors' PACS. Patient demographics, exam information, and interpretations automatically flow from the MEDITECH applications into PACS, Image status information conversely flows from PACS into the Enterprise Medical Record (EMR).

This integration not only eliminates the need to re-enter data, but allows Radiologists to present findings to physicians more quickly. By simply clicking the identifying icon to view a patient's images and reports associated with exams, clinicians immediately know both the availability of images and the status of any exams. Clinicians are pointed directly to the selected patient's exams and reports residing on the PACS, eliminating the need to re-identify patients or exams.

### Integration in Action

Consider how this solution helps busy health care providers throughout an organization...

#### In the Radiology Department

Radiologists are able to choose single or multiple PACS images that accurately show a patient's condition. Through a direct link to the PACS viewer, they also can look at other diagnostic images, such as the patient's chest x-ray for even more complete assessment. Taking advantage of this direct link gives the user access to all of the capabilities of the PACS image viewer, such as the ability to use three-dimensional rendering to display complex anatomy with a small number of images. The user accesses not just image information (such as with a stand-alone PACS/RIS system), but also a variety of different patient reports and information.

#### In the Hospital

Surgeons ready to perform surgery can access images taken in the ER and read any notes entered by the Radiologist that may be beneficial prior to performing surgery.

#### In the Physician's Office

A physician can quickly review a patient's head CT on-line and review other clinical information such as lab results and medications for more informed decision-making. Additionally, the physician is saved time by not having to make phone calls and track down paper records.

Teleradiology is also possible with MEDITECH's HCIS and PACS, allowing off-site physicians to access demographic, exam, and report information. If an image is taken at a small rural hospital and interpreted at a larger hospital, the dictated report is sent back to the original PACS, allowing the physician at the rural hospital to view the diagnostic quality image and report. Additionally, a Web-accessible PACS makes it possible to view this information over the Internet, and remote dial-up capabilities provide full MEDITECH system access, so the physician can review any other patient clinical information.

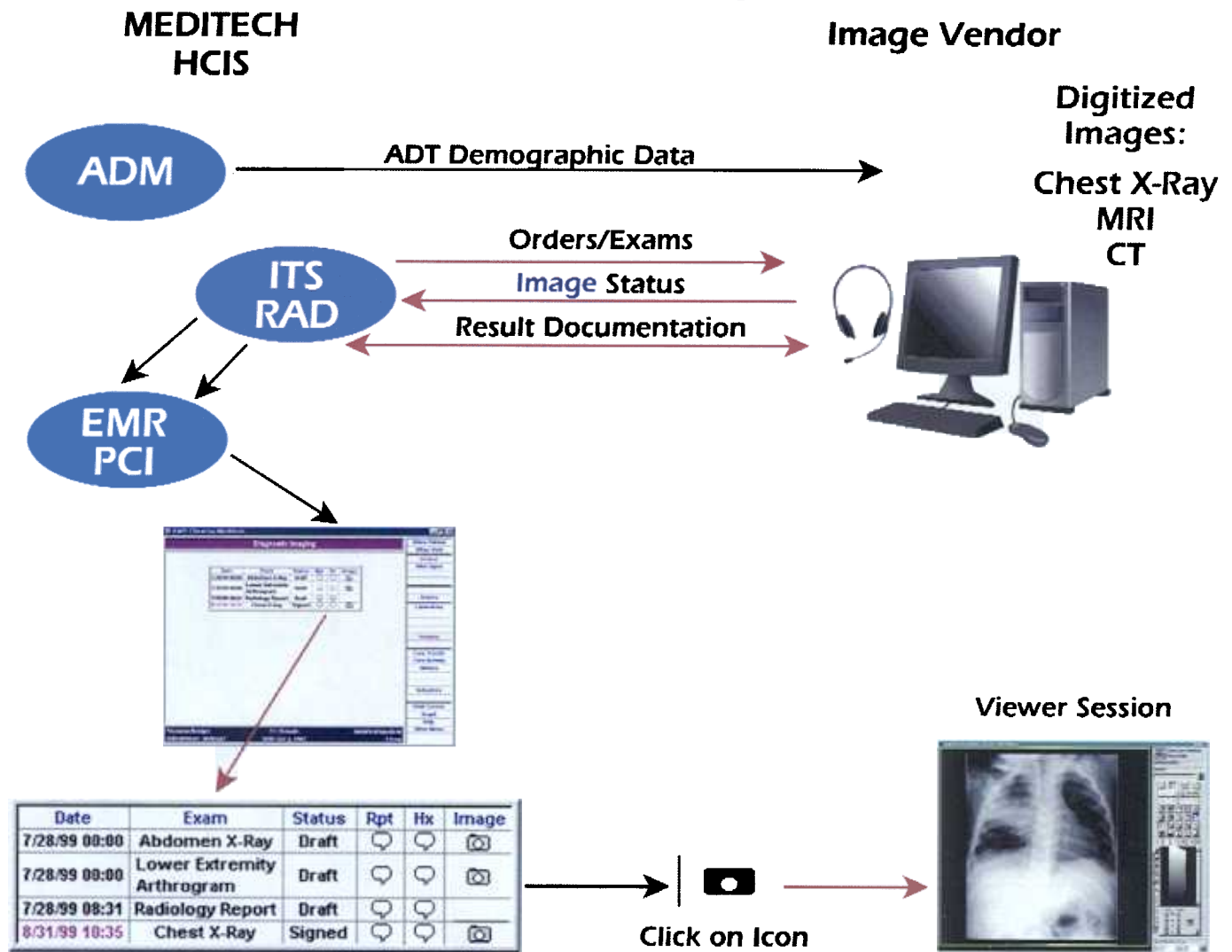
#### Benefits Across the Enterprise

MEDITECH's integration of diagnostic images into patients' electronic medical records provides a host of benefits to help organizations:

- Images are distributed and stored electronically from one central location
- Clinicians and technicians have images available where and when they want them
- Organizations are spared the expense of purchasing, transporting, and storing film
- Patient demographic and order data is transferred electronically, eliminating data re-entry and ensuring greater accuracy
- Physicians and patients benefit from simplified clinical consultations
- Faster diagnostic and treatment decisions lead to increased satisfaction for providers and patients.

Continued on back

# HCIS - PACS Integration




MEDITECH has well established capabilities integrating PACS into our HCIS. Included below is a list of image vendors that we currently work with.

Agfa	Kodak Health Imaging
Amicas	McKesson
Canon U.S.A.	Novarad Corporation
Connect Imaging	OpenMed Technologies
DR Systems	Philips Medical Systems
FUJIFILM Medical Systems	Siemens Medical Systems
GE Medical Systems	Stentor

For more information on our Imaging System, contact a MEDITECH Marketing Consultant

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# MEDITECH'S IMAGING SYSTEM

MEDITECH incorporates imaging technology into our information systems, helping Radiology departments expedite the entire exam process - from registration, through transcription and results reporting. Automated reporting and tracking features, clinical decision support tools, and on-line access to medical images help to automate workflow and ensure quality patient care.

Our imaging capabilities help Radiology departments to:

## **Ensure Patient Safety**

Maintaining patient safety is a major focus for health care organizations today. Through the use of clinical decision support tools, Radiology departments can work toward improving patient safety by alerting all staff involved in scheduling, ordering, and performing diagnostic exams of potential interactions or conflicts. MEDITECH's Imaging System provides:

- Complete allergy interaction checks for substances - such as contrast - consumed or injected during diagnostic exams
- Duplicate, conflict, and contraindication checks that ensure exams are ordered in the proper sequence and do not conflict with other scheduled procedures
- Alerts specific to a patient's condition, such as the scheduling of X-rays during pregnancy
- Radiation tracking to monitor a patient's lifetime exposure.

## **Perform Comprehensive Reporting**

MEDITECH's reporting and communication capabilities help simplify administrative tasks performed by Radiology departments. A report writer enables staff to create both standard and ad-hoc reports, such as accuracy statistics, for compliance with state and federal reporting regulations. Department managers can also run statistical reports to efficiently monitor the workload of a Radiology department for any given day.

## **Track the Distribution of Diagnostic Images**

File clerks can efficiently manage the distribution of patients' diagnostic images - both inside and outside the organization - with an easy-to-use record locator. Records can be quickly checked in and out, reserved, or transferred from one user to another on-line. Outstanding films can be monitored and reminder letters automatically generated for overdue films. The process is further streamlined through barcode scanning capabilities, which afford file clerks instant access to a patient's electronic record. Clerks can easily document the date, time, recipient, and expected return date of all records and films that have been signed out for each patient.

## **Minimize Documentation Time**

Individuals involved in the transcription process can take advantage of various features designed to reduce the amount of time spent documenting patient care. Users can:

- Store and retrieve canned text with minimal keystrokes
- Automatically populate fields with clinical and demographic information from MEDITECH applications

## **Benefits of an Integrated Imaging Solution**

Integration is the key to managing a Radiology department safely and efficiently. MEDITECH's Health Care Information System is comprised of the integrated components needed to streamline the entire exam process from start to finish, while promoting quality care. Our integration offers a number of benefits to users throughout your organization, including:

- The ability to view current laboratory results during order entry or when documenting the completion of orders
- Charge-capture capabilities and Medical Necessity checks to minimize lost charges through the automatic transfer of information to the Billing and Accounts Receivable application
- Registration and scheduling shortcuts that allow office personnel to register walk-in patients, edit demographic information, and schedule follow-up appointments from within the department
- Real-time decrementing of materials used by the Radiology department from stock levels, such as film, set up materials, catheters, and dressings, allowing the department to automatically generate purchase orders or requisitions based upon usage
- Direct outcome codes entry by Pathology for more efficient compilation of MQSA-required mammography accuracy statistics.

- Insert schematic diagrams that allow for quick and easy documentation of problem areas and points of interest
- Employ industry standard text writers and spell checkers.

A standard interface to voice recognition software allows radiologists to directly enter, review, and sign reports. Users can also take advantage of multiple third party transcription software packages.

### **Review Diagnostic Images On-line**

Radiologists and care providers can instantly access diagnostic images throughout the enterprise using archived imaging technology. Integration between Picture Archiving Communication Systems (PACS) and MEDITECH's Imaging System allows providers to view X-rays, MRIs, CT Scans, and other diagnostic images stored within a PACS directly through a patient's electronic medical record.

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## **Streamlining the Care Process**

MEDITECH provides automated tools that streamline the entire care process from patient check-in through follow-up appointments:

### **▪ Automatic Generation of Documentation**

Upon registering a patient for a diagnostic exam, staff can automatically route all necessary paperwork to the exam location, or any other user-specified printer. These forms may include requisitions, film or jacket labels, file room messages, and preparation instructions. Users can also print history questionnaires or any other user-defined forms associated with a specified procedure.

### **▪ Effective Tracking of Patients**

Using a color-coded patient monitoring feature, providers can track a patient's location within the Radiology department, including the waiting room and exam room, from arrival to departure. This feature keeps Radiology departments well informed of their department workflow by providing them with constant updates on a patient's wait-time, exam-time, and procedure status.

### **▪ Timely Verification of Results**

MEDITECH helps reduce the amount of time spent on results reporting. Using electronic signature capabilities, providers can verify and sign reports remotely by entering a pin number, which triggers a filed copy of their original signature to appear on the report. Distribution of reports is made easy, as reports are automatically routed and/or faxed to the appropriate parties inside and outside the organization. Physicians and transcriptionists also have the ability to relay questions and messages to one another before signing reports. Radiologists benefit from both a report monitoring tool, which provides a quick view of all unsigned reports under their names, as well as a quick reporting routine that allows for the direct entry of reports, bypassing transcription.

### **▪ Efficient Monitoring of Follow-Up Care**

Patient care does not cease when a patient leaves the exam room. Certain exams, such as mammography, require ongoing and comprehensive care. With the MEDITECH system, Radiology staff can track those patients requiring additional care and automatically notify them via letter, fax, email, and/or telephone. Communication with these patients can be provided on an ongoing basis until resolution occurs. All communication is documented and tracked on-line, thereby helping managers maintain a detailed record of the department's attempts to provide these patients with continuous follow-up care.

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