

BizTech Healthcare Solutions, Inc. Case Study: Healthcare Business Process Automation

24 x 7 Claims Coding at Cooley Dickinson Hospital



ISV/Software Solutions

About Cooley Dickinson Hospital

Cooley Dickinson Hospital provides 24-hour emergency care, state-of-the-art diagnostic imaging services, medical, surgical, cardiac and cancer care, childbirth services, behavioral health and rehabilitation. Clinical and laboratory services are provided at the main campus and through a network of local offices.

The Business Challenge

Provide superior medical services, operate state-of-the-art diagnostic facilities, reach out to patients throughout central Massachusetts to provide clinical and laboratory services, comply with HIPAA regulations, deal with a changing landscape of public and private health insurance programs, and simultaneously strive to improve revenue performance and reduce costs while keeping the patient the focus of care giving and health management.

Strategic Actions

Cooley Dickinson Hospital administration rose to the challenge by envisioning and executing a multi-faceted, multi-year, strategic plan to:

- build a foundation for automating process management by re-purposing their electronic document archive as a document management system,
- deploy automation to capture, index and import documents and files into the re-purposed document management system.
- integrate programmatic and side-by-side, on-screen, document access with their applications, like QuadraMed's Affinity health information system,
- leverage Microsoft .NET, browser based applications to create a thin client, "anytime, anywhere", secure access environment for back office support applications,
- commit on-going effort to discover and define work processes, and then evaluate, prioritize, automate and deploy new processes with defined and measurable returns,
- deploy process management automation that is dynamic and easy to use and integrate with existing and new applications and systems.

The Solution, Results, and Benefits

BizTech and Cooley Dickinson Hospital engaged in 2000 to modernize and upgrade the electronic document archive system. Critical to the hospital's vision was the need to create new workflow solutions that would link people, processes and applications within an architecture that was regulatory compliant, could evolve with acceptable cost of ownership and position them to achieve considerable return on investment (ROI).

Paper forms and documents continue to play a major role. A foundation of enterprise-wide, electronic document management with remote networked capture points, was needed to image-enable existing and new applications. To continuously reduce time and costs and increase process efficiencies, electronic documents need to be "consumed" and "generated" (like paper) in new, automated work processes.

The first application to leverage the new architecture is an ASP.NET, browser-based claims abstracting system from BizTech called **ProMed for Coding**. Claims Abstracters, or "coders", work from any location, whenever they want, on a 24x7 basis.

The coders access the ProMed Intranet Web site, log in, and work from queues of lab tickets. When a ticket is selected for coding, ProMed reads the patient account number and loads the appropriate claim recording screen for the health information system (HIS) into the ProMed window, where the coder reads the lab ticket and types in the abstract in a heads-up fashion.

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When completed, the abstract loads into the HIS and the lab ticket image is stored in the document management system, along with its account metadata and a Medical Records Number. The HIS generates HIPAA-compliant Patient Claims Forms which are processed by the **Parser** component of **ProMed Scanning** and stored in the document management system along with index data that supports search and retrieval operations.

ProMed Scanning supports document scanning, indexing, and storage to replace paper in the new work processes. When a patient checks in to a location, the HIS is configured to generate a barcode label which is affixed to the lab ticket. The barcode contains patient name, account number and date. After the procedures are completed, the filled-in lab tickets are scanned and saved in work queues, along with the barcode data.

During the process, the coder can see all current lab tickets for a specific patient, and can also view the archive of past tickets to see how previous procedures were abstracted.

The lab tickets are accessible to authorized network users from the document management system using the metadata (indices) or the Medical Record Number. Claims abstract information is accessible to authorized users of the HIS. Built-in monitoring tracks and reports on each work step (registration, scanning, coding, completed) for every lab ticket.

The Return on Investment

The hospital is positioned to continuously achieve time and cost savings because its technical architecture for improving processes is now modular, extendible and standardized to add additional applications from the **ProMed Series**. Some key benefits:

- Reduces process time (claims coding) from weeks to hours
- Eliminates gathering, shipping, sorting and filing lab tickets
- Eliminates “heads down” coding from paper tickets
- Eliminates searching/re-ordering tickets for multiple claims
- Eliminates copying and mailing paper internally
- Reduces need for on-site coders and abstracting services
- Significantly reduces errors and lost documents
- Significantly reduces rework
- Supervisors see real-time work status for each document
- Workstations are configurable via email, if required at all
- Single Points of Failure are manageable (continuous workflow)
- Documents stay under the hospital’s secure control (HIPAA)

Technologies Used

- BizTech ProMed for Coding
- BizTech ProMed Scanning
- QuadraMed Affinity

About BizTech Healthcare Solutions

BizTech Healthcare Solutions, Inc. is a Microsoft Gold Certified Partner and a “best of breed” systems integrator for Work Process Automation and Web Business Applications. BizTech is a single source supplier of enterprise products for automation, workflow, document management, digital signing, and e-commerce applications. Our certified engineers and developers provide design, development and “first call” support services from offices throughout the United States. With 20-years process engineering and related LAN/WAN and Internet experience, BizTech creates and supports solutions in numerous industries.