



e-health repository

A site independent solution

An industry leader in document and information management outsourcing solutions subcontracted with PBT and Global 360 to develop a secure, web-based, health record repository: **e-health**.

The repository provides customers at a major university and numerous Department of Veterans Affairs sites with a scalable, cost-effective, enterprise-wide approach to managing health-related patient records.

The paper health record environment

The obvious administrative problems posed by paper records: single-threaded access, poor security, storage and retrieval costs, the potential for lost or misfiled charts, transport costs and limited disaster recovery, pale in comparison to the clinical and accounting problems caused by paper records.

Prior to e-health, Medical Records personnel at each of the sixteen web-enabled locations accessed a list of scheduled patients, pulled their records, and delivered them to the appropriate patient care unit or treatment site.

On a daily basis, a vans at the university and multi-site DVA locations transported paper records, as needed, per the list of scheduled admissions or appointments. At discharge, or following completion of a clinic visit, loose documents were gathered and filed at the site of the patient's primary service provider.

Consider the importance of a patient's clinical history during an emergency; the difficulties inherent in conducting research and peer review with paper folders; and the negative impact on revenue when incomplete clinical information results in delayed reimbursement or a denied claim.

The implications for an electronic health record repository were clear. The solution had to:

- Support simultaneous, twenty-four hour access
- Require only basic personal computer skills to operate
- Provide quick and clear navigation to the desired information
- Limit access to information based on user profiles and ‘need to know’
- Deliver a robust and reliable security function that:
 - Protected patient confidentiality
 - Did not impede clinical practice
 - Facilitated maximized reimbursement.

The e-health repository

An e-health goal was to implement a ‘document independent’ solution by leveraging the internet. Any department: medical records, patient accounting, human resources, or purchasing, would be able to index, store and retrieve scanned and COLD documents via the web interfaces that support the e-health repository.

The scope and impact of the solution is reflected in the following statistics.

Statistic	DVA #1	University	DVA #2
Years of docs converted	5	3	2
Total documents	6,000,000	15,000,000	6,000,000
Annual documents	2,500,000	5,000,000	2,500,000
Document/data conversion	1,500,000	12,500,000	5,000,000
Storage types	Image, COLD/Text	Image, COLD/Text, COLD/Form	Image, COLD/Text
Record volumes	250,000 volumes	30 million pages	75,000 volumes
Linear feet reclaimed	12,000	40,000	5,000
Workstations	2000	350	2000
Record types	Medical Records	Patient Accounting	Medical Records

Once document conversion was initiated, new discharge procedures were implemented. Documents are collected following discharge and prepared, scanned at a central site, indexed, audited for quality, and archived. Document management was streamlined to five tasks through PBT developed applications.

Task	Solution
Capture	<ul style="list-style-type: none"> ▪ Documents are scanned, indexed, and audited for quality. ▪ Electronic documents are earmarked for conversion on a nightly basis and automatically indexed.
Conversion	<ul style="list-style-type: none"> ▪ Electronic text documents, typically notes and transcription, are converted to COLD to insure originality, optimize storage capacity, support concurrent access, and facilitate cross-reference indexing. ▪ Electronic forms, typically reports from ancillary departments on standard forms, were also converted to COLD using form overlays so that retrieved documents looked identical to their paper output. ▪ COLD storage allows users to search for information by page, or line, return large quantities of information to the desktop in seconds, and facilitate clinical research and analysis.
Hosting & Retrieval	<ul style="list-style-type: none"> ▪ Hosting refers to the secure, flexible, integrated, web-based repository of patient documents uploaded from client sites. ▪ Web-enabled retrieval minimizes customer infrastructure costs.
Output	<ul style="list-style-type: none"> ▪ As needed, any portion of a patient record may be printed given appropriate security. ▪ Original paper documents are boxed and maintained in off-site storage.
Records Management	<ul style="list-style-type: none"> ▪ HIPAA compliant security, a redundant repository that is backed-up on a daily basis, the elimination of lost and misplaced files, and the centralization of patient related information provides a foundation for strategic record management initiatives.

In conclusion

The benefits of the web-enabled, document independent, e-health repository are numerous:

- Immediate, secure, simultaneous access
- The elimination of lost files
- Dependable disaster recovery
- The elimination of 'shadow' charts
- HIPAA compliant, state of the art security
- Round the clock access regardless of location
- Reduced records management operating expense
- Negligible impact on existing systems and processes
- Centralized, electronic, patient and healthcare system information
- No capital investment
- No obsolete technology infrastructure.

About PBT

PBT can help you meet your productivity goals, improve your competitive position, and provide better customer service by automating time-consuming tasks and providing you with BPM-enabled solutions second to none.

Our experienced business professionals deliver skilled project management, award winning process redesign, creative workflow solutions and ergonomically satisfying user applications.

Our customer commitment:

- Your anticipated return on investment is always achieved and frequently exceeded.
- Your business goals are reflected in our solution templates.
- Your self-sufficiency is our deployment goal.

PBT, Inc.

70-C DaGullah Way

Pawleys Island, SC 29585

Phone: 843.359.0059

Fax: 843.235.6677

Website: www.pbtonline.com

Email: info@pbtonline.com