



BRONSON HEALTHCARE GROUP

A Holistic Approach for Managing Documents and Processes in AP, Patient Accounting, Pharmacy and More

In less than two years, Bronson Healthcare Group (Kalamazoo, MI) has adopted a system-wide platform for enterprise content management (ECM) to complement clinical applications in multiple departments with dozens of automated workflows to improve business operations and patient care and service. And it has accomplished this goal at a significantly lower cost than niche healthcare applications or other ECM solutions considered with just two IT resources, who also have other responsibilities. In fact, the solution was cost justified in about a year and provides a platform for ongoing process improvements.

A not-for-profit health care system founded in 1900, Bronson serves southwest Michigan with 343 beds, employs more than 4,000 people and generates more than \$473 million in revenue. Not only is Bronson one of the largest employers in Kalamazoo, it consistently garners awards for employee satisfaction as well as patient care, facilities and design. The vision and innovation of Bronson's IT staff has also been recognized with a McKesson VIP Award and an OnBase® Real Solution Award for its outstanding workflow solutions.

Bronson initially evaluated OnBase as a Finance Department solution after the payroll manager saw a presentation at a trade show. "When Matt [Molise, Senior IT Analyst at Bronson] and I got involved, we realized how it could be used in multiple departments and move away from niche solutions. The modular design allowed us to spread the cost of the system out over several high-profile projects, while expanding upon the same core application infrastructure," comments Mike Moore, Systems Analyst at Bronson.

Developed by Hyland Software, OnBase is a fully integrated suite of ECM software solutions that can communicate with complementary healthcare applications and includes core capabilities in EDMS (electronic document management), imaging, workflow and COLD/ERM. When compared with competing products, OnBase was chosen because it could be rapidly deployed, has strong imaging and document import functionality, strong workflow capability and ability to consolidate data from disparate systems. Based on their analysis and understanding of the processes required, Bronson chose to work with authorized OnBase solution provider KeyMark, Inc.

Imaging and Workflow Improve Finance Productivity

The first project implemented at Bronson was in the AP Department to process about 120,000 invoices a year, most of which are multi-page. OnBase is able to accommodate both paper-based and EDI invoices in a consistent process for posting to McKesson PFM (Pathways Financial Management), a Web-based financial and reporting package. Using OnBase Workflow, Bronson has significantly reduced handling of non-exception, PO-driven invoices and significantly improved exception processing and other activities.

The EDI feed is imported into OnBase, and paper-based invoices are scanned using OnBase Document Imaging. Using the OnBase Application Enabler, indexing values are automatically populated with data from PFM. If an invoice is PO-driven and the amount matches the entry in the General Ledger, the payment is automatically posted. Based on pre-configured business rules, exceptions are routed to the appropriate managers or AP clerks, depending on the type of invoice and the nature of the discrepancy.

Workflow manages the entire process for reconciling and approving the exception invoice. The solution has reduced AP labor while improving the ability to collect early pay discounts and avoid late payment penalties. "But the biggest benefit is the reduction of phone calls to the Finance Department," asserts Moore. "The ability for managers to access documents themselves right out of OnBase has been a positive for both managers and finance, even if it can't be easily quantified."

"AppEnabling" PFM also makes it possible for users to retrieve documents in the OnBase repository directly from the PFM interface. Using point-and-click configuration, specific fields in PFM are related to the appropriate document(s). A user simply double clicks on a field (e.g. an invoice number) and is presented with the appropriate document(s) (e.g. an image of that invoice). "Application Enabler was a huge factor in favor of OnBase," says Moore. "No one else had that integration capability as an integrated module."

The OnBase solution has also provided an opportunity to evaluate and improve business processes. For instance, the hospital recently implemented a

AT A GLANCE

By adopting a system-wide enterprise content management standard to complement and integrate with its McKesson Corp. clinical and business office applications, Bronson Healthcare Group has improved productivity in its Finance Department, Patient Accounting and Inpatient Pharmacy at a fraction of the cost of multiple point solutions.

BENEFITS

- Reduces labor and cycle times in multiple business and clinical areas, including days in AR
- Provides tools to track processes and accountability
- Eliminates need to call other departments to track down documents
- Improves ability to collect early payment discounts and avoid late payment penalties
- Allows authorized users to access documents through McKesson line-of-business applications
- Serves as a common enterprise platform, minimizing administrative requirements and total cost of ownership
- Pharmacy response time and form printing costs cut by more than half
- Purchase cost-justified in about a year
- Saves hundreds of thousands of dollars in comparison to purchasing multiple niche solutions
- Supports a combination of thick and thin client access, including Citrix

APPLICATIONS

- Finance (Budgeting and Compliance)
- Accounts Payable
- Purchasing
- Patient Accounting (Registration and Billing)
- Inpatient Pharmacy

ONBASE SOFTWARE

- Application Enabler
- Production Document Imaging
- Document Import Processor
- DVD Authoring
- Outlook Integration
- Virtual Print Driver
- Workflow
- Web Server

COMPLEMENTARY PRODUCT INTEGRATIONS

- EMC Symmetrix® SAN for file storage
- Fujitsu Computer Products of America document scanners
- Eastman Kodak document scanner
- McKesson Corp. Pathways Financial Management, Star and Horizon Medication Manager applications

(continued)

solution to manage travel reimbursements that allows employees to fax receipts with a signed cover sheet to the OnBase system through the Facsimile Import for RightFax™ from Captaris, Inc. In the past, there was no process for verifying that the document had been signed by someone at the director level or higher. In investigating the needs and requirements for this application, potential inefficiencies and problems were recognized and prevented.

“Workflow designed for the budget process reduces Finance’s research time in half or more,” states Moore. “Staff can immediately answer questions about budget variances. Overall, greater structure to the budget process allows us to budget more accurately, saving tens of thousands of dollars.”

Improving the Admitting Experience

At the beginning of 2005, Bronson began a phased implementation of OnBase for Patient Accounting that manages the collection of documents from admission through EOB and links them to the patient record in a McKesson Star HIS. Though OnBase is rapidly deployable, its modular design also supports a more gradual approach for organizations like Bronson that attempt to minimize the disruption of a sudden cultural shift.

When a patient registers at one of 50 registration stations around the Bronson campus, documents such as proof of identity, insurance verification and consent agreements are captured using OnBase Front Office Scanning. An admitting clerk completes the required information in Star and can access a simple OnBase scanning interface directly from that screen. S/he selects the document type (e.g. a driver’s license) from a button on the screen and scans it using a Fujitsu Computer Products of America fi-4120 document scanner at his/her workstation. Application Enabler retrieves indexing values from Star and lets users document them from the Star interface.

“We’re probably capturing about 10 different document types for each patient admitted,” estimates Moore. “Before we had OnBase, we couldn’t scan anything unless we had an account number, but there are some documents that may be collected before an account number has been generated.”

For some outpatients, OnBase also manages physician orders. In the past, several physician practices with which Bronson is affiliated would fax orders and clerks would have to try to locate them when a patient arrived. Using the RightFax integration, orders are captured and stored in alphabetized queues. When a patient calls to schedule an appointment, the clerk accesses the appropriate queue and acquires the appropriate indexing values through Star.

After discharge, electronic EOBs are imported using the OnBase 835 Processor, and paper-based ones are scanned into OnBase. Regardless of the format

in which they originated, the EOBs are associated with Star. When employees are completing research for jobs like denials management or customer service, they have a single repository from which to retrieve all relevant documents, simply by entering a keyword(s). By increasing productivity, OnBase provides Bronson with another tool for reducing days in AR. Bronson is currently evaluating a third-party recognition package to automatically capture EOB fields decreasing processing time even further.

Workflow has also been used to improve efficiency in Patient Accounting to prevent write-offs/denials, improve financial compliance and cash flow. For instance, because of the nature of the care, a physician name may not have been associated with the patient record upon admission to the ER, preventing payment. By applying OnBase Workflow logic to the HL7 data stream generated in ER, a patient record not associated with a physician will kick off an electronic form which is routed appropriately. “Abilities like this allow for faster and more accurate billing for reimbursement gains of tens of thousands of dollars per year,” says Moore.

Currently, Molise and Moore are working on a solution to create an OnBase report from Star that outlines information about admitted patients. This would provide employees with a single source of information about patients who are in-house, such as which ones the hospital has verifications for.

Pharmacy Response Times Cut By Half

One of the most recent major projects at Bronson has been the deployment of OnBase Workflow in the Inpatient Pharmacy, a solution that was implemented at a fraction of the cost of a niche specialty solution. In the past, pharmacy orders were completed by hand using three-part NCR paper, and the yellow bottom copy was sent through a pneumatic tube or placed in bins in the nursing units. Stray marks would affect the quality of the orders, which were collected by personnel from the decentralized pharmacy units. “We did a time study on how long the copies sat in the bin,” says Cherie Woodhams, Pharmacy Educator at Bronson. “Some were there as long as 38 to 40 minutes. By having them faxed or scanned to the Pharmacy, it now takes 12 to 15 minutes to get them in the system.”

OnBase Workflow sends 200-230 faxed orders per day to the appropriate queues. When the order enters a pharmacist’s queue, s/he uses dual screens to simultaneously view the McKesson Horizon Medication Manager and the image of the order. The pharmacist enters a 10 digit patient number and indexing values are completed using workflow.

Not only has OnBase hastened the processing of prescriptions, but it has also increased pharmacist productivity by decreasing the time spent on clerical tasks. The orders no longer have to be time stamped, filed or retrieved. If a nurse calls because one of several items was accidentally omitted, for instance,

the pharmacist simply looks up the form in OnBase instead of leaving his/her desk to locate and thumb through paper copies.

The OnBase solution also supports better allocation and prioritization of tasks. STAT orders, for example, are faxed to a different line and placed in a high-priority queue. Pharmacists also receive an automated text message alerting them to the critical order. “It was hard to train technicians for prioritizations,” says Ms. Woodhams. “That responsibility has now been moved to the nurses.” Pharmacists can also access queues for other units to assist when one area is experiencing especially high volumes or during off hours when only the central Pharmacy is open.

Most of the Pharmacy staff is accessing OnBase via Citrix, which supports secure remote access. “Long term, we are hopeful we can develop a system to provide additional backup during evening hours,” says Ms. Woodhams. “We may even be able to consider having a pharmacist on call who could assist from home.”

“OnBase gave us the tools to implement a customized pharmacy solution that is as good or better than the specialty solution for tens of thousands of dollars less,” comments Molise. “In fact, a consultant reviewed our workflow and the other, more expensive solution we considered and thought this one was better.”

“Even the long-term savings in eliminating NCR forms will be huge,” adds Ms. Woodhams. “The Specialty Unit has already converted the form to single page, and we estimate that will reduce costs by 50% right away. Another unit calculated that it spends \$4,000 a month on forms. That will add up to significant savings when the conversion is hospital-wide.”

Certified in OnBase System Administration and Workflow, Molise and Moore have developed/are in the process of developing a multitude of new solutions. These include an Incident Report System and other HR applications, credentialing, leave of absence processing, radiology, auditing, medication and allergy reconciliation forms and possibly insurance.

“In the past, we would have done each of these projects individually, and that would have required too many people to support,” says Molise. “With one OnBase system, two IT resources and a mid-range up-front investment, we’ve been able to accomplish all this in a relatively short time. And there’s a lot more to come.”



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