

# Connecting Patient Information Across a Healthcare Organization

*MeritCare Health System Achieves a True Electronic Medical Record  
and Improves the Revenue Cycle with Enterprise Content Management*

**OnBase®**

*a Hyland Software solution*

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# INTRODUCTION AND EXECUTIVE SUMMARY

To enhance patient care, improve business processes and connect disparate information, the MeritCare Health System has implemented an electronic document management system (EDMS) across the organization. MeritCare uses the technology to fill in the gaps that data-centric applications could not and is the link that connects patient information from the moment the patient presents at registration until payment is collected. This paper explains how the OnBase EDMS solution completes MeritCare's already mature electronic medical record (EMR) and accelerates business processes.

Integrated with the health system's GE Centricity® EMR and Siemens AG Financials, OnBase is flexible enough to meet the needs of departments and processes organization-wide. Beginning with registration, MeritCare electronically collects insurance cards and regulatory forms that were formerly copied and filed manually. Registration has also eased appointment updates, reminders and follow-ups with a workflow solution.

In Health Information Management (HIM), MeritCare uses OnBase to enter the portions of a patient's records that an EMR cannot easily capture, such as handwritten notes or diagrams. With an EMR available to analysts, coders and physicians completely online, all three groups complete their work more efficiently and have the ability to work remotely, which was impossible with paper charts.

Not only is the entire chart electronic, but it is easily accessible with a fully integrated solution. Authorized users retrieve outside documents by simply clicking a button in their familiar Centricity interface. By working within Centricity, users more readily accept the solution and require little training in order to understand it. OnBase retrieves only the documents related to that specific instance of care for the individual patient, fully supporting HIPAA and privacy policies and easing the user experience.

By utilizing the patient information collected at registration and scanning in its own documents, the Hospital Business Office (HBO) has automated its billing processes from admission through final payment. The HBO has realized significant cost savings and process improvements with the OnBase solution.

Because MeritCare's wholly owned subsidiary Healthcare Accessories (HCA) uses a separate chart, the medical supply store converted its paper charts to electronic using the OnBase Medical Record Management solution, creating a full EMR. All information is now available in OnBase, enabling the HCA billing department to also use the solution and improve efficiency.

By applying the OnBase solution organization-wide, MeritCare unites information in a central repository that is easily accessed and leveraged in departments that have unique needs, but require much of the same information. OnBase is the piece that connects the departments' systems and processes to each other to improve patient care and save MeritCare hundreds of thousands of dollars.

# ABOUT MERITCARE

With a mission “to improve the health and quality of life of the people we serve,” MeritCare Health System has provided quality healthcare for more than a century. MeritCare is an integrated clinic and hospital system with the largest group practice and hospital in North Dakota. Headquartered in Fargo, MeritCare’s service area spans 250 miles west to east and includes 17 locations in the Fargo/Moorhead area, 17 regional clinics in Minnesota and nine regional clinics in North Dakota. MeritCare provides services to more than two million patients per year, including 22,500 hospital admissions and 112,000 walk-in clinic visits.

With numerous awards in healthcare technology, MeritCare has a proven emphasis on technology to improve patient care; the health system was already handling 75 percent of its patient information electronically. However, MeritCare needed a way to capture paper and handwritten documents that kept it from achieving a true EMR, slowed down processes and hindered staff from quickly accessing patient information to ensure the best decisions on care are made. Portions of health records that were written, photographs and other information challenging to collect electronically were difficult to access and move through processes.

MeritCare began looking to fill this gap with an EDMS solution. MeritCare required the EDMS to integrate with its GE Centricity EMR as well as meet initiatives in others areas of the health system. Besides the EMR, the health system needed to apply the EDMS to patient access, HIM, the revenue cycle and its durable medical goods subsidiary. Because the system had to fit such varying needs and employees, the solution had to be flexible enough to fit the entire health system and intuitive enough so that a wide array of users could easily and quickly understand and adopt the new technology.

## MERITCARE HAS BEEN RECOGNIZED AS AN OUTSTANDING HEALTHCARE FACILITY BY MANY ASSOCIATIONS AND PUBLICATIONS, INCLUDING

- Top 25 Connected Healthcare Facility (2007 *HealthImaging & IT*)
- Gallup Award for Healthcare Excellence (2006)
- VHA Leadership Award for Clinical Excellence in Heart Care (2005)
- 100 Most Wired Hospitals in the United States (1999-2007 by *Hospitals & Health Networks*)
- Top 100 Cardiovascular Hospitals (1999-2000, 2002-2006 Solucient)
- Top 100 Hospitals (2004 Solucient)
- Top 100 Integrated Healthcare Networks (2000, 2002, 2003 *Modern Healthcare*)
- eHealthcare Leadership Gold Award for Best Recruitment Web Site (2004 *eHealthcare Strategy & Trends*)
- eHealthcare Leadership Distinction Award for Best Health Content for MeritCare.com (2002 *eHealthcare Strategy & Trends*)
- America’s Top Hospitals for Coronary Bypass Surgery and Heart Attack (2003 *Money Magazine* — data obtained from HealthGrades)
- Consumer Choice Award for Quality in Healthcare and Image (2000 National Research Corp.)
- Top 50 Cancer Center (1999 *U.S. News & World Report*)
- Health and Human Services Medal of Honor Award recognizing MeritCare’s high rate of life-saving organ donations (2005, 2006)
- Outstanding Achievement Award as a Community Hospital Comprehensive Cancer Program (2006 American College of Surgeons Commission on Cancer)
- Top 50 Hospital - Urology (2007 *U.S. News & World Report*)
- OnBase RealSolutions Award in Healthcare (2007)

# ONBASE AT MERITCARE

*“Hyland matched our vision of an integrated EMR that was able to fit in as an adjunct rather than replace the EMR we have in place. OnBase is that extra piece we need.”*

*Caryn Hewitt, RN, BSN  
Executive Partner  
Health Information Management*

Before implementing a document management solution, departments at MeritCare had significant paper challenges. The HIM department had the equivalent of more than 16 miles of paper files scattered around health system locations. Each of the 1.5 million visits per year required the retrieval of a 100 percent paper record for every visit. The 40,000 square foot facility holding the documents was nearly at capacity and MeritCare wanted to use the space for patient care. In addition, the health system wanted to decrease its 50 percent deficiency rate and make coding and analyzing more efficient.

To augment its Centricity EMR and automate processes around the health system, MeritCare chose the OnBase enterprise content management (ECM) suite. Developed by Hyland Software, OnBase is an enterprise-class software that combines integrated document management, workflow and records management in a single application. Because OnBase fits into MeritCare’s technology strategy, it does not displace existing technology investments, such as MeritCare’s Centricity EMR and Siemens AG INVISION Financials. Instead, OnBase works with the enterprise software, complementing and enhancing its functionality and keeping end users within their preferred environment.

With the OnBase system, MeritCare defined the following project objectives:

- Implement a centralized, enterprise-scale system for document scanning and management.
- Integrate with clinical and business systems to make documents accessible electronically with minimal effort.
- Reduce paper for patient visits, insurance claims and billing questions.
- Improve efficiency and increase productivity by implementing new electronic workflows.

Registration wanted to collect patient information only one time, no matter where the patient presented in the health system. With registration staff gathering information electronically, the HBO and Clinic Business Office (CBO) can also leverage the OnBase system for more efficient billing.

To guide its deployment, MeritCare used the following EDMS strategy:

- Minimize impact to users.
- Create one access point to view and sign.
- Minimize replication and versioning of data.
- Ensure workflow tools are easy to use, work with and implement.

# ORGANIZATIONAL BENEFITS OF THE ONBASE EDMS

By implementing EDMS in both clinical and business departments, MeritCare has improved patient care by connecting information across the health system. MeritCare has realized the following benefits with its OnBase solution:

Fully electronic medical record (EMR) for each patient.

Improves patient care with immediate access to chart documents from any MeritCare facility.

Estimated annual labor savings of \$650,000 by eliminating the paper filing system.

Eliminates need to retrieve 1.5 million records per year for patient visits.

Annual savings of \$145,000 in the HBO.

Savings of \$200,000 in supplies in the HBO during the first year.

Decreases deficiency rate from nearly 50 percent to less than 5 percent.

Reduces chart analysis cycle time from two to three weeks to within 48 hours.

Integrates Centricity EMR to specific documents relating to an episode of care.

Decreases HIM full-time employees (FTEs) from 135 to 73.

Analysts, coders and physicians view information simultaneously, accelerating billing processes and enabling them to work remotely.

Eliminates 60 filing cabinets of paper files in the HBO.

Increases productivity through instant access to EOBs.

Decreases chart pulls by providers looking for missing information to 18 percent, down from 100 percent four years ago.

Minimal training and high user acceptance with an interface that closely resembles the previous physical folders.

Retrieves documents without leaving familiar Centricity screen.

Space once used for HIM now used for clinical care on multiple campuses.

Decreases the risk of medical identity theft with scanning at registration.

*“All of our customers—patients, providers and physicians—couldn’t be happier with the solution. With the increased efficiency and advanced work processes, physicians are able to spend more time with patients and less time on administrative tasks. Patients can take comfort in knowing their physicians are more available to them and that all of their information is available at their point of care.”*

*Caryn Hewitt, RN, BSN*

# REGISTRATION EFFICIENCIES IMPROVE PATIENT EXPERIENCE

Because of MeritCare's single organization-wide EMR, a patient's registration information and supporting documentation need only be entered once, no matter where the patient is receiving care. The business offices in the health system can then use the information to improve the billing process.

While MeritCare uses the EMR to electronically record much of the patient's information, registration still needed a way to capture paper forms and documentation. With paper, patients had to provide information multiple times and patient registration information could not be quickly retrieved.

By adding the EDMS to registration, registration staff members enter the patient's information in the Centricity EMR when a patient presents at a MeritCare facility for the first time. Since scanning driver's licenses is illegal in North Dakota, registration staff take digital photographs of new patients to confirm identity, identify patients during subsequent visits and reduce the potential for medical identify theft and fraud.

When insurance cards, HIPAA forms or other paper forms must be entered, users are prompted with a scanning interface. Instead of walking the forms to a copier, staff members scan the patient's information at one of more than 175 document scanners throughout the health system, and the items are automatically indexed with information from Centricity. OnBase attaches the documents to the EMR for later reference. A year after implementing, MeritCare had scanned more than 160,000 insurance cards.

*"The goal of implementing Front Office Scanning was to enable the registration staff to capture key patient information at the point of registration to assist with the back end billing process. We currently scan insurance cards as well as regulatory forms at the point of registration. This eliminates the routing of paper and the potential to lose these important documents."*

Luther Stueland  
IT EDMS Team

If a patient enters the 380-bed MeritCare Medical Center for a foot injury, for example, registration collects the patient's information into the Centricity EMR. Should the patient then need follow-up physical therapy at a local clinic in Moorhead, the patient will not need to provide the same information again, eliminating the redundant registration for the patient and reducing the time registration spends on collecting and verifying information. Staff at the clinic is able to pull up the patient's record in Centricity and confirm information in the system.

Documents collected by OnBase at the original registration are available as links within the Centricity system with a simple click. The same is true should the patient begin in the local clinic. If the patient came in with an injury and the clinic recommended visiting the Medical Center, the patient's registration information would be in the system when s/he arrived at the hospital.

By eliminating the paper collection of information and forms, patients spend much less time both at the original registration and at any subsequent visits. The patient experience is improved as they are less inconvenienced and need not worry about bringing information to each visit and filling out the same forms multiple times. In addition, billing is eased because all information is sure to be available when generating a bill after a visit.

## Pre-Registration Workflow Updates Appointments Real-Time

Complementing the registration scanning and further improving the patient experience, MeritCare has implemented a pre-registration workflow. In order to call patients prior to the appointments, provider schedules had once been manually printed out and referenced. The only way to catch add-on or canceled appointments was to print and review schedules several times a day to check for new or removed patients, and the follow up for patients was time-consuming and often missed.

The new OnBase workflow utilizes HL7 messaging to send messages into OnBase, which creates an appointment e-form. Daily timers in OnBase retrieve appointments scheduled for the next seven days and place them in workflow queues. As appointments are added on or canceled, they enter and exit the queues in real-time. Users keep track of patients they are unable to reach in hold or pending queues, which keep a quick list of callbacks to work daily.

The workflow ensures that each patient is contacted before an appointment and identifies if any follow-ups are needed. Because patient appointments are easily accessed real-time, staff can always be prepared for the next patient and appointment times can be more easily filled.

# HEALTH INFORMATION MANAGEMENT IMPROVES PRODUCTIVITY

After a patient's information is collected at registration, the next piece OnBase fills is the portions of a patient's chart that are paper, such as orders, progress notes or physicians' signatures. Before the implementation, each visit required the retrieval of a paper record, which was time consuming and resource intensive. In addition, the building holding the HIM documents was nearly at capacity and documents took up space that could have been used for patient care or other activities.

To begin the implementation, MeritCare collected existing paper records from locations across the health system, totaling the equivalent of 16 miles of paper. MeritCare standardized forms and added identifying bar codes to 90 percent of documents for easier indexing. Most forms have three bar codes, including one holding the patient name and medical record number, one that supplies appointment date and the physician's name and one to identify the type of form.

MeritCare conducted an in-depth time study in determining the value of the OnBase solution and to develop the following productivity standards for both clinic and hospital document scanning:

#### Clinic Documents

- 7,500 pages processed/day
- Prepping: 8 pages/minute
- Scanning: 10 pages/minute
- Indexing: 10 pages/minute
- QA: 10 pages/minute

#### Hospital Documents

- 17,000 pages processed/day
- Scanning: 11 pages/minute
- Indexing: 11 pages/minute
- QA: 11 pages/minute

To make newly created information electronic, patients' paper charts are collected once patients are discharged from the hospital. Charts are collected from clinical care units every shift and sent to the HIM department for centralized scanning. Once content is scanned, OnBase links the documents to MeritCare's Centricity EMR system, providing complete charts to physicians, analysts and coders who are authorized to view them within a 24-hour turnaround. Hard copy documents are destroyed after 30 days.

#### BENEFITS IN HIM USING THE ONBASE SOLUTION

- Saves more than \$650,000 annually
- Reduces FTE count by 62
- Analyzes more charts with fewer staff
- Eliminates the need to retrieve 1.5 million records per year for patient visits
- Less than 24-hour turnaround time from visit to electronic access to documents
- Decreases delinquent medical record percentage by more than 15 percent
- Reduces deficiency rate to less than 5 percent, down from nearly 50 percent
- Allows analysts and coders to work from home with secure remote access
- Reduces chart pulls to fewer than 1,000 per day
- Increases productivity in analyzing incomplete medical records by more than 40%
- Flexibility to allow analysts to work from home, assisting in recruiting and retaining employees

*“Within a day of implementation, providers began ridding their offices of paper, and we received a lot of paper from them. The physicians had a very quick buy-in and it was rewarding to see the organization supported what we are doing.”*

*Kathy Buchanan, RHIT  
Manager  
Health Information Management*

#### HIM Solution Reduces Deficiency Rate and Increases Productivity by 40 Percent

With documents in OnBase, MeritCare makes the analysis and coding of charts completely electronic and eliminates the need for paper in the process. With a paper system, MeritCare could not code, analyze or complete charts simultaneously. The health system was unable to identify missing charges until weeks after discharge, and data entry staff spent many hours batch-totaling charge sheets, which were often illegible or missing data. Inefficiencies and inaccuracies slowed the revenue cycle, and because coders had to use paper in the office, MeritCare was losing valuable (and sometimes difficult to find) coders to opportunities that allowed them to work from home because MeritCare could not offer that option prior to using OnBase.

Now, chart analysts evaluate the charts electronically using OnBase Medical Record Management (MRM) and ensure that each is complete and complies with internal and external regulations. OnBase’s intuitive design and seamless integrations allow analysts to move easily between charts and outside documents. Because all the information is accessed electronically, analysts can accomplish their work without pulling any paper documents, increasing productivity and raising employee morale. In addition, this has enabled MeritCare to allow analysts and coders to work from home, helping MeritCare to attract and retain them.

From there, coders evaluate each chart and enter charge information into electronic charge sheets. The completed form is routed to data entry where the totals are calculated for each poster prior to posting. Any errors are found by the charge entry staff and routed back to the coder in a work list for review.

At the same time, physicians can complete deficiencies electronically. Instead of having to route paper charts back to doctors to thumb through to complete, providers securely sign into MRM at home or at work and are presented with their deficiencies. Whether a signature is required, they need to complete documentation or there is a missing dictation, physicians can complete the work from anywhere with an Internet connection. They no longer need to be physically at the hospital or take the charts home to complete them, and charts can be completed much more quickly. Physicians can also reject a deficiency or an entire chart from the MRM and record the reason for rejection.

Using the OnBase MRM Viewer, users see an interface that closely resembles the previous physical folders. With colored tabs marked by document type, just as they were in the physical folder, users can quickly find necessary information and make the appropriate changes and notes. Not only does this make the user experience easier, it decreases training requirements and cultural change. In fact, doctors are trained in only a few minutes and often don’t have any questions afterwards.

# EMR INTEGRATION CREATES TRUE ELECTRONIC MEDICAL RECORD

Using Centricity for an EMR, 75 percent of patient information at MeritCare was electronic before the OnBase solution. The remaining 25 percent that was paper slowed patient care as well as business processes. Keeping some chart information electronically and some paper can be confusing and actually decrease efficiency. Converting to an EMR that is fully electronic prevents the frustrations associated with employees not knowing where to find information and having to pull it from a variety of sources.

Because the HIM department now digitizes the remaining 25 percent of the chart that had been paper, MeritCare and its patients benefit from a true EMR available from within Centricity. Users access OnBase documents with a simple click within the Centricity system. They do not need to leave their familiar Centricity screens while OnBase works in the background, utilizing HL7 messaging, to pull up the documents, making the system easy for staff to learn and use.

To access clinic-based documents, MeritCare uses the OnBase “DocPop” feature. In Centricity, users click a paperclip icon and documents associated with an office visit “pop” up on the screen. With the seamless integration, users often see the documents as an added functionality of the existing application, never realizing OnBase is working in the background to retrieve the documents. By working in a familiar interface, training is simplified and the solution is quickly adopted.

For example, the Dermatology Department collects digital photographs for future reference, which are stored in OnBase and retrieved through the icon in Centricity. A summary line reflects the name of the specific document so that users have information about the document they are viewing. The integration brings up only the specific documents of the individual patient, ensuring that only authorized users view confidential information they are allowed to use and that MeritCare complies with HIPAA rules.

To access hospital-based documents, staff use a similar “ChartPop” functionality, which integrates Centricity to multiple documents relating to a hospital episode of care. By clicking a paperclip icon in an encounter, the OnBase MRM viewer “pops” to show a view like that seen by coders and physicians. Users see a “view only” version of the OnBase MRM to ensure documents are protected and unchanged, supporting compliance and patient security.

**TO FIT THE UNIQUE NEEDS OF PROVIDERS AT BOTH THE MERITCARE CLINICS AND HOSPITALS, MERITCARE IMPLEMENTED THE FOLLOWING SEPARATE, ALTHOUGH SIMILAR, SOLUTIONS:**

#### *Clinic-based documents*

- Utilizes “DocPop”—click the paperclip and “pop” the specific document
- Single documents linked to an office visit
- Summary line in Centricity reflects the name of the specific document
- Document type examples: eye notes, prenatal records, dermatology notes

#### *Hospital-based documents*

- Utilizes “ChartPop”—click the paperclip and “pop” the chart view of that specific episode of care
- No additional sign-on password – maintains security that is present in Centricity
- Multiple documents linked to a hospital episode of care for a specific patient
- Summary line in Centricity reflects the name of that episode of care
- View only version of MRM to support compliance and patient security
- Document type examples: hospital inpatient, hospital outpatient, ER visits

# REVENUE CYCLE SOLUTION SAVES \$145,000 ANNUALLY

## REVENUE CYCLE BENEFITS USING THE ONBASE SOLUTION IN THE HBO

- Annual savings of more than \$145,000
- Saved \$200,000 on supplies the first year implemented
- Re-deploys six staff to more value-added tasks
- Space previously devoted to 60 filing cabinets freed to allow another department to relocate there
- Improves morale with increased productivity
- Reduces check processing time to AR by two to three days
- Decreases errors with updated insurance information
- Reduces pulling EOBs for claim filing

*“Not only are retention needs no longer growing, they are decreasing, freeing up more patient care space. Offices are also able to move offsite, further enlarging the patient care space.”*

*Caryn Hewitt, RN, BSN*

In the HBO, paper-based processes were extremely difficult and time consuming. Because the system is encounter-based, a new account is created each time a patient visits the hospital. Employees had to attach a sticker to a detailed paper bill for each patient encounter and file the bill, forms and other documentation. The HBO filed about 500-600 per day, and the simple filing of bills often took until 11 a.m. each day before employees could “begin” the day’s work.

Balancing explanations of benefits (EOBs) was also challenging as employees could not determine if the EOB and check matched until the following day. Once balanced, employees wrote out receipts and stapled them together with the EOBs and checks. They were then filed alphabetically in a drawer in case they were needed for later reference. Audits were difficult because EOBs could not be easily searched. For one audit, an employee’s main job was to search through all of the claims to find any instances of billing for therapy. The employee highlighted any therapy bills, which were sent to the Billing Compliance Department.

With the OnBase solution, the HBO has scanned and indexed old folders containing histories and EOBs. This alone has eliminated the need for the costly storage space of 60 file cabinets and freed up space to move an entire additional department into the space previously taken up by the HBO files. By retrieving the most current insurance information received from front office scanning during registration, the office has fewer errors and retrieves paper EOBs for claim filling much less often. This has allowed staff to increase productivity and, in turn, improve morale.

Creating a paperless office, the HBO now captures more than 90 percent of information electronically and has integrated OnBase with the Siemens financial system to more easily manage billing. For example, the HBO used to have to print off accounting face sheets, but now imports them into OnBase using COLD/ERM. To accommodate the remaining 10 percent of paper documents that are not captured, such as paper EOBs, correspondence and paper checks, the HBO scans in the documents and gathers indexing information from the Siemens system.

Comprehensive workflow processes improve overall revenue management and encompass the entire billing process from the point of admission to final payment of the patient’s bill. OnBase captures EOBs with the OnBase EDI 835 EOB Processor. The HBO uses the processor to receive remittance data from an insurance carrier, separate it into individual EOBs, gather the proper index data and store the EOBs in OnBase. Workflow accurately indexes the EOBs down to the patient level and assists the cashiers in balancing each EOB to the check amount. The workflow ensures all payments for remittance have been posted into the core billing system.

# REVENUE CYCLE SOLUTION SAVES \$145,000 ANNUALLY (cont.)

Bills and EOBs are sure to be balanced as OnBase will not process them through the workflow if they do not match. Because all of the information is in OnBase, it is much easier to research why the bill does not match the EOB when necessary, and the HBO no longer needs to create and file paper receipts. The office is currently back scanning the previous receipts, further moving toward a paperless office and eliminating even more filing cabinets. In addition, the HBO works with several insurance agencies that are also OnBase users, and the department is looking to more directly interact with these carriers' OnBase systems.

Audits are also considerably easier. To remedy the situation encountered in the therapy bill audit, the HBO uses the EDI 837 Processor to collect CMS 1500 (formerly HCFA) forms and UB-04 (formerly UB-92) forms. Similar to the EDI 835 Processor, this processor receives the forms and separates them into individual forms, making them retrievable and searchable in OnBase. Workflow then identifies codes and services on the processed bills and directly routes them for billing compliance.

With Workflow, the HBO electronically routes documents between departments should they need to be reviewed for denials and edits. Review processes are performed much quicker and are more convenient and secure than paper routing. Adding a workflow process has enabled the office to send documents through the appropriate channels in less time, further increasing productivity and leading to annual savings of more than \$145,000.

While supervisors previously had to look through drawers and desks to determine how many documents were pending, the HBO now uses OnBase and Business Objects Crystal Reports® to create a report each Monday of what is pending in the workflow and for what amount. Because they know how much is waiting to be posted, balancing is much better. They can also measure and review productivity as they never could before.

The final stage of the workflow works as an aging tool for the HBO. Once a patient has paid in-full and has a zero balance, the patient is removed from the workflow. Should the bill be open for more than a year, HBO staff members research the issue and determine whether or not to send it the Collections Department. With the Workflow, received checks are processed to Accounts Receivable (AR) two to three days earlier, reducing the total cycle time and sending cash to the bank faster.

*"We are very pleased with the results of our EDMS implementation. In our first year alone we saved \$200,000 on supplies and we now save \$145,000 annually. By eliminating 60 file cabinets of paper, we are able to process checks two to three days sooner while redeploying six staff to other areas. We like that our supervisors are closer to the process and find it easier to monitor the workflow."*

*Brian Rahman  
Manager  
Patient Financial Services*

*“One of our biggest benefits has been making all of the EOBs electronic. Not having to pull those hard copies or search through microfiche has saved us a lot of time. It also gives us the potential to add more workflows to what we are doing to make the office even more efficient. By the time our implementation is fully complete, we plan to re-allocate four or five employees.”*

*Doug Okland  
Executive Partner  
Revenue Management Services*

#### Clinic Business Office Manages Billing For 400 Physicians

The MeritCare CBO manages the billing for the health system’s 400 clinic physicians using OnBase and the McKesson practice management system. The CBO is divided by specialization, including cash management, insurance, patient accounts and audit. OnBase is used in each of these areas and the CBO continues to develop its OnBase solution even further.

Unlike the HBO, the CBO already had some of its documents and processes automated. However, not all of the information can be managed by the system and OnBase helps to complete the solution. OnBase captures paper documents to make them available electronically, including paper EOBs, collection agency status reports, attorney assignments and others. Similar to the HBO, the CBO also uses the insurance and financial documents collected at registration and linked to patient accounts.

The CBO uses OnBase Workflow to improve processes. For example, the CBO has implemented a coding inquiry workflow. When a patient calls in with an inquiry about why an insurance company may or may not have paid something, the CBO has to contact a coder for information. Before OnBase, staff members had to pull out the patient’s file, fill out a paper form indicating what information was needed and then have the paper routed to a coder. With the workflow in place, patient information is available electronically and the employee fills out an electronic form. Workflow routes the e-form to a coder’s work list. The coder can then re-populate the patient account, if necessary, and OnBase Workflow routes the changes to accounting and insurance and adds it to staff work lists.

The workflows have improved the CBO’s processing time and reduced the backlog. Papers no longer have the potential of getting lost, and the office better tracks backlogs. Managers can look at employees’ work lists and monitor inquiries that need to be completed. When the department begins to fall behind, managers can address the causes more quickly and keep everything moving more smoothly.

Users in the CBO can access OnBase documents both through its McKesson interface as well as through the OnBase interface. As the implementation progresses, the CBO plans to make all documents available through a click of a button in McKesson. In the future, the CBO is also working on implementing workflows to handle denied claims, error corrections and patient inquiries. Once the implementation in the CBO is complete, the CBO hopes to re-allocate four to five employees.

# DURABLE MEDICAL EQUIPMENT SUBSIDIARY CONVERTS TO ELECTRONIC CHART

HealthCare Associates (HCA) is a wholly owned subsidiary of the MeritCare Health System and is a medical supply store offering a variety of services for providers and patients with five locations in North Dakota and Minnesota. HCA strives to provide patients with the products that allow them to be independent, while giving patients quality care, products and education in a comfortable and professional setting.

However, HCA's paper chart system made it difficult to offer this care. Charts, separate from those used at MeritCare's hospitals or clinics, were cumbersome, time consuming and often incomplete. Paper was stored in various areas of the building, making it hard to retrieve information and making it impossible to centrally store documents. Reimbursement documents took up rows of shelves and had to be boxed and stored offsite, and regulatory documents were difficult to track, which resulted in delays in the billing process.

MeritCare created a folder structure in OnBase to replace the paper chart. OnBase Foldering provides a tabbed interface that resembles physical folders, making them easier for users to adopt. A patient's folder contains all of the patient's related medical information in one set of tabs while a subset of tabs holds reimbursement information. Practitioners and billing staff have a single central repository for all content so that they can access needed documents quickly.

When a patient enters HCA, a staff member checks Centricity for insurance information. If the patient was referred to HCA by a MeritCare physician, staff pulls up the relevant insurance information and only scans the prescription the patient brings with them. If the patient has been referred by a doctor outside of the MeritCare Health System, staff scan in the insurance card as well as the prescription. All scanned forms feature a bar code identifying the type of form and a second bar code with patient information from an AS/400 application to index patient keywords. The patient's folder, any subfolders and tabs are automatically created in OnBase.

Once registered, patients are escorted to an individual room to privately and thoroughly discuss treatment. In the room, the staff member pulls up the patient's folder in OnBase so that all of the patient's information is at his/her fingertips. Practitioners at HCA also access patient information from within Centricity to get a more complete picture of a patient's needs. Similarly, MeritCare physicians who prescribed the durable medical good access the practitioner's notes in the patient's folder.

In some cases, patients are prescribed a certain treatment and practitioners at HCA realize another may be more helpful. Because HCA cannot give out any equipment without a prescription, a paper process is not sufficient to help patients who are waiting for care. HCA practitioners notify providers to revise the prescription and begin care with an approval. The new signed prescription is sent over electronically.

#### **BENEFITS IN HCA USING THE ONBASE SOLUTION**

- Saves a significant amount of time over using paper charts
- Eliminates file cabinets, freeing up space for more important uses
- Better tracks workers' productivity
- Eliminates major challenge of lost prescriptions and regulatory documents
- Simultaneous views of a prescription
- Accelerates prescription change process, improving patient safety and service

#### **Workflow Accelerates Billing and Eliminates Delays at HCA**

The folders at HCA not only serve as an electronic chart, the second subset of tabs holds information to aid in the billing process. With accessible documentation and automated workflows, HCA has sped up the billing process and eliminated delays.

Several regulatory forms must be collected and retrieved in order to file claims. However, keeping track of documentation was a major challenge for HCA when relying on a paper-based system, and paper forms were often missing when it came time to file a claim. Patient registration scanning along with a billing process workflow ensures that HCA captures and retains all the paperwork required to file claims.

The workflow also imports billing documents from an AS/400 billing system using COLD/ERM. The documents are assigned to work queues using pre-defined load balancing rules so that each employee keeps an even amount of work and no bills slip through the cracks. Like in the HBO, the workflow also allows supervisors to better track employees' work and productivity as well as keep track of where documents are in the billing process.

When a patient's equipment is delivered to HCA, employees scan in the signed delivery ticket and index it into the patient's electronic folder. It is then easily retrievable and referenced should the patient call with a question or if HCA needs it for documentation.

Adjustment requests were also a significant pain point for HCA. Each adjustment had to be manually entered into the system and various HCA personnel had to spend hours per day keying in individual adjustments. Now, any adjustment over \$25 is routed through approvals using workflow. HCA then runs a Crystal Report each day and completed approvals are automatically posted into the system. The process is now just a small part of a single person's responsibilities.

# BUILDING AN ENTERPRISE VISION

With an advanced ECM solution in place, MeritCare continues to add value to its investment with further development and expansion. As other areas of the health system see the success of the solutions and their ease of use, they become interested in implementing OnBase for their own needs.

The Human Resources Department scans and retrieves payroll documents and is one of the areas MeritCare plans to expand in the near future. Like the HCA chart, Drug Analysis documents, Quality Management Provider files and Public Policy binders are scanned and retrieved using OnBase Foldering. These documents are grouped in an interface that mimics the look and feel of physical folders, easing transitions to an electronic repository. In addition, MeritCare has deployed scanning and retrieval to include miscellaneous Accounting documents that aid in purchasing.

The OnBase solution provides MeritCare with a single store of information for departments around the health system while maintaining strict privacy policies. By linking systems and departments, MeritCare connects patient information to improve patient care while reducing its operational costs.

*“The success of OnBase in HIM and Revenue Management is breeding great demand for utilization in other areas. Legal, Contracts, HR, Materials – they are all chomping at the bit to be the next area where OnBase is implemented. If we had put in applications specific to HIM or Revenue Management, we wouldn’t be able to build solutions for all of the other departments which can also benefit from document management and automated workflows.”*

*Caryn Hewitt, RN, BSN*

# ABOUT HYLAND SOFTWARE INC.

## About OnBase Healthcare Solutions

OnBase Healthcare Solutions are built using the OnBase ECM suite and are deployed to meet an organization's specific content and process requirements now and into the future. Used by nearly 600 healthcare organizations, OnBase Healthcare Solutions address virtually every aspect of hospital operations from clinical care to the business office as well as administrative functions such as accounts payable and human resources. The open architecture of the system enables integration with EMR, HIS, PMS, AP/AR, HR and PACS systems to fully leverage their capabilities and achieve rapid payback on technology expenditures. OnBase Healthcare Solutions enable organizations to run more efficiently by managing content and streamlining workflows across the enterprise with point solutions for revenue cycle management, medical records and back office operations. Visit us at [www.onbase.com/healthcare](http://www.onbase.com/healthcare) for more information.

## About Hyland Software Inc.

Hyland Software Inc. is the developer of OnBase, a rapidly deployable suite of enterprise content management (ECM) software applications. OnBase is a modular suite of ECM applications that includes document imaging, workflow, electronic document management, COLD/ERM and records management. OnBase allows organizations to manage all digital content, including scanned paper documents, e-mails, faxes, print streams, application files, e-forms, Web content and multimedia files. OnBase is used by businesses and government agencies around the world to reduce the time and cost of performing important business functions and address the need for regulatory compliance through the management, control and sharing of digital content with employees, business partners, customers and other constituencies. For more information about OnBase, please contact an OnBase Authorized Solution Provider or visit [www.onbase.com](http://www.onbase.com).

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