

Case Study: Greenwood Leflore Hospital

Coming Back Down to Earth with Document Management at Greenwood Leflore Hospital



Between all the clinical and business documents related to treatment and service charges, by the time a patient has been discharged from Greenwood Leflore Hospital in North Central Mississippi their care will have amassed nearly 75 sheets of paper if they are an outpatient; 100 if their stay is longer than 24 hours.

With 168,000 patient visits annually, including 11,000 inpatients, Greenwood Leflore generated a stack of paper reaching high into the stratosphere. If pre-printed forms for non-clinical departments were added to the stack, the hospital could produce enough paper to stretch to the moon.

Back on Planet Earth

Located in Greenwood, Mississippi Greenwood Leflore Hospital serves six counties and is one of the largest hospitals in the region, with more than a dozen medical services and 18 outpatient satellite clinics. Since 2006, 10 departments and all patient care units have been relying on nearly 500 pre-printed forms for their business processes, often having to redesign the forms to suit their unique department needs.

“Nothing was standardized,” said April May, RN, the hospital’s clinical specialist and reporting document management administrator for nursing services. “Form changes were difficult to maintain.”

Departmental forms grew obsolete and had to go back to the printer for revisions. Documents went missing and were time-consuming to retrieve; information was often illegible. According to May, nearly 20 percent of hospital staff time was spent on manually processing forms due to inefficiencies in patient registration, clinical services, finance, human resources and administration.

In addition to the costs associated with lost productivity, the hard costs of altering individual forms, i.e., costs for reprinting, including paper and print toner, and shipping orders averaged 3 cents per page. Greenwood Leflore estimated that just one set of patient care forms, between six and 10 pages, cost \$39,000 a year.

Automating Forms

Since 2005, Greenwood Leflore has been using a document management system to manage electronic reporting called RAS, from DBTech in Clark, N.J. RAS captures, compresses and archives data from Greenwood Leflore's HIS system into a searchable repository where authorized users access information in report form.

Several Greenwood Leflore departments, including IT and the chief medical informatics officer were aware of the eForms module in RAS but hadn't used it. RAS eForms takes information from hospital department data sources and automatically generates pre-populated, bar-coded documents. Pre-printed forms, stacks of paper and multiple copies all go away.


Within two months, 483 documents used by 12 departments were scanned and converted to RAS eForms where they could be modified as needed. Forms are also bar-coded and stored in RAS electronic patient folders. Greenwood Leflore has already calculated a savings of more than \$145,000 annually using RAS.

Greenwood Leflore's Disappearing Paper Act

RAS allows hospital departments to manage their respective bar-coded forms, print patient bar-coded labels and circulate more than 600 reports.

Patient accounting uses RAS for scanning forms, including summation of benefits, financial database information, and for monthly reporting. Admission clerks use RAS to print patient registration packets, collect and scan external documents brought in by patients and print bar-coded labels for armbands and charts.

In surgical services patient care forms, surgical consent forms, lab requests and charge sheets are all sent to RAS. Nursing services uses RAS to issue discharge instructions, print bar-coded labels, patient care forms, and for monthly reporting. The nutrition department even uses RAS to print labels for patients' food trays.



“Before we transitioned from paper to RAS eForms we took the time we needed to set up our structure, and establish and monitor our processes,” recalled May, who is also the RAS administrator, responsible for scanning and eForms. “Now everything is scanned and housed in RAS.”

By adding barcodes and patient account numbers to forms using RAS eForms, handing off patient information to Greenwood Leflore’s EMR system is also a lot simpler.

“The process is much easier to hand off patient information from RAS eforms to our EMR system than to go from paper forms directly to EMR,” said May.

All point-of-care devices are also linked to RAS at Greenwood Leflore. As the patient’s vital signs and other diagnostics are checked at the bedside, nurses scan the patient’s bar-coded armband, generated by RAS and the diagnostic device screen is automatically populated with the patient’s test results.

“This is another safeguard to make sure we are matching the correct patient with the correct results,” said May. “Our ultimate goal is to have every form used at Greenwood Leflore accessible through RAS.”