

Permanent Record: Electronic Records Aid in the Aftermath of Joplin Tornado

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By Matthew Russell

When a tornado struck St. John's Regional Medical Center in May 2011, its patient records were stored in a newly launched electronic health record system, helping prevent a bad situation from being worse.

In the days following the tornado that decimated Joplin, MO, striking St. John's Regional Medical Center and leaving more than 115 dead across the region, St. John's had a field hospital set up and seeing up to 50 patients per day.

Despite the emergency conditions, patient records were relatively undisturbed. The hospital's most vital patient information was digital and backed up off site.

St. John's had gone live with its new electronic health record (EHR) system just 21 days before the tornado struck. If it had not, the situation at the facility could have been much worse, according to Tracy Clark, HIM director at St. John's.

"The only paper records in the hospital at the time of the disaster were the paper lite charts [e.g., consent forms and records from other facilities] that were on the units with current inpatients and a few that were in the HIM department waiting to be scanned into the system," Clark says.

Once St. John's medical mobile unit was functioning and clinicians could document in the system, scanners were set up to scan in the paper lite charts. Once scanned and indexed, Clark says, the charts were viewable to all users.

St. John's and other local health systems still faced challenges in retrieving records and documenting care in the days and weeks following the disaster, but digital systems and good processes kept a bad situation from being worse.

Restoring, Retrieving Records

All of St. John's records prior to July 2005 were stored on microfilm or fiche and kept in carousels and cabinets. The microfilm and fiche were retrieved from the facility and taken to an off-site vendor to be cleaned of mold, Clark says.

The hospital notified the Centers for Medicare and Medicaid Services of the situation the day after the tornado. Once the restoration vendor completes a final inventory, St. John's will contact CMS again to "let them know which records were lost in the disaster," according to Clark.

Physician clinics required help, too. "Some of our clinics still had paper records, which were also retrieved by the vendor for drying and cleaning," Clark says. "Since the records that were retrieved were relatively old and since we had access to our electronic systems within a few days of the tornado, our operations have been minimally affected."

In one radiology film storage area on the tenth floor of St. John's, some old films were blown away.

When St. John's began to receive reports of medical records and other patient information being found as far as 70 miles away, it posted instructions on its Web site requesting that any found medical records containing identifiable information be returned to the hospital. It requested that any records not containing personal health information that could be linked to a specific person be thoroughly destroyed.

"Since the tornado we have had very few records turned in to us, and most all of them have been the old radiology films," Clark says.

St. John's has access to its historical master patient index, so it knows what records it should have.

"Once we get the inventory of records from our vendor we should be able to ascertain which records were damaged or lost," Clark says. "But at this time we feel there are very few that were a total loss. I don't know how you would rebuild a database unless you had a back-up off site somewhere, which thankfully we did."

St. John's Mercy Corporate IT department is responsible for maintaining the hospital's information systems in a tornado-proof data center off site. Employees from the corporate office arrived after the disaster to set up computers and scanners so HIM personnel could start scanning documents that were either found or were being created for new patients after the tornado, according to Clark.

Many new records were created in the new EHR, rendering the field hospital a nearly paperless environment.

Privacy Worries

One lingering worry in the aftermath of the disaster is that scattered records could lead to a breach of patient information. A lost record containing identifiable, protected health information could compromise the privacy of the patient or result in identity theft.

"If someone is worried about identity theft they can change all their banking and credit accounts and also check their credit report for activity they did not [originate]," Clark advises. "If they receive any bills from medical providers that they know they did not incur, they need to report this immediately to their insurance carrier or CMS if they have Medicare. Medical billing fraud is a huge problem and costs our country billions of dollars a year."

A question for St. John's was whether the Office for Civil Rights, which enforces the HIPAA privacy rule, would consider the scattered records a breach of patient information.

"I contacted our corporate compliance officer for Mercy the morning after the tornado," Clark says. "When she contacted the regional OCR office they said they totally understood since it was a natural disaster. Our corporate compliance office has been updating OCR as to our efforts in retrieving and restoring our records."

Many of the known missing materials are x-ray films, which can be cleaned and restored once they are found, according to Clark, but there is no way to recreate them.

"If any lost records contained information from our source systems such as lab or x-ray reports we should be able to recreate that part of the health record once our patient registration system is restored," she says.

Freeman Health System's Story

Across the street from St. John's, Freeman Health System suffered only minor structural damage. It cared for the majority of the patients in the area following the disaster, receiving 1,000 patients in the first 24 hours, relates Julie Dooling, RHIT, a practice resource manager at AHIMA who visited Joplin-area hospitals several weeks after the tornado.

Despite a lack of damage, the first 36 hours at Freeman were difficult. A large number of patients were being brought to the hospital, which was running on emergency generators. The EHR system was never down, but staff resorted to paper. The generators were needed to power essential equipment, and there were not enough PCs and mobile workstations to manage the initial influx of patients.

Help, however, was not hard to find, as even physicians who were driving through the area stopped and worked alongside Freeman physicians, attending to patients, says Donna Caldwell-Chaffin, RHIA, CCS, assistant director of medical records at Freeman.

Nonclinical staff rushed to help as well. Hospital staff who would normally assist with gathering patient information in a disaster situation were instead redirected to assist in caring for the large influx of patients, according to Caldwell-Chaffin.

"One of our transcriptionists was helping radiology techs that were shooting x-rays. She was wiping blood off the metal film cases as fast as she could so they could shoot more films," she says. "Our hospital attorney was working in the ambulance bays that night. Our normal workforce for a typical evening was about 400. That night we had an estimated 888 Freeman employees report to work."

Caldwell-Chaffin says up to 100 additional nonclinical staff also volunteered their services at the hospital. But even with extra hands, documentation was difficult to obtain due to the chaotic nature of the situation. Joplin is on the border of Kansas and Oklahoma, so it was even possible that members of the same family were taken to facilities in different states.

"Documentation was not what we would have liked to see, but in this situation it was life and death, and treating patients became top priority," Caldwell-Chaffin says.

"The massive volume of patients made it very difficult to provide 'good' documentation. Clinicians were trying to treat the less critical patients and move them out so that others could receive care," she says.

Adding to the confusion, Caldwell-Chaffin says, "truckloads" of people were coming to Freeman's registration area, but often the names being documented were not those of the patients, they were names of family members or friends. "So when it came time to account for the dead and missing, these lists were not reliable," she says.

The legal ramifications that could have arisen from misidentified patients were waived when the Federal Emergency Management Agency declared Joplin a disaster area.

At the time of her visit, Dooling notes, both St. John's Regional Medical Center and Freeman Health System were working with local physician offices to match records and obtain insurance information so that bills could be dropped.

"However, physicians in the community not only lost their hospital, but in some cases their offices and even their homes," she says.

Within several days of the tornado Health and Human Services Secretary Kathleen Sebelius declared a public health emergency in Missouri and authorized waivers of certain Medicare, Medicaid, CHIP, and HIPAA requirements under section 1135(b) of the Social Security Act.

"The disaster in Joplin could have been an entirely different story if both hospitals had not made a decision many years ago to start their EHR journey by first converting paper into an electronic format by using a document imaging system," Dooling notes. "In addition, St. John's recent EHR implementation combined with a sound information technology disaster recovery plan and support from their integrated healthcare delivery system added positively to the recovery efforts."

The HIRO Fund

HIM professionals in areas affected by disasters face a unique challenge as they struggle to piece back together their own lives while working to recover as much of their community's patient information as possible.

In their support, AHIMA, through the AHIMA Foundation, has established the Health Information Relief Operation (HIRO) Fund to assist communities of health information professionals whose personal or professional lives have been severely disrupted by a natural or man-made disaster.

The HIRO Fund will provide immediate material relief made possible through an initial \$10,000 donation from AHIMA and the generosity of AHIMA members and the greater health information management professional community.

Online donations to the fund may be made at <https://secure.ahima.org/fore/donations/donatorinfo.aspx>. (Select the HIRO Fund from the dropdown menu titled "Donation Type.")

To make a donation by mail, send a check indicating the HIRO Fund designation to: AHIMA Foundation, 25351 Network Place, Chicago, IL 60673-1253.

Matthew Russell (m.s.russell@gmail.com) is a freelance journalist based in Grand Rapids, MI.

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