

Indiana Hospital Contains and Isolates First U.S. Case of MERS

UNPRECEDENTED DATA USING RESPONDER® IDENTIFIES WHO HAD CONTACT, WHERE AND FOR HOW LONG

When MERS walked out of Saudi Arabia and into a small Midwestern town one evening in April, Community Hospital in Munster, IN was ready. Unexpectedly facing the first MERS case in the United States, Community had in place the staff, the knowledge and the technology to isolate it and contain it so that staff and the community at large were protected.

The hospital's Responder® communications solution, with phone and RTLS integrations, could immediately identify who had come in contact with the patient, where and for how long — giving the hospital and the CDC 'unprecedented' data on who should be tested, the exposure times, and who should be quarantined.

IDENTIFYING RISK

A 445-bed acute care hospital 50 miles from O'Hare airport, Community Hospital frequently sees international patients. When the patient, a healthcare worker returning from Saudi Arabia, arrived at the Emergency Department with suspicious symptoms and severe respiratory distress, the patient was quickly asked for travel histories and placed in a private triage room.



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“The patient was quickly identified as a risk and taken to a negative airflow room with ventilation designed to prevent air from flowing to other parts of the hospital,” according to Ronda McKay, CNO, VP Patient Care Services. “Already, we were limiting risk of this disease spreading. From the time the patient arrived at the Emergency Department to the time they were isolated, we had the data we needed to act quickly.”

After referral to an infectious disease specialist, tests were taken and samples sent to the State Department of Health and later to the CDC in Atlanta. While waiting for results, staffers began gathering information on who had come in contact with the patient, reviewing electronic health records and video surveillance for the period before the patient was placed in isolation.

Most importantly, the hospital was able to access highly detailed contact

data from the Responder system, with minute by minute reports of who came into contact with the patient, and had access to round-the-clock support from Rauland's local distributor, Communications Company, throughout the crisis as any need developed.

"Using the Responder reports, we could tell down to the second how long staff were in contact with the patient – and how long they were in the room – and provide that data directly to the CDC," said McKay.

PATIENT AND SAFETY FIRST

Community hospital has some 3,000 employees and 66,000 emergency cases a year, McKay pointed out, and it was hugely important to be able to understand the staff workflow and presence during this time.

"We looked at every contact of more than 10 seconds," said Val MacCartney, ED assistant manager, "and then what kind of contact it was. That gave us the data we needed to determine who was tested and who was quarantined."

By the time the CDC confirmed MERS, the hospital had already identified who was at risk and was able to get them tested, out of duty and isolated while explaining to the rest of staff and the community what was going on. It was determined that 50 staff were exposed to the patient before isolation and needed to be removed from duty. None tested positive for MERS.

"We could quickly contain the situation and control the risk," McKay said.

REPORTS DATA

The hospital was able to pull this robust data using Rauland Responder's reports software. By accessing the Unit Activity Report, the hospital could identify each and every time a staff member entered



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and exited the patient room, as well as how long each staff member spent in the room. With access to this detailed information, the hospital could quickly and confidentially identify those staff members that had been exposed to the MERS patient, helping them control the situation and reassure the public.

Referring to this level of data on which staff were exposed to the patient and for how long, McKay said, "The CDC couldn't believe it. This was the first time they have had this level of detail, because MERS has not existed in the US, and in the parts of the world where it does the information is not readily available."

"We knew one false move could impact not only our facility but also alarm the community," McKay added. "The data from Responder reports software gave us and the CDC unprecedented ability to study how much exposure to an infected individual it takes before the virus can be transmitted."

EMERGENCY WORKFLOWS

The phone/tag/Responder integration also is improving overall ED communication, response times and accountability, reports Rob Hoskins, ED manager.

"We like the Responder technology and what it gives us," Hoskins said. "Staff feel safer knowing that any exposure can be easily tracked and identified."

The system also reduces noise in the ED, he adds, with no paging and bells constantly going off.

"It's surprisingly quiet," Hoskins says, "which greatly improves staff and patient satisfaction."

Hoskins reports the ED is scoring a 95th percentile now, which previously had been as low as the 10th percentile. "The Responder solution has been instrumental in helping us achieve accountability to improve patient

satisfaction scores,” he said. “We’ve hit every benchmark we measure, and HCAHPS scores are very high.”

RESPONDER ACROSS THE HOSPITAL

While Responder and its robust reporting can deliver unprecedented data to clinicians in the Emergency Department, the system also is rolling out across patient rooms and ancillary departments with similar improvements in workflows and satisfaction.

According to McKay, the RTLS integration is just a piece of the answer. She said use of RTLS tags simply logs times and locations so that the hospital can use the Responder technology to report on actual information and data needed.

“Responder communications and reports are helping us demonstrate and verify that our patient care is the best it can be, and that the patient rounding is done as expected,” said McKay. “We strive for a quiet, responsive environment, and we want to know that a patient is being responded to as quickly as possible. If a call goes audible, it means someone is not doing their job.”

“Responder puts the call through to the phones first to reduce noise and improve communications,” said Tammy Turean, nurse manager. “It also lights a related color on the corridor light outside the room, so with just one glance down the hall, I can see the status of each patient and who is in that room.”

SERVING THE PATIENT

Carla Meyers, nursing director, points out that the integration of Responder with tags and phones is benefiting staff and patients in many important ways – keeping staff and patients safe, improving response times and verification, and increasing compliance.

“Our ‘Number One’ driver is how can technology serve the patient, and the leadership team is driving this technology use to help us increase



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satisfaction and workflow across the hospital,” Meyers said. “Staff love the Responder system, how it works and communicates. We can easily reach out to specific staff as needed, and the workflow stations are helping to improve rounding, reminders and pain assessments. We’re also improving communications with ancillary departments for discharge and cleaning with just one touch.”

“There’s no more tracking people down, asking around for specific staff,” added Turean. “That’s huge.”

Val MacCartney, assistant ED manager said, “Now I only have to glance down the hall at the corridor lights to see where staff are located, or use the activity board to view not only where they are but how I can get in contact with them. With the ability to simply glance at the activity board to track staff, we’re much more efficient.”

“We’ve also struggled to reduce noise and create a more healing environment,” Meyers said. “Responder is helping us do that. You can definitely hear the difference on units using Responder and those that still do not have it.”

RESPONDER SOLUTIONS

“Staff like the Responder system,” reports McKay. “Nurses like that it saves them lots of steps and helps coordinate the care team. Patients appreciate the reduction in noise – when it’s a quieter, more responsive environment, satisfaction improves for both patients and staff.”

And, she adds, once Responder’s reporting system was implemented, staff knew that they could track response times, and this information has greatly helped the hospital to hit every satisfaction benchmark they have – with an overall improvement in HCAHPS scores.



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ABOUT COMMUNITY HOSPITAL

Community Hospital blends high-tech services typically associated with major university medical centers with the high-touch care uniquely provided by a community-based hospital. With 445 beds and a staff of 3,000, the hospital’s broad range of specialties include the area’s largest cancer research program, complex heart and vascular surgery, cardiovascular research, neurosurgery, neonatal intensive care and a 5,000-member medically-based fitness center.



ABOUT RAULAND

Rauland is a respected global leader in the design and delivery of advanced communications, workflow and life-safety solutions for hospitals worldwide, with installations in more than 4,000 hospitals in 40 countries.



ABOUT RAULAND RESPONDER®

Responder® helps staff maximize time with patients and offers insights that can impact HCAHPS scores, pilot new hospital-wide initiatives, and support real-time staffing decisions. Responder data and how it is presented can be tailored to the user role, whether VP of Nursing, Nurse Manager, or the Charge Nurse.



ABOUT COMMUNICATION COMPANY

Communication Company has been designing, installing and servicing communications systems for Michiana businesses since 1976, with highly qualified technicians and project managers dedicated to providing the best service possible. Its proven processes – from needs assessment and installation to training and ongoing support – result in decades-long partnerships with clients.



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