ACADEMY FOR EXCELLENCE IN HEALTHCARE

IMPACT ASSESSMENT PAPER

Patient Access Registration Process

Academy for Excellence in Healthcare IAP C-14 RCH

July 23, 2018

THE OHIO STATE UNIVERSITY

FISHER COLLEGE OF BUSINESS

In collaboration with

Patient Access Registration Process

Safety net hospital captures lost revenue and improves care

Roseland Community Hospital on Chicago's far South Side has been focused on providing high-quality services to the Greater Roseland Area, a neighborhood challenged by severe social and economic conditions. Roseland is a "safety net" hospital, obliged to provide healthcare for individuals regardless of their insurance status, and it is the only hospital in an eight-mile wide radius.

The viability of independent safety net hospitals, like Roseland, often depends on federal and state funding decisions: 60 percent of Roseland patients are covered by Medicaid or Medicare, and the hospital expends more than $20 million annually to ensure that uninsured and underinsured residents receive appropriate healthcare services. Without Roseland, many of Chicago's most vulnerable citizens could be without care and their lives in danger.

In 2016, Maria Gonzalez, Supervisor of Coding & HIMS at Roseland, began to notice an increase in the number of patients for which the hospital could not bill because of missing admission orders. Revenue is critical for any hospital, but especially so for safety net hospitals because uncompensated care contributes to vulnerable financial positions. Gonzalez began to track the hospital's billing denials in order to prepare a well-documented view for leadership. Without consistent tracking, it's possible to perceive billing denials in a given month as an anomaly due to a unique patient census; the data from Gonzalez showed a trend of billing denials and high aggregate volume over time.

By 2017, awareness of the billing-denial problem was apparent in administrative meetings — the six-month total had reached approximately $1.9 million. Staff also had begun to identify causes for the denials, including:

- Improper insurance authorization
- Untimely writing of admission orders (not securing admission orders within 24 hours of the patient's admission)
- Insufficient documentation (frequently by physicians)
- Patients identified with incorrect status (observation vs. full admit).

Roseland Community Hospital

Roseland Community Hospital provides comprehensive healthcare services on Chicago's far South Side. Roseland, established in 1924, is a full-service facility with healthcare professionals in many specialties. Outpatient services include pain clinic, maternal child, surgery, and pulmonary.

Roseland has 162 licensed beds, an operational bed count of 100, and an average daily census of 50 to 60 patients. Roseland's emergency room (ER) receives 26,000 visits annually.

Some at Roseland, such as the Quality Director, also were concerned that the condition of patient records and thoroughness of documentation by physicians and nurses could pose regulatory issues. The numbers compiled by Gonzalez had grabbed the attention of Tim Egan, Roseland CEO. An effort to address billing denials, which was one of three improvement projects slated to begin at the hospital, became Roseland's top improvement priority.

Lean Learning at AEH

Dr. Glennell Conaway, Administrative Director of Accreditation & Regulatory Compliance at Roseland, has been a proponent of lean concepts and had received lean training. Through those experiences she became aware of an opportunity for her colleagues to receive lean training at the Academy for Excellence in Healthcare (AEH) at The Ohio State University. Dr. Conaway submitted a proposal to bring a team to Columbus to work on the billing-denial problem, and the project was accepted by AEH.

Roseland formed a cross-functional improvement team that attended the AEH training in January 2018. "After we changed the priority [of improvement projects], we saw that we would definitely need a team of subject matter experts who knew the areas," says Dr. Conaway. CEO Egan encouraged her to get staff from across ER departments, and he approved the list of team members she had assembled, which represented four of the five departments in which changes would occur (registration, billing, HIMS/medical records, care transition, and revenue cycle). As the improvement project got underway, the team had the ear and support of CEO Egan and the hospital's governing body. Leadership backing would help to get buyin within the departments for changes to address the revenue-loss problem and help the team deal with any pockets of resistance.

Roseland Improvement Team

- Dr. Glennell Conaway, Administrative Director of Accreditation & Regulatory Compliance
- Idella Bland, Manager Patient Access Registration
- Lynn Williams, Manager Care Transitions
- Maria Gonzalez, Supervisor of Coding & HIMS
- Eva McMiller, Manager Clinical Informatics

While at AEH, the team learned about and improved their understanding of lean tools and techniques, including value-stream mapping, gemba walks and observations, use of status boards, and development of standard work. The team reported their initial improvement-project findings to AEH in May 2018. For some of the team, the AEH training was their first exposure to lean concepts.

"The whole lean process was entirely foreign to me," says Idella Bland, Manager Patient Access Registration. "That was the first I had heard of the lean process, but once I started going through it, I saw how important it was and how when an organization follows a lean process it makes it a better organization." She recalls how gemba walks dramatically increased her awareness of her department. While her office is located near the ER, she typically did not observe how the ER processes functioned, and she was surprised to see how her expectations of what should be happening differed from what really took place day to day. She saw that staff "created their own processes as a way to make things quicker for the patient." The outcome, not surprisingly, was that it was often not quicker and contributed to billing denials. "I figured out that we just had to standardize the process so that everybody on each shift was following the same process."

After returning to Roseland, the team enlisted other staff to join the project. They intentionally included some "naysayers," which team members said helped them convert others as changes were made. The

different departments were well aware of problems with registration and billing denials and repeatedly discussed them, but they all viewed the process from their respective disciplines. "There wasn't a lot of focus to implement something that would look at all the gaps across the board," says Dr. Conaway. "And so when we got this opportunity [at AEH], that's what really allowed me to see that this was going to be the gateway to help us come together as an organization and put down the barriers. We all have to realize that there are silos everywhere, and when you work in healthcare a long time, everybody's territorial. So we knew this was not going to be easy [and that] buyin was really key."

Dr. Conaway says that as the project got underway, she and her colleagues talked a lot about team dynamics and how the project would affect their different work areas. Team-building grounded their efforts and encouraged all to respect that "we all experience different things, and we all have different talents." She also believed that this initial project could form the basis to address other opportunities at Roseland — the "first win/win" could pull the departments closer together and enable them to collectively "pull down the barriers." With a cross-functional, knowledgeable team, Dr. Conaway was confident that an implementation plan could be put in place that would quickly impact the problem.

The improvement team conducted gemba walks with a focus on the registration process — the component of the billing-denial problem they could best control — and developed a better understanding of the registration function, says Gonzalez. "[We saw] why they do what they do and how they do it. It helped me see a clear picture of what or how other departments impacted me and how I impact other departments. That was helpful."

The gemba walks found that there was not a common way to register patients among the various staff, nurses, and physicians, and that there were no checks and balances to ensure that each step in the patient access registration process had been properly completed. The process essentially lacked standard work that could enable any individual to follow a single correct process. Instead, each individual involved had their own customized way of working, often taking shortcuts. Some simply ignored work that was required to successfully complete a billing.

Input from Interns

The Roseland team was supported by graduate interns, who were on a Capstone Project and were assigned roles on the improvement project by Dr. Conaway: Two interns involved in the project had taken lean/six sigma greenbelt courses and assisted with assessing the registration process (gemba walks and value-stream mapping); another intern developed a questionnaire and conducted unbiased interviews of ER and MSTA staff; and one intern was a psyche student analyzed Roseland's Hospital Medical Stabilization Program and HCAHPS data, which could be used to address fluctuating customer service scores. One of the interns also merged the team's standard work and training materials for the various departments into a single cohesive package.

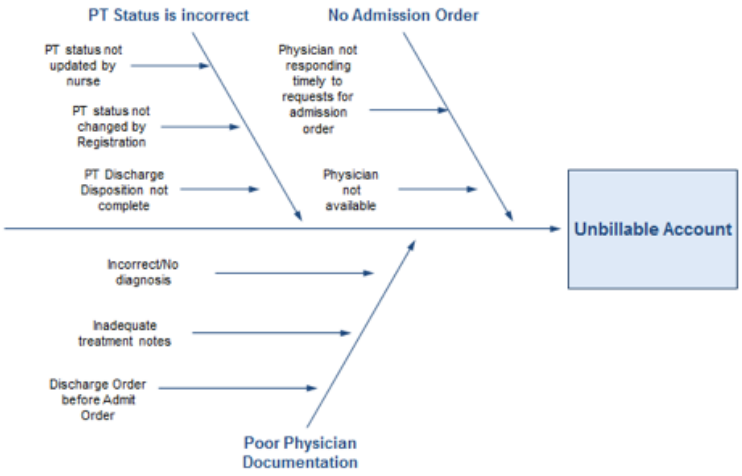
When Roseland had converted to an electronic medical records (EMR), some physicians found the system not user friendly, were slow to familiarize themselves with digital documentation, looked to others to handle those requirements, and/or considered billing and finance problems an issue for the hospital (not them), says Dr. Conaway. The transition to EMR systems has affected every healthcare organization, especially those with long-tenured physicians not accustomed to working with computers. It "was not something that we could change," she adds. "It

was just a crisis out there in the healthcare field that affected everybody." But for Roseland to fix the billing problems, some physicians would have to change their behaviors.

The team also recognized that the billing problem was related to patient flow, which also could be improved with standardization to promptly and accurately triage, process, and move a patient into treatment bays. The team mapped the current state of the ER and patient access registration process, starting from when a patient arrives (ambulance or walk-in) to when the patient is seen by a doctor and either admitted or discharged. The team found that the current process increased the overall workload on the department: significant rework to address denied registrations (40 percent of staff time) and excessive time reprocessing of service-denial claims (50-90 percent of billing staff time). The team used a fishbone diagram to document the reasons for the unbillable accounts that they had found during mapping and on gemba walks (see *Causes of Unbillable Account*). They identified primary causes (e.g., patient status incorrect) and root causes (e.g., patient status not updated by nurse).

The team worked with colleagues in their departments to define a new, standardized process for patient registration, one that could ensure patient accounts are created and that all patient information is available at billing. Process objectives for the improvement team were to lower denials (and, thus, increase hospital revenue) and to lower the amount of unbillable accounts. They would also incorporate checks and balances to ensure each step of the process had been completed. An operational objective was to ensure that all functions involved with patient registration were aware of changes being made and that individuals in those departments reviewed new criteria for each step of the new process. Lastly, a strategic objective for the team was to ensure all criteria required to bill an account is completed prior to patient discharge.

Causes of Unbillable Account



Source: Roseland Community Hospital

The improvement team's project goal was to reduce non-billable charges by 80-100 percent through implementation of a new patient registration/revenue-cycle process. The goal was a compromise — CEO Egan wanted to eliminate all billing denials (100 percent reduction) and the team's original goal had been a 40-60 percent reduction, says Dr. Conaway. The team also sought to improve admission authorizations within 24 hours, which would establish more comprehensive medical records as well as increase the revenue generated at Roseland.

Three-Phase Implementation

The Roseland team established a three-phase approach to improve the patient registration process and decrease authorization denials:

- *Phase 1:* Redesign and implement a new process for patient registration and the revenue cycle. The new process was designed to help the team achieve its billing-denials-reduction goal as well as increase patient satisfaction scores as the registration process became more efficient (i.e., less patient waiting).
- *Phase 2:* Redesign processes that impact revenue by obtaining buyin from all departments, and conduct revenue-cycle training and internal audits to measure compliance.
- *Phase 3:* Effect culture change through education and process improvement in remaining areas, and conduct internal audits to measure success.

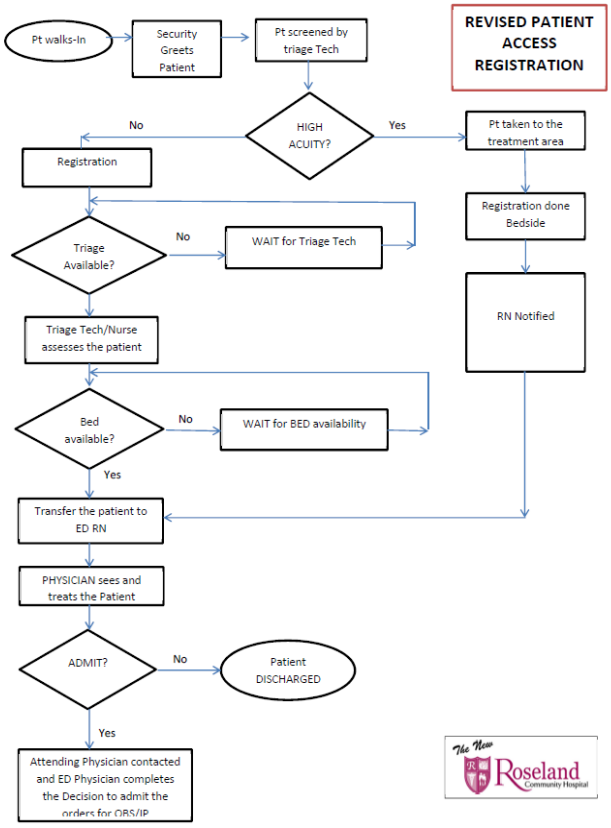
To guide Phase 1, the improvement team developed a future-state map of the registration process (see *Patient Access Registration Future-State Map*), incorporating countermeasures of:

- Visual alert for waiting patients
- Method of notifying triage that a patient is waiting
- Posting of alerts on a status board to decrease the time needed to complete the discharge process
- Finding ways to get necessary documents in less time.

It was critical for the team to get physician buyin for the changes that were taking place and to get physicians to adhere to the new documentation procedures. (For example, one physician had omitted 17 orders in one month that resulted in billing denials.) Eva McMiller, Manager Clinical Informatics, says it was important for the physicians to realize the fallout from their inaction.

The data compiled by Gonzalez had identified the dollar value denied per physician. McMiller says this "made them more aware of the real situation for this hospital [and how] the hospital is underfunded. We knew that from the beginning. Underfunding negatively makes [billing denials] an even bigger issue."

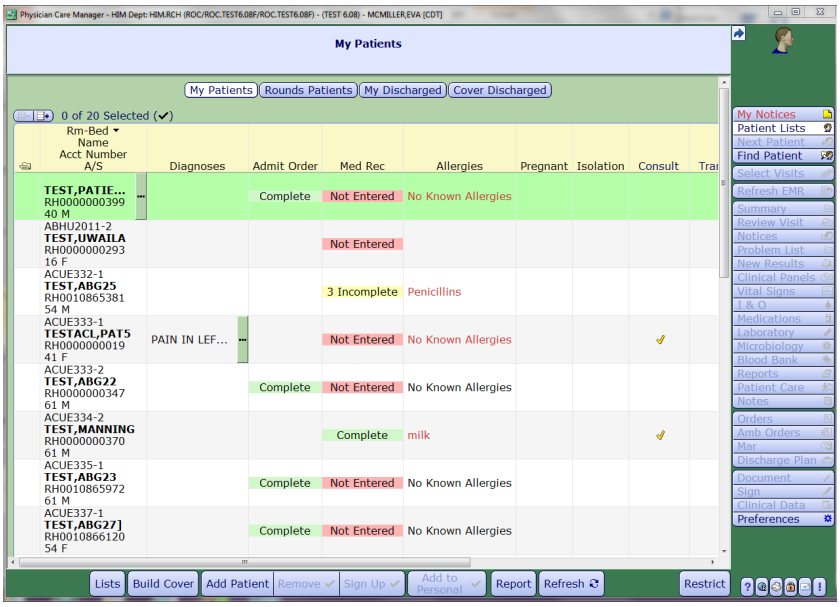
Patient Access Registration — Future-State Map



Source: Roseland Community Hospital

The team communicated the unbillable charges for each physician to the administration, attended medical executive meetings, brought in a physician advisor, discussed the specific losses with each physician, and did one-on-one training. They quickly updated their electronic medical information to clearly show those patients who had missing orders (see *Revised Status Board Displays Missing Orders*), giving physicians an easy opportunity to resolve one of the biggest contributors to denials. McMiller says, "We tried to think of techniques that we could use so that it was always in your face. And for us, [the status board] is the first thing that they see when they log in. They have a status board that shows what the current status is for their patients. So we said, 'Let's put the admit order, whether it's present or not, right there on that board.' When you log in, there's no doubt whether you did the admit order or not." The effort dramatically improved the application of admit orders.

Revised Status Board Displays Missing Orders



Source: Roseland Community Hospital

"I think the thing that helped us the most, though, was when we would not allow physicians to do the things they needed to do to get their payment," adds McMiller. "If it doesn't hurt, there's no incentive to get better." The hospital began to withhold patient reports from the most problematic physicians, who needed them for their billing and payment; only when physicians completed Roseland's documentation could they print the documents they required. The team also is planning to remove some non-compliant physicians from the on-call rotation and move their times to a hospitalist, who is willing to work with the new guidelines. "So if you're not getting on the on-call rotation, you're not getting patients, you're not getting paid," says McMiller.

Dr. Conaway adds, "The attention really came about when even our governing board was brought into it, getting their attention that this is something that can't be tolerated. The win was just really shedding the light where it needed to be shed so that people could start to behave different and know that the hospital had a right to say what they needed for the organization."

The team also worked with physicians to resolve legitimate challenges they were having recording patient information in the EMR system. When submitting admission orders, physicians had to work through a lengthy, complicated online document with many click-throughs. The team was able to shorten the electronic process to get a patient admitted, reducing physician input from 25 fields to just seven or eight fields.

Patient-flow improvements required more than just changing physician habits: Across the ER registration, standard work was developed and documented for ER discharge, registration, and utilization review processes and for social workers. As Phase 1 transitioned to Phase 2 and Phase 3 in May, the team had trained 40 staff members on the new standard routines, and implemented many of the changes to patient flow within the ER. Lynn Williams, Manager Care Transitions, stated that because team members were leaders in their departments, they had been aware of the type of patient-flow changes needed, and, thus, were able to implement them relatively easily and without trying to secure additional resources.

Improvements and Next Steps

One month after the implementation of Phase 1, the improvement team had reduced unbillable accounts from approximately $194,656 in March to $35,461 in April. Patient wait times in the ER were cut in half. By the end of May, unbillable accounts were $41,197 and just three patient accounts lacked an admission order. Gonzalez says, “We have been able to sustain. I think that is very good outcome.”

For the remainder of the project the team will continue to apply standard work across the five revenue cycle departments and evaluate the new process — metrics will be tracked for the process at six-, 12-, and 24-hour intervals, and team members will conduct internal audits weekly. The audits will help ensure that the staff and physicians are adhering to new department standards and identify any inconsistencies or common issues, which a department manager now can address on a weekly basis. If necessary, standard work can be revised/improved. As changes are made and new objectives set, the team will communicate them regularly within their departments (e.g., staff meetings, huddles, emails, computer-based training).

The improvement team also will continue to train and retrain staff throughout the departments, both existing employees and new hires. The new standard work will be embedded into e-learning modules (packages specific to departments), enabling staff to take refresher courses. The e-learning also will be used when onboarding new hires.

The team expects to share their standard work models and their methods for developing them to improve *hospitalwide* patient access registration; some of the same problems and revenue losses exist elsewhere within Roseland. That effort will require the continued support of leadership. The team’s coach, Margaret Pennington, AEH Faculty Director, briefed Roseland leadership in March on lean principles and cross-department teamwork. The team was planning to present their work to leadership to heighten their awareness of the billing-denial and patient-flow problems and countermeasures.

“We have to make sure that we are reaching leadership and the frontline,” says Dr. Conaway. “We have to make sure that there’s somebody there to keep people engaged. We want to make sure that the momentum is that it’s everybody’s job to continue this process and to make it happen.” She says that even leadership needs standardized work for “the things that have to be done every day in order for us to all be doing [our part] and be held accountable.

In addition to tangible and monetary benefits from the project, the team anticipates that employee satisfaction may improve as well as staff get accustomed to the new process. Dr. Conaway says that during the training, "I found that a lot of the employees were very open and were really happy that it was happening — they had a chance to see what other departments were doing, how they could work together, and how, finally, people were going to be listening to them." Some people have been "a little brighter and lighter and smiling a little bit more because they have been heard."

The use of tracking metrics and weekly audits — a new way of "checking," says Gonzalez — will help the team identify ways that new patient flow is impacting patient satisfaction and quality of care (i.e., patients being treated more quickly) and should indicate progress toward all of the team's objectives. These efforts can gradually contribute to a culture change, one in which all individuals gradually begin to work as change agents to build teams and remove barriers. "We have made a dent in the organization," says Dr. Conaway. "We have left a little mark that we are committed to the cause and committed to the project and committed to helping the hospital become a better healthcare institution."

AEH Commentary

The Roseland Community Hospital project illustrates the need for standard work in a healthcare environment. Carefully defined best practices for work can improve all hospital processes; at Roseland, standard work streamlined patient flow through the ER registration process — enhancing patient care and patient satisfaction — and it also helped to resolve many problems that affected billing procedures and resulted in billing denials. The project delivered a significant financial impact to a hospital that could not afford to lose revenue.

The project also highlights how the fundamental technique of gemba walks cuts through perceptions and expectations and offers, instead, a clear and realistic picture of how work is performed. The first-hand perspective of the patient access registration work in the Roseland ER, along with mapping of the process and unbiased interviews of staff, guided the development of standard work for staff in multiple departments.

Every healthcare organization has opportunities for improvement, and individuals leading hospitals and departments must carefully select where they can best impact patient care and the organization, especially given the limited resources at hand. Consistent and ongoing documentation of the billing-denial problem helped Roseland leadership prioritize the ER registration process as an area in need of rapid improvement, and, with the help of AEH, a cohesive and committed team from multiple departments was able to make much-needed changes.

About AEH

The Academy for Excellence in Healthcare blends in-person class time with hands-on project work, interactive simulations, and recurrent coaching, all aimed at helping healthcare teams spark actionable change at their organization. At the heart of this program is a real-world workplace problem each participant team selects and commits to solving through five intensive days on campus, followed several weeks later by two days of project report-outs and lean leadership training. This project-based approach pays immediate dividends and lays the groundwork for transformational change.

THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS

In collaboration with

CardinalHealth

Patient Access Registration Process

- Dr. Glennell Conaway
  Administrative Director of Accreditation & Regulatory Compliance
  Roseland Community Hospital
  773-995-3434,
  gconaway@roselandhospital.org

- Margaret Pennington
  Faculty Director
  The Academy for Excellence in Healthcare
  The Ohio State University
  614-292-3081
  pennington.84@osu.edu

For Program Information

- Beth Miller
  Program Director
  The Academy for Excellence in Healthcare
  The Ohio State University
  614-292-8575
  miller.6148@osu.edu