

Community Education that Works: Moundview Memorial Sees Success in Stroke Outreach

Optimal stroke care begins with early recognition of stroke signs and symptoms and calling 911. The Wisconsin Ambulance Run Data System shows only 40 percent of stroke patients arrived at Wisconsin hospitals by emergency medical services (EMS) in 2013. Studies have shown stroke patients who arrive at an Emergency Department via EMS receive more timely, definitive care. At Moundview Memorial Hospital, Emergency Department Manager Lisa Massen, RN, knows the importance of this statistic, as well as the positive impact community education on the topic can have on stroke patients.

In late 2015, following several Stroke Systems of Care (SSoC) Task Force meetings led by the Rural Wisconsin Health Cooperative (RWHC) in partnership with the Wisconsin Coverdell Stroke Program, Massen became curious about how her hospital was doing in relation to EMS arrivals. The results were shocking. In Q2 of 2015, Moundview's percentage of stroke patient arrivals by EMS was an astounding zero percent, and in the following quarters just 50 and 25 percent, respectively. "The data we collected showed poor or inconsistent results, particularly around our EMS arrival rate, which was cause for concern," said Massen. While hospital leadership recognized that there were several areas where the hospital could potentially devote resources to improving stroke care, the data were clear—the EMS arrival rate needed the most attention.

In seeking to improve stroke care at Moundview Memorial Hospital, Massen learned through the SSoC Task Force that outreach was a primary focus of quality improvement projects at several other Wisconsin hospitals. Massen and her staff recognized this as a strategy they could employ to improve Moundview's stroke patient EMS arrival rate. Upon receiving materials from the Wisconsin Coverdell Stroke Program, including magnets, bookmarks, and blood pressure wallet cards, Massen and her staff went to work.

Tammy Lowrey, Marketing and Community Relations Manager, and Maureen Bruce, Quality Director, were integral in supporting Moundview Memorial's community outreach efforts. Bruce initiated discussions related to potentially starting a stroke community outreach program near the Moundview clinic in Friendship, Wisconsin, and led several brainstorming sessions related to these outreach efforts. Lowrey provided logistical support and coordination for many of Moundview's community outreach efforts, including arranging speaking engagements, writing newspaper op-eds, compiling patient testimonials, coordinating volunteers, setting up exhibit booths, and even designing a stroke education float for the Friendship Fourth of July parade.

These efforts have yielded strikingly positive results. By Q2 of 2016, Moundview had already achieved a 100 percent stroke patient EMS arrival rate, and has sustained an exceptionally high EMS arrival percentage ever since. While the hospital had not measured whether residents called 911 instead of using private transport because of Moundview's outreach activities, Massen says the data "speaks for itself." Future patient post-care surveys may incorporate a question to determine how many patients, or family and friends of patients, were touched by Moundview's various stroke awareness messages. This addition to post-care surveys would help Moundview collect more concrete data regarding the effectiveness of specific outreach strategies.

What they did

Collected and evaluated stroke data. In order to decide what quality improvement actions to take, Moundview staff first collected data on a variety of stroke measures. This essential step helped Moundview stroke care staff prioritize quality improvement projects aimed at areas with the most significant potential for improvement.

Provided staff education on data results and community outreach strategies. Massen educated staff on the data collected and the importance of community outreach in quality improvement. Moundview leadership provided the appropriate tools and messaging, and offered opportunities to get involved. For example, staff members volunteered to do blood pressure screenings off the clock to more actively engage in planned outreach.

Gave presentations to targeted audiences within the community. Moundview staff presented to older adults at a community center luncheon, and to a summer school class of first graders. Moundview also organized blood pressure screenings at a local grocery store and at a booth at the county fair. Massen and her team used these learning opportunities to highlight the important role of EMS in the process, earning public buy-in about calling 911 in stroke cases.

Distributed stroke outreach materials. Massen and her team distributed blood pressure cards and magnets at various local events and venues. Additionally, Moundview staff provided goodie bags containing community stroke educational materials at the annual Women's Night Out event, and designed a parade float on stroke awareness.



“Obtain educational materials and place them in your community, this is the easiest thing you can do—it’s a no brainer!” – Lisa Massen, RN

What they accomplished

When Moundview Memorial started this project back in 2015, the hospital had no stroke quality improvement projects or initiatives in place. Before beginning their first project, it was vital to collect data. Moundview decided to focus their data collection efforts on rates of Alteplase (tPA) administration, EMS arrivals, and the stroke alert process—including who arrived, door-to-computed tomography (CT) scan times, and stroke scale numbers. Upon realizing their stroke patient arrivals by EMS were the most inconsistent of their stroke care measures, Massen and her team decided to make pre-hospital arrivals their first quality improvement goal. The team then determined the most efficient place to start was community outreach around stroke signs and symptoms and calling 911.

The results of Moundview's community outreach efforts were overwhelmingly positive, leading to the hospital maintaining a near 100 percent EMS arrival rate for stroke patients since late 2015.

Barriers and challenges

Small hospital with limited resources. Moundview Memorial has demonstrated that a hospital doesn't need an overabundance of funding or resources to make an impact. The hospital was able to overcome the barrier posed by their small size and funding limitations fairly easily with access to Coverdell's free materials and the buy-in of all staff, from leadership to front-line workers.

Lack of existing quality improvement process. Given that Massen and her staff couldn't draw inspiration from existing model programs, figuring out what kind of project to take on was a challenge. “We started by collecting data on EMS arrivals and the stroke alert process. It was necessary for us to collect data before we could begin exploring quality improvement project options, and the data ultimately helped us choose our first quality improvement goal.”

Success factors

Prioritizing outcomes. “We wouldn't do this work if not for the data—it helped us focus our attention on strategies and techniques that improve outcomes in a measurable way,” said Massen.

Focusing on internal communication and teamwork. “I couldn't do this without the staff,” Massen said. “This quality improvement program couldn't be successful without the continued efforts of EMS, ED, and Ancillary [lab and radiology] staff.”

What they learned

Buy-in at all levels is essential. According to Massen, “Buy-in starts with community trust. Residents must trust Moundview and the local EMS agency to provide prompt stroke patient care. Community participation is just as important to improving stroke outcomes as all of the work we put into getting the information out there.”

Data collection and evaluation are crucial to success. “Data collection helps you know where you started, how you improved and how quickly, and if those improvements were temporary or sustained. Data allows us to set benchmarks for staff to know how they are doing. Without effective data evaluation, it is difficult to know if a specific intervention must be continued indefinitely, or if it can be done once and have a lasting effect,” said Massen.

What they are doing now

Moundview Memorial continues to focus on outreach as a method of preventing and minimizing the negative consequences of stroke in their community. “We are continuing all of last year's efforts this year. If you stop, you lose the momentum and progress,” said Massen.

Moundview's goal is to maintain a stroke patient EMS arrival rate as close to 100 percent as possible moving forward.

