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URGENT MATTERS LEARNING NETWORK II ISSUE BRIEF 2

Standardized Performance Measurement and Reporting in Emergency Departments (EDs)

RWJF-Sponsored Hospital Learning Network Shows If You Measure, You Can Manage



The drive to maximize emergency department (ED) efficiency while also ensuring the quality of care they deliver has been the focus of experts in the United States for decades. Access to patient-centered and equitable emergency care is critical to a community, and EDs are the safety net that must provide that care whenever it is needed, to whomever needs it. A well-managed ED increases the quality and safety of patient care and strengthens the health care infrastructure.

But despite the important role that EDs play in our health care industry, studies show that just under the surface, America's EDs are constantly at a dangerous breaking point – seriously crowded and suffering from poor patient flow, with few resources to bring themselves back from the edge.

Experts say a big reason for the current state of the nation's EDs can be traced back to the “double whammy” of pressures caused by the number of EDs nationwide closing at the same time patient volumes have increased over the last decade. According to the U.S. Centers for Disease Control and Prevention, the number of annual ED visits rose 32 percent between 1996 and 2006, and the number of hospital EDs across the country shrank almost 5 percent from 1991 to 2006 – leaving an increasing number of patients now concentrated in fewer EDs.

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With 119 million patients visiting the ED annually, millions of Americans may not be receiving safe and timely treatment – directly tying the disorder of a crowded ED to poor quality care. The dangers of poorly functioning EDs are more than just poor operational efficiency and low patient-satisfaction scores. Too many patients facing long wait times leave the ED without being seen and without obtaining the critical treatments they need. At the same time, Emergency Medical Services (EMS) in the region get overloaded as hospitals elect to go on ambulance diversion. The fragile state of our nation's EDs has been worsening for awhile, and isn't surprising considering the changes that the system has faced over the last decade. “Without addressing critical patient flow issues, America's EDs simply cannot safely handle surging demand,” explains Bruce Siegel, MD, MPH, director of the Center for Health Care Quality (CHCQ) at the George Washington University Medical Center School of Public Health and Health Services (GWUMC), and a nationally recognized expert on emergency department operations. “Against a backdrop of national health reform and increased accountability, now more than ever, hospital EDs need to study their care processes and act in order to establish a safe, high-flow environment.”

Measuring to Manage - and Succeed

On the frontlines of efforts to improve these issues and America's EDs is the *Urgent Matters* Learning Network II (LN II), a collaborative of six hospitals nationwide that are working together over an 18-month period to identify, develop and implement strategies to improve patient flow and reduce ED crowding.

Funded by the Robert Wood Johnson Foundation and managed by Dr. Siegel and the *Urgent Matters* team at the Center for Health Care Quality at the GWUMC, this pioneering initiative is also leading the charge as the first-ever in the U.S. to field-test ED standard performance measures. The results will provide critical knowledge that can lead to the effective tools needed for addressing many of the most vexing ED problems.

“The age-old quality improvement adage of ‘you can’t manage what you don’t measure’ is particularly relevant in EDs, and is fundamental to what we are doing in *Urgent Matters* to develop standardized performance measures,” says Vickie Sears, MS, RN, assistant director for quality improvement, CHCQ. “EDs and hospitals have always looked internally at their own metrics to improve the care at their facilities. The widespread reporting of standard ED performance measures would enable ED directors to look externally to see how their performance compares with the rest of the industry. This type of perspective would also help them choose interventions and strategies for process improvement. Just as importantly, it would give ED researchers a powerful tool to evaluate the effectiveness and efficiency of different process improvements across EDs. An important component of the recently passed Patient Protection and Affordable Care Act was a mandate to the Secretary of Health and Human Services to accelerate and expand emergency medicine research.”

The impetus for the *Urgent Matters* work lies in the Institute of Medicine’s (IOM) landmark 2006 report titled *The Future of Emergency Care: Hospital-Based Emergency Care At the Breaking Point*. Describing the dramatic deficiencies in America’s emergency care system, the report issued a series of recommendations for how best to deal with them, charging: 1) hospitals to reduce crowding by improving efficiency and patient flow, using available strategies and tools; and 2) the medical community to develop evidence-based indicators of emergency care performance.



Building upon the groundbreaking footsteps and successes of the first *Urgent Matters* Learning Network that operated from 2002-2004, the current effort has three key goals:

- 1 Rigorously evaluate the implementation of strategies for improving patient flow and reducing ED crowding within the context of a hospital learning network;
- 2 Advance the development of standard performance measurement in the ED; and
- 3 Promote the spread of promising practices to a wider audience and variety of hospitals.

While meeting all of the IOM’s charges is equally important for improving patient flow and reducing ED crowding, the large-scale potential impact of the *Urgent Matters* work in ED performance measures have experts excited. Unlike other clinical areas, such as cardiac care, that have performance measures covering the full continuum of a patient’s journey through the health care

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system, up until now, the field of emergency care has lacked a universally followed set of performance metrics.

“Emergency medicine is a different beast from most health care settings, and that is one reason why it has been so hard for us to develop these standardized measures. Some describe ED operations as controlled chaos rather than a controlled environment,” explains Mark McClelland, MN, RN, quality improvement leader for the *Urgent Matters* LNII initiative. “No two EDs are exactly the same, so you can’t compare them

easily, but we can begin to describe what EDs, as a service line in the health care industry, look like. The performance measures we are field testing will do just that. It is very important to have these standardized measures, so that we can speak the same language. Standardized measures would facilitate the development of performance benchmarks, improve consumer decision-making and stimulate the sharing of improvement strategies that work.”

Piloting Seven Select Performance Measures

In 2008, the National Quality Forum (NQF) endorsed 10 ED performance measures. The measures address the safety and effectiveness of emergency care, care coordination and communication, and efficient management of patient flow through the emergency

Game Change: Hahnemann University Hospital

The team at Hahnemann University Hospital in Philadelphia, Pa., has found the benefits of participation in *Urgent Matters* to be far-reaching.

“We know that every ED is having the same issues with long lengths of stay and waiting room times. Everyone is struggling with these same things and wants to do better,” says Mary Kay Silverman RN, CEN, director of Emergency Services at Hahnemann. “That is why it is so great to be a part of a pioneering initiative like *Urgent Matters*. Not only are we learning from our peers and improving how the ED works through the Learning Network structure, but we are also having an impact on the greater field of emergency medicine, and that just feels great.”

Another big benefit has been the catalytic effect that the team’s involvement in the initiative has had on the culture change surrounding ED crowding. From the C-Suite down to the administrative workers, everyone is involved and following the *Urgent Matters* project – sometimes even asking the same questions that only the administrative workers had previously asked of Silverman.

“I’ve had board members and people on our medical executive committee focusing on important ED issues that they never used to,” she says. “A big part of that is because of the program’s emphasis on performance measurement. The data we are collecting and reporting is just undeniable and impacts everyone in the hospital, allowing us all to make informed management decisions. Without it, I doubt they would be able to follow as closely, which is telling for the future of this field.”

HOSPITAL METRICS

Location: **Philadelphia, Pa.**

Number of Emergency Department Visits
Annually: **Approximately 40,000**

Number of Beds: **540 licensed beds**

Ownership: **Investor Owned, For Profit**

Teaching Status: **Yes**

department. The U.S. Centers for Medicare and Medicaid Services (CMS) is considering three of the measures for inclusion in its inpatient and outpatient payment updates for the public reporting system in 2014.

Urgent Matters hospitals are utilizing seven select performance measures during the initiative, three of which are pulled from the CMS-considered and NQF-endorsed list (marked by * asterix). The remaining measures have been recently taken under consideration for endorsement by the NQF. These include:

- 1 ***Throughput for Admitted Patients:** The median time from ED arrival to the time of ED departure for patients admitted to the facility from the ED.
- 2 ***Throughput for Discharged Patients:** The median time from ED arrival to the time of departure for patients discharged from the ED.
- 3 **Time to Pain Management for Admitted Patients:** The median time from ED arrival to time of initial pain medication administration for ED patients with principal diagnosis of long bone fracture admitted to the facility from the ED.
- 4 **Time to Pain Management for Discharged Patients:** The median time from ED arrival to time of initial pain medication administration for ED patients with principal diagnosis of long bone fracture discharged from the ED.
- 5 **Median Time to Chest X-Ray for Admitted Patients:** Median time from initial chest x-ray order to time chest x-ray exam is completed for patients admitted to the facility from the ED.
- 6 **Median Time to Chest X-Ray for Discharged Patients:** Median time from initial chest x-ray order to time chest x-ray exam is completed for patients discharged from the ED.
- 7 ***Admit Decision Time to ED Departure Time:** The median time from admit decision time to the time of departure from the ED for patients admitted to inpatient status.

Following an initial period of measure clarification, training and implementation, the hospitals are collecting data for the measures, and reporting them on a regular and continuous basis to the *Urgent Matters* team. In turn, reports on the hospitals' progress are then shared with the measures support partners at the Oklahoma Foundation for Medical Quality. From there, the refinements and improvements are reported back to CMS, closing the loop on an iterative process that will have a lasting national impact.

Urgent Matters hospitals are utilizing seven select performance measures, three of which are National Quality Forum (NQF)-endorsed and are being considered by the U.S. Centers for Medicare and Medicaid Services (CMS) for inclusion in the public reporting system in 2014.

"No one else is or has ever implemented and tested ED performance measures on this scale. It is easy to theorize these in academic settings, but until you actually implement them on a broader scale and get feedback from the real-world, you never know if they will really work," says Rebecca Jones, measures project manager, Oklahoma Foundation for Medical Quality. "We are very excited by the prospects that the *Urgent Matters* work holds. It is giving the entire field first-of-its-kind evidence and data on ED performance measures which, as CMS has indicated in the IPPS proposed rule, are going to be an inevitable part of the future of emergency medicine."

Bolstering the piloting and study of the performance measures is the other major distinct component of *Urgent Matters'* work on developing ED improvement strategies. Collaborating through a 'learning network' structure to test new intervention ideas for the ED, quantifying the results and sharing their lessons learned, the hospitals are attempting to develop best practices and resources for others to use, and improve the quality of care delivered.

Aligning Forces to Prepare for the Inevitable: Thomas Jefferson University Hospital

“Performance measurement in EDs is absolutely inevitable, and we want to be as prepared as possible,” says Rex Mathew, MD, vice president for Emergency Medicine Clinical Operations at Thomas Jefferson University Hospital in Philadelphia, Pa. “One only has to look at the upcoming CMS core measures being proposed to see that before we know it, they will be getting a lot of attention. By participating in *Urgent Matters*, we’re in it from Day One.”

With that in mind, and with a strong culture of process improvement already in place, the team at Thomas Jefferson saw *Urgent Matters* as a ‘no-brainer’ when it was offered.

“This initiative aligned perfectly with the dedication we already had in place, but it is also helping us get ahead of the ED performance measurement movement that we see coming down the pike,” says Linda Davis-Moon, MSN, CRNP, APRN, BC, executive director for Strategic Initiatives at Thomas Jefferson. “It’s better for us to be a part of this from the beginning, going through the growing pains and ensuring that it is success, rather than have to face all of the unknowns when it is prescribed to us by others.”

While *Urgent Matters* has not been a ‘cakewalk’ for Thomas Jefferson, the measurable improvements that have resulted and organization-wide awareness of how ED issues affect the entire hospital have been huge.

“The ED is a barometer for the health of all the other departments within the hospital, and the data from performance measures allows us to keep track of and show that,” says Dr. Mathew. “This in turn has helped us penetrate the Thomas Jefferson culture system-wide, and implant the idea that our functions are deeply intertwined with that of all the other units, and cannot be thought of separately. They aren’t just ED performance measures – they are hospital performance measures.”

HOSPITAL METRICS

Location: **Philadelphia, Pa.**

Number of Emergency Department Visits
Annually: **Approximately 55,000**

Number of Beds: **724**

Ownership: **Non-government, Not For Profit**

Affiliations: **Thomas Jefferson University**

Teaching Status: **Yes**

Working in collaboration with the U.S. Agency for Healthcare Research and Quality (AHRQ) and the Health Research & Educational Trust (HRET), an affiliate of the American Hospital Association, *Urgent Matters* hospitals are tracking and submitting data to HRET on the CMS measures, as well as other metrics, in order to evaluate the impact and effectiveness of those improvement strategies.

“This rigorous evaluation adds even more of an evidence-base to the results and conclusions that evolve from the *Urgent Matters* work, giving other hospitals and stakeholders the information they will need to effectively

evaluate the strategies,” says McClelland. “This is a very data-driven industry, and the more ways we can incorporate use of these measures, the better chance we will have for more widespread adoption.”

Looking to the Future While Improving the Present

The program’s successes will be shared nationwide in late 2010 – giving the entire ED community not only field-tested and piloted ED performance measures, but also concrete and evaluated examples of effective change strategies that can be adopted elsewhere.

Urgent Matters Learning Network II Hospitals

Good Samaritan Hospital Medical Center, a not-for-profit teaching and community hospital under the auspices of Catholic Health Services of Long Island, is a fully accredited, 437-bed regional center for health care, serving the residents of southwestern Suffolk County and the surrounding area. It receives more than 95,000 Emergency Department visits annually.

Hahnemann University Hospital is a 640-bed, investor owned hospital in Philadelphia, Pa. The hospital is affiliated with Drexel University College of Medicine and is a member of Tenet Health System. The hospital receives more than 33,000 Emergency Department visits annually.

Stony Brook University Medical Center is a 540-bed, public hospital in Stony Brook, NY. The hospital serves Suffolk County and receives more than 75,000 Emergency Department visits annually.

St. Francis Hospital is a 230-bed, not-for-profit, private hospital in Indianapolis, Ind., and a member of St. Francis Hospitals & Health Centers. It is the newest general hospital in the city of Indianapolis, and receives more than 60,000 Emergency Department visits annually.

Thomas Jefferson University Hospital is a 765-bed, not-for-profit, private hospital in Philadelphia, Pa., and a member of the Thomas Jefferson University Hospitals. The hospital, an urban, academic Level I Trauma Center, receives more than 92,000 Emergency Department visits annually.

Westmoreland Hospital is a 301-bed, not-for-profit private hospital in Greensburg, Pa., and a member of Excelsa Health. The hospital is a full-service, acute-care facility and receives more than 41,000 Emergency Department visits annually.

As true pioneers in this field, the real-world experience and expertise of the *Urgent Matters* hospitals will have helped move the development of ED performance measurement closer to the finish line than ever before. For Sears this is just the prelude to an exciting future for emergency departments in the 21st century.

“Once we have ED performance measures established and standardized across the industry, the improvement possibilities for the future are endless. Not only will it power the inevitable widespread quality improvement initiatives, but it will also drive ED transparency and competition from things such as robust public reporting, improved patient experiences and satisfaction, and reduced costs,” she says. “The entire field of emergency medicine has been hungry for this work for some time, so I don’t think it is a stretch to say that the learnings and work *Urgent Matters* will be invaluable for years to come.”

Program successes will be shared nationwide in late 2010, giving the entire ED community not only field-tested and piloted ED performance measures, but also concrete and evaluated examples of effective interventions and strategies that can be adopted elsewhere.

For More Information

For more information about *Urgent Matters*, to subscribe to the program’s E-Newsletter, or to download a copy of the final report from the program’s first Learning Network, *Bursting at the Seams*, visit www.urgentmatters.org or email info@urgentmatters.org.