A Report on Quality, Safety & Population Health Management in Maryland’s Hospitals

Maryland Hospital Association
The people of Maryland’s Hospitals

are committed to ensuring the safety and well-being of every person who enters through their doors. That commitment is brought to life every hour of every day, and is demonstrated in Better Hospitals, Better Health: A Report on Quality, Safety & Population Health Management in Maryland’s Hospitals.

This commitment to safety guides hospitals’ constant work to improve the quality of care they deliver, whether treating illness and injury or simply helping their neighbors live healthier lives. Much of the work you’ll read about, for example, has emerged from specific initiatives that have:

- Prevented opioid-related overdoses
- Prevented falls
- Improved maternal health
- Reduced readmissions
- Curbed infections
- Improved patient satisfaction

This report offers plenty of statistics about how hospitals are improving, but also specific examples of how hospitals throughout our state are making things better for the people they serve. We are proud of this progress, yet we recognize that the work of improving quality and safety never ends. That is why Maryland’s hospitals will continue to expand on their success, and the Maryland Hospital Association will remain steadfast in our support of hospitals’ aims to transform and deliver high quality care.

Northwest Hospital
Maryland is the only state in the country that regulates the rates hospitals can charge for their services. The system began in the 1970s, and was updated dramatically in 2014 and again in 2019. But the model is about much more than payment. Throughout these decades of change, the foundation of the system has remained the use of specific and aggressive quality and safety measures to improve the care Marylanders receive.

The model today is about much more than treating illness and injury — although of course meeting those needs remains a foundation of every hospital’s work. Today, the emphasis is on improving the health of entire communities by taking care of the whole person, because the road to lower health care costs and more effective care lies in getting people the right care, at the right time, in the right setting. For hospitals, that means working with others in the community to keep people healthy and out of the hospital. It means vigorously addressing chronic yet manageable conditions like diabetes, heart disease and asthma, while at the same time working to reduce things like opioid overdoses and patient falls.

The Maryland model does all this by putting “at risk” about 8 percent of hospitals’ potential inpatient revenue. Within this 8 percent lie incentives to make care safer within hospitals, to reduce avoidable care for manageable conditions, to work with others to enhance the coordination of care across different settings, like doctors’ offices, and to engage patients in improving their health and their experiences within hospitals.

The model encourages collaboration across the health system, so that hospitals work with insurance companies, physicians, long-term care providers like nursing homes, and regulatory agencies, on statewide as well as local issues that affect the health of Maryland’s communities.

The success that Maryland’s model has had in improving quality, safety, and population health management is illustrated within this report. And the fact that the federal government continues to champion the model as an example for other states to follow is a key indication that Maryland’s hospitals are leading the charge into a new era of quality and safety improvement at both the state and national levels.
Reduced Medicare readmissions by **8.2%** from 2013 to 2017

100% of hospitals either **prescribe and/or dispense naloxone to patients** with a substance use disorder or who were treated for an overdose at discharge.
90% of respondents in 2017 would rate the hospital as a 7 or higher on a 10-point scale; 93% would definitely or probably recommend the hospital to others.

Since 2016 the majority of hospitals participated in the appropriate antibiotic use campaign.

Between 2015-17:

- **21.8%** reduction for MRSA
- **12%** reduction in C.diff

Among the **top 10 states** in 2017 for percentage of patients who received proper care for severe sepsis and septic shock.

Maryland’s maternal mortality rate is improving and now has a **lower rate** than the nation.

More babies are receiving prenatal care: **72%** got the first prenatal visit during the first trimester in 2016.

- **21.8%** reduction for MRSA
- **12%** reduction in C.diff

Between 2015-17:

- **11%** decrease from 2013 to 2017 in the number of falls in hospitals that led to serious injury or death.

Holy Cross Germantown Hospital
Bon Secours Baltimore Health System owns and operates more than 800 apartment units for low-income seniors, families, and people with disabilities. In summer 2019, Bon Secours will build a community resource center by renovating an abandoned library and will offer services including mental health screening, access to healthy food, fitness programs, and career and education services for youth and adults.

Johns Hopkins Bayview Medical Center’s peer recovery coaches meet people in the emergency department who have been identified as having substance use disorders. The coaches help them find the courage to take the first step in recovery by providing empathy and connecting them with referrals for treatment.

The Johns Hopkins Hospital, working with the Johns Hopkins Medicine Opioid Stewardship Clinical Community, has facilitated a nearly fourfold increase in naloxone co-prescribing and 15 percent decrease in high-dose opioid prescriptions. A new perioperative pain clinic has resulted in reduced readmissions, length of stay and opioid use among surgical patients.

Kennedy Krieger Institute’s Center for Child and Family Traumatic Stress provides interdisciplinary, evidenced-based therapies to address the emotional and behavioral effects of trauma exposure and education to help parents recognize symptoms of traumatic stress in their child and themselves.

Frederick Regional Health System partnered with 16 area organizations to create LiveWell, which promotes healthy lifestyle choices that lead to community health improvement. LiveWell’s first initiative is the 5-2-1-0 program that focuses on four simple behaviors to increase physical activity and healthy eating.

Garrett Regional Medical Center’s (GRMC) emergency department, social work, nursing, and outpatient services staff helped create the Well Patient Program, which taps local social service and health agencies to help patients struggling with chronic conditions stay healthy and at home. The program helped GRMC realize a readmission rate below 6 percent.

Meritus Medical Center introduced “Getting Stronger, Living Longer,” a partnership among nurses and physical and occupational therapists. Upon admission, clinical nurses assess patient mobility levels; use white boards to communicate levels and five-day goals; and measure falls, pressure ulcers and length of stay. Increased mobility lowers the risk of blood clots and pneumonia and prepares patients for life outside the hospital.

Western Maryland Regional Medical Center redesigned a pediatric observation unit in a child-friendly area in the emergency room to allow young patients to be seen by staff separate from adult patients experiencing more critical issues. The medical center also helps low-income patients with diabetes and food insecurities to obtain healthy food and tools to self-manage their diabetes through its Food Farmacy.

MedStar Union Memorial Hospital
MedStar Good Samaritan Hospital launched an opioid survivor program to conduct community navigation for those who experienced an opioid overdose. The hospital also is part of a partnership that expanded a telemedicine program to help people older than 60 monitor their health at home.

MedStar Harbor Hospital launched a prescription for food program that delivers fresh produce for eight weeks to help people access food. The hospital also partners with Safe Streets to deploy a violence responder resource in the emergency department and launched an innovative program for pregnant women and their babies affected by substance use disorder.

MedStar Union Memorial Hospital deployed evidence-based programs in partnership with community organizations, including smoking cessation, diabetes prevention, and living well with chronic disease management, and also partners with the city health department to conduct naloxone training.

Mercy Medical Center created the award-winning mWORKS program, which provides Baltimore City residents who face significant socio-economic challenges with training and employment in the hospital’s environmental services, dietary, and transport departments. In light of mWORKS, Mercy Medical Center Nursing received the 2018 AONE (American Organization of Nurse Executives) Prism Diversity Award, which recognizes institutions that have advanced diversity efforts within the nursing profession, community, or organization.

Mt. Washington Pediatric Hospital’s multidisciplinary clinical lead poisoning program reaches beyond the hospital’s walls to address the sources of lead poisoning, as well as its symptoms and long-term effects.

Saint Agnes Hospital created the Health Institute to embody a strategic approach to care management with a greater focus on population health and caring for people at a higher and more personalized level outside of the hospital. The Health Institute brings together efforts around chronic disease management, readmissions, potentially avoidable utilization and relationships in the community.

Sinai Hospital of Baltimore has taken a direct approach to addressing social determinants of health by improving the community where its patients and employees live and work. The LifeBridge Health Clean & Green team launched in 2018, taking on a variety of landscaping and beautification projects in neighborhoods around LifeBridge facilities, such as Sinai Hospital.

The University of Maryland Medical Center Midtown Campus has continuously decreased the number of Hospital-Acquired Pressure Injuries (HAPIs). For more than a year, the team sustained zero reportable HAPIs. The University of Maryland Medical Center Midtown Campus cares for a large subset of Maryland residents with uncontrolled diabetes mellitus and malnutrition, both of which are strong risk factors that contribute to a patient acquiring a HAPI.

University of Maryland Medical Center anesthesiologists in the Department of Anesthesiology at the University of Maryland School of Medicine administer ultrasound-guided nerve blocks to treat pain after injury or surgery, thereby reducing or eliminating the need for opioid medications. UMMC’s emergency department also reaches out to addicts who show evidence of being ready to enter treatment by connecting them to treatment and peer counselors.

University of Maryland Rehabilitation & Orthopaedic Institute launched the Patient Navigator Program to reduce hospital readmissions and improve outcomes for vulnerable patients. This helps patients on the stroke, traumatic brain injury, spinal cord injury, and comprehensive medical rehabilitation units access services, manage their care, and prepare them for discharge. They also hold chronic disease management education classes in the community.
Central MARYLAND

**Anne Arundel Medical Center** assembled a multidisciplinary Opioid Taskforce with the goal of reducing opioid prescriptions by 50 percent by 2019. As of the fall of 2018, AAMC reported a 63 percent reduction.

**Carroll Hospital** adopted a new model of care with the Neonatal Family Centered Couplet Care program, which keeps babies who are born prematurely or who require specialized care together with their mothers for as long as the babies are hospitalized. This comprehensive program decreases length of stay, improves infant recovery, and strengthens family bonds.

**Greater Baltimore Medical Center** uses Lean Daily Management (LDM) to problem-solve and improve outcomes every day. LDM connects senior leaders and front-line staff to create highly reliable standard processes. Using LDM, GBMC went from one Catheter Associated Urinary Tract Infection (CAUTI) a week to one per quarter — moving to zero.

**Howard County General Hospital** manages the Howard Health Partnership, a regional population health model that delivers effective, community-based, and financially sustainable care — primarily to residents who are at least 18 years old and Medicare or dual eligible with at least two encounters with the hospital in the past year. The program has reduced hospital encounters within this patient population by 40 percent.

**MedStar Franklin Square Medical Center** hosts an annual, free drive-through flu vaccination clinic and ConnectFest, a program to improve health care in communities by giving free health screenings, signing people up for library cards, making pediatric dental appointments, and more.

**Northwest Hospital** implemented a process to minimize smoke — a byproduct of many surgical procedures — in operating rooms, winning two national awards for safety. Surgical smoke carries bacteria, viruses, and toxic chemicals, and can damage the health of patients and providers alike.

**Sheppard Pratt Health System** is taking a safer, more effective approach to pain management by developing a process and guidelines for assessing and treating chronic pain among older adults. The result? Effective pain management and zero opioids prescribed since the program’s launch in 2016.

**University of Maryland Baltimore Washington Medical Center** has several programs in place that have successfully decreased sepsis mortality, improving outcomes for patients with sepsis through early recognition and intervention. The Guardian Program uses the Rapid Response Team to proactively monitor for signs of sepsis and deterioration in patients’ conditions, and the nursing sepsis screening flowsheet assessment supports screening of sepsis and severe sepsis.

**University of Maryland Harford Memorial Hospital & University of Maryland Upper Chesapeake Medical Center** contracted with the Mosaic Group and secured grants to integrate SBIRT (Screening, Brief Intervention, Referral to Treatment) into each hospital's emergency department. They also worked closely with the Harford County Health Department to develop peer recovery specialists and coaches to be involved with the emergency departments to intercede when addictions are an issue and the effectiveness of peer-to-peer engagement can lead to positive outcomes.
Atlantic General Hospital expanded its Medication Therapy Management (MTM) Program, which includes telehealth services, after a trial period yielded promising results in reducing potentially avoidable utilization. Enrolled patients had 91 emergency department visits, with nine readmissions in the year prior to participating in the program. This was reduced to 11 ED visits with one readmission.

Peninsula Regional Medical Center is part of the Salisbury Wicomico Integrated Firstcare Team (SWIFT), which assists a population of frequent EMS users who call for non-emergency aid at least five times over any six-month period. The goal is to lessen users’ reliance on Salisbury Fire Department, EMS and on the hospital for health care services that are more appropriately provided in a primary or specialty care setting.

Union Hospital of Cecil County embarked upon the journey to high reliability and zero harm in 2016. To date, the organization has trained all associates on error prevention techniques, identified and trained safety coaches, refined cause analysis process, scheduled daily organizational safety huddles, and between huddles developed new strategies and oversight to improve quality and safety.

University of Maryland Shore Regional Health has created collaboratives with long term and rehabilitation care centers, home health agencies, primary care and specialists, health departments, social services, mobile integrated health services and others to identify people failing at independently living due to medical frailty or dementia. The goal is to develop and arrange for safe, cost effective alternatives to higher acuity services.

University of Maryland St. Joseph Medical Center (UM SJMC) is on a mission to make zero patient harm a reality. UM SJMC just completed one year without any Central Line Associated Bloodstream Infections (CLABSI). UM SJMC offers wellness programs based on community need, including Stepping On to help seniors achieve better balance and increase overall strength, self-confidence, and sense of independence.
Adventist HealthCare Shady Grove Medical Center caregivers brought 10 evidence-based, diabetes self-management workshops to senior centers, community centers, and low-income housing locations through Adventist HealthCare’s Center for Health Equity and Wellness and county partners. Participants in the six-week sessions learned to manage symptoms, take medications and work more effectively with providers. Most of the 139 participants reported increased exercise and intake of fruits and vegetables after the program.

Adventist Healthcare Washington Adventist Hospital in partnership with Hungry Harvest the hospital provides 200 produce prescriptions to patients annually who are at or below 250 percent of the federal poverty level and are in need of food assistance.

Doctors Community Hospital is committed to improving people’s overall well-being including through its partnerships with La Clinica del Pueblo and Catholic Charities’ Susan Denison Mona Center, which help to address healthcare needs in underserved communities.

Fort Washington Medical Center is ranked among the top 10 percent of acute care hospitals in the nation protecting patients from serious, potentially avoidable complications during their hospital stay.

Holy Cross Hospital, delivering 10,000 babies a year, implemented Maternal Fetal Triage Index (MFTI) and reduced door-to-evaluation time in labor and delivery triage. Utilizing the processes of education, audits, Kaizen, and patient stories, door-to-evaluation score time decreased to a mean of 12 minutes and a median of 10 minutes.

Holy Cross Germantown Hospital was able to reduce IV opioid usage at the hospital by 70 percent over a six-month period. Utilizing a 24-hour stop for all IV opioid orders, the physicians and pharmacists worked together to transition patients to oral and non-opioid medications.

MedStar Montgomery Medical Center is a primary sponsor of Olney Home for Life, which has enhanced the quality of life for seniors by helping them maintain their mobility, health, and social connections.

MedStar Southern Maryland Hospital Center (MSMHC) was invited in 2018 to participate in the Institute for Healthcare Improvement’s workshop in Chicago. MSMHC gave a presentation on improving venous thromboembolism diagnostic errors and had the opportunity to demonstrate skills in applying short Plan, Do, Check, Act cycles to improve clinical outcomes.

University of Maryland Prince George’s Hospital Center reduced hospital acquired infections by 29 percent through a structured multidisciplinary improvement effort that included physicians, nurses and ancillary leaders, as well as information technology and supply chain. Efforts included consistent implementation of best practices through physician and staff engagement, education, practice changes, and ongoing monitoring.
Southern MARYLAND

*Calvert Health Medical Center*’s Opioid Stewardship Task Force decreased opioid orders in the emergency department by 26 percent in 18 months. The success of the program has earned the medical center recognitions, including Health Quality Innovator of the Year, the Circle of Honor Award, and more.

*MedStar St. Mary’s Hospital* piloted a shuttle program in an underserved area of the community. The service offered transportation to medical offices, dental offices, pharmacies, and more, and later evolved to facilitate transportation to medical appointments outside of the area.

*University of Maryland Charles Regional Medical Center* collaborates with community partners to increase healthcare quality while adding convenience. Programs like Mobile Integrated Healthcare, Meds to Beds Delivery, and free living well with chronic conditions classes bring care into the community. Inside the hospital, hand hygiene and fall prevention programs are part of a strong culture of safety, supporting the ultimate goal of zero patient harm.
Working together to provide safe, high-quality care

Maryland's hospitals rely on these organizations to improve the quality of care delivered to patients and communities.

**Maryland Hospital Association**
MHA serves Maryland's hospitals and health systems through collective action to shape policies, practices, financing and performance to advance health care and the health of all Marylanders.

**Maryland Patient Safety Center**
The Maryland Patient Safety Center helps hospitals prevent avoidable harm by developing a culture of safety and innovation. Maryland's hospitals work with the Center on the following initiatives:

- Neonatal Abstinence Syndrome
- Clean Collaborative
- Reducing First-time C-sections
- Opioid Consumer Education
- Second Victim Peer Support

For more information about how many of Maryland's health care providers and community organizations are working together to improve care delivery, visit the Innovations for Better Health website, at www.InnovateHealthMD.org.