Wisconsin Hospitals:
Applying the Science of Improvement to Patient Care
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Introduction

Every patient who receives care in a hospital expects to receive the best care possible. In Wisconsin, hospitals and health systems have made it a top priority to set the standard for clinical excellence and deliver the highest quality care possible to each and every patient.

Improving quality and sustaining that progress over time requires a deep commitment from every member of the health care team to ensure the safety and well being of the patients in our care. It is a relationship between the patient and the caregivers that is built on trust, facilitated by effective communication among the health care professionals, patient and their family, and supported by clinical excellence.

In 2016, WHA’s in-house team of quality improvement experts helped our member hospitals work on quality improvement projects aimed at reducing readmissions, decreasing hospital-acquired infections and preventing falls.

Together, the hospitals in Wisconsin that worked with WHA achieved the following results:

- Since 2010, there has been a 56 percent reduction in catheter-associated urinary tract infections;
- Hospitals have achieved an 18 percent decrease in mortality-associated sepsis since 2013, an improvement that was highlighted on a national Centers for Disease Control Town Hall Forum in August, 2016;
- Patient falls have decreased 38 percent since 2012; and,
- Hospitals are implementing Antimicrobial Stewardship Programs with a goal of determining if an antibiotic is the “right drug, right dose, for the right amount of time.” There has been an 82 percent increase in the use of an “antibiotic time out” in Wisconsin hospitals that allows care staff to re-evaluate the patient and determine if the antibiotic is still needed.

Along with the progress we have made in improving the quality of care we deliver, there have been some challenges. Wisconsin hospitals, along with the rest of the nation, have had difficulty decreasing the rate of Clostridium difficile infections. Following several years where the rate increased, the good news was that in the first half of 2016, the rate began to fall. The focus on decreasing Clostridium difficile infections will continue into 2017.

The federal Agency for Healthcare Research and Quality (AHRQ) has consistently ranked Wisconsin among the top states in the nation based on the quality of our health care delivery system. Great health care is one of Wisconsin’s strongest assets. It is the reason we will stay on solid ground as the health care environment changes around us.
Wisconsin Health Care Rankings

AHRQ State Snapshots - Wisconsin Health Care Ranks Third Highest in Nation

Wisconsin is the third most highly rated state in the country based on the quality of its health care according to the federal Agency for Healthcare Research and Quality (AHRQ). Wisconsin had the third best overall health care quality measure score among all 50 states, with scores that closely followed Maine and Massachusetts. The rankings are based on close to 200 measures that AHRQ uses to evaluate health care performance.

Wisconsin has shown consistently high performance since AHRQ started the state rankings in 2006, ranking as one of the top four states in nine of the last ten years. The AHRQ quality measures are compared to achievable benchmarks, which are derived from the top-performing states. AHRQ measures health care quality in three different contexts: by types of care (such as preventive, acute, or chronic care), by settings of care (such as hospitals, nursing homes, home health or hospice), and care by clinical area (such as care for patients with cancer or respiratory diseases). They also report measures by race and ethnicity.

Wisconsin scored higher than the national benchmarks on 50 percent of the 200 measures. Areas of strong performance include care for acute and chronic conditions, as well as preventive care. The state also shows consistently high performance in the area of care coordination, which includes measures for coordination of care among health care settings and with the patient.

While Wisconsin shows strong overall performance in most areas of care, there is still work to be done related to health care equity. When measures are segmented by race and ethnicity, the performance is just average. The data indicates that blacks and Hispanics may not be getting adequate care for their chronic conditions, which then results in avoidable hospitalizations. WHA will be working with hospitals over the next three years to begin to understand and decrease these types of disparities in care.

Wisconsin Ranking on AHRQ Snapshots

<table>
<thead>
<tr>
<th>YEAR</th>
<th>WI RANKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
</tr>
<tr>
<td>2008</td>
<td>1</td>
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<tr>
<td>2009</td>
<td>2</td>
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<td>2011</td>
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<td>2013</td>
<td>4</td>
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<tr>
<td>2014</td>
<td>3</td>
</tr>
<tr>
<td>2015</td>
<td>2</td>
</tr>
<tr>
<td>2016</td>
<td>3</td>
</tr>
</tbody>
</table>

(No report in 2012)

The rankings and details about each of the measures are posted here: [https://nhqrrnet.ahrq.gov/inhqrdr/state/select](https://nhqrrnet.ahrq.gov/inhqrdr/state/select)
Paying for Value

The Affordable Care Act (ACA) includes three programs that incentivize high-quality care through annual adjustments to Medicare reimbursement rates. The programs are administered by the Centers for Medicare and Medicaid Services (CMS). The ACA moved the CMS quality program away from rewards for reporting measures to payments based on performance on the measures. Hospitals that perform well receive increases in their rates and hospitals that do not perform as well receive rate cuts. Each of these programs applies to the 65 Wisconsin hospitals that are subject to the inpatient prospective payment system. The programs do not apply to critical access hospitals. The penalties for the programs have been increasing each year, and new quality measures are added within each program on a regular basis. The maximum cumulative penalty for the current federal fiscal year (FFY) is 6.25 percent.

Wisconsin hospitals embrace high quality, which results in overall good performance in all three of these programs.

Hospital Value-Based Purchasing

Wisconsin hospitals rank seventh best in the country in the Centers for Medicare and Medicaid Services (CMS) Value-Based Purchasing (VBP) Program. The VBP program is designed to promote high quality outcomes and efficient use of resources for hospital patients. The 22 measures used in the VBP program include hospital-acquired infections, mortality, patient satisfaction, average Medicare spending per beneficiary and measures of appropriate care. The program is a budget neutral program, which requires the total amount of value-based incentive payments, in aggregate, to be equal to the amount available for value-based incentive payments. Hospitals are scored on their comparison to national benchmarks and year-to-year improvement.

The maximum penalty for the current federal fiscal year is two percent. Wisconsin hospitals work hard to improve these quality measures with 55—which is 85 percent—of the 65 eligible hospitals receiving an incentive bonus. The average incentive bonus is 0.7 percent. No hospital will be receiving a payment penalty over 0.65 percent.

2017 Value-Based Purchasing Bonuses/Penalties
Readmission Reduction Program

Patients who must return to a hospital, or be readmitted, are a major source of health care spending. Wisconsin hospitals work to reduce this unnecessary care by improving internal care processes and through partnerships with other health care providers and community agencies that help care for patients when they leave the hospital.

The Hospital Readmissions Reduction Program was established by the Affordable Care Act. The program requires CMS to reduce payments to hospitals, paid under the prospective payment system, that have an excessive number of readmissions. The program calculates a hospitals’ excess readmission ratio based on patients who receive hospital care for heart attack, heart failure, pneumonia, chronic obstructive pulmonary disease, hip and knee replacements and cardiac bypass surgery. Hospitals with high readmission rates can be penalized up to three percent of their Medicare payments.

Wisconsin’s average penalty for 2017 will be 0.33 percent, which ranks Wisconsin at #17 when compared to other states; 26 percent of Wisconsin hospitals received no penalty and no hospital will be penalized by more than 1.51 percent. The majority of the penalties are very small.
Hospital-Acquired Conditions

The third penalty program established in the Affordable Care Act is the Hospital-Acquired Condition (HAC) Penalty program. This program, which started in FFY 2015, focuses on patient safety events in the same 65 hospitals as the two programs described earlier in the report. Unlike the other programs, the HAC program requires CMS to penalize the worst performing quartile of hospitals nationally, regardless of their level of performance. The measures used in the program include a patient safety composite measure, known as Patient Safety Indicator (PSI) 90 and five hospital-acquired infections. The penalties are restricted to outcomes for Medicare patients. WHA’s CheckPoint (www.WiCheckPoint.org) reports the results for these same measures for all patients receiving care in Wisconsin hospitals.

The number of Wisconsin hospitals receiving the HAC penalty has decreased each year. Only 11 Wisconsin hospitals, which is 16 percent of eligible hospitals, will receive the penalty in FFY 2017. This is evidence of the work hospitals across the state are doing to eliminate hospital-acquired infections, used in this program, through their work in projects such as the WHA Partners for Patients project.
Improving Patient Care

Health care providers are trained in the sciences related to how the human body works and responds to treatment. Effective improvement of patient care also has been studied and has its own science. There are known improvement strategies and techniques that are proven to yield better results. All of WHA’s quality improvement work with its members includes time spent helping hospitals and their staff improve their knowledge and skills about how to conduct successful improvement projects. Hospitals then apply these same skills to many other projects.

Wisconsin hospitals are skilled at applying “the science of improvement.” As WHA studies the success stories, it finds hospitals commonly cite recurring themes as the keys to their success. As hospitals work together in large improvement collaboratives, such as Partners for Patients and Transforming Care at the Bedside (TCAB), they teach one another how to operationalize these themes to drive all hospitals to higher performance levels.

Key Strategies to Successful Improvement:

- **Use of multiple strategies** – There are many possible strategies to reduce complications and improve patient care. Patient care is complex, therefore hospitals have to use a combination of known strategies to get lasting improvement.

- **Use of a consistent improvement model** – Adhering to consistent steps for every project ensures processes are thoroughly understood, changes are well tested and good results are achieved. The most common models used are Plan-Do-Study-Act and Lean.

- **Transparent use of data** – Data is collected over a series of weeks and months to measure the incremental effect of improvement work. Hospitals make this data readily available to the staff who do the work that is being changed so they get real-time measured feedback on their progress.

- **Staff engagement** – Those who perform the daily work and take care of the patients are the most important people to involve in improvement efforts. These staff know the steps they go through each day and why a process may not be working, have the best ideas on how to improve their work and can ensure changes are sustained.

- **Multi-disciplinary improvement teams** – Every aspect of patient care requires the involvement of multiple people from many disciplines and departments. It is critical to get input and perspective from all stakeholders to ensure smooth transitions between departments and seamless care.

- **Evidence-based care** – Most clinical improvement topics have well-studied treatments and improvement strategies. Successful improvement teams use this evidence and work to customize how it is implemented to meet the conditions that are unique to their hospital.

- **Use of cross-cutting safety practices** – Hospitals are using high-reliability practices that can address multiple areas of patient safety. These include daily staff huddles to proactively plan the day, involving patients and family members in shift hand-off discussions, including all appropriate disciplines in daily patient rounds, using whiteboards in patient rooms and visiting patient rooms at least hourly.

- **Engaging patients and families** – Hospitals focus on finding new ways to involve patients and their families in the care process. Hospitals now think of providing care “with patients,” rather than “to patients.” This includes use of patient advisors, patient advisory committees and including patients as members of improvement teams.
WHA Partners for Patients

Wisconsin hospitals began working with WHA in 2012 in the Centers for Medicare and Medicaid Services (CMS) Partnership for Patients Hospital Engagement Networks. The first phase of the project ended in 2014. Many hospitals continued the work until CMS added the second phase with another year of funding and support that began in late 2015 and ended in September 2016. The aims of reducing patient harm and readmissions are consistent with quality goals for every Wisconsin hospital. The areas of harm addressed in this work include hospital-acquired infections, pressure ulcers, patient falls, surgical complications and sepsis. These areas of focus have remained the same because they are high-risk and high-cost topics that still have room for improvement.

CMS launched the third phase of the Partnership for Patients, titled the Hospital Improvement Innovation Network (HIIN), in September 2016. WHA's participation in the HIIN, over the next three years, will be in partnership with the Michigan Health and Hospital Association and the Illinois Health and Hospital Association as the Great Lakes Partners for Patients network.

The new partnership allows the three states to pool resources to offer education, training, data management and clinical expertise to all hospitals participating in the HIIN. The 79 Wisconsin hospitals enrolled in the HIIN are working with WHA to achieve an additional 20 percent reduction in harm and 12 percent reduction in preventable readmissions. These shared goals are being achieved through the use of high-reliability principles and customized assistance for each hospital. The following sections highlight some of the aggregate results of many hospitals that have occurred over the past five years in addition to specific hospital highlights.

Hospital-Acquired Infections

Hospital-acquired infections can be serious and sometimes cause fatal complications. Preventing infections requires constant attention and implementation of not just one, but multiple improvement strategies. Most infections hospitalized patients contract are from bacteria they already have, but are unable to fight because of their medical condition. The most important preventive strategy is good hand hygiene by staff and by patients and their families. Minimizing the use of medical devices, such as catheters and invasive monitoring devices is also key. Patients who have surgery can get additional protection with use of prophylactic antibiotics and new techniques for preparing the surgical site before the procedure.

Hospitals routinely report their hospital-acquired infections to the Centers for Disease Control (CDC) National Healthcare Safety Network (NHSN). The infection rates are reported as a Standardized Infection Ratio (SIR), which indicates a hospital's performance in relationship to the national average of 1.0. Low SIRs indicate better performance in preventing infections. The CDC produces an annual report for each state showing the state’s level of improvement in relationship to their baseline and other states. The CDC report includes central line blood stream-associated infections (CLABSI), catheter-associated urinary tract infections (CAUTI), surgical site infections (SSI) for abdominal hysterectomies and colon surgeries, and hospital-acquired methicillin-resistant Staphylococcus aureus (MRSA) and Clostridium difficile infections. The latest report shows Wisconsin hospitals improvement and relative performance is outpacing the national performance in every infection. All of these infections are included in the work of the Great Lakes Partners for Patients HIIN to drive these rates even lower.
Catheter-Associated Urinary Tract Infections (CAUTI)

A catheter-associated urinary tract infection (CAUTI) is one of the most common hospital-acquired infections. Between 15-25 percent of hospitalized patients have a urinary catheter placed during their hospital stay. Patients become at risk for developing an infection if aseptic techniques are not followed during insertion or the catheter is not cared for properly. The risk of infection is directly related to how long the catheter is in place. The best strategy for avoiding these infections is to not use a catheter if it is not necessary and to remove it as soon as it is no longer needed.

Wisconsin hospitals have been working to reduce CAUTIs with WHA since 2008 and have reduced CAUTI infections by 56 percent. Wisconsin hospitals publicly report their CAUTI rates on CheckPoint (www.WiCheckPoint.org). Hospitals across the state will continue to work with WHA in 2017 in the HIIN project to either further reduce their CAUTI rate or ensure they sustain their rate if they have already achieved a low infection rate.

### Table: Catheter-Associated Urinary Tract Infections (CAUTI)

<table>
<thead>
<tr>
<th>HAI Type</th>
<th># of Wisconsin Hospitals That Reported Data to CDC's NHSN, 2014*</th>
<th>2014 SIR vs. 2014 Nat'l SIR</th>
<th>2014 SIR vs. Nat'l Baseline†</th>
<th>2014 State SIR</th>
<th>2014 Nat'l SIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLABSI</td>
<td>Nati Baseline: 2008</td>
<td>96</td>
<td>30%</td>
<td>65%</td>
<td>0.35</td>
</tr>
<tr>
<td>CAUTI</td>
<td>Nati Baseline: 2009</td>
<td>118</td>
<td>22%</td>
<td>21%</td>
<td>0.79</td>
</tr>
<tr>
<td>SSI, Abdominal Hysterectomy</td>
<td>Nati Baseline: 2008</td>
<td>81</td>
<td>12%</td>
<td>28%</td>
<td>0.72</td>
</tr>
<tr>
<td>SSI, Colon Surgery</td>
<td>Nati Baseline: 2008</td>
<td>90</td>
<td>2%</td>
<td>5%</td>
<td>0.95</td>
</tr>
<tr>
<td>MRSA Bacteremia</td>
<td>Nati Baseline: 2011</td>
<td>89</td>
<td>44%</td>
<td>51%</td>
<td>0.49</td>
</tr>
<tr>
<td>C. difficile Infections</td>
<td>Nati Baseline: 2011</td>
<td>99</td>
<td>3%</td>
<td>30%</td>
<td>0.90</td>
</tr>
</tbody>
</table>

*The number of hospitals that reported to NHSN and are included in the SIR calculation. This number may vary across HAI types; for example, some hospitals do not use central lines or urinary catheters, or do not perform coon or abdominal hysterectomy surgeries.

†Nat'l baseline time period varies by HAI type. See first column of this table for specifics. For additional data points, refer to the technical data tables.

![Catheter Associated Urinary Tract Infections](image-url)
HOSPITAL HIGHLIGHTS

St. Elizabeth Hospital, Appleton; Mercy Medical Center, Oshkosh; and Calumet Medical Center, Chilton are part of Ascension Wisconsin and share the same infection preventionist. The three hospitals worked together to implement a number of changes to their care of patients with a urinary catheter after attending the WHA/MetaStar “Re-Energizing CAUTI Efforts” in December 2015. Clinical nurse leaders (CNLs), the infection preventionist and patient unit safety champions used the Plan-Do-Study-Act (PDSA) model for improvement to implement the following processes with support from the vice presidents of nursing and quality.

- Best practices for insertion and management of catheters were developed with the catheter supplier and shared with staff during nursing unit huddles. Learnings shared in the huddles also included information on biofilm and infection processes.
- Visual electronic boards identify patients with a Foley catheter. The CNLs receive a daily report identifying all patients in the hospital that have an in-dwelling Foley catheter to help monitor continuation reasons. Each registered nurse documents the reason for continuation of a catheter every shift, using continuation criteria developed by their Standards of Care Council.
- Each CAUTI that occurs is entered into quality software as an event to be investigated by leadership.
- Daily associate huddles include ongoing discussion about the need for continuation of Foley catheters, safety practices and tips and tricks on proper insertion practices as well as feedback when a CAUTI occurs.
- Unit level NHSN Targeted Assessment for Prevention (TAP) reports are used to monitor infection and catheter utilization rates. Foley utilization reports are posted on each unit.
- Staff now work to discontinue the Foleys earlier in the day. This helps patients be more mobile, which assists with transitions in their care.

The strategies implemented by St. Elizabeth Hospital, Mercy Medical Center and Calumet Medical Center have resulted in a 20 percent reduction in catheter utilization days when measured at the hospital level. Monthly results are shared with associates in the units, safety champions, the quality council and leadership. They attribute their success to engaging the bedside staff, who started with helping them understand the evidence about why this is an important patient safety issue and creating a common patient-centered goal. Once nurses had a better understanding of the goal, they were quick to adopt the improvement strategies for their patients.

For more information contact Cheryl Schmidt, regional director, quality, at cheryl.schmidt@ascension.org; Heather Schimmers, vice president of patient care services, at heather.schimmers@ascension.org; or Brenda Ehlert, director, infection prevention, at brenda.ehlert@ascension.org.

Staff and hospital leaders at Aspirus Wausau Hospital, Wausau, work together every day to prevent CAUTIs. The positive results of their work have resulted in 23 percent fewer catheter days and 74 percent fewer infections than what they had in 2014. Aspirus looked outside of their system for help by consulting with Bellin Health System in Green Bay about best practices related to catheter-associated processes and use of data for feedback. They also partnered with the catheter vendor, who provided onsite return demonstration audits on catheter insertion technique and correct usage of the products. A combination of methods, that include the following, have helped achieve these results:

- The electronic medical record helps staff adhere to good practices. The system prompts staff with appropriateness criteria when a catheter is ordered, pop-up reminders alert providers when a catheter is being used as a reminder to consider discontinuation and dedicated areas support documentation of catheter care and continued necessity.
- Preventing CAUTIs receives constant vigilance through discussion during daily leadership rounds, staff huddles, daily review of continued necessity by staff and review of root causes if an infection occurs.
- CAUTI results are communicated to staff using multiple methods. Infection rates are displayed graphically and shared weekly with leaders and they are posted on the intranet and are part of routine quality and infection committee and management reports. The CEO helps communicate progress to all staff in the hospital-wide newsletter.

The key to Aspirus Wausau Hospital’s success is their understanding that they can’t focus on just one intervention. They combine consistent compliance with all aspects of good clinical care with leadership involvement, ongoing feedback to the whole organization on how they are doing and continued focus on how to maintain the good results they have achieved. For more information contact Anna Marciniak, infection preventionist, at Anna.Marciniak@aspirus.org.
Almost half a million individuals develop a **Clostridium difficile** infection (CDI) in the United States each year. CDI is a diarrheal illness that commonly occurs in people who have been on antibiotics, as these drugs can change the normal flora in the gut. CDI can multiply due to this change, and in turn, creates a poison that causes diarrhea. At risk individuals include those with frequent hospital admissions, older individuals (80 percent of CDIs occur in individuals older than 65 years of age), immune-compromised, and those who have inflammatory bowel disorders. Individuals with CDI have a 77 percent chance of being readmitted within 30 days of discharge from the hospital.

WHA has partnered with MetaStar to develop and implement a CDI toolkit based upon resources from CDC. The toolkit includes use of a Targeted Assessment for Prevention (TAP) report from the National Health and Safety Network (NHSN) and an assessment tool that allows hospitals to assess their current practices against evidence-based best practice. A corresponding electronic resource guide allows the hospitals to quickly prioritize their gaps and where to concentrate their improvement efforts. The TAP strategy and toolkit were recently featured in the 2016 winter *Infection Preventionist*, published by the Association for Professionals in Infection Control and Epidemiology.

The rates of CDI had been increasing in Wisconsin, as they have been nationally. However, this upward trend did not continue in the first half of 2016. Hospitals across the state will continue to work on reversing this trend in 2017 as part of the HIIN project. Hospital-specific CDI rates are available on WHA’s CheckPoint (www.WiCheckPoint.org).

### Antimicrobial Stewardship

According to the Centers for Disease Control and Prevention (CDC), 20-50 percent of all antibiotics prescribed in the country’s acute care hospitals are either unnecessary or inappropriate. Antibiotics can have serious side effects, including adverse drug reactions and *Clostridium difficile* infections. Increased antibiotic use also leads to bacteria that are more resistant to antibiotics. The key to addressing antibiotic resistance is to develop consistent prescribing practices, which is usually done via an antimicrobial stewardship program (ASP).

ASP interventions have been shown to improve individual patient outcomes, reduce the overall burden of antibiotic resistance and save health care dollars. The National Action Plan for Combating Antibiotic-Resistance Bacteria states that by 2020 an ASP will be established in all acute care hospitals, improving antibiotic stewardship across all health care settings.

In 2015, WHA established a joint effort that included MetaStar, the Pharmacy Society of Wisconsin and a group of 20 Wisconsin hospitals. This group of pharmacists, infection preventionists and quality staff developed an enhanced tool to guide hospital ASP efforts. The tool is based on the CDC and Epidemiology Checklist for Core Elements of Hospital Antibiotic Stewardship programs.
The enhancement tool, written in the CDC Targeted Assessment for Prevention (TAP) style, includes a gap analysis to assess current practices and organizational readiness. In addition, an implementation resource guide helps organizations identify where to prioritize their next steps, based on their gap analysis. The tool is being used by the 79 hospitals participating in the Great Lakes Partners for Patients Hospital Improvement Innovation Network (HIIN). In December 2016, the tool and success with its use was shared at the Center for Medicare and Medicaid Services 2016 Quality Conference.

Since starting this project, there have been significant improvements in the use of key components of an effective ASP:

- 67 percent increase in the presence of a written statement of leadership support, which is key to organizational support and staff engagement;
- 82 percent increase in use of an “antibiotic time out,” which allows staff to re-evaluate the patient and determine if the antibiotic is still needed and if it is the right drug, at the right dose and for the right amount of time;
- 39 percent increase in internal sharing of antibiotic use patterns;
- 23 percent increase in feedback to providers on how to improve antibiotic utilization; and,
- 29 percent increase in staff education about the importance of ASP.

As seen by the map below, many Wisconsin hospitals have effectively implemented the seven ASP core elements, as measured by CDC. This work will continue in 2017 as part of the HIIN.

[Map showing the percent of hospitals with antibiotic stewardship programs by state, 2015.]

*Photo courtesy of Holy Family Memorial, Inc.*
Sepsis

When a patient has an infection, it puts them at risk for developing sepsis, which is the body’s toxic response to infection. This response can lead to tissue damage, organ failure and death. Sepsis can occur in anyone, at any age, from any type of infection.

Wisconsin hospitals are reducing sepsis mortality through early detection and rapid aggressive treatment. The quicker sepsis is identified and treated, the better the chances of that patient surviving this serious condition. Sepsis can be hard to diagnose because the symptoms are the same as other less serious conditions. Hospitals are working to improve their screening process and ability to recognize sepsis more quickly in the emergency departments and in inpatient settings. This includes careful assessment of blood pressure, heart rate, monitoring the results of a lab test called serum lactate and screening for an underlying infection. Once a patient is identified as being septic, it is critical to start appropriate antibiotics and to maintain a normal blood pressure through aggressive use of fluids. Early aggressive treatment prevents a patient from going into septic shock, which has a high rate of mortality.

WHA’s HIIN “Think Sepsis First/Think Katie First” sepsis mortality improvement initiative brings hospitals from across the state together to collaborate and learn best known practices. These combined efforts and an increased focus on sepsis has led to an 18 percent decrease in mortality-associated sepsis since 2013. This measured improvement was highlighted on a national CDC Town Hall Forum webinar in August. Improving care related to sepsis will be a continued focus in the HIIN.

### Ascension Columbia St. Mary’s Hospitals in Milwaukee and Mequon

Ascension Columbia St. Mary’s Hospitals in Milwaukee and Mequon have been working on adherence to sepsis bundles for many years. Senior leaders identified the need for a more proactive approach with the implementation of the CMS sepsis bundle measure in 2015. Leadership assigned an executive sponsor and project lead and made high performance on the new measure a strategic priority. The multi-disciplinary Sepsis Performance Improvement Team, comprised of bedside nursing staff, clinical nurse specialists, hospitalists, pulmonary/critical care physicians, emergency department (ED) physicians, quality improvement specialists, pharmacists, nursing administration and informatics/information systems specialists identified and guided the implementation of key strategies to improve performance, which includes:

- The St. John Sepsis Agent, a Cerner EHR clinical surveillance tool, provides for the early detection of patients at risk for sepsis by continuously monitoring key clinical indicators and sending alerts when a risk for sepsis is identified. The ED Patient Tracking Board includes sepsis alert icons
- A Severe Sepsis Screening Tool, built into the electronic health record, is used to screen ED and inpatients for sepsis, in order to incorporate rule-based logic algorithms, promote user-friendliness and ensure proper screening of patients.

(continued on next page)
HOSPITAL HIGHLIGHTS

- Clinical care is standardized through use of sepsis workup order sets for the ED and inpatient settings and a revised ED severe sepsis/septic shock treatment order set.
- The inpatient sepsis admission order set now includes orders for non-ICU settings and a subset of orders to address ICU utilization.
- A lactic acid reflex order is used to automatically repeat a lactic acid when the initial result is greater than 2.0.
- Reminders on the Medication Administration Record (MAR) prompt nurses to contact the attending physician about crystalloid fluid administration, repeat volume status and tissue perfusion assessments.
- A sepsis infographic promotes patient and family awareness about sepsis.
- A monthly report is used to study all process measure failures. The report includes details regarding the cases, missed interventions and potential contributing factors. The report is disseminated to key nursing, medical and senior leadership and missed opportunities are built into the medical staff peer review process. Compliance with the process steps and sepsis mortality is also reviewed each month.

The process changes implemented by the Ascension Columbia St. Mary’s Hospitals have resulted in improved compliance for SEP-1 from 30 percent to 88 percent. Columbia St. Mary’s attributes their success to both people and processes, starting with the incorporation of this work in the strategic plan. The multi-disciplinary structure Sepsis Performance Improvement Team and engaged physician champions guided the improvements. Enhancements made to the electronic health record assist staff with the tools and order sets needed to standardize care. The process of studying defects and building the learning into peer review helps ensure ongoing learning and improvement. The team quickly learned that improving sepsis care is very complex and they would need to conduct multiple Plan-Do-Study-Act (PDSA) cycles to achieve sustainable improvement.

For more information, contact Gina Kinsey, director, quality, at gina.kinsey@ascension.org.

ThedaCare, which includes hospitals in Appleton, Neenah, Berlin, Wild Rose, Waupaca, New London and Shawano, uses a system approach to improving care for patients with sepsis. The opportunity to improve sepsis was identified through review of sepsis bundle compliance and DRG mortality rates. A multi-disciplinary group that included a critical care physician, emergency department physician, hospitalist, surgeon, front line nurses and informatics established the best practices that would be used and modified internal care processes. The process changes include a new way to identify potentially septic patients, along with the following improvements:

- The electronic medical record is used to continually screen all patients for possible severe sepsis and notify the care team when signs and symptoms are present. The system then prompts nurses to screen for potential sources of infection.
- When signs and symptoms of infection are present, nurses initiate a treatment protocol and notify the provider. The providers then use a standard order set for additional testing and antibiotics.
- Processes have been improved to speed up the drawing of blood cultures and administration of antibiotics.
- Compliance with the CMS sepsis bundle measure and mortality rates are reviewed regularly with the board of directors, leaders, staff and physicians.

ThedaCare measures the impact of these process changes at the system and hospital levels. The administration of antibiotics within 60 minutes of when a physician becomes aware of a potentially septic patient has increased from 35 percent to greater than 90 percent. The process changes are resulting in significantly better outcomes with a drop in mortality rate from 25 percent to less than 10 percent. The ThedaCare team attributes their success to engaging a multi-disciplinary team from the beginning. Face-to-face conversations with providers, allowing for open discussion about concerns, helped secure commitment to the proposed changes. This includes establishing a culture in the emergency department that recognizes the diagnosis is not always obvious and consideration needs to be given to over-utilization of antibiotics, which can impact compliance with process measures. Bedside nurse involvement, through the use of nurse champions, ensured nurses were involved in the design and implementation. For more information contact Lynn Hanna, patient safety coordinator, at lynn.hanna@thedacare.org.
Patient Falls

Accidental falls can happen anywhere, including the hospital. Preventing patient falls requires a patient-specific approach. Many hospitalized patients are weak and disoriented by the unfamiliar surroundings. Certain classes of medications such as pain medications, heart medications and antidepressants also put patients at a greater risk for falling. Getting patients up and moving is an important part of every healing process. Balancing the need to be up and walking with the patients’ ability to do this safely is an aspect of patient care that requires constant staff attention. While many patient falls do not result in the patient being injured, when an injury does occur it can be serious and result in increased days in the hospital and costs that could have been avoided.

Hospitals use a variety of strategies to prevent falls, including ongoing assessment of each patient for their fall risk, ensuring the physical environment is free of risks, specialized care plans for patients at greatest risk, educating all staff and involving them in falls prevention and use of hourly rounding.

Wisconsin hospitals, working with WHA to decrease falls that result in an injury, have decreased the rate of falls with injury by 38 percent since the collaborative work and sharing started in 2012. WHA will continue to work with hospitals in the HIIN project to achieve even more improvement. Hospitals report their rate of falls, with a patient injury, on CheckPoint (www.wicheckpoint.org).
Hospital leaders, nurses, nursing assistants and volunteers work together using multiple strategies to reduce patient falls at Aspirus Medford Hospital & Clinics, Medford.

- Fall kit – use of a standard set of supplies, signage and equipment that helps prevent falls and makes it easy for staff to have what they need.
- Patients and families are given information on how to prevent falls when they are admitted to the hospital and again when they leave to prevent a fall at home.
- All employees know the importance of fall prevention and use the fall signs to know which patients are at highest risk.
- Patient rounds are a key component. Multidisciplinary bedside rounds include the patient and family, providers, nurses, pharmacy, dietary, physician therapy, speech therapy and occupational therapy. These bedside meetings are used to discuss patient conditions as well as the plan of care for the day with the patient and family. Staff then make sure they visit the patient room at least hourly.
- The Fall Tree, which displays how many days have passed without a patient fall, is posted so all staff can monitor progress.
- Volunteers offer valuable assistance by sitting with confused patients and keeping them busy with simple activities.
- Fall prevention is extended into the community with the Stepping On program, done in partnership with the Commission on Aging, which includes a fall prevention open house and local radio interviews with safety tips to prevent falls at home.

Aspirus Medford Hospital & Clinics attributes their success to engaging the nurses and nurse aides, who help ensure the system is designed for their environment and can be maintained long term. They also work to ensure they have a proactive culture that makes patient falls an important topic for all staff and focuses on learning from each event with a goal of preventing future falls. For more information contact Nicky Kollmansberger, surgical/quality RN, at nicole.kollmansberger@aspirus.org.

Readmissions

When patients leave the hospital they do not expect to return. However, when they return within 30 days, this is called a readmission. While some readmissions are planned, the majority of readmissions are not. There are many reasons for unplanned readmissions, including advancement of a patient’s disease process or complications from the first admission. The factors that may cause a patient to be readmitted are varied and individual to each patient.

The variation with each patient, which includes the amount of social support they have when they leave the hospital, makes reducing readmissions complex and difficult and requires hospitals to use many simultaneous improvement strategies. These strategies include internal processes such as patient and family education, medication management and ensuring patients have scheduled follow-ups when they leave.

Hospitals are also focusing, in new ways, on helping patients navigate the health care system after they leave. Specially trained nurses, often called care managers, are making follow-up phone calls and sometimes visiting patients in their homes. These managers are working closely with staff in physician offices, nursing homes and other places of care to ensure the patient’s plan of care is being correctly implemented.

While the Wisconsin rate is close to the national benchmark rate of 8 percent, hospitals are committed to driving this rate even lower. Reducing readmissions will continue to be a major focus for hospitals working with WHA in the HIIN. Hospital-specific readmission rates can be found on CheckPoint (www.WiCheckPoint.org).
HOSPITAL HIGHLIGHTS

Wheaton Franciscan Healthcare-Franklin, part of Ascension, has been focusing on reducing readmissions for patients with congestive heart failure (CHF). High readmission rates for this patient population and patient dissatisfaction with the discharge process helped leaders identify this as a focus area. The improvements were guided by a multidisciplinary group that included bedside nurses, pharmacists, the intermediate care discharge nurse and the clinical nurse specialist. The new focus on improved patient education related to medication includes:

- Multiple people on the patient’s treatment team review the patient’s medication list prior to discharge including the physician, bedside nurse, discharge nurse and inpatient pharmacy representative. Communication between the bedside nurse and discharge nurse begins the CHF discharge process. The discharge nurse gathers all appropriate teaching materials, based on the medication list, and provides the pharmacy representative with information about the patient/family as well as any education needs.

- Daily interdisciplinary rounds, which include the clinical nurse specialist, bedside nurses, discharge nurse and inpatient pharmacy representative, identify patients and projected discharge dates and times to ensure appropriate patient education is scheduled.

- The discharge nurse coordinates a meeting with the patient, family and inpatient pharmacy representative to discuss medications and allow patients ample opportunity to ask questions.

- After the pharmacy representative has educated the patient about his/her medications and just prior to the patient leaving the facility, the discharge nurse performs “teach back” with the patient about the medication education he/she received.

- The surrounding community has a large Punjabi speaking population, which results in Franklin caring for a specific population of non-English speaking CHF patients. Since Punjabi is a language that is not able to be supported with an in-person interpreter, the care team utilizes a web-based program with two-way communication and video.

Wheaton Franciscan Healthcare-Franklin sees the highest number of CHF readmissions each year during the months of January through June. During fiscal year 2015, 40 percent of CHF patients were readmitted. Using the techniques described above during the same period of fiscal year 2016, the readmission rate decreased to 18 percent. The department attributes its success to involving all key stakeholders in developing a plan of action and having everyone “on board” to improve care. The team was very transparent throughout their tests of change and ensured consistent follow-through on staff concerns. They found that small strides lead to the greatest successes. By looking at things from a different perspective and undertaking one piece at a time, they were able to make a significant improvement in patient care. Staff quickly saw the benefits of keeping patients out of the hospital and promoting autonomy with their care as well as making the discharge process for both themselves and their patients less cumbersome. For more information contact Jamie Gordon, clinical nurse specialist, at jamie.gordon@ascension.org.
The transitional care nurses at Fort HealthCare, Fort Atkinson work to ensure the coordination and continuity of health care for patients as they transfer from the hospital to home or a community facility. The transitional care program is based on a comprehensive plan of care that includes the patient’s goals and preferences.

Nursing leadership received strong support from hospital leadership, as reducing readmissions became a priority for all direct care providers. Hospitalists were consulted early on and were supportive of the plan around readmissions. The program was rolled out as a continuation of the work the discharge planners do on the unit. Highlights of the program include:

- Nursing, discharge planners, hospitalists, pharmacy and a dietician, as well as physical therapists, respiratory therapy and speech therapy hold a daily multidisciplinary staff meeting. The focus is to provide an update on a patient’s condition with attention to what is needed for an appropriate discharge.

- The transitional care nurses receive referrals for “must-see” patients from nursing, hospitalists or any discipline. The referrals result in home visits or post-discharge calls to ensure the planned follow-ups are occurring. Regular contacts are made with staff at area clinics, skilled nursing facilities, community-based residential facilities (CBRFs) and group homes.

- Bedside visits with patients and families introduce the transitional care nurses and provide an overview of service options prior to discharge. The service is free and includes a review of needs and services offered based on eligibility.

- A checklist is used for phone calls or home visits to identify potential support and safety concerns and ensure post-discharge follow-up occurs.

- The electronic medical record (EMR) combines discharge notes from the emergency room, the floor, discharge planners and transitional care into the same document.

- An enhanced medication reconciliation process ensures “stop meds” are clearly displayed on the medication list. CBRFs and group homes are contacted to ensure medication changes that occurred on discharge have been implemented correctly.

- Access to the electronic records of other community providers helps communication and clarification of histories, medications and follow-up visits.

- Monthly reports are shared with the quality committee, administration and posted for staff on bulletin boards. When a patient is readmitted, a data collection tool is completed by nursing, pharmacy, dietary and the discharge planners, the patient and/or family are interviewed and the EMR is reviewed to identify risks and causes.

- Preventing readmissions is a county-wide priority for all health care providers. The Jefferson County Transitional Care Coalition evaluates opportunities across providers in the county.

With these efforts in place, Fort HealthCare’s readmission rate decreased from 8.9 percent to 2 percent in early 2016. They approach this as a community team effort to assist in making transitions safe and accurate. Turf wars were avoided and the team made sure to let community partners know the team appreciated their care and assistance in improving care for mutual patients. It was not evident what issues were embedded in the discharge process until staff got out in the home. They had thought they were doing a good job with discharge instructions, but the reality on the receiving end was not always the same. It quickly became evident that bridging the gap allowed Fort HealthCare to fix issues and change processes quickly to avoid errors and better provide support.

For more information contact Linda Detwiler, (linda.detwiler@forthc.com), Cecilia Smoniewski, (cecilia.smoniewski@forthc.com), or Connie Philpot, (connie.philpot@forthc.com).
Ministry Health Care Hospitals, part of Ascension; St. Elizabeth Hospital (Appleton), Mercy Medical Center (Oshkosh), Ministry Saint Michael’s Hospital (Stevens Point), Ministry Saint Clare’s Hospital (Weston), Howard Young Medical Center (Woodruff) and Ministry Saint Mary’s Hospital (Rhineland) have embarked on a journey to promote integration of palliative care services into the care of patients with life-threatening illness. This work aligns with their commitment to high-quality, person-centered care. One outcome that has been positively impacted by these efforts is the reduction of hospital readmission rates.

Palliative care has been included in the strategic goals of the organization with successful implementation metrics included in hospital leaders’ performance reviews. Knowing the importance of local engagement, each hospital was asked to identify executive and operational champions. Key elements of this work include:

- Expansion of specialty-level palliative care services along with promotion of primary palliative care services;
- Promotion of a culture of understanding and acceptance of palliative care with patient, families and staff;
- Palliative care triggers and the use of palliative care team daily huddles to identify patients and coordinate their care; and,
- Collaboration with medical executive committees, case management and quality services.

The work of reducing readmissions is a team effort that includes providers, case management, nursing, palliative care specialists, community-based home health and hospice services, spiritual services and system support services such as staff development, analytics and quality staff.

Ministry tracks their success by measuring completed palliative consults and reductions in readmission rates, as shown in the table below. They attribute their success to ensuring the program was aligned to system strategic goals and leadership incentives. It was also critical to maintain a person-centered philosophy during difficult circumstances for vulnerable patients and families.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Consults Completed in FY2016</th>
<th>Readmission Rate* 2014</th>
<th>Readmission Rate- Current</th>
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<tbody>
<tr>
<td>St. Elizabeth Hospital</td>
<td>215</td>
<td>12.6%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Mercy Medical Center</td>
<td>110</td>
<td>10.2%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Ministry Saint Michael’s Hospital</td>
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<td>16.3%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Ministry Saint Clare’s Hospital</td>
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<td>12.9%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Howard Young Medical Center</td>
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<td>11.8%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Ministry Saint Mary’s Hospital</td>
<td>180</td>
<td>11.3%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

*2014 data includes heart failure, pneumonia, and acute myocardial infarction only

For more information contact Ann K. Patek, director of palliative care, at ann.patek@ascension.org.
Highlights in Improving Care at the Local Level

The previous sections of this report have described statewide improvement collaboratives led by WHA. These topics are only a portion of what Wisconsin hospitals are working to improve. Each hospital has a strategic quality plan that also includes quality issues that may be unique to their local setting and patient population. Hospitals use the same quality improvement strategies when they work to improve care within their individual hospital or system. The following descriptions serve as examples, not an exhaustive list, of good quality work that is happening at the local hospital level.

Surgical Site Infections - Midwest Orthopedic Specialty Hospital, Franklin, has been working to reduce surgical site infection (SSI) rates. An interdisciplinary team of physicians and nurses, along with support departments including infection control, environmental services (EVS), perioperative and inpatient care worked together to make important changes in the care of surgical patients. The teams used published literature to guide their focus on SSI prevention, to include environmental factors, perioperative management and patient risk factors. Staff used PDSA forms and techniques learned during WHA improvement collaboratives, data and team huddles to implement the following changes:

- Strategies to partner with patients on infection prevention are included in their preoperative education. This includes adherence to infection prevention measures, preoperative bathing and basic hand hygiene on admission. Patient education and printed materials are available in multiple languages to promote equity of care.
- A “Nose to Toes” protocol includes a full body chlorhexidine gluconate (CHG) wipe and nasal swab with povidone iodine before surgery.
- Preoperative order sets are standardized to ensure appropriate utilization and selection of prophylactic antibiotics.
- The use of ultraviolet light technology is based on an environmental decontamination schedule and the EVS staff uses a checklist to standardize their cleaning.
- Regular audits are completed to ensure adherence to operating room standards such as appropriate hand scrubs.
- SSI data is discussed during daily staff huddles, along with a stoplight report for closed loop communication about resolutions to identified safety concerns.

These changes are reflected in important process and outcome metrics. Use of the “Nose to Toes” protocol has improved by 72 percent and the six-month standardized infection ratio has been reduced by 74 percent. Results are shared via daily staff updates, monthly team reports and hospital scorecards. These meaningful improvements are attributed to a team approach and standardized performance improvement plans that included routine monitoring and sharing of the data. The work has impacted the spirit of transparency and team collaboration within the organization. Support department staff who previously felt disconnected from patient outcomes are eager to fully engage in initiatives. Through this work caregivers now talk more openly about opportunities for improvement to prevent all adverse outcomes. For more information contact Amy Ketchum, clinical nurse specialist, at amy.ketchum@ascension.org.

Enhanced Recovery After Surgery - Implementation of enhanced recovery after surgery (ERAS) protocols for patients undergoing elective bowel surgeries at St. Elizabeth Hospital, Appleton, ensure consistent practices and facilitate optimal patient outcomes and recovery. Key components of the protocol include:

- Collaboration of a general surgeon-led interdisciplinary team together with key stakeholders from the clinic, pre-operative assessment, consultation and education, operating room, post-anesthesia care, inpatient care, pharmacy and infection prevention.
- Clinic surgery scheduling form includes key pre-operative ERAS elements, such as ordering appropriate labs, diet and prophylactic antibiotics.
• Surgical time-out enhancements include verbalization of antibiotic re-dosing time, reminder for the entire team to change gloves when the dirty portion of the procedure is completed and use of a separate instrument closing tray.

• Anesthesia checklist contains key items specific to ERAS procedures including post-operative nausea and vomiting prophylaxis, goal-directed intra-operative fluid therapy, normothermia and multi-modal analgesia.

• Inpatient bowel surgery order set has been modified to include ERAS elements such as increased ambulation expectations, eating all meals in the chair, chewing gum regularly, discontinuation of intravenous fluids the morning of post-op day 1, and multi-modal pain management to minimize narcotic use. Care maps help patients navigate the recovery process and nursing associates to ensure patient compliance with recovery goals.

• Post-operative transition instructions address increased activity expectations, continued use of incentive spirometry, dressing care instructions and the importance of contacting the general surgery office first, rather than presenting to the emergency department.

The ERAS protocols used for patients undergoing elective bowel surgeries at St. Elizabeth Hospital are on par with the same care provided in leading-edge academic centers around the country. Use of the protocols has led to 70 percent of elective bowel surgery patients being transitioned to home within two days of surgery. The desire to provide patients with the best possible care in order to achieve the best possible outcomes motivated all team members throughout every step of their process. For more information contact Jessica Kaufman, clinical nurse leader at Jessica.Kaufman@ascension.org.

**Surgical Outcomes - Columbus Community Hospital, Columbus** uses three key strategies to ensure high-quality surgical outcomes. These strategies include data-driven decision making, program standardization and use of known best practices. The tactics they use to implement these strategies include:

• Checklists to aid nurses in appropriate antibiotic selection and ensure appropriate administration prior to incision;

• Nurse-driven protocols to improve timeliness of workflow and select standard processes;

• Surgical order sets to cue physicians to select the recommended VTE prophylaxis;

• Retrospective case review and follow-up with providers and surgical team members;

• Strong partnership with the Prairie Ridge Health Clinic Orthopedic Excellence Program, which includes:
  » Prior to surgery, joint replacement group meetings provide an overview surgical intervention expectations and recovery.
  » Peer to peer support during hospital stay where patients cohort in a select unit of the hospital to encourage them to engage in a competitive, safe and supportive environment of healing.
  » Each orthopedic unit team member is provided education on post-surgical care specific to joint replacements to facilitate ease of addressing patient questions and comfort with expected outcomes.

• Care is standardized to best practices related to anesthesia and post-operative pain control, which allows patients to become mobile sooner while reducing medication side effects such as dizziness, unsteady gait and confusion. As a result, joint replacement patients experience:
  » Less pain when rising and walking; 96 percent of patients report mild to no pain when walking;
  » Fewer days in the hospital: average length of stay is 2.2 days, which is 1.0 days fewer than the national average;
More patient discharges directly to home: 88 percent of patients are discharged directly to home as opposed to 66 percent nationally; and,
Patients walk further and longer: many walk an average of 500 feet prior to discharge.

Organizational data transparency has been key to the successes of Columbus Community Hospital’s surgical program. Monthly data review and subsequent sharing throughout the organization reinforces the culture of transparency, accountability, high quality outcomes and patient safety. For more information contact Rob Pasbrig, director of quality, at RPasbrig@cch-inc.com.

**Blood Utilization - Wheaton Franciscan Healthcare-All Saints, Racine** partners with BloodCenter of Wisconsin (BCW) to raise awareness, begin dialogue about blood utilization and promote appropriate use of blood products. They use multiple strategies to ensure they can effectively manage their use of blood, including:

- Multi-disciplinary teams from different positions and departments allows for a variation in viewpoints and a sense of involvement in process changes.
- Streamlined nursing blood administration processes include:
  - Transfusion start times are aligned to evidenced-based practice, which decreased transfusion times from three hours to two hours.
  - The process for verification of the blood product allows trained patient care associates to verify blood with the nurse.
  - Blood product delivery can be done via the pneumatic tube system to most patient care areas, which increases nurse time returns at the bedside.
  - Blood Product Issue form makes transfusion services aware the nurse is ready for the blood.
- Practice is standardized and visible to providers via an electronic blood transfusion order:
  - Updates to indications to support evidenced-based transfusion practice guidelines are automatic; and,
  - Informed consent is a check box for the provider.
- Standardization for treatment of massively bleeding patients through use of a hospital-wide Massive Transfusion Protocol.
- Management of inventory and supplies by Transfusion Services:
  - Avoids excess inventory and helps staff visually know when to replenish supplies;
  - Blood bank equipment was moved for better ergonomics;
  - Decrease in inventory stock levels based on past usage and consensus from the transfusion services staff; and,
  - Two units of thawed plasma are available at all times due to the increased usage.
- Use of a Data Analytics Tool:
  - Provides department reports on blood usage and helps educate all providers;
  - Increased collaboration with hospitalists, who provide around-the-clock care; and,
  - Individual blood usage reports.

The changes in Wheaton Franciscan Healthcare – All Saints’ blood processes has resulted in a 20 percent decrease in the number of orders for two units of blood and a 10 percent decrease in total units. They have also seen a 10 percent decrease in their overall cost of blood. They attribute their success to data sharing and education on best practices at all staff levels. Sharing blood utilization data with departments opened new avenues to change habits to improve patient care and reduce costs. For more information contact Ken Morris, quality director, at Kenneth.Morris@ascension.org.
Influenza Immunizations - The senior leaders at Ascension Columbia St. Mary’s, Milwaukee, promote a culture of safety for every patient. Coupling culture with collaboration are key drivers in making sure their eligible patients receive influenza immunizations before they leave the hospital.

The Influenza Vaccine Steering Committee includes team members from across the organization: pharmacists, frontline nursing staff, nurse and infection prevention leadership, quality professionals and clinical informatics specialists. Endorsed by senior leadership, the committee works to develop, prioritize and implement multi-disciplinary strategies to alert nurses at both patient admission and discharge about assessing for and administering the influenza vaccine to their patients.

Feedback during the development and implementation phases of any electronic medical records project are critical. Revising nurse workflows are carefully considered and tested before going live to make sure alerts are timely and accurate. Input from frontline care staff as well as clinical informatics staff are considered for best-practice applications in the electronic health record.

The improvement project is now part of daily work. Nurses are prompted with mandatory, standardized assessments, for both pediatric and adult patients, 24 hours after admission and again prior to discharge. The immunization status of each patient is part of daily care coordination round and unit-based meetings. Performance data is reviewed regularly by all stakeholders to ensure project gains are sustained.

This “book-end” approach to influenza immunizations has helped Ascension Columbia St. Mary’s achieve a >99 percent immunization rate. They attribute their success to collaborative, multidisciplinary teamwork endorsed by actively engaged senior leadership, accompanied by a continued focus on how to improve reliability and promote the culture of patient safety. For more information contact, Gina Kinsey, director, quality, at gina.kinsey@ascension.org.

The Hospital Sisters Health System (HSHS) Eastern Division includes HSHS St. Clare Hospital, Oconto Falls; HSHS St. Mary’s Hospital Medical Center, Green Bay; HSHS St. Nicholas Hospital, Sheboygan; and HSHS St. Vincent Hospital, Green Bay. HSHS leaders recognize opportunities to improve inpatient care and use experts from across their staff to design and implement robust quality care processes and workflows. One successful example is ensuring influenza immunization screening and administration is completed prior to discharge.

The Professional Nurse Practice Council authorized a project workgroup from nursing staff and information technology to find a way to ensure patients are screened and given an influenza immunization, if needed, before they are sent home or to another care setting. The electronic health record does not allow staff to print patient discharge instructions if the immunization process is incomplete. In addition, the team uses a real time immunization “dashboard” that is monitored on the patient care units to see if the screening has been completed appropriately. Following up on opportunities identified by the dashboard only takes a couple of minutes and saves time at discharge.

HSHS nurses are glad to be part of the project, and the rate of immunizing eligible patients prior to discharge went from 90 percent to nearly 100 percent. Monitoring data to ensure the good work has been sustained is important. Staff regularly communicate the performance data to the Professional Nurse Practice Council, and also inform patients and families about this important goal. Leadership teams at HSHS know that their support and encouragement of highly reliable process design is a hallmark of staff satisfaction and patient safety. For more information, contact Karen Allard, quality facilitator, at Karen.Allard@hshs.org.

Stroke - Staff from across the hospital at Aspirus Riverview Hospital and Clinics, Wisconsin Rapids team up to reduce stroke care delays. Led by the chief nursing officer, representatives from the emergency department, registration, imaging, education and quality improvement apply Lean Six Sigma methods to evidence-based care delivery methods, improving critical care times for patients with stroke symptoms.
Stroke team members provide up-to-date education about stroke signs and symptoms to all hospital staff and emergency medical service (EMS) providers. This education is provided through email, staff meetings and online learning modules.

A newly implemented “Stroke Alert” protocol activates stroke team members from imaging, lab, emergency services and physicians to work quickly so that CT scans, labs and physical assessment results are provided as quickly as possible for physicians to determine emergent treatment options.

The metrics of door-to-stroke team response, and door-to-CT interpretation are measured and reported to the hospital's Stroke Committee on a quarterly basis. Currently, door-to-CT time is 5 minutes, and door-to-CT interpretation is 21 minutes. Aspirus Riverview’s collaborative approach among multiple departments helps them quickly identify stroke symptoms and communicate it to appropriate staff to get the acute stroke patient the critical care they need as quickly as possible. For more information contact Colleen Kane, DNP, at colleen.kane@aspirus.org.

**Telemetry – HSHS Sacred Heart Hospital, Eau Claire** was consistently running out of telemetry monitoring equipment and staff noted patients could be on telemetry for long time periods with no signs of arrhythmia. This led to a partnership with Oakleaf Medical Network and Marshfield Clinic physicians to develop and use standardized telemetry monitoring guidelines. Through this clinical partnership, physicians and nurses provided input in the testing and development of standardized guidelines and the following process changes:

- Enhancements to the electronic medical record allow for incorporation of new order sets as well as modifications to existing order sets;
- Utilization of existing American Hospital Association and the American Cardiology College guidelines in the development of a process roadmap;
- Regular communication to staff on the project process via multiple avenues, including daily interdepartmental safety huddles, email, quality committees, individual meetings with cardiologists and other physicians, as well as A3 poster reports for hospital colleagues; and,
- Training for physician staff includes quick reference guide to ensure consistent practices for using order sets.

Clinician engagement and improving work relationships throughout the medical staff has been a key component in the success of standardizing telemetry monitoring guidelines at HSHS Sacred Heart Hospital. Practice standardization, through physician order sets, has positively impacted workload efficiencies and reduced costs. Telemetry charges have been reduced by an average of $280 per patient for an annual reduction of $1,086,176. On average 8-10 telemetry patient monitors are now available compared to only 1-3 monitors before the standardization project began. For more information contact Travis Christman, clinical director of cardiology, at Travis.Christman@hshs.org.

**Bar Code Medication Administration -** The Bar Code Medication Administration (BCMA) process at ProHealth Care, which includes Oconomowoc Memorial Hospital, Oconomowoc, and Waukesha Memorial Hospital, Waukesha, ensures the “five rights” of medication administration: right patient, right dose, right route, right time and right medication. Their bar code strategy includes:

- System-wide assessment of Bar Code Medication Administration (BCMA) utilization, which allows for an understanding of current medication dispensing practices and identifies areas of opportunities by department;
- Prioritization of BCMA implementation based on the number of total medications and risk profile of medications administered by department;
- Involvement of bedside registered nurse staff in the review of current workflow and proposed redesign;
- Monthly review of BCMA compliance and department-specific follow up;
- Sharing of progress reports, which include identified barriers, with safety councils;
• Operational leaders and nursing shared governance teams serve as champions for the work;
• Bar code medication administration is an expectation; and,
• Additional scanners are made available on units and wireless scanners are used in the emergency department to help address barriers to compliance.

Engagement of frontline nurses is key to the success of the bar code medication administration at ProHealth Care. Creating a system expectation and monitoring compliance ensures the five rights of medication administration are at the forefront of their patient care. For more information contact Jann Pfaff, geriatric/medical clinical nurse specialist, at jann.pfaff@phci.org.

**High Reliability** - At **Memorial Medical Center, Ashland**, the obstetrics unit is striving to be highly reliable. Physicians and nursing staff on the obstetrics unit are empowered to work as a team, interact collegially and collaborate on clinical solutions in a respectful manner. Their approach to high reliability includes the following:

- An interdisciplinary approach to patient-centered care;
- Utilization of the specialized knowledge of the medical staff, perioperative services; social services, cardiopulmonary, anesthesia, lab, respiratory therapy, pharmacy, registration and environmental services to improve quality and excellence of care;
- Patients and families are central to and actively engaged as members of the health care team;
- Feedback from post-discharge calls provides timely feedback for changes and efforts to be implemented by the nursing staff;
- Fostering a just culture of openness by encouraging and promoting an active communication and identification of opportunities for improvement;
- Creating standardized provider order sets, checklists, algorithms of care, templates for the electronic medical record, patient hand-off procedures and other standardized protocols to ensure safe and evidenced-based care is provided;
- Bed side shift report to engage patients in their care plan;
- Use of staff huddles, emails and message boards to communicate changes amongst staff;
- Staff education to ensure high-quality evidence-based care for patients; and,
- Collaboration with the NICU tertiary medical center to teach S.T.A.B.L.E. classes regarding post-resuscitation and pre-transfer care of a sick newborn. The S.T.A.B.L.E. program includes six areas of newborn assessment and care: Sugar, Temperature, Airway, Blood pressure, Lab work, and Emotional support.

A healthy work environment is critical to promoting patient safety and quality care. The multi-disciplinary team and collaborative approach is instrumental in driving improvement within the department and hospital services at Memorial Medical Center. Patient satisfaction scores have been consistently above the 90th percentile and compliance with agreed upon processes is very high. The care patients receive is dependent on the entire team and the team is responsible for working together to drive improvement efforts. For more information contact Nancy Dufek, director of performance improvement, at ndufek@ashlandmmc.com.
Patient-Centered Care - Aspirus Langlade Hospital, Antigo, uses data transparency to focus on patient-centered care. Commitment to service excellence for patients and customers is a long-standing priority at Aspirus Langlade Hospital. Using satisfaction data transparency across multiple disciplines and departments underscores that priority and drives out variation in service delivery throughout the organization.

Leaders from the Board of Trustees, senior executives, medical staff, as well as all department managers and supervisors review patient satisfaction data around the “overall” quality of care regularly. Run charts and other statistical tools are utilized to show historical results and reveal variation. Discussion of successes as well as opportunities for improvement are identified and prioritized.

The hospital’s patient experience coordinator (PEC) is tasked with assisting departments with establishing clearly defined and communicated annual goals for contributing to the hospital’s goal of reaching the 60th percentile in an “excellent” scoring in the overall quality of care responses. The PEC also assists departments in creating, evaluating and implementing changes in care delivery that will align to and support the organizational goal.

Employees are informed of quarterly data results through the hospital’s internal newsletter. Department managers and supervisors meet monthly to review progress of current improvement projects and share their ideas for continued collaboration.

Active engagement of senior leaders, the regular sharing of data and a collaborative improvement approach are key drivers of the success of this effort. Patient satisfaction percentile rankings have increased significantly for 12 of 16 care delivery areas, with seven of the areas achieving the 60th percentile ranking for “excellent” in the overall quality of care patient satisfaction response.

For more information, contact Katie Spiegel, quality resource manager, at Katie.spiegel@aspirus.org or Mary Kubeny, patient experience coordinator, at mary.kubeny@aspirus.org.

Patient Engagement - Cumberland Healthcare, Cumberland, knows the importance of engaging patients in the design of services they offer. Therapists, support staff and the director of rehabilitation services are using patient survey data as well as focused conversations with patients and visitors to make improvements in the registration processes and the physical environment.

Feedback from patients and visitors, whether through after-care surveys or in real time conversations, are shared in department staff and team meetings to identify improvement work needed in privacy, comfort and cleaning. Appointment processes and wait times are being examined to see how they can be streamlined.

In June of 2015, Cumberland’s Press Ganey patient satisfaction survey scores ranked them in the 31st percentile for registration, in the 20th percentile for waiting room comfort, and in the 15th percentile for privacy concerns. One year later, those scores have improved dramatically. Cumberland now enjoys a ranking in the 99th percentile in registration and privacy concerns.

The patient satisfaction survey data and the action plans are posted for regular review by the public, staff and hospital leaders. Using the data to deepen conversations with patients as well as selecting “low hanging fruit” improvement strategies are proving to be early wins that develop momentum. This approach to transparency enhances staff ownership of how they can make a difference in their community. For more information contact Bridget Ranallo, quality management director, at branallo@cumberlandhealthcare.com.
Transforming Care at the Bedside (TCAB)

Being a nurse is one of the busiest, most demanding roles in the hospital. When nurses receive their professional training, it rarely includes the concepts and tools related to quality improvement. Many hospital improvement efforts involve teams of staff that meet away from the bedside, making it difficult for nurses to participate. Transforming Care at the Bedside (TCAB) brings improvement to the bedside and teaches front-line nurses basic skills for improving teamwork and how they do their work. The skills TCAB teaches are vital for nurses and other hospital caregivers to stay resilient in the face of constant change. The changes facing health care mean that all staff must engage in the effort to improve. TCAB teams increase their capacity to improve by focusing on patient safety, patient-centered care, increasing efficiency and improving teamwork.

WHA has been working with teams of hospital nurses to implement TCAB principles since 2010. The fourth group of TCAB hospital teams will complete their work in March 2017. With assistance from WHA, teams actively share their challenges and successes of balancing patient care and leadership duties. In addition to improving patient care delivery, they also focus on the critical foundation of any improvement – creating a culture of deep appreciation and engagement of each member of the care team.

Each TCAB team includes front-line nurses, the unit manager and a senior nurse leader. As nurses learn how to improve their daily work, leaders learn how to transform their leadership style. Finding a new balance between empowering staff to make key changes and holding them accountable to achieve agreed-upon goals is the key to TCAB success. Every hospital has been able to combine the improved leadership with innovative changes to achieve measured improvement in the four areas of focus.

TCAB Innovations

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Successful Innovations</th>
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<tbody>
<tr>
<td>Beloit Health System – Special Care Unit</td>
<td>Bedside shift report and team huddles</td>
</tr>
<tr>
<td>Beloit Health System – Emergency Department</td>
<td>Hourly rounding, volunteers and room equipment checks</td>
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<tr>
<td>Black River Memorial Hospital, Black River Falls</td>
<td>Staff driven changes allow nurses to spend more time at the bedside with patients</td>
</tr>
<tr>
<td>Columbus Community Hospital</td>
<td>Share performance data with staff to encourage new ideas to try</td>
</tr>
<tr>
<td>Froedtert and The Medical College of Wisconsin</td>
<td>Bedside shift report in the ICU</td>
</tr>
<tr>
<td>Community Memorial Hospital, Menomonie Falls</td>
<td>Safety huddles to proactively identify patient and staff safety issues</td>
</tr>
<tr>
<td>Froedtert and The Medical College of Wisconsin</td>
<td>Principles of accountability to improve teamwork</td>
</tr>
<tr>
<td>Froedtert Hospital, Milwaukee</td>
<td>“VIP” folder for easy access to patient information and preferences</td>
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<tr>
<td>Froedtert and The Medical College of Wisconsin</td>
<td>“Inside Out” communication and emotions tools to bring joy to the workplace</td>
</tr>
<tr>
<td>St. Joseph’s Hospital, West Bend</td>
<td>Standardized assessments and observation workflows</td>
</tr>
<tr>
<td>Mercyhealth Hospital and Medical Center-Walworth,</td>
<td>“Fact Mat” for the top 5 admission diagnosis accompanied by a “Your Ticket Outta Here” for patient education teach-backs</td>
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<tr>
<td>Lake Geneva</td>
<td>“Break Buddies” to increase nurses’ ability to get a meal break</td>
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<tr>
<td>ProHealth Care – 4NW</td>
<td>Daily supply check-off sheet</td>
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<tr>
<td>ProHealth Care – 4E Observation</td>
<td>Staff reporting and contacts with patients at and between shift change to improve response times and promote patient-centered care</td>
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<tr>
<td>Southwest Health Center, Platteville</td>
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<tr>
<td>Waukesha Memorial Hospital, Waukesha</td>
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<tr>
<td>St. Clare Hospital, Baraboo</td>
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<tr>
<td>St Croix Regional Medical Center, St. Croix Falls</td>
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Quality Residency

In November 2016, 21 quality professionals completed the highly successful Quality Residency Program, now in its third year. The group, which entered the program last March, successfully completed 10 days of education and networking designed to help them be successful in a quality leadership role.

Quality roles are complex due to the wide range of roles and responsibilities and lack of formal training programs. The multiple roles often include being responsible for regulatory or accreditation requirements, basic risk management skills, quality data reporting methods, data analysis and ensuring quality improvement efforts are successful. These challenges are compounded in rural areas because of both geographical and professional isolation.

The residency program, created through a partnership between the Wisconsin Hospital Association (WHA) and the Rural Wisconsin Health Cooperative, brings participants together for face-to-face learning and networking. The faculty for the program includes staff from WHA, several outside consultants and experienced peers from other Wisconsin hospitals. The program is structured as 10 independent modules that allow new participants to join at any time during the year.

As part of graduation each resident shares a “golden nugget,” which is a practical application of something they learned during the program. These short presentations demonstrate the ability to take complex material and create simple, yet elegant, solutions. Residents commonly present how they have changed their use of data for tracking improvements, redesigned quality dashboards, established better processes for regulatory and accreditation readiness and more effective use of Plan-Do-Study-Act to guide their improvement projects.

The residency program has received national attention from other hospital associations. WHA has assisted the associations in Iowa and Arkansas with establishing similar programs. Two days of this learning is also being offered to hospitals across the three-state Great Lakes Partners for Patients Hospital Improvement Innovation Network (HIIN). WHA is also expanding its reach to physicians in 2017 with the launch of the WHA Physician Quality Academy. The new two-day physician program will offer similar quality training to physicians who have a key quality-related role within their hospital system.
Sharing Our Results with the Public

Health care is often being described as entering an era of consumerism. This means consumers of health care services are becoming more interested in and involved with making choices about their health insurance and who provides their care. We also know that people are looking more often to the internet as a source of information about products and services they are purchasing, including health care.

WHA started the CheckPoint program ([www.WiCheckPoint.org](http://www.WiCheckPoint.org)) more than 12 years ago to serve as a source of reliable information about hospital quality for consumers. Wisconsin hospitals embrace public transparency, with every acute care and critical access hospital participating in the measures that apply to the care they provide. CheckPoint currently includes 60 measures of quality; 75 percent of these are measures of patient outcomes.

Many organizations are now reporting quality measures and have their own unique rating systems. These sites come and go, and many do not openly share how they determine their rating, making it difficult for consumers and hospitals to really understand what the rating means. CheckPoint has remained a steady source of results on measures that are relevant at both the state and national level. It also fully discloses how composite ratings are created. While CheckPoint includes measures reported on other sites, it also includes measures that are not available elsewhere, such as measures related to births. The birth measures report is consistently the report that is accessed most often by site users.

Additions to CheckPoint in the last year include a new measure related to breastfeeding and a modification to the All Cause Readmission measure to now include risk adjustment. The site also has a new look for the report that summarizes all of the measures for a single hospital. Features of the revised look include the addition of the three-star composite ratings and a trend line that makes it easy to see if the measure has changed over time.

CheckPoint results show that Wisconsin hospitals are outperforming hospitals across the country based on key outcome and patient experience measures.

### Key CheckPoint Results

<table>
<thead>
<tr>
<th>Measure</th>
<th>Wisconsin</th>
<th>National</th>
<th>Desired Direction</th>
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</thead>
<tbody>
<tr>
<td>Central Line Infections</td>
<td>Standardized Infection Ratio (SIR) = 0.433 (47 hospitals reporting zero infections)</td>
<td>Standardized Infection Ratio (SIR) = 1.0</td>
<td>Lower is better</td>
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<tr>
<td>Catheter-Associated Urinary Tract Infections</td>
<td>SIR = 0.55 (68 hospitals reporting zero infections)</td>
<td>SIR = 1.0</td>
<td>Lower is better</td>
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<tr>
<td>Clostridium difficile Infections</td>
<td>SIR = 0.96 (37 hospitals reporting zero infections)</td>
<td>SIR = 1.0</td>
<td>Lower is better</td>
</tr>
<tr>
<td>Methicillin Resistant Staph aureus Infection (MRSA)</td>
<td>SIR = 0.54 (101 hospitals reporting zero infections)</td>
<td>SIR = 1.0</td>
<td>Lower is better</td>
</tr>
<tr>
<td>Exclusive Breastfeeding</td>
<td>57%</td>
<td>53%</td>
<td>Higher is better</td>
</tr>
<tr>
<td>Overall Patient Satisfaction</td>
<td>77%</td>
<td>72%</td>
<td>Higher is better</td>
</tr>
<tr>
<td>Patient Would Recommend Hospital</td>
<td>76%</td>
<td>72%</td>
<td>Higher is better</td>
</tr>
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</table>
Summary

Wisconsin hospitals are among the best in the country based on the quality and safety of their patient care. However, that does not mean they are not setting the bar higher and striving for even higher standards. While it is important to celebrate the improvements in patient safety and quality that we have made to date, it is also imperative that hospitals continue to strive for even better performance.

In 2017, WHA will assist members as they continue to improve quality and maximize potential pay-for-performance incentives in the following ways:

- Support the work of 79 hospitals in the Hospital Improvement Innovation Network (HIIN) for the CMS Partnership for Patients project to achieve a statewide 12 percent reduction in readmissions and a 20 percent reduction in hospital-acquired harm;
- Support hospital leaders with the assessment and adoption of principles of high reliability to improve patient safety;
- Launch the WHA Physician Quality Academy, which will provide quality improvement training to physicians who work on quality within their hospital system;
- Support public transparency of quality results by adding measures to CheckPoint (www.WiCheckPoint.org) that align with national and state level value-based initiatives and payment reform; and,
- Work toward new ways to report both quality and cost in a single website.

It is an aggressive agenda aimed at meeting our goal of being among the best states for health care. We know, however, that our members, our patients and our communities expect and deserve nothing less. As we improve quality, we reduce health care costs and patient outcomes are better. That helps assure that Wisconsin will continue to be known for excellent health care, and it will remain an economic development asset to our state.
WHA Member Hospitals

Amery Hospital & Clinic, Amery
Aspirus Langlade Hospital, Antigo
Aspirus Medford Hospital & Clinics, Inc., Medford
Aspirus Riverview Hospital & Clinics, Inc., Wisconsin Rapids
Aspirus Wausau Hospital, Wausau
Aurora BayCare Medical Center, Green Bay
Aurora Lakeland Medical Center, Elkhorn
Aurora Medical Center - Manitowoc County, Two Rivers
Aurora Medical Center, Grafton
Aurora Medical Center, Kenosha
Aurora Medical Center, Oshkosh
Aurora Medical Center in Washington County, Hartford
Aurora Medical Center, Summit
Aurora Memorial Hospital of Burlington
Aurora Psychiatric Hospital, Wauwatosa
Aurora Sheboygan Memorial Medical Center, Sheboygan
Aurora Sinai Medical Center, Milwaukee
Aurora St. Luke's Medical Center, Milwaukee
Aurora West Allis Medical Center, West Allis
Bay Area Medical Center, Marinette
Beaver Dam Community Hospitals, Inc., Beaver Dam
Bellin Health Oconto Hospital, Oconto
Bellin Hospital, Green Bay
Bellin Psychiatric Center, Green Bay
Beloit Health System, Beloit
Black River Memorial Hospital, Black River Falls
Burnett Medical Center, Grantsburg
Calumet Medical Center, Chilton
Children's Hospital of Wisconsin, Milwaukee
Children's Hospital of Wisconsin-Fox Valley, Neenah
Chippewa Valley Hospital, Durand
Columbia Center Birth Hospital, Mequon
Columbia St. Mary's Hospital Milwaukee, Milwaukee
Columbia St. Mary's Hospital Ozauke, Mequon
Columbia St. Mary's, Inc. - Sacred Heart Rehabilitation Institute, Milwaukee
Columbus Community Hospital, Columbus
Crossing Rivers Health Medical Center, Prairie du Chien
Cumberland Healthcare, Cumberland
Divine Savior Healthcare, Portage
Door County Medical Center, Sturgeon Bay
Edgerton Hospital and Health Services, Edgerton
Essentia Health St. Mary's Hospital-Superior, Superior
Flambeau Hospital, Park Falls
Fort HealthCare, Fort Atkinson
Froedtert & The Medical College of Wis. Community Mem. Hosp. campus, Menomonee Falls
Froedtert & The Medical College of Wis. Froedtert Hospital campus, Milwaukee
Froedtert & The Medical College of Wis. St. Joseph's Hosp. campus, West Bend
Grant Regional Health Center, Lancaster
Gundersen Boscobel Area Hospital and Clinics, Boscobel
Gundersen Lutheran Medical Center, La Crosse
Gundersen St. Joseph's Hospital and Clinics, Hillsboro
Gundersen Tri County Hospital & Clinics, Whitehall
Hayward Area Memorial Hospital & Water's Edge, Hayward
Holy Family Memorial, Inc., Manitowoc
Howard Young Medical Center, Woodruff
HSHS Sacred Heart Hospital, Eau Claire
HSHS St. Clare Memorial Hospital, Oconto Falls
HSHS St. Joseph's Hospital, Chippewa Falls
HSHS St. Mary's Hospital Medical Center, Green Bay
HSHS St. Nicholas Hospital, Sheboygan
HSHS St. Vincent Hospital, Green Bay
Hudson Hospital & Clinic, Hudson
Indianhead Medical Center/Shell Lake, Shell Lake
Lakeview Medical Center, Rice Lake
Lakeview Specialty Hospital & Rehab, Waterford
Mayo Clinic Health System - Red Cedar, Inc., Menomonie
Mayo Clinic Health System, Eau Claire
Mayo Clinic Health System-Chippewa Valley, Bloomer
Mayo Clinic Health System-Franciscan Healthcare, La Crosse
Mayo Clinic Health System-Franciscan Healthcare, Sparta
Mayo Clinic Health System-Northland, Barron
Mayo Clinic Health System-Oakridge, Osseo
Memorial Hospital of Lafayette Co., Darlington
Memorial Medical Center, Neillsville
Memorial Medical Center of Ashland
Mercy Medical Center, Oshkosh
Mercyhealth Hospital and Medical Center-Walworth, Lake Geneva
Mercyhealth Hospital and Trauma Center, Janesville
Midwest Orthopedic Specialty Hospital, Franklin
Mile Bluff Medical Center, Mauston
Ministry Eagle River Memorial Hospital, Eagle River
Ministry Good Samaritan Health Center, Merrill
Ministry Our Lady of Victory Hospital, Stanley
Ministry Sacred Heart Hospital, Tomahawk
Ministry Saint Clare's Hospital, Weston
Ministry Saint Joseph's Hospital, Marshfield
Ministry Saint Mary's Hospital, Rhinelander
Ministry Saint Michael's Hospital, Stevens Point
Monroe Clinic, Monroe
Moundview Memorial Hospital & Clinics, Inc., Friendship
Oconomowoc Memorial Hospital, Oconomowoc

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<table>
<thead>
<tr>
<th>Hospital Name</th>
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<tr>
<td>Orthopaedic Hospital of Wisconsin, Glendale</td>
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<td>Osceola Medical Center, Osceola</td>
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<td>Post Acute Medical Specialty Hospital of Milwaukee, Greenfield</td>
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<td>Reedsburg Area Medical Center, Reedsburg</td>
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<td>Rehabilitation Hospital of Wisconsin, Waukesha</td>
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<td>Ripon Medical Center, Inc., Ripon</td>
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<td>River Falls Area Hospital, River Falls</td>
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<td>Rogers Memorial Hospital, Inc., Oconomowoc</td>
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<td>Rusk County Memorial Hospital, Ladysmith</td>
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<td>Sauk Prairie Healthcare, Prairie du Sac</td>
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<td>Select Specialty Hospital-Madison, Madison</td>
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<td>St. Elizabeth Hospital, Appleton</td>
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<td>ThedaCare Medical Center, Berlin</td>
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<td>William S. Middleton Memorial Veterans Hospital, Madison</td>
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<td>Willow Creek Behavioral Health, Green Bay</td>
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