Quality and Patient Safety Department

OVERVIEW AND OUTCOMES REPORT 2009

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It has been a little more than 10 years since the Institute of Medicine’s report on patient safety, To Err is Human: Building a Safer Health System, was published. It is striking to consider the changes in medicine since 1999. While we have not made enough improvement in patient safety, the cultural change since then has been enormous. Perhaps the most striking change has been the willingness to self-examine. The questions “Are we doing everything we can do to be safe?” and “How do we compare to others?” are everyday issues. Everyone is looking at scorecards, and the receptivity of hospital and medical staff to ideas of quality improvement has increased.

To improve we have to measure. This report reflects the enormous effort that goes into metrics.

Reportable measures continue to have high priority. These are the process measures of care (core measures) for acute myocardial infarction, pneumonia and congestive heart failure and the Surgical Care Improvement Project (SCIP). Our numbers continue to reflect reliable care for these conditions. We face two challenges in this compulsory reporting area. The first is devising a way to make sure the patient’s discharge instructions agree with the medications in the discharge summary. After months of effort, a reliable process for this has been tested and should result in improvement in core measure performance in congestive heart failure in 2010. The improvement in SCIP has been phenomenal over the past two years. A new measure about reliable removal of urinary catheters after surgery was added late in 2009 and presents a new challenge, but one that will clearly represent a safety improvement.

Allina and Abbott Northwestern have chosen to focus on some noncompulsory measures as well, particularly readmissions. The work began in congestive heart failure and is now broadened to include pneumonia. Readmission to the hospital is an enormous burden for patients with chronic illness. This is a worthwhile effort.

The department collaborates with Nursing, Pharmacy and the Medical Staff on safety issues. The support of the Medical Staff, particularly Mark Migliori, MD, has been vital to the improvement in adherence to the Universal Protocol. The message of zero tolerance for noncompliance has been clear. Falls remain a challenge. The attention of nursing staff to fall prevention has been enormous. There is month-to-month variation, but trends in falls have been favorable. A multidisciplinary group of nurses, pharmacists and physicians has convened to collaborate on improvement in medication safety.

We have attempted to create a culture of reporting safety issues and near misses. We performed nearly 100 critical event reviews in 2009 in order to learn from circumstances in which care did not go as well as expected.

Infection prevention is another important patient safety area. Efforts have maintained the three major antibiotic resistant nosocomial pathogens at stable levels, and there has been consistent improvement in hand hygiene compliance during the past three years. As is the case elsewhere in the U.S., hospital-acquired Clostridium difficile infection is the major challenge and will receive increased attention in 2010.

The Joint Commission visited Abbott Northwestern in 2009. The preparation for the visit was meticulous, and the surveyors were quite impressed with the attention to safety demonstrated by the organization.

It takes people to get this work done. I feel privileged to be part of this work and to learn from the expertise in performance improvement exhibited by the talented Quality Department staff. The work is never done, but we have a strong foundation for continued success.
Department Overview
Sue Carlson, MS, CPHRM, director, Quality and Patient Safety Department

The Quality and Patient Safety Department works in partnership with Abbott Northwestern's leadership, care providers and staff to improve care and performance. It provides direction and leadership in areas of quality improvement, regulatory compliance, patient safety, risk prevention, infection prevention and medical staff peer review. The department gathers clinical, demographic and financial data and organizes, analyzes and translates this data into useful information that:

- meets customers' needs in each of the identified clinical communities and non-clinical areas
- supports organization goals
- supports the systems and processes necessary to maintain accreditation and achieve regulatory compliance.

The Patient Safety and Quality Program has oversight from the Patient Safety and Quality Committee. This interdisciplinary committee supports and monitors the progress of the hospital's patient safety and quality strategies and creates a partnership between hospital leadership, employees and medical staff to actively address patient safety and quality issues. Examples of such issues include core measures, Universal Protocol, hand hygiene, hand-off communication, national patient safety goals and response to adverse health events.

Abbott Northwestern's Quality and Patient Safety Department oversees the staff members who support the Patient Safety and Quality Program. The staff includes specialists in quality improvement, patient safety, risk management, peer review, infection prevention and data analysis. A regulatory/accreditation manager and a physician who serves as medical director of the Quality and Patient Safety Department also support the program. The quality specialist positions are filled by registered nurses or certified quality professionals who focus on quality, performance improvement activities and patient safety initiatives at the hospital-wide and unit level. Most staff are key members of system-wide (Allina Hospitals & Clinics) quality work. They also participate on unit councils and other committees to report on this work and are key leaders for strategic initiatives such as Universal Protocol, safe skin, core measures and fall reduction. The risk and patient safety specialists focus primarily on reported medical errors, medication safety, near-miss events and ongoing compliance to national patient safety goals. These staff members are registered nurses. They evaluate each reported event and facilitate the event review and root cause analysis. They work cooperatively with Nursing, Pharmacy and Medical Staff leadership to evaluate the care process and determine any causal factors. Information learned from the reviews is shared at the Patient Safety and Quality Committee meetings and with the Nursing communities with a goal of reducing the risk of harm to patients. The regulatory accreditation manager is responsible for oversight of the ongoing regulatory readiness activity and also manages the staff who support the Medical Staff peer review.
Acute Myocardial Infarction Optimal Care

Cardiovascular disease is the leading cause of death in the United States and is the primary disease category for hospital patient discharges. Each year, 900,000 people in the United States are diagnosed with acute myocardial infarction (AMI). Of these, approximately 225,000 cases result in death, and it is estimated that an additional 125,000 patients die before obtaining medical care.

The goal is that all AMI patients receive the appropriate evidence-based treatments to improve outcomes. Data on six indicators are monitored and submitted to the Centers for Medicare & Medicaid Services (CMS) on an ongoing basis: aspirin on arrival, angiotensin converting enzyme inhibitors/angiotensin receptor blockers (ACEI/ARB) for ejection fraction less than 40 percent, aspirin and beta blocker at discharge, smoking cessation counseling, and percutaneous coronary intervention within 90 minutes for ST-elevation myocardial infarction.

Abbott Northwestern has been stellar in providing optimal care to AMI patients, surpassing the national average during the last three years and achieving optimal care goals for more than 99 percent of patients in 2009.
Heart Failure Optimal Care

Nearly 5 million patients in the U.S. have heart failure (HF), and approximately 500,000 to 900,000 new cases are diagnosed each year. Heart failure is the most common Medicare diagnosis-related group, and more Medicare dollars are spent for the diagnosis and treatment of HF than for any other diagnosis.

The goal is that all patients receive the appropriate evidence-based treatments to improve outcomes. Data on four indicators are monitored and submitted to CMS on an ongoing basis: all heart failure discharge instructions are given to the patient (including diet, activity, weight monitoring, symptoms worsening, medications, follow-up care), left ventricular function assessment, ACEI/ARB for ejection fraction less than 40 percent and smoking cessation counseling. Providing all discharge instructions to all patients every time remains a challenge. Tools and work processes are being designed and implemented to improve this aspect of care.

Abbott Northwestern is above the national average for optimal heart failure care.

Reducing Readmissions for Heart Failure Patients

Hospital readmissions reflect how the health care system is functioning as well as the patient population. By improving how hospitals work with primary care physicians and community resources, and by identifying patients at high risk due to socio-economic situations or acuity and addressing these issues, unnecessary hospital readmission should be reduced.

Abbott Northwestern has taken many steps to reduce heart failure readmissions. In 2009 the following key processes were implemented/reinforced:

- follow-up phone call by a nurse within 48 hours for all patients discharged with heart failure
- follow-up appointment made for the patient within 3-5 days of discharge prior to the patient leaving the hospital
- follow-up plan communicated from the discharging physician to the primary care physician
- discharge summary completed by the hospitalist on the day of discharge and given to the patient for reference
- use of the heart failure discharge order set.

Although many strategies have been implemented to prevent readmissions, this continues to be complex and challenging work. The readmission rate for Abbott Northwestern has not changed significantly.
**Pneumonia Optimal Care**

Annually two to three million cases of community-acquired pneumonia (CAP) result in 10 million physician visits, 500,000 hospitalizations and 45,000 deaths. Abbott Northwestern sees approximately 500 patients per year with CAP.

Abbott Northwestern began focused efforts on improving the optimal care score for CAP patients in 2006. Optimal care is defined as the number of patients who receive all interventions appropriate to their diagnosis. The interventions included for pneumonia patients are:

- blood cultures prior to first antibiotic
- smoking cessation advice/counseling
- seasonal influenza and pneumococcal vaccination
- initial antibiotic within six hours of arrival
- initial antibiotic selection for immunocompetent ICU and non-ICU patient.

This work has significantly increased the percentage of patients who receive optimal care, from 55 percent in 2006 to 95 percent in 2009. The 2009 average surpassed the national average of 86 percent for third quarter 2009.

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**Surgical Care Improvement Project**

The Surgical Care Improvement Project (SCIP) is a national quality partnership of organizations committed to improving the safety of surgical care by reducing postoperative complications. The goal of the partnership was to save lives by reducing the incidence of surgical complications by 25 percent by 2010.

SCIP includes nine measures: antibiotic prophylaxis selection, antibiotic prophylaxis start time, antibiotic discontinuation, venous thromboembolism (VTE) prophylaxis ordered, VTE intervention timely, hair removal, beta blockers, normothermia and glucose control.

In 2009, new systems (e.g., physician order set changes, electronic medical record reporting tools, computer-based education modules) were put into place to support health care providers in this work. Surgeons, anesthesia caregivers and nurses worked together to provide the best possible care to patients.

Abbott Northwestern has achieved steady improvement in its SCIP scores over the last four years. In 2009, it surpassed the national average.
Universal Protocol

The Universal Protocol is designed to ensure surgery safety. It applies to all procedures requiring written consent. The protocol includes pre-procedure verification, site marking and the time-out. The surgical team verifies the following eight elements during the time-out: (1) patient identity, (2) position, (3) correct side/site marked, (4) procedure, (5) accurate and complete consent, (6) relevant images properly labeled and displayed, (7) antibiotics/irrigation fluids, and (8) safety precautions.

In 2009, Abbott Northwestern earned a Minnesota Hospital Association Patient Safety Excellence Award. This award recognized the hospital for implementing more than 90 percent of the suggested best practices in the Safe Site Roadmap for a comprehensive safe site procedure program.

A time-out observation monitoring process was implemented throughout the hospital. The intent was to provide real-time coaching as needed and ensure all steps are in place. The Allina Quality Council reviewed monthly data for four hospital departments: Operating Room, Cardiovascular/Electrophysiology Lab, Medical Imaging and WomenCare®. Abbott Northwestern continues efforts to eliminate wrong patient, wrong site/side and wrong procedures.

<table>
<thead>
<tr>
<th>Universal Protocol Step</th>
<th>Compliance (Goal = 100%)</th>
</tr>
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<tbody>
<tr>
<td>Proceduralist marked site with initials</td>
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<tr>
<td>Time-out was complete stop of activity</td>
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<tr>
<td>Time-out elements met</td>
<td>99.9%</td>
</tr>
<tr>
<td>Universal Protocol checklist documentation complete</td>
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</tr>
</tbody>
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Fall Prevention

Reducing the risk of harm from falls was a 2009 Joint Commission National Patient Safety Goal with the following requirements: fall risk assessment, interventions based on risk, staff education, patient and family education and evaluation of program effectiveness. In 2009, there was an average of 55 falls per month. Approximately 27 percent resulted in minor harm to the patient and 1.8 percent resulted in major harm.

The Abbott Northwestern Fall Prevention team met monthly to review data and direct performance improvement activities. Abbott Northwestern is part of the Allina Fall Prevention Team and participated in the Minnesota Hospital Association’s statewide Falls Call to Action.

In 2009, Abbott Northwestern met the Allina harmful fall goal in fourth quarter and reduced falls with serious injury from 10 during January-June to two during July-December. The Abbott Northwestern Fall Prevention team is developing Operation Falls Prevention, a comprehensive strategy addressing equipment, staff education and safety checks to reduce falls.
The Infection Prevention and Control Department (IPC) focuses on preventing the transmission of infectious disease in the hospital. The infection preventionists within the department monitor disease trends and use guidelines developed by national infection prevention organizations, such as the Centers for Disease Control and Prevention (CDC), to develop policies to protect patients, health care workers and visitors from infectious disease. The department also monitors policy compliance and provides education to health care workers about infectious disease issues. The IPC department works cooperatively with all hospital departments to reduce the spread of disease and investigate outbreaks.

**Hand Hygiene**

The Joint Commission requires that hospitals comply with the current World Health Organization (WHO) or CDC hand hygiene guidelines to reduce the risk of infections associated with health care. To address these requirements, the IPC set out to reduce the risk of health care-associated infection by demonstrating a 90 percent compliance with hand hygiene practices. Although this goal was not achieved, Abbott Northwestern’s 2009 average hand hygiene compliance of 86 percent is much higher than the national average of 40 percent.
Ventilator-associated Pneumonia (VAP) Bundle Compliance

Patients placed on a ventilator are at increased risk of developing pneumonia. Several interventions can help reduce a patient’s risk:

- keeping the head of the bed elevated to at least 30 degrees
- conducting daily assessment of weaning readiness
- using prophylaxis for peptic ulcer disease and deep vein thrombosis.

During 2009, Abbott Northwestern completed VAP bundle audits and conducted a pilot of daily patient bathing with chlorhexidine impregnated cloths in one intensive care unit. The average compliance rate in 2009 was 80 percent. Abbott Northwestern reported compliance rates to the Minnesota Hospital Association as part of public reporting to ensure the value of the information for the reader.

Central-line Associated Blood Stream Infection (CLA-BSI) Prevention Bundle Compliance

Research has indicated that the risk of a patient developing a blood stream infection as a result of central-line placement is greatly reduced when certain precautions are taken during the insertion of the line. These precautions include using a skin antiseptic containing chlorhexidine to cleanse the skin prior to insertion and having the health care professional wear sterile gloves, hat, mask and gown when inserting the line. During 2009, Abbott Northwestern conducted education for all nurses on disinfecting the hub prior to accessing the central line, implemented the Allina-wide central line insertion bundle checklists for all ICU patients, and conducted a pilot study in one intensive care unit involving daily patient bathing with chlorhexidine impregnated cloths.

The average compliance rate in 2009 was 96 percent, surpassing the goal of 95 percent. Abbott Northwestern reported compliance rates to the Minnesota Hospital Association as part of public reporting to ensure the value of the information for the reader.
Adverse Heath Event and Critical Event Review

Abbott Northwestern established a formal, systematic process for the prompt reporting and investigation of potential and actual critical/sentinel events. A critical event is defined as a death or serious temporary or permanent injury (or the risk thereof) within an Abbott Northwestern facility or from care provided by an Abbott Northwestern employee. A critical event review (CER) is defined as a causal analysis and is a process for identifying the basic or causal factor that underlies variation in performance, including the occurrence or possible occurrence of a critical event. The CER is facilitated by Risk Management, Quality or Patient Safety and is designed to uncover the events from the participants’ perspectives. Participants may include physicians, leaders and staff involved in the care of the patient and other staff as identified. Change action plans with measurement and accountability are developed and considered lessons to be learned.

Safety Rounds

All clinical and patient care areas participate in safety rounds coordinated by the Abbott Northwestern Safety Department. A multidisciplinary team, which includes representatives from Safety, Security, Biomedical, Facilities, Environmental Services, Infection Control, the Minnesota Nurses Association, Quality and Patient Safety and the manager of the area, completes safety rounds regularly. In 2009, the process included one scheduled safety round by the entire team and a second round (approximately six months apart) completed by the department manager. During safety rounds, members of the team use a checklist to review priority areas and talk with nurses and other staff members. This provides caregivers with an opportunity to express any concerns they have and identify areas that need attention, such as broken cabinets or locks or equipment that needs repair. The team then writes work orders to complete the proper maintenance. Team members also interview staff to assess their knowledge of important safety issues for both patients and staff in the area and identify any areas for improvement.
In addition to meeting annual regulatory and accreditation requirements and re-organizing the regulatory steering committee, regulatory readiness activities were prominent in 2009 at Abbott Northwestern.

Annual requirements included preparing and submitting the Joint Commission Periodic Performance Report (PPR). In conjunction with the PPR, the hospital addressed the related Corrective Action Plans and subsequent monitoring for areas of non-compliance.

After evaluating the structure and function of the regulatory steering committee, the hospital implemented a new model. It includes five core teams: patient care, organizational support, environment of care, outpatient and survey preparation. All teams have leadership representation of the chapters included within the scope of the team’s responsibility and include a member of the senior management team. This model has helped the teams work more efficiently.

With an impending Joint Commission triennial survey, the hospital employed a variety of venues and modalities to help staff prepare.

For example, an active Joint Commission educational “blitzing” campaign directed at nurses was underway by April. Nursing leaders met three times a week to review the previous blitz results and kick off the blitz of the day. These nursing-focused campaigns, as well as a Medical Staff leadership session on physician-specific Joint Commission standards, helped prepare caregivers for the survey.

Educational materials, such as the Joint Commission employee pocket guide, monthly Joint Commission calendar, pamphlets on critical survey readiness tips, and information about how to talk with a Joint Commission survey helped prepare all employees and physicians for a successful survey.

When the Joint Commission arrived on November 2, hospital staff members were prepared to demonstrate the hospital’s capabilities and the pride they have for the excellent patient care at Abbott Northwestern. After five days, the surveyors exited with many positive remarks and reported exceptional results. The 2009 survey was the most successful Joint Commission survey in the history of Abbott Northwestern’s decades of experience with the Joint Commission.

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Abbott Northwestern Hospital is the largest not-for-profit hospital in the Twin Cities area, with 633 available beds and 65 bassinets. Each year, the hospital provides comprehensive health care for more than 200,000 patients and their families from the Twin Cities area and throughout the Upper Midwest. More than 5,000 employees, 1,600 physicians and 550 volunteers work as a team for the benefit of each patient served.

Abbott Northwestern Hospital is a part of Allina Hospitals & Clinics, a family of hospitals, clinics and care services in Minnesota and Western Wisconsin.

For more than 125 years, Abbott Northwestern has had a reputation for quality services. The hospital is well known for its centers of excellence:
- cardiovascular services in partnership with the Minneapolis Heart Institute®
- Mental Health Services
- medical/surgical services
- Neuroscience Institute
- Orthopaedic Institute
- physical rehabilitation through the Sister Kenny® Rehabilitation Institute
- Spine Institute
- Virginia Piper Cancer Institute™
- perinatology, obstetrics and gynecology through WomenCare.

Abbott Northwestern and its Medical Staff are dedicated to providing outstanding care and service to patients and their families. We’re proud of what we offer the community: exceptional physicians, nurses and support staff; a commitment to research, education and outcomes; a foundation of clinical partnerships that span the region; and a cultural enthusiasm for growth and improvement. Brought together in one institution, these factors create an energetic and sophisticated environment that inspires caregivers to collaborate in new ways for the benefit of patients.

Our passion for finding new and better approaches to care drives extensive research efforts in clinical areas across the hospital. This ensures that new treatment advances benefit patients as quickly as possible, supports a dynamic environment for medical and nursing education, and is the catalyst for our outcomes measurement program.
Accessing Abbott Northwestern Hospital

24/7 PHYSICIAN-TO-PHYSICIAN® LINE

1-800-828-8900
- Hospital admissions
- Hospitalist service
- Specialist appointments
- Specialist/subspecialist consultations
- Van service to Abbott Northwestern and affiliated physician clinics

EMERGENCY DEPARTMENT-TO-EMERGENCY DEPARTMENT (ED TO ED)

1-800-863-4233
- ED to ED transfers
- ED-facilitated direct transfer admissions
- ED physicians triage and consultation
- Urgent stroke neurologist telephone consultation

MINNEAPOLIS HEART INSTITUTE® AT ABBOTT NORTHWESTERN

612-863-3900
1-800-582-5175
- Refer a patient to MHI
- Make an appointment for a patient at MHI

FIND A PROVIDER ONLINE

- Search online for a specialist or subspecialist at allina.com/doctors (choose Abbott Northwestern Hospital in the Hospital Affiliations field)
In Appreciation

Our sincere thanks go to the Abbott Northwestern Hospital Foundation for its support of Abbott Northwestern’s Outcomes Institute and the production of this Overview and Outcomes Report. The commitment of the Foundation and Abbott Northwestern’s generous donors to improving patient care through these efforts is greatly appreciated.