



MHA KEYSTONE
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(SHRCH)
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Patient Safety

- "Preventable adverse events are leading cause of death in the United States." (To Err Is Human, 2000)
- "at least 44,000 and perhaps as many as 98,000 Americans die in hospitals each year as a result of medical errors." (To Err Is Human, 2000)
- "Deaths due to preventable adverse events exceed the deaths attributable to motor vehicle accidents (43,458), breast cancer (42,297) or AIDS (16,516)." (To Err Is Human, 2000)
- "almost two percent of admissions experience a preventable adverse drug event, resulting in average increased hospital costs of \$4,700 per admission or about \$2.8 million annually for a 700-bed teaching hospital." (To Err Is Human, 2000)

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Patient Safety

- "An error is defined as the failure of a planned action to be completed as intended (i.e., error of execution) or the use of a wrong plan to achieve an aim (i.e., error of planning)." (To Err Is Human, 2000)
- "An adverse event is an injury caused by medical management rather than the underlying condition of the patient. An adverse event attributable to error is a "preventable adverse event." Negligent adverse events represent a subset of preventable adverse events that satisfy legal criteria used in determining negligence (i.e., whether the care provided failed to meet the standard of care reasonably expected of an average physician qualified to take care of the patient in questions"." (To Err Is Human, 2000)

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Patient Safety

- **Adverse Events**
 - "An adverse event is defined as an injury caused by medical management rather than by the underlying disease or condition of the patient. Not all, but a sizable proportion of adverse events are the result of errors." (To Err Is Human, 2000)
 - "The American health care delivery system is in need of fundamental change" (Crossing the Quality Chasm, 2001)
 - "Quality problems are everywhere, affecting many patients. Between the health care we have and the care we could have lies not just a gap, but a chasm." (Crossing the Quality Chasm, 2001)

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Patient Safety

- "Four key aspects of the current context for health care delivery help explain the quality problems:
 - the growing complexity of science and technology,
 - the increase in chronic conditions,
 - a poorly organized delivery system,
 - and constraints on exploiting the revolution in information technology." (Crossing the Quality Chasm, 2001)

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Quality Professionals Leadership & Direction Required

- "Recommendation 1: All health care organizations, professional groups, and private and public purchasers should adopt as their explicit purpose to continually reduce the burden of illness, injury, and disability, and to improve the health and functioning of the people of the United States.
 - Safe
 - avoiding injuries to patients from the care that is intended to help them
 - Effective
 - providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding under use and overuse)." *(Crossing the Quality Chasm, 2001)*

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Quality Professionals Leadership & Direction Required

- "Patient Centered
 - -providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.
- Timely
 - -reducing waits and sometimes harmful delays for both those who receive and those who give care.
- Efficient
 - -avoiding waste, in particular waste of equipment, supplies, ideas, and energy.
- Equitable
 - -providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status." *(Crossing the Quality Chasm, 2001)*

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What could go wrong?

- "98,000 patient deaths is equivalent to losing one commercial jumbo jet airliner full of about 270 passengers each day, every day of the year or about 11 preventable fatalities every hour of any given day." *(Fatal Care, 2008)*
- "Grave mistakes occur in small-town hospitals as well as at some of the most prestigious medical facilities in the nation, and with alarming frequency." *(Fatal Care, 2008)*
- "The healthcare industry needs to provide the same level of safety statistics, data and transparency that is found in other industries such as auto manufacturing or commercial aviation, where lives are on the line." *(Fatal Care, 2008)*

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SHRCH CAH Hospital Description

- Med/Surg/ICU – 25 Bed Planetree Facility
- Rehab Nursing Center – 54 Bed Eden Facility
- Emergency Department – 10 Bed – 24/7 Emergency Services
- Cancer Services
 - Oncology – Infusion Therapy
 - Radiation Therapy Center
- Inpatient/Outpatient Surgery
- Rehabilitation & Sports Medicine
- Specialty Clinics
- Rural Health Clinic
- Women's Services
- Orthopedic Services
- Laboratory
- Diagnostic Imaging



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Surgical Services Provided



- Procedures in the areas of:
- Ear, nose and throat
- Gastroenterology
- General surgery
- Gynecology
- Ophthalmology
- Orthopedics
- Podiatry

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MHA Keystone Center

- **Vision:**
- Michigan hospitals will lead the nation in patient safety and quality improvement practices.
- **Mission:**
- The MHA Keystone Center for Patient Safety & Quality will expedite the translation of patient safety and quality evidence into practice.
- **Motto:**
- "Bringing health care providers together with ¹²

MHA Keystone: *Surgery*
Background

- 329,000 surgeries in Michigan each year, of those literature shows:
 - National estimates of complications are at 25%.
 - This may result in up to 82,320 surgical complications.
 - Mortality rates as a result of surgical complications are at 5%. (Including infections and post-surgical complications.)
 - Creating a significant cost estimated at \$250 million.

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Background Continued

- MHA Keystone: Surgery was launched in fall of 2007.
- Now more than 100 Michigan hospitals are voluntarily participating to improve perioperative patient safety.

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Goals of MHA Keystone: Surgery

- **Intervention 1:** Eliminate surgical-site infections by ensuring that at least 90 percent of patients receive evidence-based interventions for infection prevention
- **Intervention 2:** Eliminate the mislabeling of specimens
- **Intervention 3:** Prevent defects in care, in particular focusing on the National Quality Forum's serious adverse events (wrong-site surgery and retained foreign bodies)

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Methods To Improve

- Surgical teams conduct briefings or “time outs” before surgery, confirming the correct patient, surgical site, and procedure.
- After surgery the surgical team conducts another debriefing to discuss the patient’s future needs, ensuring a smooth transition to postoperative care.
- Lean Six Sigma is used to identify process gaps and eliminate the mislabeling of specimens removed during surgery.

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Results

- Since fall of 2007, more than 84,000 surgical briefings have been completed by participating hospitals.

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Future

- To further facilitate surgical improvements, a new intervention to prevent the mislabeling of specimens began in 2009, with data collection beginning statewide in the fall of 2009.

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SHRCH Project Team Members

- Lisa Pope, IC/TJC Nurse Coordinator, Keystone Champion
- Andrea Sargent-Sharrah, Surgery Supervisor, Keystone Champion
- Dr. Thomas Campana, Surgeon
- Jan Ferguson, RN Out Patient Surgery
- Susan Bregg, Surgical Tech
- Jean Moore, RN Circulator
- Teresa Koelzer, CRNA
- Linda Rubin, COO
- Kerry Olson, TQM Project Coordinator

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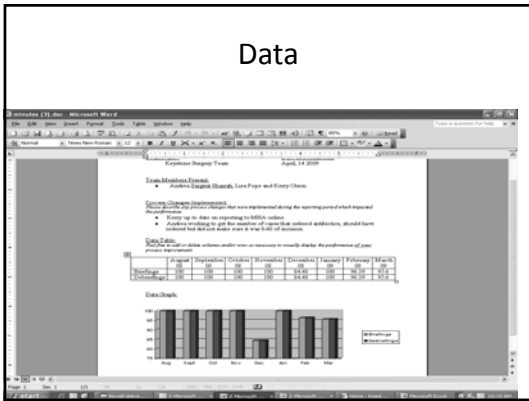
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Quality Core Measures Dashboard

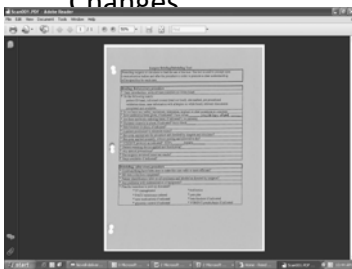
- 1 - Prophylactic Antibiotic Received Within 1 Hour Prior to Surgical Incision
- 2 - Prophylactic Antibiotic Selection for Surgical Patients
- 3 - Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End time
- 6 - Surgery with Appropriate Hair Removal
- 7 - Colorectal Surgery Patients with Immediate Postoperative Normothermia
- VTE 1 - Surgery Patients with Recommended Venous Thromboembolism Prophylaxis Ordered
- VTE 2 - Surgery Patients Received VTE within 24 hours Prior to Surgery to 24 Hours after Surgery
- CARD 2 - Surgery Patients on Beta Blocker Prior to Admission. Received BB during Perioperative Period

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Data



Intervention & System Changes



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Challenge

- “How can it be that in 2008, a checked bag on an airline flight is still exponentially safer than a patient in an American hospital? Simply put, one industry has learned the realities of what it takes to make a human system safe, and the other has not.” (Why Hospitals Should Fly, 2008)

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Sources

- MHA Keystone Center for Patient Safety & Quality. (2009). Setting the Health Care Quality Agenda Annual Report. Lansing, MI: MHA Keystone Center
- Kohn, L.T., & Corrigan, J.M. (Eds.) (2000) To Err Is Human. Washington, D.C.: National Academy Press.
- Briere, R. (Ed.) (2001) Crossing The Quality Chasm. Washington, D.C.: National Academy Press.
- Kumar, S. (2008) Fatal Care. Minneapolis, MN.: IGI Press.
- Nance, J.J. (2008) Why Hospitals Should Fly. Bozeman, MT.: Second River Healthcare Press.
- Suzanne Hurley, FSU Intern
- Picture One: Carol Te Bos RN and Beth Nicholson ST
- Picture Two: Angie Reed (unit clerk), Katie Tiesworth RN, Dr. Roose, Sue Scarbrough LPN, Jan Ferguson RN, Irene Beckstrom RN

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