5 Years of Progress
2010

“Envisioning a health care environment safe for all patients, in all processes, all the time.”
From the Executive Director
For five years, the Missouri Center for Patient Safety has worked for health care change by bringing organizations and individuals together to improve patient safety. The goal: learn as much as possible about medical errors, so we can prevent them from occurring.

Simply stated, it is complex work.

Safety improvement involves all of the people who drive the delivery of health care. It requires willingness and openness to discuss mistakes and risk. This does not come naturally; yet is necessary if we are to effectively learn about medical errors and risky conditions, and share that learning to ultimately improve and eliminate medical errors.

To me, completing five years of our vital work is more than an anniversary or an achievement – it’s an indicator. Our work in the first five years has been meaningful and will undoubtedly continue to be even more necessary into the future.

Consider – in five years we have:
- Achieved organizational goals as a result of successful funding efforts, obtaining more than $1.5 million in grants and additional funding to support special projects.
- Gained recognition as a state and national leader in patient safety.
- Led successful statewide initiatives to improve safety culture, teamwork, communication and decrease blood stream infections.
- Provided education and training for health care providers, professionals, students, regulators, and consumers.
- Served as a statewide resource on patient safety through our website, interviews, articles, and other public outreach.
- Became a leader in PSO services - working with more than 180 providers to report medical mistakes, learn from mistakes and take actions aimed at prevention.
- Aimed toward future growth through short and long term communications and development strategies.

The Center is committed to helping providers meet their goals to improve the safety of health care delivery in Missouri and around the nation. Our commitment is here to stay and is necessary to meet the needs and expectations of the public.

What we achieve in the next five years rests firmly on the foundation of support we have had in this first five – a focused vision, support from our founding members and the funding and collaboration to move forward with our impassioned momentum!

We humbly thank each organization and individual involved in our efforts during our first five years, and hope each and every one, and many more, will move with us into the future to fulfill our vision of a health care environment safe for all patients, in all processes, all the time!

- Barry Miller
WHY WE DO, What We Do

Improvements in safe care happen every day, yet reports continue to reveal grim statistics, evidencing the need for a continued focus on learning and prevention.

- Up to 98,000 patients die annually in hospitals due to medical errors\(^1\).
- An estimated 1.7 million healthcare associated infections occur each year leading to 99,000 deaths\(^2\).
- Adverse medication events cause more than 770,000 injuries and deaths each year\(^3\) at a cost as high as $5.6 billion annually\(^4\).
- An estimated $19.5 billion dollars in health care costs are attributable to medical errors (2008 estimate)\(^5\).
- Health care’s safety culture needs improvement in teamwork and communication, with encouragement to openly report errors\(^6\).
- On the national level, quality and safety of care are improving slowly; but safety improvement is lagging behind. Of 33 safety indicators, 17 improved, but 8 stayed the same and 8 were worse over time\(^7\).
- Missouri’s overall health care quality ranking remains average, with only slight improvement in patient indicators, ranking 20th in the nation\(^8\). Average and a ranking of 20th are not good enough.

Why We Do, WHAT WE DO

- Bring national projects, resources and funding to Missouri for statewide patient safety learning and error prevention.
- Facilitate collaboration of health care providers and other stakeholders with focus on high priority patient safety challenges.
- Serve as a statewide resource on patient safety activities and initiatives.
- Use our resources to learn about and implement error prevention strategies.

We Seek to Answer ….

- What type of medical errors and near misses are occurring?
- What unsafe conditions exist?
- Why are they occurring?
- How can errors, near misses and unsafe conditions be prevented?
- How can Missouri providers better work together with a joint focus on improving the safety of health care delivery?

“Facilitate collaboration of health care providers and other stakeholders with focus on high priority patient safety challenges.”
MOCPS PSO services and resources developed for our PSO Participants:

A data system to report and analyze adverse events, near misses and unsafe conditions within the parameters of the federal Patient Safety and Quality Improvement Act of 2005 (PSQIA). Guidelines and policy templates to assist organizations in establishing policies and procedures for PSO participation.

Educational sessions on key aspects of PSO participation - Establishing a Patient Safety Evaluation System, Defining Patient Safety Work Product, Using the MOCPS PSO Data System, Confidentiality and Security, and one-on-one assistance upon request.

Annual PSO Participant Day bringing MOCPS PSO participants together with national and state experts for networking and learning.

Benefits of PSO Participation:

- Federal confidentiality and privilege protection (retroactive to 7/29/05)
- Ability to compare patient safety performance across facilities
- Identification of best practices and improvement opportunities through collaboration
- PSOs are estimated to decrease preventable adverse events by 3%, saving $435 million in their first five years of operation.

In November 2008, the Center was certified as one of the first ten PSOs in the nation. PSO activities are defined by the federal Patient Safety and Quality Improvement Act of 2005. PSOs exist to encourage medical error reporting to allow sharing, learning and prevention among health care providers.

The Center’s PSO implementation officially began in 2009, resulting in PSO service contracts with more than 180 hospitals and ambulatory surgery centers in Missouri, Kansas and Illinois.

PSO resources also support MOCPS PSO participants in compliance with a Missouri HealthNet (MHN) regulation which requires hospital and ambulatory surgery center MHN providers to participate with a PSO and report NQF-defined Serious Reportable Events (SREs) and CMS-defined Healthcare-Acquired Conditions (HACs).

Examples of SREs and HACs being reported to the MOCPS PSO for targeted improvements are wrong site surgery, pressure ulcers, falls and trauma, and events resulting in unanticipated deaths and serious injuries, among others.

While MOCPS PSO reporting is beginning with SREs and HACs, we encourage and support reporting of other adverse events, in addition to near misses and unsafe conditions, to enhance learning and prevention of medical errors.

Emergency Medical Services (EMS) PSO Project

Throughout 2010, in collaboration with the Missouri Ambulance Association (MAA), the Center launched PSO services for EMS.

- Developed a data system to report EMS-specific medical errors utilizing federally-defined Common Data Formats.
- Identified categories of EMS error reporting – medication errors, equipment/device errors, ambulance crashes and airway management errors.
- Trained over 200 EMS professionals in a Just Culture for patient safety, setting the stage to encourage reporting of adverse events by EMS providers.
- Developing and delivering EMS-specific PSO resources and education, including resources that will be available nationwide pertaining to a Just Culture in EMS, in collaboration with Outcome Engineering, LLC.

Nationwide Alliance of Patient Safety Organizations (NAPSO)

In 2010, the Center, along with the California Hospital PSO, the North Carolina Quality Center PSO and Quantros™, founded NAPSO. NAPSO enables collaboration between these PSOs to collect data within a common data system and to share learning from reported events, as well as efforts toward prevention. NAPSO is a beginning effort to establish a national framework for exponential sharing, learning and prevention made possible through PSOs.
Coming In 2011…

(PSO) Implementation – Expanding the Learning and Prevention!

Since achieving one of the Center’s primary 2010 objectives, Implementing Patient Safety Organization (PSO) services, we now move to the next phase – obtaining sufficient data to feed the learning that will lead to tangible improvements.

Central Line Associated Blood Stream Infection (CLABSI) rates by 32%.
Consistently maintained a lower rate of CLABSI compared to national project rates.
Estimated to have saved one life, prevented 17 CLABSI and saved $ 1.4 million in healthcare costs.

In 2009 and 2010, in collaboration with the Missouri Hospital Association, the Center worked with 15 hospitals in Greater Metropolitan Kansas City and Northwest Missouri to use the Comprehensive Unit-based Safety Program (CUSP), evidence-based practices to improve front-line teamwork and communication, and clinical interventions aimed at reducing Central Line Associated Blood Stream Infections (CLABSI).

Partially funded by the Blue Cross and Blue Shield of Kansas City

In 2010, with the experience of the CUSP/Stop BSI Kansas City area project, the Center, in collaboration with the Missouri Hospital Association, developed People, Priorities, and Learning Together (PPLT) as a comprehensive model for statewide and regional improvement.

Why CLABSI prevention is important:

In the United States, approximately 250,000 CLABSI are estimated to occur each year, associated with a death rate of 12-25% and extended hospital stays, at a cost of up to $56,000 per infection.13

What is being done about CLABSI?

Missouri is one of 47 states participating in the national project with HRET, funded by the AHRQ, in partnership with the Johns Hopkins University Quality and Safety Research Group and the Michigan Keystone Center.

The goal of the national project is to reduce the mean rate of CLABSI to less than 1/1,000 central line days, that will save lives, reduce infections and save health care dollars.
People, Priorities, and Learning Together (PPLT), Module 1 - The Basics of CUSP

In 2010, 73 units within 42 hospitals participated in the Basics of CUSP. These unit-based teams, consisting of frontline staff, senior executives, physicians, nurses and other clinicians, worked together to assess the culture of safety and used evidence-based tools to proactively identify safety risks on their units. Through The Basics of CUSP, these units have now established building blocks to support current and future safety improvement work.

Components of CUSP:
• Learning the Science of Safety
• Safety Culture Survey
• Identifying & Learning from Defects
• Senior Executive Partnership & Commitment
• Using Teamwork Tools (Checklists, Briefings, Rounding, Shadowing, Debriefing)

Basics of CUSP Participants Identified Areas to Improve:
• Device alarms
• Equipment sterilization
• Emergency department delays
• Turnaround times for lab results
• Medication issues – availability, missed doses, communication about home and discharge medications
• Identifying changes in patient status
• Communication among staff at shift change
• Consistent use of blood sugar level protocols
• Hand washing compliance
• Consistent use of fall prevention protocols
• Behavioral health elopements
• Proactively identifying fire hazards
• Patient transfers
• Performing accurate and timely procedures

Coming In 2011...

PPLT serves as the Center’s model to:
• Expand on The Basics of CUSP training
• Expand the CUSP/Stop BSI project to further reduce CLABSIs, moving toward a goal of a mean rate of < 1/1000 central line days
• Launch a CUSP/Stop CAUTI project with a goal to reduce catheter-associated urinary tract infections by 25%
• Support and provide assistance to perform and analyze safety culture surveys
• Provide messaging to key audiences about patient safety issues
• Train on critical teamwork and communication skills
• Expand Just Culture training
• Assist in integration of safety activities within strategic plans
• Expand the falls and hand hygiene collaboratives
• Identify clinical collaborative opportunities in high priority areas

Our Safety Supporters

Platinum Sponsor – Healthcare Services Group
Silver Sponsor – Missouri State Medical Foundation

For information about additional safety supporters, and how you can contribute, go to www.mocps.org
Principles Of A Just Culture

To Err is Human
To Drift is Human
Risk is Everywhere
We Must Manage in Support of Our Values
We are all Accountable

“The single greatest impediment to error prevention in the medical industry is that we punish people for making mistakes.”

Leader in Patient Safety Initiatives

Just Culture Training

Expanding on the Center’s successful Missouri Just Culture Collaborative of 2008, elements of a Just Culture are now being taught by the Center’s certified Just Culture trainers to Missouri ambulance service providers. Throughout 2010, more than 200 of Missouri’s EMTs, paramedics and first responders were trained in a Just Culture, setting the stage for more open and comprehensive reporting of adverse events to the PSO.

With Just Culture training and resources in hand, Missouri EMS providers now join the 67 organizations and more than 500 individuals who were part of the 2008 Collaborative, many of whom are still moving through their Just Culture journey.

An October 2010 follow-up with organizations that participated in the 2008 Collaborative resulted in the following highlights, revealing efforts to establish a culture for safety remain strong.

Elements of the Just Culture Follow-Up

Just Culture Collaborative participants say that most of the components important to improving their organization’s safety culture have been implemented by their organizations, and improved since participation in the Collaborative.

**Please rate how well, in your opinion, your organization currently implements the following components of a safety culture.**

- Teamwork Within Units
- Teamwork Across Units
- Staffing
- Overall Perception of Safety
- Organizational Learning-Continuous Improvement
- Non punitive Response to Error
- Manager Expectations - Actions
- Management Support for Patient Safety
- Handoffs & Transitions
- Feedback & Communication About Error
- Openness of Communication

**In your opinion, indicate how these elements of a Just Culture have changed since participation in the Missouri Just Culture Collaborative.**

- Teamwork Within Units
- Teamwork Across Units
- Staffing
- Overall Perception of Patient Safety
- Organizational Learning-Continuous Improvement
- Non punitive Response to Error
- Manager Expectations - Actions
- Management Support for Patient Safety
- Handoffs & Transitions
- Feedback & Communication
- Openness of Communication

- Has Decreased
- Has Not Changed
- Has Improved
Banding Together - For Patient Safety:

In 2007, Missouri was one of the first states to standardize the use of colored wristbands to reduce the risk of mistakes being made due to misinterpretations of the meaning of wristband colors used to designate high risk health conditions. Such standardization is now occurring in 41 states. In 2010, the Center performed a follow-up to the 2007 project that revealed continued use of red, yellow and purple bands to designate allergies, fall risk and patients with an end-of-life decision. The follow up revealed additional band colors are being used, such as pink for “restricted extremity” and green for “latex allergy”, as well as banding being expanded to additional hospital units such as outpatient, psychiatric service and ambulatory surgery services. Follow up also revealed that hospitals have been leaders in their communities by encouraging standardization at community nursing homes, home care agencies and physician offices.

Hand Hygiene:

In 2009, based on the World Health Organization’s “Your Five Moments for Hand Hygiene” campaign, the Center launched, MOMO, a hand hygiene pilot project with seven organizations in Southeast Missouri. These organizations are using the “Slaying MOMO the Monster” theme to encourage compliance with hand hygiene processes. Results of this pilot project are being reviewed for potential statewide expansion.

Prevention of Injuries from Falls:

In 2009, 12 hospitals began working with the Center to assess fall prevention strategies and protocols in an effort to reduce injuries resulting from falls. These organizations continue to share protocols and experiences to show how the project can be expanded in the future.

National Recognition at Institute for Healthcare Improvement (IHI)

The Missouri Center for Patient Safety was honored to be part of the December 2010 IHI annual conference which recognized safety efforts across the nation. The Center’s PSO, EMS PSO, Banding Together, Just Culture, and CUSP/CLABSI prevention activities were highlighted in the IHI video, available at www.mocps.org.

Coming In 2011…

Exploring opportunities to expand MOMO and fall injury prevention across the state.
Annual Conference Poster Topics – Sharing Safety Successes:

- Asthma Care
- Implementing Evidence-based Practices
- Infection Prevention
- Wound Care
- Staff Communication
- Improving Quality Measures
- Response Teams to Improve Cardiac Arrest Response
- Engaging Staff in Safety Improvement
- Preventing Patient Elopements
- Prevention of Embolisms
- Fall Injury Prevention
- Screening for Venous Thromboembolism
- Improving Outcomes of Pneumonia Patients
- Staff Accountability and Rewards
- Diabetic Education in a Small Community Hospital
- Safety Investigation Practices
- Sustaining a Just Culture for Safety
- Improving Safety by Sharing Patient Stories
- Improving Esophagus Food Impactions
- Documentation of Patient Allergies
- Pressure Ulcers
- Preventing Tracheostomy

In addition to numerous presentations, nationally and statewide, to health care professional organizations, health care provider organizations, health care leaders and health professional students, the Center hosts annual conferences for networking with national and state patient safety leaders and to re-energize the spirits of those who strive every day to improve the quality and safety of care.

Annual Conferences:

The Center’s annual conferences in 2009 and 2010, “In Harmony for Safe Care” and “Learning Together for Safe Care,” highlighted patients and their needs as well as their importance as members of the health care team.

Keynotes for both conferences, Ilene Corina and Sorrel King, provided family member perspectives on medical errors through their tragic stories and encouragement for family involvement and open communication between patients, families and caregivers.

Attendance at the annual conference continues to grow, reaching a record attendance of over 250 in 2010.

PSO Participant Day:

The first annual MOCPS PSO Participant Day was held in 2010 – an opportunity for Center PSO participants to come together to learn about PSO activities.

PSO Participant Day will continue as a tradition focusing on the Center’s PSO work and needs of participating organizations.

Through the Center’s Annual Conference and the Annual PSO Participant Day, we strive to bring national and state safety experts together with health care providers, to share and learn about safety practices that are replicable across health care settings to improve the safety of care.

APRIL 5, 2011 - Inspiring Change...
...Improving Care

APRIL 2012 - MOCPS 6th Annual Conference

Continued learning through the Missouri Excellence in Safe Care Awards.
**Missouri Excellence in Safe Care Awards:**

In 2009, Missouri Excellence in Safe Care Awards was launched to recognize effective safe practices of Missouri providers. In addition to award applications in 2010, the Center began accepting “Great Inspirations” poster displays. Both Award and Inspiration applications are encouraged as a way to share successful safety practices that may be replicated across the state.

**Patient Safety Awareness Month:**

April is Missouri Patient Safety Awareness Month annually, sponsored by the Center to encourage involvement of health care providers, patients and families.

April 2009’s Patient Safety Awareness Month focus was the Missouri Safe Surgery, Safes Lives Campaign in collaboration with the Missouri Hospital Association. The campaign encouraged the use of the World Health Organization’s surgical checklist, proven to decrease surgical complications by one third and surgical deaths by forty percent.\(^{15}\)

*Sixty-two Missouri hospitals pledged to utilize the checklist in at least one surgical suite for one day as part of the initiative.*

April 2010’s Patient Safety Awareness Month focus was on the importance of patients and families being the most important member of the health care team. Tips for consumers and stories of medical errors were shared in our video, Partnering for Safe Care, released in April 2010. In addition, key patient safety resources for consumers were posted on our web site. Go to [www.mocps.org](http://www.mocps.org) to review the video.

*The Center thanks the Missouri State Board of Nursing for funding to support production and distribution of the “Partnering for Safe Care” video.*

**MOCPS Web Site:**

Our web site, [www.mocps.org](http://www.mocps.org) includes Center updates, safety news, information and resources on Center project, consumer resources, studies and research on safety, and much more.

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**Excellence in Safe Care Award Winning Practices - 2009-2010:**

- Patient Safety Gets Help from the Bucket Brigade  
  *Research Medical Center*

- Improving Pneumonia Vaccination Compliance  
  *St. Lukes – Northland*

- An Integrated Order Set Improves Appropriate DVT Prophylaxis  
  *University of Missouri School of Medicine*

- The Cruise to Excellence  
  *Forest Park Hospital*

- Patient Safety in Radiology: Optimizing Radiation Dose  
  *St. Louis Children’s Hospital*

- Ventilator Associated Pneumonia  
  *St. John’s Regional Medical Center, Joplin*

- Mitigation of H1N1  
  *St. John’s Mercy Hospital, Washington*

- Developing Frontline Ambassadors Into Engaged Patient Safety Stewards  
  *University of Missouri Health Care*
Continued Focus on Patient Safety Improvement:

The national health reform legislation includes many provisions that address the quality and safety of health care delivery. As such, the need to improve safety in health care will continue to be a priority at the national and state level for legislators, regulators, health care providers and the public.

To this end, the Center continues to be engaged in these national and statewide activities in an effort to be positioned for the future through short and long-term strategies for:

- National and statewide PSO-related activities with AHRQ, NAPSO, MHN and contracted PSO participants.
- National Healthcare Acquired Infection prevention activities.
- Strategies established by the Institute for Healthcare Improvement.
- Enhanced communication strategies.
- Enhanced fund development strategies.

We welcome any and all health care providers, consumers and other interested stakeholders to become involved in our statewide patient safety work now and in the future!

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Who Helps Us With Our Work?

- MOCPS Advisory Panel
- MOCPS Hospital Advisory Committee
- MOCPS PSO Advisory Committee
- MOCPS EMS PSO Advisory Committee

Visit www.mocps.org for a list of individuals donating their time to help improve the safety of care.

Coming In 2011...

Enhanced communication with the many audiences interested in health care safety through:

- An updated Web site
  - Facebook
  - Twitter
  - Blogs
  - And more...
References:

1. IOM, To Err is Human Report, 1999


14. Leape, L: Error in Medicine, Journal of the American Medical Association, 272 (23); 1851-1957 1994