CQSPI: Clinical Quality, Safety & Performance Improvement

Michael Edmond, MD, MPH, MPA
Chief Quality Officer
Michael B. Edmond, MD, MPH, MPA is the Chief Quality Officer and Associate Chief Medical Officer for University of Iowa Health Care and Clinical Professor of Infectious Diseases at the University of Iowa Carver College of Medicine. He previously served as the Richard P. Wenzel Professor of Internal Medicine, Chair of the Division of Infectious Diseases, and Hospital Epidemiologist at Virginia Commonwealth University in Richmond.

He is a graduate of the West Virginia University School of Medicine (MD), the University of Pittsburgh Graduate School of Public Health (MPH), and the Virginia Commonwealth University School of Government and Public Affairs (MPA). He was a resident and chief resident in Internal Medicine at West Virginia University Hospitals. He then completed a fellowship in Infectious Diseases at the University of Pittsburgh Medical Center and a fellowship in Hospital Epidemiology at the University of Iowa College of Medicine.

Dr. Edmond’s areas of research focus on the epidemiology of healthcare-associated infections and the public policy implications of infection prevention. He has published 350 papers, abstracts and book chapters, and co-writes a blog entitled Controversies in Hospital Infection Prevention.
Vision

To ensure every patient high quality, compassionate care, free of all preventable harm
Mission

- To effectively and continuously measure the state of quality, value and safety at UIHC
- To proactively seek latent causes of harm and effectively mitigate their risk
- To implement evidence-based best practices for improving the quality and safety of patient care
- To promote stewardship of healthcare resources
- To ensure regulatory compliance
- To serve as an educational resource
- To create and disseminate knowledge in infection prevention, healthcare quality, and patient safety
- To enhance the visibility of quality and safety internally, and the reputation of the institution externally
High value healthcare is now the goal

Components of value:
- Quality (outcomes)
- Cost
- Patient experience
# CQSPI Domains

## Infection Prevention
- Healthcare-associated infections
- Resistant organisms
- Community acquired infections of public health importance
- Hand hygiene compliance
- Education related to outbreaks, exposures or infection prevention
- Regulatory compliance for infection prevention
- Infection prevention consultation in construction projects

## Performance Improvement
- TJC/CMS core measures
- Blood utilization
- UHC metrics
- Iowa Hospital Association
- Clinical Dept PI projects
- National registries:
  - National Surgical Quality Improvement Program (NSQIP): Adult & pediatric
  - The Society of Thoracic Surgeons: Adult & pediatric CT surgery
  - Virtual Pediatric Intensive Care Unit Systems
  - Stroke
  - Resuscitation

## Patient Safety
- Review & investigate events entered in the Patient Safety Net (PSN) system
- Safety culture
- Publicly reported Patient Safety Indicators & Hospital-Acquired Conditions
- Failure Modes and Effects Analysis (FMEA) and Root Cause Analysis (RCA)
- Safety education

## Antimicrobial Stewardship
- Optimize antimicrobial usage through:
  - Guidelines
  - Formulary optimization
  - Prospective audit and feedback
  - Education
  - Management of antibiotic shortages
QI and safety activities organized along 4 vertical service domains:
Quality & Safety Service Domains

- Each of the 4 domains creates a cross-functional team (a group of people with different functional expertise working toward common goals)

- Each team is led by an Associate CQO and a Nursing Leader

Team members:

- Physician Value Officers
- Medical Directors
- Nurse Managers
- Physician Informaticist
- PI/Safety Engineer(s)
- Operations Excellence Engineer
- Infection Preventionist
- Office of Patient Experience Representative
- Pharmacist
Coordinate the quality and performance improvement activities of the subcommittees of the University Hospital Advisory Committee and the quality and performance improvement committees of the Clinical Services and hospital departments.

Review, analyze and evaluate on a continuing basis the performance of the Clinical Service quality and performance improvement committees in formulating standards of care; measuring outcomes of care; and taking constructive intradepartmental action on the evaluation results, as specified in the UIHC Performance Improvement Program.

Submit recommendations to the University Hospital Advisory Committee on the establishment of and adherence to standards of care for the purpose of improving the quality of patient care delivered in the hospital.
# Quality & Safety Oversight Subcommittee

## Membership

<table>
<thead>
<tr>
<th>Quality Executive Committee</th>
<th>Department/Unit/ Institutional Representatives</th>
<th>Physician Value Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Chief Medical Officer</td>
<td>• Chief Pharmacy Officer</td>
<td>• Anesthesiology</td>
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<tr>
<td>• Chief Nursing Officer</td>
<td>• Director, Office of the Patient Experience</td>
<td>• Emergency Medicine</td>
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<tr>
<td>• Chief Quality Officer</td>
<td>• Director, Operations Excellence</td>
<td>• Family Medicine</td>
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<tr>
<td>• Assoc. Chief Quality Officers</td>
<td>• Assistant Vice President for Compliance/Accreditation</td>
<td>• Internal Medicine</td>
</tr>
<tr>
<td>• Director, CQSPI</td>
<td>• Associate VP for Legal Affairs</td>
<td>• Internal Medicine (Hospitalists)</td>
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<tr>
<td>• Chief Medical Information Officer</td>
<td>• Housestaff (4)</td>
<td>• Neurology and Neurosurgery</td>
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<tr>
<td>• Hospital Epidemiologist</td>
<td>• Director, Advanced Practice Providers</td>
<td>• Ambulatory Care</td>
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<tr>
<td>• Director, Nursing Research &amp; Evidence Based Practice</td>
<td>• Co-Chief Operating Officers</td>
<td>• Obstetrics-Gynecology</td>
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<tr>
<td>• Director, GME Quality and Patient Safety Initiatives</td>
<td>• Associate Chief Medical Officer, Critical Care</td>
<td>• Orthopedics and Rehabilitation</td>
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<td>• Executive Director, University of Iowa Physicians</td>
<td>• Pathology</td>
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<td></td>
<td>• Chief of Medical Staff</td>
<td>• Pediatrics</td>
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<td></td>
<td>• Director, Perioperative Nursing Services</td>
<td>• Psychiatry</td>
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<td></td>
<td></td>
<td>• Radiology, Radiation Oncology</td>
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<tr>
<td></td>
<td></td>
<td>• Surgery, Cardiothoracic Surgery</td>
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<tr>
<td></td>
<td></td>
<td>• Dermatology, Otolaryngology, Urology, Ophthalmology, Dentistry</td>
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Physician Value Officers

- Oversees and/or executes work on improving key areas, including but not limited to:
  - Quality metrics (e.g., CMS, TJC, UHC, institutional)
  - Patient safety
  - Patient experience (e.g., HCAHPS, CG-CAHPS, Press Ganey scores)
  - Department clinical re-design initiatives that foster the consistent delivery of high-value care
  - Documentation improvement
  - Provider support (e.g., Epic optimization)
  - Strategic planning (e.g., providing input for space and facilities planning)

- Works with ACQO, Medical Directors, Nurse Managers, training program directors, and administrative leadership within his/her domain to support initiatives and foster and improve collaboration

- Formally presents and distributes key information with department leadership, faculty, advanced practice providers, and trainee, as applicable
Infection Prevention
Types of Isolation Precautions

Standard Precautions
*Applies to all Patients*

Transmission-Based Precautions
*For patients with documented or suspected infections*

3 types: *airborne, droplet, contact*
MicroGuide Free App for Smart Devices
(Apple/Android/Windows)

Menu

MicroGuide

< Adult Antimicrobial Guide

Contacts & General Information

Antibiograms

Body Systems

Formulary and Restricted Antimicrobials

Infection Prevention

Surgical Prophylaxis

Renal Dosing of Antimicrobials

What's new in this Version?
## Key Prevention Strategies for HAIs

<table>
<thead>
<tr>
<th>UTI</th>
<th>CLABSI</th>
<th>VAP</th>
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<tbody>
<tr>
<td>• Place foley catheter only when necessary</td>
<td>• Hat, mask, sterile gown for the operator(s)</td>
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<tr>
<td>• Remove foley catheter ASAP</td>
<td>• Large sterile drape on the bed</td>
<td>• Keep head of bed elevated</td>
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<tr>
<td></td>
<td>• Use chlorhexidine to prep the insertion site</td>
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<tr>
<td></td>
<td>• Use central line checklist for insertion</td>
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<tr>
<td></td>
<td>• Remove IV lines ASAP</td>
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**Hand hygiene**
3 ways to prevent infection

Clean care is safer care

Wash up
Clean your hands before and after patient contact

Wipe it down
Clean your stethoscope after patient contact

Go bare below the elbows
Recommended no white coat or sleeves below the elbows
• Roll up your shirt sleeves (even better, wear scrubs!)
• Guys: go necktie-free (or tuck it into your shirt)
• Don’t wear a white coat (or hang it here before seeing patients)
• Wash your hands before & after every patient contact
• Wipe down your stethoscope after every patient exam
Preventing infection:

Get your flu shot!
Preventing infection:
If you’re sick stay home!
Presenteeism

An example from UIHC

*Index case*: Resident who came to work ill with influenza
Sharps Injury or Blood/Body Fluid Exposure

- Sharps injury: clean wound with soap and water immediately

- Splashes:
  - flush mucous membranes with clean water
  - for eye exposure: remove contacts, if present and flush eyes for a minimum of 5 minutes.

- Do not delay evaluation:
  - During business hours, report to Employee Health
  - After hours, report to the Emergency Department
3 ways to prevent infection

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Patient Safety Program
Vertical Interventions

DVT prophylaxis
Central line bundle
Discharge planning
Best practice alerts
Sepsis bundle

Horizontal Interventions

Safety Culture
Behavior Expectations for Error Prevention
Service Excellence
### Behavior Expectations for Error Prevention

<table>
<thead>
<tr>
<th>Expectation</th>
<th>Tools</th>
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<tbody>
<tr>
<td>Pay attention to detail</td>
<td>• STAR (Stop, Think, Act, Review)</td>
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<tr>
<td></td>
<td>• Performing multiple tasks</td>
</tr>
<tr>
<td></td>
<td>• Distracted or fatigued</td>
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<tr>
<td></td>
<td>• Under time pressure</td>
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<td></td>
<td>• Before any safety critical action</td>
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<tr>
<td>Communicate clearly</td>
<td>• 3-way repeat back / read back</td>
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<tr>
<td></td>
<td>• Ask and encourage clarifying questions</td>
</tr>
<tr>
<td></td>
<td>• Phonetic &amp; numeric clarifications</td>
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<tr>
<td></td>
<td>• SBAR (situation, background, assessment, recommendation)</td>
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<td></td>
<td>• Direct physician to physician communication</td>
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<tr>
<td>Have a questioning attitude</td>
<td>• Validate &amp; verify</td>
</tr>
<tr>
<td>Handoff effectively</td>
<td>• Patient, Plan, Purpose, Problems, Precautions</td>
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Stop the Line Policy: Escalating Concern

Concemed individual unable to resolve safety or quality issue

Local leader: • Nurse manager • Medical Director • Charge Nurse • Attending physician

House leader: • Nurse supervisor • Dept Chair

CNO/CMO or designee
Safety Events

Serious Safety Event
• Reaches the patient
• Results in moderate to severe harm or death

Precursor Safety Event
• Reaches the patient
• Results in minimal harm or no detectable harm

Near Miss Safety Event
• Does not reach the patient
• Error is caught by a detection barrier or by chance

How to enter a Patient Safety Net Report

- Click on PSN icon on clinical desktop
- OR
- Access through The Point