Improving Patient Safety Across Michigan and Illinois

Hospital Engagement Network (HEN) 2.0

Kickoff Meeting

November 11, 2015

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MHA Keystone Center
“The problems that exist in the world today cannot be solved by the same level of thinking that created them.”

- Albert Einstein
Michigan’s Overall Performance

### Measure Area

<table>
<thead>
<tr>
<th>Measure Area</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient mortality</td>
<td>Best performance of all measures in 2013; also improving faster than state median</td>
</tr>
<tr>
<td>30-day mortality and inpatient expense/discharge</td>
<td>Very good and good 2013 performance but below median rates of improvement</td>
</tr>
<tr>
<td>Core measures</td>
<td>Near median performance and improvement</td>
</tr>
<tr>
<td>Medicare spend/beneficiary index</td>
<td>Average 2013 performance (no trend)</td>
</tr>
<tr>
<td>Complications</td>
<td>Very poor 2013 performance but above median rate of improvement; Michigan’s MOST IMPROVED measure</td>
</tr>
<tr>
<td>Patient safety</td>
<td>Very poor 2013 performance but ranked above median on rate of improvement</td>
</tr>
<tr>
<td>30-day readmissions and patient rating of care</td>
<td>Poor performance and below median rates of improvement</td>
</tr>
<tr>
<td>Average length of stay and operating profit margin</td>
<td>Poor and very poor performance</td>
</tr>
</tbody>
</table>

**Overall Ranking: 2009-2013 2013**

- **88.2**
- **27.5**

Source: Truven Health Analytics
Individual Hospital Performance

Commentary by Truven Health Analytics from their Top 100 Hospitals® National Performance Report:

- Data show approximately 30% of hospitals exhibit high reliability on inpatient mortality, 30-day mortality, inpatient expense and Medicare spending per beneficiary.
- Less than 25% show reliable performance on complications, patient safety, core measures, 30-day readmissions, average length of stay, profit and patient rating of care.
- Nearly half demonstrate low reliability on patient safety and profit.
- Of greatest concern – over half of the hospitals are likely to show decline in patient safety, 30-day readmissions, profit and HCAHPS in the future, unless leadership has taken action since 2013.
- The bottom line is Michigan does not appear to offer reliable performance in the majority of hospitals on the majority of metrics.

Source: Truven Health Analytics
HEN 2.0 Focus Areas

Goal: 40%/20% Reductions, 2010 baseline

- Catheter-associated urinary tract infections (CAUTI)
- Central line-associated blood stream infections (CLABSI), in all hospital settings
- Ventilator-Associated Events (VAE)
- Surgical site infections, hip/knee replacements, colon surgery, abd hysterectomy
- Obstetrical adverse events, early elective delivery, obstetrical hemorrhage, and preeclampsia treatment and management
- Adverse drug events (ADE), opioid safety, anticoagulation, and glycemic management
- Injuries from falls and immobility
- Pressure ulcers
- Venous thromboembolism (VTE), including, at a minimum, all surgical settings
- Preventable Readmissions, goal is 20% reduction
Optional Topics for Improvement

• Severe Sepsis and Septic Shock
• Hospital Culture of Safety
• Iatrogenic Delirium
• Clostridium Difficile
• Undue Exposure to Radiation
• Airway Safety
• Failure to Rescue
MHA-IHA HEN Participation Benefits

1. Expert and peer-sourced resources and tools to support your HEN improvement work
2. In-person and virtual networking opportunities to learn from national experts and each other
3. Keystone and IHA collaborative offerings to advance your quality improvement work
4. Comparative and benchmarked data to identify and track progress
5. Opportunities to participate in peer-mentoring
6. Opportunities to train staff in quality improvement principles and infection control
MHA-IHA Approach to HEN 2.0

**Focused Interventions**
- Pressure Ulcers
- Falls
- SSI
- VTE
- CLABSI
- Readmissions

**Collaboratives**
- Keystone: Pain Management
- Keystone: ICU (delirium & early mobility)
- Keystone: Sepsis
- Keystone: Obstetrics
- Keystone: CAUTI
- IHA: Readmissions

**Foundational Components**
- Culture
- Patient and Family Engagement
- High Reliability
Foundational Components

1. **Cultural improvement**: Executive leadership shall implement/participate in hospital-wide safety huddles.

2. **Patient & Family Engagement**: Hospital shall implement two new practices from the PFE Roadmap.

3. **High Reliability**: Leadership shall complete the High-Reliability Self-Assessment Tool.
Foundational Components

1. Cultural improvement: Executive leadership shall implement/participate in hospital-wide safety huddles

By September 23, 2016:

*HEN 2.0 hospitals will have implemented daily, hospital-wide safety huddles that include executive leadership*
Foundational Components

2. Patient & Family Engagement: Hospital shall implement two new practices from the PFE Roadmap

The 12 recommended PFE best practices are broken down into 3 categories:
1. Infrastructure
2. Staffing
3. Deployment
Patient & Family Engagement

Next steps:

1. PFE and primary HEN 2.0 contacts will be emailed instructions to complete a **PFE Action Planning** form to identify the practices that will be implemented across the year.

2. The MHA Keystone Center will host a number of training and coaching events in 2016 to support the implementation of these practices.
Foundational Components

3. **High Reliability**: Leadership shall complete the High-Reliability Self-Assessment Tool

*Striving for high reliability is not a project*

- Leadership commitment to goal of zero
- Fully functioning culture of safety
- Highly effective improvement capacity
High Reliability


**Leadership Commitment**
- Board
- CEO/Management
- Physicians
- Quality Strategy
- Quality Measures
- Safe Adoption of IT

**Adoption of Safety Culture**
- Trust
- Accountability
- Identifying Unsafe Conditions
- Strengthening Systems
- Assessment

**Robust Process Improvement®**
- Methods
- Training
- Spread

**Stages of Maturity:**
- Beginning
- Developing
- Advancing
- Approaching

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The Oro 2.0™ Reliability Self-Assessment Tool

Organizational Assessment & Resource Library
49 questions with branching logic for hospital senior leadership
Evaluates level of maturity in 14 components

Provides leading indicator information about strengths, opportunities, and potential investment strategies for achieving performance

Alignment is critical for the high reliability journey
High Reliability Program

• **Tier 1 (Foundational; all hospitals)**
  – Baseline high reliability (Oro 2.0) assessment
  – One in-person conference/year
  – Monthly webinars
  – Coaching calls (1/quarter)

• **Tier 2 (max of 10 hospitals): above plus-**
  – Onsite facilitated, in-depth high reliability assessment
  – Additional site visit
MHA-IHA HEN 2.0

Focused Interventions
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Collaboratives
- Keystone: Pain Management
- Keystone: ICU (delirium & early mobility)
- Keystone: Sepsis
- Keystone: Obstetrics
- Keystone: CAUTI
- IHA: Readmissions

Foundational Components
- Culture
- Patient and Family Engagement
- High Reliability
MHA-IHA Keystone Collaboratives

MHA-IHA HEN participants have the opportunity to join any (or all) of these 6 Collaboratives:

1. Pain Management
2. ICU (Delirium and Early Mobility)
3. Sepsis
4. Obstetrics
5. CAUTI
6. Readmissions (IHA)
MHA Keystone and MPRO are maximizing efficiencies by working together to leverage the resources and educational opportunities we offer to hospitals, and coordinating to accelerate patient safety improvements across Michigan.

- **CAUTI**: HEN hospitals are welcome to participate in MPRO’s webinars and other educational opportunities.
- **ADE**: Supporting joint goals by aligning ADE reporting and improvement.
- **Care Coordination/Readmissions**: MHA and MPRO together support a statewide Care Transitions Coordinating Team to align and support all of the care transitions activities happening within Michigan.
MHA-IHA HEN 2.0

Focused Interventions
- Pressure Ulcers
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Collaboratives
- Keystone: Pain Management
- Keystone: ICU (delirium & early mobility)
- Keystone: Sepsis
- Keystone: Obstetrics
- Keystone: CAUTI
- IHA: Readmissions

Foundational Components
- Culture
- Patient and Family Engagement
- High Reliability
Focused Interventions

Intensive one-on-one coaching and support will be available to hospitals that request assistance through focused interventions to address specific HACs and Readmissions.

Focused Intervention Platforms:
- MHA Keystone Site Visits
- Coaching Calls
- Facilitation of Peer to Peer Site Visits/Coaching Calls
HEN 2.0 Resources

1. IHA-MHA HEN 2.0 Website
2. MHA Community Website
3. MHA Keystone Data System (KDS)
4. Keystone Collaboratives and Readmissions Collaborative
5. Hospital site visits and coaching from MHA Keystone staff and clinical consultants
Hospital Engagement Network (HEN)

CMS' national Partnership for Patients campaign has funded HEN 2.0 - a Hospital Engagement Network (HEN) follow-up initiative - to accelerate improvement efforts to reduce harm to patients by 40 percent for hospital-acquired conditions and 20 percent for preventable readmissions (40/20; against a 2010 baseline). HENs are responsible for identifying, recruiting, engaging, intervening with, and gathering data from their network of participating hospitals on the ten core topic areas of the Partnership for Patients, as well as other elective areas of harm.
MHA Keystone Center
Collaborative Overview
Deeper Dive into the MHA-IHA Collaboratives

• Structure: Kick-off in-person meeting, followed by monthly webinars and coaching calls with national experts. Each collaborative collects its own baseline and monthly data to ensure focused progress is made and sustained and each collaborative continues and grows beyond the HEN 2.0 year.

• Collaboratives utilize the Johns Hopkins University 4Es methodology:
  – **Engage**: Share stories and baseline data that show how the project will improve culture and patient outcomes.
  – **Educate**: Educate staff on evidence and interventions needed for change to occur.
  – **Execute**: Standardize procedures, create independent checks, learn from mistakes and empower staff to pause a procedure if they see a potential error, safety or quality issue.
  – **Evaluate**: View infections or harm as defects in care and provide feedback on performance.
MHA & IHA Collaboratives
2016 Participation

The deadline to enroll or recommit to any collaborative is January 1!

https://www.alliance4ptsafety.org/HEN/Collaboratives.aspx
MHA & IHA Collaboratives

MHA-IHA HEN participants have the opportunity to join any (or all) of these 6 Collaboratives:

1. Pain Management
2. ICU (Delirium and Early Mobility)
3. Sepsis
4. Obstetrics
5. CAUTI
6. Readmissions
MHA Keystone: Pain Management

**Goal:** reduce opioid-related adverse events, improve appropriate pain management, decrease opioid usage statewide and enhance patient expectation management

**Interventions:**
1. Screen to determine if patients are opioid naïve or tolerant prior to receiving any opioids.
2. All patients needing pain control will have multimodal analgesia, follow the World Health Organization analgesic pain ladder.
3. Assess all patients receiving opioids via the Michigan Opioid Safety Score or Pasero Opioid-induced Sedation Scale to prevent unintended sedation and respiratory depression.
4. Patients receiving opioids will not receive more than one concomitant sedative.
5. All patients receiving pain medications will be counseled on potential medication side effects and expectations of realistic pain management.
6. Establish policies and procedures for patients no longer responding to treatment, including increased monitoring, level of care and appropriate pain consultation.
7. Patients requiring a PCA will be monitored via pulse oximetry and/or capnography.
MHA Keystone: ICU Delirium and Early Mobility

**Goal:** reduce the risk of ICU patients developing delirium and encourage early mobility of those that are mechanically ventilated.

**Interventions:**
ABCDEF bundle
A. Assess, Prevent and Manage Pain
B. Both Spontaneous Awakening Trials and Spontaneous Breathing Trials
C. Choice of Sedation
D. Delirium: Assess, Prevent and Manage
E. Early Mobility and Exercise
MHA Keystone: Sepsis

**Goal:** Reduce mortality of septic patients through the implementation of the Surviving Sepsis Bundle

**Interventions:**

Within 3 hours:
- Measure lactate
- Obtain blood cultures prior to administration of antibiotics
- Administer broad spectrum antibiotics
- Administer 30mL/kg crystalloid (Lactate ≤4 or hypotensive)

Within 6 hours:
- Apply vasopressors to maintain mean arterial pressure ≥ 65 mmHg.
MHA Keystone: Obstetrics

**Goal:** reduce the risk of perinatal harm to mothers and babies.

**Interventions:**
- Management of Post-Partum Hemorrhage
- Management of Preeclampsia
- Reduction of Early Elective Deliveries (continued focus)
MHA Keystone: CAUTI

**Goal:** Reduce the risk of patients developing CAUTI.

**Interventions:**
- Conduct a gap analysis gauge a hospital’s practices regarding CAUTI.
- Used the Learning From Defects tool to identify improvement opportunities.
IHA Readmissions Collaborative

• Contracted with Cynosure Health as content experts and collaborative leads.
• Collaborative will consist of an 11 part webinar series beginning in February 2016.
• Development of a Reducing Readmissions Implementation Workbook.
• Establishment of a Readmissions Peer to Peer Learning Network.

(1) The Four Walls

- Eight webinars will focus on different topic areas within readmissions, with each webinar addressing interventions hospitals can implement within their four walls.

(2) The Continuum

- Each of those eight webinars will also address community resources and successful partnerships hospitals have made across the continuum which have resulted in enhanced continuity of care and reduced readmissions rates.
Measurement and Metrics
MHA-IHA Encyclopedia of Measures

30 required measures
HEN 2.0 Data Reporting

### 30 required measures

<table>
<thead>
<tr>
<th>Measures reported for you from MHA &amp; IHA claims data</th>
<th>ADE-1</th>
<th>OB-3</th>
<th>Pressure Ulcer-1</th>
<th>Readmits-3</th>
<th>VTE-1</th>
<th>Sepsis-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Measures reported for you from MHA &amp; IHA claims data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Measures reported for you by conferring rights to MHA/IHA</td>
<td>CAUTI-3</td>
<td>CLABSI-3</td>
<td>SSI-4</td>
<td>VAE-2</td>
<td>C.Dif-1</td>
<td>MRSA-1</td>
</tr>
<tr>
<td>6 Hospital directly-reported measures</td>
<td>ADE-3</td>
<td>Falls-1</td>
<td>OB-EED &amp; PPH</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hospitals will enter numerator/denominator data for 6 self-reported metrics into the Keystone Data System (KDS).
Confer Rights to NHSN

Instructions for Conferring Rights to the MHA Keystone Center Group in NHSN

Join the MHA Keystone Center group in NHSN:
a. Login to NHSN via the Patient Safety component
b. On the blue navigation bar on the left-hand side of the webpage, click “Group”, then click “Join.”
**ADE- Excessive Anticoagulation with Warfarin – Inpatients**

<table>
<thead>
<tr>
<th>Measure type</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of inpatients experiencing excessive anticoagulation with warfarin (INR greater than 6)</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of inpatients receiving warfarin anticoagulation therapy</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Patients with INR greater than 6, present on admission</td>
</tr>
<tr>
<td>Rate calculation</td>
<td>$\frac{\text{number of patients with INR &gt; 6}}{\text{number of patients receiving warfarin anticoagulation therapy}} \times 100$</td>
</tr>
<tr>
<td>Specifications/definitions</td>
<td>Available from <a href="https://www.ismp.org">ISMP Trigger Alert List</a></td>
</tr>
<tr>
<td>Sources/Recommendations</td>
<td>Hospital Reported: Submit to Keystone Data System (KDS)</td>
</tr>
</tbody>
</table>

**Data source(s)**
- Hospital Reported: Submit to Keystone Data System (KDS)

**Automatic transfer from**
- n/a

**Baseline period**
- October 2015

**Data collection period**
- Monthly, beginning July 2015

**KDS Measure ID(s)**
- KDS-HEN-ADE-2
# ADE—Hypoglycemia in Inpatients Receiving Insulin

<table>
<thead>
<tr>
<th>Measure type</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Hypoglycemia in inpatients receiving insulin or other hypoglycemic agents (e.g. hypoglycemia defined as plasma glucose concentration of 50 mg per dl or less).</td>
</tr>
<tr>
<td>Denominator</td>
<td>Inpatients receiving insulin or other hypoglycemic agents</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Patients with hypoglycemia present on admission</td>
</tr>
</tbody>
</table>

**Rate calculation**

\[
\text{Rate} = \frac{\text{number of patients with hypoglycemia who are receiving insulin}}{\text{number of patients receiving insulin}} \times 100
\]

**Specifications/definitions**  
Available from [ASHP Safe Use of Insulin](#)

**Data source(s)**  
**Hospital Reported:** Submit to MHA Keystone Data System (KDS)

**Automatic transfer from**  
n/a

**Baseline period**  
October 2015

**Data collection period**  
Monthly, beginning July 2015

**KDS Measure ID(s)**  
KDS-HEN-ADE-3
# ADE– ADEs due to Opioids

<table>
<thead>
<tr>
<th>Adverse Drug Events (ADE) related to Opioids: Patients receiving naloxone after treatment with IV opioids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure type</td>
</tr>
<tr>
<td>Numerator</td>
</tr>
<tr>
<td>Denominator</td>
</tr>
<tr>
<td>Exclusions</td>
</tr>
<tr>
<td>Rate calculation</td>
</tr>
<tr>
<td>Specifications/definitions Sources/Recommendations</td>
</tr>
<tr>
<td>Data source(s)</td>
</tr>
<tr>
<td>Automatic transfer from</td>
</tr>
<tr>
<td>Baseline period</td>
</tr>
<tr>
<td>Data collection period</td>
</tr>
<tr>
<td>KDS Measure ID(s)</td>
</tr>
</tbody>
</table>
# Falls with Injury (NQF 0202)

<table>
<thead>
<tr>
<th>Measure type</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of patient falls of injury level minor or greater (whether or not assisted by a staff member) in eligible units.*</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of patient days in eligible units during the measurement period</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Non-eligible unit types: pediatric, psychiatric, obstetrical, etc.</td>
</tr>
</tbody>
</table>
| Rate calculation      | \[
\frac{\text{number of falls with injury}}{\text{number of patient days}} \times 1,000
\]
| Specifications/definitions, Sources/Recommendations | Available from [NQF 0202](#) |
| Data source (s)       | Hospital Reported: Submit to MHA Keystone Data System (KDS)             |
| Automatic transfer from | n/a                                                                     |
| Baseline period       | 2014                                                                    |
| Data collection period | Monthly, beginning July 2015                                            |
| KDS Measure ID(s)     | KDS-HEN-Falls-1                                                         |
## OB Adverse Events - EED

### EED: CMS HEN 2.0 Evaluation Measure (PC-01, NQF 0469)
**Patients with Elective Vaginal Deliveries or Elective Cesarean Sections at ≥37 and <39 Weeks of Gestation Completed**

<table>
<thead>
<tr>
<th>Measure type</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of patients with elective vaginal deliveries or elective cesarean sections at ≥37 and &lt;39 weeks of gestation completed</td>
</tr>
<tr>
<td></td>
<td>• Medical induction of labor as defined in the <a href="#">Joint Commission Manual</a></td>
</tr>
<tr>
<td></td>
<td>• Cesarean section as defined in the <a href="#">Joint Commission Manual</a> and all of the following:</td>
</tr>
<tr>
<td></td>
<td>○ Not in labor</td>
</tr>
<tr>
<td></td>
<td>○ Not experiencing spontaneous rupture of membranes</td>
</tr>
<tr>
<td></td>
<td>○ No history of a prior uterine surgery</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of patients delivering newborns with ≥37 and &lt;39 weeks of gestation</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Diagnosis codes for conditions possibly justifying elective delivery prior to 39 weeks gestation as defined in Appendix A (see source documents)</td>
</tr>
</tbody>
</table>
| Rate calculation | \[
|                | \frac{\text{number of elective deliveries between 37 – 39 weeks gestation}}{\text{number of deliveries between 37 – 39 weeks gestation}} \times 100
| Specifications/definitions | Available from the [Joint Commission Manual: PC-01](#) |
| Sources/Recommendations | Available from [NQF 0469](#) |
| Data source(s) | **Hospital Reported:** Submit to MHA Keystone Data System (KDS) (or **OB Portal** for Keystone: OB Hospitals) |
| Automatic transfer from | n/a |
| Baseline period | 2013 |
| Data collection period | Monthly, beginning July 2015 |
| KDS Measure ID(s) | KDS-HEN-EED-1 |
OB Adverse Events - PPH

<table>
<thead>
<tr>
<th>Measure type</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of women (who gave birth &gt; 20 0/7 weeks gestation) who were transfused with ≥4 units of any blood product during the birth admission. See included codes below.</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of women giving birth (&gt;20 0/7 weeks gestation)</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Only include women who have delivered (either vaginal or cesarean) and received a transfusion as a result of the delivery. All other instances would be exclusions e.g. transfusions for co-morbidities, other disease processes, or trauma.</td>
</tr>
</tbody>
</table>
| Rate calculation     | \[
\frac{\text{number of women transfused with } \geq 4 \text{ units of blood during birth}}{\text{number of women giving birth}} \times 100
\]                                                                                                                                           |
| Specifications/definitions Sources/Recommendations | Available from [TJC/ACOG/CMQCC](#)                                                                                                                                                                    |
| Data source(s)       | Hospital Reported: Submit to MHA Keystone Data System (KDS) (or OB Portal for Keystone: OB Hospitals)                                                                                                   |
| Automatic transfer from | n/a                                                                                                                                                                                                   |
| Baseline period      | 2015                                                                                                                                                                                                   |
| Data collection period | Monthly, beginning July 2015                                                                                                                                                                         |
| KDS Measure ID(s)    | KDS-HEN-OB-4                                                                                                                                                                                           |
Keystone Data System (KDS) Demonstration

Sign in to continue to MHA Keystone Data System™

Email
Password
Sign In
Forgot your password?
Request Access
HEN Selfies...

I commit to...

Next week I will...

I learned...

Ah Ha!...

I Commit to...

MakIng the MHA-IHA HEN #1 in HEN 20!
Questions?

Michigan

Please email: keystone@mha.org

Or contact:

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Sam Watson
swatson@mha.org | (517) 886-8362