Hospital Improvement Innovation Network
Partnering with IHA and HRET

Nov. 1, 2016
Understanding HIIN

A Flowchart

Department of Health and Human Services (USDHHS)
- AHRQ (Agency for Healthcare Research and Quality)
- CMS (Centers for Medicare & Medicaid Services)
- CDC (Centers for Disease Control and Prevention)

Office of Clinical Standards and Quality (OCSQ)
- HSOPS (Hospital Survey on Patient Safety)
- TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient Safety)
- PSO (Patient Safety Organization)

QIO Program (Quality Improvement Organization)
- QIN – QIO (Quality Innovation Network - Quality Improvement Organizations)
- BFCC – QIO (Beneficiary and Family Centered Care - Quality Improvement Organizations)

HIIN (Hospital Improvement Innovation Network)

American Hospital Association (AHA)
- HRET (Health Research and Education Trust)

State Hospital Associations
- Hospitals

HIIN (Hospital Improvement Innovation Network)
# Quick Reference Comparison

<table>
<thead>
<tr>
<th></th>
<th>Original HEN</th>
<th>HEN 2.0</th>
<th>HIIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding Source</strong></td>
<td>Affordable Care Act</td>
<td>Affordable Care Act</td>
<td>Medicare Trust Fund</td>
</tr>
<tr>
<td><strong>Project Timeline</strong></td>
<td>2 base years; 1 optional year</td>
<td>1 base year; no optional year</td>
<td>2 base years; 1 optional year</td>
</tr>
<tr>
<td><strong>Project Aim</strong></td>
<td>40% reduction in preventable harm; 20% reduction in readmissions</td>
<td>40% reduction in preventable harm; 20% reduction in readmissions</td>
<td>20% reduction in all cause harm; 12% reduction in readmissions</td>
</tr>
<tr>
<td><strong>Number of hospitals</strong></td>
<td>1,378</td>
<td>1,497</td>
<td>~1710</td>
</tr>
<tr>
<td><strong>Number/Types of Topics</strong></td>
<td>10 core harm topics plus readmissions ADE, CAUTI, CLABSI, EED, Falls, OB Harm, Pressure Ulcers, SSI, VAP/VAE, VTE</td>
<td>10 core harm topics plus readmissions ADE, CAUTI, CLABSI, EED, Falls, OB Harm, Pressure Ulcers, SSI, VAE, VTE</td>
<td>10 core harm topics plus readmissions ADE, CAUTI, CLABSI, C-diff, Falls, Pressure Ulcers, Sepsis, SSI, VAE, VTE</td>
</tr>
<tr>
<td><strong>Number of Primes</strong></td>
<td>26</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td><strong>Data Submission Baseline</strong></td>
<td>2010</td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td><strong>Data Measures</strong></td>
<td>Mix of national, state, and organizationally defined measures</td>
<td>Nationally defined (standardized) outcome measures</td>
<td>Nationally defined (standardized) outcome measures</td>
</tr>
</tbody>
</table>
Keep patients from getting injured or sicker
• Reduce preventable hospital-acquired conditions by 40%.
• 1.8 million fewer injuries to patients, with more than 60,000 lives saved over the next three years
• Help patients heal without complication

Reduce all hospital readmissions by 20%
• 1.6 million patients will recover from illness without suffering a preventable complication requiring re-hospitalization within 30 days of discharge
HRET HEN 2.0
2015-2016

• 34 states and over 1500 hospitals in the AHA/HRET HEN 2.0 project

• Working in conjunction with 16 other HENs for a total of 3200 hospitals!
### HRET HEN 2.0 Accomplishments

#### TABLE 1: FINAL AHA/HRET HEN 2.0 ESTIMATED TOTAL HARMs PREVENTED AND COST SAVINGS

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>HARMs PREVENTED</th>
<th>COST/HARM</th>
<th>COST SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE</td>
<td>15,611</td>
<td>$5,000$¹</td>
<td>$78,054,063$</td>
</tr>
<tr>
<td>CAUTI</td>
<td>505</td>
<td>$1,000</td>
<td>$505,078</td>
</tr>
<tr>
<td>CLABSI</td>
<td>439</td>
<td>$17,000</td>
<td>$7,469,333</td>
</tr>
<tr>
<td>EED</td>
<td>1,151</td>
<td>$9,732</td>
<td>$11,240,529</td>
</tr>
<tr>
<td>Falls</td>
<td>1,409</td>
<td>$12,965</td>
<td>$18,265,363</td>
</tr>
<tr>
<td>OB Harm</td>
<td>4,336</td>
<td>$114</td>
<td>$753,627</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(with instrument)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$197</td>
<td></td>
</tr>
<tr>
<td>Pressure Ulcers</td>
<td>1,122</td>
<td>$17,000</td>
<td>$19,077,915</td>
</tr>
<tr>
<td>Readmissions</td>
<td>8,040</td>
<td>$15,477</td>
<td>$124,440,097</td>
</tr>
<tr>
<td>SSI</td>
<td>792</td>
<td>$21,000</td>
<td>$16,630,883</td>
</tr>
<tr>
<td>VAE</td>
<td>278</td>
<td>$21,000</td>
<td>$5,632,649</td>
</tr>
<tr>
<td>VTE</td>
<td>738</td>
<td>$8,000</td>
<td>$5,001,515</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>34,422</strong></td>
<td>---</td>
<td><strong>$288,171,052</strong></td>
</tr>
</tbody>
</table>

* Totals may not match sum of individual topics due to rounding.

1. Represents total harms and cost savings for all events reported (hypoglycemia, anecaputallation, and opioid adverse drug events)
2. Represents total harms and cost savings for obstetrical trauma for vaginal deliveries with instrument, and obstetrical trauma for vaginal deliveries without instrument
3. Represents total harms and cost savings for all procedures reported (colon surgeries, abdominal hysterectomies, total hip replacement, and total knee replacement)

Data Source: Data submitted as of 09/01/2016, for October 2015 through May 2016. Costs per harm were provided by the HEN 2.0 Evaluation Contractor, July 20, 2016, "HIPPEC_Cost Savings_ROI_Summary.PDF"
Indiana HEN 2.0 Accomplishments

**STATE AGGREGATE TOPIC-LEVEL ACHIEVEMENT**

<table>
<thead>
<tr>
<th></th>
<th>Baseline Rate</th>
<th>Most Current Q Rate</th>
<th>Relative reduction</th>
<th>Baseline Data Submission</th>
<th>May Data Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE</td>
<td>1.18</td>
<td>0.85</td>
<td>-28.4%</td>
<td>90%</td>
<td>82%</td>
</tr>
<tr>
<td>CAUTI</td>
<td>1.01</td>
<td>0.94</td>
<td>-7.3%</td>
<td>100%</td>
<td>96%</td>
</tr>
<tr>
<td>CLABSI</td>
<td>1.06</td>
<td>1.09</td>
<td>3.2%</td>
<td>100%</td>
<td>96%</td>
</tr>
<tr>
<td>EED</td>
<td>2.95</td>
<td>0.52</td>
<td>-82.2%</td>
<td>100%</td>
<td>85%</td>
</tr>
<tr>
<td>Falls</td>
<td>0.57</td>
<td>0.53</td>
<td>-6.6%</td>
<td>97%</td>
<td>82%</td>
</tr>
<tr>
<td>OB Harm</td>
<td>20.17</td>
<td>11.78</td>
<td>-41.6%</td>
<td>100%</td>
<td>88%</td>
</tr>
<tr>
<td>PrU [1]</td>
<td>1.09</td>
<td>0.19</td>
<td>-81.4%</td>
<td>126%</td>
<td>104%</td>
</tr>
<tr>
<td>Read</td>
<td>9.92</td>
<td>9.45</td>
<td>-4.3%</td>
<td>95%</td>
<td>78%</td>
</tr>
<tr>
<td>SSI</td>
<td>2.44</td>
<td>2.07</td>
<td>-15.0%</td>
<td>95%</td>
<td>80%</td>
</tr>
<tr>
<td>VAE</td>
<td>3.41</td>
<td>5.44</td>
<td>59.7%</td>
<td>99%</td>
<td>92%</td>
</tr>
<tr>
<td>VTE</td>
<td>3.76</td>
<td>3.09</td>
<td>-17.8%</td>
<td>98%</td>
<td>85%</td>
</tr>
</tbody>
</table>

**Graph**: Harms Prevented by Month

- **Number of Harms Prevented**
  - October: 379
  - November: 316
  - December: 289
  - January: 403
  - February: 930
  - March: 506
  - April: 372
  - May: 503
  - YTD* (372)

**Cost Savings**

- $4,382,595
- $2,940,726
- $1,093,083
- $3,552,781
- $6,896,475
- $4,267,402
- $5,158,221
- $4,576,852
- $52,957,437

*The YTD value reflects the total harms prevented for all hospitals in the state for the entire monitoring period, and may not equal the sum of individual monthly harms prevented.

IHAnet.org/Quality-Patient-Safety
Patient & Family Engagement Metrics

<table>
<thead>
<tr>
<th></th>
<th>BL</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning checklist...</td>
<td>56%</td>
<td>54%</td>
<td>57%</td>
<td>56%</td>
</tr>
<tr>
<td>Huddles and bedside reporting</td>
<td>88%</td>
<td>88%</td>
<td>88%</td>
<td>88%</td>
</tr>
<tr>
<td>Dedicated PFE staff</td>
<td>66%</td>
<td>66%</td>
<td>69%</td>
<td>69%</td>
</tr>
<tr>
<td>Active PFE committee</td>
<td>69%</td>
<td>69%</td>
<td>68%</td>
<td>68%</td>
</tr>
<tr>
<td>Patients on boards</td>
<td>51%</td>
<td>51%</td>
<td>54%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Disparities Metrics

<table>
<thead>
<tr>
<th></th>
<th>BL</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collects information about RACE...</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Collects information about ETHNICITY...</td>
<td>96%</td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Collects information about LANGUAGE...</td>
<td>87%</td>
<td>87%</td>
<td>87%</td>
<td>87%</td>
</tr>
<tr>
<td>Reports race and ethnicity...</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>Uses data to establish goals...</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Uses data to identify gaps...</td>
<td>49%</td>
<td>49%</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>Uses targeted interventions...</td>
<td>39%</td>
<td>39%</td>
<td>39%</td>
<td>39%</td>
</tr>
</tbody>
</table>
Person and Family Engagement

- Implementation of planning checklist
- Conducting shift change huddles and bedside reporting
- Accountable leader who is responsible for PFE
- Hospitals having an active Person and Family Engagement Committee
- One or more patient representatives serving on hospital Board of Directors
Health Care Disparities

- Review and address gaps in the collection of Race, Ethnicity, Age and Language data
- Measure disparities related to readmission as a top priority
- Questions related to PFE and disparities will be asked in the initial needs assessment and then updated once a quarter to track progress
WHERE WE ARE GOING

GOALS:

20% **Overall Reduction in Hospital Acquired Conditions**
(baseline 2014)

12% **Reduction in 30-Day Readmissions**
(baseline 2014)

“America’s hospitals embrace the ambitious new goals CMS has proposed,” said Rick Pollack, president and CEO of the American Hospital Association (AHA). “The vast majority of the nation’s 5,000 hospitals were involved in the successful pursuit of the initial Partnership for Patients aims. Our goal is to get to zero incidents. AHA and our members intend to keep an unrelenting focus on providing better, safer care to our patients — working in close partnership with the federal government and with each other.”

2010 145 Harms/1,000 Discharges
2011 142 Harms/1,000 Discharges
2012 132 Harms/1,000 Discharges
2013 121 Harms/1,000 Discharges
2014 121 Harms/1,000 Discharges

**New Goal**

2019 97 Harms/1,000 Discharges

partnershipforpatients.cms.gov

IHAdconnect.org/Quality-Patient-Safety
HIIN Is Different

- Focus on individualized approaches & technical assistance
- Emphasis on doing, not planning
- Identifying and spreading adaptive solutions
- Leverage stories and public narrative for change
Benefits of HIIN Participation

- Reduces harm to patients
- Improves quality of care
- Access to programming
- Pay for Performance [https://www.qualitynet.org/](https://www.qualitynet.org/)
- PSO [https://pso.ahrq.gov/](https://pso.ahrq.gov/)
Overview of Our HIIN Plan

- Topic-specific Webinars and Office Hours
- Nationally-sponsored State-level Meetings
- Data Education and Support
- Rural/CAH Affinity Group
- Fellowships: QI, PFE
- UP Campaign

Hospital-level Improvement

SHA-led Meetings

Site Visits

IHAlconnect.org/Quality-Patient-Safety
Setting Up for Success... HRET will provide

Education
- Encyclopedia of Measures
- Onboarding

Technical Support
- HRETdatasupport@aha.org
- Office Hours

Other Resources
- Improvement Calculator
- Results and Reports

IHAconnect.org/Quality-Patient-Safety
HRET’S APPROACH

- Framing all HIIN work as a single, cross-cutting improvement initiative rather than series of discrete efforts
  - Group a few interventions together (leadership, current/accurate data, physician engagement, culture of safety, PFE)
- Emphasize “doing” within the hospital rather than “attending” as the route to substantive progress
  - Look at the improvement occurring within the organization
- Stressing rapid progress vs chance
  - Focus on rapid change linked to process improvement

IHACoNECT.ORG/QUALITY-PATIENT- SAFETY
HRET Areas of Emphasis

- Organizational Engagement
  - Leadership engagement
    - Leverage HIT resources to promote improvement
    - Making the financial case
    - Monitoring and promoting improvement
  - Physician Engagement
    - Training and coaching to project leaders regarding how to effectively engage physicians
    - Training and coaching for physicians on how they can champion improvement efforts
  - Patient / Family Insights
    - Provide guidance and coaching on how to leverage PFE insights to reduce harm
    - Focused guidance on how PFE can directly contribute to avoid infections, prevent falls
HRET Support

- Hands on Improvement Support
  - Site Visits
    - Well-planned and executed site visits
    - Foster leadership support
    - Facilitate physician engagement
    - Provide a forum to receive practical advice on topics
  - Coaching calls
    - Focus on implementation challenges
    - Allow hospitals to ask questions, get advice and encouragement
    - Obtain improvement insights
  - Panels
    - Clinical and implementation experts
    - Hospital staff
    - Peer level sharing
HRET Tactics

- Data System
  - Simple, straight forward, user-friendly, non-duplicative
- Education and resources development
  - Best practice dissemination
  - Active engagement by participants
  - Implementation challenges addressed
- Virtual support, tools and resources
  - Easily accessible, relevant
  - Website and LISTSERV®
- SMEs, IAs, Physician Advisors

- Guidance from a national patient advisory council
- Focused virtual events (e.g., webinars, conference calls)
- Extensive online support
- In-person meetings: national and state-sponsored
- Fellowships
- Leveraging data
- Site visits
- Coaching and accountability

IHAconnect.org/Quality-Patient-Safety
IHA State Implementation

- Site visits
- Coaching calls
- In-person statewide meeting
- Regional patient safety coalitions
- Patient safety summit
- Improvement cohorts
- Affinity Groups

- Science of Improvement Programs, e.g., LEAN / Team STEPPS / High Reliability
- Topic specific campaigns
- Data support, e.g., reports, help desk
- On-going communication
HRET-HIIN Website

www.hret-hiin.org
HRET Encyclopedia of Measures

EOM available at www.hret-hiin.org

Data & Quality Improvement

The HRET HIIN project aims to reducing all-cause inpatient harm by 20 percent participating hospitals. A key component to making patient care safer in your hospital is towards improvement using clinical data.

Data Tools. The HRET HIIN project provides a number of tools to support the Encyclopedia of Measures (EOM) which serves as the measure reference required topic measures. Tracking your data in this manner will provide you to study your data across time using run charts, and determine the effect of your topics at your hospital in reducing patient harm.

Submitting Data. If your hospital will be joining the HRET HIIN NHSN group, the NHSN Group Instructions will guide you through this process.

ENCyclopedia(S) OF MEASURES

- Topic
- Measure applicability
- Numerator & denominator statement
- Rate calculation formula
- Hyperlinked publicly available specifications
- NHSN availability
- Baseline timeframes
- Measure identifiers
- Additional resources

Update was released on 10/31/2016
## MEASURES FOR ALL HOSPITALS

<table>
<thead>
<tr>
<th>Topic – Measure</th>
<th>Baseline</th>
<th>Y1 Goal</th>
<th>Y2 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE – individual measures, composite</td>
<td>2014</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>CAUTI – overall rate</td>
<td>2015</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>c. <em>Difficile</em> – rate</td>
<td>2014</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>Falls</td>
<td>2014</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>Pressure Ulcers – rate, prevalence</td>
<td>2014</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>Readmissions</td>
<td>2014</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>Sepsis – mortality</td>
<td>2014</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>MRSA – rate</td>
<td>2014</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Culture of Safety – worker harm events</td>
<td>2014</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

1 The AHRQ PSI measure specifications exclude stays less than 5 days. While CAHs are required to maintain an annual average length of stay of 96 hours or less, CAHs are encouraged to follow the specifications to track pressure ulcers for appropriate inpatient stays in their facilities, even if the Inpatient stay is less than 5 days.
# Reporting Measures

## MEASURES FOR SPECIFIC HOSPITALS

<table>
<thead>
<tr>
<th>Topic - Measure</th>
<th>Applicability</th>
<th>Baseline</th>
<th>Y1 Goal</th>
<th>Y2 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUTI – ICU rate</td>
<td>Hospitals w/ICUs</td>
<td>2015</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>CAUTI – SIRs</td>
<td>Hospitals reporting to NHSN</td>
<td>2015</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>c. Difficile – SIR</td>
<td>Hospitals reporting to NHSN</td>
<td>2015</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>CLABSI – ICU rate</td>
<td>Hospitals w/ICUs</td>
<td>2015</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>CLABSI – SIRs</td>
<td>Hospitals reporting to NHSN</td>
<td>2015</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>MRSA – SIR</td>
<td>Hospitals reporting to NHSN</td>
<td>2015</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>VTE – post operative</td>
<td>Hospitals that perform inpatient surgeries</td>
<td>2014</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>VAE – VAC and IVAC</td>
<td>Hospitals that use ventilators</td>
<td>2014</td>
<td>7%</td>
<td>20%</td>
</tr>
<tr>
<td>SSI – rates</td>
<td>Hospitals that perform each of the four surgeries listed</td>
<td>2014</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>SSI - SIR</td>
<td>Hospitals reporting to NHSN</td>
<td>2015</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>
NHSN Reporting Groups

- Facilities have the option to join and confer rights to an NHSN group (HRET and IHA)
- If you join an NHSN group, baseline and monitoring data will be extracted for you by the group
- Instructions on how to join and confer rights to the HRET group are available on the HEN website: [http://www.hret-hiin.org/data/hiin_nhsnconferrightsinstructions_pdf.pdf](http://www.hret-hiin.org/data/hiin_nhsnconferrightsinstructions_pdf.pdf)
- Instructions on how to join and confer rights to the IHA group are available: [https://ihaconnect.boxcn.net/shared/static/02f8529901dc6f674503.pdf](https://ihaconnect.boxcn.net/shared/static/02f8529901dc6f674503.pdf)
NHSN group instructions available at www.hret-hiin.org
Q: When will CDS be available?
A: Within the next two weeks, but no later than Nov. 11 2016.

Q: How will hospitals get set up in CDS?
A: All hospitals will be granted an “initial setup” login which will permit them to create specific user accounts.
- If you are a returning HEN 2.0 hospital, any users who logged into CDS within 90 days of the end of HEN 2.0 will be migrated.
- Stay tuned for the “Quick Start Guides”
Q: How will CDS “look” for HIIN?
A: CDS will display one baseline, with start and end dates to be selected by the hospital (refer to the EOM for the preferred baselines!)
A: CDS will display monthly data beginning with October 2016.

Q: Will returning HEN 2.0 hospitals be able to see their HEN 2.0 data?
A: Not as the HEN 2.0 project. If a returning hospital has data that meets the migration criteria, HRET will migrate that data.
Q: Will data be migrated for returning HEN 2.0 hospitals, and when?
A: Yes, as much as possible, for the HIIN baseline. HRET is working on the data migration plan and will provide details as soon they can.

**HEN 2 DATA MIGRATION**

- Only available for HEN 2 hospitals committed to HIIN
- NHSN measures (facilities in HRET group) “new” baselines
  - SIRs: 2015 – **after** December 2016 update in NHSN
  - Rates: 2014 or 2015 (CLABSI, CAUTI)
- For other measures, assess baseline availability
  - If measure tracked before HEN 2, assess timeframes
  - If measure not tracked before HEN 2, use Oct – Dec ’15
- **Will take time to complete**
Upcoming AHA/HRET Webinars

- Nov. 8 from 12 – 1 p.m. ET  
  AHA HPOE Webinar  Healthcare Reform and The Path to Equity
- Nov. 8 from 12:00 – 12:50 p.m. ET  
  HRET HIIN | C. Difficile - Stubborn or Unreasonable?
- Nov. 10 from 12 – 1 p.m. ET  
  HRET HIIN | Readmissions - Hospital Bright Spots
- Nov. 15 from TIME ET  
  HRET HIIN | Data
- Nov. 17 from TIME ET  
  HRET HIIN | ADE
- Nov. 29 from TIME ET  
  HRET HIIN | Sepsis

Webinar registrations can be located at [http://www.hret-hiin.org/events/events.shtml](http://www.hret-hiin.org/events/events.shtml)
Next Steps

1. Return Commitment Letter to IHA by **Nov. 18**
2. Confer Rights within NHSN to the HRET and IHA user groups
3. Review the Encyclopedia of Measures for data reporting details
4. Watch for announcements about CDS and needs assessments being available
5. Register for webinars