Translating Evidence into Practice

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Large Scale Collaboratives (All funded by AHRQ)

• Michigan Keystone ICU program
  – 103 ICUs, 67 hospitals

• National On the CUSP: Stop BSI Project
  – 1,800 units, >1,000 hospitals, 44 States

• Safety Program for Surgery
  – >350 perioperative teams, 220 hospitals, 37 States

• Safety Program for Mechanically Ventilated Patients
  – 254 ICUs, 214 hospitals, 38 States
A National Success Story

ICU CLABSI Rates per 1000 catheter days in US

<table>
<thead>
<tr>
<th>TECHNICAL WORK</th>
<th>ADAPTIVE WORK</th>
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<tbody>
<tr>
<td>Work that we know we should do, like hand hygiene or appropriate skin prep prior to surgical incision</td>
<td>The intangible components of work, like ensuring team members speak up with concerns and hold each other accountable</td>
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<td>Work that lends itself to standardization (e.g., checklists and protocols)</td>
<td>Work that shapes the attitudes, beliefs, and values of clinicians, so they consistently perform tasks the way they know they should</td>
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<td>Evidence-based interventions</td>
<td>Safety culture, including teamwork</td>
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Comprehensive Unit-based Safety Program (CUSP)

Pre-work: Measure clinician and staff perceptions of safety culture with HSOPS survey

1. Educate staff on science of safety
2. Identify defects
3. Partner with a senior executive
4. Learn from defects
5. Improve teamwork communication

Adaptive Work

Translating Evidence Into Practice (TRIP)

1. Summarize the evidence in a checklist
2. Identify local barriers to implementation
3. Measure performance
4. Ensure all patients get the evidence
   - Engage
   - Educate
   - Execute
   - Evaluate

Technical Work

Improving Care of Mechanical Ventilation

- Daily Care Processes (ie: HOB, SAT, SBT, SubG-ETT, delirium assessment)
  - Early Mobility
  - Low Tidal Volume Ventilation
National CLABSI reduction: A Success Story to Learn From

• Valid and reliable measures
  – Scalable mechanism to collect and report (NHSN)
• Effective strategies to reduce harm
  – Mature practice guidelines
• Investment in implementation science
  – Combine technical and adaptive work
  – Single and multicenter studies
• Clinical communities
  – Clinicians led the work
  – Hospitals learned from each other
VAE Rate per 1,000 Ventilator Days
(n=194 units ever submit VAE data)

Preliminary data, unpublished
Barriers

- Competing priorities
  - Multiple efforts at unit/hospital level
- Lack of leadership support
  - Senior leaders and physicians
- Burden of data collection
  - Lack of integration with EMR
- Challenges with sustainability
Best Way Forward

• Advance the science
  – Increase funding for research in patient safety and implementation science

• Enabling infrastructure
  – Standard measures, data collection tools and performance reports; Resources for data collection

• Engage and connect frontline staff
  – Educate and build capacity; clinical communities

• Transparent reporting and accountability
  – National, state and hospital (board to bedside)