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Infection Prevention Implementation: AHRQ's Perspective on Translating Evidence into Practice

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The Research Continuum: Discovery to Implementation





HAI Prevention: From Research to Implementation

- Support **research** to develop improved methods for preventing HAIs: **what to do**
- Support **research** to develop effective **implementation** strategies for HAI prevention (implementation science): **how to do it**
- Translate research findings into tools for **implementing** HAI prevention
- Promote **implementation** of HAI prevention with effective methods, strategies, and tools



Implementation Tools for Preventing Transmission

- **Enhanced Protocol for Universal Decolonization**
 - ▶ Based on REDUCE-MRSA trial
 - ▶ Combining study protocol and QI elements into clinician-friendly tools
- **CRE Control and Prevention Toolkit**
 - ▶ Combining CDC guidelines with QI approaches



Implementation of HAI Prevention

Comprehensive Unit-based Safety Program (CUSP) Elements

- Improvement in:
 - ▶ Safety culture
 - ▶ Teamwork
 - ▶ Communication
- Checklist of proven practices

CUSP Implementation Impact

- CUSP for CLABSI: 41% ↓ in CLABSI rate
- CUSP for CAUTI in hospitals:
 - ▶ 701 non-ICUs: 30% ↓ in CAUTI rate
 - ▶ 509 ICUs: no significant ↓
 - ▶ Follow-up project: CUSP for ICUs with persistently elevated rates
- CUSP for CAUTI in LTC
 - ▶ Significant ↓ in CAUTI rate
- Toolkits





CUSP Implementation

Further Expansion of CUSP:

- CUSP for Safe Surgery – Inpatient
- CUSP for Safe Surgery – Ambulatory
- CUSP for Mechanically Ventilated Patients
- CUSP for Persistently Elevated CLABSI and CAUTI Rates in ICUs
- CUSP for Enhanced Recovery After Surgery
- CUSP for Antibiotic Stewardship



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