



Effective Health Care

Hospital Infection Control Processes

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- The topic area, *Hospital Infection Control Processes*, was found to be addressed by a 2012 AHRQ effectiveness report titled *Closing the Quality Gap Series: Prevention of Healthcare-Associated Infections*. In addition to this 2012 report, there are ongoing research and programmatic activities funded by AHRQ, which may eventually inform an update of the report. Given that the existing reports and ongoing work related to this nomination, no further activity will be undertaken on this topic.

AHRQ Evidence Report

- Mauger Rothenberg B, Marbella A, Pines E, Chopra R, Black ER, Aronson N. Prevention of Healthcare-Associated Infections. Closing the Quality Gap: Revisiting the State of the Science. Evidence Report/Technology Assessment No. 208. (Prepared by the Blue Cross and Blue Shield Association Technology Evaluation Center Evidence-based Practice Center under Contract No. 290-2007-10058-I.) AHRQ Publication No. 12(13)-E012-EF. Rockville, MD: Agency for Healthcare Research and Quality. November 2012. www.effectivehealthcare.ahrq.gov/reports/final.cfm.
- Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices. October 2014. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/research/findings/evidence-based-reports/services/quality/ptsafetyii-full.pdf>

Related AHRQ-funded programmatic activities

- Advances in the Prevention and Control of HAIs. June 2014. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/advances-in-hai/index.html>
- AHRQ Projects to Prevent Healthcare-Associated Infections, Fiscal Year 2011: Fact Sheet. October 2014. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/research/findings/factsheets/errors-safety/haify11/index.html>
- AHRQ Safety Program for End-Stage Renal Disease Facilities. November 2014. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/esrd/index.html>

Topic Description

Nominator(s): Organization

Nomination Summary: The nominator is interested in the comparative effectiveness of the use of a specially-formulated and delivered "bundle" of infection control interventions as compared to current or status quo infection control processes with hospitalized in-patients. The

nominator would also like to parse out and examine the effect of each element within the bundle (e.g., environmental cleaning methods, isolation, nursing activities, product review and choice, team training, quality improvement methods, patient cleaning, patient activation, infection control activities, senior leadership activities, education, measures and reporting, analysis, and peer-mentoring).

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Population(s): Hospitalized in-patients, including the frail elderly, patients on Medicaid, and those with exposure to nursing home or end stage renal disease (ESRD) settings

Intervention(s): A "bundle" of infection control interventions. Components of the "bundle" could include environmental cleaning methods, isolation, nursing activities, product review and choice, team training, quality improvement methods, patient cleaning, patient activation, infection control activities, senior leadership activities, education, measures and reporting, analysis, and peer-mentoring.

Comparator(s): Usual care or other bundles

Outcome(s): Reduced risk of healthcare-associated infections (HAIs); cost savings

Key Questions from Nominator: For hospitalized in-patients, what is the comparative effectiveness of the use of a specially formulated and delivered "bundle" of infection control interventions as compared to current or status quo infection control processes?

Considerations

- Healthcare-associated infections (HAIs) are among the leading threats to patient safety. More than one million HAIs occur across the US health care system annually. Fortunately, most HAIs can be prevented through effective approaches for reducing HAIs on the front lines of care.
- Infection control process bundles may reduce the risk of HAIs and reduce associated costs. Components of these bundles include environmental cleaning methods, isolation, nursing activities, product review and choice, team training, quality improvement methods, patient cleaning, patient activation, infection control activities, senior leadership activities, education, measures and reporting, analysis, and peer-mentoring. These bundles may need to be adapted depending on considerations such as the setting and target (e.g. specific HAI).
- This topic area was found to be addressed by a broadly focused 2012 AHRQ evidence report titled *Closing the Quality Gap Series: Prevention of Healthcare-Associated Infections*. Key questions from this report include:
 - **Key Question 1.** Which quality improvement strategies are effective in reducing the following healthcare-associated infections?
 - **Key Question 2.** What is the impact of the health care context on the effectiveness of quality improvement strategies, including reducing infections and increasing adherence to preventive interventions?
- AHRQ has invested in research and implementation projects to prevent HAIs in diverse health care settings. Consequently, our search also identified recently completed and ongoing research that may

be useful for the nominator. These projects may be targeted at specific types of HAIs and/or health care settings.