1288Rapid Dissemination of Universal Decolonization in Adult Intensive Care Units (ICUs) Reduces Healthcare-Associated (HA) Central Line Associated Bloodstream Infections (CLABSI) in over 100 Community Hospitals in a Single Healthcare System

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Citation

Published Version
doi:10.1093/ofid/ofu051.128

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1288. Rapid Dissemination of Universal Decolonization in Adult Intensive Care Units (ICUs) Reduces Healthcare-Associated (HA) Central Line Associated Bloodstream Infections (CLABSI) in over 100 Community Hospitals in a Single Healthcare System

Jason Hickok, RN, MBA1; Julia Moody, MS2; Ken Kleinman, ScD2; Taliser Avery, MS3; Susan S. Huang, MD, MPH, FIDSA4; Sara Bienvenu, MSN5; Jonathan Perlin, MD, PhD, MSHA, FACP, FACMI6; Richard Platt, MD, MS, FSHEA7; Edward Septimus, MD, FIDSA, FSHEA8; Clinical Services Group, HCA Inc, Nashville, TN; Department of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA; Division of Infectious Diseases and Health Policy Research Institute, University of California Irvine School of Medicine, Irvine, CA

Session: 173. CLABSI: Surveillance and Prevention
Saturday, October 11, 2014: 8:30 AM

Background. We conducted a 3 arm cluster randomized trial of three MRSA prevention strategies in 74 ICUs at 43 hospitals which demonstrated universal decolonization with chlorhexidine and mupirocin in adult ICUs resulted in a 44% reduction in risk of bloodstream infection due to all pathogens. (N Engl J Med 2013; 368:2255-2268)

Methods. We conducted a cluster randomized trial of three MRSA prevention strategies in 74 ICUs at 43 hospitals with demonstrated universal decolonization with chlorhexidine and mupirocin in adult ICUs resulted in a 44% reduction in risk of bloodstream infection due to all pathogens. Implementing novel evidence based strategies across a large healthcare system presents challenges to scale to reach high compliance.

Results. We fit a Poisson Generalized Linear Mixed Model regression for the number of infections to assess differences between the pre- and post-implementation periods while accounting for hospital and unit level correlation. We assessed the possibility of trend over time, and adjusted for seasonal effect, and number of beds in the unit. The log total number of central lines was the offset.

Conclusion. Universal decolonization of ICU patients was associated with significant decline in CLABSI across a large community hospital system confirming our original trial. Rapid implementation is reproducible in a learning healthcare system.

Disclosures. J. Hickok, Sage Products: Conducting a clinical trial (ABATE) for which contributed product is being provided to participating hospitals, Contributed Product; Molnlycke: Conducting a clinical trial (ABATE) for which contributed product is being provided to participating hospitals, Contributed Product; NIH: Grant Investigator, Grant recipient J. Moody, Sage Products: Conducting a clinical trial (ABATE) for which contributed product is being provided to participating hospitals, Contributed Product; Molnlycke: Conducting a clinical trial (ABATE) for which contributed product is being provided to participating hospitals, Contributed Product; AHRQ, CDC, NIH: Grant Investigator, Grant recipient E. Septimus, Sage and Molnlycke: received product, provided product for ABATE study; AHRQ, CDC, NIH: Grant Investigator, Grant recipient K. Kleinman, Sage Products: Conducting a clinical trial for which contributed product is being provided to participating hospitals, Contributed Product; Molnlycke: Conducting a clinical trial for which contributed product is being provided to participating hospitals, Contributed Product; S. Bienvenu, Sage Products: Conducting a clinical trial (ABATE) for which contributed product is being provided to participating hospitals, Contributed Product; Mo- lyncke: Conducting a clinical trial (ABATE) for which contributed product is being provided to participating hospitals, Contributed Product; AHRQ, CDC, NIH: Team member of Grant Investigator, Grant recipient J. Perlin, Sage Products: Conducting a clinical trial for which contributed product is being provided to participating hospitals, Contributed Product; Molnlycke: Conducting a clinical trial for which contributed product is being provided to participating hospitals, Contributed Product; AHRQ, CDC, NIH: Grant Investigator, Grant recipient E. Septimus, Sage and Molnlycke: received product, provided product for ABATE study; AHRQ, CDC, NIH: Grant Investigator, Grant recipient