

## INTRODUCTION

# Introduction to “Preventing Healthcare-Associated Infections: Results and Lessons Learned from AHRQ’s HAI Program”

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For over a decade, the Agency for Healthcare Research and Quality (AHRQ) has invested in research and implementation projects to prevent healthcare-associated infections (HAIs) in diverse healthcare settings. AHRQ’s commitment to HAI prevention has been expressed in activities within the agency and through its funding of contracts and grants. In 2011, AHRQ funded IMPAQ International and the RAND Corporation to conduct a synthesis of results of AHRQ-funded HAI projects to identify the major results and lessons learned stemming from AHRQ-funded research, disseminate this information, and identify remaining gaps in the HAI knowledge base. To accomplish these goals, the synthesis draws information from AHRQ-funded project documents (final reports, peer-reviewed literature, and HAI-prevention tool kits), in-depth interviews with project leaders, and the AHRQ-published *Advances in the Prevention and Control of HAIs*,<sup>1</sup> which focuses on methods. In addition, the present volume, “Preventing Healthcare-Associated Infections: Results and Lessons Learned from AHRQ’s HAI Program,” is one of two supplements published in peer-reviewed infection control journals. The *American Journal of Infection Control* is publishing the other special supplement. Both publications are key information sources for the synthesis project and the field and serve as valuable mechanisms for disseminating the scientific results of the HAI projects.

This volume presents 18 manuscripts developed by AHRQ-funded HAI project leaders who have agreed to share important scientific findings. The articles examine epidemiological topics such as regional variation in catheter-associated urinary tract infection and urinary catheter use;<sup>2,3</sup> the spread of multidrug-resistant organisms (MDROs) between nursing homes and acute care hospitals;<sup>4</sup> risk factors and detection of surgical site infections;<sup>5,6</sup> mortality among patients with healthcare-associated pneumonia;<sup>7</sup> age, gender, racial, and ethnic disparities in HAI rates;<sup>8,9</sup> and resistance of *Staphylococcus aureus* to zinc and cadmium.<sup>10</sup> In addition, the studies included herein report results related to HAI-prevention and quality-improvement efforts, such as effectiveness

of and cost savings from universal methicillin-resistant *Staphylococcus aureus* decolonization versus screening and isolation and targeted decolonization;<sup>11,12</sup> development of a tool to assess the Comprehensive Unit-Based Safety Program to Eliminate Ventilator-Associated Pneumonia implementation progress;<sup>13</sup> effectiveness of antibiotic stewardship programs in acute care hospitals,<sup>14</sup> skilled nursing facilities,<sup>15</sup> pediatric primary care practices,<sup>16,17</sup> and assisted living;<sup>18</sup> and the use of microbiology data to notify infection preventionists about admission of patients with MDROs.<sup>19</sup> Collectively, the articles presented in this volume contribute substantially to HAI-prevention science, and we trust they will be of interest to readers of this journal.

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