

QUERINational Program

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Combating Antimicrobial Resistance through Rapid Implementation of Available Guidelines & Evidence

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Overview

The goal of the Combating Antimicrobial Resistance through Rapid Implementation of Available Guidelines & Evidence (CARRIAGE) QUERI program is to address the growing public health crisis of antimicrobial resistance through strategies that support the uptake of new and existing evidence-based practices, policies, and programs targeting the improved use of antibiotics and the prevention of healthcare-associated infections.

CARRIAGE QUERI is a series of related projects unified around the common goal of arresting and potentially reversing the spread of antimicrobial resistance in VA healthcare facilities and beyond. Investigators will accomplish this with rapid, cross-cutting, and interdisciplinary approaches that target the healthcare processes that contribute to the development and spread of antimicrobial resistance. Specific objectives are to:

- Foster improved healthcare worker handwashing practice by repairing the broken audit-and-feedback mechanism in VA acute-care hospitals via a VISN-wide quality improvement project;
- Support and enhance the implementation of new VA guidelines to detect and prevent the spread of highly resistant carbapenem-resistant Enterobacteriaceae (CRE) in VA hospitals; and
- Promote judicious inpatient antibiotic use through a novel self-stewardship “timeout” project that prompts VA providers to evaluate the continued need for antibiotics.

By creating an integrated “implementation network” of VA sites around a core team of implementation scientists, CARRIAGE QUERI will establish an infrastructure for rapidly deploying these and other interventions within a broad complex of VA facilities across the nation.

Methodology

The CARRIAGE program will employ complementary implementation strategies and theories guided by a team of VA implementation scientists with proven track records in designing and executing programs to control antimicrobial resistance and healthcare-associated infections. Research designs utilized across projects will include the stepped-wedge design for implementation of interventions, prospective observational designs of practice implementation of large-scale policy initiatives, and rigorous evaluation of VA national policies. Data collection methods will include the use of national VA datasets, direct observation, and primary data (i.e., surveys, interviews, and focus groups).

Findings and Anticipated Impacts

The CARRIAGE QUERI program is expected to have substantial and long-lasting impact in improving VA quality of care and patient safety, both by leveraging the current investments of our operational partners in the form of national initiatives or guidelines and by informing future infection prevention and patient safety efforts, including the implementation of future VA-wide practice guidelines or bundles. Better control of the spread of antimicrobial-resistant organisms within VA healthcare facilities is expected through:

- Improved handwashing compliance via a novel audit method that can be readily implemented throughout the VA system;
- More appropriate and judicious use of broad-spectrum antibiotics via self-stewardship and decision-support for frontline VA providers; and
- Identification and promotion of “best practices” that facilitate the success of national VA infection prevention policy implementation.

Operations Partners

National Infectious Diseases Service, Multi-drug Resistant Organisms Program Office, National Center for Patient Safety, and the VA Antimicrobial Stewardship Task Force.

VA



U.S. Department of Veterans Affairs

Veterans Health Administration
Quality Enhancement Research Initiative

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