

SUMMARY OF RESULTS



The Antibacterial Resistance Leadership Group (ARLG) funds, designs, and conducts clinical research that will help prevent, diagnose, and treat infections caused by bacteria that are resistant to antibiotics.

The ARLG, along with the team of study doctors, scientists, and researchers, are pleased to describe the results from a study focused on antibiotic review strategies in community hospitals to prevent overuse of antibiotics.

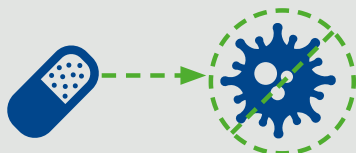
WHAT IS THE STUDY TITLE?

Stewardship Interventions in Duke Infection Control Outreach Network (DICON) community hospitals

WHY WAS THIS RESEARCH DONE?

Community hospitals in the United States have high rates of antibiotic use.

Overuse of antibiotics results in infections by drug-resistant bacteria, also called "superbugs," which can lead to deaths and increased hospital costs.



To prevent antibiotic overuse, the Infectious Diseases Society of America recommends that hospitals implement antibiotic review strategies.

Community hospitals usually do not have the resources or staff training to routinely review antibiotic therapies.

This study was done to understand if community hospitals could put in place an antibiotic review strategy if the appropriate training is provided to the pharmacist staff.

WHAT IS THE PURPOSE OF THE RESEARCH?

The purpose of this study was to learn if antibiotic review strategies could be put in place in community hospitals.

WHY IS THIS RESEARCH IMPORTANT?



Including an antibiotic review strategy into clinical practice can improve how antibiotics are prescribed and ultimately improve how patients with infections do.

WHEN DID THE RESEARCH TAKE PLACE?



October 2013 – October 2014

Changes to your healthcare should not be made based on information in this summary without first consulting a doctor. If you have questions about these results, speak with your doctor.



WHO WAS INVOLVED?

The study took place in four community hospitals in North Carolina. Seven pharmacists were trained on two different antibiotic review strategies. In addition, the use of antibiotics in 2692 patients was reviewed.

The antibiotics given to patients were reviewed by the trained pharmacists after either:

- 1) A single dose of antibiotic(s) or
- 2) Three days of antibiotic(s).

The pharmacists provided recommendations to the prescribing clinicians based on their review.



WHAT DID RESEARCHERS LEARN FROM THIS STUDY?

The community hospitals approved incorporation of the antibiotic review strategies in about three months. The seven pharmacists were trained in about three hours.



The training made the pharmacists more comfortable in implementing the review strategies and providing recommendations to clinicians.

HOW WILL THE RESULTS HELP PATIENTS AND DOCTORS?

This research shows that community hospitals can implement antibiotic review strategies.

These review strategies can increase the interaction between pharmacists and clinicians, which may provide additional opportunities to guide the appropriate use of antibiotics.

WHAT'S NEXT?

This study was only conducted in North Carolina. More research should be done to test these strategies in community hospitals in other states.

More studies should be done to test which antibiotic review strategy is most effective in community hospitals.

WHERE CAN I LEARN MORE?

Read the [published paper](#).

Read about the study on clinicaltrials.gov.

Visit the [ARLG website](#).



This summary was completed in May 2021. Newer information generated since this summary was written may now exist.

Research reported here was supported by the National Institute of Allergy and Infectious Diseases of the National Institutes of Health under Award Number UM1AI104681. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.