



# Interventions to Enhance Clinical Nurse Partnership in Acute Care and Nursing Home (NH) Antibiotic Stewardship: a Scoping Review

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## BACKGROUND

- The nurses' roles and responsibilities in antibiotic stewardship programs (ASPs) are poorly understood
- Nurses' impact on ASP-related measures is unknown

## PURPOSE

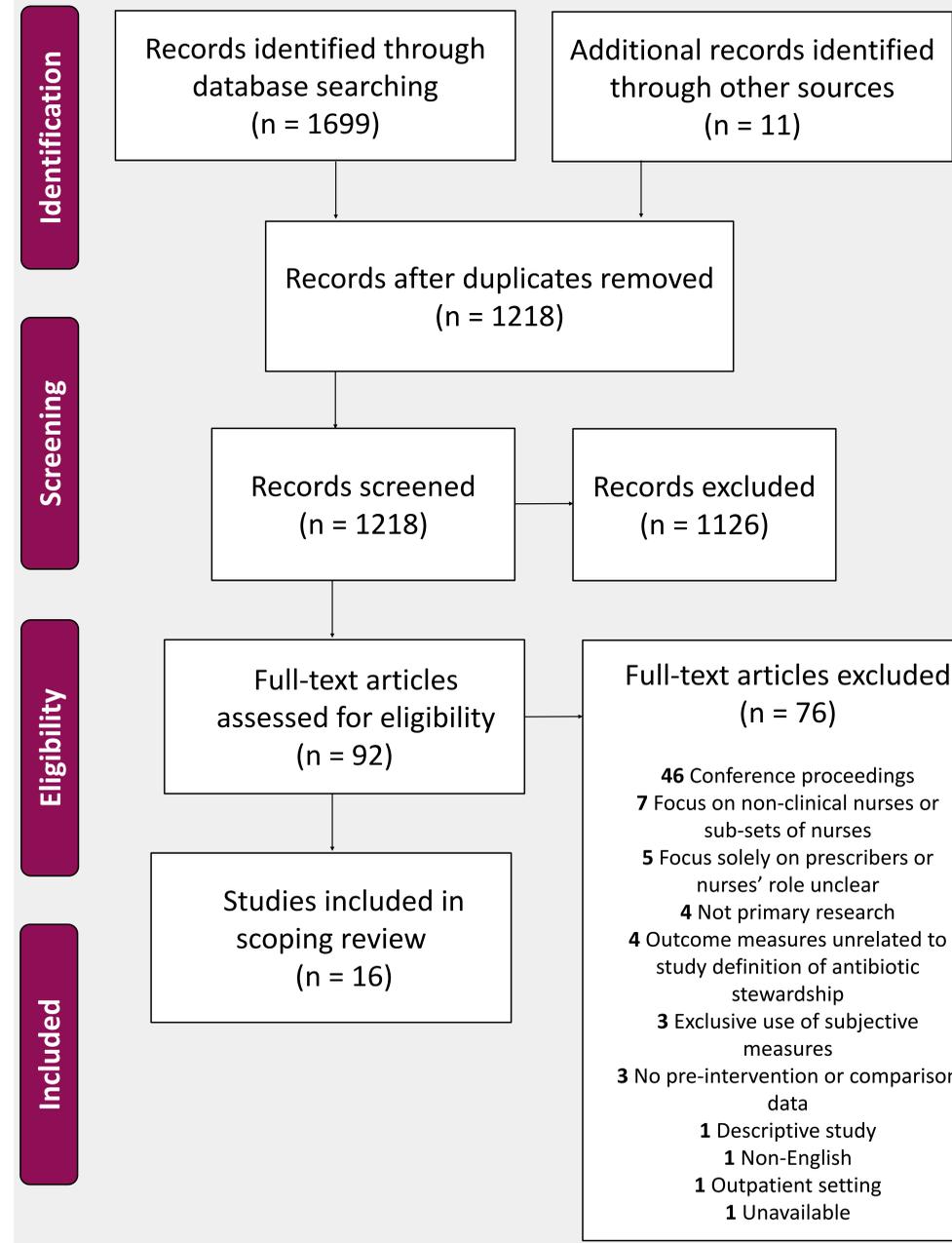
- Scoping review to explore:
  - Interventional studies that included nurses to optimize antibiotic use in the inpatient and nursing home (NH) settings
  - Impact of nurses' contributions on improved antibiotic use

## METHODS

- PubMed, CINAHL, Embase, and Cochrane Library databases searched for:
  - Interventional studies
  - Published between 2005 and October 2017
  - Study setting: hospital or NH
  - Clinical nurses targeted to improve antibiotic use:
    - Appropriateness, timing, or duration of antibiotics
  - Objective measures of antibiotic use evaluated
- Two researchers independently:
  - Reviewed titles and abstracts for inclusion criteria
  - Extracted relevant data from full-text articles using standardized form

## RESULTS

### Study Flow Diagram



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### Overview of Studies

- Sixteen studies met inclusion criteria
  - Ten conducted in the NH; 5 conducted in the hospital; 1 conducted in NH and hospital

### Nurses' Roles and Responsibilities in Improved Antibiotic Use

- Antibiotic appropriateness targeted in 13 studies
  - Nurses educated on culturing technique, indications for culture, and/or antibiotic treatment guidelines
- Timely antibiotic administration targeted in 6 studies
  - Nurses educated on importance of prompt antibiotic administration
- Duration of antibiotics targeted in 2 NH studies
  - Nurses tracked days of antibiotic therapy and/or reminded physicians to use treatment guidelines

### Study Outcomes & Findings

- Non-prescribing outcomes (e.g., timeliness of culture specimen and antibiotic administration) evaluated in 7 studies
  - Significant improvements found in 100% (7/7) of studies
- Prescribing outcomes (e.g., total antibiotic use, appropriate antibiotic use) evaluated in 12 studies
  - Significant improvements found in 67% (8/12) of studies

## CONCLUSIONS

- Nurses may successfully contribute to improved antibiotic use
- Interventional studies to engage nurses in improved antibiotic use have primarily been conducted in the NH and aim to increase nurse partnership via nursing education
- Further research needed to develop validated measures of nurses' contributions to ASPs across settings