

PROJECT SNAPSHOT

10A: Implementation of Decolonization for Staphylococcus Aureus Prior to Hip and Knee Replacements in Alberta

Pillar: Prevention of Transmission

Theme: Policy, Economics and Sustainability

Keywords: Decolonization; Quality Improvement; Health Economics



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AIM

The purpose of this project is to study the implementation of a new decolonization protocol prior to hip and knee replacement in Alberta, as well as study relevant patient outcomes.

WHY IS THIS IMPORTANT?

There are an increasing number of hip and knee replacements annually in Alberta and with this we have seen a rise in the number of deep surgical site infections which are costly and result in poor quality of life. However, it is difficult to standardize changes to care across varying healthcare zones.

OUTCOME

Successful implementation of a decolonization protocol for Staphylococcus aureus prior to hip and knee replacement.

RESEARCH QUESTIONS

- 1 Is it possible to implement an effective decolonization protocol prior to knee and hip replacements?
- 2 Are the rates of resistance to topical antimicrobials affected by decolonization bundles?

OUR APPROACH

- 1 With the co-operation of the Alberta hip and knee clinics and the Alberta Bone and Joint Health Institute we will assess patient compliance with decolonization through secondary information sources.
- 2 Infection prevention and control surveillance will be used to capture infection rates.
- 3 Administrative costing data will be utilized to capture costs of patients who do and do not develop a complex surgical site infection.
- 4 The research microbiology laboratory will test isolates from patients who develop a complex surgical site infection to determine if resistance to topical antimicrobials has developed.
- 5 We are conducting qualitative focus groups with the Alberta hip and knee clinics and orthopedic surgeons to better understand challenges and barriers with implementing a decolonization protocol.

ALIGNMENT WITH THE AMR - ONE HEALTH CONSORTIUM

LEVERAGED SOURCES OF SUPPORT

3M • Infection Prevention and Control • University of Calgary
Department of Medicine (Infrastructure)

KNOWLEDGE & TECHNOLOGY EXCHANGE AND EXPLOITATION

- This work will serve to inform best-practice pre-operative policy.
- This study will help understand barriers to implementing changes in care pathways across different health care zones.

TRAINING OF HIGHLY QUALIFIED PERSONNEL

- 2 New Investigator Research Scientists
- Researchers from UofA and UofC
- 1 MSc
- 1 Summer Student
- 1 Research Associate
- 1 Research Analyst

AFFILIATIONS:

