

Launching Antimicrobial Stewardship Programs in Rural Canadian Hospitals: Implementation of a Pharmacist-Led Telestewardship Model

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BACKGROUND

- Antimicrobial resistance (AMR) is a major patient safety issue across all healthcare facilities
- National bodies recommend antimicrobial stewardship programs (ASP) for all acute care hospitals
- Rural and small hospitals face limited staffing and antimicrobial stewardship (AMS) expertise with similar antimicrobial use (AMU) pressures as larger centers
- Gap:** Limited Canadian guidance for rural and small hospital ASP implementation
- Strategy:** Pharmacist-led antimicrobial telestewardship model

ACTION

Describe the implementation and evaluation of a pharmacist-led antimicrobial telestewardship program at rural Canadian hospitals.

METHODS

DESIGN: Retrospective descriptive implementation study

StaRI Framework – Implementation Reporting

Differentiates intervention and implementation

INTERVENTION

Pharmacist-led telestewardship program

- Remote infectious diseases pharmacy support
- Delivered to five rural Canadian hospitals

IMPLEMENTATION

How the intervention was introduced

- Pre-launch activities
- Program launch processes
- Ongoing delivery adaptations

Reported using Standards for Reporting Implementation (StaRI)

RE-AIM Framework- Outcome Evaluation

Reach

Who was exposed

Effectiveness

What impact was observed

Adoption

Organizational uptake

Implementation

How the program was delivered

Maintenance

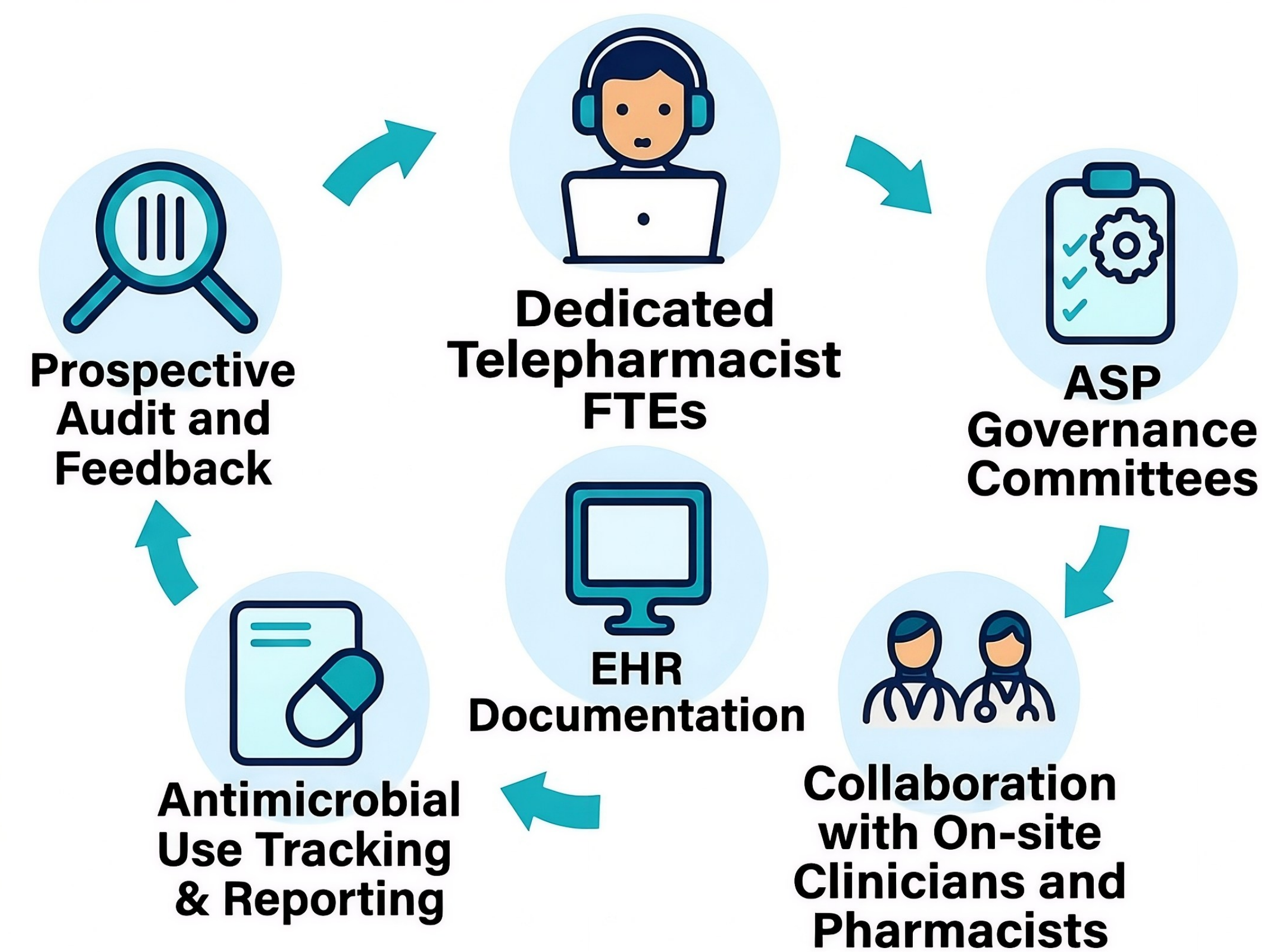
Sustained stewardship

INTERVENTION AND IMPLEMENTATION

PRE-LAUNCH



LAUNCH



OUTCOME EVALUATION

REACH



5 hospitals with major common AMS gaps:

- No AMS funding
- Poor AMU tracking
- Low AMS literacy

EFFECTIVENESS



Signal of decrease in antibiotic and carbapenem use

ADOPTION



3 full programs

1 partial program

1 declined

Funding below recommended levels

IMPLEMENTATION



Integrated via current telepharmacy infrastructure

Iterative improvements based on data

MAINTENANCE



80-100% prescriber acceptance

Sustained workload

Increased on-site pharmacist confidence

BARRIERS

- Limited AMU data in rural Ontario hospitals
- Low AMS literacy
- Funding constraints (low FTEs)
- Remote ASP pharmacist recruitment challenges
- Cost concerns from leadership

FACILITATORS

- Strong stakeholder support
- Telepharmacy infrastructure
- Data-driven gap analysis
- Workload demonstrating value

KEY POINTS

- Telestewardship is feasible in rural hospitals
- Gap analysis is essential
- Works even with limited resources
- High clinician acceptance
- Early signal of reduced antibiotic use
- Supports local capacity building

CONCLUSIONS

- Telestewardship enables rural ASP implementation
- Potential for a scalable and sustainable model
- Promising early outcomes
- Adequate funding and leveraging existing infrastructure are crucial for success and scaling of ASP programs
- Future work: formal effectiveness evaluation

DISCLOSURES

Tran E.	Employed by Northwest Telepharmacy Solutions
Wong C.	Employed by Northwest Telepharmacy Solutions
Thomas T.	Employed by Northwest Telepharmacy Solutions
Langford B.	None
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