



Antimicrobial Stewardship Profile: Timmins and District Hospital



Timmins and District Hospital is a referral and teaching hospital with 173 beds, serving 115,000 residents of Timmins and Algoma.

The hospital provides a range of services, including:

- Ambulatory Clinics
- Critical Care
- Emergency
- Long-Term Care
- Maternity
- Medical
- Mental Health
- Newborn
- Pediatric
- Surgical



Champions (L-R): Jodie Russell, Infection Control/Risk Management; Natalie Roy, Lead pharmacist; Dr. Mishra, Infectious Disease physician; Lorraine Melanson, Infection Control; Roger Walker, CEO.



Joan Ludwig, Chief Nursing Officer and Vice President of Patient Services (left); Jodie Russell; and Jennifer Plant, Manager, Quality and Patient Safety (right).

Why an Antimicrobial Stewardship Program (ASP)?

An outbreak of extended-spectrum beta-lactamase producing organisms (ESBL) and an increasing number of community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infections signaled a need for an ASP at Timmins and District Hospital. Jodie Russell, the Infection Control Practitioner (ICP)/Risk Management Co-ordinator, recognized an opportunity to explore an ASP. Although there were initial concerns about how they would be able to do this, they realized it was a case of "pay me now or pay me later". If they didn't move forward with an ASP they were going to continue to deal with increasing numbers of antibiotic resistant organisms (AROs).

Dr. Mario Ciccone, a family physician and one of the physician leads for the Hospitalist Program, was an early physician champion for antimicrobial stewardship. His background as a pharmacist, physician and head of the Pharmacy & Therapeutics (P&T) Committee ensured the formulary supported ASP. Dr. Ciccone always asks, "If an antimicrobial is needed, why is it needed?" Dr. Sharmistha Mishra, who was a regular visiting locum physician at Timmins and District Hospital for internal medicine, also happened to be an Infectious Diseases physician at St. Michael's Hospital in Toronto and was routinely being consulted by local physicians.

When Dr. Mishra was asked to provide direction on antimicrobial stewardship at the hospital, a team of like-minded individuals started to form. Today, Chief of Staff Dr. Voogjarv adds his support by promoting the program through his membership on the many medical and hospital committees he attends. With momentum building, Jennifer Plant, Manager of Quality and Patient Safety, ensured the ASP was included in the hospital's 2013 Quality Improvement Plan (QIP). Chief Nursing Officer Joan Ludwig, whose focus included patient safety and quality issues, got on board with her talent for presenting new initiatives to the senior team and breaking down impediments. Joan's motto of "this is NOT extra work, this IS the work" keeps the team focused.

Collaboration

Meeting agendas include the success factors from the Strategic Plan to enhance patient safety. The hospital has built a change-friendly culture of excellence. Bringing a microbiology lab back on-site in 2005 was instrumental in developing their local hospital antibiogram which is shared with physicians via a physician newsletter to guide treatment choices. Chief Executive Officer (CEO) Roger Walker commends the efforts of the entire team, "I've never seen a team to rival this one for accomplishing things", and Dr. Mishra notes that "the pharmacy and infection control teams work very well together in this hospital". Although Timmins and District Hospital can't claim a formal ASP yet, they are embracing and developing many elements of a program including:

- Two clinical pharmacists rounding and interacting with physicians and nurses on the units
- IV to PO conversion
- Standardizing surgical prophylaxis
- Dosing guidelines for gentamicin, tobramycin and ceftriaxone
- Auto-substitution orders
- Linezolid restrictions
- Clostridium difficile order sets and therapy streamlining when culture results are available.

Despite a need for more pharmacist education, the team continually works to build capacity and has won the respect of physicians. Dr. Mishra has also turned an eye to community-acquired pneumonia and the development of guidelines, to include an alternate diagnosis of blastomycosis. Dr. Mishra suggests conducting a fungal culture early in treatment to reduce repeated therapy for patients.

Successes

- Access to a part-time infectious diseases physician
- ASP Charter developed and Quality Improvement Program (QIP) plan
- Strong team with inter-professional collaboration
- IPAC and Pharmacy orders on patient charts
- Treatment guidelines for *Clostridium difficile and* CA-MRSA infections
- Successful hand hygiene program

Challenges

- Funding cuts to balance budget-lost ICP time and pharmacy time
- IT support (Meditech)
- Burning out Champions
- No formal program
- Time to collect metrics to evaluate program

Horizon

- Implementing a Charter and a formalized ASP
- Antimicrobial audits
- Reducing urinary tract infections
- CAP guidelines including differential diagnosis for blastomycosis

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For further information

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