Issue Brief
Antimicrobial Stewardship in Canadian Hospitals and Healthcare Organizations

Facts
In 2011, the Public Health Agency of Canada (PHAC) identified antimicrobial resistance as one of the most significant public health risks facing Canadians. The number of drug-resistant infections is increasing. PHAC estimates that 18,000 Canadians in hospitals contract drug-resistant infections each year. Hospital-acquired infections, due to organisms such as C. difficile, are responsible for significant morbidity and mortality in the institutional healthcare setting and dramatically increase healthcare costs. In fragile patients - for example, on intensive care wards or in infants and patients with weakened immune systems - these infections can be fatal.

It has been estimated that up to 50% of antimicrobial use in hospitals inappropriate. Inadequate stewardship poses an unacceptable risk to the safety of patients and the public.

On March 31, 2015, the Government of Canada released a Federal Action Plan on Antimicrobial Resistance and Use (building on the previously released Federal Framework for Action and in response to HealthCareCAN recommendation) and launched the Canadian Antimicrobial Resistance Surveillance System (CARSS), a new surveillance approach aimed at providing an integrated, national picture of antimicrobial use and resistance across Canada.

The 2015 Federal Budget announced $2 million per year to the Canadian Institutes of Health Research (CIHR) in support of additional research to better understand and address the health challenges posed by antimicrobial resistant infections, with funding set to begin in 2016.

On April 28, 2015, Canada’s Auditor General reported that, “significant work [remains to be done] to develop a pan-Canadian antimicrobial resistance strategy” and recommended greater collaboration by PHAC with a wide range of stakeholders to move forward in combatting antimicrobial resistance.

Issue
Antimicrobial resistance is a serious global problem. New forms of resistance are continuously emerging and spreading. The World Health Organization recently warned that, without urgent, coordinated action, “a post-antibiotic era - in which common infections and minor injuries can kill – is a very real possibility for the 21st century.”

Promoting prudent antibiotic use in Canadian hospitals and healthcare organizations (e.g., the right drug, at the right dose, frequency and duration) – in conjunction with effective infection prevention and control measures - is essential to addressing antibiotic resistance. Significant work remains to be done in healthcare institutional and clinical communities to increase awareness, improve antimicrobial stewardship, and achieve consensus around clinical practice guidelines.
There are “made in Canada” best practices in antimicrobial stewardship that could be rolled out effectively across the country in the next 2-3 years with a modest investment. In Ontario, CAHO (Council of Academic Hospitals of Ontario) has effectively rolled out a leading Mt. Sinai-UHN Antimicrobial Stewardship Program (led by Dr. Andrew Morris) in intensive care units (ICUs) across Ontario under the ARCTIC (Adopting Research to Improve Care) program. With a second round of funding, CAHO, in partnership with Health Quality Ontario, is now “spreading and scaling” the CAHO ARTIC program to help community hospitals implement antimicrobial stewardship programs (ARTIC Community Hospital ICU Leadership or “CHILL”). This successful antimicrobial stewardship model has enormous potential to be applied in other jurisdictions across the country, reducing antibiotic use in Canadian hospitals and healthcare organizations.

HealthCareCAN Action

HealthCareCAN has met on several occasions with senior leaders of the Public Health Agency of Canada to discuss the best ways to increase engagement of the Canadian healthcare institutional and clinical communities with respect to addressing antimicrobial resistance and promoting antimicrobial stewardship.

On August 6, 2015, HealthCareCAN convened a visit to the Mount Sinai-UHN Antimicrobial Stewardship Program (ASP) by Dr. Gregory Taylor, Canada’s Chief Public Health Officer, Krista Outhwaite, Chief Executive Officer of the Public Health Agency of Canada, Dr. Theresa Tam, Deputy Chief Public Health Officer, and Karen Michell, Executive Director, Council of Academic Hospitals of Canada. The goal of this visit was to shine a light on best practices in antimicrobial stewardship and help facilitate their spread across the country. As a result of this meeting, the ASP will now be featured at the upcoming G7 Health Ministers meeting.

Recommendation:

There is a need for effective antimicrobial stewardship programs in all Canadian hospitals and healthcare organizations. Antimicrobial stewardship programs are underdeveloped in many Canadian hospitals and healthcare organizations. Many organizations are struggling to develop and implement evidence-based, effective programs and there is evidence that many organizations lack the capacity to “do the basics”.

HealthCareCAN proposes to work with PHAC and other key stakeholders to convene an Action Roundtable aimed at launching of an antimicrobial stewardship program across the country for Canadian hospitals and healthcare organizations.