

## Appendix A

# Hand Hygiene Pilot Project Overview

### BACKGROUND

The 2005 Annual Report of the Chief Medical Officer of Health highlighted components of *Operation Health Protection: An Action Plan to Prevent Threats to our Health and Promote a Healthy Ontario (2004)*, which are being actively implemented. One specific component is a core competency education program for infection prevention and control. The Public Health Division (PHD) of the Ministry of Health & Long-Term Care (MOHLTC) is developing this program in partnership with key stakeholder groups including:

- CHICA-Canada
- Registered Nurses Association of Ontario
- Ontario Hospital Association
- Ontario Medical Association
- Association Medical Microbiologists and Infectious Diseases Ontario
- Ontario Public Health Association
- Association of Local Public Health Agencies
- Ontario Association of Non-Profit Homes and Services for Seniors
- Ontario Long-Term Care Association
- Provincial Infectious Disease Advisory Committee
- Ministry of Labour

The program will provide core competency education tools for front-line health care workers across three parts of the health care continuum: acute care, long-term care, and community-based providers.

Hand hygiene has long been identified as a critical core competency in the prevention or spread of organisms which can result in infections. Studies have shown that one of the key factors in reducing healthcare associated infections (HAI) is effective hand hygiene (the use of alcohol-based hand rub or the use of soap and water) by healthcare workers (Institute for Healthcare Improvement 2006; Centre for Disease Control 2002; Larson 1988; Pratt 2001; Health Canada 1999). Despite poor compliance with hand hygiene being strongly linked to healthcare associated infections, adherence to hand hygiene is estimated to be less than 50% in most healthcare settings (Pittet 2001; Pittet 1999), with data from Ontario indicating adherence of only 32% (Loeb 2006). Improving this compliance is critical, as hand hygiene is a vital component of a comprehensive infection prevention and control program. In particular, the threat of pandemic influenza and the increase in antibiotic resistant organism outbreaks, as well as Ontario's experience with Severe Acute Respiratory Syndrome, underscores the importance of a strong hand hygiene program (Bell 2006; Boyce 2004; Ho 2003). To this end, the MOHLTC is funding a project aimed at developing solutions to improve hand hygiene compliance in hospital settings.

In March 2006, the MOHLTC launched the hand hygiene project with an international hand hygiene workshop co-sponsored by the Public Health Agency of Canada. Hand hygiene experts from around the world gathered to share knowledge and current

practices in an effort to support the project implementation in Ontario. Workshop participants came from a broad range of backgrounds and disciplines including infection prevention and control, human factors, social marketing, communications, administration and education. The goal of the workshop was to learn from the world's leading authorities about programs that result in sustainable change in hand hygiene practices, and how to adapt these for use in Ontario. Participants were charged with the task of examining the evidence, barriers, perception and possible drivers to improving hand hygiene.

Participants learned that those interventions that have been most successful, and effected a more sustainable change, have done so by developing multi-faceted interventions. These interventions include education and social marketing, while emphasizing changes in the organizational culture and workplace environment (Larson 2000; National Patient Safety Agency 2004). Larson et al. found that the support of individuals (champions) at all organizational levels is an important component in influencing change. This study also indicated that providing feedback, based on observation and evaluation, to all health workers involved, assists in making a change.

The lessons learned from the workshop serve as the basis for the provincial hand hygiene project. Ontario's hand hygiene project objectives are:

- To increase patient safety in acute care settings by improving hand hygiene compliance among healthcare workers
- To encourage and support healthcare workers to become role models for excellence in hand hygiene
- To increase healthcare workers and visitors safety through enhanced knowledge levels and use of best practices
- To raise patient and visitor awareness of the critical role of hand hygiene in preventing the spread of avoidable infections in acute care

A Hand Hygiene Project Implementation Advisory Committee, comprised of multi-disciplinary experts, will guide implementation of this provincial initiative. A network of national and international collaborating advisors is supporting the Advisory Committee including:

- Public Health Agency of Canada
- Canadian Patient Safety Agency
- World Health Organization – Global Patient Safety Challenge
- United Kingdom National Patient Safety Agency – cleanyourhands campaign
- Swiss Hand Hygiene Campaign

### **Overview of Pilot Project**

The pilot phase of the project will commence this summer (2006). It will include eight hospitals from across Ontario.

The timeline of the Pilot will include:

- a three month preparation phase within each pilot facility.

- a six month testing phase in 2 - 3 units of each hospital facility (approximately 80 beds).

The design of the provincial hand hygiene program will enable hospitals to implement and individualize the program. The MOHLTC will provide central project support including the development of the following materials:

- An Implementation Guide detailing roles and responsibilities and providing advice on the day-to-day running of the campaign
- Promotional materials for the length of the project (posters, leaflets, other collateral)
- User-friendly materials designed to encourage patients to become involved in their own healthcare by asking healthcare workers about hand hygiene
- Teaching materials and Q & As
- Evaluation tools including physician, staff and patient surveys, interview guides, and routine observation tool for hand hygiene
- Cost/Benefit analysis
- Access to central resources/information on hand hygiene best practices

To assist the MOHLTC with testing and evaluating the program, **pilot sites only** will be funded to appoint an on-site project coordinator. The on-site project coordinator will be the main point of contact between the hospital pilot site and the MOHLTC. (see Appendix C for detailed role description). This site coordinator is responsible for ensuring that:

- the pilot site is adequately prepared for implementation.
- feedback and evaluation data is collected and forwarded to the MOHLTC throughout the pilot testing and implementation period.

The coordinator will not be personally responsible for completing all activities related to implementing the program, rather they will work with members of staff within the organization whose efforts are required to make the campaign sustainable in the long run.

One component for evaluation of the pilot sites is the collection of baseline data on hand hygiene compliance. The MOHLTC will provide trained observers to conduct the observation. The observers will work with the on-site project coordinator to ensure access for observation on the site's pilot units and staff. In addition, the MOHLTC will also offer training to the hospitals infection prevention and control group.

Recognizing that pilot sites will incur costs to test and evaluate the program, the MOHLTC agrees to provide funding of **up to \$10,000** per site for expenses related to the selected units only. Eligible expenses may include:

- additional alcohol based hand rub, dispensers or portable alcohol to ensure point of care access
- expenses related to training including equipment, internet access and staffing backfill
- expenses related to data collection

Capital expenses such as installing extra hand washing sinks are **excluded from funding**.

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