

# Health Quality Ontario

*Let's make our health system healthier*

## Ultraviolet Light Surface-Disinfecting Devices for Prevention of Hospital-Acquired Infections: OHTAC Recommendation

### ONTARIO HEALTH TECHNOLOGY ADVISORY COMMITTEE RECOMMENDATION

- The Ontario Health Technology Advisory Committee recommends against publicly funding ultraviolet light surface-disinfection devices for prevention of hospital-acquired infections

### RATIONALE FOR THE RECOMMENDATION

The Ontario Health Technology Advisory Committee accepted the findings of the health technology assessment.<sup>1</sup>

The main reason the committee recommended against publicly funding this technology is that, given the available evidence, the committee was uncertain whether or not the technology is better than standard cleaning and disinfection in preventing hospital-acquired infections. OHTAC members were also concerned about practical challenges associated with using this technology.

## Decision Determinants for Ultraviolet Light Surface-Disinfecting Devices for Prevention of Hospital-Acquired Infections

Decision Criteria	Subcriteria	Decision Determinants Considerations
<b>Overall clinical benefit</b> How likely is the health technology/intervention to result in high, moderate, or low overall benefit?	<b>Effectiveness</b> How effective is the health technology/intervention likely to be (taking into account any variability)?  <b>Safety</b> How safe is the health technology/intervention likely to be?  <b>Burden of illness</b> What is the likely size of the burden of illness pertaining to this health technology/intervention?  <b>Need</b> How large is the need for this health technology/intervention?	Because of the low to very low quality of evidence, we are uncertain whether UV surface disinfection is better than standard cleaning and disinfection.  The UV technology is known to be safe. It does not involve contact with patients and leaves no residuals after application.  About 200,000 Canadians acquire a health care–associated infection annually, with an estimated 8,000 to 12,000 persons dying as a result of their infection.  Hospital-acquired infections constitute 10% of acute hospitalizations.
<b>Consistency with expected societal and ethical values<sup>a</sup></b> How likely is adoption of the health technology/intervention to be congruent with societal and ethical values?	<b>Societal values</b> How likely is the adoption of the health technology/intervention to be congruent with expected societal values?  <b>Ethical values</b> How likely is the adoption of the health technology/intervention to be congruent with expected ethical values?	The UV technology is noninvasive and has safety features. No societal concerns are expected.  The UV technology is non-invasive and has safety features. No ethical concerns are expected.
<b>Value for money</b> How efficient is the health technology/intervention likely to be?	<b>Economic evaluation</b> How efficient is the health technology/intervention likely to be?	The value for money (cost-effectiveness) could not be determined on the basis of currently available evidence.
<b>Feasibility of adoption into health system</b> How feasible is it to adopt the health technology/intervention into the Ontario health care system?	<b>Economic feasibility</b> How economically feasible is the health technology/intervention?  <b>Organizational feasibility</b> How organizationally feasible is it to implement the health technology/intervention?	Given the high capital cost as well as the ongoing maintenance and operating cost, adoption into Ontario hospitals is not economically feasible.  Implementation is likely to be challenging for several reasons, including that hospital rooms in Ontario are usually shared by multiple patients.

Abbreviation: UV, ultraviolet.

<sup>a</sup>The anticipated or assumed common ethical and societal values held in regard to the target condition, target population, and/or treatment options. Unless there is evidence from scientific sources to corroborate the true nature of the ethical and societal values, the expected values are considered.

## REFERENCE

- (1) Health Quality Ontario. Ultraviolet light surface-disinfecting devices for prevention of hospital-acquired infections. Ont Health Technol Assess Ser [Internet]. In press.

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