



**Title** **Assessment of Videoconferencing in Telehealth in Canada**  
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**Reference** CCOHTA Technology Report, Issue 14, May 2001. ISBN 1-894620-00-3. [http://www.ccohta.ca/ccohta\\_production/entry\\_e.html](http://www.ccohta.ca/ccohta_production/entry_e.html)

## Aim

To provide Canadian health care decision makers with information about the use of telehealth videoconferencing (VC), including:

- Broad-based information about the collective experience of eight VC programs in Canada
- Evidence of efficacy with respect to patient care, distance education and training, user and provider satisfaction, and communication patterns
- Suggestions for future directions for using VC technology.

## Conclusions and results

Survey results indicated that VC for telehealth applications in Canada is in transition between pilot project and program status. While VC telehealth activity is undergoing rapid growth, few patients are seen at present. All 8 programs surveyed report some positive results, including improved communication among colleagues, better access to care, and high-level patient satisfaction. Barriers to widespread adoption and implementation include organizational change, medico-legal concerns, insufficient infrastructure, lack of standards for user training and education, and unresolved issues on reimbursing practitioners. Of over 270 articles and reports found, 40 were selected as primary outcome studies. These studies suggest it is feasible to establish patient care systems using VC technology, but there is little evidence of clinical or economic benefit, especially on cost effectiveness compared to face-to-face care. VC is well suited to the unique geography and unevenly distributed population of Canada and will continue to expand.

## Recommendations

- Encourage orderly development of VC by developing nationally approved standards and guidelines for planning, implementation, user training, and program sustainability.
- Recognize that planning strategies and long-term funding are vital to sustain VC programming.

## Methods

According to predetermined criteria, representatives from the participating healthcare agencies and federal, provincial, and territorial governments identified telehealth programs across Canada in which VC was used to provide health care and distance learning in health/medical programs. Responses to a mail questionnaire and project evaluations from 8 VC programs (reaching approximately 150 sites) were synthesized. Literature published from 1998 to October 2000 was reviewed to evaluate the efficacy of VC.

## Further research/reviews required

The findings of this study suggest a need for quality outcome studies on clinical and cost effectiveness of VC.

