

Virtual Visits *Literature Summary*

PATIENT PERSPECTIVE

Acceptable to the majority of patients.

Increased or equal satisfaction compared to in person visits.

Improves access & helps avoid a walk in clinic.

Appreciate the convenience: saves time off work, money and a long drive for rural patients.



CLINICAL & QUALITY OUTCOMES

Provides an alternative option without compromising patient outcomes

Quality is same or improved

Clinical outcomes are same or improved

Can improve continuity of care



PROVIDER PERSPECTIVE

Acceptable to providers, with appropriate funding & workflow modifications.



BARRIERS & FACILITATORS

Ease of use

Training & technical support

Workflow redesign

Adequate remuneration

Cost

Privacy & security guidance

Support from professional bodies & government

Perceived benefits to patients & providers



41% of Canadians would like have virtual visits with their health care provider but just 4% of family physicians and 9% of specialists offer this option.

For full literature summary visit:
<https://actt.albertadoctors.org/file/VirtualVisitsLitSummary2020.pdf>

Virtual visits in community practice – Literature summary

May 2020

Questions

- What is required to facilitate greater adoption of virtual visits in community practice?
- What do providers and patients think about virtual visits?
- What are the clinical and quality outcomes of virtual visits?

Summary

Barriers and facilitators to greater adoption of virtual visits

- Resistance to change by providers & their teams.^{1,2}
- Patient acceptance and comfort with the new technology and interaction.^{1,3,4}
- Ease of use for patients & providers of video visit technology.^{1,2,5}
- Technology issues including: internet access & speed for both patients & providers.^{1,2,5}
- Guidelines & resources to support & ensure privacy & security.^{1,3,5}
- Existing meaningful use of health information technologies & information exchange enablement.⁶
- Clinic workflow redesign to accommodate virtual visits.⁶⁻¹⁰
- Support services from medical associations & government bodies.⁵
- Supportive legislation for virtual visit adoption, including remuneration, and addressing licensure restrictions on the provision of care across provincial/territorial boundaries.^{8,9,11}
- Training & technical support for patients & providers.¹
 - must be incorporated into the medical curriculum and continuing professional development. Virtual care requires a cultural transformation.^{11,12}
- Provider financial supports for: equipment purchase & technical support, remuneration for the visits & any follow-up or paperwork.^{1,3,5,11}
- Perceived convenience & time saved by patients & providers.¹
- Patients' existing comfort and satisfaction with their providers.¹

Provider perspectives

- One study found that rural FPs were twice as likely to use virtual visits as urban FPs.¹⁷
- Acceptable to providers, with appropriate funding & workflow modifications.^{6,10}

Patient perspectives

- Acceptable to the majority of patients.¹⁹⁻²²
- 41% of Canadians would like have virtual visits with their health care provider but just 4% of family physicians and 9% of specialists offer this option.^{5,23}

- Many patients using virtual primary care do not have a regular provider and do not know their virtual providers. They utilize virtual care for enhanced access.^{21,24,25}
- Patients report that a virtual visit with their primary provider would help them avoid visiting a walk in clinic.²³
- Patients appreciate the increased convenience of virtual visits, such as saving time out of work, money, and sometimes a long drive in the case of rural patients.^{23,26–29}
- Increased or equal satisfaction compared to in person visits.^{19,20,26,30}
 - An Ontario study of virtual primary care visits found that 98% of users felt that the visit was the same or better than in-person care, and 99.9% indicated they would use virtual care again.²⁶
 - A systematic review found that patients perceived virtual visits as enhancing communication and engagement between health care providers and patients and their caregivers, especially through real-time videoconferencing.

Continuity impact

- One review found that virtual visits with one's primary provider can increase continuity of care.¹⁸

Clinical & quality outcomes

- Provides an alternative option without compromising patient outcomes. Quality of care is equal or improved.^{31–33}
- A Michigan study of a primary care network found that in adult patients presenting with sinusitis, care at a virtual visit was associated with an increase in guideline-concordant diagnosis and a decrease in antibiotic prescribing compared with in-office primary care visits.³¹
- A primary care study comparing blood pressure control between patients who received virtual visits compared to usual hypertension care found that among patients with reasonably well-controlled hypertension, virtual visit participation was associated with equivalent blood pressure control.³⁴
- Several systematic reviews of specialty care have found that virtual visits result in improved or similar clinical and quality of life outcomes compared with in person visits.^{35–41} Most of the reviews also looked at other e-health interventions, but reviews were only included in this summary if they examined synchronous virtual visits. Evidence still growing in the primary care realm.
 - A systematic review on the effectiveness of virtual visits as a part of secondary prevention in coronary artery disease found that they yielded positive outcomes in lifestyle changes for coronary artery disease.³⁵
 - A systematic review on the effect of virtual visits on quality of life of cancer patients found that they are as effective at improving QOL scores in patients undergoing cancer treatment as in-person UC.³⁶
 - A systematic review on the effect of virtual visits versus usual care for home-care patients with long-term conditions found virtual visits were not statistically significantly different versus standard home care for quality of life, psychological wellbeing, physical function, anxiety, depression, disease specific outcomes or bed days of care at 3, 6, 9 and 12 months.³⁷
 - A systematic review on virtual visit intervention on hypoglycaemia in diabetes patients found that compared to usual care, the use of virtual visits was found to improve HbA1c and reduce the risk of moderate hypoglycaemia in diabetic patients, but without significant difference in BMI.³⁸

- A recent systematic review⁴⁰ evaluated the measures of effectiveness, efficiency, and quality that result from the utilization of telemedicine in the management of alcohol abuse, addiction, and rehabilitation. It found that: telemedicine reduced alcohol consumption & depression, & improved quality of life.
 - A systematic review of virtual (phone or video) visits for older adults in community settings, found that similar outcomes are achievable compared to usual, in-person care.⁴¹
- Virtual visits can also be used for shared medical appointments or group visits. In one systematic review, video teleconference groups were found to be feasible and resulted in similar treatment outcomes to in-person groups.⁴²
 - Virtual education delivered to patients with chronic diseases was comparable, or more effective, than usual care.⁴³
 - A telehealth-based chronic disease management program including clinical pharmacy specialists (CPSs) improved disease management and clinical outcomes.⁴⁴

Cost impact

- The costs of home-based virtual visit programs varied substantially by program components, disease type, equipment used, and services provided.¹⁴
- For primary care, a BC study found cost savings only if seeing own provider.¹⁵
- Overall system savings unclear. Most analysis of cost savings is just for the visit itself.^{15,16}

Video vs telephone consultations¹³

- Videoconference was comparable or better than telephone in reducing healthcare utilization, but healthcare costs were highly variable across studies.
- Consultations done by videoconference typically took longer than by telephone
- Videoconference resulted in better quality of care compared to telephone consultation.
- Patient outcomes were generally comparable between videoconference and telephone with no consistent differences in patient mortality or patient satisfaction.

Characteristics of visits

- An Ontario study of virtual primary care visits found that the most common patient-reported reason for a visit was “New Health Condition” (34%), followed by a “Chronic Condition” (28%). The most common provider reported reason for visit was classified as “Other, reason for visit not listed” in more than half of the visits (55%), followed by “Chronic disease management” (25%).²⁶
- An Ontario study of virtual visits overall, using the Ontario Telemedicine Network found that 62% of telemedicine use is for mental health and addictions, and this varies from 42% in rural Northern Ontario to 70% in urban Southern Ontario. Family and general medicine use is highest in urban areas, especially urban Southern Ontario. Proportionally, rural Northern Ontario has more surgical, oncology, and internal medicine use than the other geographical areas. Usage for the catchall category of “other clinical services” is higher in rural than urban CSDs (15% versus 7%), regardless of region.⁴⁵

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