



# Using Telehealth to replace a face-to-face visit

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# Learning Objectives

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1. What is telehealth?
2. What are the professional standards related to using telehealth technologies?
3. Review of the literature
4. Telehealth in our clinic



# What is telehealth?

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Telehealth is the use of communications and information technology to deliver health and health care services and information over large and small distances” (CAD 7.1.1)

# Telehealth Technologies

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- Telephone
- Video-conferencing
- Internet – based
- Point of service can include clinics, hospitals, homes, and schools

# Uses of Telehealth Technologies

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- Clinical consulting
- Invasive diagnostic procedures
- Imaging
- Surgery
- Home care
- Learning
- Administration



## What do the Professional Organizations say?

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Different interpretations of how telehealth should be used by different professional organizations and regulatory bodies across Canada

All agree that telehealth technologies are important methods in providing care to patients



# Canadian Nurses Association

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- Canadian Nurses Association Position Statement (2007) Telehealth: The Role of the Nurse. This document outlines the responsibilities and competencies expected of nurses who provide care via telehealth technologies.
- Important Point: Registered Nurses are “considered to be practicing in the province or territory in which they are located and currently registered, ***regardless of where the client is located***”

# Canadian Psychological Association

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- “Where appropriate, expand telehealth services to include psychological services”
- Several documents address the need to improve “interprofessional/terretorial health services integration”
- Unclear though as to provincial boundaries of care

<http://www.cpa.ca/cpapadvocacyproject/rural.pdf>



# Canadian Medical Association

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- No National consensus as of yet on the use of telemedicine
- “In conclusion, the following activities may generally be considered safe:
  - Providing telemedicine services to patients within one’s own province
  - Providing teleconsultation assistance to physicians treating their patients within Canada”

[www.cma.ca](http://www.cma.ca) Feb 2008; Regulatory Aspects of telehealth by John Carlisle

# Ethical Challenges

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- Potential benefits but also ethical tensions related to use of telehealth technologies
- Design issues – privacy, security breaches but also do we sacrifice traditional care giving values?
- Is the focus on cost/benefit? How are we evaluating it's use?
- Recommend prudence in using telehealth technology and more research required

Kaplan & Litewka (2008)



# Pediatric Research

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Limited research has examined use in mental health (Lingley-Pottie & McGrath, 2008; Cloutier et al, 2008)

Systematic review of telepsychiatry studies (Pesamaa et al 2004)

- 27 articles identified - 2 RCTs
- Accessibility, education, lower cost & travel
- Nonverbal communication deficits and video quality cited as drawbacks

Telepsychiatry for children in rural Ontario (Broder et al. 2004)

- 500 cases reported
- High satisfaction reported in clients and staff

# Telehealth in Pediatric Pain

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- Integrative Lit Review (Sato et al, 2009) explored provision of CBT by videoconferencing in youth with functional abdominal pain – determined to be a ‘good fit’ but more research required, especially assessing impact of developmental factors and outcomes
- Many different methods of providing care using technology are available but lack evaluation (McGrath et al, 2006)

# Potential Benefits

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- Greater access – especially specialty services
- Less travel time
- Lower costs to families
- Less school missed
- Social connections in group setting
- Stay in home community
- Shift from crisis management to self-management

# Challenges

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- Attitudes
- Past experience (or lack thereof)
- Privacy and confidentiality
- Research and development resources
- Quality control monitoring
- User burden & technology abilities
- Access for low SES families

# Recommendations

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- Develop benchmarks for evaluation
- Use quantitative and qualitative approaches
- Cost benefit analysis
- Effects on outcomes
- Facilitate research collaboration
- Train staff in use of telehealth

Drotar et al. 2006



## Stollery Pediatric Chronic Pain Clinic

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We always begin with a face to face  
assessment with team

We use telehealth for:

- Individual and team follow up sessions
- Pain 101
- Parent education and support session

Remote sites are health units/hospitals or schools

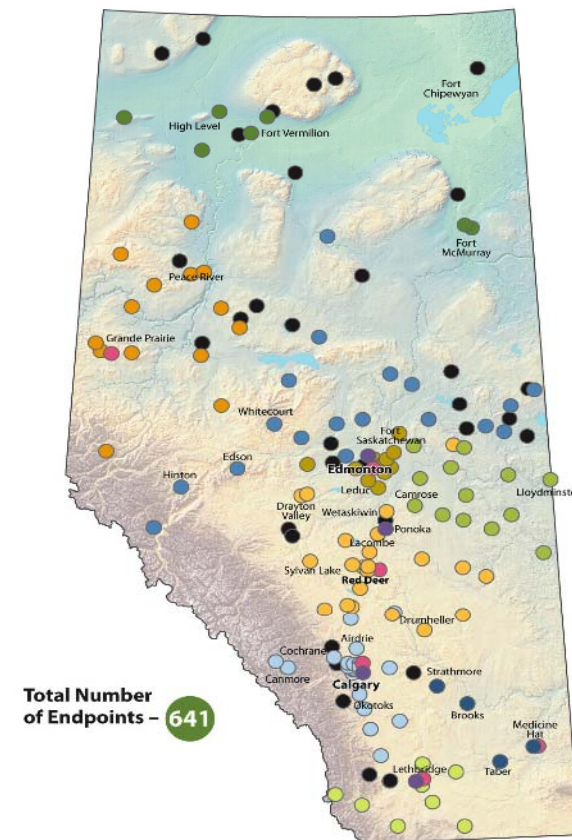


# Where can we use telehealth?

In November 2007, the Alberta government provided more than \$2.4 million to the Telehealth Clinical Grant Program to give Albertans living in rural and remote areas better access to health care services without having to travel great distances.

We can also use the technology in schools using the “supernet”

Telehealth Locations in Alberta



# Pain 101

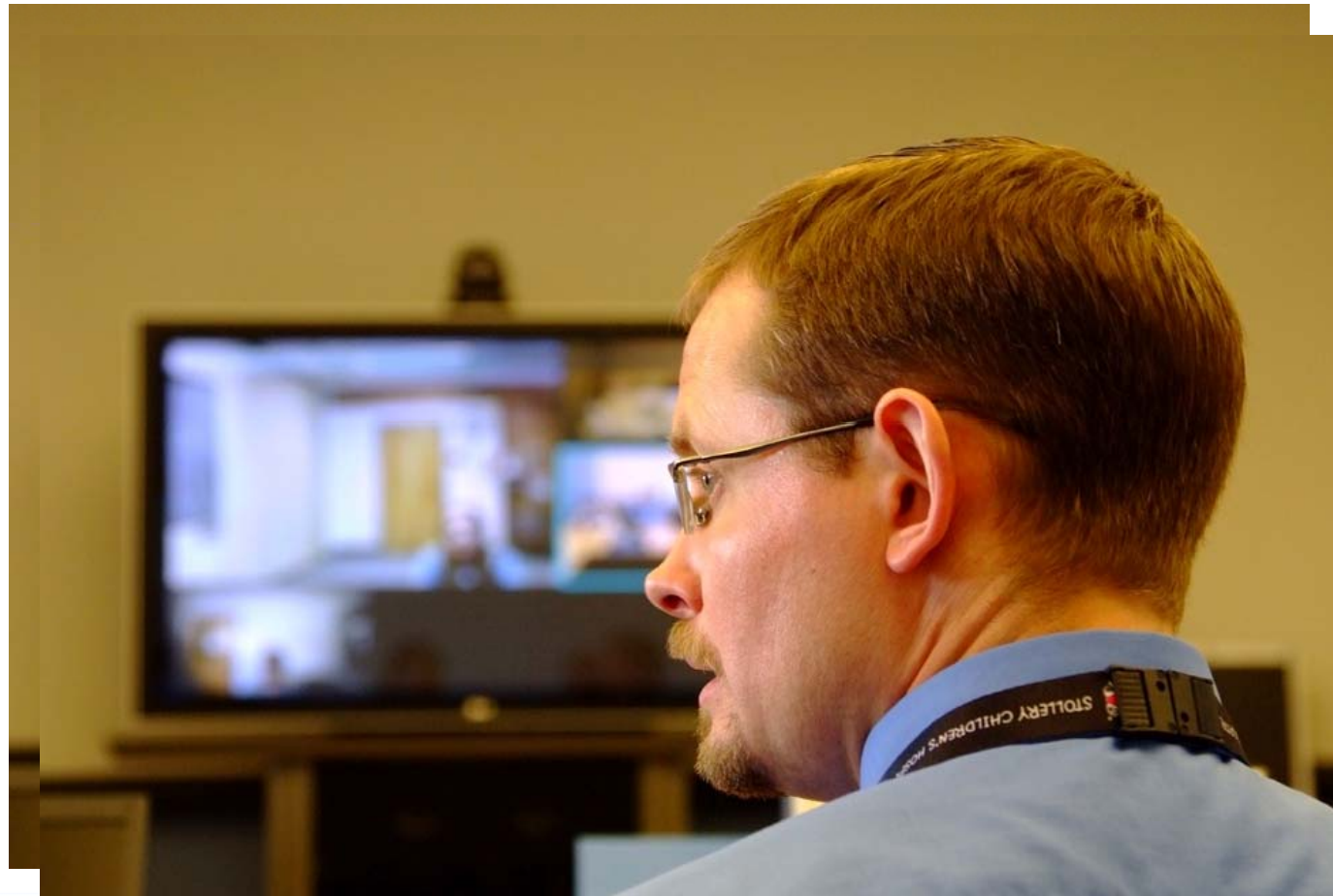
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- Pain Education
- Reducing tension
- Graded Activity / Pacing / Goal setting
- Depression and negative thinking
- Coping with stress and anxiety
- Sleep hygiene
- Mindfulness
- Communication and pain behaviour
- Managing setbacks



# Pain 101 Videoconferencing

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# Non- scientific cost analysis...

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Face to face visit:

- Gas \$100
- Night's accommodations \$120
- Meals \$50
- Parking \$15
- TOTAL expenses = \$285 minimum
- Lost wages!

Telehealth visit:

- Free!



# Learning from each other

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Alberta Children's Hospital –  
Calgary

- Joined our Pain 101 for Parents session

IWK – Halifax

- Jill Chorney, joined our group for 10 weeks
- We joined their group for Mike Sangster's pacing session



# Outcomes

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Pain 101 sessions to date:

- 7 groups with a total of 40 teens.
- Age range 10 – 17 yrs

Number who attended via telehealth:

- 18

We have offered 4 parent sessions – 15 attendees had parents attend, 3 of those by telehealth.



# Data

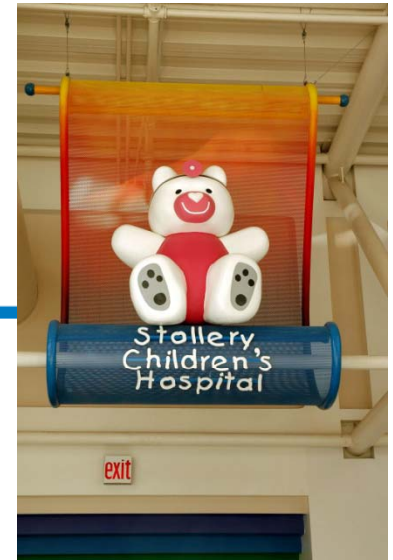
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We utilize;

- Pain-related disability (FDI)
- Quality of life (PedsQL)
- Anxiety and depression (RCADS)

Collected prior to 2<sup>nd</sup> session of Pain 101, 3 months, 6 months then annually

*No significant differences in outcomes between those who attend in person versus those who attend via telehealth*



## The good,

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- Real time connection,
- Allows the group to interact with each other.
- Allows attendance when perhaps they would not have been able to attend
- Saves families that trip to the city = \$\$\$
- Can attend from school



## The bad...

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- Relies on technology – and that can always have problems... power outage with a thunderstorm!,
- Booking issues – now coordinating two sites rather than one
- They play with the equipment!
- Potential lack of interaction
- The lack of human touch...



## The ugly (potential)...

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- Potential exists for problems as you are not in the room – they leave and don't return??? Medical problem???
- We have not been able to pursue use in the home setting due to security concerns

## Bottom line...

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- We use telehealth technologies whenever we can
- Teens and families report high satisfaction with it AND some report they would not attend if it wasn't available
- Allows real time interaction with the group
- You almost think they are in the room with you...
- Be aware of its limitations
- More data required!

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