



Alberta Health
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Improving access for rural cancer patients to a specialist multidisciplinary Pain & Symptom Control/ Palliative Radiotherapy Clinic using Telehealth technology

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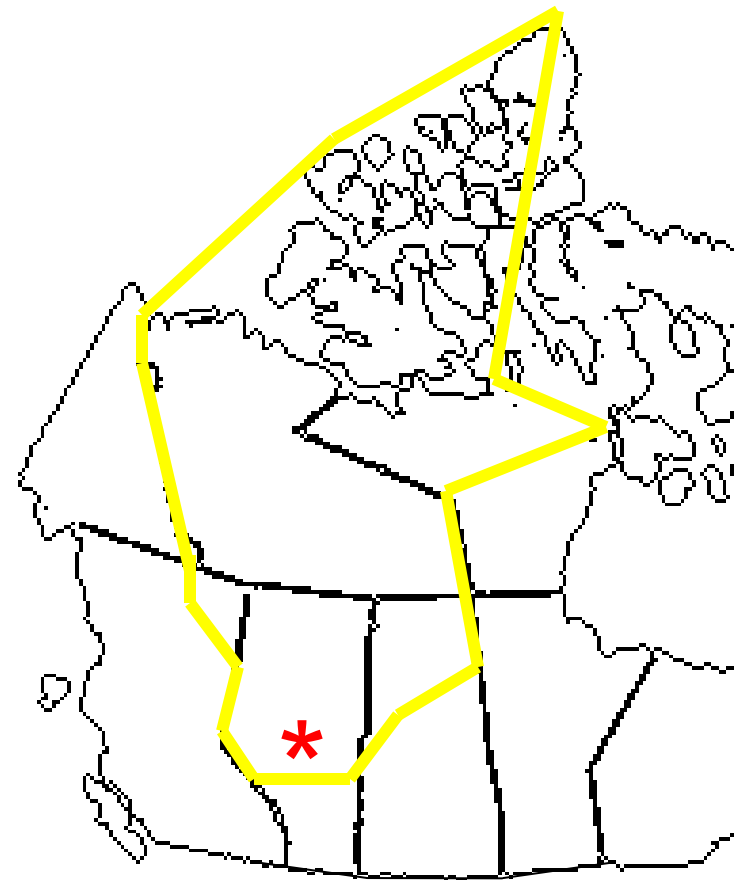


Objectives

- Introduce the **Virtual Pain & Symptom Control/Palliative Radiotherapy Clinic**
- Describe logistics and steps involved in the consultation process
- Review results of the Virtual Clinic to date

The Challenge

- Palliative and Supportive Care services for symptom management are well-established at the Cross Cancer Institute (CCI)(*).
- However, for patients living at a distance, **travel** to CCI can **exacerbate symptoms, remove them from their support systems and pose a financial burden...**
- ...Since the distance to be traveled for each visit can be prohibitive.



Approximate
area served by CCI



Vision

To provide access for remote or rural cancer patients to a specialist multidisciplinary Pain and Symptom Control and Palliative Radiotherapy consultation service via Telehealth link with a CCI-based Team

Telehealth

Pain and Symptom Control/Palliative Radiotherapy Clinic

An integral part of ensuring all Albertans have access to high quality and timely cancer services closer to home

* Community Cancer Centres
 ▲ Acute Care Centres
 ■ Cross Cancer Institute Research Unit Cancer Centres & Help Centres (see page 2)

If you have any questions or need more information regarding this program, please speak to your physician or contact:
 Phone: 781.572.8114
 E-mail: cci@hsc@pacis.hc.ca@ccab.ca

Patient brochure



Benefits of Telehealth

- Improve the way patients and their families access information and learn
- Result in improved health outcomes for patients
- Empower consumers and communities by providing accessible health education and decision-making options
- Improve the way healthcare providers deliver care, access information, and learn
- Enhance recruitment and retention of healthcare providers in rural or remote areas
- Lower healthcare costs, reduce travel, minimize time off work, and decrease patient waiting time
- Decrease self-reported patient anxiety
- Eliminate unnecessary repeat diagnostic procedures or tests
- Improve and broaden early diagnostic capabilities
- Improve administrative and communication capabilities

What is 'Telehealth'?

'Telehealth' provides access to care for patients who live at a distance from their doctors and other health care professionals. It allows participants in different places to speak, see each other, and share information (such as a report) in 'real time'. Telehealth can increase access to health care, reduce travel time and reduce costs. Through the use of Telehealth, we have the potential to take care of patients closer to their homes.

Telehealth Pain & Symptom Control/Palliative Radiotherapy Clinic

Your doctor has advised that your symptoms be reviewed by the Pain and Symptom Control/Palliative Radiotherapy Clinic team at the Cross Cancer Institute in Edmonton via Telehealth.

You and up to two family members or friends are encouraged to participate. You will be asked to come to a specially outfitted room in your area where a specially trained nurse will guide you through the Telehealth visit. The nurse will help with the necessary forms and perform the physical examination that is part of the process. Once you are 'connected', you will be able to see and hear the Edmonton team via videoconference, and they will be able to see and hear you in a secure and confidential way.

The Edmonton Team

To save you from having to repeat your history to many different people, the Edmonton team may consist of:

- Radiation Oncologist
- Physicist
- Occupational Therapist
- Respiratory Therapist
- Psychologist
- Pain & Symptom Control Physician
- Nurse Practitioner
- Physical Therapist
- Dietician
- Social Worker
- Dispense

At the end of the discussion, the team members may have some suggestions (such as changes in medications or radiation treatment) to help improve your symptoms. You will be able to ask questions.

Radiation Treatment

Radiation is the treatment of cancer with high-energy x-rays which can be helpful with certain symptoms. If radiation treatment is recommended, you will need to travel to the Cross Cancer Institute in Edmonton. Further details will be provided if this is a treatment option. A social worker can assist with transportation, accommodations or finances if necessary.



Anticipated Benefits

- Patient-centred assessment
- Condensing multiple health care professionals' consultations into one visit
- ↓ Time invested in medical appointments
- ↓ Need for travel
- ↓ Discomfort and cost
- Support community clinicians in management of complex palliative care patients





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Community Cancer Network Partners

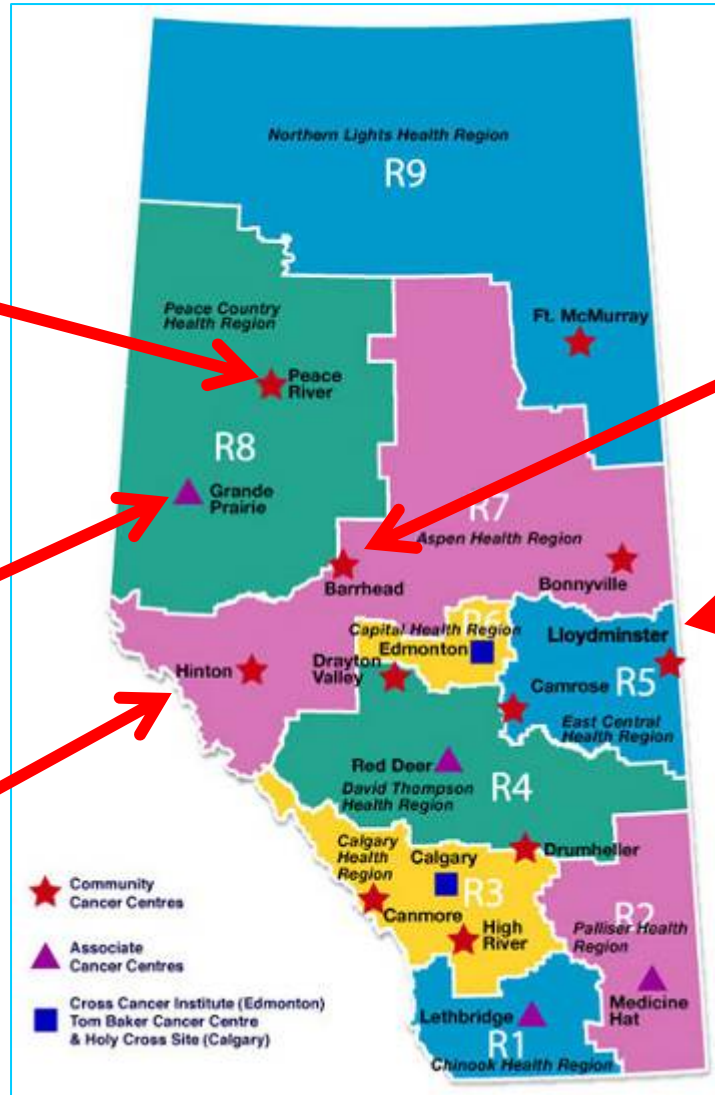
Peace
River

Barrhead

Lloydminster

Grande
Prairie

Hinton





The Team

- Clinical Telehealth Coordinator (CTC)
- CCI Multidisciplinary Team (MDT): Palliative Care physician, Radiation Oncologist, pharmacist, nurse practitioner, dietician, respiratory therapist, physiotherapist, occupational therapist, speech language pathologist, psychologist, social worker, spiritual care provider
- Community RNs recruited from Associate & Community Cancer Centres and Regional Palliative Program; 3-day orientation provided



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Logistics – Pre-Clinic

Referral form faxed to CTC by referring MD.





Referral Form



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REFERRAL FORM

Telehealth - Pain & Symptom Control/Palliative Radiotherapy Clinic

Patient Name: _____ New Follow-Up
(Last Name) (First Name) (Middle Name)
 PHN: _____ Province: _____ Birth Date: _____ ACB# _____
(Day/Month/Year)
 Phone Number(s): _____ Sex: Male Female

COMPLETE OR ATTACH ALL Relevant Information (Consults, Investigations, Progress Notes)

Diagnosis: Primary _____ Metastatic To _____

Symptom Concern(s): Pain (Location) _____ Other: _____
 Nausea/Vomiting Constipation Confusion Dyspnea

Previous Interventions (e.g. Morphine 10 mg po q4h, Radiotherapy):

Past Medical History:

Current Medications (e.g. Medication Profile):

Referring Physician (Print) _____ *Signature* _____ *Date* _____
 Contact Information: _____
(Office) (Fax) (Other)

***N.B.** If the referral is received by the **end of the day on Thursday**, the patient will usually be seen on the following **Tuesday**. Otherwise, the patient will be seen on **Tuesday of the next week**.
IF URGENT RECOMMENDATIONS ARE NEEDED, PLEASE PAGE THE PAIN & SYMPTOM CONTROL PHYSICIAN AT (780) 432-8771
Original forms to be kept on patient chart at Referring Site
 FAX form & documents to (780) 432-8645 & CALL Chris Johnson, Telehealth Coordinator (780) 860-0442



Logistics – Pre-Clinic

Referral form faxed to CTC by referring MD.



Background information (e.g. from cancer centre chart) collected.
Referral form & background discussed with Virtual Clinic MD.



CTC phones patient for screening (e.g. ESAS) to determine necessary
MDT members (up to 4, including MD).





Triage ESAS

Based on symptom concerns, referral and triage information in this example, the following MDT members should be consulted:

- Dietitian
- Rehab (PT/OT)
- Psychologist
- Palliative Care MD



Edmonton Symptom Assessment System:
Numerical Scale
Palliative Care Program

Please circle the number that best describes:

Past 24 hrs 1400-1400.

No pain	0	1	2	3	4	5	6	7	8	9	10	Worst possible pain
Not tired	0	1	2	3	4	5	6	7	8	9	10	Worst possible tiredness
Not nauseated	0	1	2	3	4	5	6	7	8	9	10	Worst possible nausea
Not depressed	0	1	2	3	4	5	6	7	8	9	10	Worst possible depression
Not anxious	0	1	2	3	4	5	6	7	8	9	10	Worst possible anxiety
Not drowsy	0	1	2	3	4	5	6	7	8	9	10	Worst possible drowsiness
Best appetite	0	1	2	3	4	5	6	7	8	9	10	Worst possible appetite
Best feeling of wellbeing	0	1	2	3	4	5	6	7	8	9	10	Worst possible feeling of wellbeing
No shortness of breath	0	1	2	3	4	5	6	7	8	9	10	Worst possible shortness of breath
Other problem	0	1	2	3	4	5	6	7	8	9	10	

Patient Name: _____

Date: *April 30/08*

Time: *1543*

Complete by (check one)

- Patient
- Caregiver
- Caregiver assisted

BODY DIAGRAM ON REVERSE SIDE



Logistics – Pre-Clinic

Referral form faxed to CTC by referring MD.



Background information (e.g. from cancer centre chart) collected. Referral form & background discussed with Virtual Clinic MD.



CTC phones patient for screening (e.g. ESAS) to determine necessary MDT members (up to 4, including MD).



Referring MD receives confirmation of scheduling and instructions on booking any required imaging or lab tests. Patient is informed.



CTC completes technical aspects e.g. booking on Telehealth network, equipment, personnel.



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Virtual Clinic Day

Community RN performs symptom assessment, medication review, and focused physical exam.





Assessment Tools

- Symptoms (ESAS)
- Cognitive status (Folstein MMSE)
- Alcohol use (CAGE)
- Performance status (KPS, PPS)





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Virtual Clinic Day

Community RN performs symptom assessment, medication review and focused physical exam.



Telehealth link established between community cancer centre and CCI.



Community RN reviews patient data with CCI team.



CCI team interviews patient and family to further explore concerns.





Clinic Day & Follow-up

While Telehealth link muted, Team discusses assessment and recommendations



Recommendations are discussed with the patient and family, and faxed to referring MD (dictation sent next day)



Telehealth link disconnected



Patient and family complete survey with assistance of RN



Follow-up booked as required e.g. via Telehealth, and/or in Edmonton



Experience to Date

- Number of referrals: 21
- Number of ineligible: 8
- Reasons for ineligibility:
 - No cancer diagnosis
 - No active malignancy
 - Died prior to clinic or near death (3)
 - Refused participation
 - Required surgery
 - Transferred to CCI before clinic





Experience to Date

- Primary reasons for referral (n=13):
 - Pain 12
 - Constipation 6
 - Nausea 4
 - Dyspnea 2
 - Confusion 1
 - Dysphagia 1
- Time from referral to clinic (mean): 6 days (0-13)



Consultation Sites

of consults = 13

of F/U visits = 17

2

3

3

3

Mayerthorpe - 2



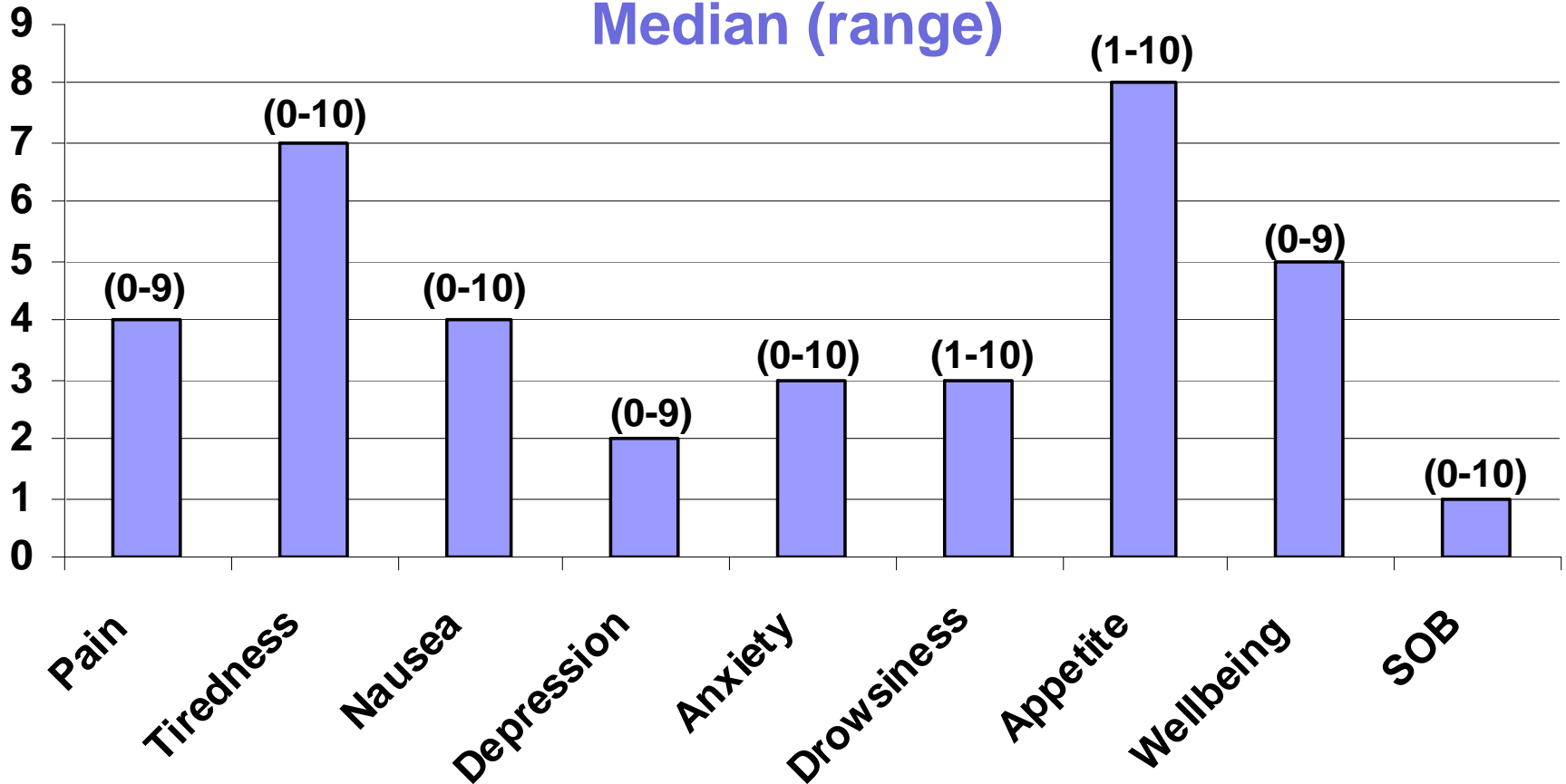
Patient characteristics

	N=13
Median age (range)	60 yrs (47-83)
Male : Female	7 : 6
Outpatient : Inpatient	8 : 5
Cancer diagnosis	
Gastrointestinal	5
Genitourinary	2
Sarcoma	2
Other	4
MMSE \leq expected normal	2
CAGE \geq 2	2
Median PPS (range)	70 (40-90)
Median KPS (range)	60 (30-80)



Initial ESAS Scores

Median (range)



N=13



Participants (# of clinics)

CCI:

- Palliative Care MD - 13
- Dietician - 11
- Psychologist - 6
- Social worker - 5
- Respiratory therapist - 5
- Occupational therapist - 2
- Physiotherapist - 1
- Speech lang. path. - 1
- *Also: multiple trainees*

Community:

- Community RN - 13
- Home Care RN
- Inpatient RN
- Hospital pharmacist
- Hospital social worker
- *Also: multiple trainees*



MD Survey Results

- “Compared to how long your patient would have waited to access palliative care in a face-to-face consultation, was your patient’s wait”:
Shorter: 66.7%
Same: 33.3%
- “My patient received a beneficial service that would otherwise have been unavailable and/or difficult to access”:
Agreed or strongly agreed: 100%
- “Resulting clinical recommendations increased my awareness of symptom management issues”:
Agreed or strongly agreed: 83.3%
Neutral: 16.7%



MD Survey Results

- “I plan to implement _____ of the recommendations”:
All: 83.3%
Some: 16.7%
- “I would consider referring other patients in future”:
Yes: 100%
- “I would recommend the Clinic to a colleague”:
Yes: 100%
- “I am satisfied with the Virtual Pain & Symptom Clinic experience”:
Agree or strongly agree: 100%



Patient/Family Survey

- “We received enough information on what to expect before taking part”:

Agree or strongly agree: 100%

- “We felt that the Edmonton Clinic team listened to our concerns and understood us”:

Agree or strongly agree: 93.8%

Neutral: 6.2%

- “In terms of meeting team members at the Clinic visit today, were there”:

Enough: 93.8%

Not enough: 6.2%

Advantages of a 'long-distance' clinic visit:

- Met many experts: **87.5%**
- Didn't have to travel: **75.0%**
- Didn't have to wait as long: **68.8%**
- A nurse was in the room: **68.8%**
- Access to research: **18.8%**

Disadvantages of a 'long-distance' clinic visit:

- Would have preferred face-to-face: **31.2%**
- Technical issues: **25.0%**
- No travel savings if radiation or other Edmonton treatment needed: **18.8%**
- Uncomfortable with format: **0%**



Patient/Family Survey

- “How would you like your next Pain & Symptom appointment arranged” (n=15):
 - Telehealth: 80.0%**
 - Edmonton: 0%**
 - Don’t know/unsure: 20.0%**
- “Would you recommend the clinic to someone in a similar situation?”
 - Yes: 87.5%**
 - Don’t know: 12.5%**
- “I am satisfied with the Clinic experience”:
 - Agree or strongly agree: 87.5%**
 - Neutral: 12.5%**



Travel Saved

- N=30 clinic encounters
- Round trip distance, home to CCI
- Round trip distance, home to Telehealth facility
- Total travel saved

18 774 km

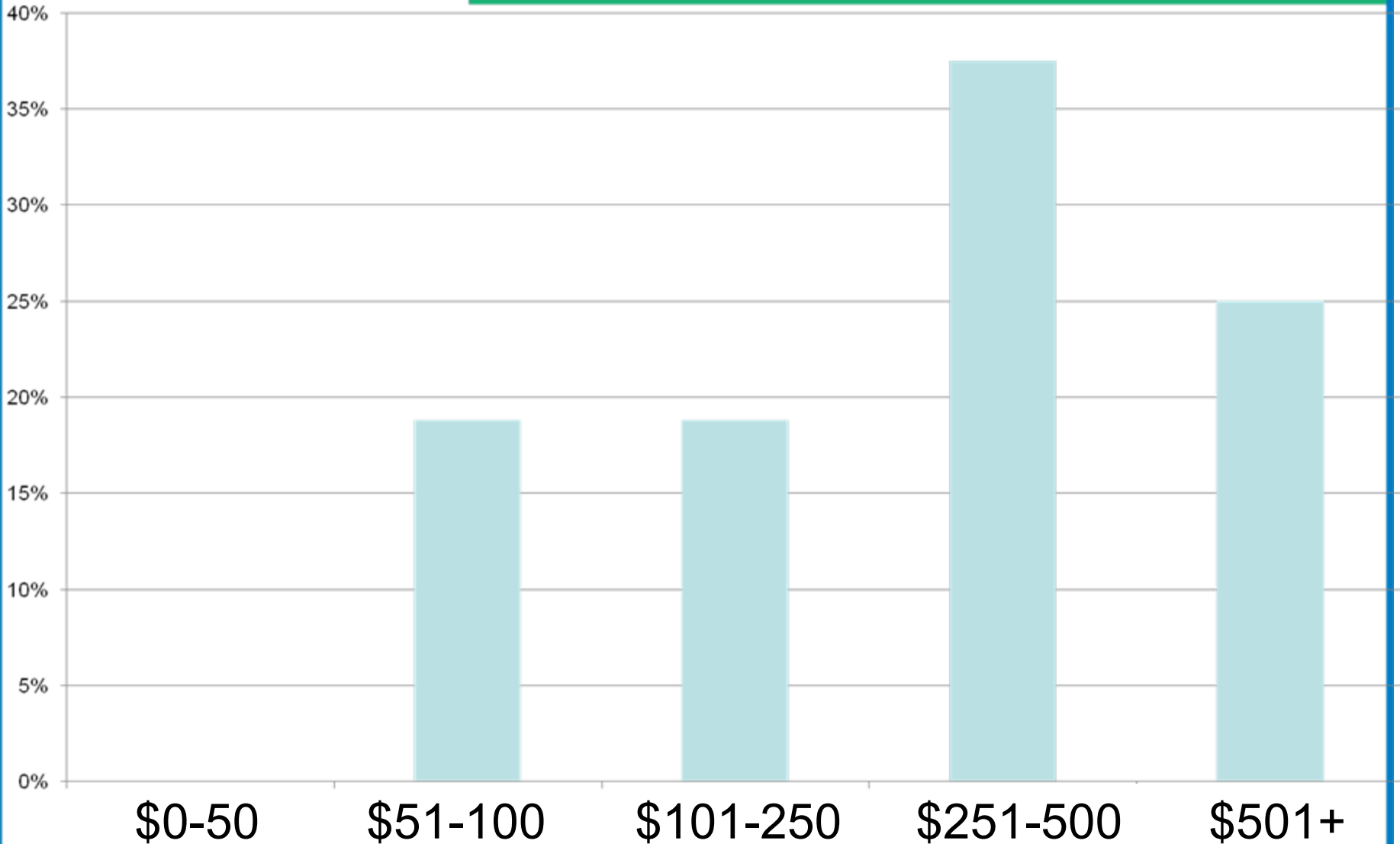
- 3 472 km

15 302 km



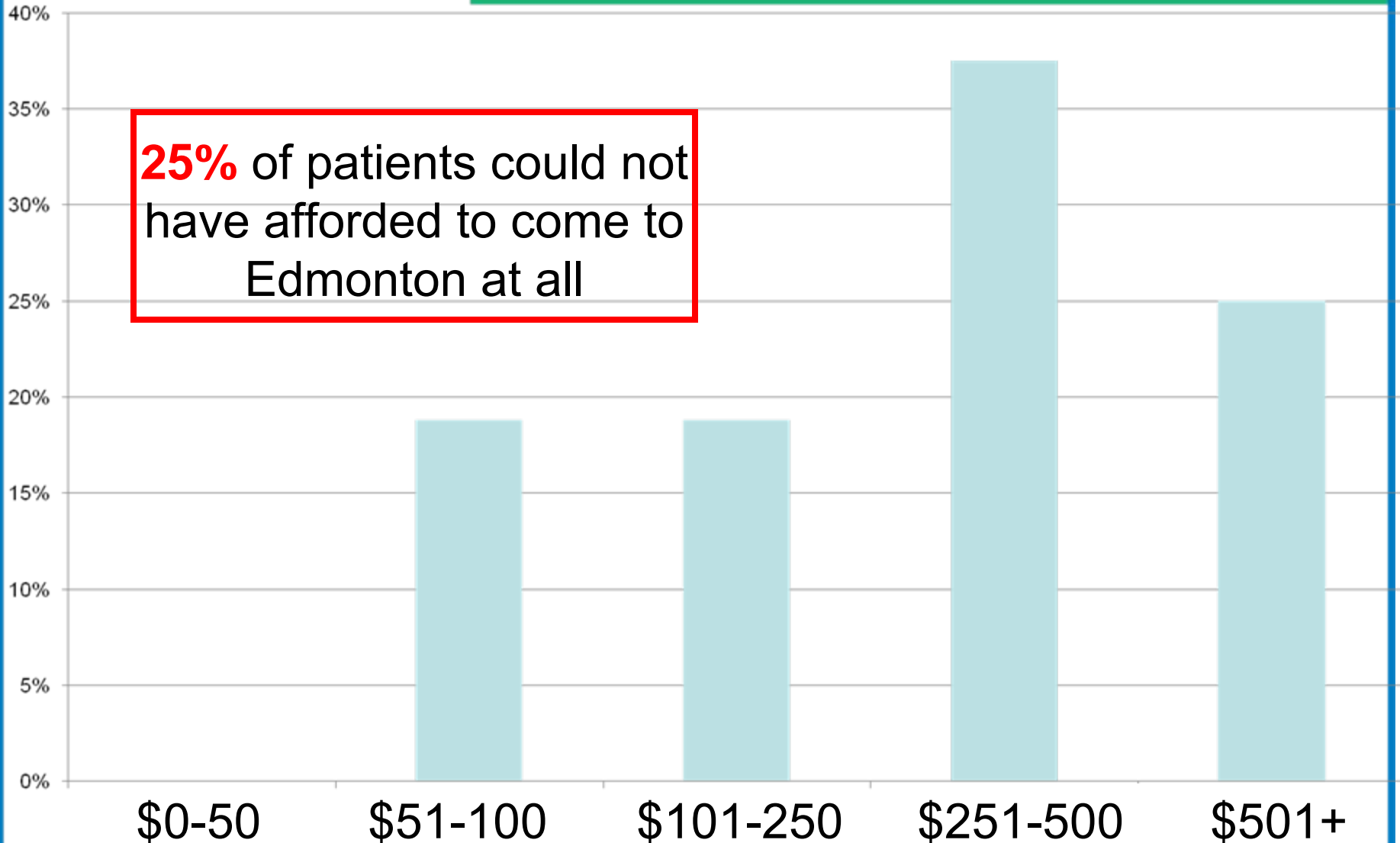
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Money Saved





Money Saved



25% of patients could not have afforded to come to Edmonton at all



Lessons Learned

- ✓ Multidisciplinary consultation by Telehealth is feasible
- ✓ Adequate time is required to arrange consultation e.g. staff/room/equipment availability
- ✓ Presence of RN at remote site is essential
- ✓ Technical support is necessary
- ✓ Assessment is more difficult for very ill or cognitively impaired patients
- ✓ Process of investigation, follow-up is slower
- ✓ Significant advertising is required



Future Directions

- Grant to expand clinic to remaining centres in Northern Alberta
- Development of clinic in Southern Alberta
- Enhancing partnerships with local palliative care providers
- Funding beyond grant



Conclusions

- The Virtual Pain & Symptom Control/Palliative Radiotherapy Clinic is feasible...
- ...Largely due to coordinated efforts of tertiary and community health care facilities, dedicated MDT, and CTC
- Expected patient benefits apparent:
 - Reduced travel and cost
 - Satisfaction with service described by patients, families, MDs
- Challenges include promotion of service to encourage referrals



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