Beyond these walls:

reaching rural/remote people with high-quality GIM care

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INTERNIST, ANTIGONISH, NS

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Disclosures

• I have no commercial interests related to travel clinics or non face-to-face care.

• I have been remunerated to care for patients outside of my usual practice setting
Hmmm. An outpatient topic, eh?

David – 66 yo man with AI, 3VD, RA, COPD
   Echo in August – LV 65mm, Simpson’s 37%, severe AI
   Referred by GP (in Port Hawkesbury) to Cardiology

   Note to GP

Presented to Inverness two weeks later – trop up, pulm edema
   GP in PH calls me – please get him where he needs to be
The intervention

Call to MRP in Inverness to clarify situation
Filled out cath referral form to send to Hx
Patient awaited transfer in Inverness

Safety ensured by relationships with both sites
Direct knowledge of local circumstances
Internist as bridge (community sites<-> tertiary site)
The travel clinic made all the difference
LEARNING OBJECTIVES

• Provide high-quality, non face-to-face care for individuals (and populations) living far from the usual practice setting

• Challenge the assumption of specialty care relying on patient travel, and propose less costly alternatives

• Develop an efficient, rewarding model for a geographically distributed practice designed to meet the needs of patients and other care providers
What we won’t cover

• Utilization of patient-based monitoring systems with transmission of data to the provider
• Electronic transmission of patient data for purposes of remote consultations between providers (e.g. teledermatology)

Focus on real-time clinical encounters between doc and pt; and population care
Annie’s story

68-year-old retired nurse living with her frail husband
Presents with dyspnea and fatigue; LVEF 25-30%
DM on insulin, CKD (creat 130)
Lives 5 hours from Halifax, 2 hours from Antigonish

She needs: cath, medication titration, CHIM
She has: an NP in community, internist in Antigonish
EST and CHIM offered locally
Inverness, Nova Scotia
St. Martha’s Hospital, Antigonish

Parking: $2  Walk time: 5 minutes  Distance: 135 km
QE2, Halifax

Parking: $6-10  
Walk time: 15 minutes  
Distance: 345 km
Plans for Annie

Monthly med titration: NP on the phone, internist in Antigonish
Weight, BP, creat, K, and physical exam by NP
*would telehealth change clinical decisions?

Scheduled, remunerated and documented via letter back to NP
15-minute slot, 5-minutes on the phone

Internist travel to Inverness (q6 weeks) -> EST on site

CHIM in community, 3 times per week
# Kai-Lee’s processes

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<th>Time</th>
<th>EMR Schedule</th>
<th>Phone F/U</th>
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<tr>
<td>11:00</td>
<td>Paul MacDonald</td>
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<td>11:40</td>
<td>Greg MacDougall</td>
<td></td>
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<tr>
<td>12:00</td>
<td>Annie Gorgan Phone F/U</td>
<td>Phone NP 902-867-4635</td>
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<tr>
<td>1:00</td>
<td>Donna Trump</td>
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<table>
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<tr>
<th>Time</th>
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<th>Code</th>
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<td>11:40</td>
<td>GM</td>
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<td>12:00</td>
<td>AG</td>
<td>Phone f/u 12:06-12:13</td>
<td>EST Inv</td>
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</table>
... And what is that treadmill doing in Inverness?
What Rick did over 20-30 years

Previous regular services in Northside from CBRH internists
NS recruited a GIM; RB explored Inverness (watershed)
Adequate MD resources in CBRH; reached out to GP leads
Rick’s reasons

Convenient and efficient to see patients in home setting: own charts available

His secretary can get her work done for a day
No distractions

Ability to interact with referring MDs face-to-face
-> hidden story dialogue, more appropriate referrals
Curiosity re. local circumstances – the call from Cheticamp now occurs within a clearer context
... And then that treadmill

Demo machine in Dec 1999 after regular clinics established
16 ESTs during TC with visiting Sydney tech
Put on budget, then scrapped by district
Hospital Foundation funded purchase
Q6wks 20 ESTs for 18 years – nearly 3000 ESTs

Other added services: Pacemaker checks
(interrogators from 2 manufacturers donated)
Community cardiac/pulmonary rehab and ortho prehab
Building programs & getting equipment in the rural/remote setting

Don’t fill out a form; shake a hand
Hospital foundations are key
Services are highly desired if facilities are at risk
Staffing may be different (LPN, RT for EST’s)
Your commitment may be richly rewarded
Relational, not political approach

e.g. echo at SMRH, cardioresp donation
CHIM in Inverness – RB’s ongoing support (gratis)
Keep it fun!
Population Care: an example
What Dr. Fanning started in the NWT
Tuberculosis Rounds
Reactivation/Primary TB

2-4 weeks in the hospital

6-18 months total treatment, in community

There’s a lot that can happen in 18 months!

How can we be rapidly responsive to the patient – and the nurse on the ground?
Let’s talk to each other.

All together now.
TB Rounds: 60 minutes  q2wks
What changed with TB rounds?

Local expertise: physician, nursing, lab

Multiple system changes

Cohesive approach to community f/u

Rapid intervention for education/support

The system could follow a mobile patient

Unified voice in outbreaks; relationships
But I’m not in the NWT! Relevance, please?

How can patients benefit from you (the expert) without coming to see you?

Who is (or could be) your hands and feet?

- Dialysis telehealth
- Oncology telehealth
- Palliative care rounds
- Cardiac rehab
- Lung cancer work-up
- INSPIRED (COPD home mgt)
- Diabetes teams
- Heart function clinic support
Distributed practice: two pieces

**Travel/outreach clinic** (the specialist moves towards the patient)

*Non face-to-face care* (the specialist and patient have clinical encounters that do not involve travel)
  *real-time encounters, for our purposes*

The tyranny of distance can cause poor access, lower frequency of follow-up, high patient costs, less guideline-adherent care, more fragmentation
What is a travel/outreach clinic?

From the literature: 4 models (Williams, 1981)

1. **Shifted outpatient** (same services, different place)
2. **Replacement** (specialist as first contact instead of PCP)
3. **Consultation** (enhanced specialist-PCP relationship, but care delivered through PCP)
4. **Liaison attachment** (specialist is part of a team of visiting services)
Whom are we trying to reach?

Urban non-disadvantaged: more data, lower benefit

Urban disadvantaged

Rural non-disadvantaged

Rural disadvantaged (increased specialist utilization by up to 390%, with reduced hospital-based costs – Gruen, 1993-1999, surgical pts in remote Australia)
Benefits with data behind them

Oncology rural outreach (US) for BrCA-> more guideline-consistent care Howe et al. Cancer Causes Control 1992

Joint ortho/GP consultation-> fewer diagnostic and lab tests (Dutch) Vierhout et al. Lancet 1995

Multifaceted interventions-> lower hospitalization rate and improved clinical outcomes (psychiatry)

Virtually no data for IM-specific travel clinics in 2010 Cochrane review
What we don’t know

IM-specific data are largely lacking; locally distinct

Comparative data on overall system/patient costs

Analysis of cons of travel/outreach including:
- a gap in specialist services at the usual site of practice
- lower efficiency due to travel time
- ineffective consultation due to inadequate equipment or information systems

The critical mass of patients, or critical distance, to make outreach worthwhile (by what measure?)
Rick Bedard’s Advice

Reliability is key. Don’t have a threshold, even if you’re FFS

Expansion of your procedural practice is a real possibility

Clerical support, space, and computer access are essential

Nurture your passions, and the locals will support them
What is non-face to face care? (distinguishing from Telehealth)

Telehealth:
1. Videoconferencing between two sites
   * psychiatry (>50% in Canada), nephrology, oncology
2. Store-and-forward solutions
   * Telederm, radiology, ophthalmology, wound care
3. Telemonitoring
   * chronic disease management from the home setting

IM tools: a telephone, labs, +/- a colleague
history is still essential -> no store-and-forward
Figure 2: Total Number of Telehealth Sessions in 2010 — per 10,000 Population

Source(s): 2010 CTF Pan-Canadian Telehealth Survey. Quebec data and Alberta administrative numbers were collected from key informant interviews with the respective Ministries of Health. Data for Prince Edward Island were unavailable.
Telehealth Use in Canada

Figure 1: Total Number of Telehealth Sessions in 2010

Source(s): 2010 CTF Pan-Canadian Telehealth Survey. Quebec data and Alberta administrative numbers were collected from key informant interviews with the respective Ministries of Health. Data for Prince Edward Island were unavailable.
Telehealth Use in Canada

Figure 3: Proportion of Telehealth Services — by Clinical Service

- Mental Health and Addictions: 54%
- Internal medicine: 15%
- Oncology: 13%
- Renal/Nephrology: 5%
- Surgery and anaesthesia: 5%
- Paediatrics: 2%
- Chronic Disease: 1.2%
- Obstetrics/Gynaecology/Women’s Health: 1.1%
- Stroke: 1.4%
- Rehabilitation: 1.1%
- Dermatology: 0.4%
- Chronic Pain: 0.2%
- Wound care: 0.1%

Source(s): 2010 CTF Pan-Canadian Telehealth Survey. Quebec data were collected from key informant interviews. Data for Prince Edward Island were unavailable.
Are you already doing outreach?

As an expert to a population of patients/providers?
As a diligent doc preventing travel day-to-day?
By stepping out of the office into another setting?
Let’s look at the evidence...
On physician motivation

National cross-sectional study of Australian specialists, 2017
567 specialists providing rural/remote outreach services
(Sullivan et al., *Human Resources for Health (2017)15:3*)

Self-reported reasons for participating in outreach
Salaried vs. FFS
Inner regional vs. Outer regional/Remote outreach
Metropolitan vs. rural specialists
Australian study results

19% of specialists providing outreach clinical services
   42-44% of urologists/renal
   30-33% of oncologists, ENT
   13% of subspecialist surgeons
   21-22% of internists

26% of travelling specialists were required to do outreach
   40% if salaried
   14% if FFS
## Results, cont’d.

### Table 3

Association between covariates and reasons specialist doctors undertake rural outreach services, based on Pearson chi-squared.

<table>
<thead>
<tr>
<th>Covariate</th>
<th>Grow my practice</th>
<th>Maintain personal connection to region</th>
<th>Complex healthcare in challenging situations</th>
<th>Provide healthcare for disadvantaged people</th>
<th>Provide support rural staff</th>
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<tr>
<td></td>
<td>n (%), P</td>
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<td>Metropolitan</td>
<td>385, 206 (55)</td>
<td>112 (30), .003</td>
<td>68 (18), .65</td>
<td>50 (13), .39</td>
<td>35 (6), .22</td>
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<td>Rural</td>
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<td>32 (18), .87</td>
<td>35 (20), .65</td>
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<td>Salaried only</td>
<td>196, 127 (68)</td>
<td>56 (29)</td>
<td>27 (14)</td>
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<td>7 (4), .07</td>
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<td>Fee-for-service</td>
<td>332, 158 (48)</td>
<td>80 (24), &lt;.0001</td>
<td>72 (22), .027</td>
<td>35 (11), .20</td>
<td>25 (8), .031</td>
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<td>Inner regional</td>
<td>340, 163 (49)</td>
<td>96 (29)</td>
<td>73 (22)</td>
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<td>Outer regional/remote</td>
<td>227, 141 (64)</td>
<td>49 (22), .001</td>
<td>31 (14), .017</td>
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<td>Time travelled</td>
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<tr>
<td>&lt;1 h</td>
<td>86, 39 (47)</td>
<td>18 (21)</td>
<td>24 (29)</td>
<td>14 (16)</td>
<td>9 (10), .01</td>
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<td>From 1–3 h</td>
<td>342, 178 (53)</td>
<td>92 (27)</td>
<td>60 (18)</td>
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<td>4+ h</td>
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<td>11 (2)</td>
<td>7 (1)</td>
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Take-home points (Australian study)

Growing my practice the major impetus for outreach (especially among salaried specialists)

Managing more complex conditions and maintaining a connection with a region were also significant motivations for outreach

Providing care for disadvantaged people and supporting rural staff were relatively minor factors
Outreach as policy – the NWT model
The hub-and-spokes model
Outreach as policy: enablers

*Salaried structure

*Clear expectations, long history

*All administration looked after (flights, accommodations, bookings, transcription)

*Clear hospital mandate (financial and altruistic)

*Regular schedule of contractually obligated clinics

*Social events with local staff physicians
The devil’s in the details...

Local responsibilities vs. your responsibilities for:
- triaging consults
- booking patients, notifying them, reminders
- transcription
- space, equipment
- follow-up care
- booking investigations

An individual vs. a shared commitment
- one wait list or multiple? Central or local?
- will you see each others’ follow-ups?
- do you have a similar practice pattern?
- how will you set the schedule?
The line in the sand

Space – examining table, BP cuff
Local results – paper or computer chart access
Clerical – someone to register patients
Local requisitions for labs, DI, cardiodiagnostic, PFTs

Negotiables

Remuneration for travel and accommodations
Payment for travel time (good luck)
Added services (e.g. education for support staff, local docs)
Fancy stuff (pacemaker interrogators, treadmill, POCUS)
Getting paid: travel and NFTF care

Higher efficiency in travel clinics
  (start early, shorter appts)
  -> this can offset travel and accommodations costs

NFTF fee codes in NS:
  With PCP (requires consultation letter)
  Direct to patient (can be follow-up)
  Telehealth
Getting started

Consider the route of next follow-up at the end of each appt:
Distance, cost, patient preference
What you really need for the next clinical decision(s)
Questions to ask

Is it difficult for you to come to my office every couple of months?

Can you have your blood pressure/weight checked in your community?

Would you prefer that our next appointment be a phone call (booked, documented)?
Maybe it’s time to start

small
Thank you!