The Saskatchewan approach to rural and remote dementia care

ANDREW KIRK MD, FRCPC

UNIVERSITY OF SASKATCHEWAN
Why is there a problem?

1. Prevalence of dementia increasing.
2. Large rural population (Canada 30%; SK 49%) with access problems.
3. Large older population in SK (14.6%).
4. Seniors more likely to live in rural areas.
5. Large geographic area (1 million people in 652,000 sq. km).
Saskatchewan is a big place with few people
“It was like climbing a mountain to get a diagnosis.”
- Focus group comment.
THE GOAL

To develop and evaluate a streamlined interdisciplinary “one-stop shopping” clinic for patients from rural and remote Saskatchewan for diagnosis and management of dementia and to evaluate telehealth as a means of delivering follow-up care to patients and their families.
Community-based participatory research
INITIAL TELEHEALTH VISIT WITH BLOODWORK
CLINIC DAY
(THEN)
NOW
CLINIC DAY

Joint and individual assessments by neurologist, neuropsychologist, physiotherapist, dietitian.

Neuro-imaging
Original Buschke Cued Recall Test
Pictorial Prairie Buschke
END OF CLINIC DAY

Inter-disciplinary meeting of all professionals involved with family doctor on telephone.

Meeting with patient and family to discuss diagnosis, treatment.
1700:

Patient and family head home.
STEP 4 – FOLLOW-UP

6 Weeks
12 Weeks
6 Months
12 Months

OR
## WHO DO WE SEE?

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s Disease</td>
<td>194</td>
<td>43.6%</td>
</tr>
<tr>
<td>Mild Cognitive Impairment</td>
<td>68</td>
<td>15.3%</td>
</tr>
<tr>
<td>Normal</td>
<td>60</td>
<td>13.5%</td>
</tr>
<tr>
<td>Frontotemporal Dementia</td>
<td>46</td>
<td>10.3%</td>
</tr>
<tr>
<td>Lewy Body Dementia</td>
<td>22</td>
<td>4.9%</td>
</tr>
<tr>
<td>Vascular Dementia</td>
<td>20</td>
<td>4.5%</td>
</tr>
<tr>
<td>Vascular/Alzheimer’s Dementia</td>
<td>12</td>
<td>2.7%</td>
</tr>
<tr>
<td>Head Injury</td>
<td>5</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
Travel saved by Telehealth (km per round trip) (n=363)

Mean distance to Telehealth = 71
Mean distance to Saskatoon = 529
Distance saved by Telehealth = 458
Family/Patient Satisfaction with Telehealth

Would you use Telehealth again?
Yes: 100%

Would you recommend Telehealth to another person? Yes: 97%
Satisfaction with Appointments (n = 58)

<table>
<thead>
<tr>
<th></th>
<th>Mean (SEM)</th>
<th>Min</th>
<th>Max</th>
<th>F(1,56)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH</td>
<td>4.66 (0.11)</td>
<td>1</td>
<td>5</td>
<td>2.05</td>
<td>0.158</td>
</tr>
<tr>
<td>IP</td>
<td>4.48 (0.09)</td>
<td>3</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No difference in satisfaction

1 = very dissatisfied, 5 = very satisfied
Convenience of Appointments (n = 58)

<table>
<thead>
<tr>
<th></th>
<th>Mean (SEM)</th>
<th>Min</th>
<th>Max</th>
<th>F(1,56)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH</td>
<td>4.78 (0.08)</td>
<td>3</td>
<td>5</td>
<td>37.78</td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>IP</td>
<td>3.76 (0.15)</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Telehealth significantly more convenient

1 = very inconvenient, 5 = very convenient
Can Cognition be Followed over Telehealth?

Mini-mental Status Scores (N = 71)

In-person: 22.34 +/- 6.35
Telehealth: 22.70 +/- 6.51
FUNDING

Then: CIHR-funded research project

Now: Funded directly by provincial government
A GLIMPSE TOWARD THE FUTURE

Working with rural and remote health regions to streamline and improve the journey for those with dementia and their families.
A multi-disciplinary “one-stop shopping” Rural and Remote Memory Clinic with telehealth follow-up is a convenient, valid, effective, and transferrable way to improve the care of those with dementia and their families.