GTA Rehab Network Best Practices Day

Telehealth in Respiratory Rehabilitation & Long Term Ventilation
May 1st, 2015

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West Park Healthcare Centre
Telehealth

The different ways that West Park uses this communication and information technology:

- **Consultation & Follow-Up**
- **Monitoring & Management**
- **Education**
- **Rehabilitation**
Telemedicine: Consultation and follow-up of respiratory rehabilitation referrals

Remote Access to Respiriologists
How Telemedicine Video Conferencing Works:

• Receive referral and contact patient or facility.
• WP coordinator contacts OTN site coordinator.
• Patients are contacted with location, date, & time.
• Connect through Ontario high speed broadband network called SuperNet.
• Scheduled events are automatically connected using Ontario Telehealth secure connections.
• Care coordinator calls patient back to schedule rehab stay.
## Pre-Admission Consultation Or Follow-Up

<table>
<thead>
<tr>
<th></th>
<th>Central Site</th>
<th>Satellite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Consultation</td>
<td>In clinic</td>
<td>Remote site</td>
</tr>
<tr>
<td>Healthcare professional present</td>
<td>No</td>
<td>Usually</td>
</tr>
<tr>
<td>Chest X-ray</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lung Function</td>
<td>Full pulmonary function test</td>
<td>Simple spirometry</td>
</tr>
</tbody>
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The Positives And The Negatives:

+ 
  • Improved access
  • Appreciated by patients and providers
  • Able to evaluate many pulmonary conditions
  • Few patients require an in-person visit

− 
  • Scheduling coordination
  • Time issues - no flexibility
  • Lack of clinical outcomes and cost effectiveness
Patients Seen via Telemedicine

<table>
<thead>
<tr>
<th>Year</th>
<th>New</th>
<th>F/up</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
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</table>

Travel Distance Saved

<table>
<thead>
<tr>
<th>Year</th>
<th>Average trip</th>
<th>Average yearly total</th>
<th>Total distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
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Telemonitoring: Telehomecare

It starts with a referral to the CCAC
Read the question, then answer by touching **YES** or **NO**

<table>
<thead>
<tr>
<th>Additional activities</th>
<th>Logout</th>
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**Breathing**

Monday 12 Jan 2015

Monday Breathing (6:30 AM)

Are you **more short of breath today** than yesterday?

- **Yes**
- **No**

No reading

[Continue]
In the past two weeks, have you been bothered by little interest or pleasure in doing things?

- 0: Not at all
- 2: More than half the days
- 1: Several days
- 3: Nearly every day

No reading

Continue
A Systematic Review of Home Telemonitoring for COPD
292 citations-6 studies included

Conclusion

- Potential but clinical benefit unclear for COPD.
- Identifying changes in symptoms and signs from baseline requires detailed attention.
- Trials need to specify the intervention, and include an economic analysis.
- Not ready to be embedded in routine clinical care.

Telemonitoring integrated into existing clinical services on hospital admissions for exacerbation of COPD

Pinnock H, BMJ 2013;347
LTV in Community: Management & Monitoring

- Pilot between WP and the TC LHIN as part of their Long Term Ventilation Strategy. Uses Ontario Telemedicine Network.
- Laptop with video conferencing in patient’s home
- Patients more empowered, fewer home visits, fewer admissions.
- Information shared among patients, caregivers, WP clinical staff and Community Care Access Centre.
Personal Video conferencing
Telehealth in Pulmonary Rehabilitation: Education and Consultation

Remote site requires:

• A local health care coordinator
• An exercise facility
• Telehealth capabilities
Lessons Learned

- In order to manage multiple sites, there would be a need for a key central coordinator
- Scheduling (staff and sessions)
- IT support
- Need to use standardized outcome measures
- Facility limitations/Equipment limitations
- Need to podcast educational sessions
- Need to ensure education materials is applicable for all locations.
Conclusion

Telemedicine is a growing opportunity for WPHC to improve access and capacity for patients ongoing medical conditions.