PROCESS: Providing Telemedicine Follow-up Services for Northern Surgical Patients

Value Statement:
TBD

Organization(s): SLMHC, KOTM, OTN
State: Current
Start Point: Identification of Patient Need
End Point: Completion of Telemedicine Appointment

Last Revision Date: 13 Oct 2011
Validation Date: 13 Oct 2011
Prepared By: Tim Berezny
Observation: Oct 12-13 2011

Will be expanding Telemedicine to more services

Top Referral Sources
- Hugh Allen Clinic (for prenatal program)
- Surgical Unit
- Stroke Prevention Clinic
- *Occasionally from from nursing stations)*

Uses of Telemedicine Equipment
- Clinical (most northern activity is surgical, stroke, dental, sometimes pre-natal
- Admin/meetings
- Family Visits
- Patient Education
- Staff Education

Telemedicine Providers
KOTM - Keewaytinook Okimakanak
Provides services and manages equipment in Northern First Nations
(provider for northern surgical follow-up process)

OTN - Ontario Telemedicine Network
Provide telemedicine services and manages equipment for most of Ontario

Telemedicine Unit Inventory
1. Emergency Unit - Fixed location in ER. Not booked, used on-demand only.

3. Mobile Unit 3 - Move between rooms. Book unit in dedicated Outlook calendar through Telemedicine Coordintor. May need to book room that it is being moved to (through shared Intranet room booking). Can go into any patient unit when required

4. Ambulatory Care - Fixed location in Ambulatory Care Boardroom. Booked though Intranet room booking. (No Outlook Calendar)
*Secondary Unit for Clinics

5. Telehealth/Clinical Unit - Fixed location in Telehealth Clinical Room. Unit and Room booked exclusively in Outlook through Telemedicine Coordinator.
*Primary unit for clinics

6. Mobile Unit 6 - Move between rooms. Book unit in dedicated Outlook calendar through Telemedicine Coordinator.
May need to schedule room that it is being moved to (through shared Intranet room booking). Can go into any patient unit when required

Information items: (1) Outlook Calendar: 5.Telehealth/ Clinical Unit; (2) Monthly OR Schedule; (3) Telemedicine Clinic Schedules; (4) Telemedicine Clinic Schedule Printouts; (5) KOTM online calendar; (6) TSM-Telemedicine Service Manager Calendar (OTN); (7) EMAIL; (8) Scheduling checklist; (9) Desktop Calendar + (10) Calendar Datebook; Outlook Calendar: 5.Telehealth/ Clinical Unit; SLMHC Surgical Discharge Sheet; Telemedicine Referral Package; Client; Community Phone Directory; TSM Confirmation; Health Records; Ambulatory/ Appointment Clinic sheets (for each patient); Setup checklist; Patient Chart filing system (paper); Feedback Form; Activity Log; Scheduling checklist; Scheduling checklists Folder; FAX

1 Build Telemedicine Availability
By: SLMHC Telemedicine Coordinator & Surgery Clinic Clerk
At: Telemedicine Office

- Call (phone) surgery clinic nurse
- Review Outlook Calendar for 5.Telehealth/ Clinical Telemedicine unit availability (by Telemedicine Coordinator)
- Review Physician schedule for availability (Surgery Clinic Nurse)
- Jointly agree on appropriate telemedicine days to block off
(Dr. Touzin always Thurs, Dr. Chaudhuri alway Tues)
- "Book" meeting slot in "5. Telehealth/ Clinical Unit Outlook calendar."
- Create "Telemedicine Clinic Schedules", one excel file for each clinic day for each physician (2 physicians).

Variations
V1: May book in 4.Ambulatory Care unit

 # Employees: 1 in telemed, 1 in Surgery
Availability: 7am-3pm mon-fri
 # Surgical Physicians: 2
 # Surgical Telehealth days/mo: 3-5
25 min

30 days

2 Build Monthly OR Schedule
By: Surgical Clinic Clerk
At: Surgical Clinic

- With reference to telemedicine availability, book physician into telemedicine block (use other information to book other blocks)
- Write "Monthly OR Schedule" document, save .doc to hard drive
- Email "Monthly OR Schedule" document to Telemedicine Unit

Variations
V1:

 # Employees: 2 clerks
Availability: 7am-3pm & 8am-4pm
 # Schedules: 2
1 hr

3 Identify need for Telemedicine Surgery Follow Up
By: Surgical Clinic Physician
At: Surgery Clinic

- Identify need after surgery
- Write "Telemedicine Follow-up" on SLMHC discharge sheet
- Leave discharge sheet with chart

Variations
V1: Hugh Allen Clinic: For prenatal, single page specialized referral form
V2: Stroke Prevention Clinic: Single page specialized referral form

 # Employees: 2 surgeons
Availability: on surgery days (see DS map)
1 min

Batch Size 1 referral

5 days

4 Assemble Referral Package
By: Surgery Clinic Clerk
At: Surgery Clinic

- Assemble Telemedicine Referral Package
  - Discharge note
  - Operative Report (for post-op, from meditech) or referral letter (for pre-op visits)
  - Pathology Report
- File a month worth of referral packages
- Send batch of referrals (5 - 25) to telemedicine unit once or twice a month
- Note: documents must be filed continually as they are received

Variations
V1: Documentation included depends on clinical picture

 # Employees: 2
Availability: 7am-3pm & 8am-4pm
2 hr

Batch Size: 5-25 referrals

30 days

5 Build/Book Telemedicine Schedule
By: Telemedicine Coordinator
At: Telemedicine Coordinator Office

- Process referrals approx. 1x per month
- Group referral by community
- Copy info into "Telemedicine Clinic Schedule.xls"
  - Name, chart #, DOB, Band #, HCN, referring physician, Site/community
- Save schedule
- Print schedule
- Fax schedules to KOTM (Balmertown)
- File schedule with referral documentation

Variations
V1: OR builds their own schedule for dental services

 # Employees: 1
 # Appointments booked per 30min slot: 5
90 min

Batch Size: 5-25 referrals

3 days

6 Inform KOTM of Telemed Meeting Request
By: KOTM Scheduler
At: KOTN Balmertown Office

- Receive faxed schedule
- Create scheduling checklist for each client
- Put appointments in KOTM online calendar as "pending" (viewable but not used by SLMHC telemed coordinator minus client name)
- Put appointment info into "OTN TSM - Telemedicine Service Manager" Calendar
- email community telemedicine coordinator (CTC) with date and time of booking and special instructions (no patient ID info).

Variations
V1:

 # Employees:2 clinical + 1 admin + 1 education scheduler
Availability: 9am - 5pm
120 min

Batch Size: 1-6 referrals

3 days

7 Collect PHI Information
By: CTC-Community Telemed Coordinator
At: Community

- Receive email notification (checks frequently)
- Call KOTM
- Receive information about appointment, including personal health information

-------PHONE CALL EXCHANGE------

By: KOTM Scheduler
At: KOTM Balmertown Office

- Provide PHI
- Mark on "Scheduling Checklist" when spoke with CTC

Variations
V1:

Frequency: 1-3x per month
 # Coordinators: 28
 # Communities: 28
10 min

Batch Size: 1-6 referrals

30 days

8 Find & Confirm Appointment With Patient in Community
By: Community Telemed Coordinator
At: Community

- Find patient in community
  1 Phone (have listing in phone directory)
  2 Radio from nursing station
  3 go with home care workers to home
  4 cross paths in community
- Inform of meeting time, get confirmation
- Inform KOTM Balmertown via phone of confirmation, as patients are located
- Put appointment in desktop calendar (don't include PHI)
- Put appointment in calendar datebook (day timer), includes PHI
- Reference TSM calendar. (useful for PHI and when HCM out of date)

Variations
V1: most communities do not have access to TSM calendar
V2:

 # Patients per Clinic: 1-6
5min - 5 hrs

Batch Size: 1-3 referrals

3 days

9 KOTM Receives Client Confirmation
By: KOTM
At: Balmertown Office

- Receive phone confirmation that client has been informed of appointment
- Mark on "Scheduling Checklist" date of confirmation
- Mark confirmation in "KOTM online calendar"
- Mark confirmation in "TSM Calendar"
- Send confirmation to SLMHC via phone
- Mark on "Scheduling Checklist" date that SLMHC telemed coordinator was notified
- Print TSM Confirmation (appointment info w/o PHI)
- Build appointment package for each client. Attach: Surgery schedule + telemedicine services check sheet + TSM confirmation. File in 1 blue folder per client, grouped by month.

Variations
V1: If cancelled, record date of cancellation in Scheduling Checklist and note who was informed.
25 min

Batch Size: 1-3 referrals

3 days

10 SLMHC Receives Client Confirmation
By: Telemedicine Coordinator
At: Telemedicine Coordinator Office

- Receive phone confirmation that client has been informed of appointment. Arrive in small batches throughout month.
- Check off printed Telemedicine Clinic Schedule
- Check off excel Telemedicine Clinic Schedule

Variations
V1: If have a lot of NO confirmations, MAY attempt to reschedule, but likely not in same month.
V2: If cancelled, make a note on referral, then try and rebook for next available clinic (send referral back after 3 tries)
15 min

Batch Size: 5-25 referrals

Batch Size: 5-25 referrals

20 days

11a Prep for Clinic Day (SLMHC)
By: Telemedicine Coordinator
At: Telemed Coordinator Office

- 1-2 days before clinic day, fax telemedicine clinic schedule to health records
- Health records sends records to Telemedicine unit for day of clinic

Variations
V1:
30 min

Batch Size: 5-25 referrals

1

12a Morning Preparation
By: Community Telemed Coordinator
At: Telemed Coordinator Office

- Ask "Registration/Admitting" to print "Ambulatory/Appointment Clinic" sheets for each client
- Pick up sheets from Registration/Admitting
- Registration provides stickers (which are not used - in process of eliminating)
- Collate Paperwork by client:
  - Referral paperwork
  + Ambulatory/Appointment clinic sheets
  + Patient Health Records
- Put daily schedule on top of whole pile
- Bring documentation in to Telemedicine room

 # Patients per clinic: 1-6
30 min

Batch Size: 1 patient

15 min

13a Provide Telemedicine Visit
By: Physician
At: Telemedicine room

- Review cases through operative reports
- Dial into community (on forms)
IF connects (maybe coordinator present)
IF coordinator (maybe patient present)
IF patient (maybe on time)
IF on time - share results of pathology report
Variations
V1: if know patient is running late, may dial back to that community later
V2: May disconnect due to loss of power

Appointment length: 15-20min
Cancellation rate: > 50%
Eligible for Telemed F/U: ~80%
Receive Telemed F/U: ~10%
25 min per client

0min

14a Close-out Clinic Session
By: Physician
At: Telemedicine room

- Medical records are returned to Day Surgical Clinic Clerks, who return documentation to health records.

Variations
V1: May need to book another follow-up appointment
V2:
15 min

Telemed: Can - Take a physical exam (sometimes) & auscultations. NOT able to do "feeling" activities (palpate)

Problem: All rooms have ports but not all activated
Idea: Activate ports in all rooms

Note: Equipment is fairly reliable, but community runs on generators so power outages are common

Problem: All rooms have ports but not all activated

Tried setting appointments for afternoon, but didn't help much

Reasons for cancellation:
- **Patient no show (most):** Patient forgets, sleep in, no child care, miss ride, don't like coming in over lunch time, don't like coming in early, death in the community, periods of hunting, community festivals, shut down for 2 weeks at Christmas.
- **Technical reasons:** power, internet, satellite, unplugging port by accident
- **HR issues:** CTC not present, CTC didn't confirm with client.

11b Prep for Clinic Day (Northern Community)
By: Community Telemed Coordinator (CTC)
At: Nursing Station

- Call patient day before to remind them of appointment, ask if still able to come.
- Tell to arrive 20-30 minutes before consult start time. Determine if medical transport required

Variations
V1: If cancellation before appointment date, notify KOTM, who notifies SLMHC
V2: Use other methods to remind patients (e.g. radio)
V3: Some CTCs don't remind patients

 # Patients to call: 1-5
45 min

Batch Size: 1-6 referrals

1

12b Morning Preparation
By: CTC
At: Nursing Station

- Pre-fill information on nursing forms
- Complete activities on "setup checklist"

Variations
V1: Troubleshoot equipment if issues
V2:
30 min

Batch Size: 1 patient

15 min

13b Receive Telemedicine Visit
By: CTC - Community Telemedicine Coordinator
At: Remote Telemedicine room

- Bring patient to the room
- Explain to patient what will happen
- Patient waits in waiting room
- Wait for doctor to dial in.
- Patient "Receives telemedicine consult"
- Guide patient to ask questions

Variations
V1: CTC provides translation
V2: CTC leaves room during consult (privacy)
V3: Patient arrives via Medical transport
V4: CTC not on site -> meeting cannot run
V5: Patient not available/found
V6: Patient fills out feedback form

 # patients per site: 1-5
25 min per client

Batch Size: 1-6 referrals

0min

14b Close-out Clinic Session
By: CTC
At: Nursing Station

- Photocopy activity log. Put in nursing station client chart (paper based)
- Fax activity log to KOTM
- Fax feedback survey to KOTM

Variations
V1: May need to book another follow-up appointment
V2:
30 min

Batch Size: 1-6 referrals

0 min

15 Close patient file
By: KOTM Telemed Scheduler
At: KOTM Balmertown Office

- Receive Activity Log
- Double check data on activity log (e.g. correct physician name)
- mark complete on scheduling Checklist
- File scheduling checklist in monthly scheduling checklist file folder

Variations
V1: Unsuccessful appointment, initiate a incident report process, determine reason for failure. Cancel in TSM
V2:
60 min

Batch Size: 1-6 referrals

30 days

16 Analyze Data
By: KOTM Data Analyst
At: KOTM Balmertown Office

- Transcribe data into database
- Create reports
- Send all successful activity logs to Health Canada.

Variations
V1: May need to book another follow-up appointment
V2:

 # Employees: ?

Note: ALL video conferencing booking has to go through telemedicine coordinator

TSM is the OTM hub of all telemedicine coordination. Bookers resource on both side of call. Contains extensive appointment info, including HCN. Requires training to use. (Many community coordinators not trained)

Telemedicine equipment is owned by the community, managed by the network

Telemedicine service manager statuses: Pending, Confirmed, Cancelled, Cancelled after confirmation

All CTCs are members of the community. Funded by KOTM. Partner with band council, working with council chief who holds health portfolio.

Noting cancellation on referral form (which is a duplicate) and kept with Telemedicine is a risk, may not be captured properly in the patient chart

Issue: OTN won't process visit without valid HCN

Problem: Patients often too intimidated to ask questions

Problem: NIHB won't pay for in-community transit to tele health appointment, but will pay for trip to SLMHC. (incentive to travel)