Developing a Telemedicine Program

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Common Business Plan Elements

• Foundational work
  – Needs and demand assessment
  – Services plan
  – Organizational assessments
  – Market study
  – Technical plan
  – Regulatory environment
  – Management plan overview (includes outcome measures & evaluation)
  – Financial plan
  – Executive summary with introduction and background

• Roll out work
  – Training plan
  – Operations (implementation)
  – Evaluation
  – Conclusion and recommendations
1. Needs & Demand Assessment

• Define the need—be very specific
  – What is the clinical and/or service need? (drives equipment selection)
  – Is there a demand (not just a need)?
  – Where are the services to be delivered? Where are the patients? The partners?
  – When is it needed? Urgency?
  – Why is it important?
  – How is telemedicine already being provided?
    – Learn from successes and failures, evaluate processes for ideas
    – Look to see if there’s a bigger need

• Collect data for all of these questions if possible

• Other sites: for all of the above, assess from their perspective
2. Services plan

• What service will be added or enhanced?
• Who are the players? Champions?
• How should we provide it?
  • Remote monitoring
  • mHealth
  • live video
  • store & forward
• Are there protocols developed for telemedicine in this service line?
• Where should we deliver the services?
• Provider staffing? 24/7 coverage?
• Other sites: assess from their perspective
## Types of Telehealth

<table>
<thead>
<tr>
<th>Modality</th>
<th>Primary Uses</th>
<th>Advantages</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store &amp; Forward</td>
<td>ENT, dermatology, radiology reads</td>
<td>No scheduling, Minimal tech support</td>
<td>Limited assessment</td>
</tr>
<tr>
<td>Live Video</td>
<td>Specialty clinic follow up, behavioral health, group therapy, direct to patient</td>
<td>See non verbal cues, Can discuss treatment plan with patient</td>
<td>Scheduling Support (IT and clinical), Still need a secure system for sharing medical records information</td>
</tr>
<tr>
<td>Remote Patient Monitoring</td>
<td>Home telehealth, telemetry, smart homes</td>
<td>Can get into patient homes</td>
<td>Need to track (usually a monitored dashboard)</td>
</tr>
<tr>
<td>mHealth</td>
<td>Prevention, fitness, chronic disease management</td>
<td>It goes with the patient or with the provider</td>
<td>What do we do with all that data?</td>
</tr>
</tbody>
</table>
3. Organizational Assessment: Climate

- Interest
- Motivation
- Readiness (SWOT)

- What’s the vision and mission of each organization who will be involved—does the plan match?
3. Organizational Assessment: Capability

- Support
  - IT
  - Administrative/leadership
  - Clinical

- Equipment
  - Telemedicine hardware and software and licensing
  - EHR vs telemedicine platform: can you communicate? Can you integrate?

- Connectivity

- Clinical service capabilities
  - Staffing
  - Skill mix
  - Credentialing and privileging and contracting

- Space

- Other sites: assess from their perspective
4. Organizational Assessment: Feasibility & Market Analysis

- Telehealth policy and law (CTEL, NCSL, CMS, ATA, TRC’s, etc.)
- Patient flow
  - Will it work?
  - Who will be impacted with extra time demands?
- Other sites: assess from their perspective
- Market analysis
  - Reimbursement/patient payer mix
  - Other revenue opportunities
  - Budget and sustainability
  - Is there a demand (not just a need identified)
  - Grants are designed for seed funding (equipment, infrastructure, etc.)
5. Technical plan

• What technology makes the most sense based on clinical need?
• What model is best? Consider ease of use, durability, clinical clarity, etc.
• Will it work with other stuff? With our EHR? With other telemedicine equipment?
• Can we support it? How about long term?
• Can we afford it? Initial cost, ongoing licenses and service contracts, disposables, replacements. Do we need/want a grant??
• National Telehealth Technology Assessment Resource Center: check for user reviews, innovation, toolkits for equipment selection
Live Video

• Types of visits
  – Scheduled visits
  – Urgent consultations
  – On demand visits

• Types of systems
  – Room systems
  – Carts
  – Desktop
  – Mobile

• Considerations
  – Codec (coding and decoding)
  – Bandwidth=more traffic lanes
  – Dual monitors
  – Peripheral capabilities
  – Hidden costs
Store and Forward

• Consultations
  – Images
  – Short video or sound recording

• Referrals

• Administrative / off label
  – Discharge Summaries
  – Travel
  – Certifications
Remote Patient Monitoring

- Home telemedicine
  - Mattress sensors
  - Smart homes
- Video monitoring (ICU)
- Telemetry / Wearable devices
mHealth

- Tracking of symptoms or results: electronic record that can be shared with the provider

- Data collection with medical device interfaces
  - Blood glucose readings
  - Blood pressure

- Texting
  - Education (maternity)
  - Encouraging (diabetes)
  - Challenging (weight loss)
  - Simple reminders
6. Regulatory environment

- Interstate Nurse Licensure Compact
- Licensing, credentialing & privileging for providers
- Prescribing
- Malpractice
- Security & privacy
- Reimbursement
6. Regulatory environment: licensing, credentialing & privileging for nurses

• Interstate Nurse Licensure Compact
  – National Council for State Boards of Nursing model proposed in 1997
  – Recognized growth in telephone triage, telehealth consultation, air transport and other nursing practice areas that cross state borders

6. Regulatory environment: licensing, credentialing & privileging for Physicians

- Licensing, credentialing and privileging primarily driven by the site where the patient is “seen”

- Resources
  - National Telehealth Policy Resource Center
    - Current and pending information about licensing & credentialing
  - National Conference of State Legislatures
    - Current licensure requirements listed by state
  - Center for Telehealth and e-Health Law
    - Consultation requirements
    - Foreign medical graduate licensure report
6. Regulatory environment: Prescribing

• National Telehealth Policy Resource Center
  – Online prescribing issues:
    – Patient-provider relationship
    – Adequate physical exam
    – Accuracy of self reported history
    – State board requirements

http://telehealthpolicy.us/credentialing-privileging Downloaded 4/9/14

• Center for Telehealth and e-Health law
  – Country-wide research done with publications on:
    – Pharmacy laws pertaining to telemedicine and e-prescribing
    – Prescribing laws for medical devices and diagnostic testing
    – Internet and telemedicine prescribing
6. Regulatory environment: Malpractice

• National Telehealth Policy Resource Center
  – Very few cases, most settled out of court
  – Recommend checking current malpractice insurance to see if telehealth is covered and if it extends to any applicable states

http://telehealthpolicy.us/malpractice-0 downloaded 3/17/15
6. Regulatory environment: security & privacy

- Provide for patient privacy and confidentiality with all modalities
  - The cubicle question
- Restrict access to patient data, limit disclosure
- Comply with HIPAA security rule
  - Use technically secure devices and systems
  - Control access to the facility and equipment
  - Follow policies and obtain training

- Resources:
  - Center for Telehealth & e-Health Law
    - Medical record access laws (50 state research)
  - National Telehealth Policy Resource Center
    - Health Information Technology section including information on the FCC, mHealth regulation, HITECH act and Meaningful Use
6. Regulatory environment: reimbursement

• Resources
  - ATA has information on Medicaid and private insurance coverage/reimbursement
  - National Telehealth Policy Resource Center—Policy Overviews on Medicare, Medicaid, state laws and reimbursement
  - National Conference of State Legislatures site discusses state coverage for services: (Medicaid & private insurance)
  - Medicare and Medicaid (CMS.gov)
    - Medicare 2014 Telehealth Services publication ****
    - Medicaid definition of telemedicine: cost effective, a mode of care delivery ****
  - Center for Telehealth and e-Health Law
    - Publication on stark and anti-kickback policies and regulations for all 50 states
6. Regulatory Environment: Reimbursement

• Medicare:
  – primarily reimburse for live video with 2 demonstration projects for store and forward reimbursement

• Medicaid
  – Most states have some sort of Medicaid telemedicine coverage (43 plus D.C. January 2014 update)

• Private insurance and parity laws
  – Growing number of states with parity laws (19 plus D.C. January 2014 update)

http://www.ncsl.org/research/health/state-coverage-for-telehealth-services.aspx
7. Management plan

• Overview of how the program/project will be managed
  – Reporting structure
  – Interagency agreements
  – Outcome measures/ongoing evaluation
  – IT support

• Telehealth program manager (implementation, monitoring and evaluation oversight)

• Telehealth coordinator or assistant

• P&P
  – Available services and how they are provided
  – Authorized technology/devices
  – Scheduling
  – Case management
  – Technical support
8. **Financial plan**

First: what is the financial objective: increase profit? Increase market share? Break even?

**Revenue**
- Reimbursement
- Referral streams
- Contracts
- Program and user fees
- Etc.

**Expenses**
- Clinical and non-clinical personnel
- Clinical expenses
- Telecommunication expenses
- Equipment (purchase, maintenance and fees)
- Etc.
9. Executive summary

• Seeking the “green light”

• Components
  – What are you doing?
  – Why are you doing it?
  – What do you hope to achieve?
  – What critical components will affect your success?
Business Plan: The Roll-Out
Operations, Training, Pilot/Deployment and Follow Up
Managed by AK Native Tribal Health Consortium (ANTHC)

MISSION: to improve access to health care through sustainable telehealth systems

>15 year Operational History
  - Store & Forward: >40,000 last year in the AK Tribal Health System
  - Video visits: 1519 last year (with ANMC as an endpoint)
  - Telemedicine facilitates care between ANMC and rural tribal sites and between villages and rural hubs
  - Greatest impacts of program seen in reduced travel expenses, increased access to primary and specialty care and in decreased clinic wait times
AFHCAN Store & Forward Support

Cases packaged and sent via secure, encrypted software from a telemedicine cart, computer or mobile device.
AFHCAN Video Support

Live visits: patient to provider and provider to provider consults
Support provided for cart, desktop and mobile
Project Milestones Tracking Sections

- Leadership and team coordination
- Site equipment
- Planning and workflow analysis
- Training
- Pilot
- Deployment
- Follow up

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Supported Resources</th>
<th>Definition / tasks</th>
<th>Lead Person</th>
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<tbody>
<tr>
<td>Leadership</td>
<td></td>
<td>1 week</td>
<td>Primary THC</td>
</tr>
<tr>
<td>Initial Leadership Kickoff Meeting</td>
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<td>Prog Dev Director facilitates leadership meeting</td>
<td>Primary THC</td>
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<tr>
<td>Initial Project Leadership Meeting</td>
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<td>ANMC team identified by name</td>
<td>Primary THC</td>
</tr>
<tr>
<td>Weekly Meetings (as needed)</td>
<td></td>
<td>Remote team identified by name</td>
<td>Primary THC</td>
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<tr>
<td>Technical evaluation local site equipment</td>
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<td>Discussion items: Scope and timeline, Work Flow Diagram, team members/roles, room locations, equipment and accessories, accounts, testing, credentialing, scheduling, EHRs, training, village roll out plan &amp; timeline.</td>
<td>Primary THC</td>
</tr>
<tr>
<td>Planning &amp; Workflow Analysis</td>
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<td>DocumentLocator\AFHCAN\Documents\Operations\requirements worksheet submission Planning\Vidyo</td>
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<td>Vdyo accounts</td>
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<td>Primary THC</td>
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<td>Primary THC</td>
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Kick Off Meetings

• Purposes
  – Ensure IT, administration and clinical agreement on all sides
  – Mutually determine scope
  – Clearly identify the team to do the actual roll out work
  – Overview of the plan
    – Rooms
    – Equipment*
    – Credentialing/contracting*
    – General workflow including scheduling
  – Timeline

*These items can take a significant amount of time
Ongoing communication plan

• Meet weekly and keep it short and sweet
• Send weekly update to all participants and leadership
Equipment

• Technology needs to follow the clinical need (not the other way around)
• Sometimes the technology can’t do what providers want it to (SLP)
• Once you’ve determined the clinical need, though, you may need to focus on technology first
• Do you have redundancy built in on both ends?
• Technical evaluation components (both ends)
  – Physical space
  – Outline requirements (equipment, software, connectivity, etc.)
  – Purchase, install and test
  – Moving target—plan for upgrades, warrantees, replacements
  – Is there a need for a service contract?
  – Note: technical issues can be show stoppers, be cautious of moving too far ahead with the clinical folks
Planning and Workflow Analysis

• Details are super important
• Work through them with your clinical group
• Need to look at the whole process, from scheduling to final communication & billing
• How does the chosen equipment/technology fit? Who will be using it and how easy is it for them to do so?
Processes

- Credentialing, privileging and contracts
- Access and accounts
- Scheduling & rooms
- Preparatory work process
- Documentation including coding and billing
Some Notes about Room Design

- Private
- Quiet
- Well lit but avoid backlighting
- Minimize clutter
- Equipment as needed for telemedicine
  - Dual monitors with access to EHR
  - Headsets vs. speakers
- Way to call for help
Training—consider all sites

• Equipment training
  – New software? New hardware? New way to use old equipment?
  – Processes
  – Troubleshooting

• Detailed walk-through for all parties

• Repeated practice is critical

• Challenges and cheat sheets
  – Process checklist (planning)
  – Visit checklist (pre and during)
ANMC CLINIC VIDO TELEMEDICINE
DAY OF VISIT RESPONSIBILITIES

Before the Scheduled Session:
- Log in 5-10 minutes before the session
- Ensure all ordered items are available for provider, including any ‘day of visit’ tests.
- When receive notification that patient is present, check patient in to EMR
- Answer incoming call
- Mute microphones until visit initiated

Beginning the Session:
- Look at the camera, not the monitor
  - Introduce yourself to the patient
  - Ask patient if they can see & hear you clearly, let them know you can see & hear them
  - Troubleshoot any issue(s) immediately
  - Pan your own room to show patient you're providing for privacy/confidentiality
  - Ask the rural staff member to introduce all parties in their room, then refocus camera on patient
  - Remind patient of right to terminate videoconference at any time

During the Session:
- Treat the encounter as you would any face to face encounter.
- Patient camera/microphone: you can't control, so need to ask rural staff to assist with placement
- If disconnected, attempt to reconnect to your room for 5 minutes, if you cannot connect after 5 minutes, contact the patient clinic by telephone. Report your issue to ANMC helpdesk at 2626.

Ending the Session:
- Communicate end of session with follow up plans
- Ask patient if OK to see him/her again via VIDO (if applicable)
- ANMC to schedule follow up and write orders related to the patient
- Discontinue the call (exit the Vido room)
- Document in Cerner, send copy of note and orders to patient’s clinic via original case

Best Practices for Video Patient Visits:
- Center your display monitor directly underneath your camera. Camera at eye level if possible.
- Check your "self view" before the call. Look for clutter or other distractions behind you.
- Speaker and microphone should be directly in front of you. Speak in a normal tone of voice.
- Use caution with noise near microphone (papers shuffling, tapping on desk, etc.)
- Light should be on your face. Avoid bright lighting behind you.
- Turn off/silence other devices and LOCK or password protect your Vido Room.
- Pay attention to your body language—it’s easy to forget that you’re being watched.

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# Telemedicine Patient Video Visit Process Management

| ANMC IT Help Desk Number: ext. XXXX |
| AFGAN Telehealth Support Number: X-XXX-XXX-XXXX |

- Schedule Video Visit in Cerner - use VTC slot and appointment type.
- Create patient case in AFHCANweb and fill out the Video orders form for your clinic.
- Send AFHCANweb case to the specific group associated with the visit (example: Manillaq VTC Group), if not sure, please contact an AFHCAN Telehealth Coordinator.
- Monitor your group in AFHCANweb for the return of the case from the patient site group.
- Ensure all required attachments are available from case. (If not, return case to sender with a comment of information needed.)
- All documentation should be scanned into patient record in Cerner.

## Day of Video Visit

- Place VIDEO VISIT IN SESSION sign on exam door.
- At least 5 minutes before visit, if using Vidyo, log on to the exam room computer and on to Vidyo and join the ANMC provider’s room.
- If not using Vidyo, turn on your video equipment and call directly to the patient site.
- If anyone is present in the provider’s room, introduce yourself.
- Perform a video and audio check with patient. Have them speak and wave their hands.
- If audio and video are not present, refer to troubleshooting guide in exam room.
- Collect vital from the patient site team if not already received.
- Once all preparations are complete, let the patient site know that you are signing off and the provider will join the room shortly.
- Log off Vidyo - Log off computer, (if connected with another video system, do nothing.)
- Assist your provider with joining their room and LOCKING room in Vidyo if necessary.
- Ensure that the patient has been checked in for their Video Visit in Cerner.

## After Video Visit

- Shred any materials if necessary.
- Attach video visit Cerner notes to original AFHCANweb case.
- Send case to patient site group in AFHCANweb.
- If another video appointment was requested during the visit, begin Video Visit Checklist process with a new AFHCANweb case.
- When the case is sent back to you, notify ANMC provider of the Information.
- Archive case.
ED VIDYO IPAD SESSION

1. Beginning the Session:
   - Clinic staff to be present with patient and remain in session.
   - Provide for privacy/confidentiality.
   - Patient and/or guardian has right to stop VTC at any time.
2. During the Session:
   - Avoid moving camera and/or microphone unnecessarily.
   - If disconnected, attempt to rejoin room, if unable, the fast end will call the ANMC Emergency Room by telephone.
3. Ending the Session:
   - ANMC doctor will advise on patient follow up plans and end call.
   - Log out of Vidyo by going to Settings, then selecting Log out.

Best Practices for Video Patient Visits:
- Place mobile devices in stands, if possible.
- Be familiar with the iPad toolbar (shown below), including switching to different camera views. To get this toolbar to appear, tap on the screen.
- Turn off other devices.
- Avoid bright back lighting.

ENTER PIN: [red box]

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Training—patients

• Key elements:
  – Consent if required
  – Pre-visit work
  – What to bring to the appointment
  – Visit instructions: where, when, who
  – Day of visit tips:
    – look at camera
    – what to do if there’s a problem
Pilot / Deployment

- Mock patient walk through
- Initial deployment
  - Technology green light
  - Administrative green light
  - Clinical green light
Follow Up—all sites

• Need
  – Goals and success measures
  – QI system
  – Reports

• Monitor weekly at first

• Monthly

• Quarterly—probably not enough. Need relationship.

• Monitor for:
  – Volume / usage
  – Training needs
  – Assistance needs (problems)
  – Growth/expansion needs
General Resources

• ATA
  - Telemedicine outcomes & case studies
  - Telemedicine practice guidelines (core and specialty)
  - Special Interest Groups
  - General telemedicine & public policy news
  - Learning Center
  - Buyer’s guide
  - Liability insurance information
  - Accreditation for online patient consultations
  - Accreditation for training programs

• TRC’s
  - Regional
  - National Telehealth Policy Resource Center
  - National Telehealth Technology Assessment Resource Center

• Center for Telehealth and e-Health Law
• National Conference of State Legislatures
• CMS/Medicare/Medicaid
General Resources: Highlights

• Center for Telehealth and e-Health Law
  – Legal team provides expertise in credentialing, privileging, e-prescribing, licensure, reimbursement, etc.)
  – Resource Directory
  – Publications based on 50 state surveys

• ATA State Policy Resource Center
  – Helpful information for those working with state government
  – State comparisons/gaps re: policies

• National Conference of State Legislatures
  – Telehealth and rural health care delivery
  – Current licensure requirements by state
  – State coverage for telehealth services
Thank you!