

Developing a Telemedicine Program

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Telehealth in the Alaska Tribal Health System



Alaska Tribal Health System (ATHS)



The ATHS is a voluntary affiliation of 30 Alaskan tribes and tribal organizations providing health services to 170,000 Alaska Natives/American Indians

• Each is autonomous and serves a specific geographical area

- Alaska Native Medical Center (ANMC) provides both primary and tertiary care
- Serves as the tertiary/specialty hospital for all regions (entire state)





Models of Telemedicine Care in ATHS



Asynchronous (Store and Forward) Consults

- Outpatient
- Inpatient
- Emergency

Live Videoconferencing

- Outpatient scheduled visits clinic to clinic
- Video to patient at home (direct to consumer)
- On-demand consultations
- Care Conferencing/Care Coordination
- Project ECHO "Telementoring"





Alaska Native Health Care System Referral Pattern and Telehealth Network

Same Scale Comparison - Alaska Area to Lower 48 States





Village-Based Medical Services



180 Small Village Health Centers

- 550 Community Health Aides / Practitioners
- 125 Behavioral Health Aides
- 20 Dental Health Aides / 12 Therapists
- 100 home health/personal care attendants
- Average AK village has 350 residents



ANMC Specialty Services Offered via Telehealth

Adolescent Medicine	HIV/EIS	Palliative Care
Breast Cancer		
Screening	Infectious Disease	Pediatric Endocrinology
Cardiology	Maternal Fetal Medicine	Pediatric Neurology
		Peds Speech Language
Dermatology	Nephrology	Pathology
Diabetes	Neurology	Primary Care
Emergency Services	Neurosurgery	Pulmonology
Endocrinology	OB/GYN	Rheumatology
		Speech Language Pathology
ENT	Oncology	(Adult)
Gastroenterology	Oncology Nutrition	Surgery Clinic
Internal Medicine	Orthopedics	Walk-in Clinic
Hepatitis	Pain Clinic	



ATHS Telehealth Impact: By the Numbers

Since 2001, telehealth utilization has resulted in:







Starting/expanding a service which uses telemedicine

Common Plan Elements

- 1. Communication plan
- 2. Needs and demand assessment
- 3. Services plan
- 4. Organizational assessments
- 5. Financial plan
- 6. Regulatory environment
- 7. Process and Operations plan (implementation)
- 8. Technical plan
- 9. Training plan
- 10. Deployment plan
- 11. Follow up and Evaluation



1. Communication

- 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?



1. Communication: 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



1. Communication: Project Milestones

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

Don't get paralyzed by over planning Do use this as a tool, not a weapon

Milestone	Supported Reources	Definition / tasks	Lead Person
Leadership		1 week	
Initial Leadership Kickoff Meeting		Prog Dev Director facilitates leadership meeting	Lead THC
		ANMC team identified by name	Primary THC
		Remote team identified by name	Remote Leaders
Initial Project Leadership		Discussion items: Scope and timeline,	Primary THC
Meeting		Work Flow Diagram, team	
		equipment and accessories accounts	
		testing, credentialing, scheduling, EHRs,	
		training, village roll out plan & timeline	
Weekly Meetings (as		Facilitate Weekly Meeting	Primary THC
Weekly Formal		Send out weekly email to team	Primary THC
Communication		members	
Site Equipment		2 weeks	SI
site equipment		ANMC physical room identified	discussion
	DocumentLocator\AFHCAN\Documents\Operations\ Planning\Vidyo	requirements worksheet submission	THC
		determine equipment, software,	SI
		connectivity to be used & verify that it	
		meets specs	
		needed	
		equipment installed, software configure	dClinic, SI & IT
		Test all ANMC endpoints (workstations)	SI
		with all remote site endpoints	<u></u>
		directory entries made into the Vidyo system as needed for remote accounts	SI S
Technical evaluation remote site equipment	DocumentLocator\AFHCAN\Documents\Operations\ Planning\Vidyo	Site survey for organizational network needs	SI and IT
		remote physical room selection	THC facilitate
		network connections ID'd, equipment installed	SI with remote
		test connection remote w ANMC	
Planning & Workflow		3 weeks	THC
Analysis			
Vidyo accounts	http://home.anthc.org/empres/index.cfm support_tab/IT_work_orders	ANMC and remote sitesensure they get set up	
Vidyo room		configure if needed	
swim lane process diagram	1\\afhcan-dmbkup- 1\share\$\Projects\VIDYO_ROLLOUT\Flowcharts	review with clinic staff (usually case managers)	THC
credentialing privileging	\\afhcan-dmbkup-	Check on status	Lead THC
agreement	1\share\$\Projects\VIDYO_ROLLOUT Master_list of THO_VtV_readiness		
Prescribing		describe challenges, can't use	Lead THC
		AFHCANweb for Rx, discuss remote site preference for this process	2

1. Communication during the project

- Meet weekly and keep it short and sweet
- · Send weekly update to all participants and leadership



1. Communication to others (marketing)

- Marketing investment advised to be greater than or equal to the cost of program development
- Need to know what various groups want/need and demonstrate how you can meet it
- Tell the world what you are doing
 - Internal to your organization
 - To other organizations
 - Directly to consumers
- Share credit
- Publish

2. 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 others.
- Collect data
- Assess needs from all perspectives



2. Needs: patient perspective

- I can't make it out of my house...
- I can get to the clinic, but can't handle the travel
- I have weekly appointments with my speech therapist and it's a four hour drive one way
- What happens if I have an emergency and can't get off the island due to weather?
- I am seriously ill and would like for my family to all be able to meet with my providers. They live in three different states.

2. Needs: provider and clinic staff perspective

- I'm worried about follow up care
- Meeting standard of care is very difficult as the patient cannot get to see me as often as is recommended
- It would be nice to "take a look" at the patient when another provider calls me for advice
- I'd like to meet with my remote staff regularly and discuss patient care issues
- I found this great new piece of technology I'd like to use
- I can call the patient, but it'd be nice to actually see them take their inhaler medication
- I need frequent contact with a subset of my patients

2. Needs: providing organization's perspective

- CIO: we need to keep our technology systems secure, reliable and as standardized as possible
- CEO: we need to expand our services both in total number and in volume, we need to ensure our services are marketable
- CMO: standards of care for my patient cannot change based on location
- CFO: we need to ensure we include revenue cycle discussions in any service creation or expansion. We also need to make sure there's a market to warrant the work.

2. Needs: receiving organization's perspective

- I know this is good for my patient, but I need to make sure I have the time, space and personnel to support it
- I'd like to learn more about how to best care for my patient
- We need to keep our community relationships strong. Expanding services offered in our town will help.
- We need to ensure that our reimbursement is sufficient for the services we are offering.

2. Needs & Demand Assessment: Set Initial Goals Based on Needs

- Goals can be based on
 - Patient access to services (inability to travel, expense of travel, etc.)
 - Frequent touch points required for the service
 - Need for remote access to follow up on services
 - Continuity of care
 - Desire to improve patient and/or provider satisfaction
 - Meeting standard of care requirements
 - Increase market share
 - Other

3. Services plan (to meet initial goals)

- What service will be added or enhanced?
- Where should we deliver the services? Inpatient? Outpatient? Home? School? Other?
- Who are the players? Champions?
- Are there service line protocols developed?
- Provider staffing? 24/7 coverage?
- Support staff technical, clinical and administrative
- Other sites: assess from their perspective



3. Services Plan (to meet initial goals)

- What type of telemedicine would work best to enable reaching your goal(s)? Do you need to interact with the patient? With another provider? With a group? Does it need to be real time? Is it urgent?
 - Store and Forward
 - Clinic/facility based
 - Live Videoconferencing
 - Clinic/facility based
 - On demand consultations
 - Group visits (patient groups or provider groups)
 - ECHO
 - Live video or Store and Forward or a combination
 - Direct to consumer
 - mHealth
 - Remote patient monitoring

3. Services plan

- Clinical site workflows need to make sense
 - Sending and receiving room configurations
 - Scheduling to fit in with current processes as much as possible or be managed separately
 - Telemedicine needs to be "mainstreamed" into the entire clinical care process. It should not be a "different" way of taking care of patients.
- Direct to consumer workflows need to make sense
 - Patient registration requirements
 - Time management (screening out "non-issues")
 - Ensuring accurate consumer health information/records
 - How do we document and share information?

3. Services plan: examples

- On demand emergency department or internist
- Palliative Care direct to consumer, CCU, med/surg floor
- ECHO

Questions so far?

- Communication
- Needs assessment
- Services plan

4. Organizational Assessment: Climate

- Interest
- Motivation
- Readiness (SWOT)
- What's the vision and mission of each organization who will be involved—does the plan match?



4. Organizational Assessment: Capability & Fit

- 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 (especially if augment care with direct to consumer)
 - Staffing
 - Skill mix
 - Credentialing and privileging and contracting
- Space
- Other sites: assess from their perspective
- NOW: adjust and refine your goals

4. Organizational Assessment: Examples

- Consider capability and fit
 - Palliative care direct to consumer
 - Audiology equipment and user skill set
 - Ultrasound request

4. Organizational Assessment: Feasibility & Market Analysis

- Telehealth policy and law (CCHP, CTEL, NCSL, CMS, ATA, TRC's, etc.)
- Patient flow
 - Will it work? Is there a clear pathway?
 - 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. Financial plan



Goal: Increase profit? Increase market share? Break even? Increase access even if doesn't result in a financial gain? Are we willing to take a loss?

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.

5. Financial plan

- You often get what you measure as it provides a target
- Measures could include:
 - Telemedicine reimbursement dollars
 - Number of patient video visits
 - Patient outcomes from a telemedicine service
 - Number of sites using a service
 - Number of new patients
 - Time to access specialist
 - Etc.

6. Regulatory environment

- Interstate Nurse Licensure Compact
- Licensing, credentialing & privileging for providers
- Prescribing
- Malpractice
- Security & privacy
- Reimbursement

6. Regulatory environment: Some Resources

- Center for Connected Health Policy (National Telehealth Resource Center)
- Center for Telehealth and e-Health Law
- Centers for Medicare & Medicaid Services
- American Telemedicine Association
- National Telehealth Technology Assessment Resource Center
- 12 Regional Telehealth Resource Centers
- National Council of State Legislatures
- Federation of State Medical Boards (telemedicine guidelines)

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
 - Currently discussing increased requirements

PT, EMS and Psychology now also discussing state compact agreements



Map downloaded 9-14-18 https://www.ncsbn.org/nurse-licensure-compact.htm

6. Regulatory environment: physician licensing

- Licensure is regulated at the state level
- Applies to the state where the <u>patient</u> is physically located not the provider.
- Interstate Medical Licensure Compact
 - Agreement between 24 states and 1 territory and the 31 Medical and Osteopathic boards in those areas
 - Expedites the application process



- = IMLC Member State non-SPL issuing licenses*
- = IMLC Passed; Implementation In Process or Delayed*

* Questions regarding the current status and extent of these states' and boards' participation in the IMLC should be directed to the <u>respective state boards</u>.

Downloaded 9-14-18 https://imlcc.org/

6. Regulatory environment: licensure exceptions

- Indian Health Care Improvement Act <u>exempts</u> licensed health care professionals from state licensing requirements while employed by a Tribal Health Organization
- Other exceptions to state licensing:
 - Provider to Provider Consultations
 - Medical Emergencies
 - Telemedicine Special Purpose Licenses that some states have enacted

6. Regulatory environment: credentials & privileges

- Providers must be credentialed and privileged to provide patient care at the facility where the patient is located
- Often can be managed through credentialing agreements
- Sites without agreements in place require full provider credentialing to meet CMS and TJC standards

6. Regulatory environment: Prescribing

- Online prescribing issues:
 - Patient-provider relationship
 - Adequate physical exam
 - Accuracy of self reported history
 - State board requirements
 - Controlled Substances
 - Look at both medical and pharmacy laws



6. Regulatory environment: Malpractice

- Check current malpractice insurance to see if telehealth is covered and if it extends to all states where patients are seen
- # of cases increasing, but still a very small percentage of malpractice claims
- Protecting providers:
 - Know the state's laws for all states where patients are seen (especially important for prescribing and informed consent)
 - Document to show:
 - Established patient/provider relationship
 - Adequate assessment
 - What was done to help ensure the history you have is accurate
 - Decide ahead of time conditions that may necessitate an in person visit
 - Have a process for escalating treatment

6. Regulatory environment: security & privacy

- Provide for patient privacy and confidentiality with all modalities
 - The cubicle question
 - Kiosks
 - Patient home (portal, direct to website or secure access with password)
- 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



• FCC, mHealth regulation, HITECH act and Meaningful Use

6. Regulatory environment: reimbursement

• Resources

- ATA has information on Medicaid and private insurance coverage/reimbursement
- Center for Connected Health Policy—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)
 - CMS 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:
 - Synchronous: approved originating site, approved provider, approved service, approved area
 - 2 demonstration projects for store and forward reimbursement
 - Chronic care management/remote monitoring
 - Opioid Crisis Response Act passed in the senate (eliminates originating site requirement for substance use disorder treatment via telemedicine)
- Medicaid
 - 49 state plus DC have some Medicaid telemedicine coverage
 - 15 reimburse store and forward
 - 20 reimburse for remote patient monitoring
 - 23 limit the type of facility for the originating site
 - 32 offer transmission/facility fee
 - 38 plus DC have a law that governs private payer telehealth reimbursement policy
- Private insurance and parity laws
 - Growing number of states with parity laws or proposed laws (38 plus D.C. 2018)

2018 http://www.cchpca.org/telehealth-and-medicare 2018 http://www.cchpca.org/telehealth-medicaid-state-policy 2018 http://www.ncsl.org/research/health/state-coverage-for-telehealth-services.aspx

6. Regulatory environment: Revenue Cycle Lessons Learned

- Challenges creating "on-the-fly" encounters for store and forward and on-demand consultations.
- Make workflows easy for clinic staff, providers and patients and follow up regularly
- Use badge cards, EHR templates to help guide your providers to optimize documentation
- Be clear on what constitutes a consultation vs a referral
- Talk with coding team to alert them of new telehealth services
- Spot check your telemedicine revenue cycle processes
- Measure, track, share results

Questions so far?

- Communication
- Needs assessment
- Services plan
- Organizational assessment
- Financial plan
- Regulatory environment

7. Process and Operations Plan

- Reporting structure
- Interagency agreements
- Outcome measures/ongoing evaluation
- IT structure
- P&P
 - Available services and how they are provided
 - Authorized technology/devices
 - Scheduling
 - Case management
 - Technical support



7. Process and Operations Plan: Personnel

- Telehealth program director (implement, monitor, evaluate, strategize)
- Telehealth coordinator or assistant (day to day business)
 - Scheduling
 - Equipment checks
 - Encourage use
 - Encourage users
 - Train (software, hardware, process)
 - Address issues and roadblocks
 - Troubleshoot
- IT Support

• Personnel requirements frequently underestimated

7. Process and Operations Plan: Workflow

- Details are super important
- Work through them with your clinical group
- Need to look at the whole process, from scheduling to final communication & billing



7. Process and Operations: Other Considerations

- Credentialing, privileging and contracts
- Access and accounts
- Scheduling & rooms
- Preparatory work process
- Documentation including coding and billing

7. Process and Operations: lessons learned

- Define your need thoroughly and focus on the patient
- Details are important...all of them are potential points of failure
- Complex flow charts can be a double edged sword
- Match process with the real world...unless the real world is broken
- Trifecta: Administration/Technology/Clinical leadership
- Order of events is important during the project:
 - Clinical need must drive technology solution
 - Technology needs to be in place and functional before your roll out
- Stick to your design principles
- Set standards / promote consistency

7. Process and Operations: lessons learned

- Should always have a back up plan
- Avoid slowing down clinical workflow
- User helps should be targeted to specific groups
- First impressions are critical
- Start simple (grow as you learn)
- Minimize technology demands on clinical providers
- Create a timeline with clearly defined milestones
- The amount of time to start a new project is almost always underestimated
- Don't jump to solutions too fast
- Provide weekly communication regarding progress and next steps



8. Technical plan

- Evaluation components:
 - What technology makes the most sense based on clinical need?
 - Is it easy to use? Durable?
 - Does the equipment meet the criteria needed for clinical care?
 - Will it work with the EHR? With other telemedicine equipment?
 - Can we support it? How about long term? If it's to a patient's home, how do we support that?
 - Can we afford it? Initial cost, ongoing licenses and service contracts, warrantees, disposables, replacements. Do we need/want a grant??
 - Will it work in the physical space that we have?
 - Will our network support it?
 - National Telehealth Technology Assessment Resource Center: check for user reviews, innovation, toolkits for equipment selection



8. Technical plan

- Technology needs to follow the clinical need (not the other way around)
- Sometimes the technology can't do what providers want it to
- Once you've determined the clinical need, push this forward as it may take time
- Do you have redundancy built in on both ends?
- Who is supporting what?
- What happens when technical people get asked clinical questions?
- Technical problems can be show stoppers, be cautious of moving too far ahead with the clinical folks

8. Technical plan: Live Video

- Considerations
 - Type of visit (Discussion need? Nonverbals?)
 - Tech support on both ends
 - How do you share medical information/records?
 - Hardware
 - Codec (coding and decoding)
 - Bandwidth=more traffic lanes
 - Dual monitors
 - Peripheral capabilities
 - Hidden costs





8. Technical Plan: video scheduling issues

• Scheduling options and considerations

- Back to back video appointments or mixed in with in person appointments?
- Do we want a special room to do video visits, or just equip the clinic rooms?
- How do I ensure I have a private place to meet by video if it's an on demand type service?
- How will we communicate?
 - Who contacts the patient?
 - How do the clinics sync schedules?

8. Technical plan: Store and Forward

- Considerations
 - Type of data needed
 - Limits clinical assessment
 - Decreases scheduling issues
 - Smaller technical support need
 - How is information shared?









8. Technical plan: Remote Patient Monitoring

- Considerations
 - What data points are needed?
 - Where will data be gathered?
 - What will we do with alerts and problems?
 - Can patients do what you ask them to?
 - What do we do with all the data?









8. Technical plan: mHealth

- Considerations
 - What's the purpose?
 - Tracking
 - Data collection
 - Reminders
 - Motivation
 - Etc.
 - How do we manage the data?
 - Where do patients get help?



8. Technical plan: room set up

- 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



9. Training plan

- Foundational training
 - Technology (clinical and telehealth)
 - Device training
 - Workflow training
 - Troubleshooting
- Follow up training and on site assessment
- Follow up assessment and refresher training
- Any automated (system checks, etc.) or posted training/helps that need to be in place?

9. Training plan: Clinical Staff

- Patient selection and education
- Scheduling/rescheduling and pre-visit work
- Checking in and "rooming" patient
- Visit management
- Presenter and provider tips during visit
- Equipment, troubleshooting and resources
- Documentation
- Follow up

9. Training plan (consider all sites)

- Helpful tools for training
 - Process checklist (planning)
 - Visit checklist (pre and during)
 - EHR templates
 - Planning forms
- Ongoing support: clinical need
 - Badge cards
 - Go bag
 - Live group support



2. Training Plan





Brightness Controls (Toppies between levels of Reht brightness) Camera/Mater Mode (Deggles liebween vollimages and video recording) Mena Battan Press to view stored analysis and to delete images, see back page for details!

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3. Training Plan: ongoing support



9. Training plan: patients

- Key elements:
 - Consent if required
 - Pre-visit work to be done
 - 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
 - special instructions if visit to patient home



10. Deployment

- Mock patient walk through
- Repeat practice is often critical
- Initial deployment
 - Technology green light
 - Administrative green light
 - Clinical green light



11. Follow Up and Evaluation

- Follow up on your goals and success measures
- Attend first few VTC sessions with new personnel
- Monitor process
 - Completed VTCs
 - Cancellations, no shows, failed visits
 - Scheduling
 - Documentation
 - Revenue cycle
 - Clinic response/turnaround times
- Get feedback
 - process improvement ideas
 - Needs for training and/or assistance
 - Growth/expansion needs



Questions?

- Communication
- Needs assessment
- Services plan
- Organizational assessment
- Financial plan
- Regulatory environment
- Process and Operations plan (implementation)
- Technical plan
- Training plan
- Deployment plan
- Follow up and Evaluation

General Resources

- ATA
- Telehealth Resource Centers
 - 12 Regional Centers
 - Center for Connected Health Policy
 - National Telehealth Technology Assessment Resource Center
- Center for Telehealth and e-Health Law
- National Conference of State Legislatures
- Federation of State Medical Boards (telemedicine guidelines)
- CMS/Medicare/Medicaid





Thank you!

