

Integrating Telemedicine into Primary Care: Practice Models for Primary Care Physicians

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Dr. Parab is a family physician who has been practicing full-time telemedicine nationally for more than three years. The vice chair of the American Academy of Family Physicians' (AAFP's) Telehealth Member Interest Group, she holds more than 30 state licenses and has been involved with multiple quality assurance projects and marketing demos related to telemedicine. Dr. Parab is passionate about telemedicine education and serves as the Grand Rounds and CME director for a national telemedicine organization. She presented a poster titled "Telemedicine and Family Practice" at the 2015 AAFP Family Medicine Experience (FMX). Dr. Parab understands the concerns and challenges telemedicine may bring to family physicians. She is committed to quality improvement processes in telemedicine, and she is also an advocate for finding ways to reduce or prevent physician burnout. Prior to being involved in telemedicine, she practiced as an outpatient family physician in single-specialty and multispecialty groups.



Learning Objectives

1. Compare different telemedicine practice models accessible to family physicians.
2. Identify specific diagnoses suitable to treat within telemedicine.
3. Design a quality assurance protocol for telemedicine.



Audience Engagement System

Step 1: Home screen with navigation icons (Home, Search, My Profile, My CME, My History, My Favorites, My Alerts, My Settings, My Account, My Support, My Feedback, My Privacy, My Terms, My About).

Step 2: CME activity list showing details for 'CMED01 Acute Coronary Syndromes: Unchain My Heart'.

Step 3: CME activity details for 'CMED01 Acute Coronary Syndromes: Unchain My Heart'.

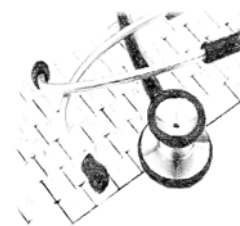


Outline

- Terminologies
- Definition of Telemedicine
- Getting Started
- Practice Models for Family Medicine
- Appropriate Telemedicine Visits
- Quality Assurance in Telemedicine
- Definitions
- Resources
- References

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2/3 of Healthcare Providers Rank Telemedicine as Top Priority in 2016



REACH Health surveyed 390 US health care professionals between 11/15 to 12/15 - Included physicians, nurses, and health care executives⁹

Gallegos 2016

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Polling Question #1

Do you practice telemedicine?

- a. Yes
- b. No

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Polling Question #2:

For those practicing telemedicine

Do you practice telemedicine via:

- a. Videoconferencing and Phone
- b. Phone only
- c. Store and forward only
- d. All of the above

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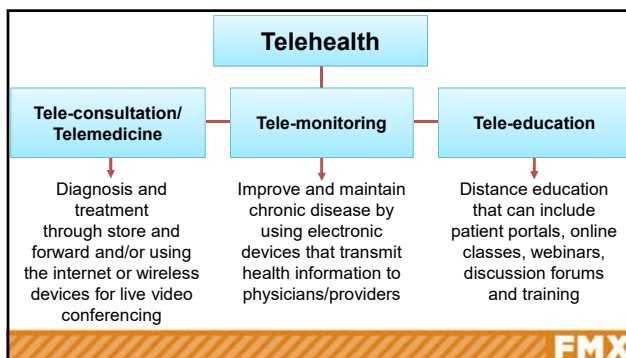
Polling Question #3:

For those not practicing telemedicine . . .

I would like to start practicing telemedicine:

- a. Within 1 – 2 years
- b. Within 3 – 5 years
- c. Not sure, but interested in the topic
- d. Never – If I can help it!

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Definition of Telemedicine

WHO (World Health Organization) Definition¹

According to WHO telemedicine is defined as,

"The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities"

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Elements of Telemedicine

Four Main Elements

1. Provide clinical services
2. Connect users who are not in the same physical location
3. Involves the use of various types of communication technologies
4. Goal is to improve health outcomes

Fifth and Sixth Elements to Consider

5. Develop and maintain collaboration of care
6. Keep and improve quality healthcare

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Getting Started²

#1 Establish a Vision

Establish a vision

What is the current vision of the organization and how will telemedicine contribute to that vision?

#2 Assess Your Practice

Knowledge

DO YOUR RESEARCH

Web sites, Publications, Field study, Surveys, Interviews, Lectures

Persuasion

Get buy in from all levels of the practice

Senior management/ Administrators, Clinical management, Physicians, Medical Staff, Billing, Legal

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Getting Started²

#3 Preparation

Decision

TELEMEDICINE PROGRAM APPROVED

#4 Implementation

Implementation

Pilot Start simple

#5 Review Process

Confirmation

Create metrics to measure
Have a review process in place
Review and revise

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Polling Question #4

For those thinking of adding telemedicine

What stage of the above process are you in?

- a. Creating a vision
- b. Assessing the practice
- c. Preparation
- d. Implementation – approved telemedicine program
- e. Review
- f. None – learning about telemedicine today

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Partnership Models



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Possible Partnership Models

- Add telemedicine to your current single or multi-specialty group (Keep it within your private practice)
- Partner with an organization (such as a hospital system) who already uses telemedicine
- Use a private vendor or outside service who solely specializes in telemedicine
- Form an affiliation with other independent family physicians who want to solely practice telemedicine

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Choosing the Right Model

Location	Personal Style	Types of Visits
<ul style="list-style-type: none"> • Local • State • Regional • National 	<ul style="list-style-type: none"> • Have more control on decision making process – work better on your own • Like to work with large organizations 	<ul style="list-style-type: none"> • Triage • Low acuity urgent care visits • Chronic care supplement visits • Counseling sessions • Medication refills • Patient monitoring • All of the above

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Choosing the Right Model

Technology	Reason	Specialty Needs
<ul style="list-style-type: none"> • Consultation type: Provider to provider, Provider to patient, Provider to provider with patient • Tele-monitoring • Health education 	<ul style="list-style-type: none"> • Extend office hours • Supplement low acuity office visits – increase office availability • Improve management of chronic illnesses • Improve patient compliance • Offer increased work flexibility/lifestyle 	<ul style="list-style-type: none"> • Specialty clinicians • Other healthcare providers • Mid-level providers

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Choosing the Right Model

Location	Personal Style	Type of Visits	Technology	Reason	Specialty needs
<ul style="list-style-type: none"> ➤ Local ➤ State ➤ Regional ➤ National 	<ul style="list-style-type: none"> ➤ Have more control on decision making process – work better on your own ➤ Like to work with large organizations 	<ul style="list-style-type: none"> ➤ Triage ➤ Low acuity urgent care visits ➤ Chronic care supplement visits ➤ Counseling sessions ➤ Medication refills ➤ Patient monitoring ➤ All of the above 	<ul style="list-style-type: none"> ➤ Consultation type: Provider to provider, Provider to patient, Provider to provider with patient ➤ Tele-monitoring ➤ Health education 	<ul style="list-style-type: none"> ➤ Extend office hours ➤ Supplement low acuity office visits – increase office availability ➤ Improve management of chronic illnesses ➤ Improve patient compliance ➤ Offer increased work flexibility/lifestyle for physicians 	<ul style="list-style-type: none"> ➤ Specialty clinicians ➤ Other healthcare providers ➤ Mid-level providers

Partnership Models

- Keep telemedicine within your private practice
- Partner with an organization – eg. hospital system
- Use a private telemedicine vendor
- Affiliation with independent family physicians who want to practice telemedicine

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Which Partnership Model

- | | |
|--|---|
| <ul style="list-style-type: none"> ➤ Hardware and software needs (Installation, Maintenance, Upgrades) ➤ Telemedicine and EMR Integration ➤ Choosing best providers to deliver the care ➤ Workflow arrangements ➤ Clinical policies and protocols | <ul style="list-style-type: none"> ➤ Creating a telemedicine team ➤ IT team and support ➤ Training ➤ Regulatory updates ➤ Marketing ➤ Legal |
|--|---|

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Before Picking a Partner

- Consider practicing telemedicine outside of your practice – Why?
 - Learn what are the benefits and challenges
 - Test out software if it is available to purchase
- Talk to other organizations and individuals who are practicing or have practiced telemedicine
 - Attend lectures

Minimal set up cost - Approachable technology - Reimbursable - Sustainable

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Potential Pitfalls of Adaptation

- Buy in is not at all levels
- Not integrated within the organization – feels separate
- Too complex too soon
- Utilization not maximized - need marketing and support
- Reimbursement does not offset the cost
- Technology limitations
- Trying to find the best way to follow evidence based medicine
- Provider retention
- Not sustainable

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Goals of Telemedicine Visits

- Improve patient care – compliance, access, continuity and outcomes³
- Capture revenue that would otherwise be lost
- Relieve physician overload

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What types of visits are appropriate through telemedicine?

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Top 3 Types of Telemedicine Visits

- URIs
- UTIs
- Skin lesions – Rashes

(Health Affairs 2014³)

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Appropriate Family Practice Telemedicine Visits

- **Supplement current triage**
 - Capture appropriate online visits that would otherwise been sent directly to the ER by phone triage
 - E.g. 20 year old female with costochondritis vs 56 year old DM male with chest pressure on exertion
- **Manage low level acuity visits online**
 - Opens office schedule for higher acuity visits and decreases office wait time
 - E.g. Sinusitis, uncomplicated UTIs
- **Interim re-assessment visits**
 - E.g. Asthma exacerbation, cellulitis or rash that does not need follow-up in person care

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Appropriate Family Practice Telemedicine Visits

- **Medication refill**
 - Bridge medication gap until next appointment
- **Counseling sessions**
 - Example: Smoking cessation
- **Monitor chronic diseases**
 - Example: Diabetes
- **Review labs or imaging studies when an in person exam is not needed**

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Appropriate Family Practice Telemedicine Visits

- **Multidisciplinary visits**
 - Example: Obesity with MD, Dietician and Behavioral Health
- **Consult with other disciplines**
 - Consulting with other specialists for example: Wound Specialist

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Top 10 Uses for Telemedicine Becker's Health IT & CIO Review⁴

Concierge services for fee paying patients	91%	Chronic condition management	80%
Medication management /prescription renewal	86%	Pediatric after-hours needs	79%
Minor urgent care	85%	Behavioral health	77%
Birth control counseling	83%	Post-hospital discharge	73%
Home health care	82%	Post-surgical follow-up	59%

Physicians could respond more to more than one answer.

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Guide for Diagnosis Appropriate Telemedicine Visit

YES	NO
1. Patient is stable	Appears in distress or is unstable*
2. Diagnosis mostly straightforward, uncomplicated	Diagnosis appears complicated due to uncontrolled comorbidities
3. Diagnosis commonly seen and treated through telemedicine successfully	Broad differential dx so further exam or testing may be needed or unsure treatment plan via telemedicine

1. **Acuity**
2. **Complexity of diagnosis**
3. **Standard of care**

* Need to have an emergency protocol

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Guide for Diagnosis Appropriate Telemedicine Visit

YES	NO
4. Some evidence based medicine that can be interpreted for appropriate telemedicine use	More research may be needed
5. Patient understands where, when, and how to follow-up if needed	Known non-compliance or potential attempt to misuse the system

4. **Evidence based medicine**
5. **Patient compliance and comprehension**

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Why Do We Need a New Way to Deliver Healthcare?

Major Problems of the US Healthcare System	Benefits
<ul style="list-style-type: none"> ➤ Cost/Affordability ➤ Accessibility ➤ Lack of portability 	<ul style="list-style-type: none"> ➤ Cost Effective ➤ Quick ➤ Improved access to healthcare ➤ Portable ➤ Use technology to enhance face time with provider

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Polling Question #5

What type of visit would you feel comfortable seeing through telemedicine?

- a. Triage visits
- b. Low acuity visits such as URIs/uncomplicated UTIs
- c. Chronic conditions
- d. Medication refills
- e. None of the above
- f. Some of the above
- g. All of the above

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Quality Assurance in Telemedicine

- Physician credentialing (in the state where the patient is located) to accreditation organization standards such as NCQA
- Establish basic policies
 - Research local/state/national regulatory policies
 - Prescribing and consultation statuses
 - Develop clinical telemedicine policies

Administration

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Quality Assurance in Telemedicine

- Assemble quality assurance protocols
 - Develop clinical telemedicine guidelines
 - Audit charts, review patient complaints
- Clinical and non-clinical staff training: initial and ongoing
 - Technical
 - Clinical workflow
 - Policies and Guidelines
 - Documentation
 - HIPAA

Quality Assurance Committee

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Take Home Points

- Telemedicine will become an integral part of healthcare in the next few years.
- Telemedicine fills the healthcare gaps to improve cost/affordability, accessibility and portability.
- It is important to have an organized method of getting started if you are considering adding telemedicine to your practice such as:
 - Establish a vision, Assess your practice, Preparation, Implementation, Review and Improve the process.
- Consider the different models of implementing telemedicine within your practice by asking what are your needs.
 - These needs should be from the perspective of technology, management, and financial. Don't forget to do your research on your potential partner.
- Use diagnosis specific practice guidelines to form telemedicine standardized guidelines for your practice.
- Make sure there is a quality assurance process in place to help maintain patient safety and improve overall patient outcomes.
 - Be involved with evaluating the quality of telemedicine care within your organization.

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Questions

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Definitions

ATA (American Telemedicine Association)⁵

Formally defined, telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status. Telemedicine includes a growing variety of applications and services using two-way video, email, smart phones, wireless tools and other forms of telecommunications technology. Telemedicine is an encompassing term with many, many aspects to it.

FSMB (Federation of State Medical Boards)⁶

"Telemedicine" means the practice of medicine using electronic communications, information technology or other means between a licensee in one location, and a patient in another location with or without an intervening healthcare provider. Generally, telemedicine is not an audio-only, telephone conversation, e-mail/instant messaging conversation, or fax. It typically involves the application of secure videoconferencing or store and forward technology to provide or support healthcare delivery by replicating the interaction of a traditional, encounter in person between a provider and a patient

Definitions

Store and forward technology

The patient information is stored in a digital file in one location and transmitted and reviewed later at another location.

Live videoconferencing technology

The patient and specialist is present at the same time but in different locations and connecting with a secure broadband connection-transmission which is the same for both people.

Remote patient monitoring

Electronic devices transmit patient health information to health care providers

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Definitions

mHealth?

mHealth, also known as mobile health, is a form of telemedicine using wireless devices and cell phone technologies. It is useful to think of mHealth as a tool—a medium—through which telemedicine can be practiced. mHealth is a particularly powerful development because it delivers clinical care through consumer-grade hardware and allows for greater patient and provider mobility.

HIT (Health information technology)⁸

HIT is the generation and transmission of digital health data, often through an electronic health record. Generally, HIT is used for administrative functions (keeping track of patient's health history, sharing information between providers, etc.) while telemedicine is the delivery of an actual clinical service. HIT can facilitate telemedicine but it is not a requirement for delivering remote health care.

Resources

1. American Telemedicine Association <http://www.americantelemed.org/>
2. CMS <https://www.cms.gov/>
Next Generation Accountable Care Organization Model (NGACO Model)
<https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-Items/2016-01-11.html>
3. CTel. (Center for Telehealth & e-Health Law) <http://ctel.org/>
4. Federation of State Medical Boards
http://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/FSMB_Telemedicine_Policy.pdf
5. Telehealth Resource Centers <http://www.telehealthresourcecenter.org/>

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TW1 Although CCHP & TTAC (the 2 national TRC's) would of course be listed among all TRC's, for physicians not familiar with the fact that there are regional TRC's as well as 2 national TRC's, could be worthwhile to point out CCHP (policy/legislation) & TTAC (technology) are the 2 national TRC's.

Theresa, 6/27/2016

Slide 47

TW2 If you can find a link for this resource, recommend including it.

Theresa, 6/27/2016

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- TELEHEALTH Start-Up and Resource Guide Version 1.1 October 2014
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