

IMPLEMENTING TELEHEALTH INTO REHABILITATION PRACTICE

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CONFESSION

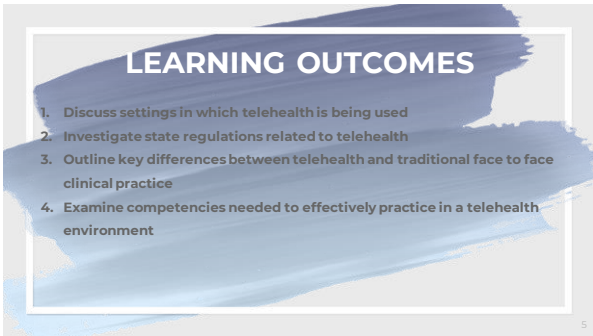
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PURPOSE

- Definition
- Use
- Regulations
- Practicalities

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LEARNING OUTCOMES

1. Discuss settings in which telehealth is being used
2. Investigate state regulations related to telehealth
3. Outline key differences between telehealth and traditional face to face clinical practice
4. Examine competencies needed to effectively practice in a telehealth environment

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1.
WHAT IS TELEHEALTH
Let's start with the basics

TELEMEDICINE
Remote clinical services

<https://www.hhs.gov/health-it/2017/02/27-how-telehealth-different-telemedicine>

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TELEHEALTH
Remote clinical services
+
Training, meetings, continuing education

<https://www.hhs.gov/health-it/2017/02/27-how-telehealth-different-telemedicine>


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**AMERICAN
TELEMEDICINE**
ASSOCIATION

“
ATA treats "telemedicine" and
"telehealth" as synonyms and
uses the terms
interchangeably.

<http://www.americantelemed.org/main/about/about-telemedicine/telemedicine-faq>

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DIGITAL PRACTICE

Definition
Digital practice is a term used to describe health care services, support, and information provided remotely via digital communication and devices.

Purpose
The purpose of digital practice is to facilitate effective delivery of services by improving access to care and information and managing health care resources.

WCPT/NPTRA Digital Practice Final Report available at: http://www.naiaa.org/pubs/Reports/TheWCPT/NPTRA_DigitalPhysicalTherapyPractice_TaskForce.pdf

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“
The future requires all clinicians to be digitally literate”

WCPT/NPTRA Digital Practice Final Report available at: http://www.naiaa.org/pubs/Reports/TheWCPT/NPTRA_DigitalPhysicalTherapyPractice_TaskForce.pdf

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2.
HOW IS IT USED?

REMOTE PATIENT MONITORING

- Daily monitoring
 - Glucose
 - Blood pressure
 - Weight
 - Pulse oximetry
 - Falls

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25%
Reduction in bed days of care

19%
Reduction in hospital admissions

\$1600
Per patient per year

© 2010 A. Ryan, D. Kasper, et al. Case report (2010) Home Telehealth: the systematic implementation of health informatics, home telehealth, and clinical management to improve the care of veteran patients with chronic conditions. Telemed J E Health. 2010;16(3):198-205.

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STORE AND FORWARD

- Examples
 - Radiology
 - Dermatology
 - Diabetes

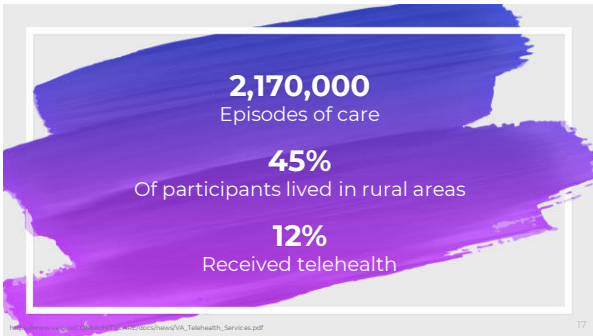
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REAL TIME
VIDEO
CONSULT

- Examples
 - Mental Health
 - Rehabilitation
 - Primary Care
 - Cardiology

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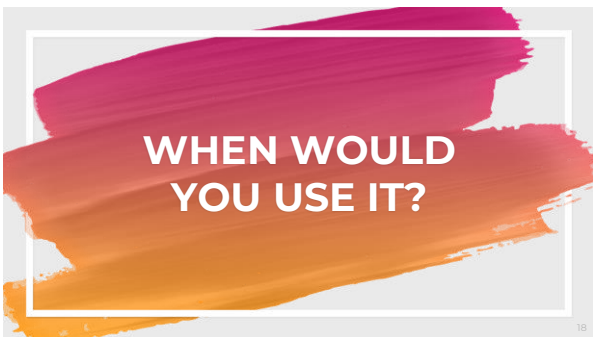
2,170,000
Episodes of care

45%
Of participants lived in rural areas

12%
Received telehealth

<https://www.vic.gov.au/health-services/telehealth-services>

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WHEN WOULD
YOU USE IT?

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WHEN WOULD YOU NOT USE IT?

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Effects of Virtual Exercise Rehabilitation In-Home Therapy Compared with Traditional Care After Total Knee Arthroplasty

VERITAS, a Randomized Controlled Trial

Janet Prvu Bettger, ScD, Cynthia L. Green, PhD, Daluancía N. Holmes, MS, Anang Chokshi, DPT, Richard C. Mather III, MD, MBA, Bryan T. Hoch, DPT, Arthur J. de Leon, MPT, Frank Aluisio, MD, Thorsten M. Seyler, MD, PhD, Daniel J. Del Gaudio, MD, John Chiavetta, MD, Laura Webb, BS, Vincent Miller, MMCL, Joseph M. Smith, MD, PhD, and Eric D. Peterson, MD, MPH

510(k) clearance in October 2015. VERA is a cloud-based virtual telehealth system that functions with use of 3-dimensional (3D) tracking technology to quantify pose and motion, an avatar (digitally simulated coach) to demonstrate and guide activity, visual and audible instructions and immediate feedback on exercise quality, and a virtual video connection for synchronous telehealth visits with an assigned intervention telehealth physical therapist. Individualized prescribed therapy regimens were electronically programmed for patients through the clinician interface prior to surgery.

The VERA system tracked activity, performance, exercise quality, and adherence; the telehealth therapist monitored the patient's progress asynchronously. Patients had a video visit with their telehealth therapist in the week after hospital discharge and weekly thereafter to review progress and to revise the therapy regimen accordingly. The telehealth therapist provided remote clinician oversight to the patients for the duration of the intervention and communicated progress to each clinical site ahead of the patient's 2- and 6-week postoperative visits. Patients and the telehealth therapist mutually agreed when therapy goals were met for discharge from virtual PT. All patients who were randomized to virtual PT were able to receive in-person PT as clinically deemed necessary.

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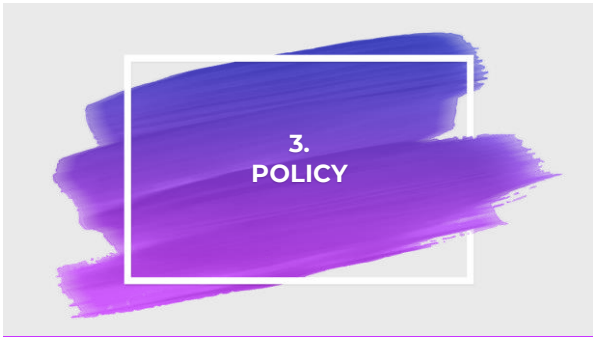
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	Intervention Group (N = 143)	Usual Care Group (N = 144)	P Value*
Primary outcome: 12-week health service use costs			<0.001
Mean and standard deviation†	\$1,781.96 ± \$2,531.77	\$4,526.77 ± \$4,498.35	
Median	\$1,050.00	\$2,805.00	
Interquartile range	\$900.00, \$1,200.00	\$1,644.50, \$4,505.00	
Secondary outcome: 12-week health care utilization†			
Home health physical therapy (no. of visits)	36 (0.3 ± 1.6)	686 (4.8 ± 6.3)	<0.001
Outpatient physical therapy (no. of visits)	199 (1.4 ± 4.4)	1,450 (10.1 ± 8.1)	<0.001
Physician clinic (no. of visits)	379 (2.7 ± 1.7)	998 (2.6 ± 2.0)	NS
Communication with physical therapist† (no. of calls/emails)	817 (5.7 ± 5.2)	19 (0.1 ± 0.4)	<0.001
Communication with physician† (no. of calls/emails)	149 (1.0 ± 2.0)	126 (0.9 ± 1.8)	NS
Urgent care (no. of visits)	11 (0.1 ± 0.3)	16 (0.1 ± 0.4)	NS
Emergency room (no. of visits)	10 (0.1 ± 0.3)	14 (0.1 ± 0.3)	NS
Inpatient rehabilitation (no. of inpatient stays)	0 (0 ± 0)	2 (0 ± 0.1)	—
Skilled nursing facility (no. of inpatient stays)	2 (0 ± 0.1)	5 (0 ± 0.2)	NS
Rehospitalization (no. of inpatient stays)	12 (0.1 ± 0.3)	30 (0.2 ± 0.5)	0.007

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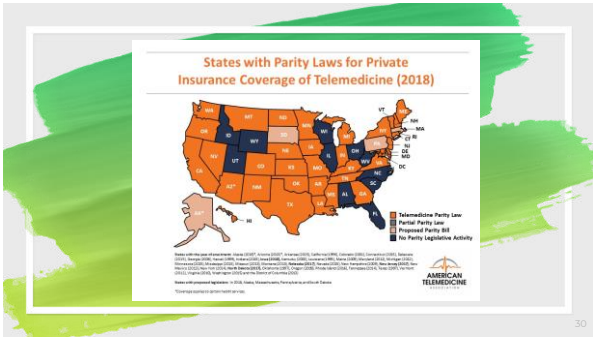
LIMITATIONS

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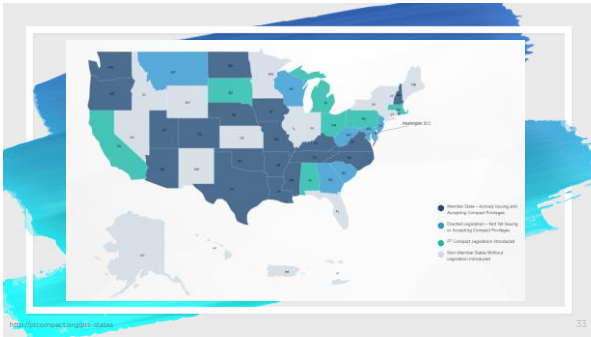


MEDICARE

- Only live video
- Rural or underserved
- Using facilities
- Providers
- CPTs

MEDICAID

- 50 states - Live video
- 11 states – store and forward
- 20 states – remote patient monitoring



<https://evisit.com/state-telemedicine-policy/>

tinyurl.com/telehealth-policy
tinyurl.com/COVID-State-Changes

1. What types of telehealth are reimbursed in your state (private and Medicaid)?
2. Are PT's/OT's eligible providers under Medicaid?

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4. TELEHEALTH PLATFORMS

WHAT ARE YOUR NEEDS?

[Tinyurl.com/telehealth-platforms](https://tinyurl.com/telehealth-platforms)

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5.
PRACTICE
CONSIDERATIONS



BEFORE
YOU GET STARTED



TELEHEALTH
READINESS ASSESSMENT

tinyurl.com/telehealth-readiness

GUIDING PRINCIPLES

- Best interest
- Scope
- Stakeholders
- Access
- Competent (both!)
- Monitor
- Collaborate

WCPT/NPTBA Digital Practice Final Report available at:
http://www.natix.org/portal/Reports/ReportOfTheWCPT/NPTBA_DigitalPhysicalTherapyPractice_TaskForce.pdf

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LEGAL

- Liability
- Payers
- License

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SECURITY

- Use secure portals
- Comply with established security regulations


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HIPAA

- Privacy
- Security

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SAFETY

- Correct ID
- Local EMS
- Pathway for referral and follow-up

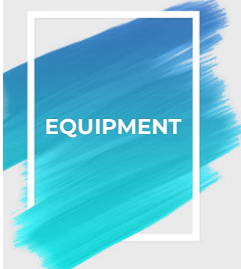
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CONSENT

- Consent
- + digital considerations


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EQUIPMENT

- Connection
- Screens
- Plan B

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**6.
PRACTITIONER
CONSIDERATIONS**



**WEBSITE
MANNER**

“
Many competencies for telehealth ... are not novel competencies. They are fundamental to nursing care as a whole and therefore are also indispensable for telehealth.”

Van Houwelingen, CT, Moerman AH, Ettama, DC, Kort HS, Ten Cate O. Competencies required for nursing telehealth activities: A Delphi study. *Nurse Educ Today*. 2016;39:50-62

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Domain I: Digital communication and website manner	Optimal visualization, body language, and speech	Communication speed—reduced for clear enunciation to ensure clarity over online platforms. Colloquial speech—avoided to differentiate between professional encounter and lifestyle video communication such as FaceTime® Body motion and gestures—minimized and made in full view of camera. Motions should be slowed to avoid blurring or poor visualization over video. Background, lighting, and framing are essential components of a virtual encounter which differ from traditional encounters. Dress—solid clothes with a neutral background project optimally in a virtual setting. Camera—located in a fixed position with clinician's head and shoulders centered. Clinicians look at the camera rather than screen to maintain "eye contact."
Graphic-assisted communication	Virtual technologies	Imaging and diagnostic findings—conveyed to patients using a screen share methodology Understand—be familiar with virtual health platforms Troubleshoot—from both patient and clinician perspective

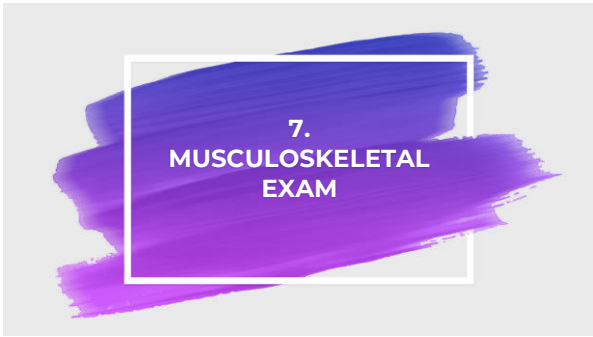
Sharma R, Nachum S, Davidson KW, Nachorovitz M. It's not just FaceTime: core competencies for the Medical Virtualist. *Am J Emerg Med*. 2019;20(18).

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TELEHEALTH
VS
IN-PERSON

- **Touch**
- Time
- Tools
- Triage

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TELEHEALTH
VS
IN-PERSON

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- **Time**
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TELEHEALTH
VS
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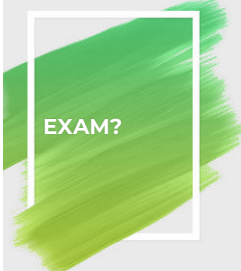
**TELEHEALTH
VS
IN-PERSON**

- Touch
- Time
- Tools
- **Triage**

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Examination components	Examination techniques	Patient self-performs	Patient performs with assistance of second person
History	Interview	X	
	PROs	X	
Systems Review	Vital signs	X	X
	Environmental scan	X	
	Observation	X	
Movement analysis/screens	Neuro screen	X	X
	Cognitive screen	X	
	Functional screen	X	X
	UQ/LQ screen	X	X

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EXAM?

- PROs
 - orthotoolkit.com

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**8.
INTERVENTIONS**






**SERVICE
DELIVERY
PATHWAYS**

- Live video
- Live screen sharing
- Secure messaging
- Digital written materials
- Pre-recorded video



**WHAT?
SO WHAT?
NOW WHAT?**

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THANKS!
Any questions?
You can find me
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 Zachary.Rethorn@duke.edu

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