



Department of Veterans Affairs

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TELEREHABILITATION: CURRENT SERVICES AND THE BENEFITS OF TELEHEALTH IN PHYSICAL THERAPY

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Disclaimer

- What is presented is for information purposes and should not be regarded as legal advice.
- My comments are based on my own clinical experience as a physical therapist and do not represent the policy or views of the Department of Veterans Affairs.





Telerehabilitation History & Trends



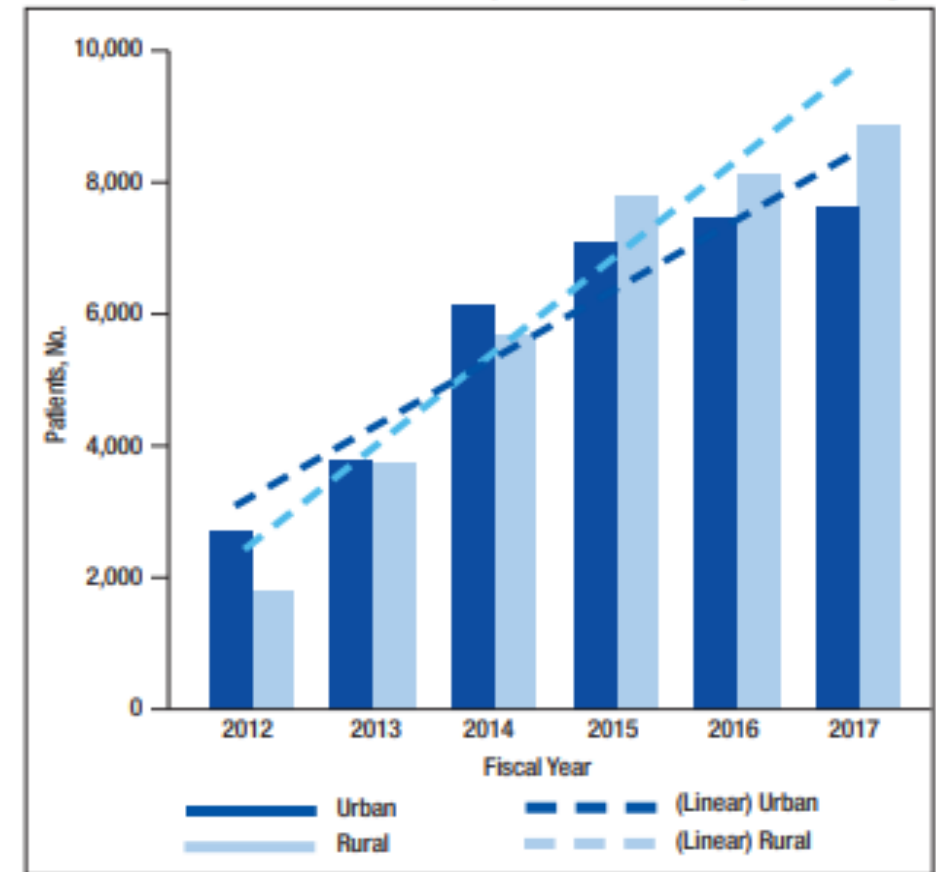
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Rural Veterans Telerehabilitation Initiative

- Established 2009
- Funding from the VA Office of Rural Health.

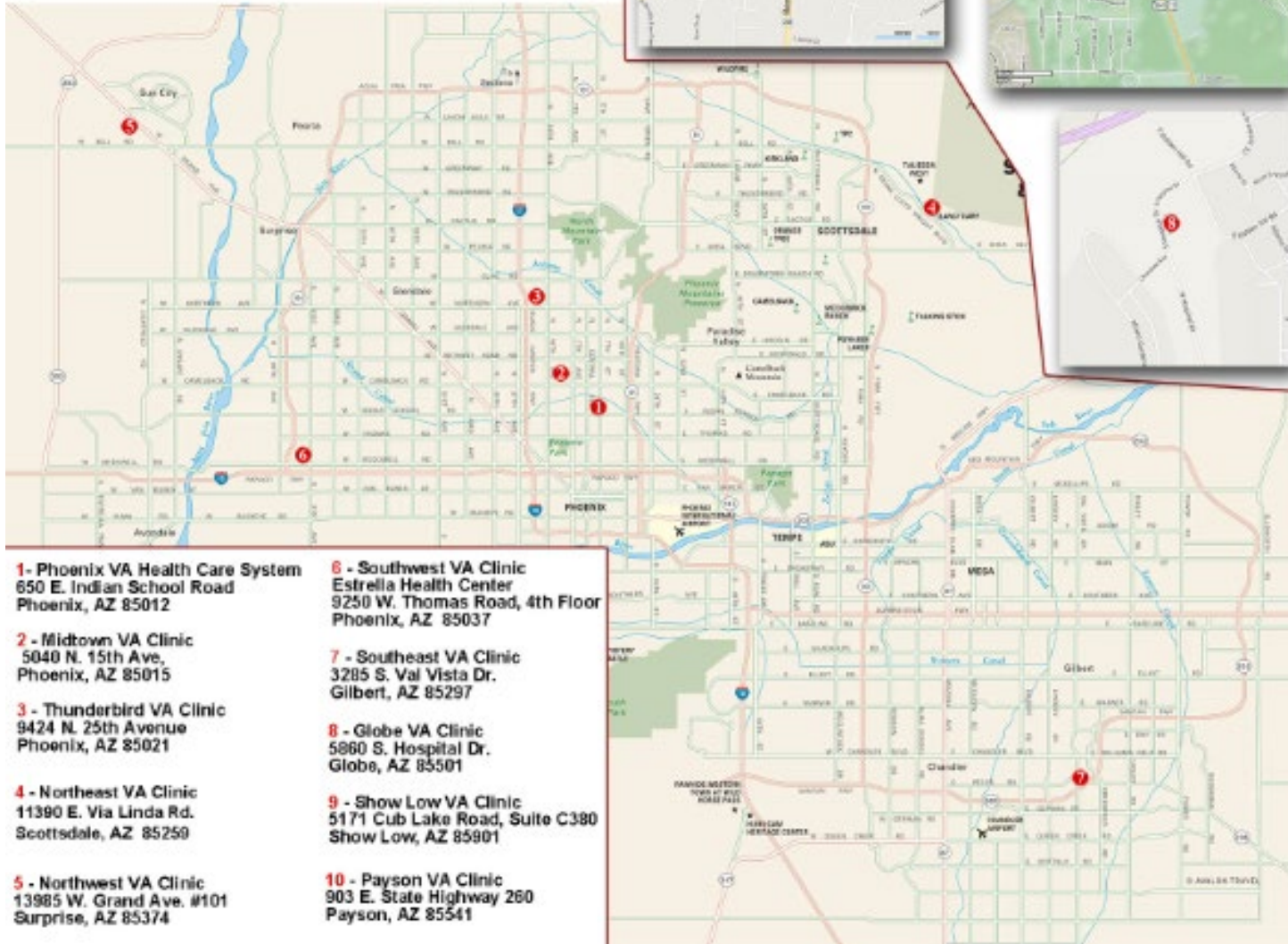


FIGURE 3 Number of Unique Patients by Rurality



Cowper-Ripley, D. C., Jia, H., Wang, X., Freytes, I. M., Hale-Gallardo, J., Castaneda, G., ... Romero, S. (2019). Trends in VA Telerehabilitation

PHOENIX VA HEALTH CARE SYSTEM CBOCS



✓ Connecting Veterans across Metropolitan Phoenix and rural Community-Based Outpatient Clinics (CBOC):

- ✓ Southeast CBOC
- ✓ Northeast CBOC
- ✓ Show Low CBOC
- ✓ Southwest CBOC
- ✓ Thunderbird Clinic
- ✓ Northwest CBOC
- ✓ Globe CBOC
- ✓ Midtown CBOC
- ✓ Payson CBOC

- ✓ Telehealth Clinical Technicians (TCT)
- ✓ 1-2 TCT in each CBOC to assist with remote care



VA
HEALTH
CARE

Defining
EXCELLENCE
in the 21st Century



Connecting with CBOCs

- Schools – 1x education class
- Group exercise classes
- One-on-one appointment
 - Durable medical equipment assessment
 - Assistive device assessment
 - Pain management and modulation treatment options
 - Follow-up from prior appointment
 - Guide primary care provider for specialized referral





Staying Active & Staying Connected

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Benefits of Clinic-to-Clinic Connection



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➤ **Provider**

- Can more readily include family/caregivers in teaching/education
- Attracts new patients
- Reduces No-Shows
- Ease of set-up/clean-up in-between
- Optimizes space of a smaller clinics

➤ **Veteran**

- Convenient - Frequently occurs after working with primary care provider
- Reduce resource burden (e.g. time - long commute)
- Improved remote access to a specialist
- Provides timely follow-up to facilitate carry-over
- Co-Pay exempt



Connecting with the Veteran at Home

- Specialty PT Providers available:
 - Chronic Pain, Orthopedic, Pelvic Floor, Amputee, and Geriatrics
- PT Telehealth services:
 - AD training or retraining
 - Pain education or modality training
 - Home Exercise program review or progression
 - Fall recovery in home and education
 - Post discharge follow-up (example: TKA)
 - Patient and family education
 - Consult with home primary care team

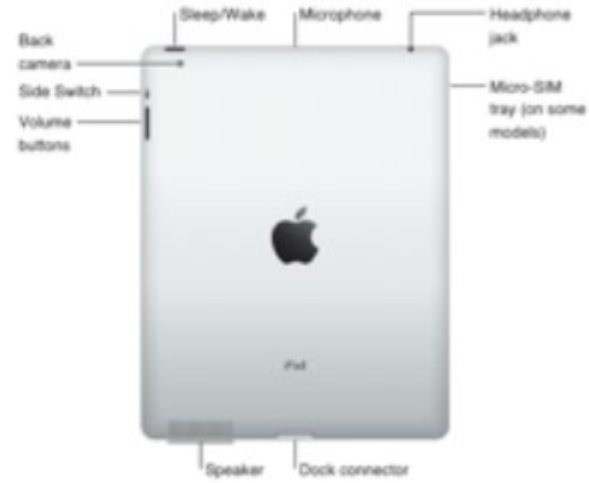




Video-to-Home Telehealth Services



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“Anywhere to Anywhere”



Benefits of Video-to-Home Telehealth



- Improved access and reduced no shows
- Improve continuity of care
- Convenient
- Home Environment
 - Able to assess function and mobility in patient's home
 - Inclusion of family and caregivers
- Optimize use of resources
 - Co-Pay exempt
 - No transportation needed
 - Time





Influencers of Telehealth Utilization

Barriers

- Slow Internet speed
- Poor audio/video quality
- Internet access and wireless coverage
- Low provider communication skills
- Resistance to use or perceptions
- Difficulty with camera position
- Security and privacy concerns
- Reimbursement issues
- Policy and laws

Facilitators

- Cost savings
- Reduced wait time
- No travel time
- Easy to use
- Motivation and engagement
- Family involvement
- Convenience
- Privacy
- Better management

Musculoskeletal Telerehabilitation

2017 Systematic Review & Meta-Analysis - Telerehabilitation was found to be...

- Effective to improve physical function and pain
- More favorable than in-person care alone
- Equivalent to in-person care
 - Cottrell, Galea, O'Leary, Hill, & Russell, 2017

2016 Systematic Review - Telehealth PT assessment - "feasible with overall good concurrent validity and excellent reliability"

- Assessment of pain, swelling, range of motion, muscle strength, balance, gait and functional assessment.
 - Mani, Sharma, Omar, Paungmali, & Joseph, 2016



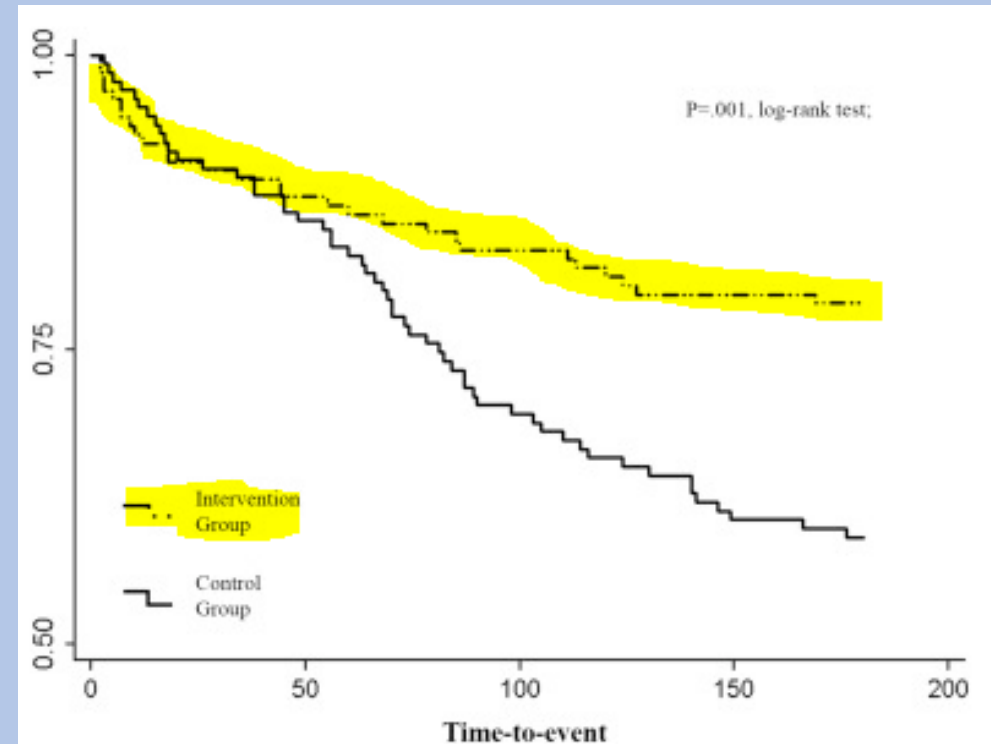
Fall Prevention Telehealth Program

Participants with 1 fall

- Telehealth group 20.6%
- Conventional 39.4%

Participants with 2 or more falls

- Telehealth group 8%
- Conventional group 17%



Total Joint Arthroplasty

- 2020 Systematic Review –
Telerehabilitation for post-op lower
limb total joint
 - Improved physical function, similar to
that of in-person outpatient physical
therapy, without an increase in adverse
events or resource utilization.
Jansson, Rantala, Miettunen, Puhto, &
Pikkarainen, 2020
- Is there acceptance of telehealth after
surgery?
 - 44% preferred a virtual visit
 - Satisfaction associated with feeling
heard
 - Helpful for self management
 - Clear communication pathway
 - Parkes, Palmer, Wingham, & Williams, 2019

April 26, 2019

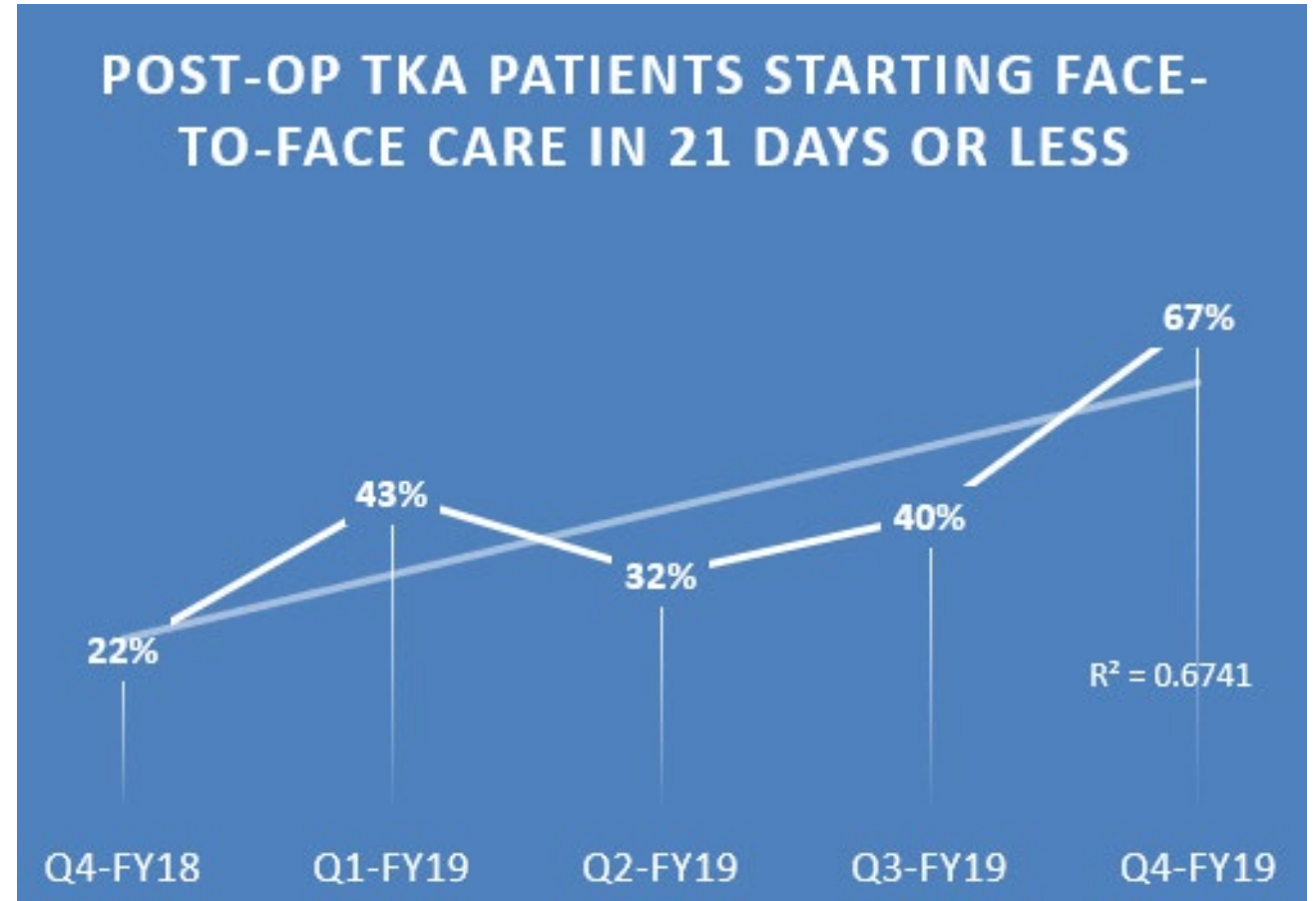
Assessment of Outcomes of Inpatient or Clinic-Based vs Home-Based Rehabilitation After Total Knee Arthroplasty A Systematic Review and Met- a-analysis

Mark A. Buhagiar, PhD, MHM, BAppSc^{1,2}; Justine M. Naylor, PhD, BAppSc^{2,3,4}; Ian A. Harris, MBBS, MMed, PhD, FRACS, FAHMS^{2,3,4}; et al



Potential Telehealth Impact on Post-Op Care

- Connecting Phoenix VA Veterans that are post-operative total knee arthroplasty
 - Start conversation at pre-op
 - Facilitate access & connection
 - See virtual provider within 1 week from discharge
- Significantly more patients started out-patient services in the recommended time.



*“Learn from yesterday, live for today, hope for tomorrow.
The important thing is not to stop questioning.”
~Albert Einstein~*

Thank you!