



Telehealth Project Playbook

for Home-Based Tele-rehabilitation
and Digital Health Solutions

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Acronyms / Abbreviations

ACL	Anterior Cruciate Ligament
APTA	American Physical Therapy Association
ATA	American Telemedicine Association
CCHP	Center for Connected Health Policy
CMS	Centers for Medicare & Medicaid Services
EMR	Electronic Medical Record
FDA	Food and Drug Administration
HHS	U.S. Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
HRSA	Health Resources and Services Administration
IRB	Institutional Review Board
IT	Information Technology
NIH	National Institutes of Health
OCR	Office for Civil Rights
OT	Occupational Therapy / Occupational Therapist
PHI	Protected Health Information
PT	Physical Therapy / Physical Therapist
QI	Quality Improvement
RPM	Remote Patient Monitoring
SaMD	Software as a Medical Device
TelePT	Tele-Physical Therapy
UMMC	University of Mississippi Medical Center
WHO	World Health Organization

Introduction

To optimize patient outcomes, individuals undergoing orthopedic surgery should initiate physical therapy services as soon as possible to enhance recovery and reduce the likelihood of postoperative complications. Unfortunately, there are a variety of barriers that can prevent patients from seeking rehabilitative services following surgery. Home-based tele-rehabilitation offers a potential solution to improve patient access to physical therapy services.

This playbook provides a structured framework for implementing a tele-rehabilitation program to improve patient access to rehabilitative providers and services.

Key Goals:

- ✓ Improve Patient Access to Healthcare Providers
 - ✓ Improve Patient Outcomes
 - ✓ Improve Patient Engagement
 - ✓ Decrease Patient Burden

Tele-rehabilitation Project Impact Statement

Key Impacts:

Improved Patient Access

- Limited mobility, transportation, and scheduling, as well as decreased proximity to a provider, are among the barriers that prevent or delay patients from receiving physical therapy services. Tele-rehabilitation can reduce these barriers by providing an alternative to traditional therapy, offering flexibility for both patients and providers.

Improved Outcomes

- By allowing patients to receive physical therapy services within one week of surgery, this program can improve functional outcomes and reduce the risk of postoperative complications.

Improved Engagement

- Telehealth rehabilitation software offers customizable home exercises with real-time user feedback.
- The software can send reminder notifications to patients to enhance engagement with the home exercise program.

Decreased Burden

- Tele-rehabilitation allows patients to receive physical therapy services in the comfort of their home, thereby increasing flexibility.

Implementation Workflow for Telehealth Rehabilitation



- Needs Assessment
- Feasibility Assessment
- Program Planning
- Sustainability Planning
- Pre-Launch Training

Pre-Implementation Phase



- Project Launch
- Performance Monitoring
- Provider support

Implementation Phase



- Performance Tracking and Optimization
- User Experience Evaluation
- Scaling and Sustainability

Post-Implementation Phase



Pre-Implementation

Planning and Preparation

This phase focuses on strategic planning, operational details, testing, and user training. It ensures all technical, operational, and regulatory requirements are satisfied to support a seamless transition to go-live.

Planning and Preparation

Patient needs vary greatly in the rehabilitative environment. Therefore, a comprehensive analysis of operational and technical details is required before initiating a tele-rehabilitation program into a clinical workflow.



Identify a Need

- Needs Assessment allows for the identification of the patient population who may be experiencing barriers to access for rehabilitative services and assesses if this population is appropriate for telehealth rehabilitative services.



Training & Workflow Development

- Identify rehabilitation healthcare providers (PTs & OTs) who demonstrate buy-in with the telehealth model and have the technical skills required to manage the software.
- To promote sustainability and optimize productivity, telehealth visits should be integrated in a manner that minimally disrupts clinician workflow



Pilot Testing & Feedback

- Before fully launching the telehealth program, testing with a small group of 2-3 patients should be performed.

This allows for the identification of user experience challenges, enabling necessary adjustments before broader implementation.



Regulatory & Compliance Review

- Is the telehealth software compliant with institutional/clinical regulations?
- Will the telehealth software integrate into the clinic's current electronic medical record platform?
- Is the telehealth software HIPAA compliant?
- Does the institution require data storage in the United States? If so, does the telehealth platform store all data in the U.S.?
- Is it FDA approved or exempt from approval?



Technical & Infrastructure Readiness

- Does the clinic have the technical equipment and support to implement the telehealth program?
- Will the telehealth platform integrate with the clinic's current EMR system?



Feasibility Assessment

- Does the literature support telehealth rehabilitation as an evidence-based approach for this patient population?



When identifying patients appropriate for telehealth services, the provider should consider the diagnosis AND the patient's stage of recovery.

A patient who is appropriate for tele-rehab in the acute phase may not be appropriate as recovery continues and vice versa.

Technology & Vendor Selection



Vendor selection for a home-based rehab telehealth project is the process of choosing the technology or service provider that best supports remote rehabilitation through secure, user-friendly, and integrated tools that ensure quality care and scalability.

Here are the main considerations:

»» Functional Requirements

- Easily accessible to patients
- User friendly
- Integrates well with clinic's EMR system

»» Technical Requirements

- Ideally functions on phone AND computer
- Markerless motion capture may be useful
- Customizable home exercise programs

»» Security & Compliance

- HIPAA compliant
- Does the technology qualify as Software as a Medical Device (SaMD)? Is it FDA exempt or approved?
- Meets institutional standards

»» Support and Training

- IT support for providers and patients



Telerehabilitation software with a limited exercise library restricts the variety of patients who can be effectively treated using the technology. Exercise customization is key!





Implementation

Deployment & Adoption

This phase focuses on executing the tele-rehabilitation program while ensuring system functionality and user adoption.

Deployment and Adoption



Key objectives include launching the program, supporting users, monitoring performance, and resolving issues

System Go-Live & Deployment



- Launch telerehabilitation technology into clinic
- Monitor performance
- Provide support for initial patients and providers



Provider Adoption & Support

- Conduct frequent check-ins
- Gather feedback from initial users
- Offer additional training as needed



Performance Monitoring & Issue Resolution

- Track patient no-show and cancellation rates
- Analyze patient outcomes
- Ensure compliance with regulatory and institutional standards and security protocols



Continuous Optimization

- Update technology based on user feedback
- Adjust clinical workflow as needed



When implementing a telerehab program into clinical workflow, it is important to start small. Identify 1-2 providers who can champion the technology and a single patient population most appropriate for telehealth services.



Post-Implementation

Continuous Improvement

This phase focuses on monitoring patient outcomes, provider satisfaction, safety, technology performance, and program utilization to refine the tele-rehabilitation model and support long-term sustainability and expansion.

Continuous Improvement



Continuous improvement in telehealth home-based rehab promotes a high-quality user experience, user adoption, compliance updates, workflow optimization, and sustainability.



Program Evaluation

- Review feasibility and success metrics. This should include patient outcomes, provider satisfaction, visit cancellation rates, safety concerns, provider productivity, and financial metrics.



Long-Term Monitoring & Maintenance

- Perform regular software updates
- Monitor regulatory changes to ensure compliance



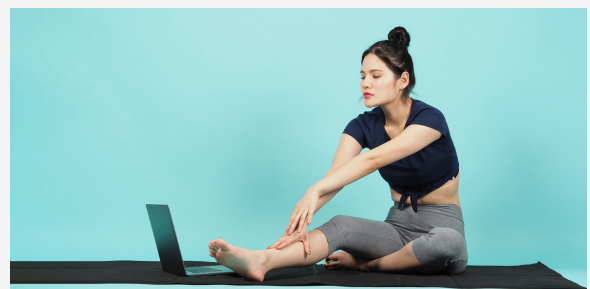
Compliance & Safety

- Have there been any adverse events since implementation?
- Is the selected patient population safe for telehealth services?
- Is the telehealth software safeguarding protected health information?
- Has there been any data breach or noncompliance issues?



Patient & Provider Feedback

- Regularly collect and analyze provider & patient satisfaction surveys to identify trends, improve usability, and enhance overall program engagement and outcomes



Track patient progress trends and provider feedback through the tele-rehab dashboard each month. Use these insights to adjust exercise difficulty levels, enhance training resources, and ensure the technology continues to meet both clinical and patient needs.

Scaling & Sustainability



TelePT sustainability relies on monitoring outcomes, patient engagement, provider use, reimbursement, and tech performance, while ensuring access, compliance, and integration into broader care.

»» Clinical Outcomes Monitoring

- Patient functional outcome measures
- Pain rating
- Range of motion improvements
- Strength gains
- Short-term and long-term goals

»» Regulatory Compliance & Quality Assurance

- Assign a team member to be responsible for tracking regulatory changes (Billable Remote Patient Monitoring, etc.)

»» Technology Performance & Support

- Customize the provider dashboard for performance tracking, as applicable
- Train an internal “super user” who can offer provider and patient support

»» Engagement & Satisfaction

- No-show/missed visit rate
- Cancellations
- Patient engagement with home exercise program (some software tracks in-app usage/compliance)

»» Provider Utilization & Retention

- Establish strong provider buy-in to ensure long-term adoption and sustainability of the tele-rehabilitation program.
- Ensure providers can deliver high-quality, patient-centered care through virtual visits.
- Expand the program beyond the initial target patient population to reach broader clinical groups

»» Program Scalability

- Expand to other rehab providers (e.g., PT, OT, and speech therapy)



If patient engagement and/or provider satisfaction are limited, consider the following: Are patients and providers receiving adequate training on the technology usage? Are the patient’s physical and cognitive abilities suitable for telerehabilitation? What other barriers could be limiting buy-in?



Program Barriers and Mitigations

Barrier	Mitigation
Limited Patient Tech Access or Skills	Provide pre-visit tech checks, simple how-to guides, and offer phone support for setup. Consider loaner devices for high-need patients.
Poor Internet Connectivity	Schedule sessions during low-bandwidth hours; explore community resources (e.g., clinics, libraries).
Reimbursement Uncertainty	Work closely with billing teams to verify payer policies; keep updated on state/federal telehealth guidelines; build out appropriate documentation and coding practices.
Limited Physical Assessment Capabilities	Train providers in virtual functional assessments and technology functions and limitations; supplement with in-person care when necessary.
IRB and Regulatory Requirements	Determine early whether the project constitutes research, quality improvement, or another activity requiring institutional review. Engage the appropriate institutional research or compliance office as needed and allow adequate time for required reviews or approvals.



Successful tele-rehabilitation implementation requires proactive planning, appropriate technology, effective training, clear communication, and ongoing collaboration to overcome barriers and support long-term sustainability.

Top 10 FAQs for Tele-Physical Therapy (TelePT)

What is Tele-Physical Therapy?

TelePT allows patients to receive physical therapy services remotely using video conferencing tools. Therapists guide patients through assessments, exercises, and education without requiring an in-person visit.

What types of conditions can be treated through TelePT?

- TelePT is effective for a variety of diagnoses
- Appropriateness for TelePT services will vary based on individual needs and stage of diagnosis

What technology do I need for a TelePT visit?

You need:

- A smartphone, tablet, or computer with a camera and microphone
- A stable internet connection
- A quiet, private space with room to move

Will my insurance cover TelePT?

Many insurance providers cover telehealth services, including TelePT. Coverage may vary by state and plan, so it's best to confirm with your insurance provider.

How do I schedule a TelePT appointment?

Appointments can be scheduled through your provider's office, online portal, or by calling the scheduling team. A link will be sent to join your virtual session.

What should I wear and prepare for my session?

Wear comfortable clothing that allows free movement. Clear a space to perform exercises and have any necessary equipment nearby (e.g., resistance bands, a chair).

Can I have someone with me during the session?

Yes, a caregiver or family member can be present if you feel you need assistance with technology, safety, or exercise performance.

What if I need hands-on treatment?

If manual therapy is necessary, your therapist will refer you for an in-person visit or coordinate care with a local provider.

Is my information secure during a TelePT session?

Yes. Sessions are conducted through secure, HIPAA-compliant platforms to protect your privacy.

Can I switch between virtual and in-person therapy sessions?

Yes. Your therapist can recommend a combination of virtual and in-person visits, tailored to your progress, safety needs, and treatment goals, to ensure continuity of care.

Appendix: Contacts & Key Resources



Contact Us



National Telehealth Support Resources

The following national organizations provide guidance, policy updates, research, and implementation resources to support telehealth and tele-rehabilitation programs.

Health Resources and Services Administration (HRSA)

<https://telehealth.hhs.gov>

Provides national telehealth guidance, implementation resources, and federal program information supporting telehealth expansion.

Centers for Medicare & Medicaid Services (CMS)

<https://www.cms.gov>

Offers telehealth reimbursement policies, billing guidance, and Medicare/Medicaid coverage information.

National Telehealth Resource Center Program

<https://www.telehealthresourcecenter.org>

Provides technical assistance, best practices, and training for organizations implementing telehealth programs.

Center for Connected Health Policy (CCHP)

<https://www.cchpca.org>

Tracks telehealth policy, reimbursement updates, and state-by-state telehealth regulations.

American Telemedicine Association (ATA)

<https://www.americantelemed.org>

Develops telehealth practice guidelines, industry standards, and professional education resources.

American Physical Therapy Association (APTA)

<https://www.apta.org>

Provides clinical guidance and best practices for tele-physical therapy and tele-rehabilitation services.

Office for Civil Rights (OCR) – HIPAA Guidance

<https://www.hhs.gov/hipaa>

Offers federal guidance on HIPAA privacy and security compliance for telehealth services.

U.S. Food and Drug Administration (FDA) – Digital Health

<https://www.fda.gov>

Provides regulatory guidance for digital health technologies and software used in telehealth care delivery.

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References

American Physical Therapy Association (APTA). (2023). Telehealth in physical therapy practice: Resource guide. APTA. <https://www.apta.org/patient-care/telehealth-practice>

Centers for Medicare & Medicaid Services (CMS). (2024). Telehealth services fact sheet. U.S. Department of Health and Human Services. <https://www.cms.gov>

Health Resources and Services Administration (HRSA). (2024). Telehealth programs and initiatives. U.S. Department of Health and Human Services. <https://telehealth.hhs.gov>

National Institutes of Health. (2023). Rehabilitation research and practice: Advancing patient outcomes through technology. NIH. <https://www.nih.gov>

Office for Civil Rights. (2023). Summary of the HIPAA privacy rule. U.S. Department of Health and Human Services. <https://www.hhs.gov/hipaa>

U.S. Food and Drug Administration (FDA). (2024). Software as a medical device (SaMD): Clinical evaluation guidance. <https://www.fda.gov>

World Health Organization. (2022). Global strategy on digital health 2020–2025. World Health Organization. <https://www.who.int>

World Physiotherapy. (2023). Telehealth practice guide for physical therapists. <https://world.physio>

Sanders TL, Maradit Kremers H, Bryan AJ, Larson DR, Dahm DL, Levy BA, et al. Incidence of Anterior Cruciate Ligament Tears and Reconstruction: A 21-Year Population-Based Study. *Am J Sports Med*. 2016;44(6):1502-7.

Dunphy E, Gardner EC. Telerehabilitation to Address the Rehabilitation Gap in Anterior Cruciate Ligament Care: Survey of Patients. *JMIR Form Res*. 2020;4(9):e19296.

Pastora-Bernal JM, Martín-Valero R, Barón-López FJ, Estebanez-Pérez MJ. Evidence of Benefit of Telerehabilitation After Orthopedic Surgery: A Systematic Review. *J Med Internet Res*. 2017;19(4):e142.

Russell TG. Physical rehabilitation using telemedicine. *J Telemed Telecare*. 2007;13(5):217-20.