Medical Coverage Policy | Rehabilitative Devices with Remote Monitoring

EFFECTIVE DATE: 10|01|2024
POLICY LAST REVIEWED: 09|16|2026

OVERVIEW
This policy addresses the use of rehabilitative devices with remote monitoring and adjustment capabilities intended to evaluate and improve muscle strength and range of motion (ROM) while reporting session data to the individual's provider.

MEDICAL CRITERIA
Not applicable

PRIOR AUTHORIZATION
Not applicable

POLICY STATEMENT
Medicare Advantage Plans
The use of rehabilitative devices with remote monitoring or adjustment capabilities is not covered for all indications as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Commercial Products
The use of rehabilitative devices with remote monitoring or adjustment capabilities is not medically necessary for all indications as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

COVERAGE
Benefits may vary between groups/contracts. Please refer to the Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

BACKGROUND
Post-operative rehabilitation after knee arthroplasty
Although it is generally accepted that rehabilitation following knee arthroplasty is essential to achieve optimal results, no single rehabilitation protocol has been established as the standard of medical practice. Moderate quality evidence suggests that multi-disciplinary rehabilitation may improve treatment outcomes. Rehabilitation programs in this setting typically address ROM, strengthening, gait, and modification of daily activities as needed. Unresolved questions remain about the optimal setting, intensity, and frequency of therapy sessions.

ROMTech PortableConnect®
The PortableConnect is a rehabilitative therapy device to increase ROM. It is similar in appearance and function to a recumbent exercise bicycle. An adaptive pedal adjusts the turning radius to the individual's current ROM. Used in conjunction with the ROMTech AccuAngle®, the device shares data on time used, effort, and ROM with a remote physician or therapist. The physician or therapist can remotely adjust settings such as active vs. passive motion, resistance, and pedal radius. The manufacturer asserts that the PortableConnect® improves recovered ROM over a 3 to 6 week treatment course.

The U.S. Food and Drug Administration (FDA) identifies the PortableConnect device as an isokinetic testing and evaluation system intended for medical purposes, such as to evaluate, measure, and increase the muscle

strength and ROM. The FDA classifies this type of devices as exempt from the premarket notification procedures.

ROMTech AccuAngle®
The AccuAngle measures knee extension and flexion and reports these data to the individual's app. It is placed on the side of the leg and uses Bluetooth technology to measure and report flexion and extension during each therapy session. It is used in conjunction with the PortableConnect® device.

The U.S. Food and Drug Administration (FDA) identifies the AccuAngle device as an AC-powered goniometer, a device intended to evaluate joint function by recording and measuring ranges of motion and forces exerted by a joint. The FDA classifies this type of devices as exempt from the premarket notification procedures.

Mechanical Offloading for Diabetic Foot Ulcer
Reducing pressure by mechanical offloading benefits ulcers subjected to frequent pressure and stress. Various types of offloading devices include shoe modifications, cast walkers, total contact cast and other devices aiding ambulation. Cast walkers are prefabricated brace designed to provide offloading capability and maintain contact fit.

Sensoria Health Diabetic Foot Ulcer Boot
The Sensoria diabetic foot ulcer boot monitors an individual's compliance to the clinician's prescribed stabilization and mechanical offloading rehabilitation protocol. Real-time updates on the individual's activities and for how long the boot is taken off is provided to the clinician.

Available evidence consists primarily of small feasibility studies, retrospective analyses, and proof-of-concept evaluations demonstrating technical accuracy and user acceptability, but with limited data on long-term functional outcomes or comparing effectiveness to standard rehabilitation approaches. Professional societies and systematic reviews emphasize the importance of structured rehabilitation after knee arthroplasty and consistent offloading for diabetic foot ulcer (DFU) management, but do not specifically recommend remote monitoring rehabilitation devices as part of standard practice. Overall, current literature supports technical feasibility and monitoring capability, while larger prospective studies are needed to clarify clinical impact and optimal integration into rehabilitation protocols. The evidence is insufficient to determine the effects of the technology on health outcomes.

The devices addressed in this policy are not intended to represent an all-inclusive list of rehabilitative devices with remote monitoring.

CODING

Medicare Advantage Plans and Commercial Products
There is no specific CPT or HCPCS code for these devices. Therefore, the following HCPCS code should be filed:
E1399 Durable medical equipment, miscellaneous

RELATED POLICIES

Unlisted Procedures

PUBLISHED

Provider Update, November 2026
Provider Update, December 2025
Provider Update, August 2024

REFERENCES

1. Bus SA, Reeves ND, Armstrong DG, Najafi B. Offloading and adherence through technological advancements: modern approaches for better foot care in diabetes. Diabetes Metab Res Rev. 2024; 40(2):e3769.

2. Cay G, Lee M, Armstrong DG, Najafi B. SmartBoot: real-time monitoring of patient activity via remote edge computing technologies. Sensors (Basel). 2025; 25(14):4490.
3. Park C, Mishra R, Vigano D, et al. Smart offloading boot system for remote patient monitoring: toward adherence reinforcement and proper physical activity prescription for diabetic foot ulcer patients. J Diabetes Sci Technol. 2023; 17(1):42-51.
4. Summers SH, Nunley RM, Slotkin EM. A Home-Based, Remote-Clinician-Controlled, Physical Therapy Device Leads to Superior Outcomes When Compared to Standard Physical Therapy for Rehabilitation After Total Knee Arthroplasty. J Arthroplasty. 2023 Mar;38(3):497-501.

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