The CyMedica muscle activation and patient engagement solutions are designed to support the complete care path for knee osteoarthritis, from early onset and diagnosis to surgical interventions and post-operative rehabilitation.

The Clinical Challenges of Muscle Weakness

Muscle weakness is considered one of the most prevalent underlying clinical conditions associated with knee osteoarthritis and the rehabilitation challenges facing patients recovering from knee procedures. Studies have shown:

- Patients can lose over 60% of their quadriceps strength after knee surgery, and clinic physical therapy programs alone may not always be successful in restoring critical muscle activation strength.¹
- In patients with pre-operative knee osteoarthritis, upper leg muscle strength is reported to be approximately 20-40% lower compared with healthy age-matched controls.² Muscle weakness in knee OA is strongly related to the patient-reported outcomes pain, activity limitations and falls, and has been linked to symptomatic progression of the disease.

Patient Engagement from Home

CyMedica partners with healthcare providers to engage patients in strengthening their muscles from home to minimize pre- and post-surgical atrophy.

- Supporting research has shown that consistent NMES therapy and patient engagement post-knee surgery may help patients attain and exceed their preoperative activity levels. The use of NMES in addition to progressive strengthening exercises has shown promising results and should be provided to attenuate the early loss of quadriceps strength after TKA.³

60%

Studies show that post-TKA patients can lose over 60% of quadriceps strength.

20% to 40%

Research indicates that patients with OA can experience 20-40% loss of quadriceps strength.

1. Patients can lose over 60% of their quadriceps strength after knee surgery, and clinic physical therapy programs alone may not always be successful in restoring critical muscle activation strength.
2. In patients with pre-operative knee osteoarthritis, upper leg muscle strength is reported to be approximately 20-40% lower compared with healthy age-matched controls.
3. Muscle weakness in knee OA is strongly related to the patient-reported outcomes pain, activity limitations and falls, and has been linked to symptomatic progression of the disease.

Supporting research has shown that consistent NMES therapy and patient engagement post-knee surgery may help patients attain and exceed their preoperative activity levels. The use of NMES in addition to progressive strengthening exercises has shown promising results and should be provided to attenuate the early loss of quadriceps strength after TKA.
Introducing e-vive™ Technology

Empowering patients to find their strength. That’s true quality-based care. And that’s our mission here at CyMedica.

The e-vive system has been optimized to help clinicians encourage patients to be proactive in their rehabilitation. Key data points such as range of motion, activity level, pain level, and more, are collected and wirelessly sent to our provider portal. Surgeons and physical therapists have real-time access to their patients’ information so they can monitor and motivate patients between visits.

CyMedica Orthopedics® is focused on delivering advanced muscle activation solutions for at-home therapy—because more engaged patients means faster recovery times, lower chances of readmission, and improved clinical outcomes.

That’s true quality-based care. And that’s our mission here at CyMedica.

The e-vive system consists of three components:

- The e-vive App
  - The e-vive App controls various therapeutic NMES units and sends key data points to the cloud, where providers can track patients’ rehabilitation progress and engage with them remotely.

- The CyMotion™ NMES Controller
  - The CyMotion™ Technology uses a closed-loop feedback system to monitor the muscle for maximum comfort and effectiveness.

- The e-vive Conductive Garment
  - Precisely positioned electrodes on the quadriceps
  - Precisely positioned electrodes on the quadriceps
  - Precisely positioned electrodes on the quadriceps

The e-vive system is the ONLY muscle activation therapy and patient engagement solution for knee conditions.

e-vive is the ONLY muscle activation therapy and patient engagement solution for knee conditions.

Our patented CyMotion™ Technology uses a closed-loop feedback system to monitor and adjust the power delivered to the muscle based on the patient’s physiology and dynamic bioimpedance. The result is delivery of a more comfortable, targeted muscle activation.

CyMotion™ Technology

Our patented CyMotion™ Technology uses a closed-loop feedback system to monitor and adjust the power delivered to the muscle for maximum comfort and effectiveness.

The CyMotion™ NMES Controller

used our proprietary CyMotion™ Technology to monitor and adjust the power delivered to the muscle for maximum comfort and effectiveness.

The e-vive Conductive Garment

with built-in sensor technology monitors range of motion data and steps, while precisely positioning the electrodes in place on the quadriceps.

The e-vive App

enables patients to find their strength.

That’s true quality-based care. And that’s our mission here at CyMedica.
Experience the new standard of care for muscle strengthening:


To learn more, visit www.cymedicaortho.com or call 844-296-2014