ottobock.

Optimizing post-amputation outcomes.

Supporting patients on their path to recovery.

Following a lower limb amputation, patients begin a complex journey back to mobility. Today's clinical evidence strongly indicates that the first steps in that process are among the most important. Early rehabilitation can have a significant impact on the level of mobility patients are ultimately able to achieve.[1,2,3]

Immediately post-amputation, new prosthesis users and their caregivers need to adapt to major changes in their everyday life. During that time, interdisciplinary care can greatly increase a patient's potential to achieve a sustainable recovery – especially when it includes comprehensive education and an individually tailored approach to rehabilitation and prosthesis selection.[3,4,5]

Enhancing rehabilitation with microprocessor-controlled knees (MPKs).

A prosthesis can have a substantial positive impact on patient outcomes, even in high-risk populations. In fact, some evidence indicates that prosthetic fitting can lead to better 5-year survival even in patients recovering from amputations that are associated with serious comorbidities.[2]
During the rehabilitation phase, one critical goal is building new users' trust in their prosthesis. To maintain their motivation and confidence, patients need to believe that their device will keep them safe as they re-learn to walk. MPKs are especially effective for this purpose: during recovery and beyond, these advanced knee joints provide a very high level of safety while also helping patients increase their mobility.[6] And not only that, they're a cost-effective way to achieve that critical result.[7, 8, 9]

Improved mobility

- Greater facility with different situations and activities of daily living (ADLs)[10, 11]
- More relief for users' contralateral side[10]

Enhanced quality of life (QoL)

- Improved QoL for moderately active users[6]
- Greater independence in daily life[10]

User satisfaction

- Nearly 90% prefer an MPK over a non-MPK[10]
- Users report much greater satisfaction with an MPK than a non-MPK[11]
- Functionality can be tailored to users' abilities[10, 12]

Safety and stability

- Decreased risk of stumbling and falling[6]
- Reduced fear of falling and increased perception of safety[6]
- Improved balance during ADLs[10]

Health economics

- Cost-effectiveness is demonstrated for MPKs[7, 8, 9]
- Economic benefits of MPKs ≥ many widely reimbursed medical technologies[7]
- Fewer injurious secondary events (falls) among elderly users[8]

References