

Evidence Essentials

Kenevo/Microprocessor Knees K2

	Mobility need or deficit of the patient	Evidence for benefits of Kenevo/MPK vs. NMPK in K2 patients
Safety	<p>Patient stumbles and/or falls repeatedly</p> <p>Patient avoids activities due to fear of falling</p> <p>Patient sustained fall-related injuries</p>	<ul style="list-style-type: none"> - Significant reduction in falls of up to 80% (Hafner et al., 2009; Kahle et al., 2008; Kannenberg et al., 2014; Kaufman et al., 2018; Mileusnic et al., 2017) - Significant reduction in fear of falling (Mileusnic et al., 2017) - Significant reduction in the frequency of stumbles (Hafner et al., 2009; Kannenberg et al., 2014; Mileusnic et al., 2017) - Significant improvements in balance and indicators for the risk of falling, such as Timed-up-and-go-test, ABC scale, etc. (Burnfield et al., 2012; Hafner et al., 2007 and 2009; Kannenberg et al., 2014; Lansade et al., 2018)
Mobility	<p>Patient has difficulty negotiating slopes/hills</p>	<ul style="list-style-type: none"> - Significant improvement in quality of slope descent towards more natural gait pattern (Burnfield et al., 2012; Hafner et al., 2009; Kannenberg et al., 2014) - Significant increase in downhill walking speed of up to 36% (Burnfield et al., 2012; Hafner et al., 2009; Kannenberg et al., 2014)
Mobility	<p>Patient has difficulty negotiating uneven terrain and obstacles</p>	<ul style="list-style-type: none"> - Significant increase in walking speed on uneven terrain and obstacle courses of up to 20% (Hafner et al., 2009; Kahle et al., 2008; Kannenberg et al., 2014)
Mobility	<p>Patient has difficulty descending stairs with reciprocal (step-over-step) gait</p>	<ul style="list-style-type: none"> - Significant improvement in quality of stair descent towards more natural gait pattern (Hafner et al., 2009; Kahle et al., 2008; Kannenberg et al., 2014)
Mobility	<p>Patient has difficulty with dual tasking while walking with the prosthesis</p>	<ul style="list-style-type: none"> - Significantly improved capacity and performance in executing a concurrent task while walking with the prosthesis (Hafner et al., 2009; Kannenberg et al., 2014; Mileusnic et al., 2017)

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Mobility	Patient has difficulty with performing activities of daily living	<ul style="list-style-type: none"> - Significantly improved performance in the execution of various activities of daily living (Theeven et al., 2011 and 2012; Kannenberg et al., 2014)
Mobility	Patient is limited in his/her mobility Patient uses a wheelchair and a prosthesis	<ul style="list-style-type: none"> - Significant increase in over-ground walking speed of up to 25% (Eberly et al., 2014; Kahle et al., 2008; Kannenberg et al., 2014) - Significant reduction in additional use of a wheelchair from 87% to 37% of subjects (Mileusnic et al., 2017) - Patients spent significantly more time active and significantly less time sitting (Kaufman et al., 2018) - About 50% of K2 patients are able to improve their overall mobility level to K3 (Hafner et al. 2009; Kahle et al., 2008; Kannenberg et al., 2014)

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