

# Post-Operative Limb Protection with AmpuShield®

Removable rigid dressings are clinically proven to optimize patient outcomes and reduce the length of acute hospital stay.<sup>1,4</sup>

Hanger Clinic's proprietary line of AmpuShield® limb protectors are appropriate for all transtibial amputation patients. The soft inner liner is gentle on the surgical site, and a rigid frame provides all the benefits of RRDs. AmpuShield is available from your local Hanger Clinic office and is measured and fit the same day it's ordered for most patients.

## AmpuShield® Benefits

- Wound protection
- Expedites healing
- Promotes earlier ambulation
- Easy access to wound for inspection
- Edema control
- Contracture prevention
- Reduces the risk of revisions due to falls



## The Importance of Fall Reduction for Health Systems

- Studies show that the incidence of falls among amputees during the acute post-surgical hospital stay is over 16%, with almost a third of patients experiencing a fall sometime during their inpatient rehabilitation.<sup>1,4</sup>
- Patients who experience falls often experience injuries that result in the need for revision surgery and longer lengths of stay.<sup>3</sup>
- The average costs of revision surgery can range from \$30,000–\$33,000.<sup>3</sup>
- Medicare will not reimburse for these revisions, putting providers at risk for covering any associated costs.
- RRDs, like AmpuShield, have been shown to reduce the risk of revision surgery due to falls.<sup>3</sup>

### REFERENCES:

- <sup>1</sup> Yu JC, Lam K, Nettel-Aguirre A, Donald M, Dukelow S. Incidence and risk factors of falling in the postoperative lower limb amputee while on the surgical ward. *PMR* 2010 Oct;2(10):926-34. doi: 10.1016/j.pmrj.2010.06.005.
- <sup>2</sup> Pauley T, Devlin M, Heslin K. Falls sustained during inpatient rehabilitation after lower limb amputation: Prevalence and predictors. *Am J Phys Med Rehabil*. 2006;85:521–532.
- <sup>3</sup> Gooday, H, Hunter, J. Preventing falls and stump injuries in lower limb amputees during inpatient rehabilitation. *Clinical Rehabilitation* 2004;18: 379/390.
- <sup>4</sup> Vlahov D, Myers AH, al-Ibrahim MS. Epidemiology of falls among patients in a rehabilitation hospital. *Arch Phys Med Rehabil*. 1990 Jan;71(1):8-12.

## AmpuShield® ROI

**\$90,000**

Hospital savings (per 100 cases) from the reduction of revision surgeries\*

**\$15,000**

Estimated hospital costs for AmpuShield\*\*

**1:6**

For every \$1 spent on AmpuShield, \$6 is saved from revision surgery.

\*3 x \$30,000 per revision surgery

\*\*100 cases x \$300 per AmpuShield® with 50% of cases billed to Medicare

# Supporting Clinical Evidence



## **Do (Removable) Rigid Dressings Reduce the Time from Amputation to Prosthetic Fitting? A Systematic Review and Meta-Analysis**

The use of removable rigid dressings or rigid dressings in transtibial amputees reduces time from amputation to prosthetic casting or fitting when compared with soft dressings.



## **Utility of Removable Rigid Dressings in Decreasing Discharge Narcotic Use and Improving Ambulation Following Below-Knee Amputation**

The use of RRDs after transtibial amputation significantly reduced narcotic prescriptions at discharge, improved ambulatory status at follow-up, and resulted in a much lower rate of revision to the above-knee amputation level.



## **Impact of Time to Receipt of Prosthesis on Total Healthcare Costs 12 Months Post-Amputation**

Earlier receipt of a prosthesis is associated with reduced spending in the 12 months post-amputation of approximately \$25,000 compared to not receiving a prosthesis. These results suggest that not providing or delaying the provision of a prosthesis increases costs by about 25%.



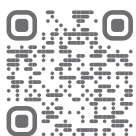
## **Removable Rigid Dressings for Postoperative Management of Transtibial Amputations: A Review of Published Evidence**

Based on best-available current published evidence, non-weight-bearing removable rigid dressings should be considered the first treatment choice for the postoperative care of transtibial amputees to optimize outcomes with regard to reductions in injury due to falls, knee flexion contractures, edema, healing time, time to prosthetic fitting, and pain.



## **A Comparison of Immediate Postoperative Rigid and Soft Dressings for Below-Knee Amputations**

Below-knee amputees had a significantly quicker healing time, as measured by time to be cast for prosthesis, when rigid dressing was used compared with soft dressing. Consideration should be given to the use of a rigid dressing after below-knee amputation to expedite healing and promote earlier ambulation.



## **Preventing Falls and Stump Injuries in Lower Limb Amputees During Inpatient Rehabilitation: Completion of the Audit Cycle**

Although the interventions employed did not reduce the proportion of patients who had falls or other accidents, significantly fewer falls resulted in injuries and there were no falls causing major stump injury among amputees.