DeRoyal® SPENE Bracing Program

Clinical Research Findings

In 2019, DeRoyal partnered with a Level 1 Trauma Center to conduct a clinical research project to compare spine bracing efficiency between two models: braces provided by outside vendors compared to a Centralized Spinal Orthosis Program (CSOP) managed by the Trauma Center's PT Department. The research team reviewed patient records for a retrospective comparative study. The Vendor program included 100 patients, and the CSOP program included 120 patients. Findings from the DeRoyal sponsored study demonstrated considerable quality, process, and financial improvements to the hospital in 4 key areas:

SIGNIFICANT COST SAVINGS

 Over \$900 in cost savings per spine brace (over \$200,000 annually)

DECREASE IN PATIENT CHARGES

• Over \$2,000 reduction in orthosis delivery, fit, and mobilization charges per patient

DECREASE IN TIME TO PATIENT MOBILIZATION

- Decrease in time to mobility was 14.6 hours per patient braced
- Eliminated delays in brace deliveries (40% of paitents in Vendor Program experienced delays vs. 0% of patients in CSOP)

DECREASE IN PATIENT LENGTH OF STAY

- Decrease in length-of-stay was 9.2 hours per patient braced*
- Acutely Hospitalized Trauma Patients (LOS < 11 days) discharged 24 hours earlier with CSOP

*Removed 1 LDS outlier of >40 Days







Dorsal Lumbar Extension (DLE)



Extension Panels

ULTRalign®+

Thoracic Lumbar Sacral Orthosis (TLSO) Lumbar Sacral Orthosis (LSO)



Two closure systems available:

- 1. The Boa® Fit System
- 2. DeRoyal's patented dynamic closure system
- Low-profile and lightweight design allows the brace to be worn under second layer of clothing to be less noticeable
- Constructed of hook receivable material with soft, breathable liner that provides a cooler, lighter fit
- Posterior, anterior, and lateral panels provide optimal support and immobilization and can be heat molded for a truly customized fit
- The ULTRAlign® LSO & TLSO spine braces are compatible with all DeRoyal® spine brace accessories to accommodate the unique clinical needs of each patient



To learn more about the application of ULTRAlign® spine brace with the BOA® Fit System





the application
of ULTRAlign®
spine brace with
Dynamic Strapping +
Accessory Application



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