# **Venous Relief Elevation Device (VRED)**

For patients to safely and effectively elevate their legs to lower venous pressure, increase venous flow, and promote better outcomes during treatment.





#### The Venous Relief Elevation

**Device (VRED)** is a patented new solution for medically prescribed leg elevation that patients can use in a clinical setting or at home. The VRED was developed by a board certified vascular surgeon to alleviate the symptoms associated with chronic venous insufficiency (CVI).



#### The VRED helps to correct the

underlying pathophysiology of CVI by lowering venous pressure and improving sluggish blood flow. Symptoms of CVI include venous stasis ulcers, swelling in the lower leg and ankles, painful and achy legs, and changes in the appearance of the skin.

In the U.S., venous leg ulcers (VLU) affect 7 million people annually, with a recurrence rate of nearly 70% per patient, costing the healthcare industry nearly \$15B annually.

#### Leg elevation is the leading prescribed treatment for VLUs, and can help reduce healing times and treatment costs when the **VRED** is used as prescribed.

- Average total medical cost to treat one ulcer is \$9,685 per patient, with home health care, hospitalizations, and home dressing changes accounting for 48%, 25% and 21% of total costs respectively (remaining 6% is office visits and medications).<sup>1</sup>
- Average duration of treatment for a VLU is 119 days, with seven clinic visits on average. During this treatment time, 18% of patients will undergo hospitalization, adding exponentially to the cost of treatment.<sup>1</sup>
- Venous leg ulcer treatment costs are DIRECTLY related to the amount of time until wound closure and with a savings of \$100 per day, using the VRED can have a significant financial impact in reducing the treatment cost of each patient.

The VRED can help improve patients' outcomes and reduce healing times of venous ulcers by increasing venous flow, reducing swelling, and increasing microcirculatory blood flow in lipersclerotic skin.

Sources:

<sup>1</sup> "Department of Vascular Medicine, Cleveland Clinic Foundation, Cleveland, OH, Covance Health Economics and Outcomes Services Inc., Washington, DC, and the Program for Medical Technology and Practice Assessment, Johns Hopkins University School of Medicine, Baltimore, MD. USA

<sup>2</sup> Abu-Own A, Scurr JH, Coleridge Smith PD. Effect of leg elevation on the skin microcirculation in chronic venous insufficiency. J Vasc Surg. 1994.20(5).705-710

## **Patented Design Based on Science**



### The angles and contoured design of the VRED are based on science.

- Lying on a flat surface, with the thigh tilted 40 degrees • maximizes blood flow without kinking the femoral vein.
- The knee, bent at 25 degrees, augments venous blood flow by • preventing the veins from being obstructed behind the knee when the leg is fully extended.
- The lower leg, tilted at 15 degrees, helps prevent pooling and increases blood flow in the lower legs and feet.
- The contoured design anatomically fits the shape of the leg to • prevent pressure points.
- The recommended regimen is 30 minutes, three to four times each day.<sup>2</sup>
- Offered in four sizes to fit each patient precisely.
- Approved HCPCS Code E0190

VRED's Pressure Management Fabric is designed to achieve low interface pressure, in conjunction with an ergonomic pressure management support surface that provides moisture protection, anti-microbial properties. and comfort.







