# Overlay™ Features and Benefits

## **Product Description**

The Ethnocare Overlay is a transtibial external socket insert, worn over the patient's liner, that features an innovative air expansion system to support a patient's continuous comfort and mobility. The Overlay helps the clinician efficiently treat fitting issues caused by daily volume fluctuations and/or transitions to the size and shape of the patient's residual limb. The Overlay features a series of interconnected posteriorly positioned pneumatic cells. A proximally positioned built-in pump and release valve enable the patient to effortlessly self-manage the fit quality and comfort of their socket by inflating or deflating the air cells. An external air pump is also provided for faster inflation. The Overlay is an effective alternative to prosthetic socks (and internal socket padding) to fill voids, relieve pressure points, reduce the potential for skin irritations, and improve suspension, thereby reducing socket issues that can disrupt comfortable and safe use of the prosthesis.

The device is compatible with most liners and sockets, which allows the clinician to utilize this technology to improve results until a new socket is needed.





### Air Expansion System

The Overlay is a circumferential external socket insert with a patented air expansion system that helps the patient keep their socket snug and comfortable. The air cells compensate for variations in volume of the residual limb. The interconnected air cells, ingeniously incorporated into the posterior, medial and lateral aspects of the external insert, can be easily inflated and deflated without the patient removing their clothing and prosthesis.

The integrated pump allows the patient to make small incremental adjustments to the air volume in the cells.

### **Advanced Flexible Fabric**

The Overlay external socket insert is a durable, breathable and stretchable fabric sleeve that enables easy donning and doffing. The thickness of the Overlay's advanced fabric technology is under one millimeter, allowing for a low profile and intimate fit over the liner.

#### Silicone Print

Silicone is printed onto the interior proximal surface of the fabric to help maintain continuous adherence with the liner during ambulation.

#### Proven Results

A \*case study conducted in Canada that included 15 transtibial patients indicates the Overlay demonstrated effective volume management and benefits for patients, including: Improved socket fit; enhanced cushioning; pain reduction; ease of use compared to the traditional use of prosthetic socks; and overall improvement in user comfort and satisfaction. Significant results over traditional methods of socket volume management include:

- 1. Users reported a ↑32% improvement in socket fit with the Overlay compared to other volume management methods.
- 2. Users experienced ↑35% better cushioning when using the Overlay compared to other volume management techniques.
- 3. Patients indicated their pain sensation decreased by ↓28% when wearing the Overlay compared to their regular volume management methods.
- 4. Users found the Overlay ↑51% easier to use than adding prosthetic socks.

\*Ethnocare. (2023). Evaluation Overlay [Case study]

These improvements validate the Overlay's design, technology, and functional efficiency in helping a patient self-manage fitting issues that can compromise mobility and the health of their residual limb. The Overlay's success in significantly reducing discomfort improves the patient's overall experience with their prosthesis.