

#### THE SCIENCE BEHIND SLINGS

# Pressure Mapping

Pressure mapping is a specialised measurement technology used to visualize the contact pressure distribution between the human body and a supporting surface and equipment interface, e.g. chair or sling. Care & Independence commission independent pressure mapping experts to conduct such trials to ascertain sling performance and help identify areas of risk. The subsequent scientific data insight has enabled Care & Independence to develop solutions and vastly improve upon the areas which indicate tissue viability risks, pain or other health concerns to the equipment user.

# RESULTS FOR COMFORT VALUE™ RECLINE (CVR)



MEDICAL CUSHION TYPE: 1. PolyAir® comfort cushion 2. Sumed Integrity® Static High Risk

SUBJECT: Male, 5'6", 82.5kg

# **BASELINE MAPPING**

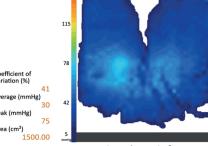
#### 10 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION WITHOUT SLING

Both cushion types return a clear low pressure result as indicated by the expanse of blue colouring.

# 78 High Risk Polyair®

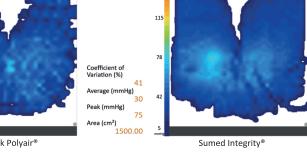
78

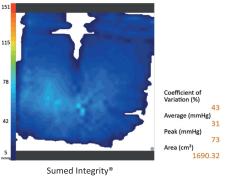




## CUSHION + CVR 2 MINUTES

Introducing the CVR actually decreases the peak pressure for both cushion types.

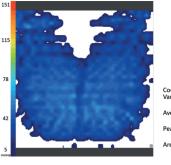




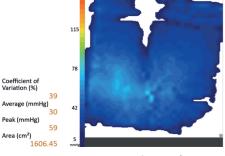
### **CUSHION + CVR** 10 MINUTES

improving lives

After ten minutes sitting in the sling, the pressure peak results remain lower than the baseline maps.



High Risk Polyair®



Peak (mmHg) Area (cm²) 1693.55

High Risk Polyair® Sumed Integrity®

Coefficient of Variation (%)

Average (mmHg) Peak (mmHg)

Area (cm²) 1598.38

CONCLUSION: The data clearly shows that not only does the introduction of the CVR sling not impair user comfort but actually improves it! Pressure remains evenly and consistently distributed across the users seat with no evidence of high risk areas.