Pressure Mapping

Pressure mapping is a specialised measurement technology used to measure and visualize the contact pressure distribution between the human body and a supporting surface and equipment interface, e.g. person, 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 GLOVE™ IN-CHAIR DIVIDED LEG (GIDL)

The data from these tests is impressive. After ten minutes, the performance of the GLOVE™ In-Chair Divided Leg sling with the Polyair® cushion is 11 mmHg *lower* than without the GIDL in-situ. This shows that the addition of the GLOVE™ In-Chair Divided Leg can actually be <u>better</u> for a user.

In the baseline mapping tests where the subject was sat clothed direct upon both cushion types, a clear low pressure result was returned as indicated by the expanse of blue colouring. [Fig. 1 & 2]

In the two minute seating test, the **GIDL/Polyair® combination shows a decrease to peak pressure**. With the Integrity® cushion, there is an increase against baseline results but as the chart shows, this remains well within the comfort zone. [Fig. 3 & 4]

After ten minutes seating, the Polyair®/GIDL combination continues to further decrease peak pressure, whilst the Integrity® results are only marginally different to the two-minute test results. [Fig. 5 & 6]

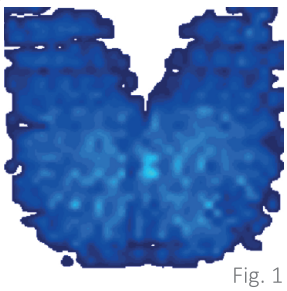


Fig. 1

BASELINE MAPPING

10 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION <u>WITHOUT</u> SLING

PEAK 75 mmHg

AVERAGE 30 mmHg

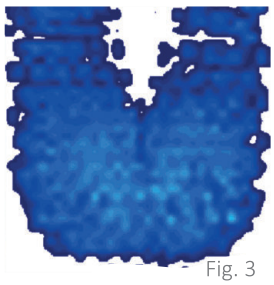


Fig. 3

POLYAIR® + GIDL

2 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION WITH SLING

8 mmHg 67 mmHg

30 mmHg

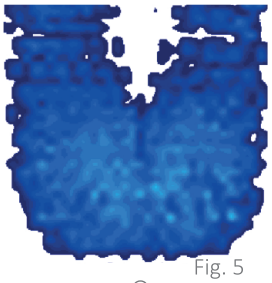


Fig. 5

POLYAIR®+ GIDL

10 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION WITH SLING

11 mmHg 64 mmHg

1 mmHg 31 mmHg

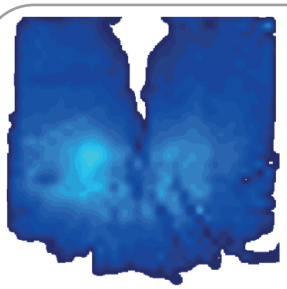


Fig. 2

BASELINE MAPPING

10 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION <u>WITHOUT</u> SLING

PEAK 76 mmHg

AVERAGE 31 mmHg

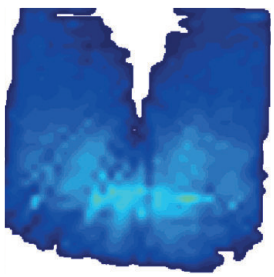


Fig.4

INTEGRITY® + GIDL

2 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION WITH SLING

10 mmHg 86 mmHg

3 mmHg 34 mmHg

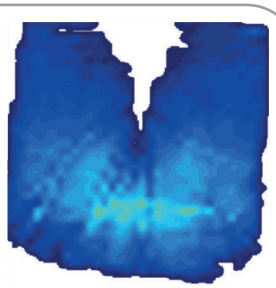


Fig. 6

INTEGRITY®+ GIDL

10 MINUTES

SUBJECT SAT DIRECT ONTO CUSHION WITH SLING

12 mmHg 88 mmHg

2 mmHg 35 mmHg

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

SUBJECT: Male, 5'6", 82.5kg
DATE OF TEST: April 2021
TESTER: Sumed International (UK) Ltd

**mmHg stands for millimetres of mercury and is used as a pressure measurement*

151 115 78 42 5 MmHg* scale

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