Title: An innovative approach to providing customised commode seating

No author information to be included in the submission.

Aims: To develop a custom commode seat for a client with high pressure care needs

Findings/Results/Outcomes

Assessment of 3 available commode seats all of which pressure mapped with high pressure over the posterior pelvis. The development of a customised commode seat was proposed which was went through a process of moulding, scanning and 3D design. A prototype customised commode seat was produced using a robot carver. The custom seat was checked again using the pressure mapper and refinements made. A final product was then covered and checked again on the pressure mapper. The results showed improved pressure distribution away from the vulnerable areas. The outcome was that the client could continue to use commode seat with reduced risk of developing pressure injury.

Abstract (word count)

Standard commode seats are fine if you don’t need to spend long on them and your skin is in good condition. Pressure injury is a common complication for people with Spinal Cord Injury. It is essential that all support surfaces provide the best available pressure redistribution. This client had a major pressure injury and spent 7 months in hospital as a result of having to have 2 surgeries (debridement and rotation flap) then extensive rehabilitation to get back to normal sitting regime and functional activity

Commode seats typically can cause pressure injury and in this case pressure mapping indicated these were not providing adequate pressure distribution

A customised commode seat was needed

The process involved pressure mapping using the, taking an impression using a bean bag mould technique, scanning the impression and using a Qube® design program to manipulate the object to come up with a design. This was then carved using a robotic CNC machine to produce a prototype. This was then checked again with mapping and improved pressure distribution noted vs commercial products. The result was a commode seat that enabled the client to complete daily functional tasks with reduced risk of pressure injury.