

Safe transfer of paediatric intensive care patients with multiple lines/attachments to CT

Design For Health

Collaborative Project 2021-22

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The Challenge

Patients may need to be transferred from the Paediatric Intensive Care Unit (PICU) for a range of scans or procedures to other areas of the hospital building; frequently CT scans in the radiology department. These patients are attached to multiple tubes, lines and monitors which all need to be transferred with the patient. Organising this equipment onto the trolley for transfer and then again from the trolley to the CT scan table, and finally, reversing this journey to the intensive care unit bed, is time consuming, causes tubes to become tangled and keeps patients away from the safe PICU environment for longer than possibly needed.

The project entails designing a safe and efficient method of transferring the patient along with multiple attachments.

The solution needs to be easy to clean between patients and robust enough to survive multiple uses. Ideally, the transfer process should also minimise the number of staff required to physically move the patient.

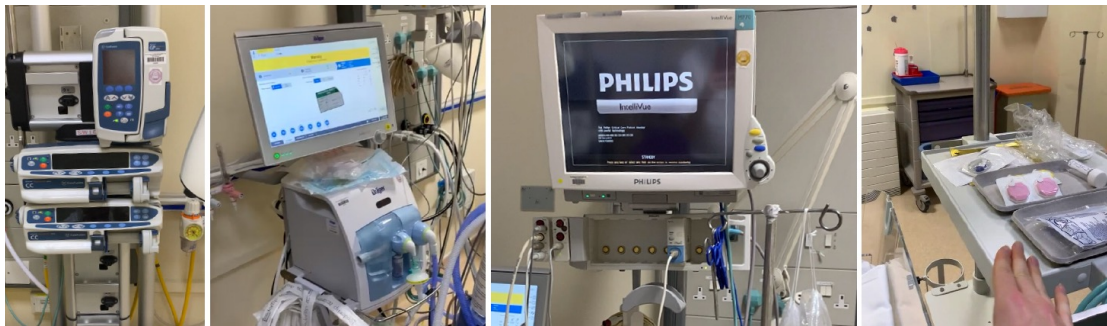


Fig. 1: Equipment that must be transferred with the patient

Horizontal transfer of sedated patients



Figure.10:(BabyPod, 2021)

Patient: 0-1 year olds
Number of staff: 1
Staff back pain risk: High

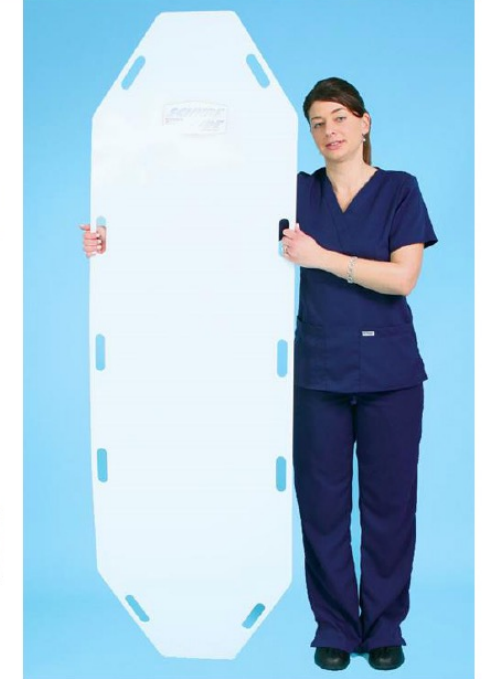


Figure.11:(SchureMed, 2021)

Patient: Children & adults
Number of staff: 4
Staff back pain risk: High

Fig. 2: Current solutions