

Developing Flat Slings for Use in a Pediatric Hospital

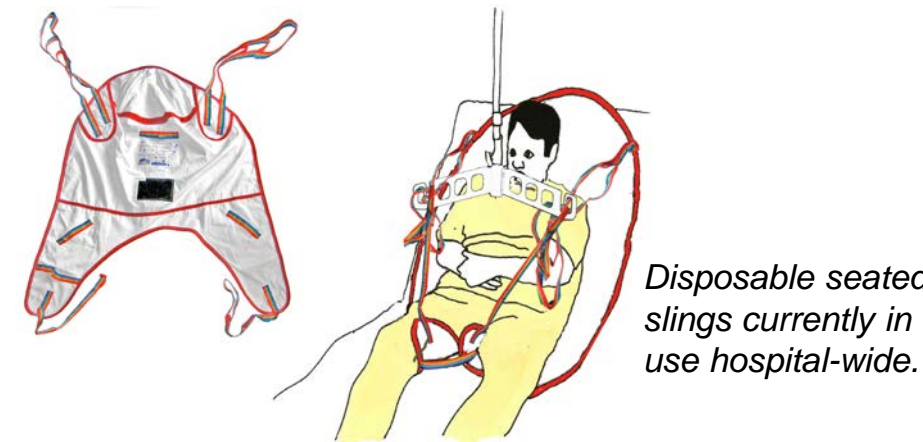
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Process Evaluation / Lessons Learned

Problem Statement

Disposable seated slings are most often used at Seattle Children's for moving patients during bed, chair, and wheelchair transfers. However, many patients need to remain in a flat/level position while being repositioned and/or transferred.



Disposable seated slings currently in use hospital-wide.

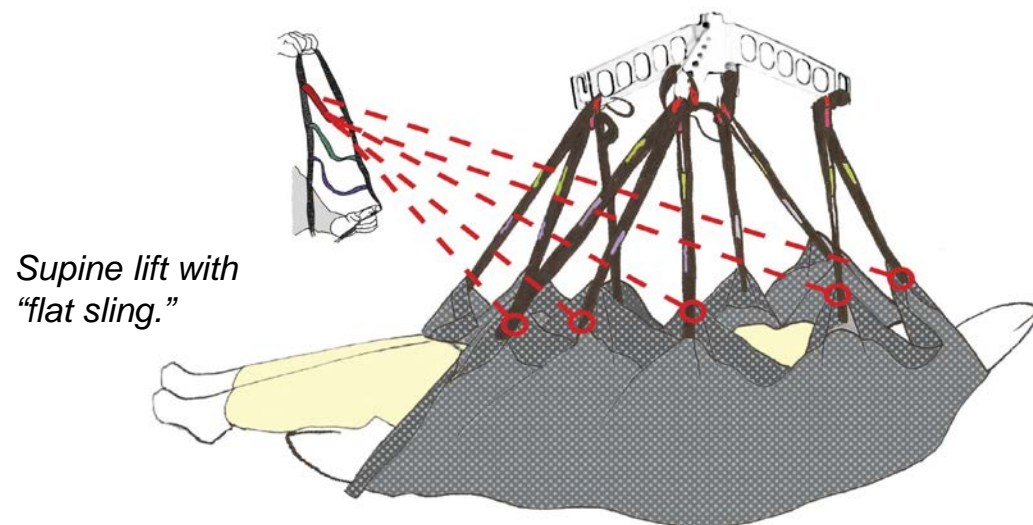
Background

Children's uses mechanical lift systems for patient mobility, transfers, and positioning.

Our patients often:

- Require total care
- Weigh more than 35 lbs / 16 kg (a toddler at the 90th percentile can weigh 16kg!)
- Have "fragile" conditions where some movements can result in fractures

We identified a need for a sling that allows for **flat or semi-reclined positioning** that can be used for turning or transfers, and can remain under the patient.



Supine lift with "flat sling."



Two prototype "flat sling/turning" sheets



Criteria and Trial Process

Two local vendors developed flat sling prototypes to fit our patient needs. Options included:

- Four or five straps, evenly distributed or with varying distance between straps
- Color coded loops versus figure-eight numbered straps
- Mesh color options
- Mesh versus mesh with wicking material
- Dimension options (size of bed versus larger versus shorter)

Prototype slings were presented to Rehabilitation Unit staff and Safe Patient Handling Committee (SPHC) members, who have a high level of experience with slings and lifts. Staff trialed the slings on each other, looking for:

- Ease of use
- Perceptions of safety/comfort
- Desirability of fabric

Implementation

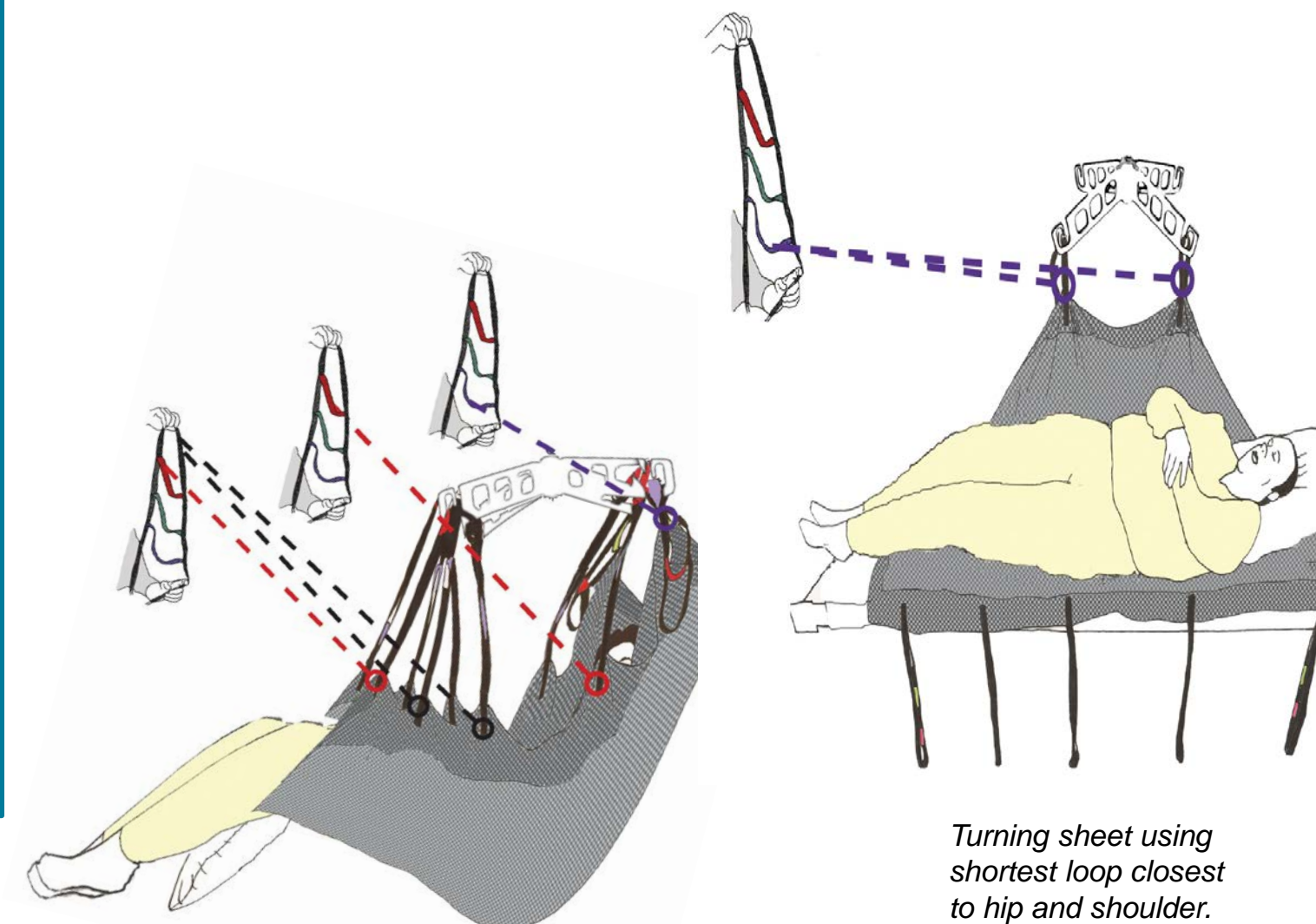
Final product chosen:

- Dimension: 42" x 66"
- 5 color-coded straps, evenly distributed (no need for head or foot designation)
- Gray color (different than slider sheet color), mesh on one side, wicking material on patient side.
- Washable/re-useable



Sling does not have a specific head or foot designation.

Value Analysis Team (VAT) was involved early in the process. A final quote was obtained, negotiating with Sourcing Department, VAT and vendors. Funds were acquired through Nursing Professional Development.



Flat sling used as a "semi-reclined seated lift" by varying the loop length.

Funding

The negotiation and trial process contributed to delay in the purchase order and consequently, fabrication of the custom slings, delaying distribution deadline. SPH program has no specific budget.

Solution: Vendor kindly donated 10 ready-made flat slings. (Custom size sheets arriving >1 month after go-live.)

Storage and Distribution

Worked with Linen Services and Demand Flow teams for storage and restock process.

Solution: Created "sling holders" to mount on clean utility wall.



Laundry

Need a 48-hour turn around.

Solution: More inventory for steady supply.

Training

Only ICU nurses were trained on flat sling use (supine lift, semi-recline lift, and turning).

Solution: Develop a training plan to roll-out slings to remaining patient care staff.

Prototype Dimensions

Not large enough, noted during training with prototype.

Solution: Adjusted dimensions to add 10 inches on width, and 12 inches on length to the final product.

Acknowledgements

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