

Use of quick response code educational videos can improve nursing staff confidence with thoracolumbar braces

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Background

Thoracolumbar (TL) spinal braces are frequently used to manage patients following spinal fracture or surgery. Safe and effective application of these braces in the acute care setting is essential for promoting therapy engagement and minimising hospital-based harms. A 2022 survey of trauma ward nursing staff at The Alfred Hospital revealed that majority of staff have low confidence in donning TL braces and lack sufficient resources that support bedside education.

The purpose of this quality project was to design, test and implement an on-demand resource for staff on the correct technique to don TL braces.

Methods

A multidisciplinary team created video packages demonstrating the correct technique to apply five TL braces, accessible through quick response (QR) codes displayed on the trauma ward (see Figure 1).

The model for improvement¹ was used to guide the testing and implementation of the project.

Data collected from testing cycles included:

- Surveys of trauma nursing staff including confidence in brace application and knowledge of where to find information
- Qualitative feedback
- Number of video views

Feedback informed further adaption and distribution of the resource. Concurrent targeted education sessions supported the implementation of the resource into usual ward processes.

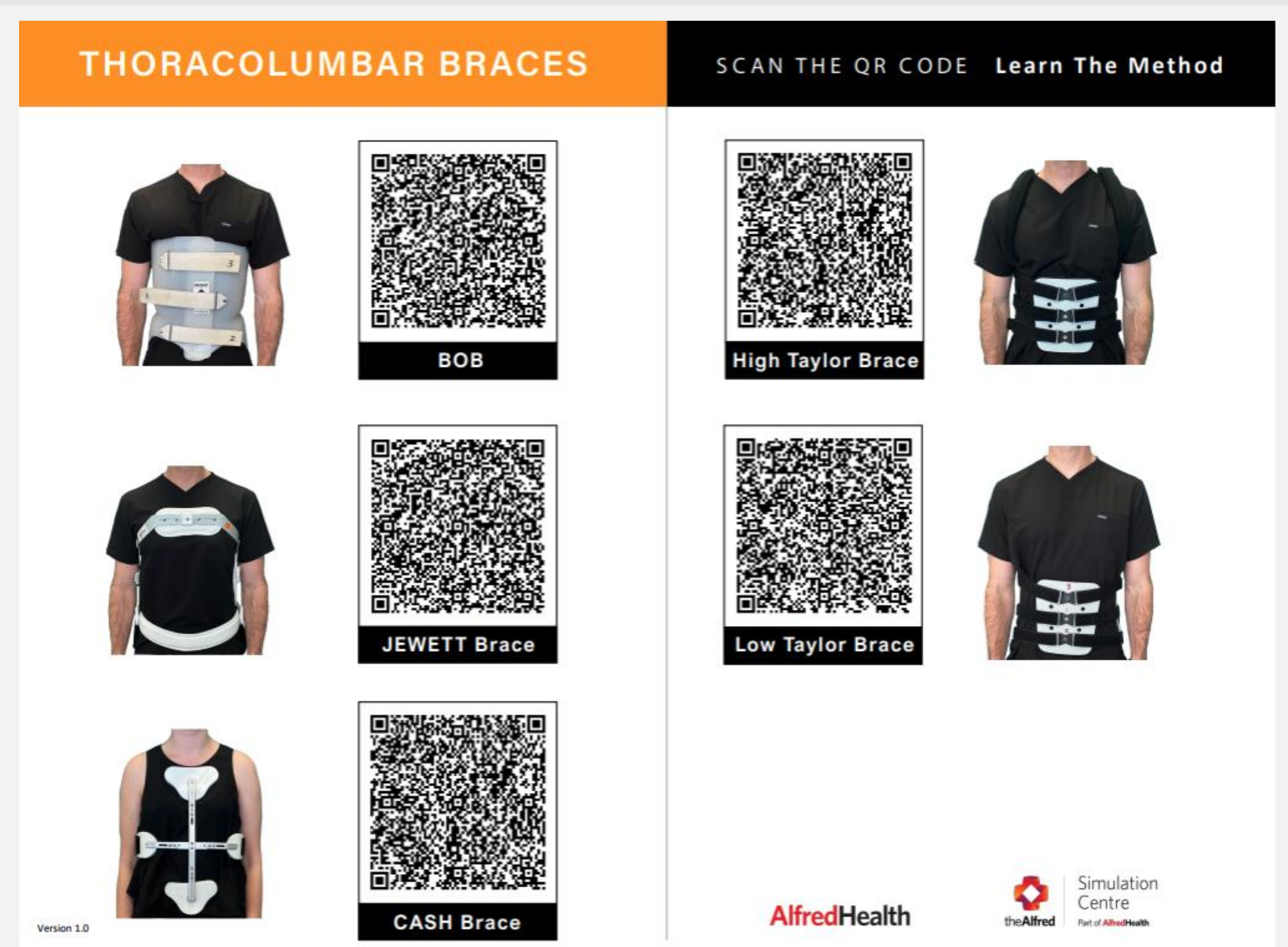
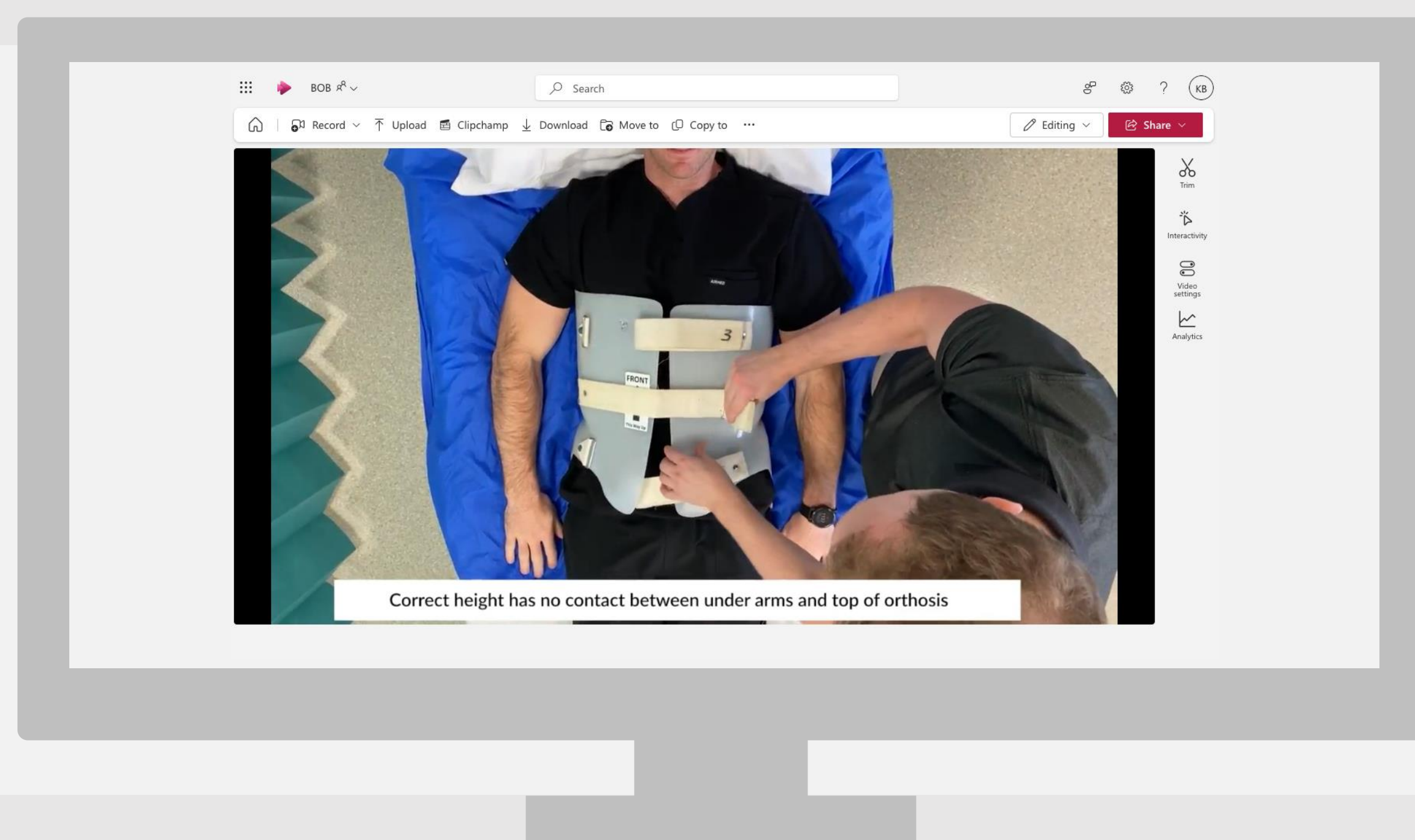


Figure 1: TL brace poster with all five brace types (Alfred Health organisation account needed to access videos)

Results



> 100 views in 6 months



"It was a great teaching tool for bedside nurses who were unfamiliar with the brace"

- Senior Nursing Clinical Educator

Pre & post survey with nursing staff (pre n=26, post n=19)

87%

reported the QR code video resource was **valuable**

100%

reported the resource would be **useful** for staff who haven't worked with braces

95%

reported **greater confidence** in their ability to find information on how to don TL braces

4 out of 5 braces

showed an increase in staff **confidence** in brace application post implementation

Conclusion

- QR code video resources offer a convenient on-demand resource for nursing staff and can improve confidence in application of TL braces
- QR code video resources used for bedside education are feasible in an acute hospital setting
- Future opportunities exist to spread this resource across Alfred Health, other health networks and as part of patient education

References

1. Crowl, A., Sharma, A., Sorge, L., & Sorensen, T. (2015). Accelerating quality improvement within your organization: Applying the Model for Improvement. *Journal of the American Pharmacists Association : JAPhA*, 55(4), e364–e376. <https://doi.org/10.1331/JAPhA.2015.15533>