

Redesigning trauma education: a pre/post evaluation of the Nova Scotia Trauma Course

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INTRODUCTION

- Historically, Trauma Nova Scotia provided the American College of Surgeons' Rural Trauma Team Development Course (RTTDC) to healthcare providers in Nova Scotia.
- While the course was halted by the COVID-19 pandemic, we conducted a needs assessment of trauma education in NS; based on the findings, we pivoted from RTTDC and created the **Nova Scotia Trauma Course (NSTC)**.
- Research Objective:** To evaluate levels of comfort and confidence with procedural skills and managing the care of multiple patients before and after participation in the NSTC, as well as satisfaction with the course.

METHODS

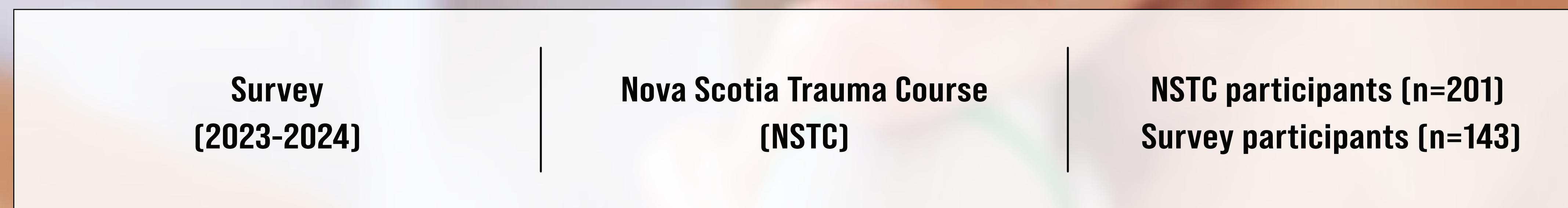
- An electronic survey was created with Microsoft Forms to measure **levels of comfort and confidence** across 2 domains: 1) patient care; and 2) simulation learning.
- A **rating scale** of 1 star (not at all comfortable) to 5 stars (extremely comfortable) was used. Course participants accessed the survey using a **QR code** projected at the beginning/end of each course. Pre- and post-course surveys were compared using descriptive statistics.

RESULTS

- Between May 2023 and February 2024, **11 NSTCs** were provided at regional hospitals across the province.
- Participants averaged 12 years of clinical experience (avg. 9.7 years caring for trauma patients); most had not taken the RTTDC before (79%), but were aware of the trauma team activation process in NS (62%).
- Ratings for **confidence and comfort** with procedural skills and managing multiple patients simultaneously were all increased following completion of the NSTC.

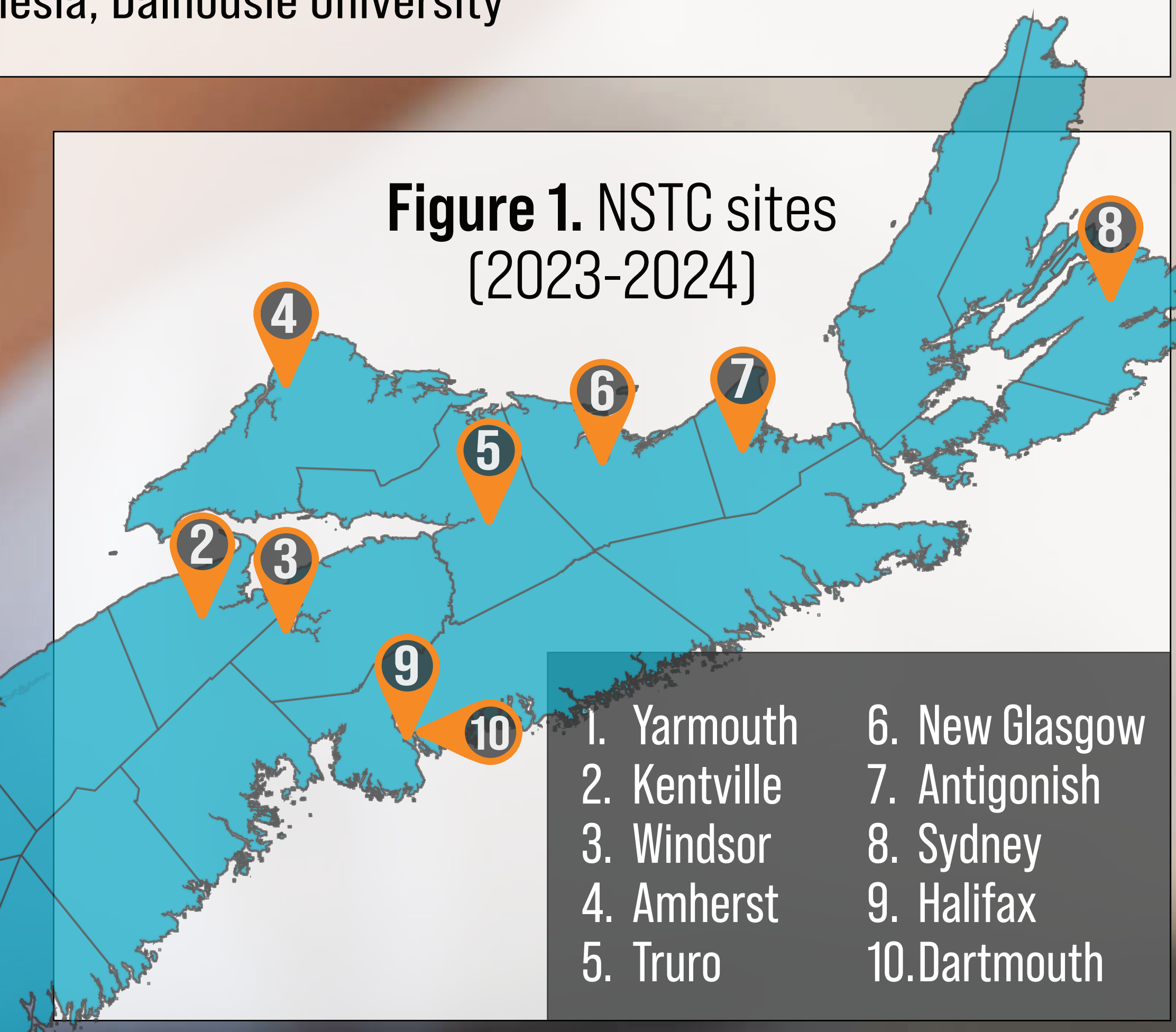
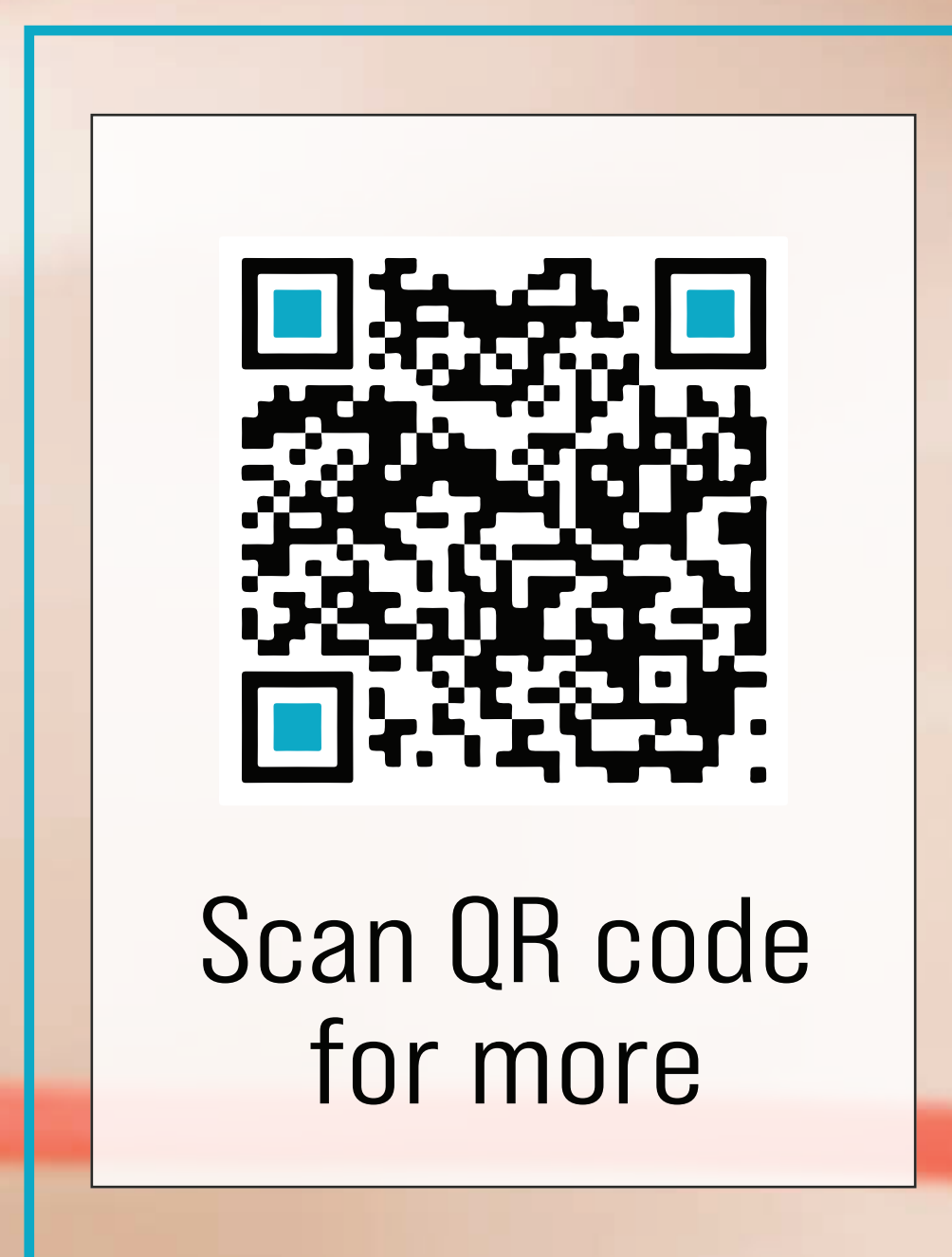
DISCUSSION

- The creation of a redesigned, **dedicated trauma course** in NS successfully improved participant comfort with key skills and managing the care of trauma patients.
- By systematically assessing local challenges with the provision of trauma education, the redesigned NSTC was tailored to meet the needs of **local care providers**.



Participants reported **increased comfort and confidence** with procedures and patient care

Further work is required to evaluate **long-term retention** of **training** and **procedural skills** among NSTC participants



Role	NSTC Participants n (%)	Survey Participants n (%)
Registered Nurse	114 (56.7)	64 (44.8)
Paramedic	36 (17.9)	32 (22.4)
Staff Physician	29 (14.4)	19 (13.3)
Respiratory Therapist	10 (4.9)	10 (6.9)
Licensed Practical Nurse	6 (2.9)	4 (2.8)
Resident Physician	3 (1.5)	3 (2.1)
Physician Assistant	2 (1.0)	2 (1.4)
Nurse Practitioner	1 (0.5)	1 (0.7)
Other*	-	8 (5.6)

Table 1. Roles of course participants (n=201) and survey respondents (n=143). *Included Support Services (n=2), Medical and Nursing students (n=3) and unknown (n=3).

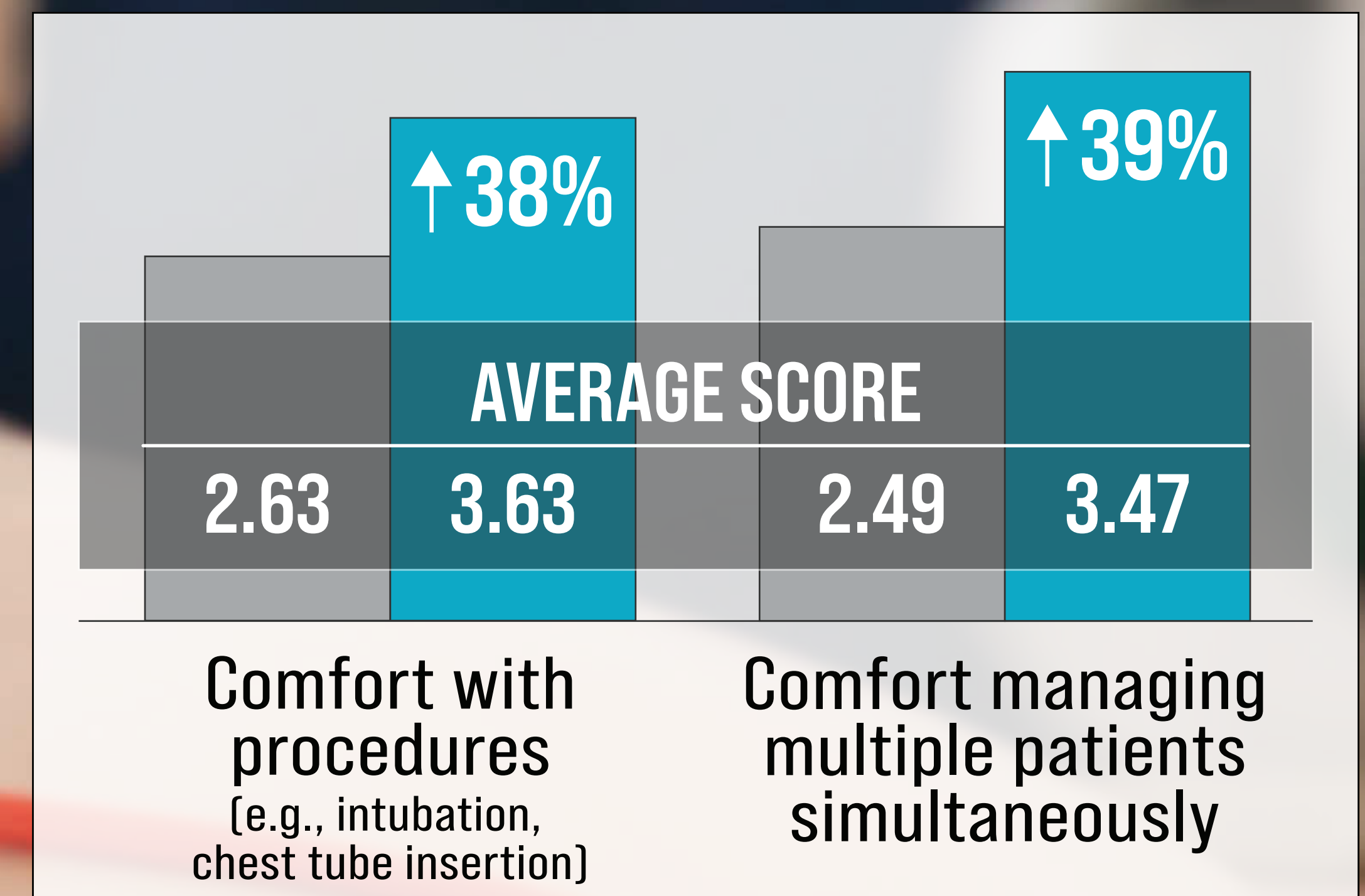


Figure 2. Comfort with procedural skills and simultaneously managing multiple patients pre-NSTC (gray) and post-NSTC (blue).