Neuraxial Anesthesia Task Training Workshop for CRNAs

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Introduction

- CRNAs have restricted practice in many states, including NJ
  - Certain skills may not be practiced frequently due to these restrictions
- NJ requires CRNAs to practice under medical direction or supervision of a physician anesthesiologist
  - Joint protocol must be with physician anesthesiologist
- Consumer Access to Healthcare Act
  - Remove joint protocol with physician anesthesiologist in NJ
  - Allow residents of NJ with improved access to anesthesia services
  - NJ CRNAs will have even greater responsibility to provide high-quality anesthesia care without the supervision of a physician anesthesiologist
- Neuraxial Anesthesia Refresher Course
  - Allow CRNAs to refresh knowledge and simulate skills in neuraxial anesthesia

Background & Significance

- Neuraxial anesthesia
  - Not always performed by CRNAs
  - Essential aspect of anesthesia practice
    - Obstetrics, orthopedic, open abdominal cases, thoracic surgery
    - Continuous or patient-controlled epidurals for post-op pain
- Scope of practice limitations
  - State laws (Malina & Izlar, 2014; Greenwood & Biddle, 2015)
- Differences between physician services and CRNA services
  - Care Models
  - Cost effectiveness = CRNA alone is the most cost-effective model (Cintina et al., 2018)
  - Patient outcomes = No differences found (Negrusa et al., 2016; Dulisse & Cromwell, 2010)

Methodology

Design

- Participants completed a pre-intervention survey, then participated in a Neuraxial Refresher Workshop which included a knowledge refresher presentation and an instructional video, followed by time for commentary and open discussion; participants were also provided with a resource sheet for both spinal and epidural anesthesia
- Participants completed a post-intervention survey immediately following completion of the workshop

Setting

- A Statewide Professional Organization for Nurse Anesthesia Virtual Fall Symposium via Zoom, November 7th, 2020
- Task trainers from Rutgers Simulation Lab utilized in an instructional video in lieu of in-person task-trainer simulation

Study Population

- Included: Currently practicing CRNAs attending the Virtual Fall Symposium from any state
- Excluded: SRNAs & CRNAs not currently practicing
- Participation in on a volunteer basis
- Goal: 56 participants

Measures

- Data collected from a pre-intervention survey and a post-intervention survey via Qualtrics software
- Pre-intervention survey included demographic inquiry, including years of practice and practice environment
- Pre-intervention also assessed frequency of neuraxial anesthesia performance and confidence levels
- Post-survey included the same questions on the pre-intervention survey regarding confidence levels and readiness to perform neuraxial anesthesia
- Aimed to assess the effectiveness of the neuraxial workshop on confidence levels and readiness to perform

Analysis

- Convenience sampling to achieve a statistically significant sample size
- Statistical analysis using Qualtrics software from the pre and post-intervention surveys

Results

- There was a strong statistically significant relationship between the length of time practicing as a CRNA and increased confidence levels.
- 56.3% of participants felt that having the opportunity to refresh their knowledge and skills in Neuraxial Anesthesia with a Neuraxial Anesthesia workshop would be beneficial to their practice as a CRNA.
- Overall confidence levels in knowledge and skill of neuraxial anesthesia increased from the pre survey to the post survey.
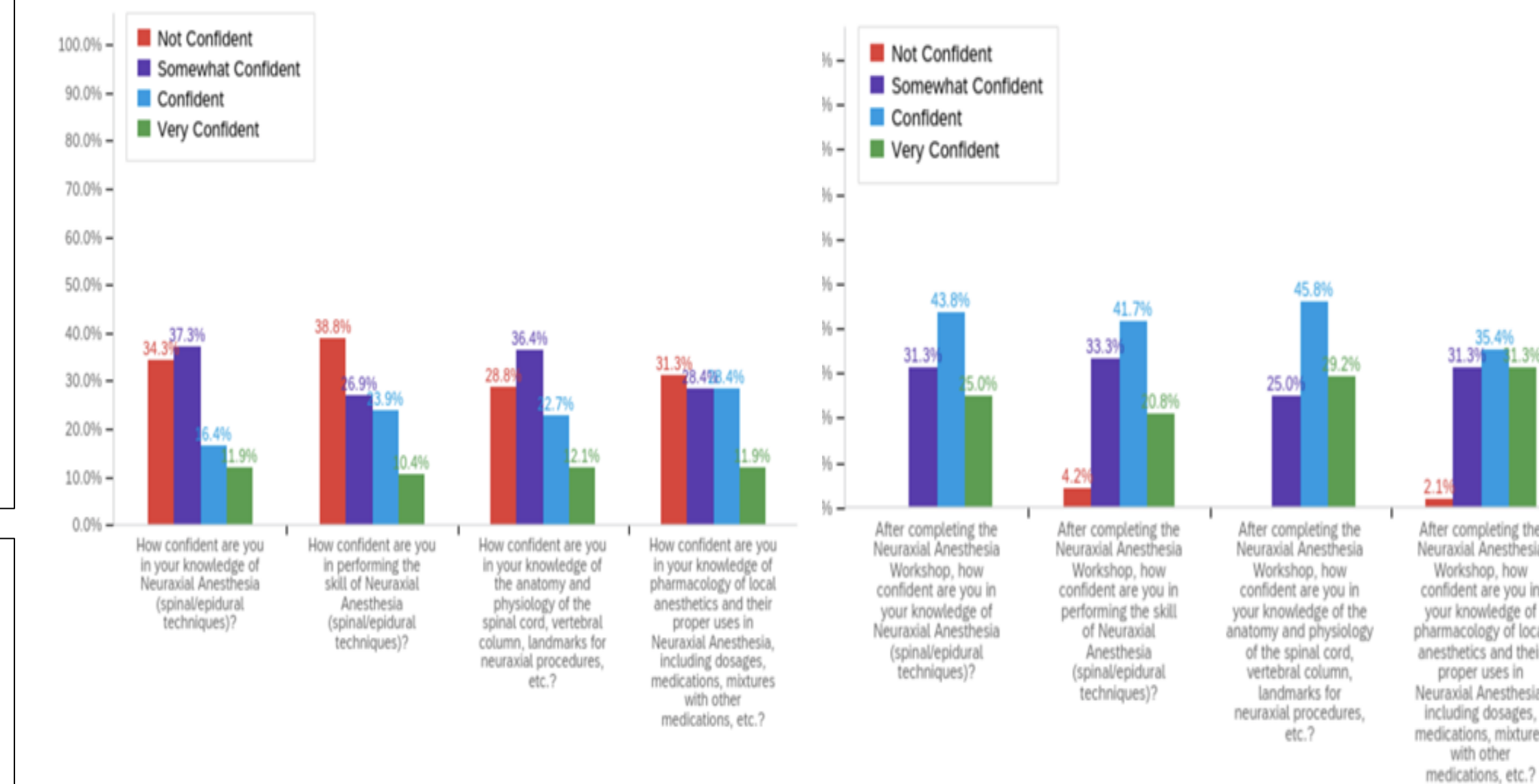

Pre-intervention Survey Results | Post-intervention Survey Results

Discussion

- Following the neuraxial anesthesia workshop, CRNAs felt more confident in their knowledge and skill level of neuraxial anesthesia.
- With more CRNAs confident in performing neuraxial anesthesia, more patients will be able to benefit from this.

Neuraxial demonstration video and slide from refresher presentation
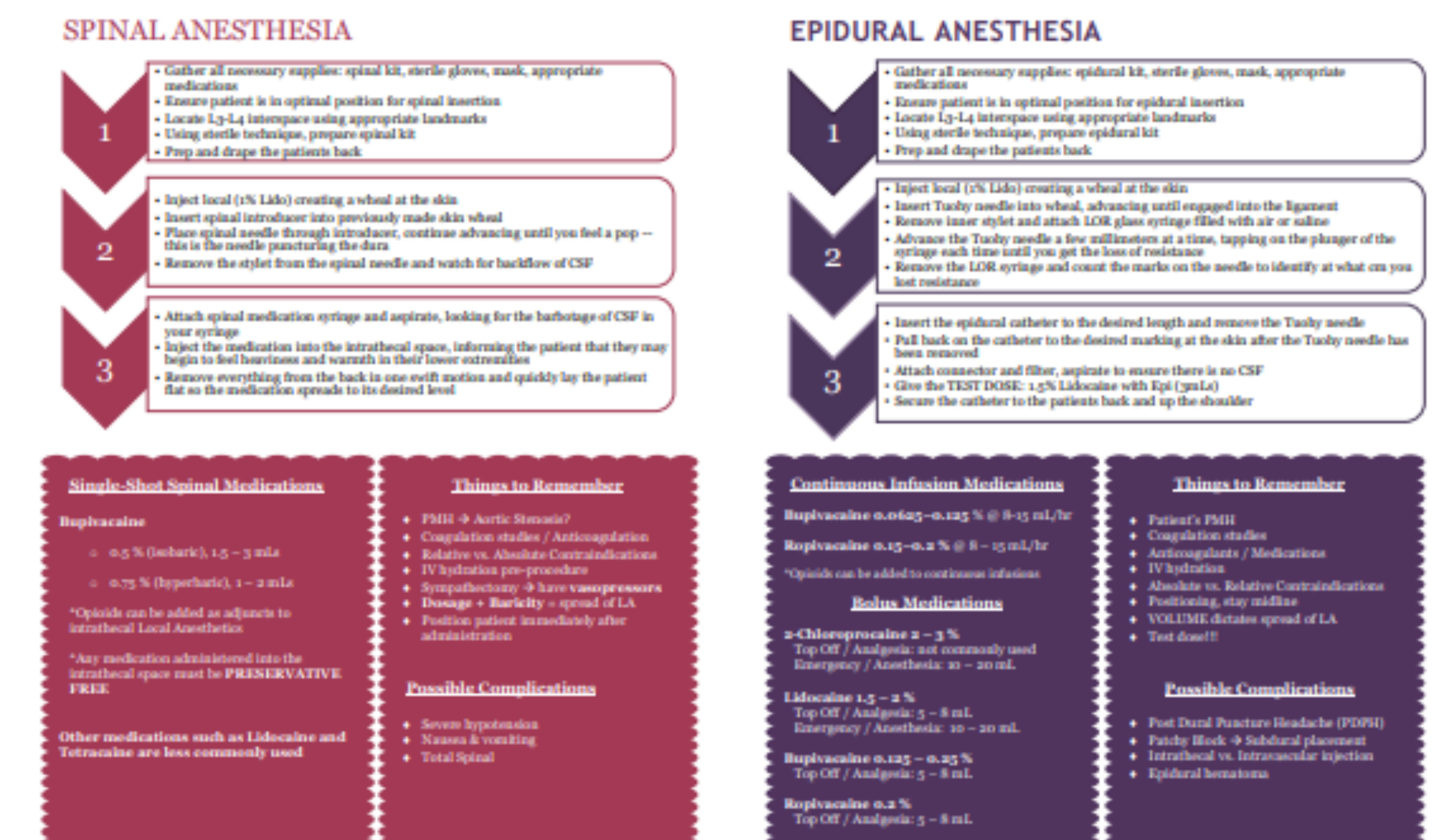
Spinal and Epidural Resource Sheets; available via PDF and QR code

Scan QR code for poster references