

# Innovative Solutions in Pediatric Emergency Medicine: Physician feedback on the use of a novel LP cradle

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## BACKGROUND

- Lumbar puncture (LP) in neonates has low success rates.
- NeoCLEAR trial reported: improved first-pass success rate in the seated position vs. lateral decubitus.
- An LP cradle is a novel device that secures infants in a seated position

## STUDY AIMS

- Assess pediatric emergency medicine (PEM) MD acceptability & feasibility of using a novel LP cradle.
- Secondary outcomes: first-pass success, overall success (CSF obtained with <10,000 RBC/hpf) and non-traumatic taps (<1000 RBC/hpf).

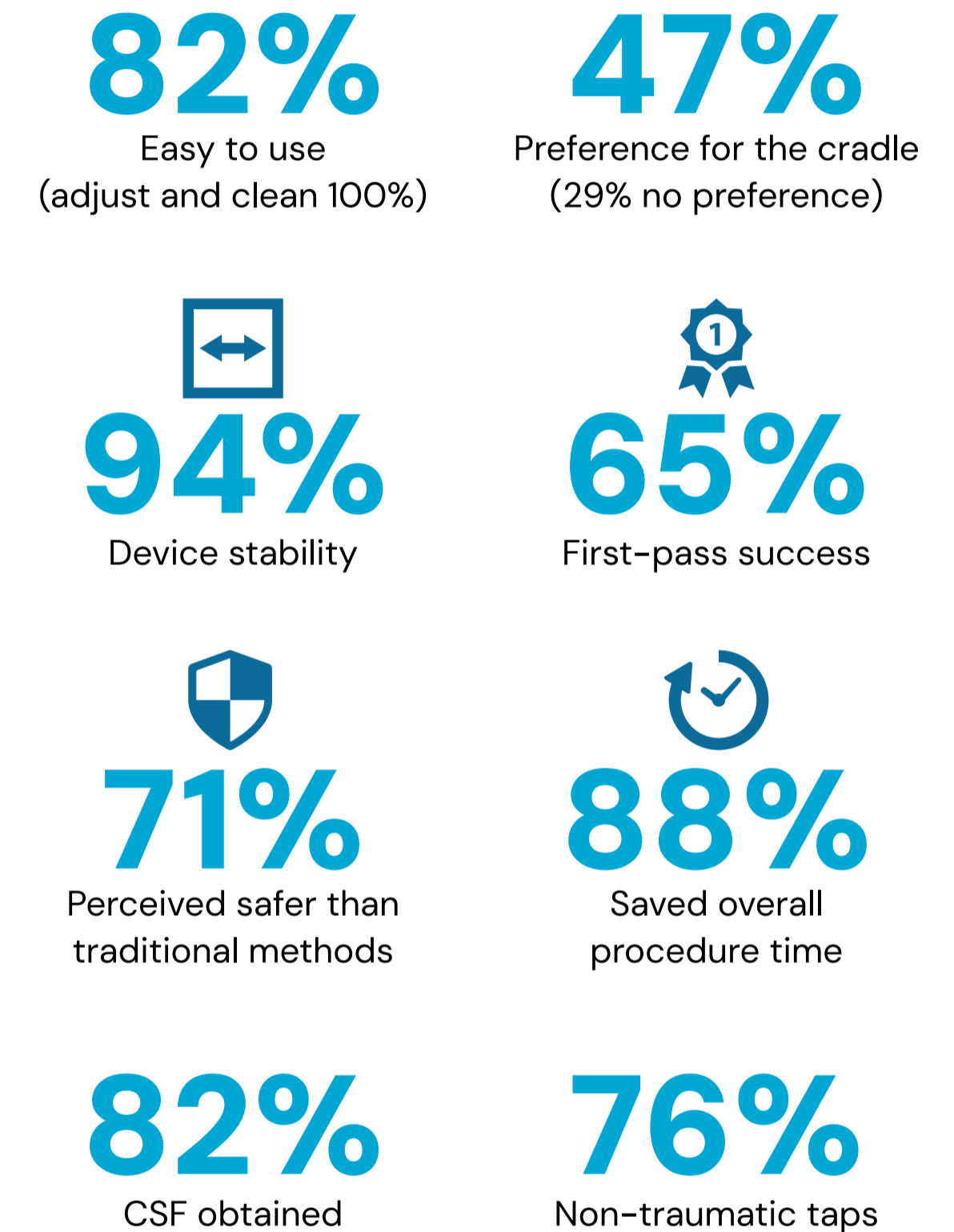
## METHODOLOGY

- Mixed methods study.
- 17 PEM staff & fellows using the LP cradle for the first time.
- Pre-procedure just-in-time demonstration.
- Post procedure survey administered, capturing qualitative feedback, whether CSF was obtained, number of attempts and rbc/hpf.

PEM physicians reported positive experiences with the LP cradle, citing feasibility, safety, and potential procedural efficiency.



## RESULTS



## IMPLICATIONS

- High acceptability from first time users—highlighting minimal learning curve and just-in-time training viability.
- Cradle may be particularly valuable as obviates need for holder during LPs.
- Pilot efficacy data supported next steps (comparison of cradle to no cradle on first-pass success rates & traumatic tap rates).