

Can a stick in time save the mind?

Speaker: Jacques Lee, MD, MSc, FRCPC

Track: Plenary - Top 4 Research Abstracts



200 ED Physicians across Canada were trained in **Point-of-care Ultrasound-Guided Regional Anesthesia (POCUS-GRA)** in a 2 hr training session.

After training, the blocks performed were:



FAST

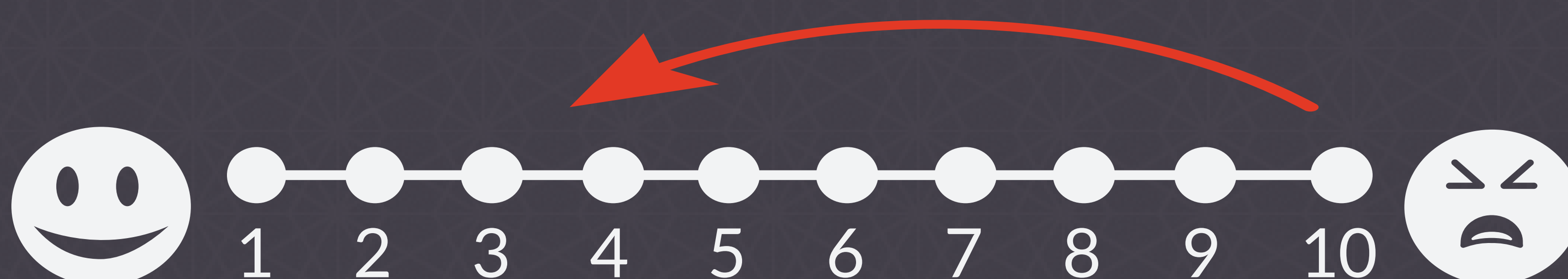
- Taking 15 minutes



SAFE

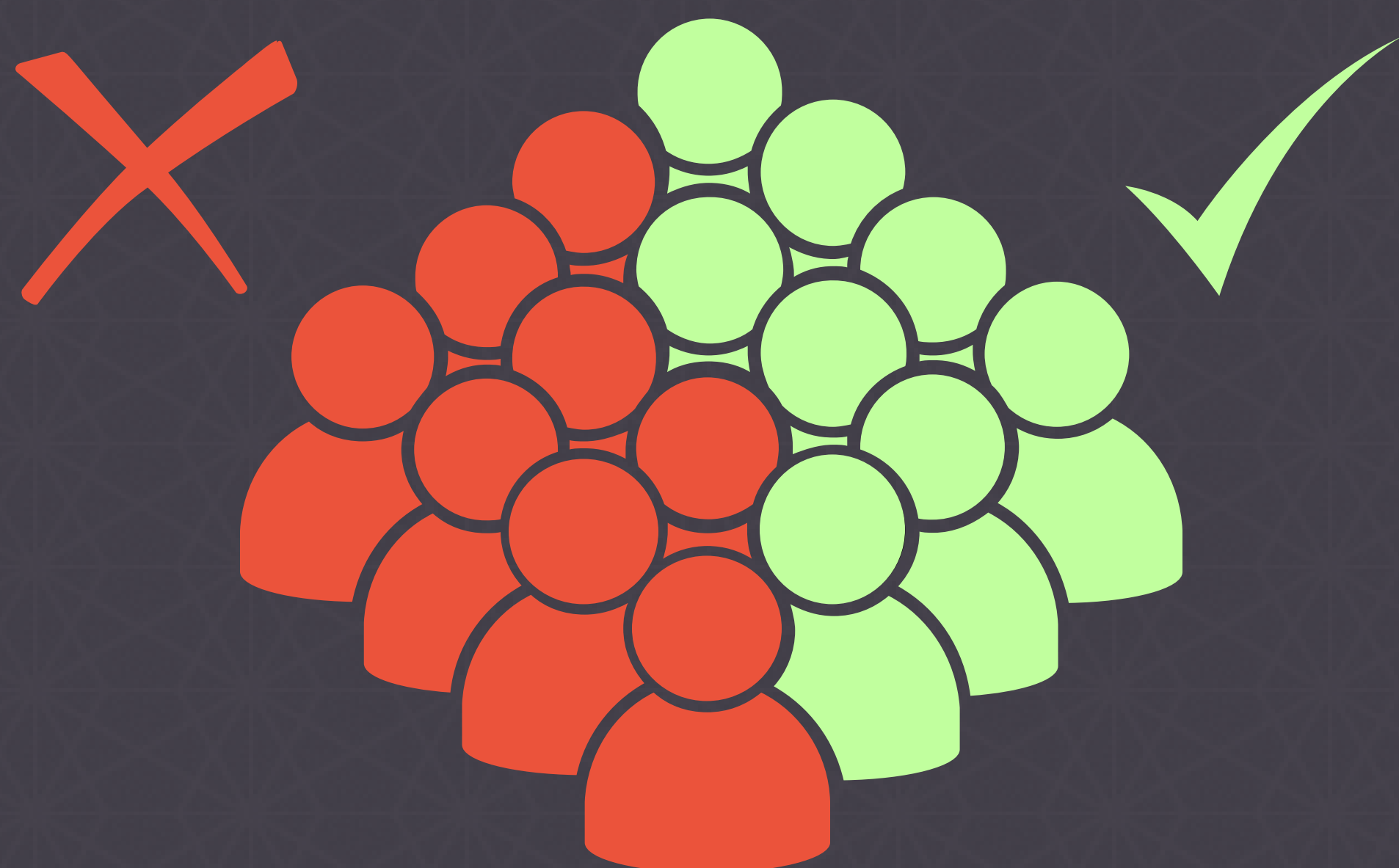
- Only 1 hematoma
- No serious complications

The blocks were effective!

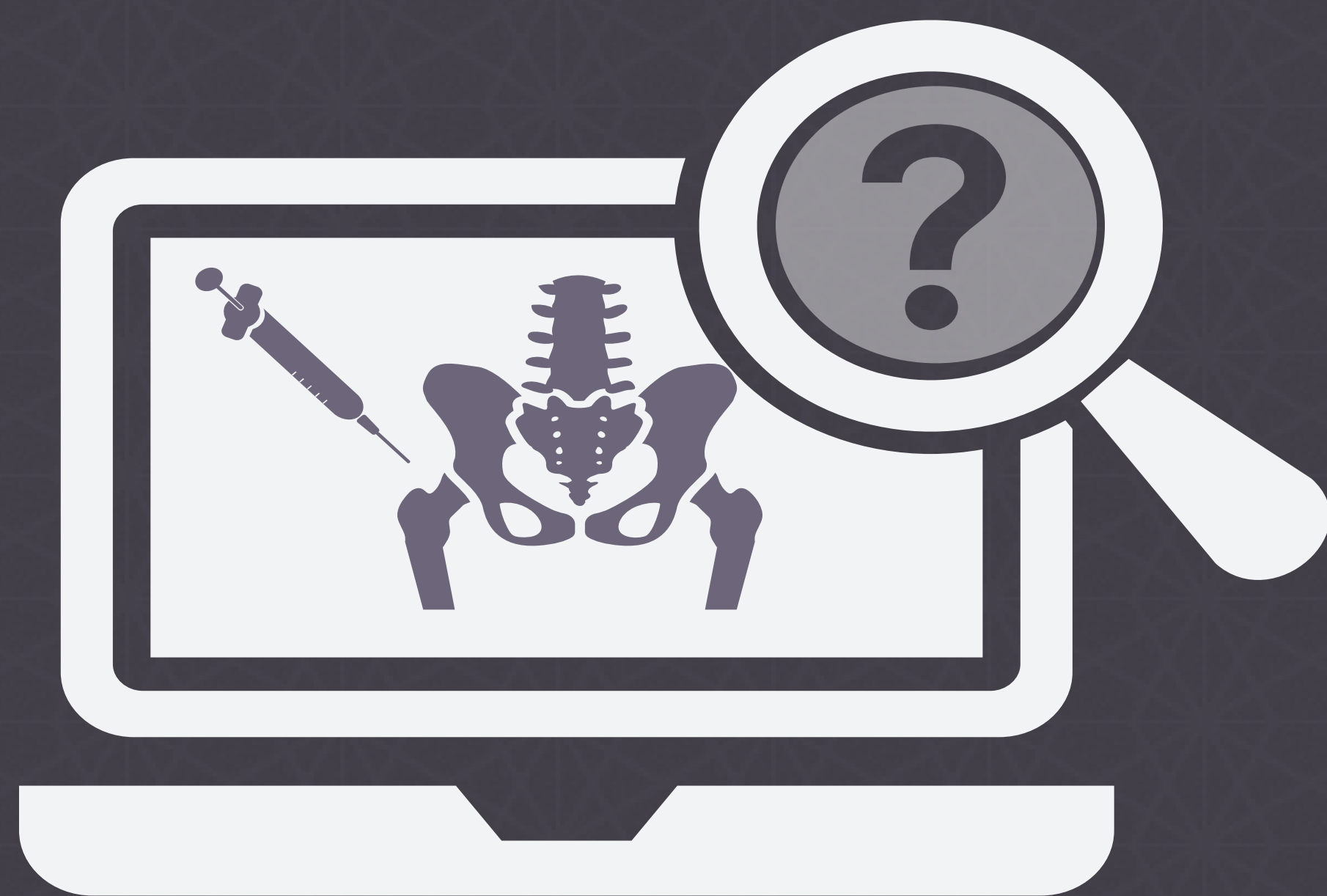


Reduced pain by -3.2 on a 10-point pain scale & 67% had > 50% reduction in their pain score.

Unfortunately, only **50%** of eligible patients **received a block...**



so we **could not show a reduction in delirium** from POCUS-GRA.



More research should focus on **how to improve uptake** of this safe & effective procedure.



Paramedic Assessment of Low-Risk Pediatric Trauma Patients Using the Canadian C-Spine Rule

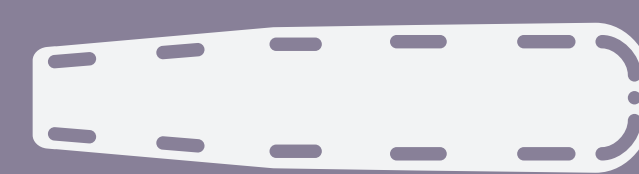
Speaker: Dr. Christian Vaillancourt
Track: Plenary - Top 4 Research Abstracts

STUDY DESIGN



Large trial (11 paramedic services) to evaluate a strategy authorizing paramedics to assess low-risk pediatric patients with the Canadian C-Spine Rule (CCR)

OBJECTIVES



Proportion of patients immobilized

Impact on pain and discomfort during transport



Use of diagnostic imaging

Safety

All appropriate C-spine injuries were immobilized



None of them resulted in **spinal cord injury**



No additional injuries found at 30-day follow-up



OUTCOMES

Pain and discomfort scores did not change (pediatrics) unlike with adults



Proportion of patients immobilized

Impact on pain and discomfort during transport



Use of diagnostic imaging

Paramedics can **safely** use the CCR and identify all injuries. The CCR can now be used for children aged 8 to 15 years



This will lead to **fewer unnecessary immobilizations** and **less diagnostic imaging**



Predictors of Mortality Among Older Trauma Patients at a Level One Trauma Centre

Speaker: Dr. Krishan Yadav

Track: Plenary - Top 4 Research Abstracts

STUDY DESIGN



Retrospective charts for trauma care accessed by **patients over 65** at a level one trauma centre in Ottawa between 2014 and 2020 were reviewed

3 main pieces of information were assessed:



Baseline Demographics

Injury Mechanism and severity



Extent of trauma care delivered

RESULTS & DISCUSSION

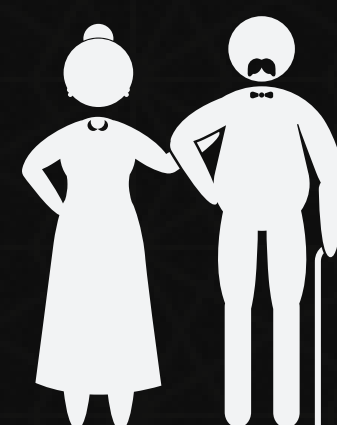
The following 5 factors were associated with **increased 30-day all cause Mortality**:



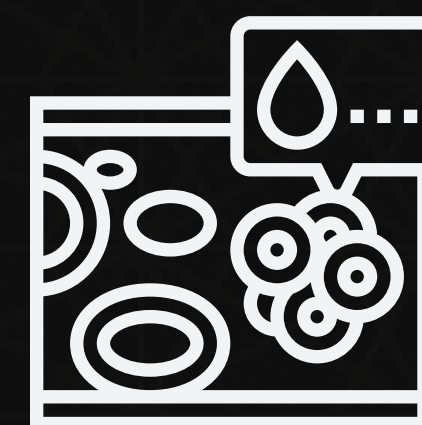
GCS < 15



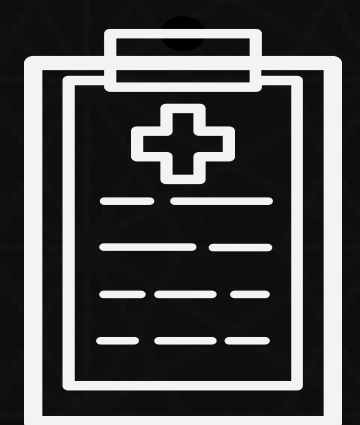
Injury severity score > 15



Age \geq 85



Anticoagulant use

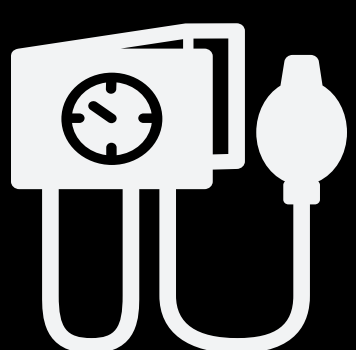


Multimorbidity

The following factors had **no bearing** on **all cause Mortality**:



Lack of trauma team activation



Systolic Blood pressure \leq 110 mmHg

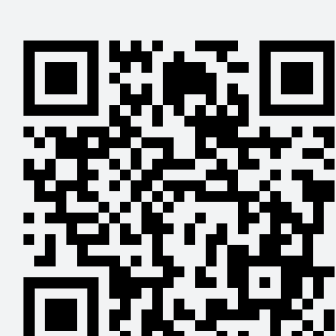


Heart rate > 90 bpm

The above outlined factors are **reliable predictors** of mortality in the elderly

0.82

As suggested by a high C-statistic score

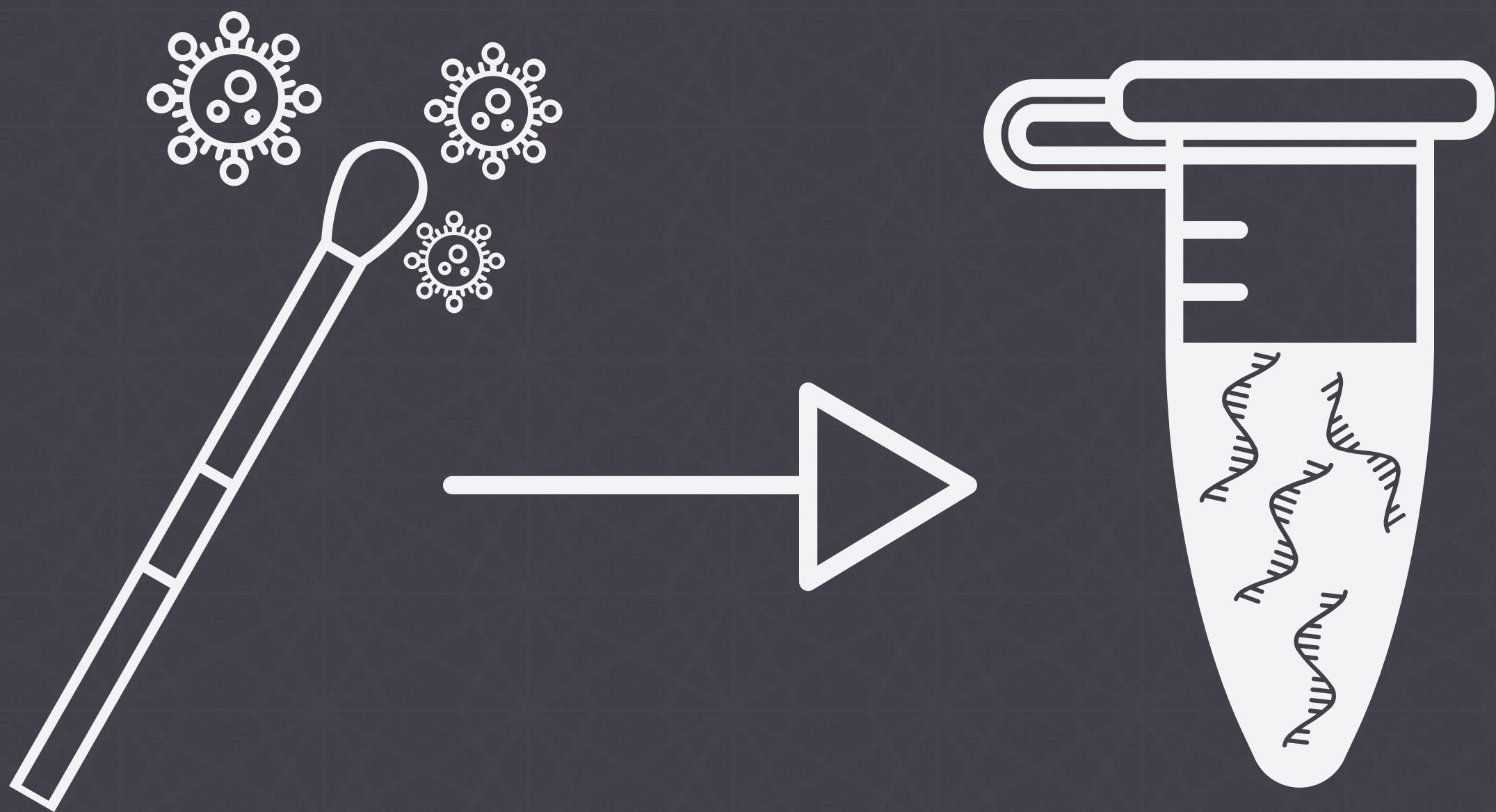


Sensitivity and Diagnostic Yield of the SARS-CoV-2 NAAT in Patients Presenting to Hospital

Speaker: Corinne M. Hohl, MD, MHSc

Track: Plenary - Top 4 Research Abstracts

Introduction



Early diagnostic testing for **SARS-CoV-2** is important to **initiate treatment** and **prevent transmission**

Study Design

Retrospective observational study assessing **SARS-CoV-2 NAATs** performed within **24 hours of ED arrival**



47
Hospitals



7
Provinces

1°

Positive SARS-CoV-2 NAAT

2°

Sensitivity and diagnostic yield of first test in ED or hospital

Patient presentations to ED

150,055



96,232

Met inclusion criteria

12.9

% tested positive for SARS-CoV-2

Results

96.9

% sensitivity for first test in ED/hospital

12.0

% diagnostic yield from NAATs

Discussion

Effect of **Symptom onset date** on **NAAT sensitivity** and **diagnostic yield**

Sensitivity



Diagnostic Yield



Conclusion



Diagnostic test **sensitivity** was **high** for the **first in-hospital** SARS-CoV-2 NAAT

Sensitivity **did not vary** significantly by **symptom duration**



Avoid retesting patients with **negative tests**, unless **pre-test probability** is **high**

