

Evaluation of a patient safety initiative of rapid removal of backboards in the emergency department



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Introduction

- Prolonged time on the transfer backboard used by EMS leads to:
- Higher levels of patient discomfort
- Respiratory distress
- Agitation
- Removal from a backboard is time intensive
- Goal is to implement a medical directive which allows paramedics to assist in removal of patients from backboards in the emergency department

Objectives

Primary Objective

To determine if the length of time ED patients were immobilized on a rigid backboard decreased following implementation of the medical directive

Secondary Objectives

To determine if this directive decreases spinal imaging (X-ray, CT) and ED length of stay

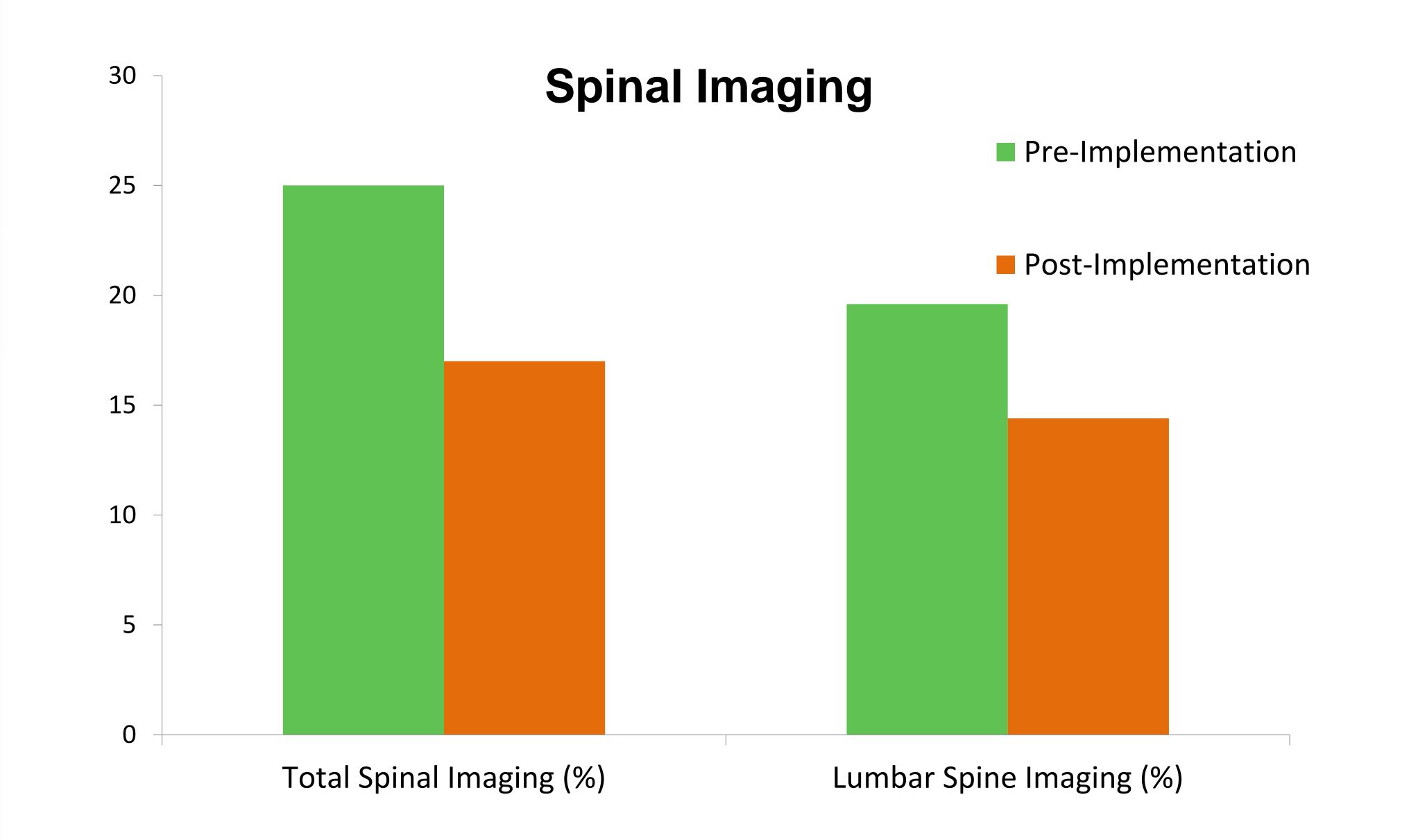
Methods

- Pre- and post-implementation study
- Inclusion Criteria:
 - 18 years or older
 - Brought to WRH Ouellette Campus on a rigid transfer board
- Charts reviewed 3 months pre and 3 months postimplementation of the policy

Patient Data	ED Data
Age	Time of EMS Arrival
Gender	Time of transfer to ED bed
CTAS	Time of patient removal from EMS board
GCS	Spinal imaging obtained in ED
Disposition	Time of discharge from ED

Results

- Preliminary data of 88 patients: Time on backboards reduced from an average of 72 minutes to 51 minutes (p<0.001).
- Chart Review: 183 pre-implementation, 186 post-implementation
- No significant difference in secondary outcomes



Limitations

- Decrease in backboard time relied on preliminary data
- Backboard time was not documented for the majority of cases
- Larger sample size?



Conclusions

- Duration on backboards was significantly decreased with a medical directive allowing paramedics to assist in removal of boards
- There was no significant change in secondary outcomes, including imaging and ED length of stay
- It is important to remove patients from backboards as soon as possible, as it will improve patient comfort and decrease potential complications of prolonged time on backboards.