

## Introduction

- The ambulance call report (ACR) is used to record clinical history and physical exam findings, vital signs, pre-hospital medical treatments and scene details
- Ontario ED nurses and occasionally physicians receive verbal handover from paramedics as part of their transfer of care from EMS. Important information is often lost in the exchange

## Objectives

### Primary Objective

- To determine if the ACR contains clinically important information that could change the ED management

### Secondary Objectives

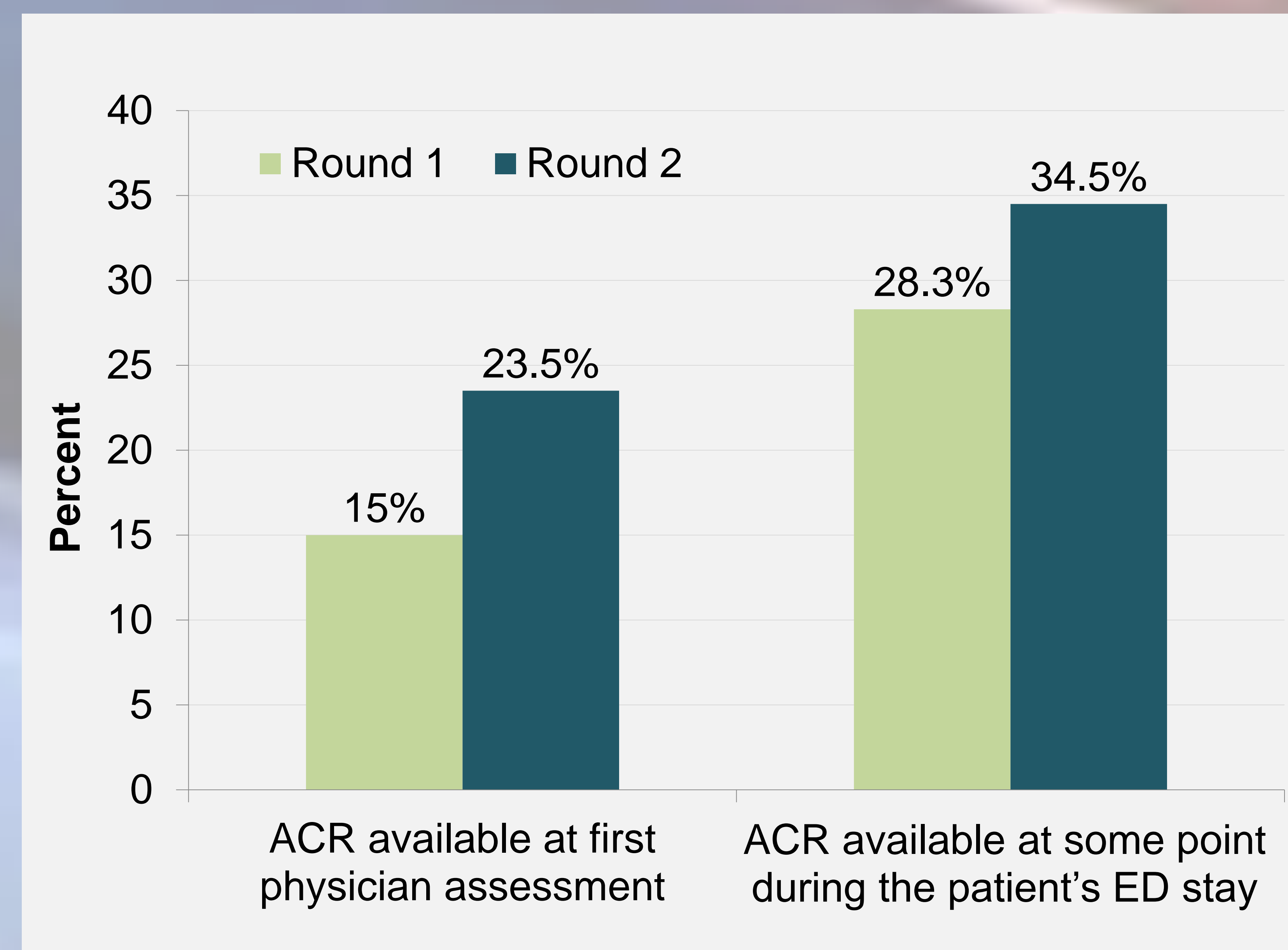
- How often the ACR is available
- Perceived value of information contained in the ACR to either change patient management, or provide support for diagnosis and disposition

## Methods

- A prospective cohort study of adult patients arriving to one of two EDs at a tertiary care centre (annual census 125,000) by ambulance
- Electronic ACRs were faxed to the ED upon completion and added to the patient's chart by ED staff
- Physicians were asked to complete a data collection form for each patient regarding ACR availability and the perceived value of the ACR
- Conducted over 2 four-week time periods to control for any confounding factors related to the implementation of this new eACR handover process
  - July 24 - August 21, 2012 (Round 1)
  - February 19 - March 19, 2013 (Round 2)

## Results

- 869 forms were collected during the study period (545 Round 1, 324 Round 2)
- ACR available at first physician assessment for 82 (15.0%) patients in Round 1 vs. 76 (23.5%) in Round 2 ( $\Delta$  8.5%; 95% CI: 3%, 14%)
- ACR available at some point during the patient's ED stay for 154 (28.3%) patients in Round 1, compared to 111 (34.5%) in Round 2 ( $\Delta$  6.2%; 95% CI: 0.3%, 12.4%)



**Figure 1.** ACR availability

- When ACR was available (n=265), physicians reported that information changed or altered their treatment plan in 28.7% of cases
- When ACR was not available, 63.9% of physicians reported that the ACR would have provided valuable information
  - Patient history (72.3%)
  - Vital signs (69.2%)

- In 50.5% of cases (n=411), the physician did not receive verbal handover or an ACR
- Physicians received verbal handover AND ACR in 6.9% of cases (n=56)
- Of the cases where there was no ACR available at first physician assessment, 36% were faxed to the ED at least 10 min prior to PIA

**Table 1.** How ED management was changed by the ACR. Some patients had changes in more than one category

How ED management was changed	n
Medical therapy	37
Laboratory investigation	28
Imaging investigation	20
Outpatient referral	7
Inpatient referral	3
Other	10

## Limitations

- Low response rate (22% overall)
- Biased responders
- Hypothetical nature of some questions

## Conclusions

- Although the ACR contains clinically relevant information that may change or influence ED management, physicians often assess, treat and disposition patients without receiving the ACR
- Physicians reported that information in the ACR changed or altered their treatment plan in 76 (28.7%) cases