



ACP CRIO

Advance Care Planning Collaborative Research & Innovation Opportunities Network

# Implementation and Evaluation of Electronic Medical Orders for Goals of Care and End of Life

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## BACKGROUND & RATIONALE

- In 2008, Alberta Health Services' Calgary Zone implemented a policy for Advance Care Planning (ACP) and Goals of Care Designation (GCD)
- The GCD framework includes 7 types of GCD orders for communicating a patient's overall focus and preferred location of care
- The concurrent implementation of **electronic GCD orders** in acute care in 2008 provided a rich resource for monitoring ACP/GCD policy uptake

GOALS OF CARE DESIGNATIONS		Chest compressions	Intubate	ICU	Surgery	Site Transfer	Symptom control
<b>R</b> Resuscitative Care	1	✓	✓	✓	✓	✓	✓
	2	✗	✓	✓	✓	✓	✓
	3	✗	✗	✓	✓	✓	✓
<b>M</b> Medical Care	1	✗	✗	✗	Can consider, if required for symptom control	✓	✓
	2	✗	✗	✗	✓	✓	✓
<b>C</b> Comfort Care	1	✗	✗	✗	✗	✓	✓
	2	✗	✗	✗	✗	✗	✓

## OBJECTIVE

To identify **emerging usage patterns and determinants of GCD orders** among adult patients admitted to acute care settings in the Calgary Zone of Alberta Health Services from 2008-2014.

## METHODS

- Electronically recorded GCD orders for adults admitted to acute care settings in the Calgary Zone between 01/Dec/2008 and 31/Dec/2014 were analyzed
- Data included GCD order, order start/stop dates, location (i.e. hospital and patient care unit), attending physician, patient demographics (i.e. DOB, gender, dates of admission/discharge)
- Data were retained for patients  $\geq 19$  years of age, for GCD orders made in acute care or the emergency department prior to admission

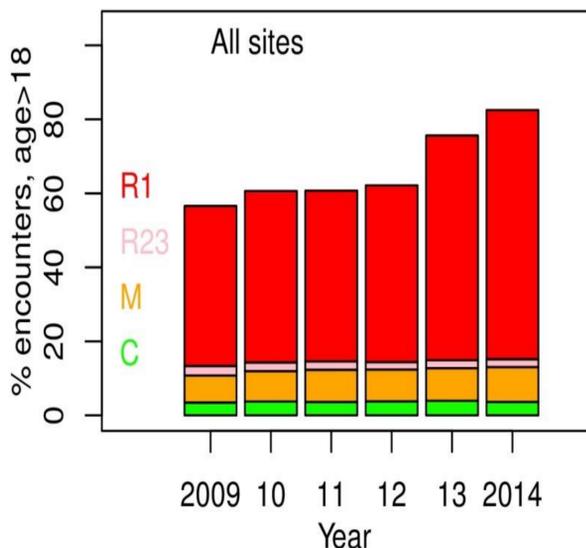
## RESULTS

225189 patients

374163 encounters

525284 GCD orders

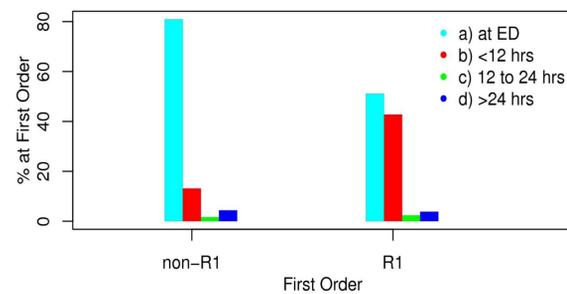
Figure 1. Percentage of adult encounters with completed GCD order by year



- The **% of encounters with an electronic GCD order increased** from 54% in 2009 to 81% in 2014, with most GCD orders being R1
- The introduction of physician order sets in 2012 increased goals of care documentation
- The **% of non-R1 orders grew** from 13.5% in 2009 to 15% in 2014

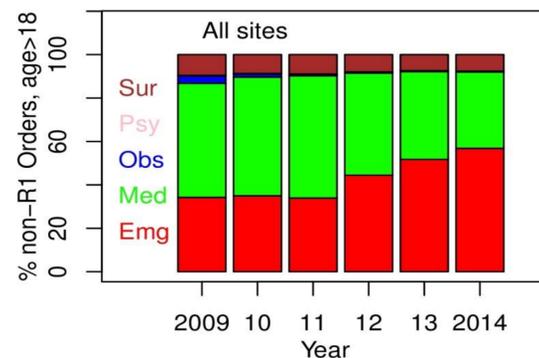
## RESULTS CONT'D

Figure 2. Timing of first GCD order per encounter



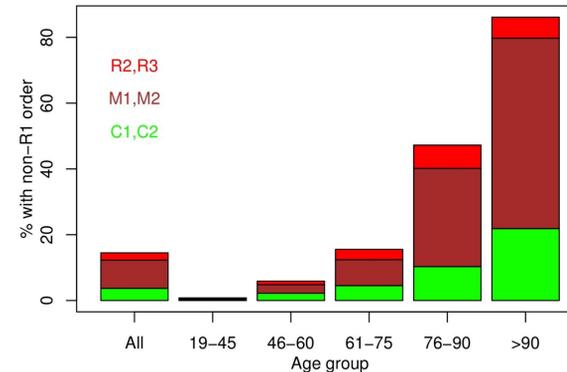
- The **majority of first orders are made in the emergency department**
- Only 4% of first orders are made >24 hrs post-admission

Figure 3. Percentage of non-R1 GCD orders by patient care unit



- ~90% of non-R1 orders are made in Medicine and Emergency units**
- Once ordered, **few GCD orders change** → only 7% of encounters have a GCD order change

Figure 4. Percentage of non-R1 GCD orders by age



- % of non-R1 orders grows with age**, from near zero below age 45 to 84% for age > 90

## CONCLUSIONS

- Electronic GCD orders are increasing over time in Calgary Zone acute care settings
- GCD education should be focused in emergency and medicine units, where most orders continue to be generated
- Goals of care conversations **before emergency** are vitally important
- Processes are needed to **review GCD orders** prior to patient discharge from acute care

## CONTACT

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