

# What Clinical Pharmacy Key Performance Indicators (cpKPI) Are Patients Receiving Across Canada?

A National cpKPI Patient Registry and Pooled Analysis

UNIVERSITY OF TORONTO
LESLIE DAN FACULTY OF PHARMACY

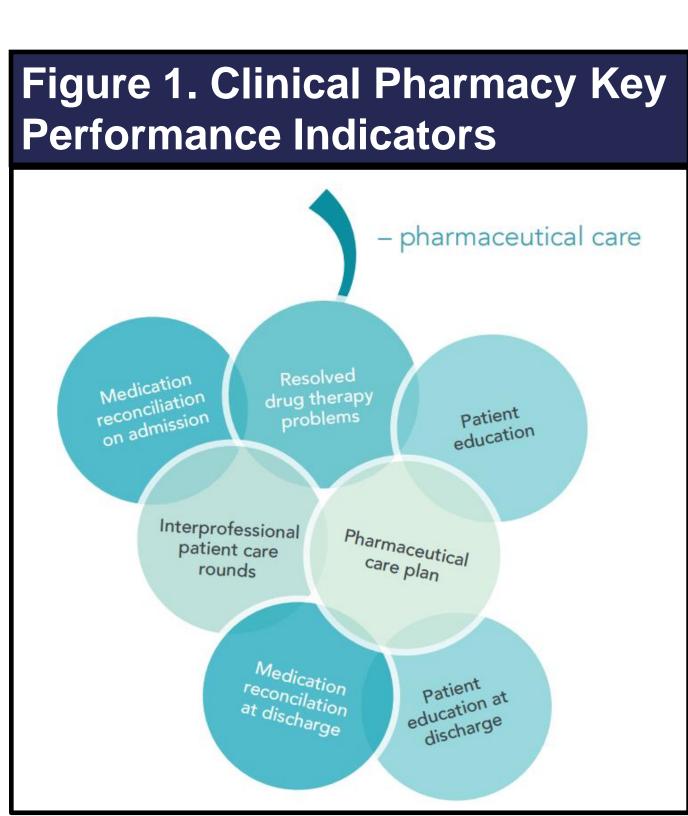
Amanda Carroccia, PharmD<sup>1,2</sup>; Kent Toombs, BScPhm<sup>3</sup>; Sean K. Gorman, PharmD<sup>4</sup>; Sean P. Spina, PharmD<sup>5</sup>; William M. Semchuk, PharmD<sup>6</sup>; Andrea Meade, BScPhm<sup>3</sup>; Donna Lowe, PharmD<sup>1</sup>; Erin MacNeil, BScPhm<sup>3</sup>; Tania Bayoud, PharmD<sup>7</sup>; Steve Shalansky, PharmD<sup>8</sup>; Nadia Facca, MHS<sup>9</sup>; Winne Seto, PharmD<sup>10</sup>; Jean-François Bussières, MSc<sup>11</sup>; Gary Wong, BScPhm<sup>1</sup>; Philip Lui, PharmD<sup>14</sup>; Sandra Porter, BScPhm<sup>1</sup>; Douglas Doucette, PharmD<sup>12</sup>; Clarence Chant, PharmD<sup>13</sup>; Bob Maclean, PharmD<sup>14</sup>; Olavo Fernandes, PharmD<sup>1,2</sup>

<sup>1</sup>University Health Network, Toronto, ON; <sup>2</sup>Leslie Dan Faculty of Pharmacy, University of Toronto, ON; <sup>3</sup>Nova Scotia Health Authority, Truro, NS; <sup>4</sup>Interior Health Authority, Kelowna, BC; <sup>5</sup>Victoria Island Health Authority, Victoria, BC; <sup>6</sup>Saskatchewan Health Authority, Saskatoon, SK; <sup>7</sup>St. Joseph's Health Care London, Condon, Condon

### Background

- Eight evidence-informed national consensus clinical pharmacy key performance indicators (cpKPIs) representing processes of care associated with an impact on meaningful patient outcomes have been established.
- Hospitals
   across
   Canada
   have
   begun
   measuring
   cpKPI data,
   however, a
   Canadian
   national
   registry
   does not

exist



### Objectives

#### **Primary Objective:**

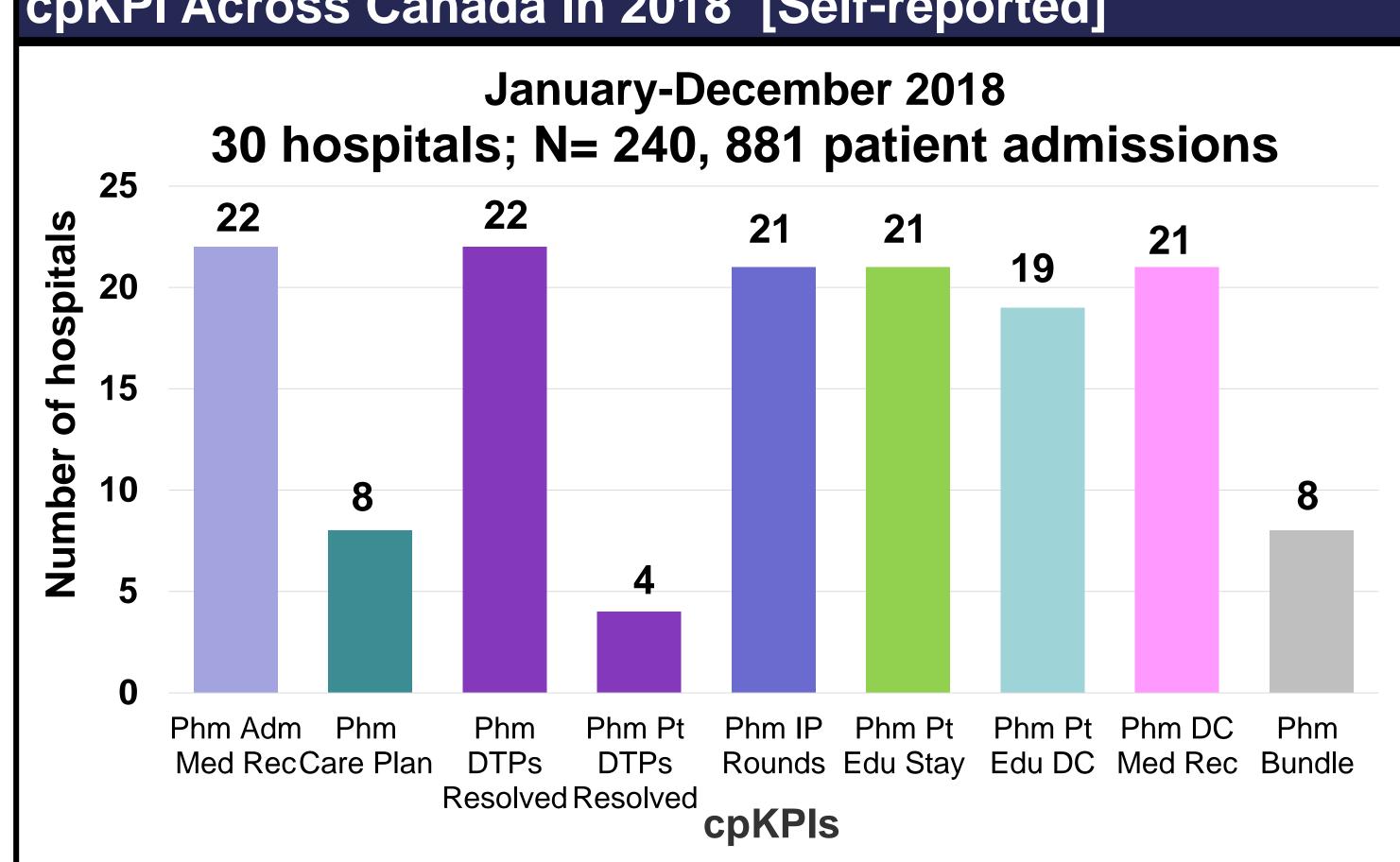
 To develop a national cpKPI patient registry and generate pooled national summary cpKPI reports to inform the advancement of pharmacy practice and improve patient outcomes.

### Methods

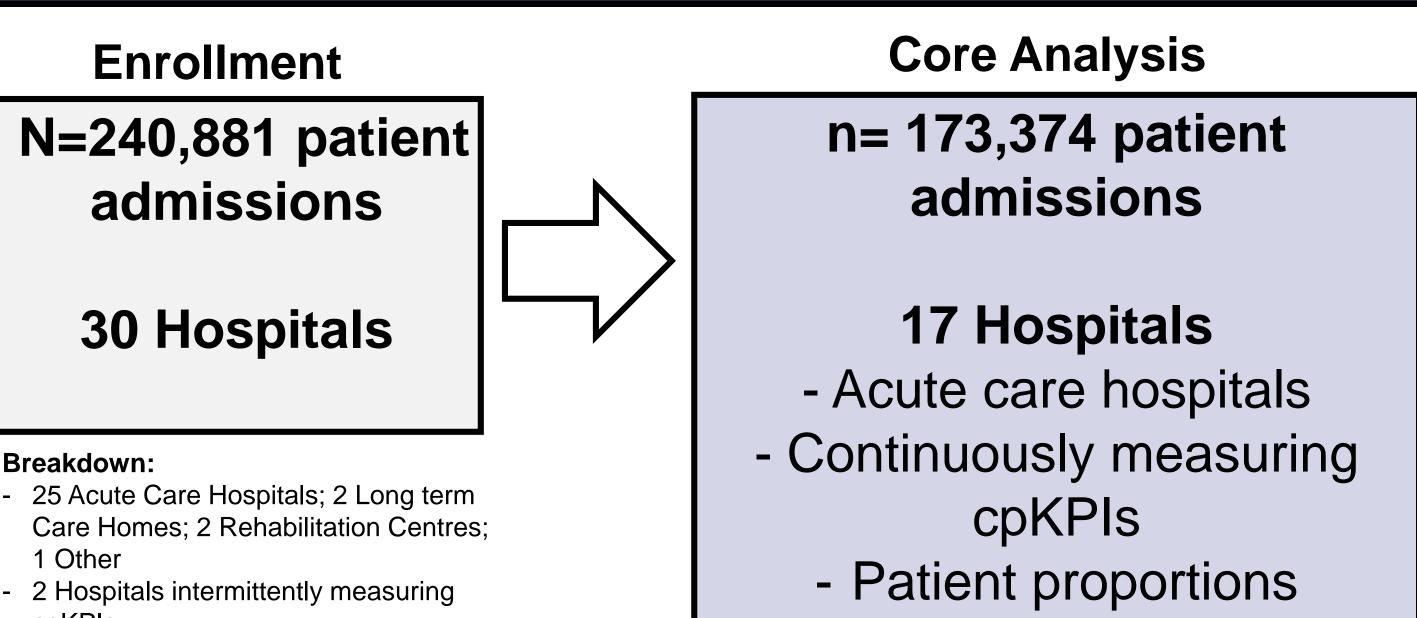
- Design: National, quality improvement, observational Patient registry
- Participant Selection:
- Volunteer Canadian hospitals from the National cpKPI Collaborative who have implemented cpKPI patient care processes
- Actively locally measuring and tracking at least one cpKPI on at least one inpatient clinical patient care area
- January-December 2018 timeframe



# Figure 2. Total Number Of Hospitals Measuring Each cpKPI Across Canada In 2018 [Self-reported]



# Figure 3. Patient Enrollment and Healthcare Organization Inclusion For National Registry



# Table 1. Patient And Healthcare Organizations Characteristics [Core Analysis]

Characteristics [Core Analysis]	
Total number of hospital	Pooled: 4081 beds
beds	Average (mean): 240 beds/ hospital
Total number of beds	Pooled: 3,800 beds
eligible to receive at least 1	Average (mean): 224 beds/ hospital
cpKPI during the time	
period submitted	
Proportion of beds eligible	93%
to receive at least 1 cpKPI	
Full-time equivalent (FTE)	<b>Pooled:</b> 227.2
pharmacists	Average (mean): 13.4/hospital
Total Number of Teaching	11 hospitals (65%)
hospitals- (%)	

#### Results

Figure 4. Pooled Proportion Of Patients Receiving Each cpKPI In Canada In 2018 [Core Analysis]

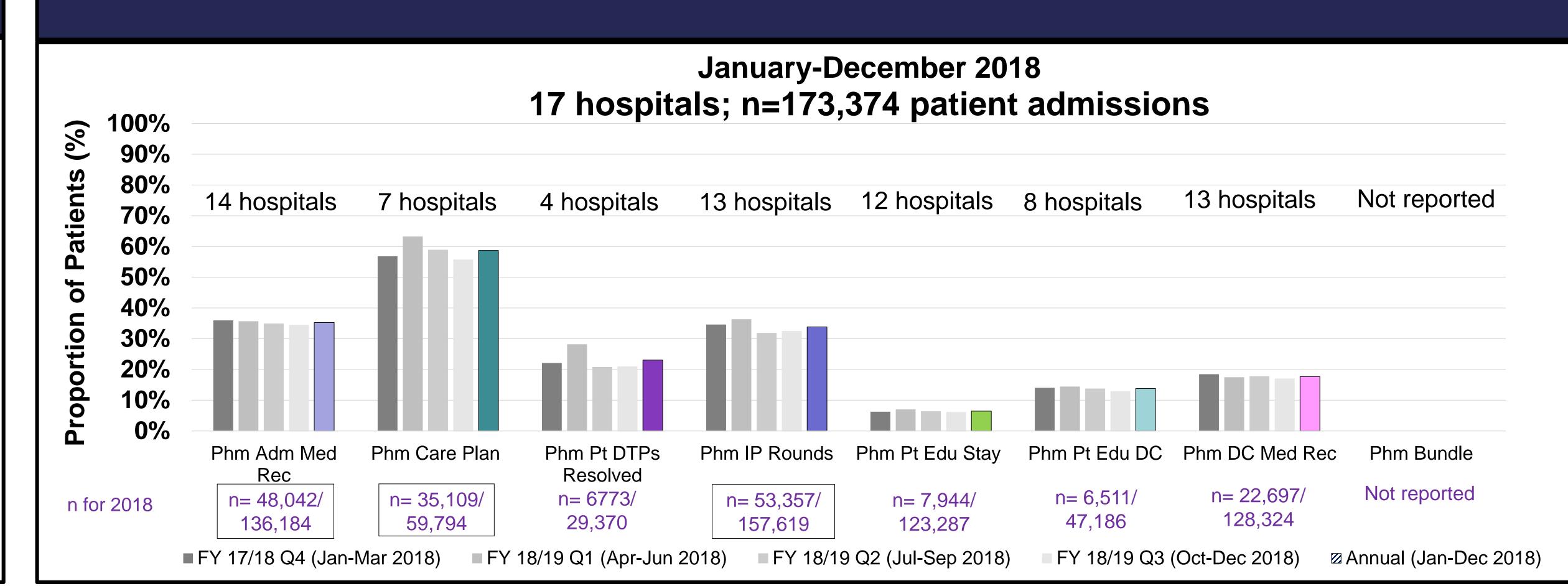
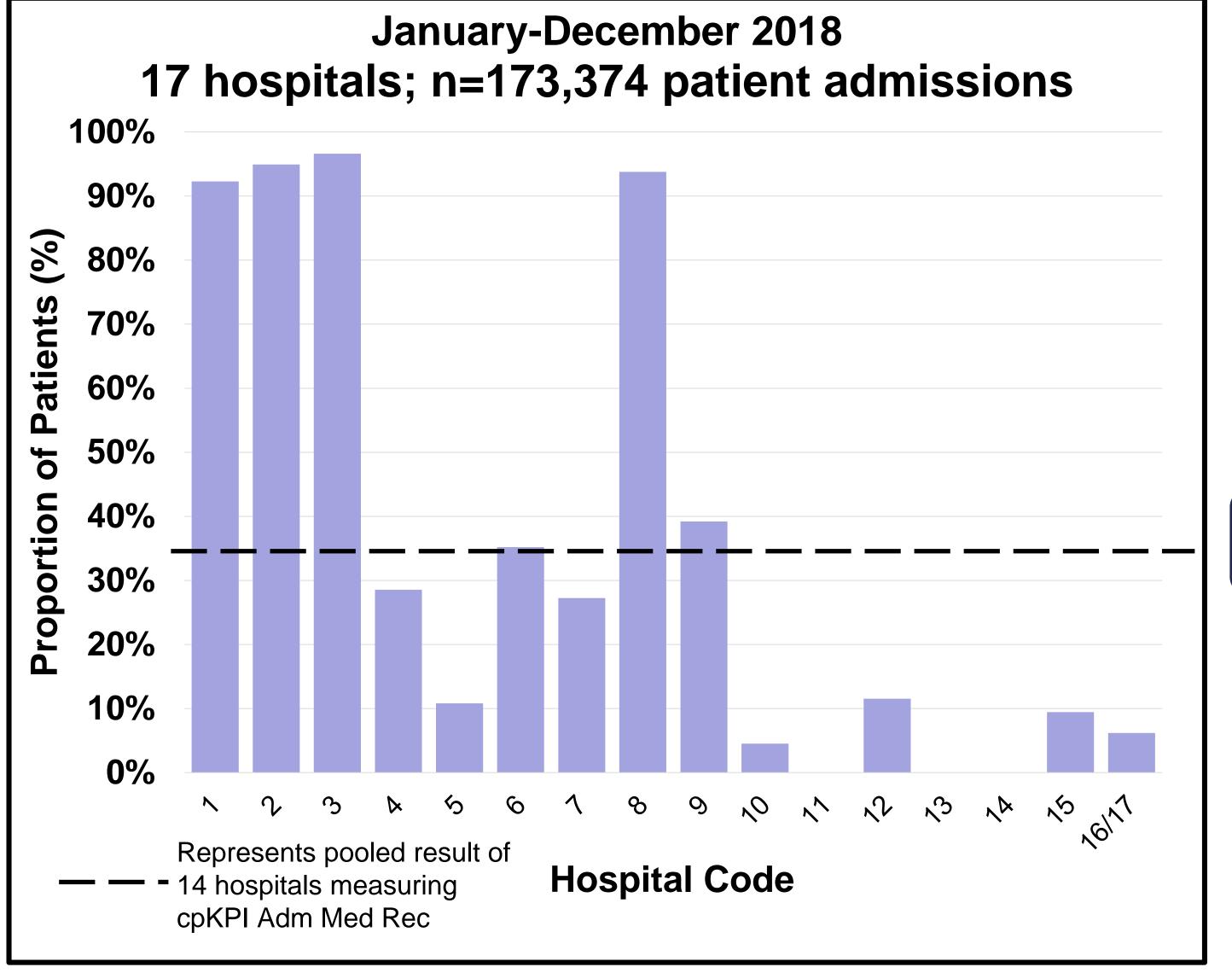


Figure 5. Admission Medication Reconciliation- Acute Care Hospital Comparison [Core Analysis]



- Total Number Of cpKPI Events [Core Analysis]
  - 180,433 patient cpKPI events in 2018
- Total Number of DTPs Resolved (Phm DTPs Resolved)
  - 66, 358 DTPs Resolved for 22 hospitals in 2018

#### Discussion

- Variability among the cpKPI practice profiles for each hospital
- Results may facilitate identification of strengths, care gap opportunities, and need to further refine cpKPI definitions
- Limitations: Self reporting by pharmacists (over/under-reporting)

#### Conclusions

- The first national registry for capturing cpKPI patient-level data in Canada was established.
- Findings may permit hospital cpKPI profile benchmarking and support national bestpractice sharing

## Acknowledgements

- Canadian National cpKPI Collaborative Members
- Students and local team members involved in various stages of the National cpKPI project
- Email correspondence to: olavo.fernandes@uhn.ca