

Reengineering The Discharge of Elderly Patients from Intensive Care



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THE CANADIAN SOCIETY
OF RESPIRATORY THERAPISTS





**No disclosures or
conflicts of interest**

Many acknowledgements



Objectives

1. Review transition of care from intensive care
2. Describe TVN funded cohort study
3. Solicit feedback & collaboration

Introduction

- Transitions of care are common & vulnerable periods in healthcare
- ICU discharge is high risk
 - Severely ill frail elderly patients
 - ↓resources
- The optimal structure & process for ICU discharge is unknown

Do We Have a Problem?

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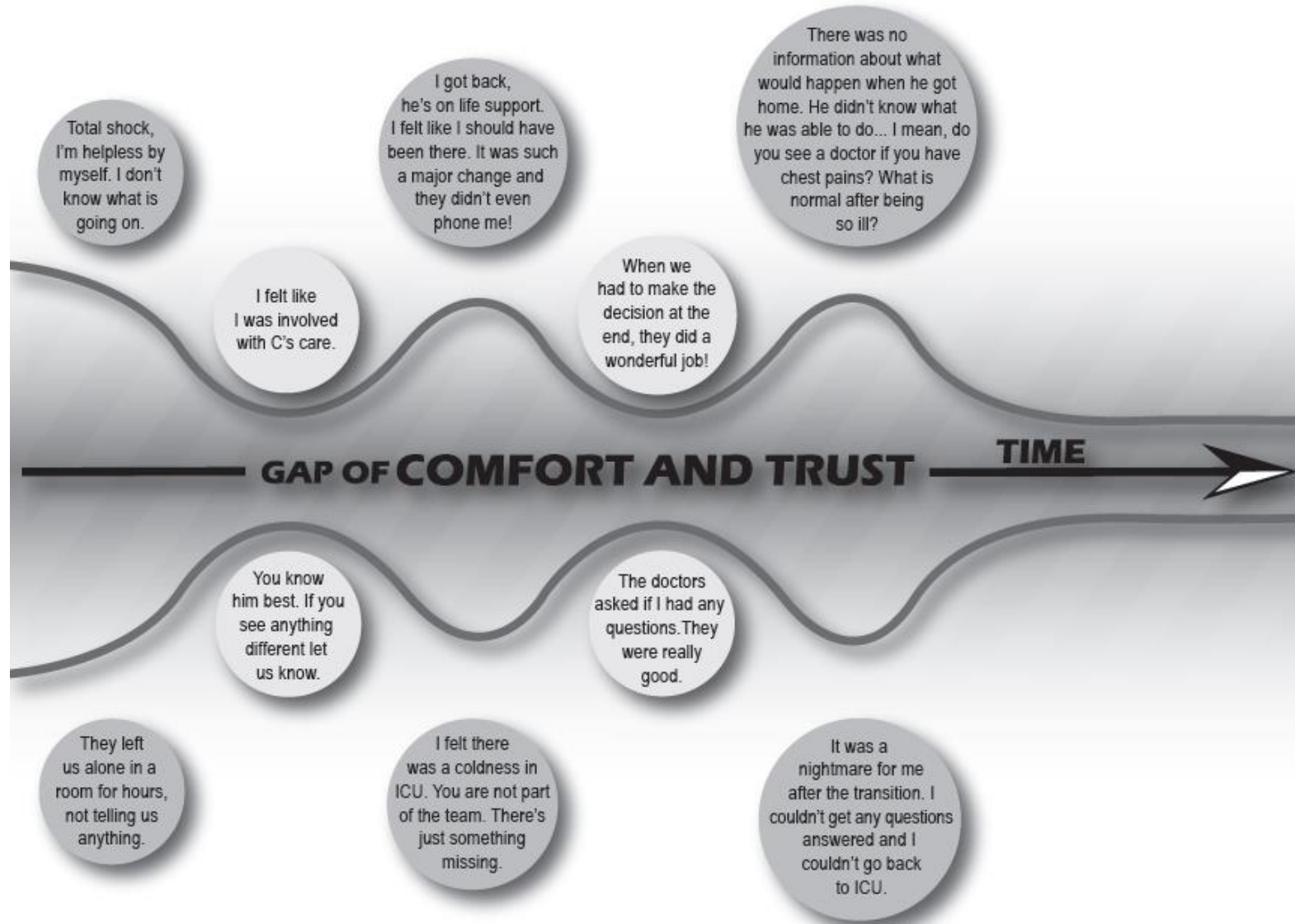
Patient & Community Engagement Researchers (PACER)

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Critical Care Journey

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Improve Transitions of Care

I'm trying to understand the picture of the future and the people in ICU had no idea about rehab. The ability of people to look down the chain would have been helpful.

Husband of surviving patient

Inform Patients about the Long-term Effects of Critical Illness

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I still get dizzy spells, memory loss. I forget the rest of the sentence I was going to say. I get time lapses, get chest pains and headaches. I'm not sure what is normal for what I have gone through.

Male patient

Stakeholder Priority

Provider/Decision-Maker

- Delirium screening
- Early mobilization
- Transitions of patient care
- End of life care
- Daily sedation interruption

Patient/Family

- Family navigator
- Fragility of trust
- Transitions of patient care
- Improve communication
- Long-term effects of illness

Well Documented in the Literature

A Scoping Review of Patient Discharge From Intensive Care

Opportunities and Tools to Improve Care

Henry T. Stelfox, MD, PhD; Dan Lane, MSc; Jamie M. Boyd, BA; Simon Taylor, BSc; Laure Perrier, MEd, MLIS; Sharon Straus, MD; David Zygun, MD; and Danny J. Zuege, MD, FCCP

- Scoping review - 224 studies
 - ICU readmission rate ~ 6% (1-15%)
 - Hospital death rate ~ 7% (1-23%)
 - 30 factors that impact quality of ICU discharge
 - 48 tools to facilitate ICU discharge

National & International Challenge

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Stakeholder views regarding patient discharge from intensive care: Suboptimal quality and opportunities for improvement

Pin Li MD MSc^{1,2*}, Jamie M Boyd BA^{3*}, William A Ghali MD MPH^{1,2,3}, Henry T Stelfox MD PhD^{1,2,3,4}

- Survey of 114 ICUs & 737 providers
 - Quality of ICU discharge rated as suboptimal
 - <1 in 5 Canadian ICUs use a tool/guideline
 - 9 in 10 ICU managers report need for a tool

Feasible to Observe & Measure

A Prospective Observational Study of Physician Handoff for Intensive-Care-Unit-to-Ward Patient Transfers

Pin Li, MD, MSc,^a Henry Thomas Stelfox, MD, PhD,^{b,c} William Amin Ghali, MD, MPH^{a,c}

- Pilot Observational Study (n=112 patients)
- Verbal communication between ICU & Ward physicians in 15-25% discharges
- 7 of 10 patients/families wanted more opportunity to speak with providers prior to discharge
- 1 in 10 patients experienced a transition error

Sample Impact – Province of Alberta

- ❑ >10,000 ICU discharges / year
- ❑ 1 in 2 patients communication failure
- ❑ 1 in 4 patients preventable medical error
- ❑ 10 adverse events per 1000 hospital days
- ❑ ~ 28 days in hospital post life support
- ❑ 5 readmissions to ICU per 100 patients
- ❑ 16 readmissions to hospital per 100 patients
- ❑ ~\$19,000 hospital costs per patient after ICU

How Do We Reengineer ICU Discharge?

- Step 1 - Cohort study to describe transition of patient care from ICU to hospital ward
 - Stakeholder experiences – patients, families, providers
 - Communication practices
 - Tools used
 - Adverse events
 - Opportunities for improvement

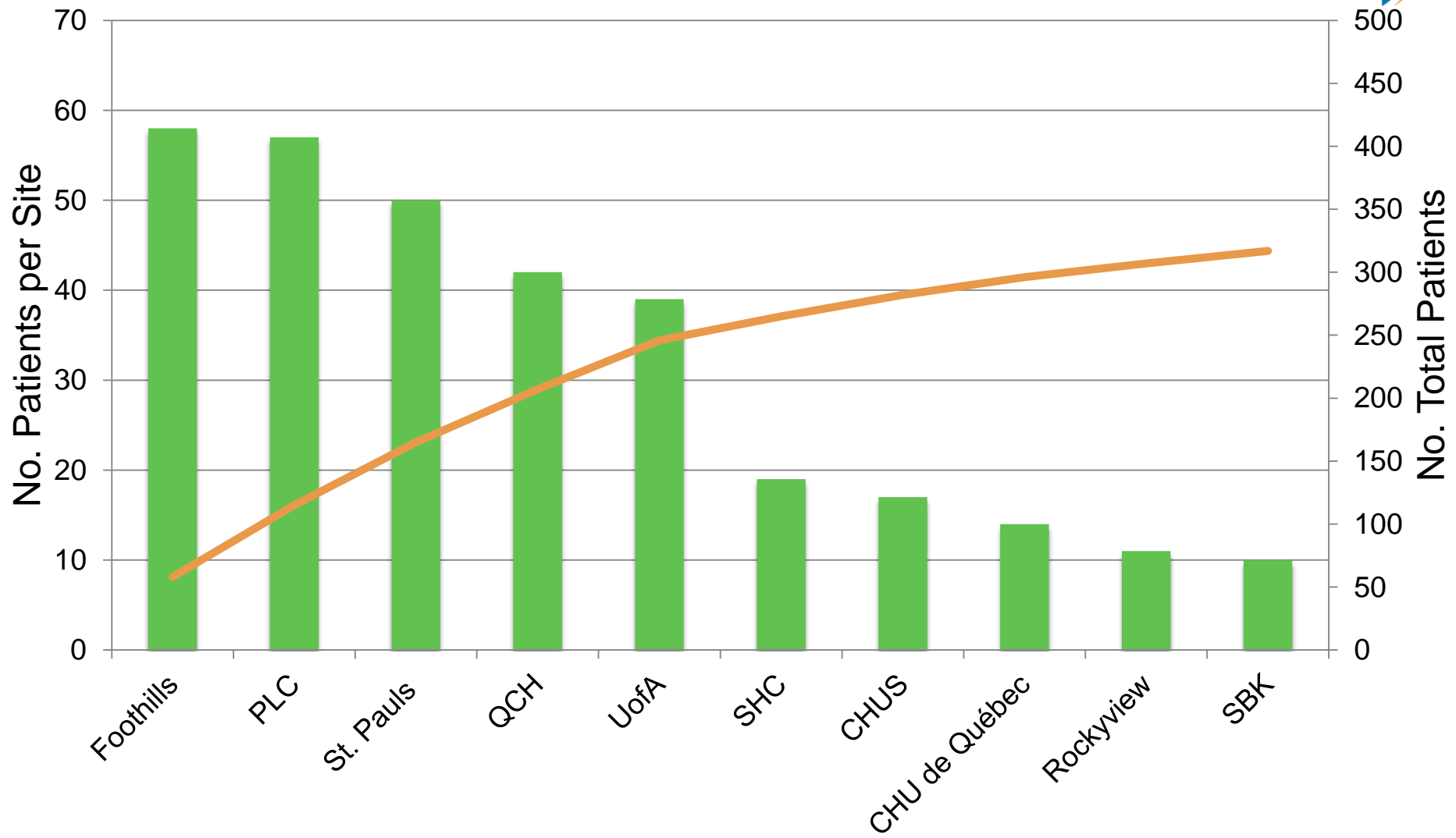
- Step 2 – Develop an evidence-informed ICU discharge tool kit

Cohort Study

- 500 patients discharged from 10 ICUs spanning 7 cities & 4 provinces
- Surveys & interviews of patients, families, physicians & nurses (ICU/ward)
- Textual analysis of written communication
- Describe adverse events

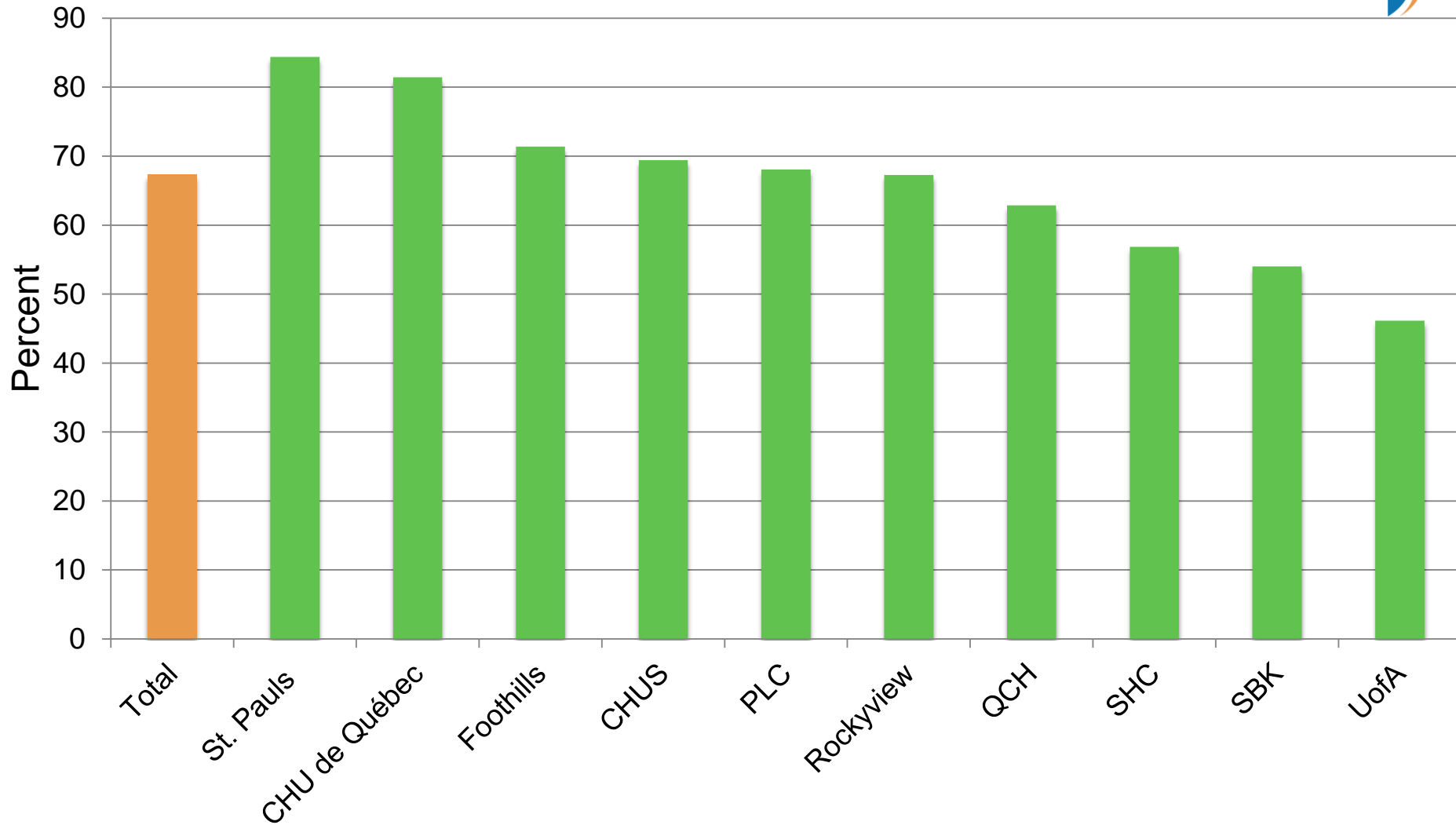
Recruitment

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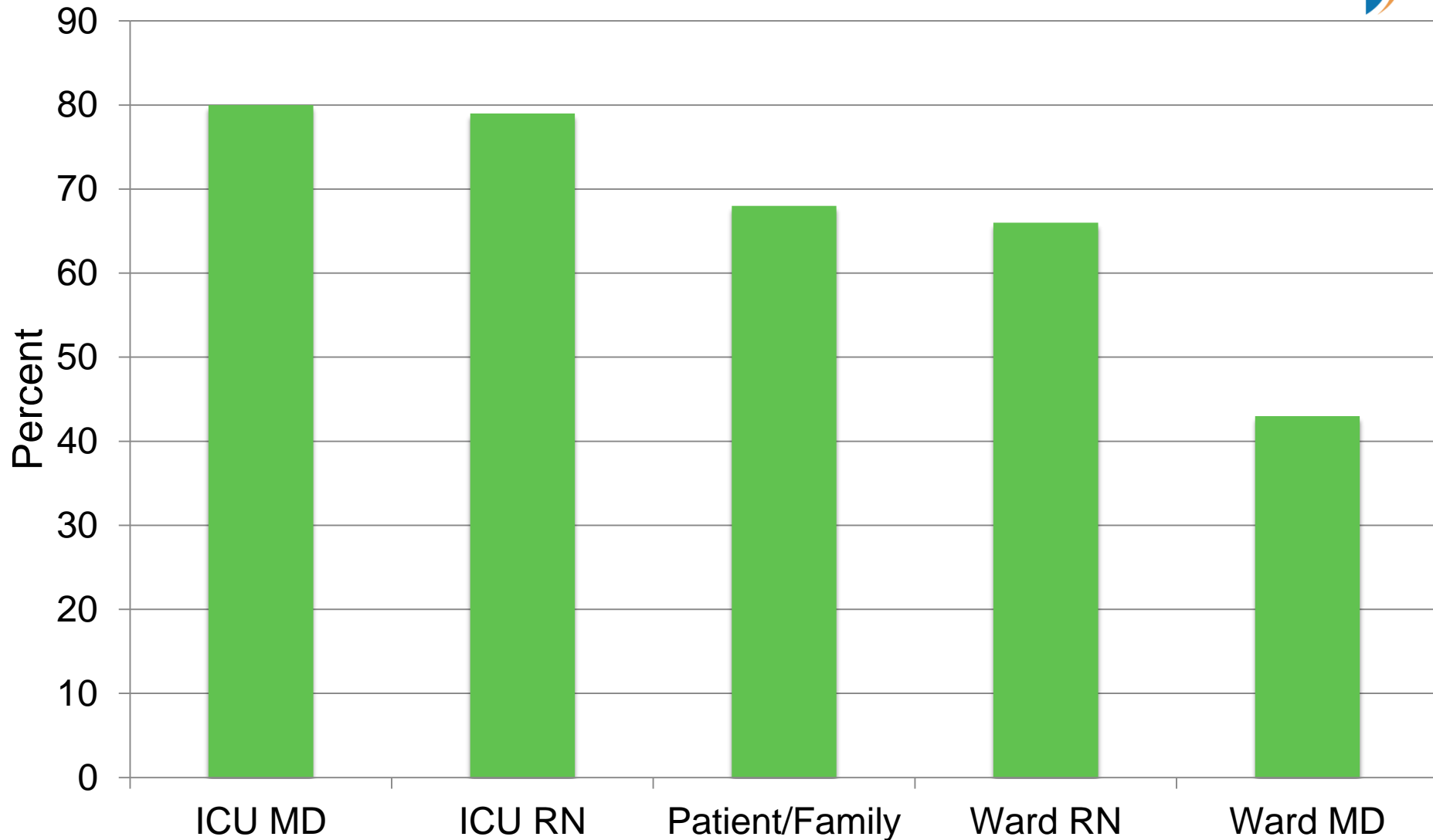
Survey Responses by Site

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Survey Responses by Stakeholder

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Next Steps I

- Strategy to increase survey response
- Complete recruitment – 183 more patients
- Interviews & qualitative analyses
- Textual analysis
- Adverse event evaluation

Next Steps II

- Build evidence-informed ICU discharge tool kit
 - TVN funded

- Conduct heuristic & pre-clinical evaluation
 - TVN catalyst application

- Clinical implementation & evaluation
 - Critical Care Strategic Clinical Network
 - AIHS Partnerships for Health System Improvement application

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Thank You

