
Respiratory Health Strategic Clinical Network

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Respiratory Health SCN (RHSCN)

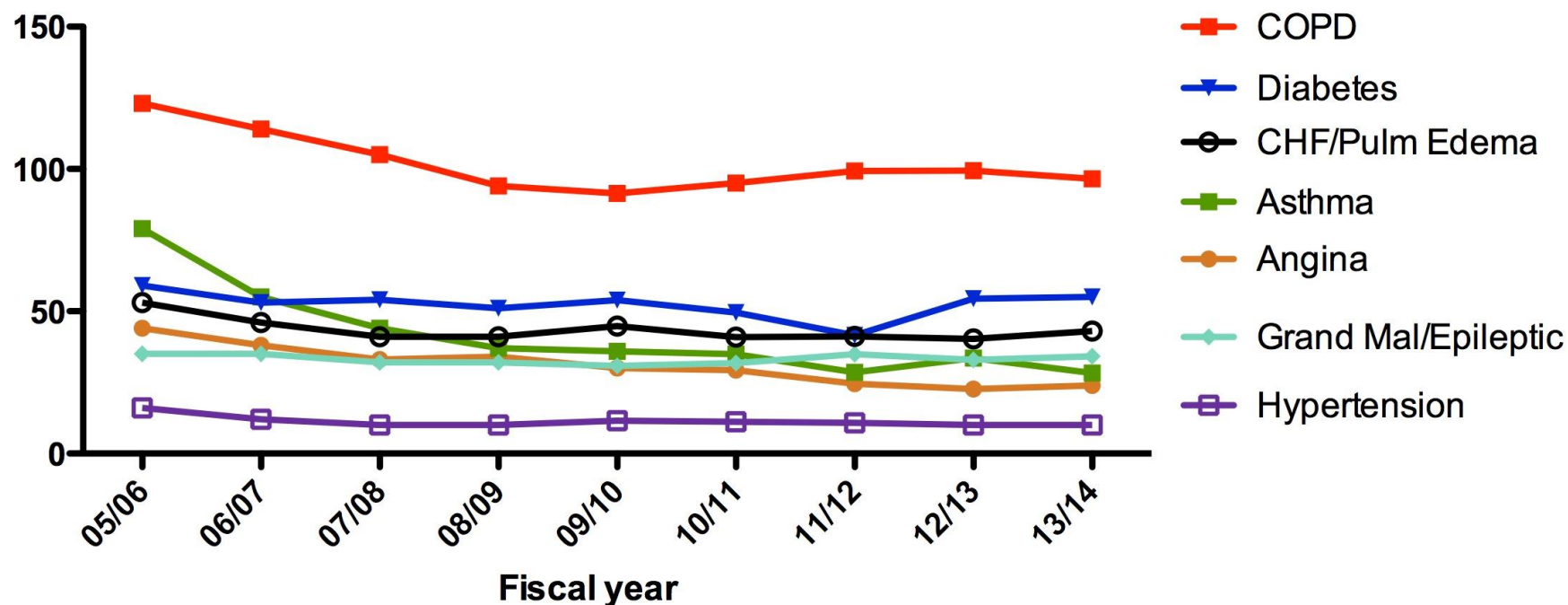
- Launched on January 16th 2014; www.albertahealthservices.ca/scn
- **Mission:** To facilitate optimal respiratory health through implementation of innovative, patient-centered, evidence-informed and coordinated services.
- 43 Core Committee members from across disciplines and zones; oversight for 4 Working Groups = over 100 sitting (voting) members.
- Working Groups:
 - Childhood Asthma
 - Adult Asthma
 - Sleep Disorders
 - COPD

13 SCN Functions - highlights

1. Engine for **innovative** service delivery
2. Develop and evaluate **evidence-based** care models
3. Improve evidence-based **value for money**
4. Assist with service development to support **quality and sustainability**
5. Generate new knowledge and apply **knowledge translation** skills to help solve emerging clinical problems

Ambulatory Care Sensitive Conditions in Alberta

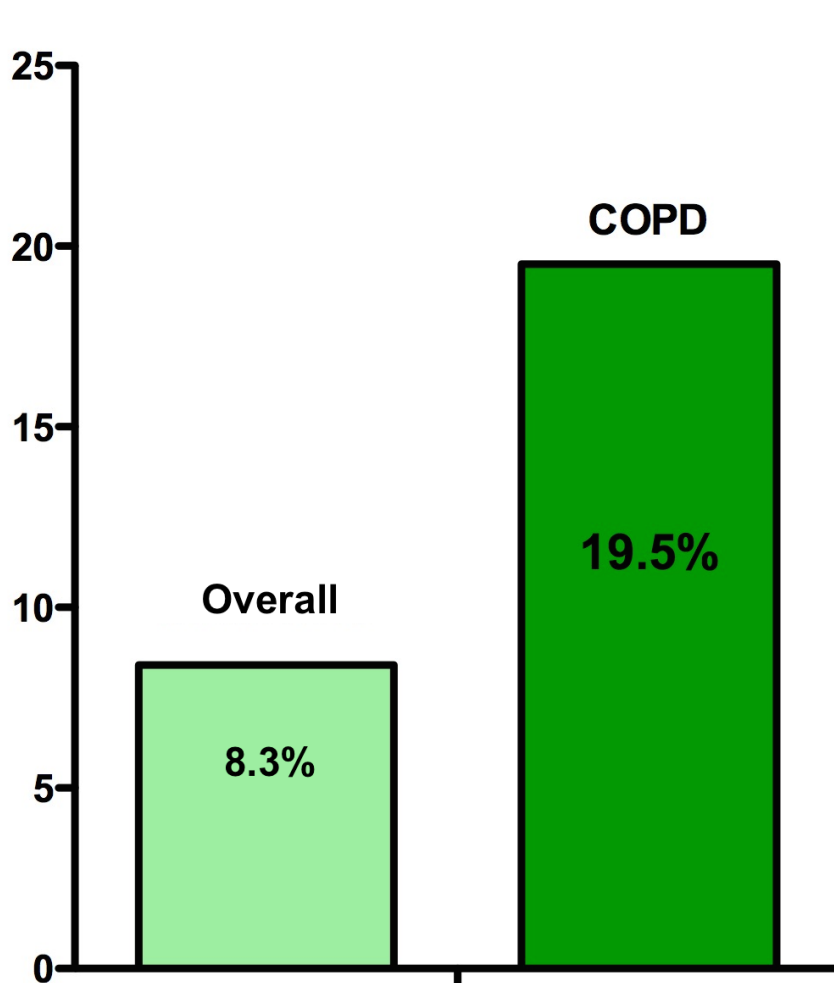
Age-standardized Hospitalization Rates/100,000 for ACSS in Alberta



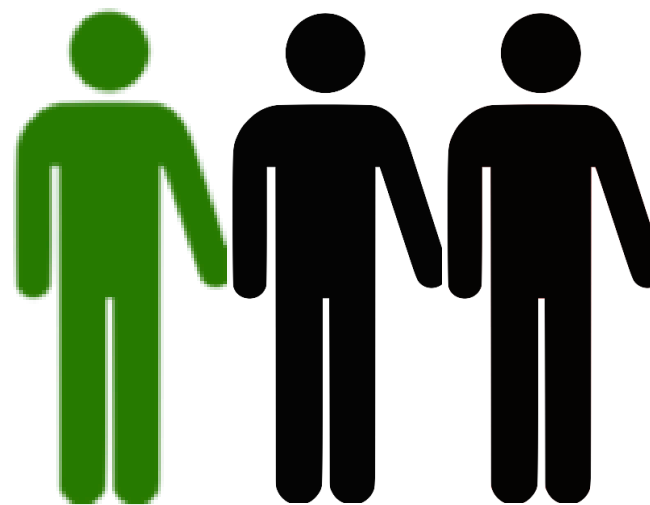
Nationally COPD top reasons for inpatient beds in GIM

30-day Hospital Readmissions & ED Revisits

30-day hospital readmission rates
in AB



EMERGENCY



One in three COPD patients will
revisit the ED within 30 days in
Alberta

COPD Projects

1. COPD Admission Order Set Pilot
2. Develop and Assess the Effectiveness of a Post-Discharge Bundle for COPD

COPD Order Set Pilot

- ▶ Electronic Order Set adapted based on COPD Guidelines (Provincial & site leaders)

- ▶ Site engagement & Education

- ▶ **Phase 1 (April 1, 2013 – July 15, 2013):**
 - ▶ Respiratory & General Internal Medicine (including GIM team, GIM Medical Teaching Unit)
- ▶ **Phase 2 (July 16, 2013 – March 31, 2014):**
 - ▶ Hospitalists

COPD Order Set Pilot

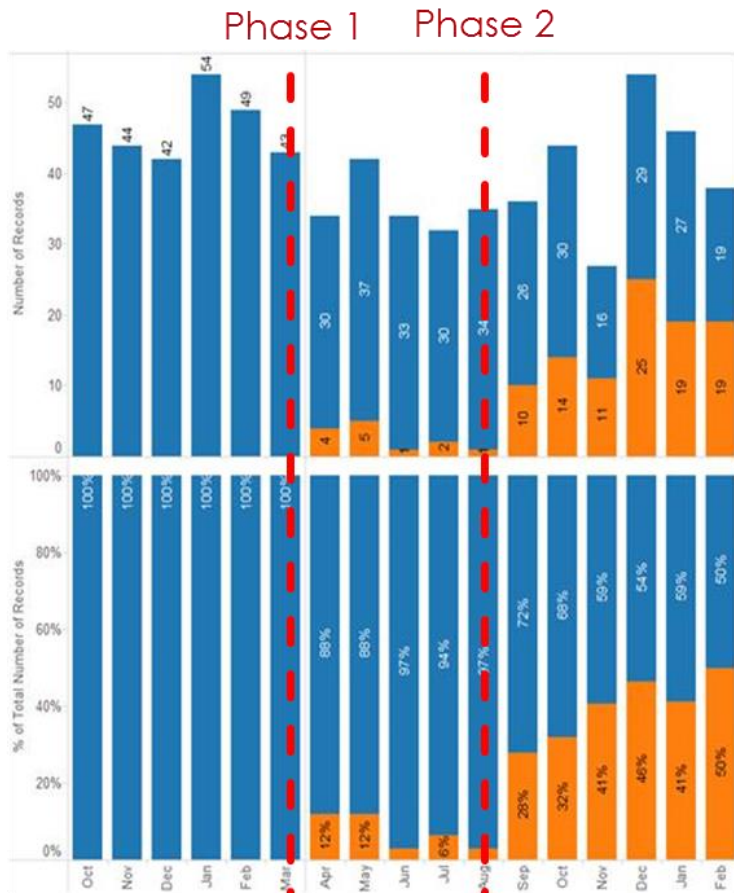
Primary Outcomes:

- 1) Length of Stay:
 - a) Length of stay
- 2) Re-Admission:
 - a) 7 & 30 day readmission

Secondary Outcomes:

- 1) Clinical Uptake of Order Set
- 2) Per-protocol Analysis Relative to Primary Outcomes on:
 - a)Corticosteroid use
 - b)Antibiotic use
 - c)Time to OT/PT referral/ Assessment

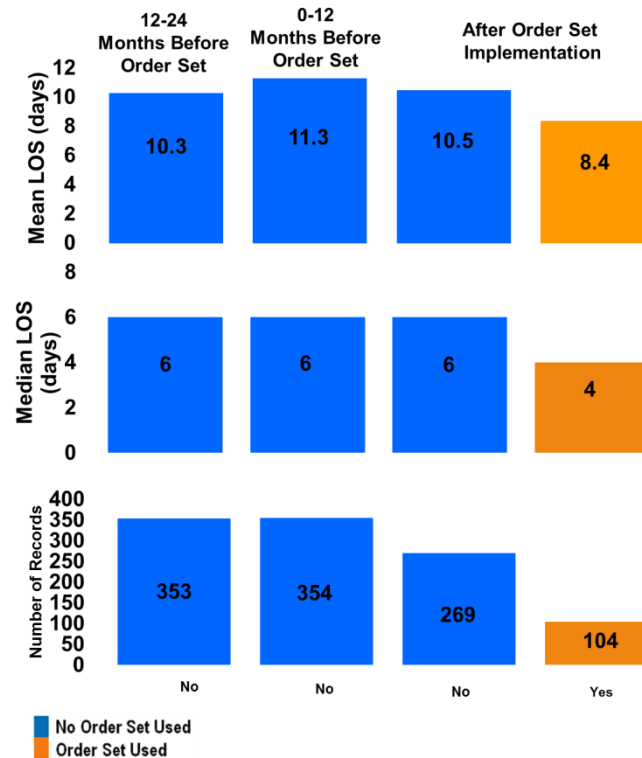
Uptake



Phase 1:
Respirology & Gen Intern Med

Phase 2:
Respirology

Length of Stay



- Significant reduction in mean & median LOS
- No increase in re-hospitalization rate or mortality

Effectiveness of an evidence-based COPD discharge bundle

Aim 1:

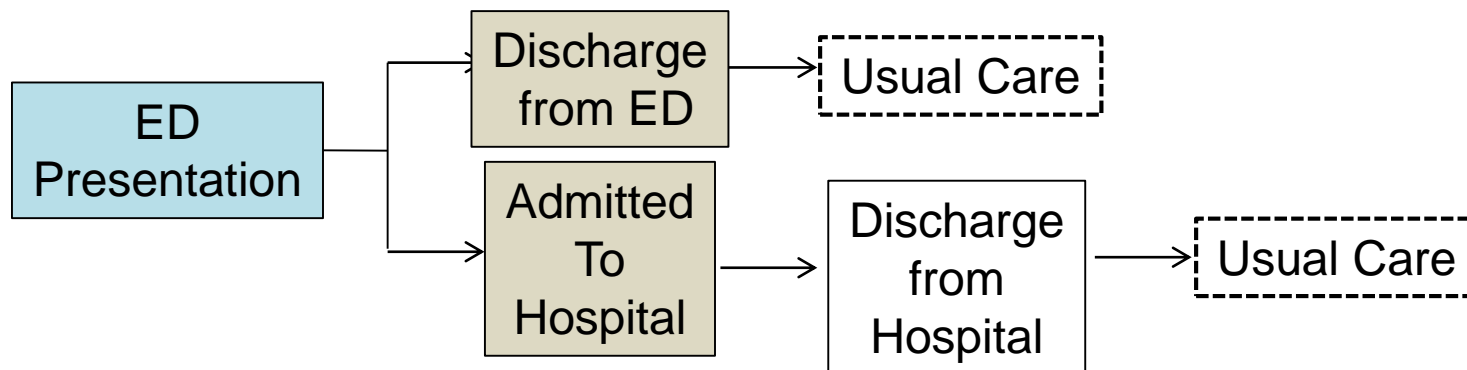
- 1 Adaptation of an evidence-based COPD post-discharge bundle
- 2 Evaluation of care gaps, barriers and facilitators for the adoption of the bundle
- 3 Development of the final version of the bundle and checklists (w/ CTC COPD Clinical Assembly)

Aim 2:

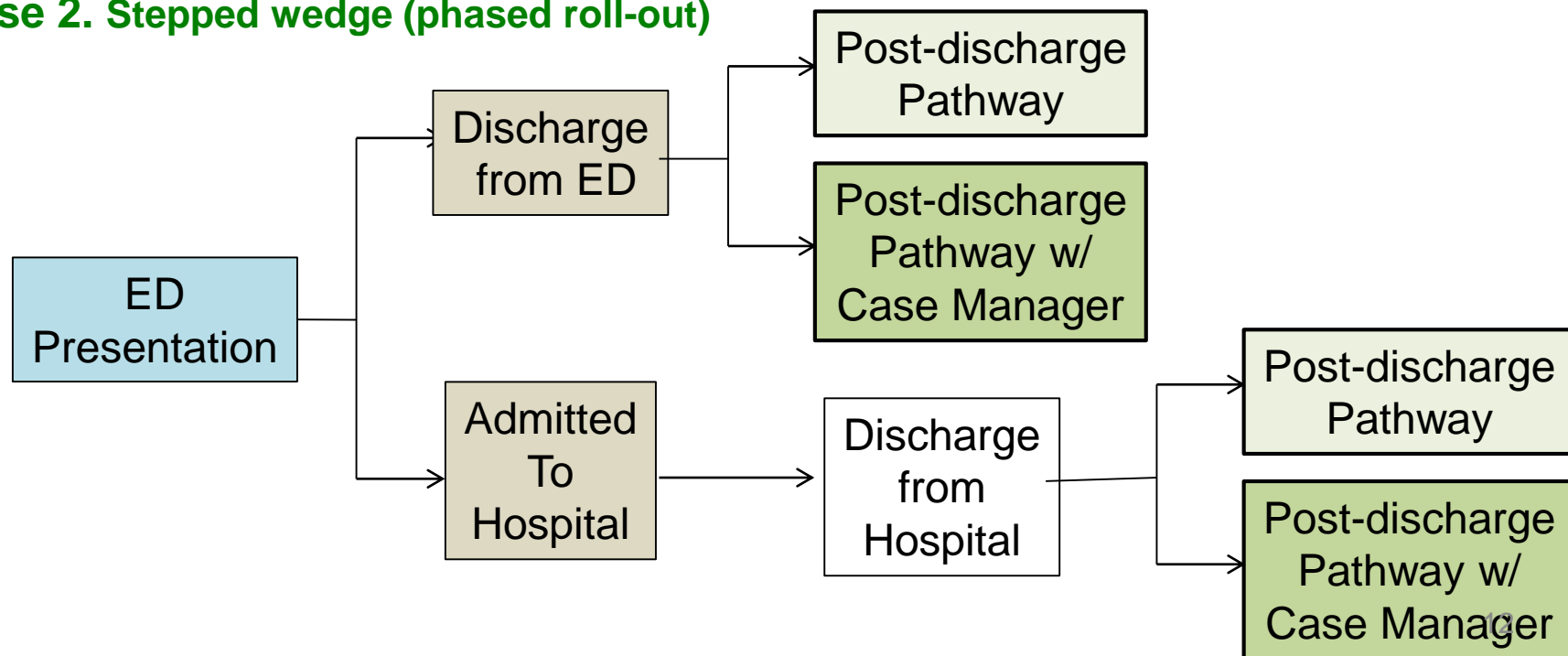
- 4 Implementation and evaluation of the bundle (Spring 2016, 5 Alberta sites)

Effectiveness of an evidence-based COPD discharge bundle

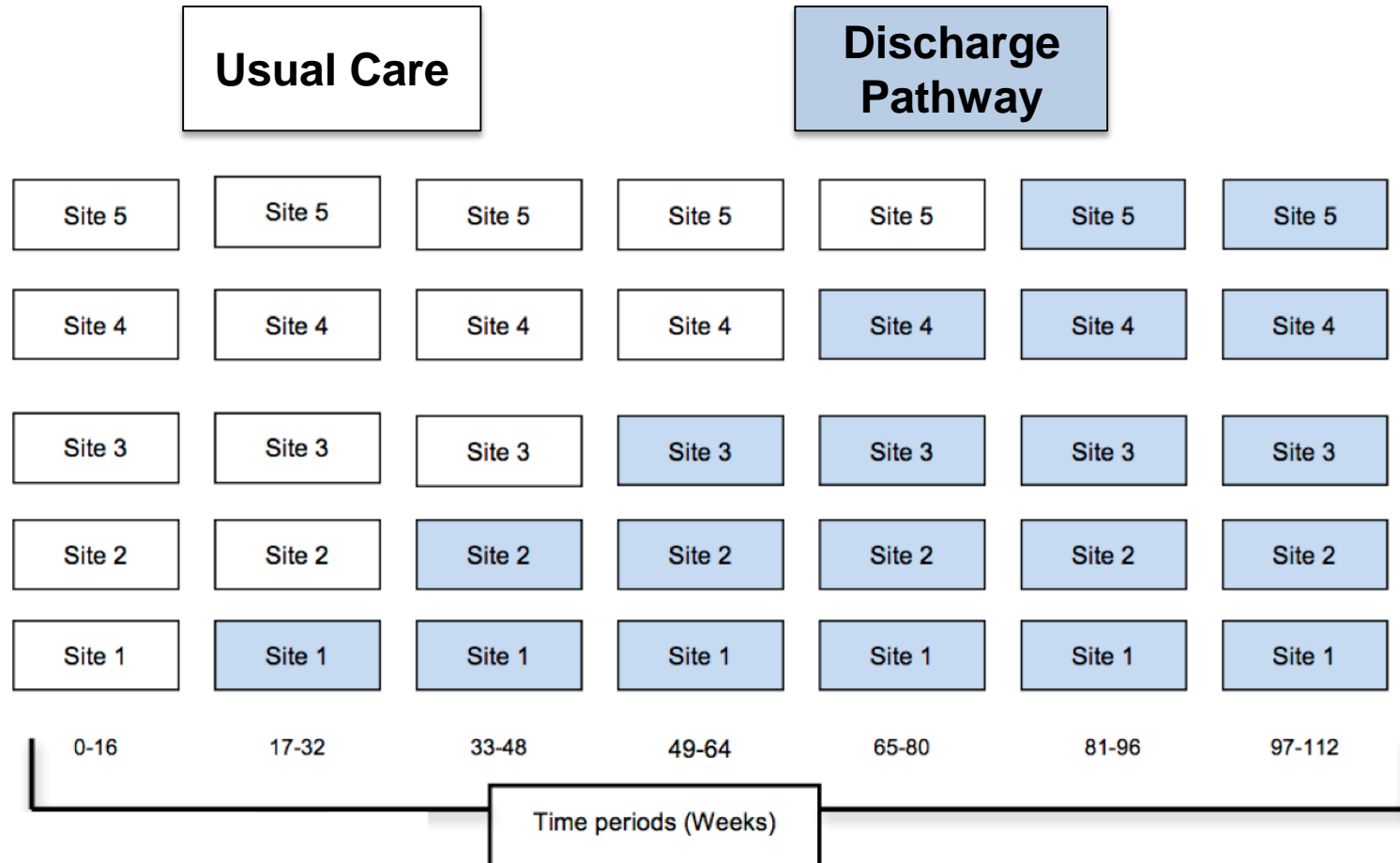
Phase 1. Usual Care



Phase 2. Stepped wedge (phased roll-out)

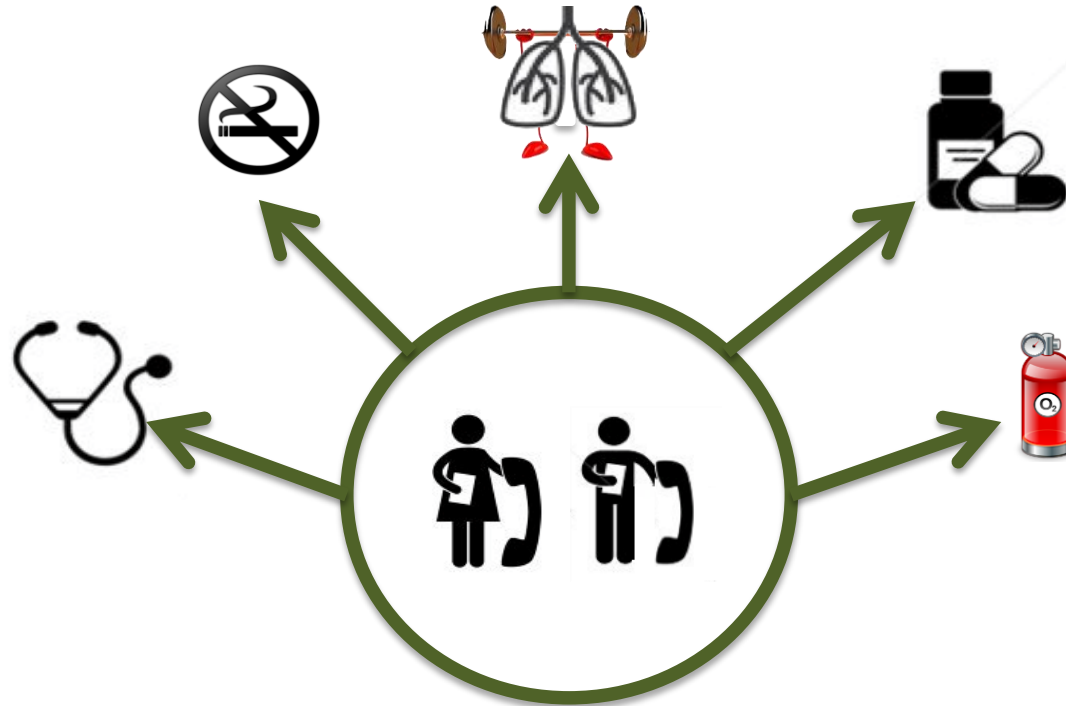


Stepped Wedge Design



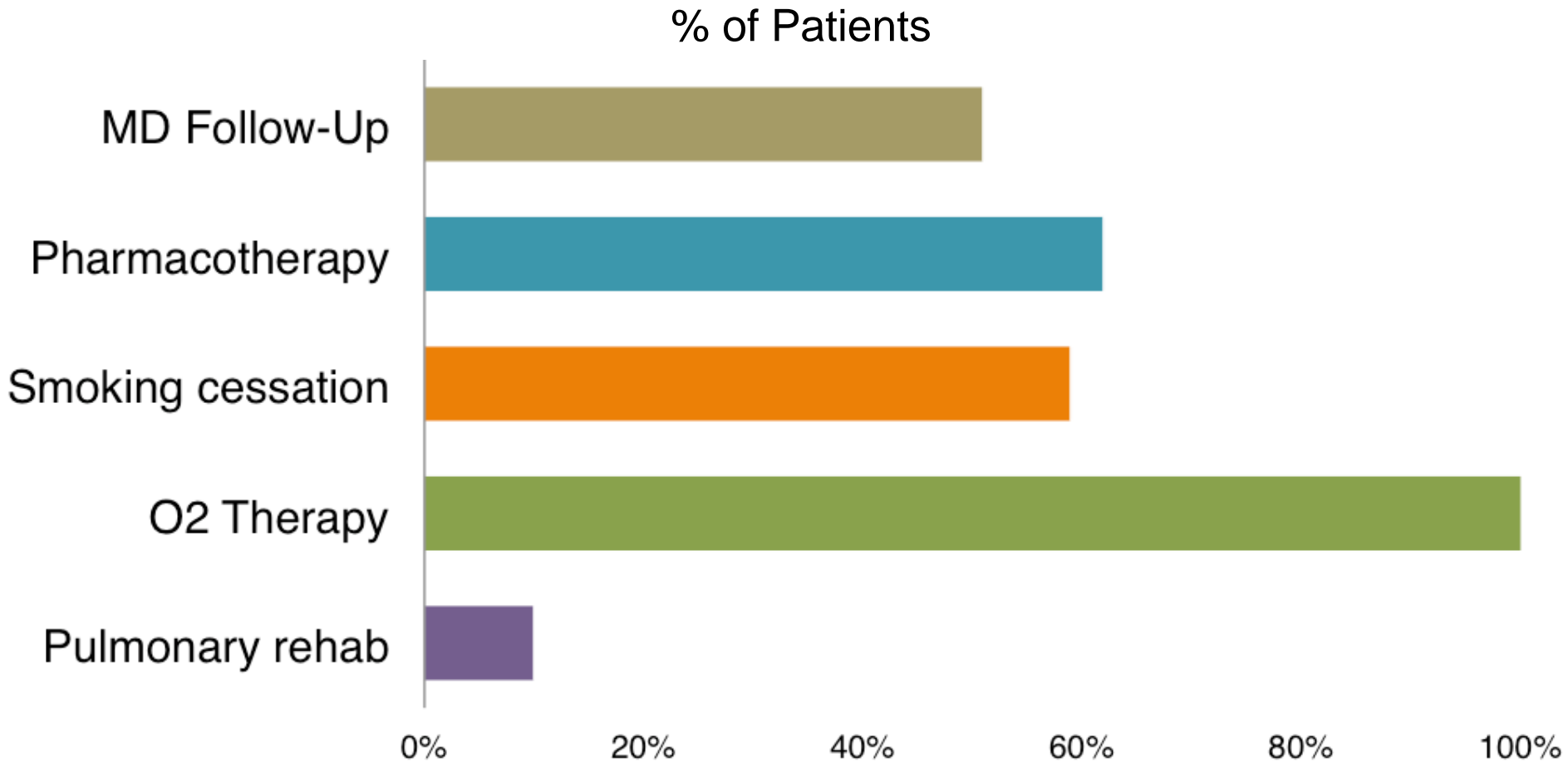
Study sites: Foothills Rockyview, U of A, Royal Alexandra and Red Deer

Case Manager (Care Navigator)



- ❖ Each Patient: 3 phone calls (1hr each)
- ❖ 1384 pts in Case Manager Arm over 2.3 yrs
- ❖ 250 pts / year per Case Manager (0.3 FTE)

Adherence to Clinical Practice Guidelines

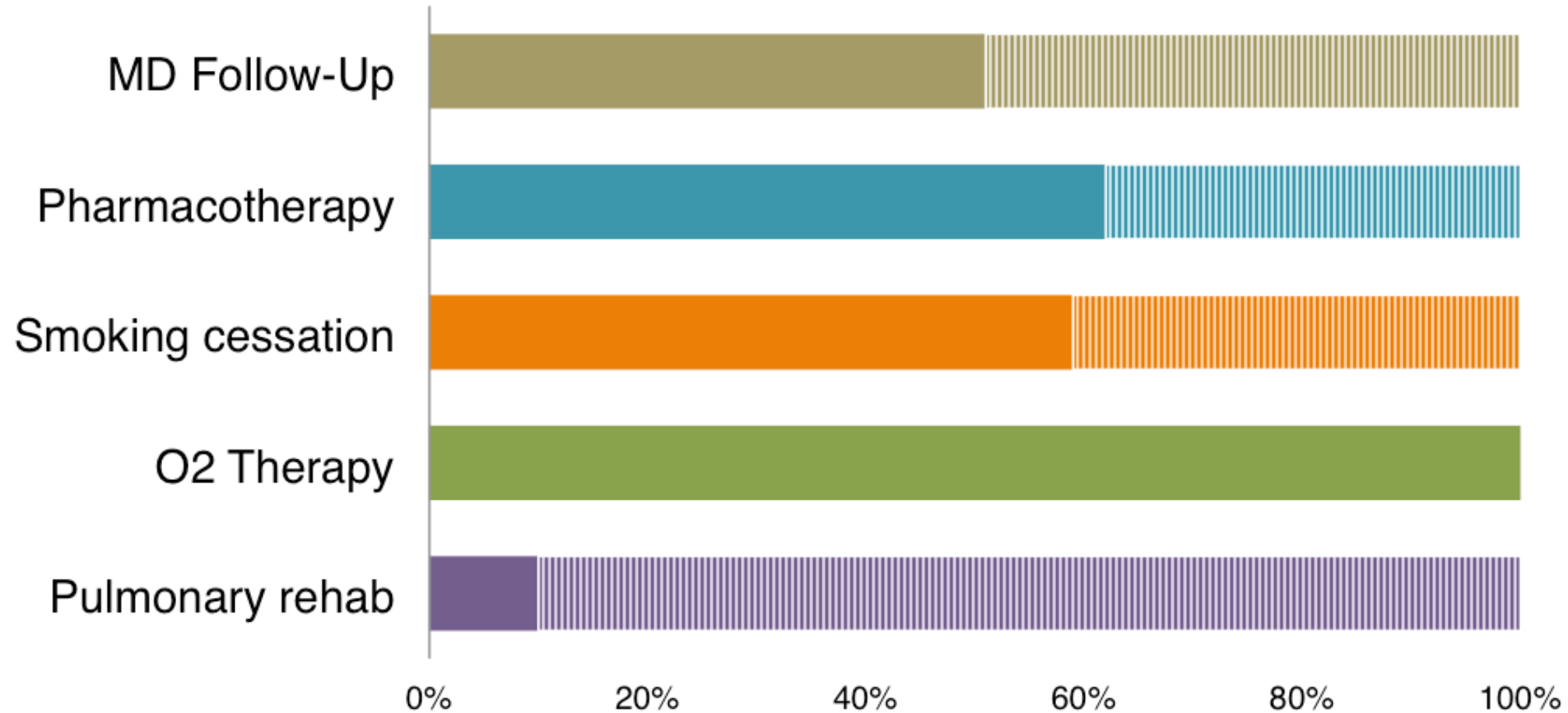


Bourbeau et al, 2008

Leung & Bhutani, 2010

Following COPD Discharge Bundle

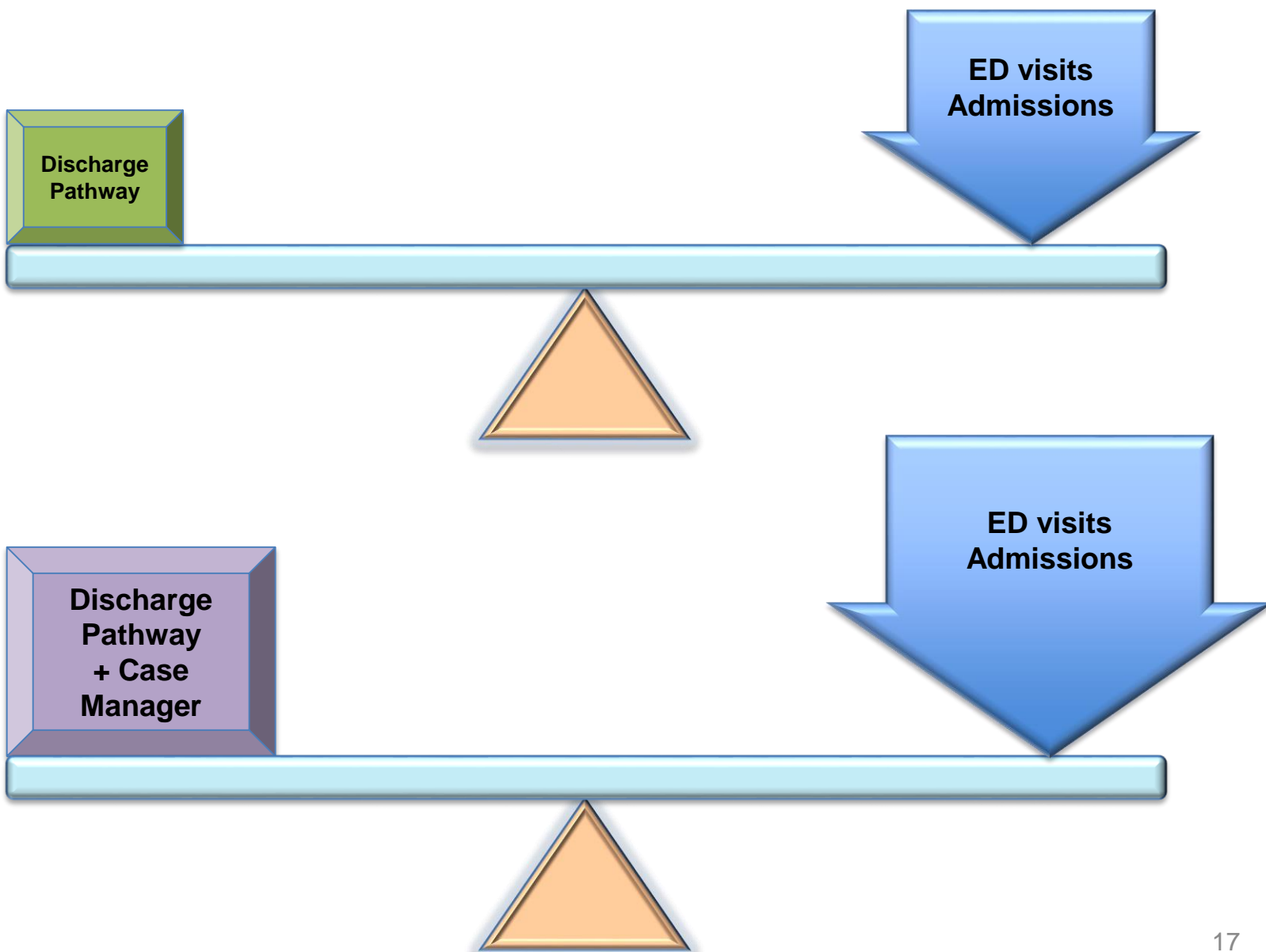
% of Patients



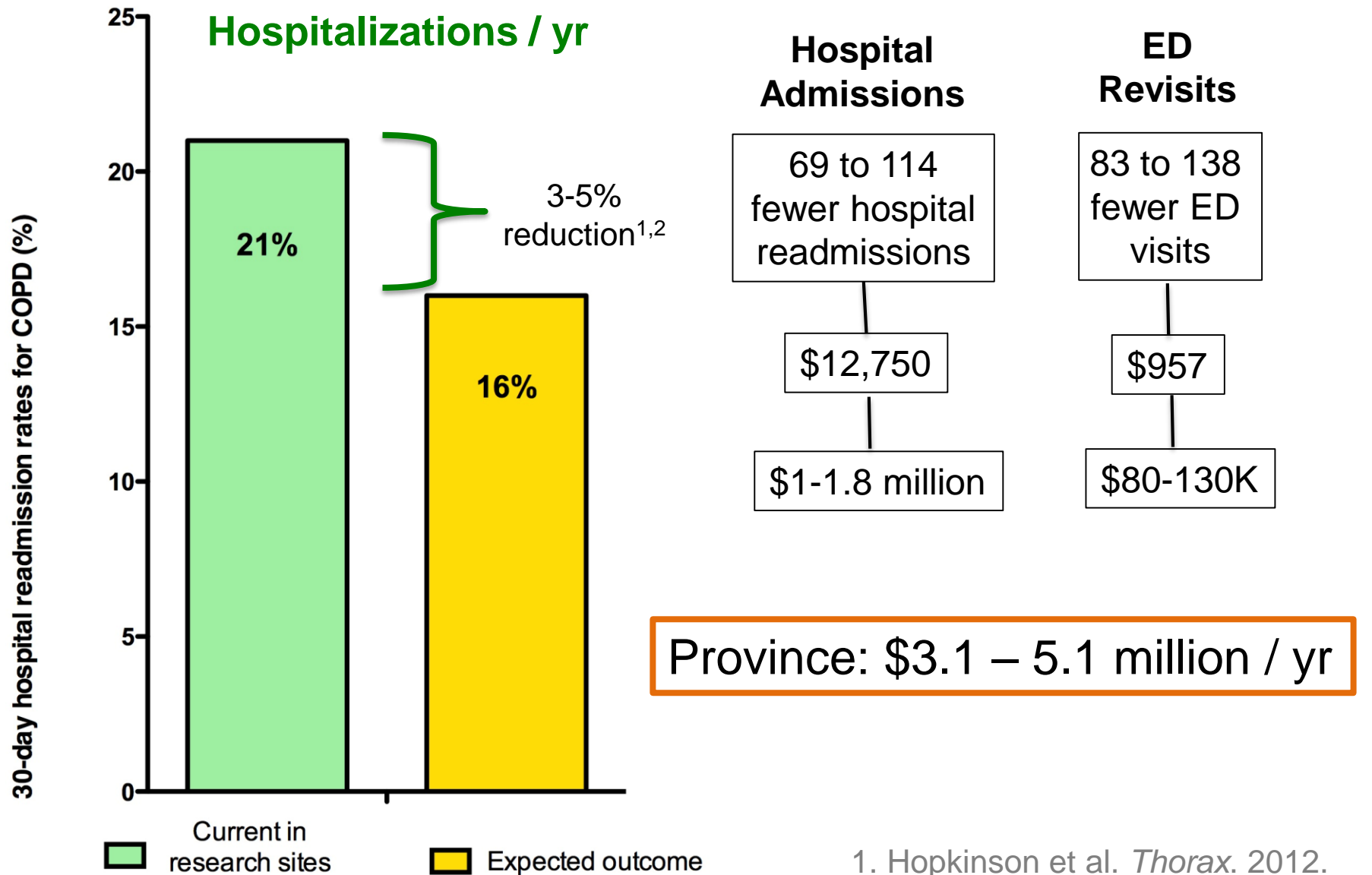
Bourbeau et al, 2008

Leung & Bhutani, 2010

Value for Money – Discharge Bundle \pm Case Manager/Navigator



Expected Impact of COPD Discharge Bundle



1. Hopkinson et al. *Thorax*. 2012.
2. Matthews et al. *Nurs Times*. 2013.