

Characteristics and Healthcare Use of COPD Patients Across Multiple Sectors of Care in Alberta

CAHSPR

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Objectives

- Introduce the project
- Share preliminary results
- Discuss limitations and next steps

Project Goals

1

Leverage newly developed *High Users of Hospital Beds Indicator & physician claims data*



2

Link data across multiple health sectors



3

Analyze health data in priority area while considering regional context



4

Highlight promising or priority interventions that improve treatment and care for COPD patients



Collaboration



Respiratory Health Strategic Clinical Network



Project Questions:

1. What are the (i) patient characteristics and (ii) health care use patterns of people with COPD in Alberta?
2. What are the differences by health zone?

Methodology

High Users of Hospital Beds

- COPD diagnosis code in 2 years (DAD, FY2012, FY2013)
- 3+ hospitalizations in a 1-year period and cumulative LOS >30 days

Non-High Users of Hospital Beds

- COPD diagnosis code in 2 years (DAD, FY2012, FY2013)
- At least one hospitalization but does not meet criteria of high user

COPD Patient Groups

Emergency Dept. Users

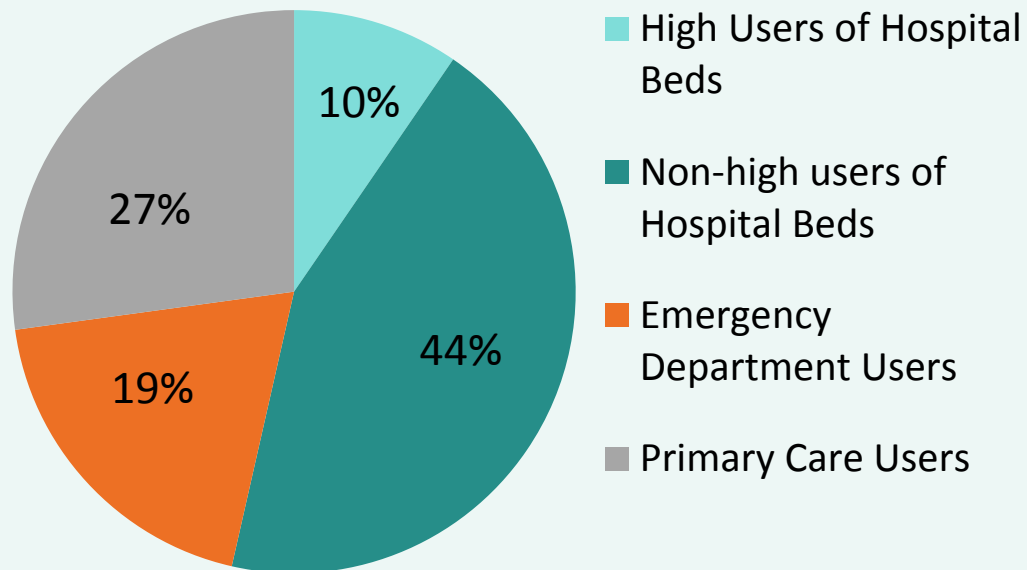
- COPD diagnosis code in 2 years (NACRS, FY2012, FY2013)
- No hospital stay in the past year

Primary Care Users

- 2 claims with COPD diagnosis code in 2 years (Physician claims data FY2011-FY2012)
- No hospital stay or ED visit in the past year

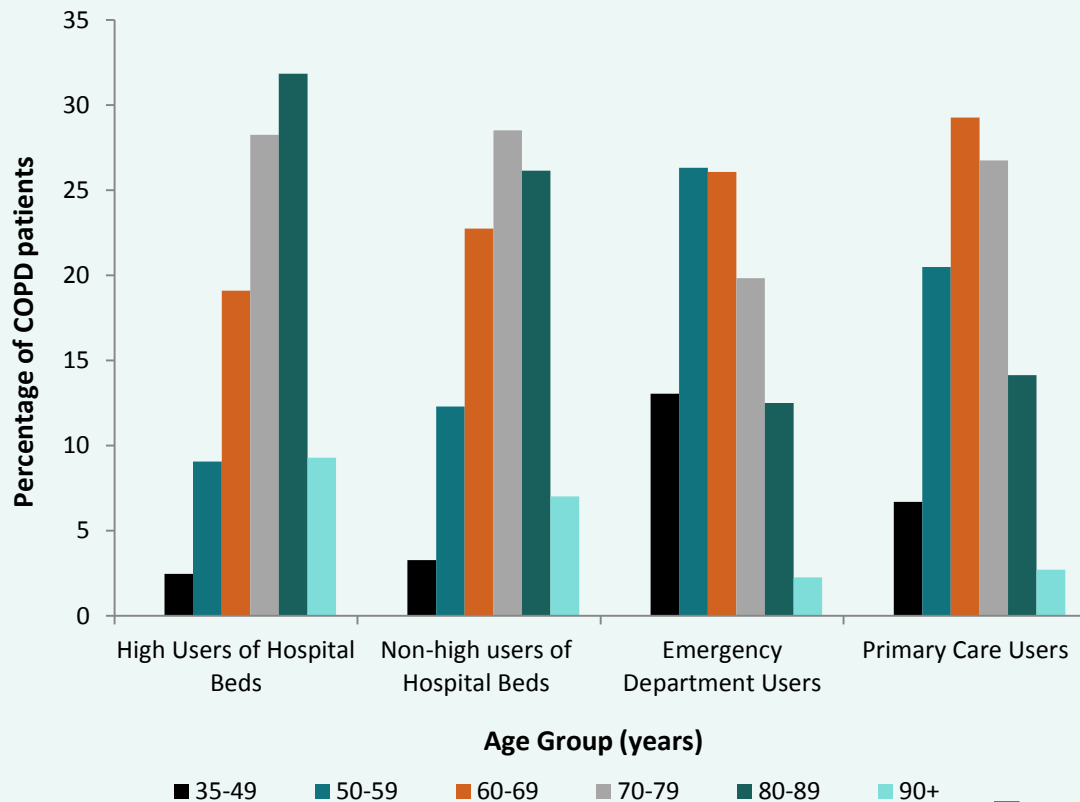
Preliminary Results – COPD Groups

- 1 in 10 COPD patients is a high user and over half of COPD health care users are hospitalized

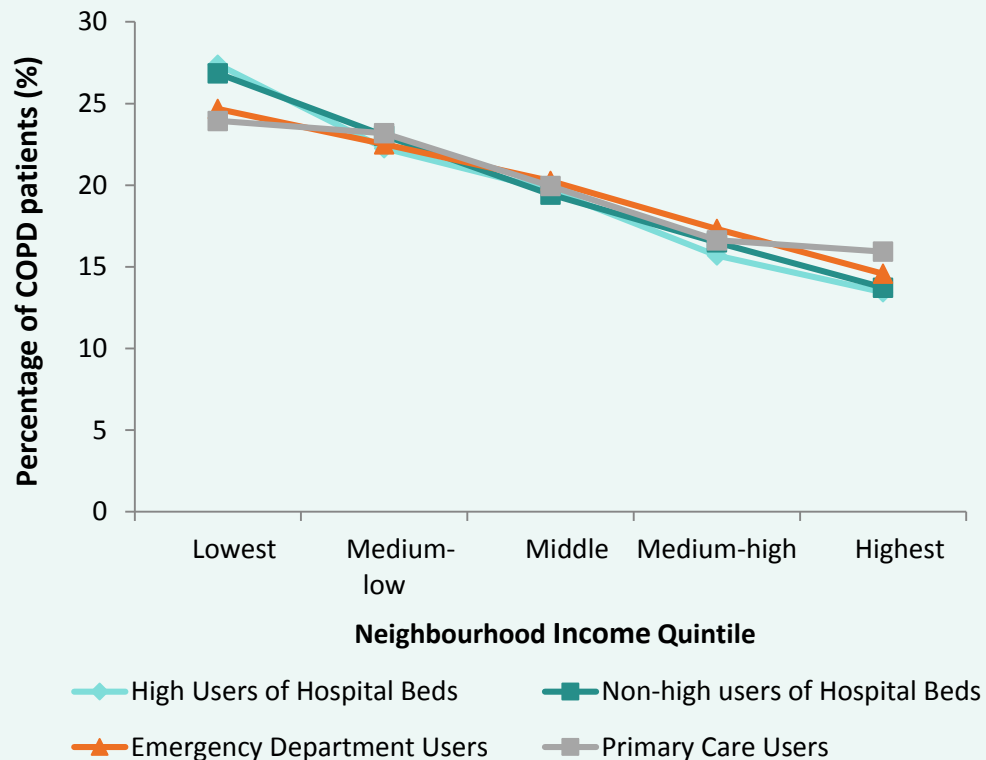


Preliminary Results - Age

- High users of hospital beds are older (avg. age 75 years)
- ED users are younger (avg. age 64 years)



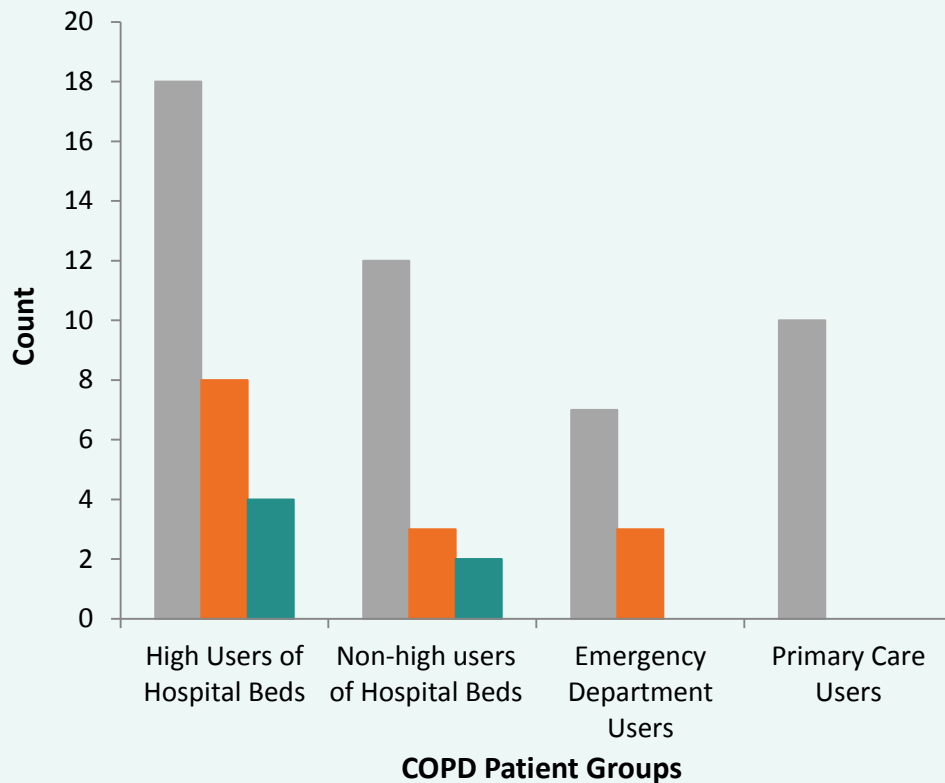
Preliminary Results – Neighbourhood Income



- There is an income gradient for COPD across all patient groups

Preliminary Results – Healthcare Use (past year)

- High users of hospital beds are high users of other health services



* Inpatient stays and ED visits based on DAD/NACRS FY2011-2013 respectively and physician visits based on PLPB FY11-12

10

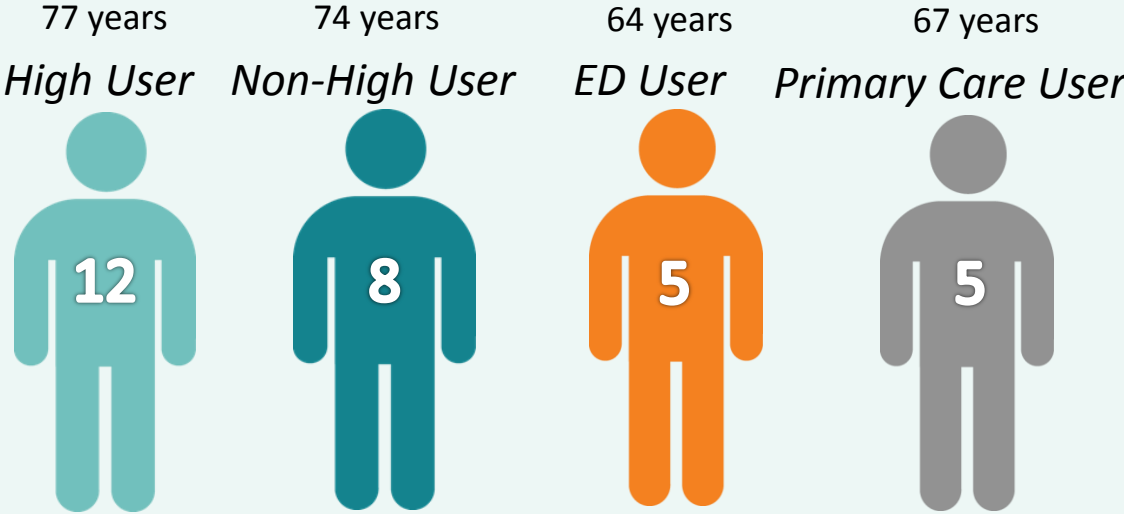
■ Physician visits

■ ED visits

■ Inpatient stays

Preliminary Results – Health Conditions

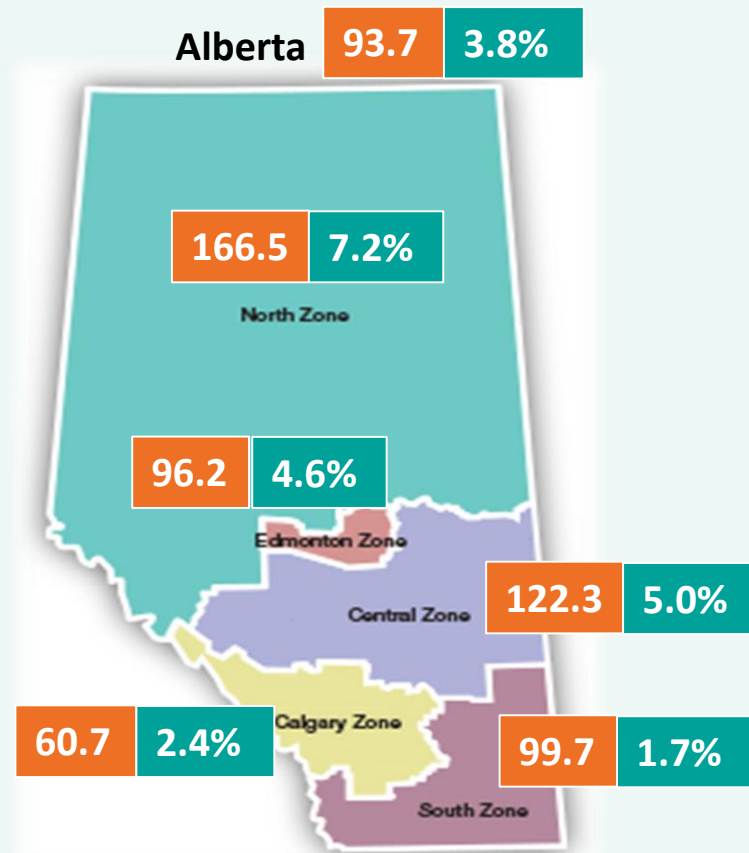
- High users of hospital beds have more health conditions



Health Condition	High User (77 years)	Non-High User (74 years)	ED User (64 years)	Primary Care User (67 years)
Hypertension	76%	62%	29%	33%
Pneumonia	67%	45%	20%	11%
Heart failure	53%	28%	7%	5%
Disorders of Electrolyte acid base balance	57%	32%	8%	5%
Diabetes	38%	27%	17%	12%

Preliminary Results By Zone

- The North Zone has the highest High User rate and Calgary Zone the lowest



Age standardized rate
of COPD High Users
(per 100 000) 2013

Population with self-
reported COPD (Statistics
Canada)

Limitations



- Only capturing physician diagnosed COPD
- All relevant diagnosis codes may not be recorded on physician claims data
- No information on COPD disease severity
- Physician claims data only available until FY2012-13
- Alberta only

Next Steps



- By income, by rurality, marginalization (CanMarg index)
- Long-term care
- Possibly home care
- Drug claims
- Consultation with Alberta Health/Alberta Health Services/Respiratory Health Strategic Clinical Network
- Highlight priority/promising interventions
- Winter 2017



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