

# The Impact of Comorbidities on Calgary Hospital Utilization for Patients with COPD and Heart Failure



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## Chronic Obstructive Pulmonary Disease (COPD) and Heart Failure (HF) are among the top four diagnoses for inpatient hospitalizations in Alberta (CIHI, 2017-18)

In Calgary, disease-specific order sets have been implemented to reduce days in hospital associated with these diseases.

### Our research found that . . .

Comorbidities are strongly correlated with days in hospital, so care pathways for patients with COPD or HF should include management for common comorbidities.

= 100 patients   = 1,000 days in hospital

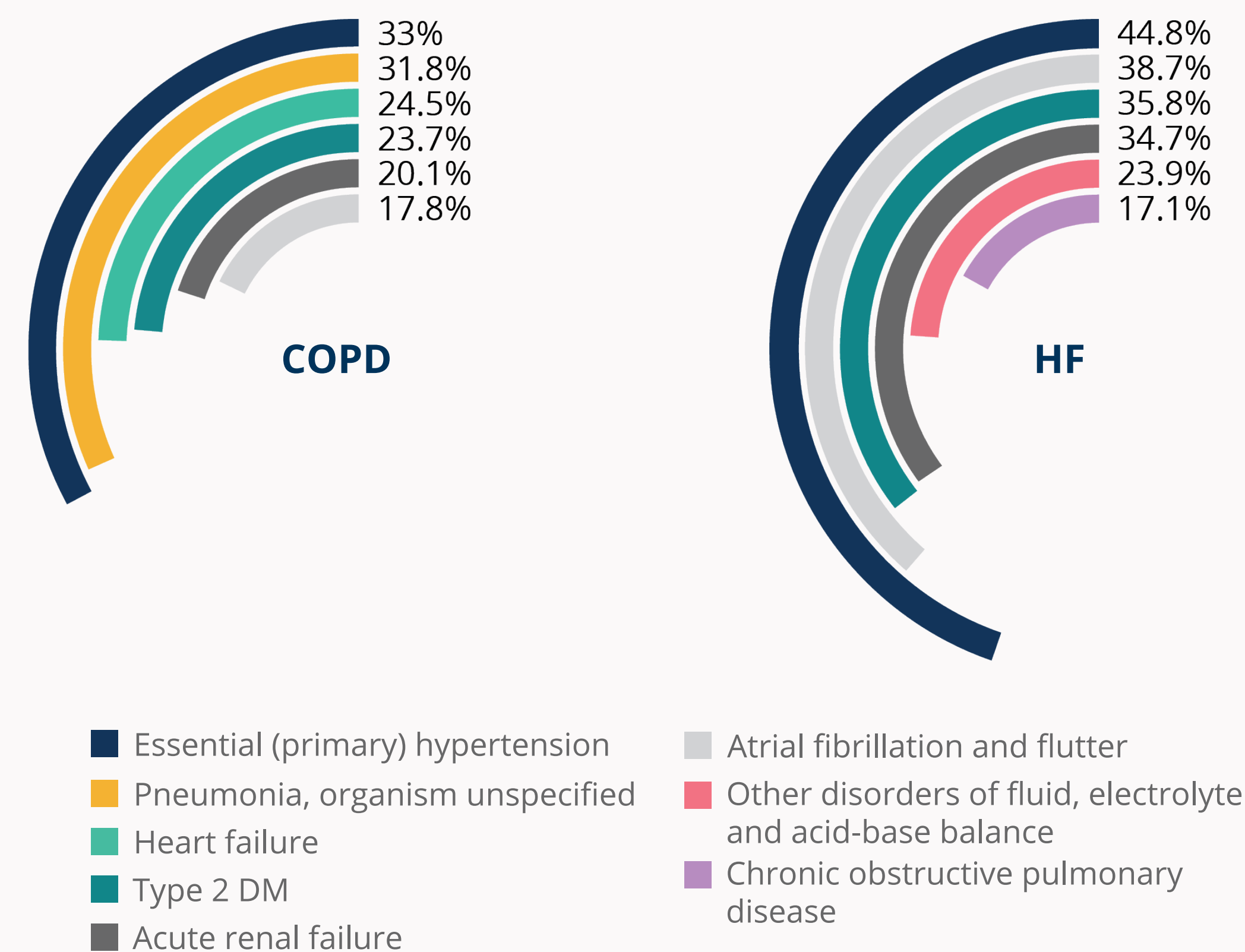
### COPD patients with comorbidities vs. no comorbidities



### COPD patients with comorbidities vs. no comorbidities

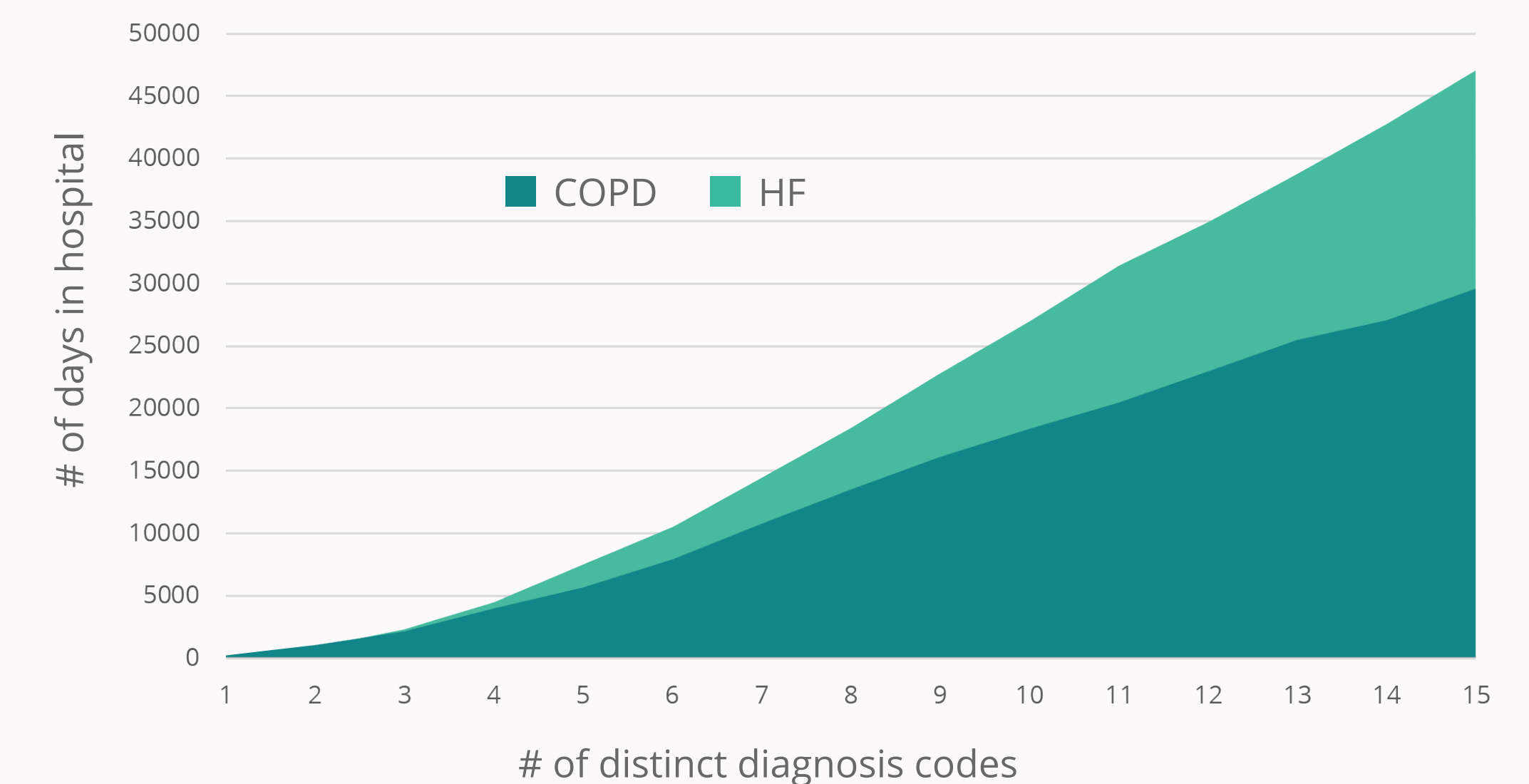


### Patients with COPD and HF commonly present with related diagnoses



### The greater the comorbidities, the more time spent in hospital

#### Cumulative total days in hospital, per year for patients with COPD or HF



#### COPD

- Patients had an average of 9 diagnosis codes
- Patients spent an average of 14 days in hospital per admission

#### HF

- Patients had an average of 11 diagnosis codes
- Patients spent an average of 17 days in hospital per admission

#### Methods:

- Used administrative data for 5,032 adult patients with COPD and 7,197 patients with HF admitted to Calgary hospitals between April 1, 2017 - March 31, 2019

### HF patients with comorbidities vs. no comorbidities



### HF patients with comorbidities vs. no comorbidities

