

# Psychosocial Factors Influencing COPD Readmission: Engaging Interdisciplinary Team Care

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## Background

Patients with COPD commonly suffer from depression and anxiety<sup>1</sup>. Such psychiatric comorbidities result in increased risk of exacerbation of physical symptoms<sup>2,4</sup> and greater risk of hospital admissions<sup>3,4</sup>. Generally speaking, 20 to 40% of patients admitted to hospitals for medical concerns have psychiatric comorbidities resulting in poorer clinical outcomes, staff dissatisfaction, and higher cost<sup>5</sup>.

Studies demonstrate a strong relationship between hospital readmissions and mental health, but patients' psychological health is often viewed as outside the scope of the inpatient medical team's practice.

Our aim was to better understand current screening practices at the bedside in order to promote practice improvements that would result in increased interdisciplinary care, and attention to patients' psychosocial experiences.

## Hypotheses

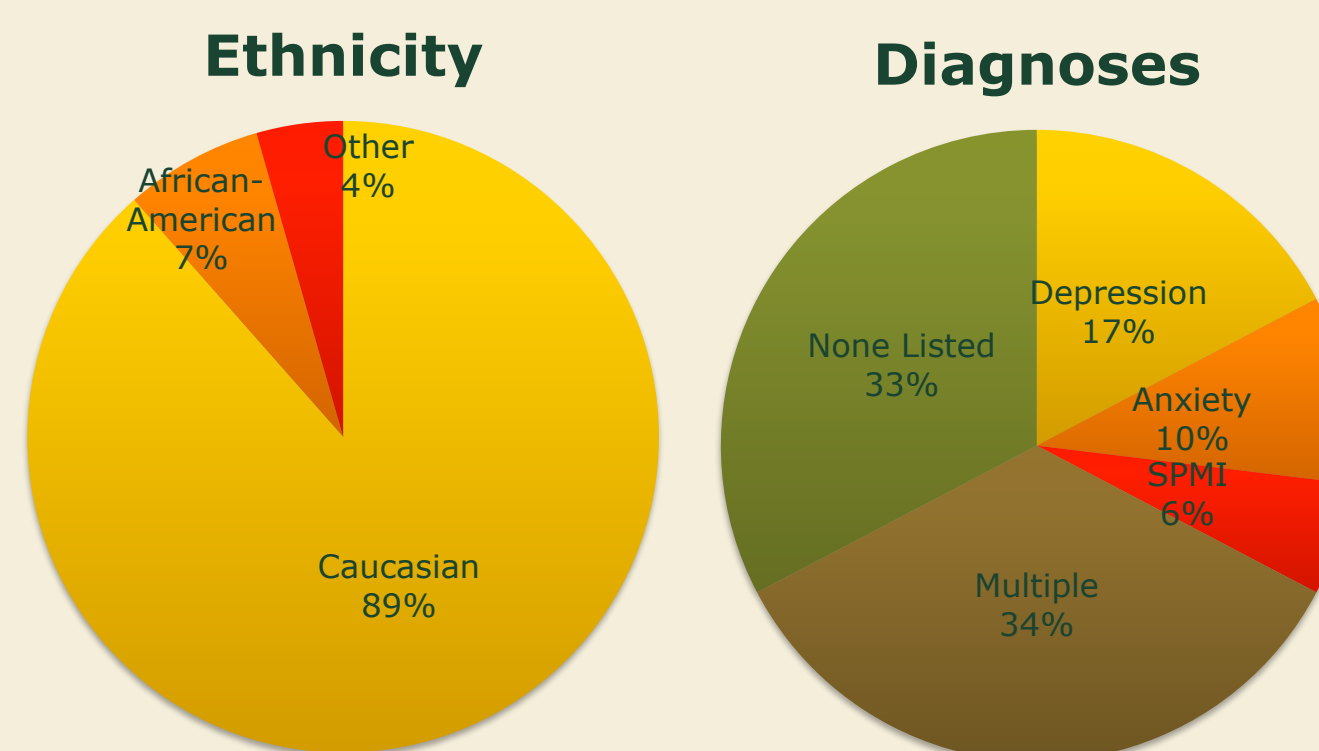
Physician-patient collaboration, and efforts to address mood symptoms at the bedside would reduce readmissions.

Mental health diagnosis (including substance use) would increase the likelihood of readmission.

## Methods

54 patients had repeat readmissions over a period of one year. Retrospective review of medical records was conducted and data collected pertaining to psychiatric diagnoses, intervention, and collaborative treatment approaches. Data were coded and reviewed for accuracy (PRT, LDR). Two patients were removed from analyses as overall readmission rates were extreme outliers.

	N = 52	Mean	SD
<b>Age</b>		71.9	10.8
<b>COPD Readmission</b>		3.85	2.94
<b>Overall Readmission</b>		6.08	4.75



Graphical inspection of the readmission rate suggested the use of the Wilcoxon rank-sum test. There were no corrections for multiple comparisons. All analyses were carried out using SAS.

## Results

- Mental health (MH) diagnosis was statistically significantly associated with greater number of total re-admissions ( $p = 0.04$ ) and COPD re-admissions ( $p < .01$ ).
- Collaborative pt-centered care was more effective than physician-lead education in reducing COPD re-admissions ( $p = 0.05$ ), but not total re-admissions.
- Addressing mood at the bedside did not result in significant differences in admission rates.
- Older patients had fewer readmissions.
  - Post-hoc analysis reflects support systems were more expansive as patients aged ( $p = -.04$ ).

## Discussion

Despite confirming that MH diagnoses increase readmission rates in COPD patients, only one patient received a recommendation for behavioral health treatment.

MH, smoking and social isolation are modifiable risk factors and intervention could improve safe discharge planning especially when implemented by an interdisciplinary team. Behavioral health professionals (BHPs) can help patients manage mood symptoms, and teach self-management skills specific to COPD.

Building a collaborative team, including families, can reduce the isolation these conditions carry and can increase medical adherence.

### Limitations

Given the retrospective nature of this study, we cannot fully appreciate how discharge plans were discussed (e.g., to what degree they were pt-centered) or how well documentation adequately reflects communication. Moreover, we do not know how comfortable or skillful individual physicians were in assessment or management of mood with patients which might influence the pt experience. We recommend a larger sample and evaluating more of this work via live observation.

### Next steps

- 1) Implement standing orders to screen mood for all COPD patients admitted to medical units, and provide referrals for BHPs as needed.
- 2) Embed a BHP to patients' teams for MH consultation.
- 3) Support physicians in developing collaborative language and ensure patient/family engagement in discharge planning.

## References

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