Capsule Commentary on Melzer et.al., Missing Potential Opportunities to Reduce Repeat COPD Exacerbations

Lindsay E. Jubelt, MD^{1,2,3}

¹Robert Wood Johnson Foundation Clinical Scholars, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA;

²Philadelphia VA Medical Center, Philadelphia, PA, USA; ³Leonard Davis Institute of Health Economics, University of Pennsylvania, Philadelphia, PA, USA.

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Chronic obstructive pulmonary disease (COPD) is the most common of the chronic lower respiratory illnesses, the third leading U.S. cause of death.¹ Despite the prevalence of COPD, established treatment guidelines and evidence that long-acting beta-agonists and/or inhaled corticosteroids reduce the risk of exacerbations, the disease is often undertreated.² In this study, Melzer et al. found that nearly all (93 %) of 2,570 Veterans Affairs (VA) patients experiencing a COPD exacerbation were on no or only one long-acting medication, and a minority (~35 %) were prescribed additional medications within 180 days of the exacerbation.³ Older patients, smokers, depression, congestive heart failure (CHF), diabetes, use of ipratropium bromide and prior COPD exacerbations were associated with lower odds of receiving additional therapy.

Clinicians can use this study to reflect on their own practice patterns in treating patients with COPD. Given that medication adherence is low among patients with COPD (between 19.8 and 30.6 %), under-prescribing evidence-based therapy magnifies the unnecessary morbidity and cost associated with this disease.⁴ Clinicians should use COPD exacerbations as an opportunity to review the patient's current treatment regimen and consider changes to reduce future exacerbations.

There are limitations to this study. First, the study uses data from an administrative database. This data set captures prescribing patterns of VA physicians, but not those outside the VA, which may underestimate the amount of medication prescribed.

Second, the study assumes that all study patients not on both a bronchodilator and inhaled corticosteroid (ICS) should have additional inhaled therapies added to their

regimen. However, there is limited evidence on when to start combination therapy. The Global Initiative for Chronic Obstructive Lung Disease (GOLD) recommends starting with a bronchodilator and then adding an ICS for those with FEV₁ <50 % or with frequent exacerbations.⁵ Melzer et al. do not describe how many exacerbations the patients in their study have experienced. If they have only had the single index exacerbation, ICS may not be necessary.

Despite these limitations, this study demonstrates missed opportunities to improve treatment for patients with symptomatic COPD. With greater penetration of the electronic medical record, clinicians and practices can review their own prescribing patterns to improve the quality of treatment they provide to their patients with COPD.

Corresponding Author: Lindsay E. Jubelt, MD; Robert Wood Johnson Foundation Clinical Scholars, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104, USA (e-mail: ljubelt@upenn.edu).

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