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# Integration of Palliative Care in Chronic Obstructive Pulmonary Disease Management

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## Abstract

The purpose of this scholarly project is to determine if the integration of palliative care (PC) into COPD management provides an improvement in symptom burden associated with quality of life and end of life care when compared to the standard of care. A review of the literature was performed using the following electronic databases, and the use of keywords and mesh terms were used to define the set of literature that would be critically analyzed. A total of 16 articles achieved the necessary criteria for review and critical assessment. The literature reviewed various aspects related to symptom burden and symptom management associated with the disease, advanced care planning documentation, integration of palliative home care, and challenges surrounding integrating palliative care into standard care plans. The data shows that there was little statistical support for integrating palliative care to improve quality of life through more appropriate management of symptom burden associated with the disease. The literature did find support for the addition of palliative home care for improvements in advanced care planning. The scholarly project concluded that more research is needed to truly assess if palliative care has increased benefits in COPD management because there continues to be challenges that surround the integration of this specialty.

Keywords: Palliative Medicine, Palliative Care, Advanced Care Planning, Pulmonary Disease, Chronic Obstructive, Quality of Life

## Introduction

- Chronic Obstructive Pulmonary Disease (COPD) is a significant cause of mortality and morbidity across the globe. The Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease report (2020), indicates that the disease was responsible for more than 3 million deaths in 2012.
- Palliative care (PC) was originally founded to assist terminal cancer patients with end of life care and decision. Currently, the addition of palliative care services can be applied at any stage of a disease, terminal or not (Lanken et al., 2008).
- The goals of palliative care aim to improve quality of life, provide emotional support, prevent suffering, and aid in advanced care planning opportunities (Lanken et al., 2008).

## Statement of the Problem

- The symptom burden of COPD is comparable to lung cancer near the end of life, yet patients with COPD are less likely to receive palliative care services (Bloom et al., 2018).
- Through integrating palliative care earlier in disease progression, it is hypothesized that patients and their care providers may see an increase in quality of life towards the end of disease progression.

## Research Question

- Does the integration of palliative care in COPD management provide an improvement in symptom burden associated with quality of life and end of life care when compared to the standard of care?

## Literature Review

### The Burden of Chronic Obstructive Pulmonary Disease

Bloom et al. (2018) and Wysham et al. (2015) demonstrated that the burden of these symptoms is comparable to patients with lung cancer

- COPD patients are less likely to be referred to palliative care

Ding, Small and Holmgren (2017), concluded that with routine care, a high symptom burden remained among patients even with treatment.

- The results suggest that there is a consistent misalignment between GOLD recommendations and patterns of prescribing.

### Management of Symptoms

Results from Duenk et al. (2017), found that the addition of palliative care helped to better manage symptoms through decreasing the symptom burden; however, it did not improve the overall quality of life

- No statistical variance between the groups (95% CI,  $p = 0.70$ ), which demonstrated no change in the quality of life.
- The group that received palliative care had more documented ACP choices ( $p = 0.003$ ).

Scheerens et al. (2020), Janssens et al. (2019) and Long et al. (2014) research demonstrated that the integration of early palliative care did not impact the patients' overall quality of life.

Higginson et al. (2014) demonstrated that patients in the interventional group had significant mastery of their breathlessness compared to the control group (mean difference 0.58, 95% CI 0.01-1.15,  $p = 0.048$ ; effect size 0.44).

### Advanced Care Planning

Gainza-Miranda et al. (2019) analyzed patients' survival after the initiation palliative care and if this addition provided more appropriate end of life care

- No patients had implemented ACP at the beginning of the study, 55% had performed ACP during follow up visits
- This study highlights the benefits of implementing a palliative care team in the treatment of advanced COPD

The addition of palliative care demonstrated that patients were more likely to make ACP choices before death (Janssens et al. 2019; Bove et al. 2018; Duenk et al. 2017; Wysham et al. 2015; Au et al. 2012).

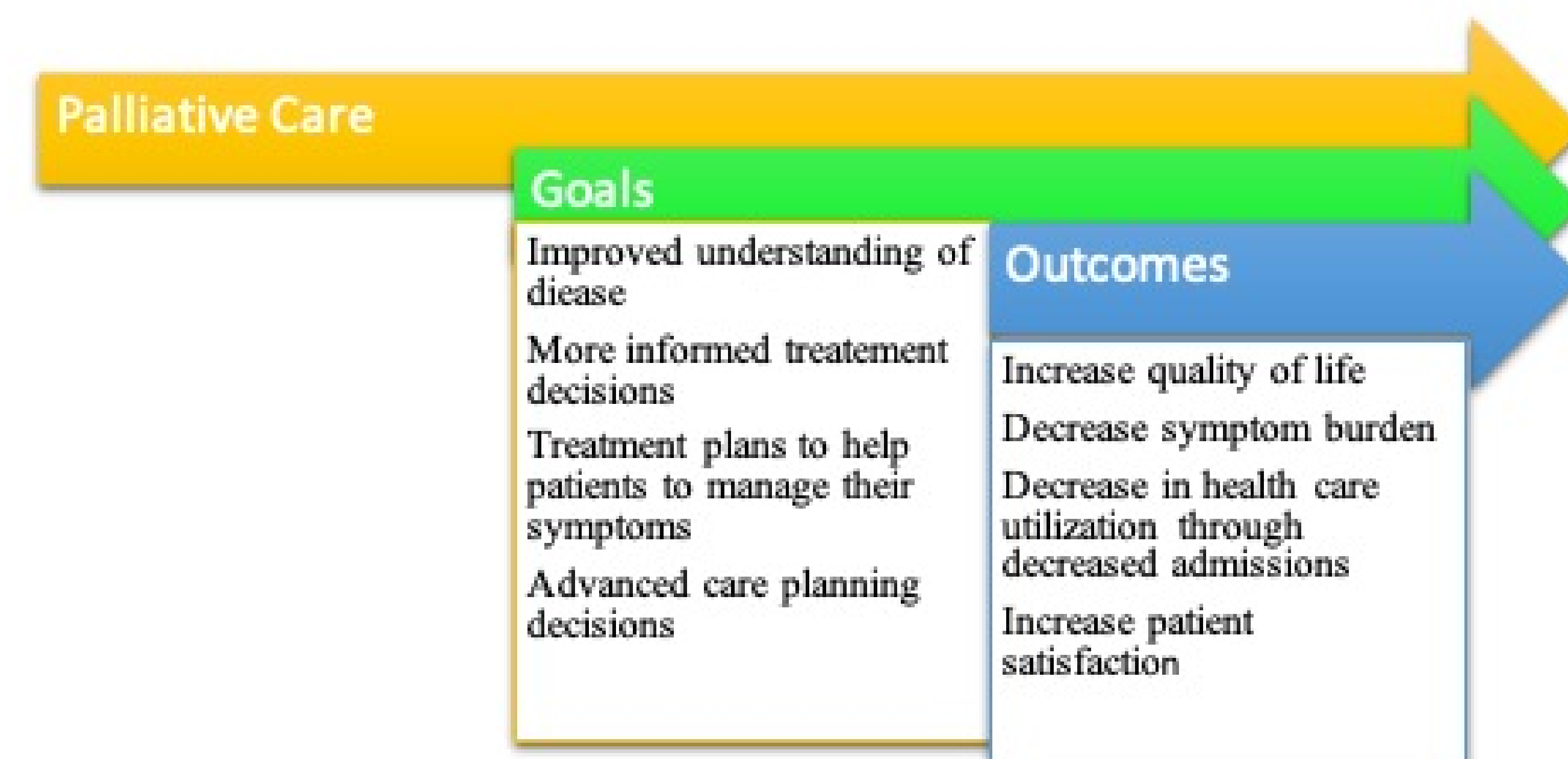
### Integration of Palliative Home Care (PHC)

Scheerens et al. (2020) & Buckingham et al. (2014) did not support the hypothesis that palliative care could improve quality of life,

- No statistical significance regarding the integration of PHC

Janssens et al. (2019) found no statistical difference concerning hospital, ICU or ED admissions (hospitalization,  $p = 0.219$ ; ED,  $p = 0.484$ ; ICU,  $p = 0.163$ ).

- No significant difference with the addition of PHC concerning HRQOL, anxiety, depression, and survival scores.



## Literature Review cont.

### Challenges Surrounding Palliative Care Applications in COPD

- Bloom et al. (2019) and Almagro et al. (2017) also recognize that there are no reliable methods to predict COPD mortality
  - Identifies one of the most significant issues surrounding palliative care's addition; the unpredictability of disease trajectory
- Scheerens et al. (2018) study was focused on challenges surrounding PC integration early in disease trajectory
  - Patients do not have a proper understanding of their disease how it will affect their quality of life.
  - Critical to understanding the issues surrounding palliative care initiation

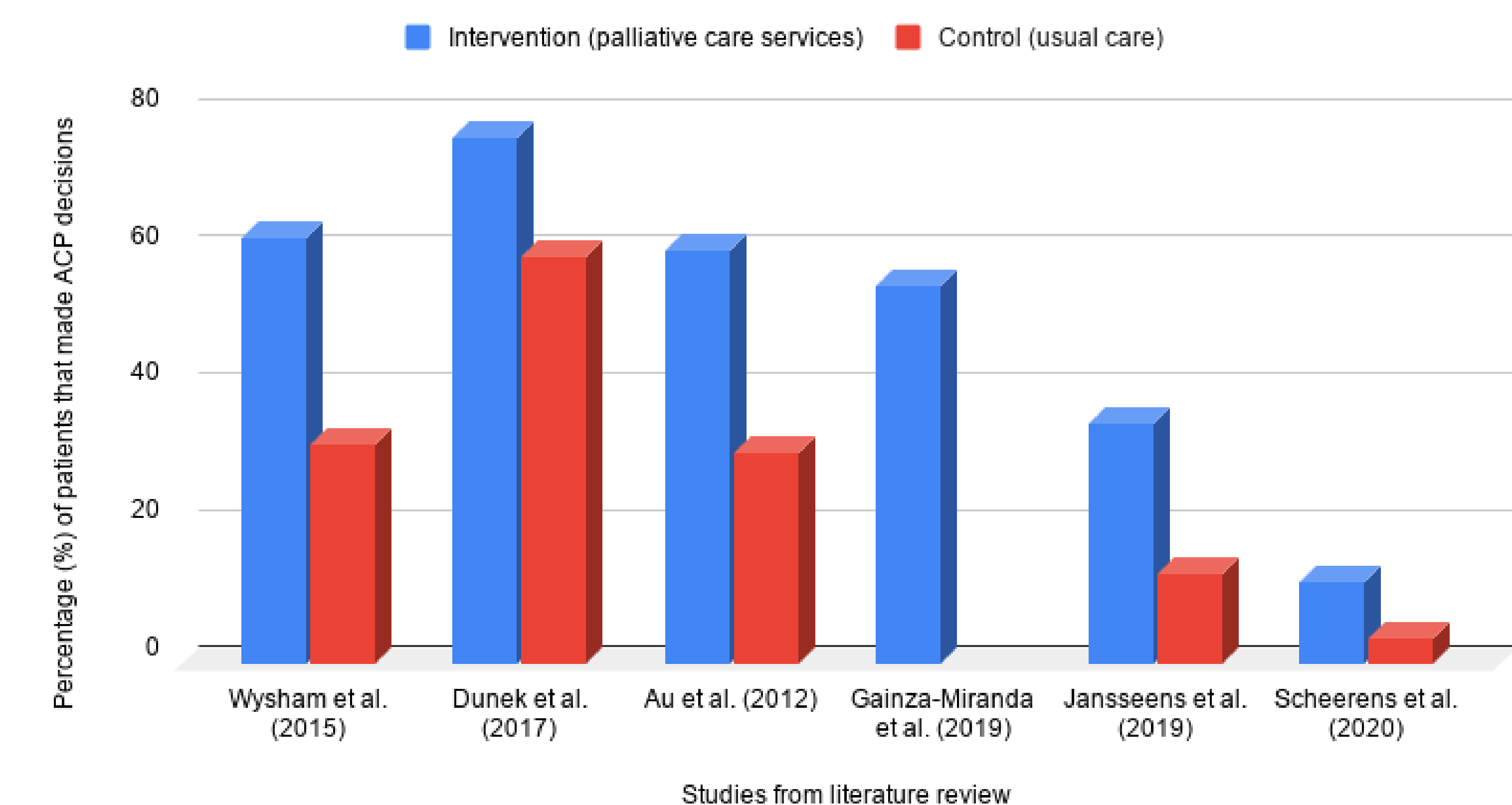
## Discussion

- The burden of symptoms is comparable to patients with lung cancer
- The standard of care, which uses GOLD criteria to classify patients, does not equate to managing symptom burden appropriately.
- Some specific symptoms such as breathlessness were found to statistically support the addition of palliative care.
- Other reviewed literature did not find support for the addition of PC to manage symptoms.
- Support the addition of palliative care to aid in conversations regarding ACP.
- Pointed to various challenges surrounding the integration of palliative care in the management of COPD patients.
  - Providers should work to educate patients more frequently on the benefits that palliative care can provide, and these conversations should not focus on end of life, but rather improvement of quality of life.
- Challenges that surround the integration of palliative care demonstrate that further research is needed
  - Investigate these challenges and find a more appropriate way to introduce the topic of palliative care.

## Applicability to Clinical Practice

- As the population begins to age, more providers will be faced with the inevitable need to introduce palliative care principles to patients and their families.
- Although the research surrounding the support of integration of palliative care into serious illnesses is still limited, the clinician should be able to critically analyze if palliative care will improve the quality of life in patients with end-stage COPD.
- The literature reviewed demonstrates that palliative care interventions, when compared with usual care, decreased hospitalizations and increased advanced care planning
- The primary care provider working closely with the patient and their family, will have increased knowledge of this subject that will help recognize the need to add palliative care into the management plan of severe COPD.

### Decisions Surrounding Advanced Care Planning (ACP)



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