



# A Multidisciplinary COPD Collaborative Approach To Prevent Hospital Readmission

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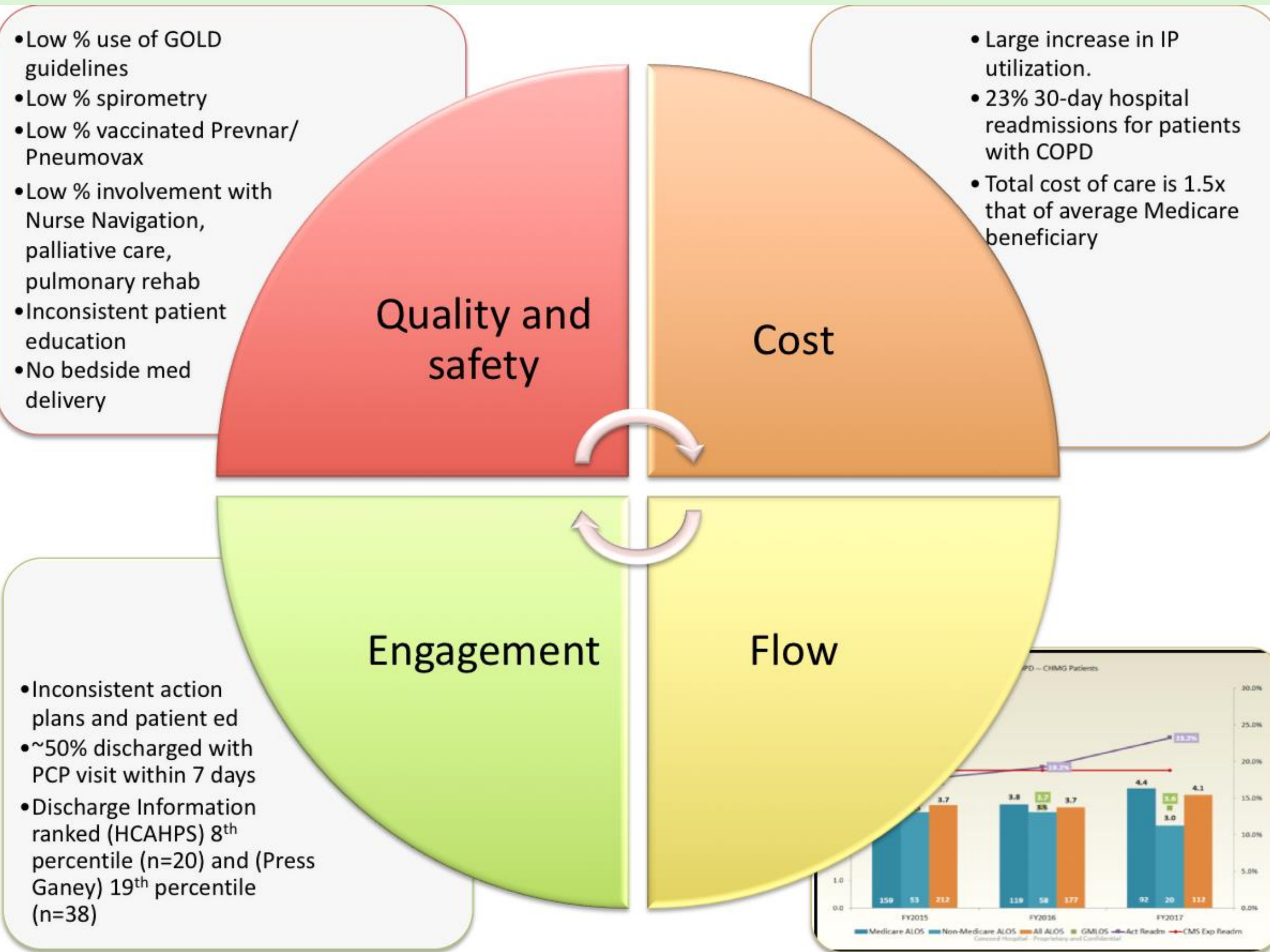
Concord Hospital, Concord, NH

## Introduction

- COPD is a progressive respiratory disease characterized by persistent airflow obstruction.<sup>1</sup>
- Comorbidities, like lung cancer, ischemic heart disease, and anxiety, are common.<sup>2</sup>
- COPD causes a heavy health and economic burden to patients and society.<sup>3</sup>
- COPD is the third most common cause of death in the USA<sup>3</sup> and the fourth leading cause of death in New Hampshire.
- Treating COPD requires addressing individual physical, psychological, social, and spiritual needs through person-centered comprehensive care.<sup>4</sup>
- Comprehensive treatment can reduce symptoms, treat comorbidities, prevent exacerbations, improve exercise tolerance, health status, and quality of life.<sup>5</sup>
- Concord Hospital serves approximately 1900 people with COPD with a current rate of 30-day readmission at 23%.

1. Hernandez, M. et al. (2018). Impact of using the new GOLD classification on the distribution of COPD severity in clinical practice. *Int J Chron Obstruct Pulmon Dis*; 13: 351-356.  
 2. Yawn, B. (2018). Introduction: COPD in Primary Care. *Journal of Family Practice*, 67(2):S1-2.  
 3. Guarascio AJ, et al. (2013). The clinical and economic burden of chronic obstructive pulmonary disease in the USA. *Clinicoecon Outcomes Res*; 5:235-245.  
 4. Gardener, AC, et al. (2018). Support needs of patients with COPD: A systematic literature search and narrative review. *Int J Chron Obstruct Pulmon Dis*, 13: 1021-1035.  
 5. Yawn B & Kim V. (2018). Treatment options for stable chronic obstructive pulmonary disease: Current recommendations and unmet needs. *Journal of Family Practice*, 67(2): S28-36.

## Baseline

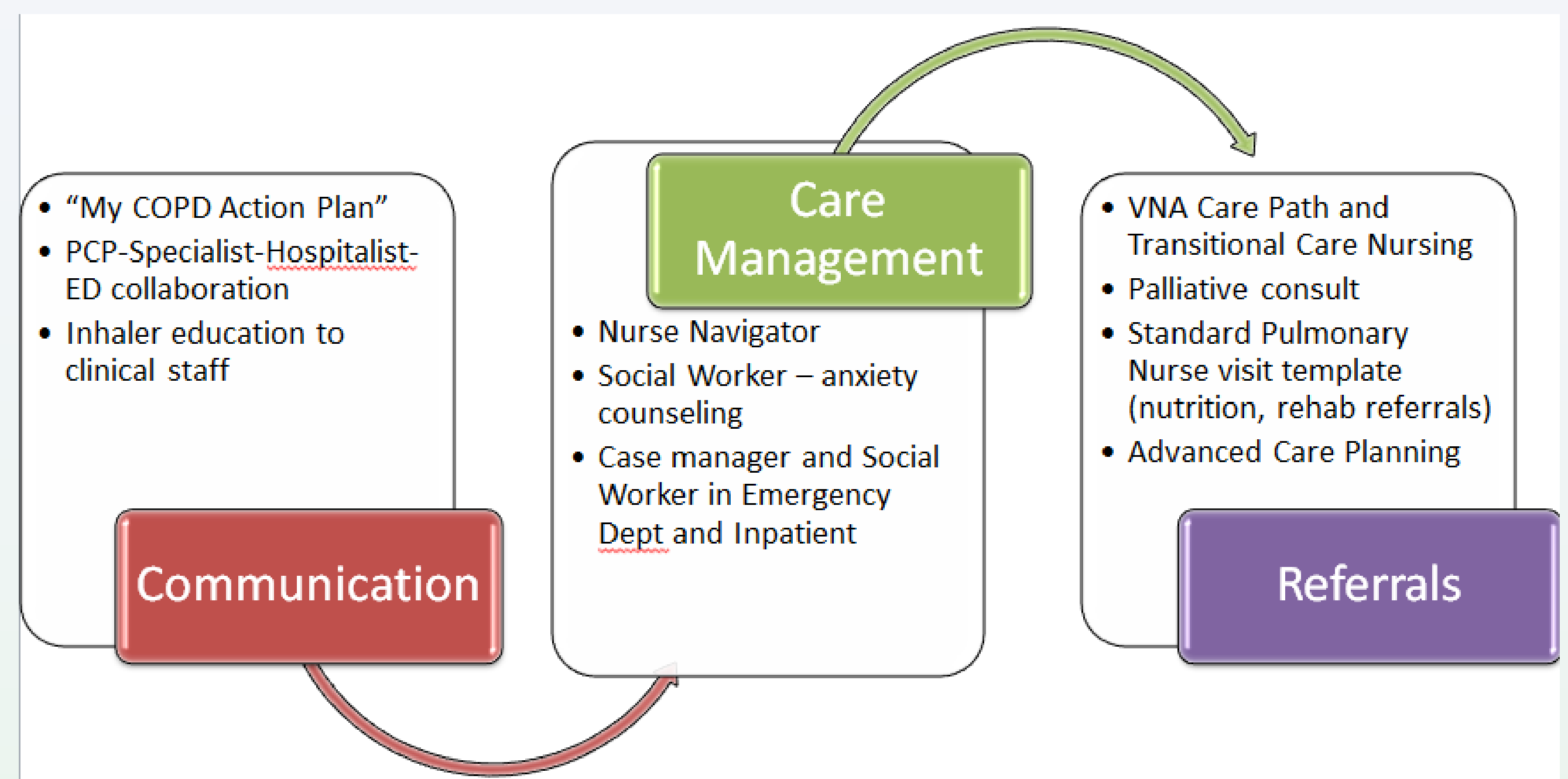


## Action Plan

- Identified and brought together key inpatient and outpatient providers (inpatient nursing and social work, population health, Nurse Navigation, ED providers, care management, respiratory therapy, pulmonary, pharmacy, PCPs, outpatient nursing and social work, home health, skilled nursing, palliative care, pulmonary rehab, informatics, quality assurance) and community providers (VNA, Breathe NH, Genesis Healthcare) to create the COPD Collaborative
- Reviewed top 30 patients per specialty (primary care, ED, hospitalists, pulmonary)

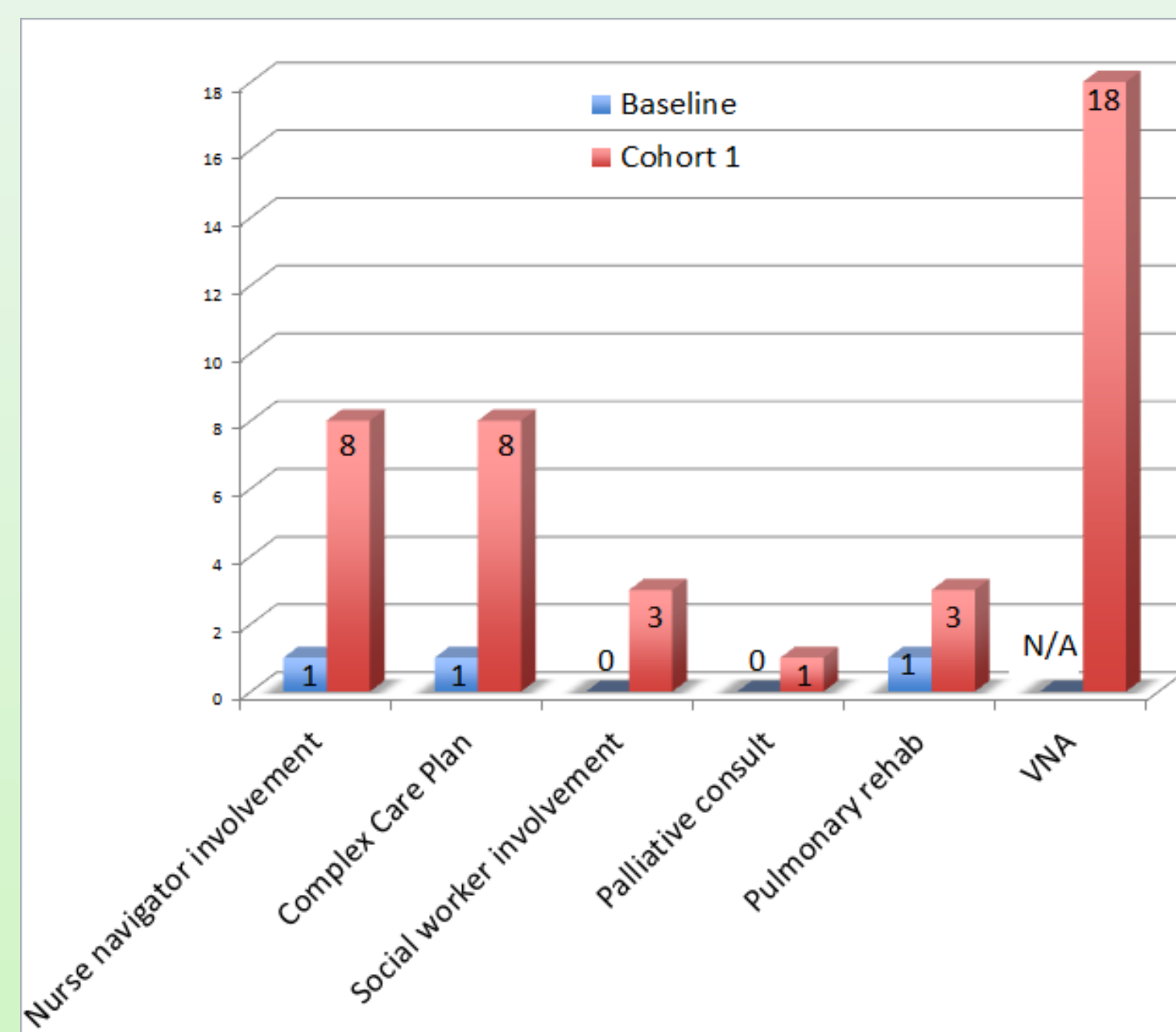
## Collaborative Approach:

- Established the Action Plan collaboratively



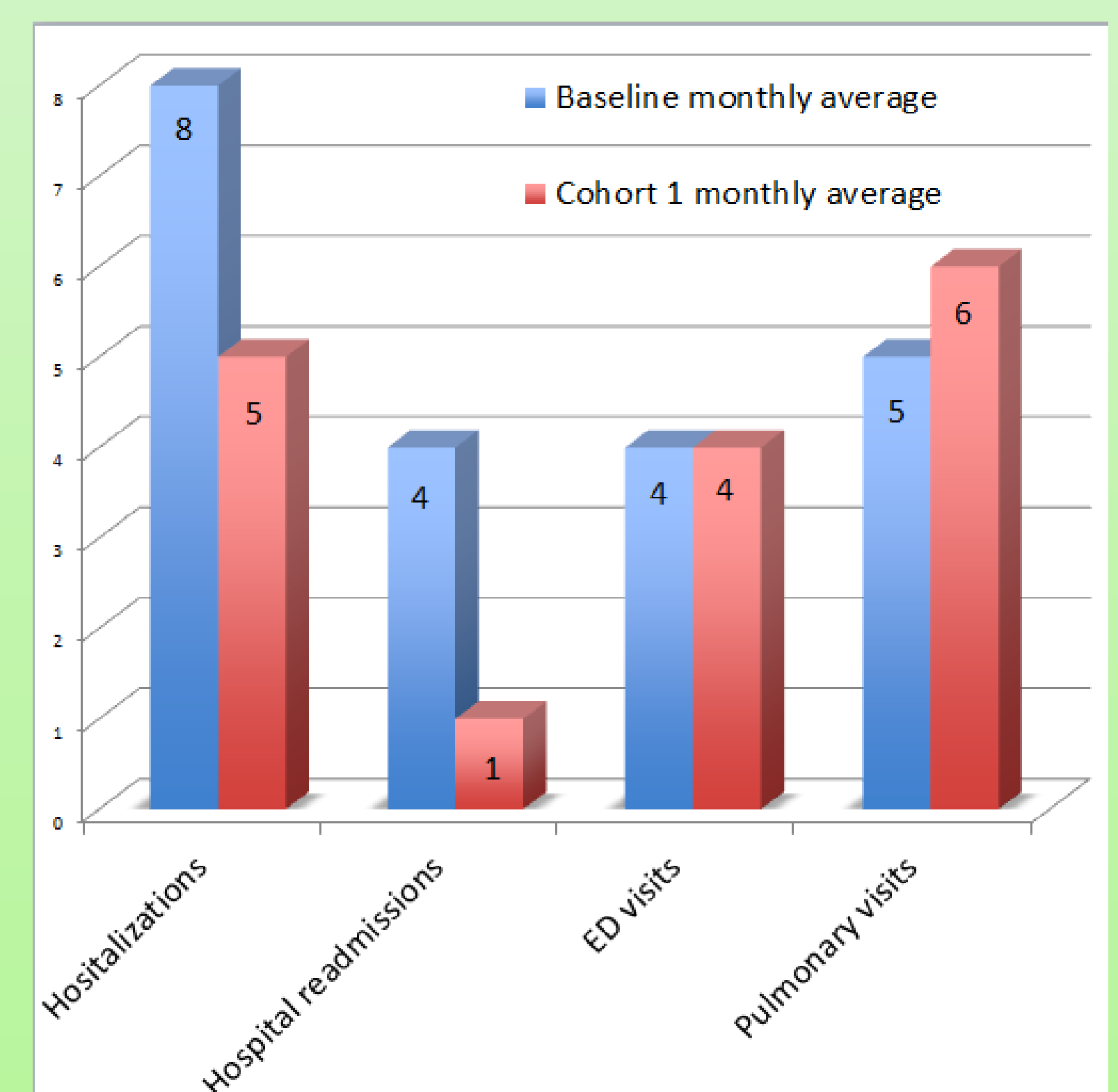
## Results

**Baseline:** April – December, 2017 = 9 month baseline  
**Cohort 1:** April – August, 2018 = 5 month pilot



## Services provided

## Utilization



## Next Steps

- Apply learning from Cohort 1 (pilot) to broader population
- Launch Cohort 2 (based on frequent ED visits)
- Reduce variation in clinical definition and risk stratification for COPD using GOLD criteria and MRC dyspnea scale
- Implement organization-wide smoking cessation program
- Evaluate nurse-driven COPD clinic in PCP practices
- Develop COPD support group