

# Getting Aggressive with COPD in Texas

Outcomes from a 2009-2010 health professional continuing education initiative

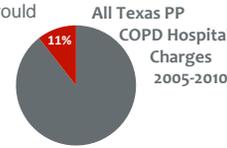
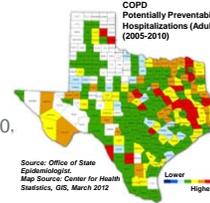
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UNT Health Science Center • Professional and Continuing Education

## DISCUSSION

This initiative demonstrates that properly planned educational activities can contribute to improved clinician competence and performance, and can result in improved patient outcomes and community health. While all variables affecting these elements in each community cannot be assessed, the results are consistent in each county where UNTHSC focused its efforts, suggesting educational activities had the desired effects.

## BACKGROUND

- COPD is responsible for one death every four minutes in the US<sup>1</sup>
- In Texas, COPD was responsible for 171,936 hospitalizations between 2005-2010, resulting in \$4.6 billion in hospital charges, 11% of all potentially preventable charges.<sup>2</sup>
- These admissions are classified as "potentially preventable" (PP) because if the individual had access to and cooperated with appropriate outpatient healthcare, the hospitalization would likely not have occurred.<sup>2</sup>
- COPD is misdiagnosed in primary care about half the time<sup>4</sup>

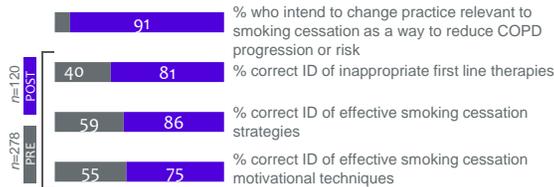


## OBJECTIVES

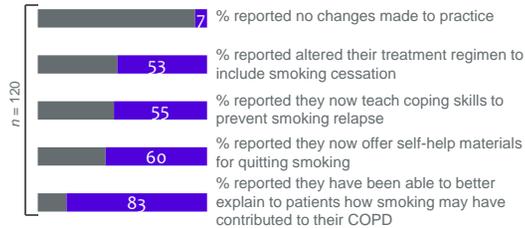
- Reduce the number of undiagnosed patients with COPD in Texas by promoting more frequent and quality testing by primary care clinicians;
- Reduce the number of preventable hospitalizations related to COPD in Texas;
- Improve the quality of life of patients with COPD by aggressively treating COPD and reducing environmental and behavioral risks to slow the disease progression;
- Equip clinicians with knowledge and materials needed to educate patients on risks of developing COPD and methods that could prevent it from developing; and
- Establish a network of local resources clinicians can access for COPD information and additional education.

## RESULTS

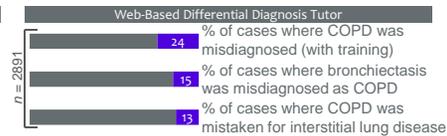
### Clinician Competence Improvements



### Clinician Performance Improvements



**Better Breather's Club**  
35 physicians referred 43 COPD patients to the Better Breather's Club, a newly-established community resource



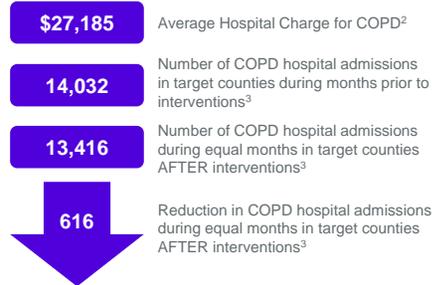
### Patient and Community Health Improvements

Patient Improvement assessed through Better Breather's Club Referrals and Performance Variables

All five variables (Exercise Time, METS, DASI, Functional METS, and Dartmouth) showed (highly statistically) significant changes over time.

Patients completing the program showed significantly better improvement than a patient not completing program measured in exercise time, METS, DASI, and Fn METS.

Community health improvements assessed using the actual number of hospitalizations due to COPD in targeted counties as reported by the Texas Department of State Health Services<sup>3</sup>

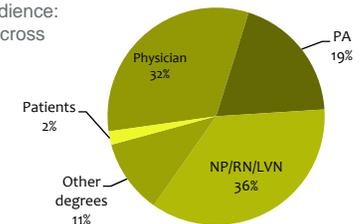


Direct healthcare savings in target counties resulting from reducing COPD-related hospitalizations, facilitated by education on risk reduction, patient communication and guideline-concordant management strategies.

**\$16,754,960**

## METHODS

- Content development
- 15 live, face-to-face, 2-hour meetings in areas known to have higher than state rates of COPD hospitalizations
- Content focused on risk reduction, patient education and management
- Online, artificial intelligence-based differential diagnosis tutor focused on spirometry
- Modest grant provided to Area Health Education Center (AHEC) to serve as local resource (Better Breather's Club established)
- Placed a presentation into five existing conferences in Texas
- Interdisciplinary audience: 2154 participants across all activities



1. National Heart Lung and Blood Institute. What is COPD? Available online at <http://www.nhlbi.nih.gov/health/public/lung/copd/what-is-copd/index.htm>. Accessed May 17, 2012  
 2. State of Texas Preventable Hospitalizations Profile. Texas Department of State Health Services. Available online at <http://www.dshs.state.tx.us/ph/state.shtm>. Accessed May 17, 2012.  
 3. Texas Hospital Inpatient Discharge Public Use Data File, Q1 2009-Q4 2010. Texas Department of State Health Services, Austin, Texas.  
 4. Tinkelman DG, Price D, Nordyke RJ, Halbert RJ. Misdiagnosis of COPD and asthma in primary care patients 40 years of age and over. *Journal of Asthma*. 43:1-6. 2006.

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Supported by an educational grant from Pfizer Medical Education Group