



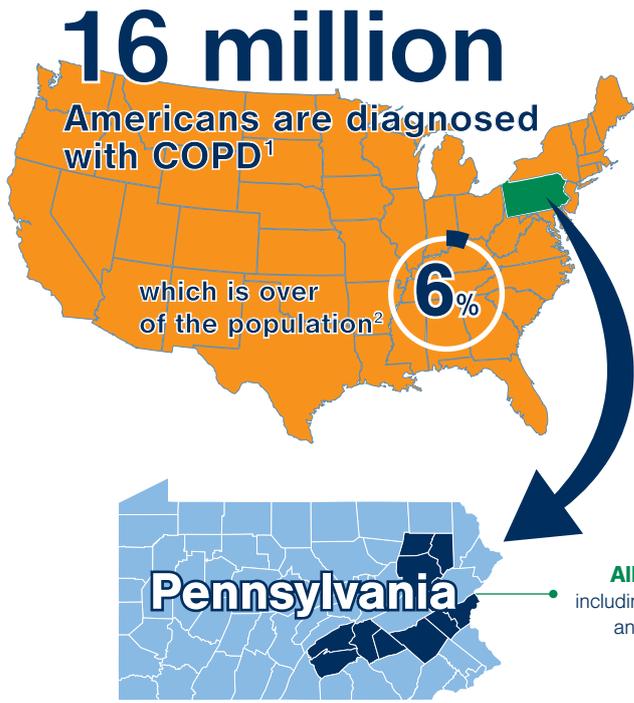
**Employers for Healthcare Value Since 1980**

**Lehigh Valley Business Coalition on Healthcare**

**COPD Report 2018**



## BACKGROUND



COPD kills more than  
**150,000**  
Americans each year



one death every  
**4 minutes**<sup>3</sup>



**COPD** 

is a major cause of disability

Compared to adults without COPD, adults with COPD are more likely to be unable to work<sup>1</sup>



**Allentown**  
including Bethlehem and Easton

**Harrisburg**  
including Lebanon and Carlisle

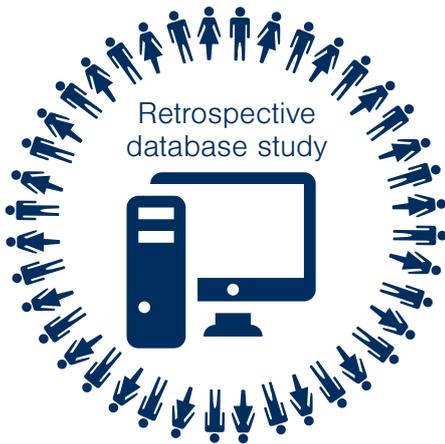
**Reading**

**Scranton**  
including Wilkes-Barre and Hazleton

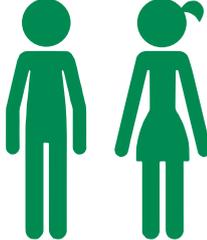
The goal of this report is to benchmark Lehigh Valley Business Coalition on Healthcare (LVBCH)-level and Pennsylvania (PA) state-level data with national-level data and help providers and employers in the PA region understand how COPD patients are managed compared to the national COPD population; providing information that may help decision-makers better serve the needs of their patients.

## METHODS

### IQVIA's Real-World Data Adjudicated Claims – US™ (2012-2015) formerly known as PharMetrics Plus™



Population studied

  
**patients ≥18 years of age and diagnosed with COPD**

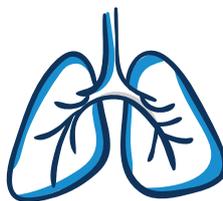
Mostly commercially insured patients



not much representation of Medicare or Medicaid COPD patients

We measured patients' exacerbations, healthcare resource utilization and associated costs over a one-year period

  
**Medication use**

  
**Exacerbations**

**Hospitalizations**

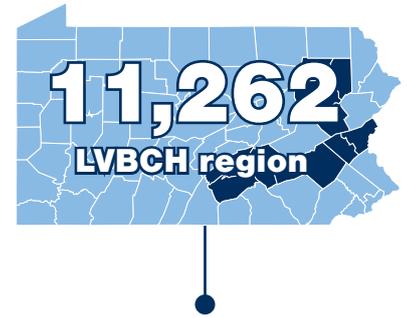
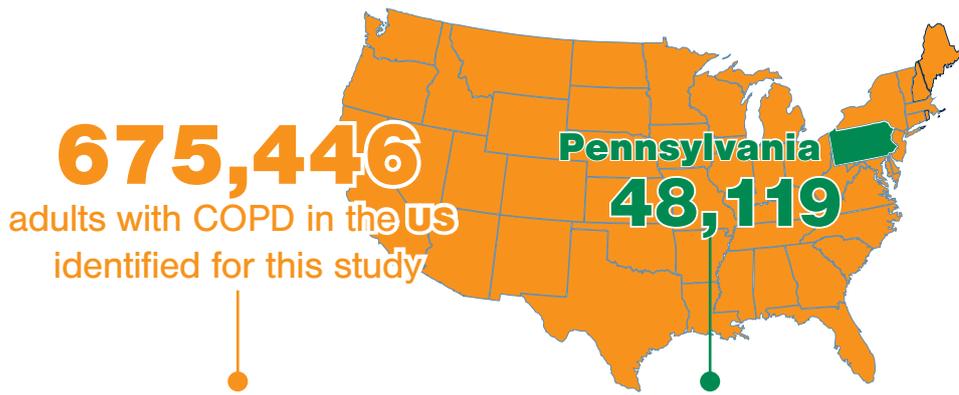


**Healthcare utilization**

**ER visits**



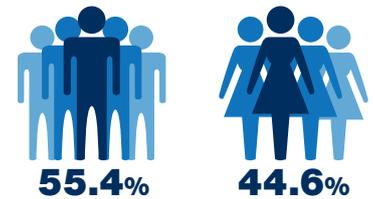
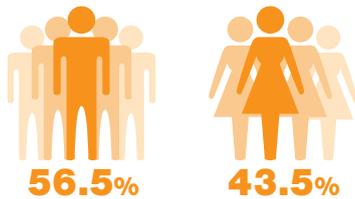
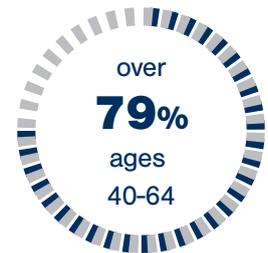
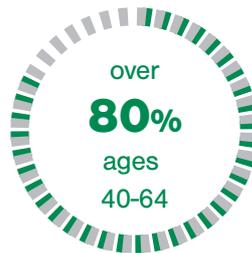
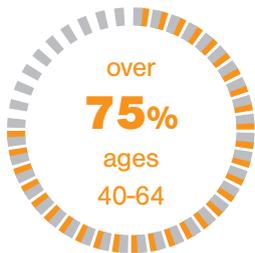
# RESULTS – PATIENT POPULATION



**Mean age 48.6**

**Mean age 49.5**

**Mean age 49.2**



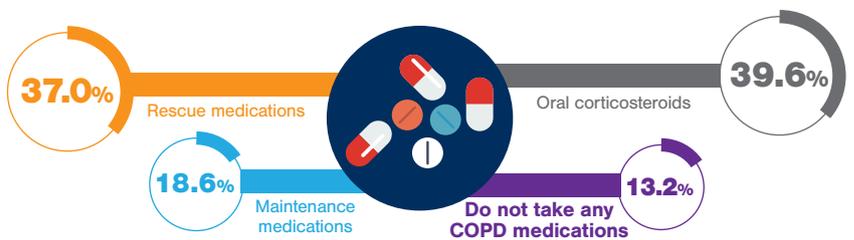
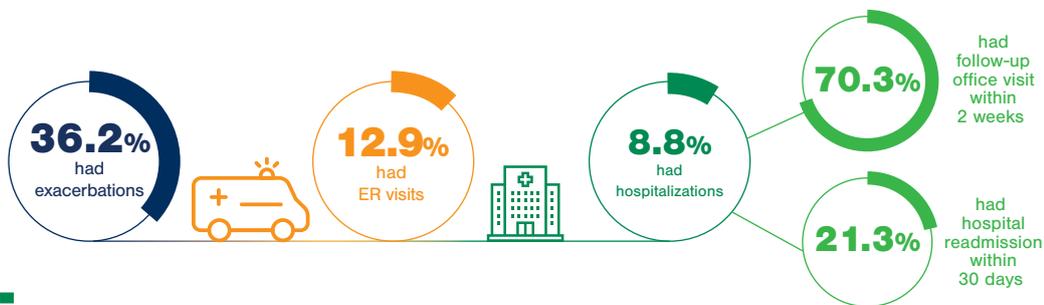
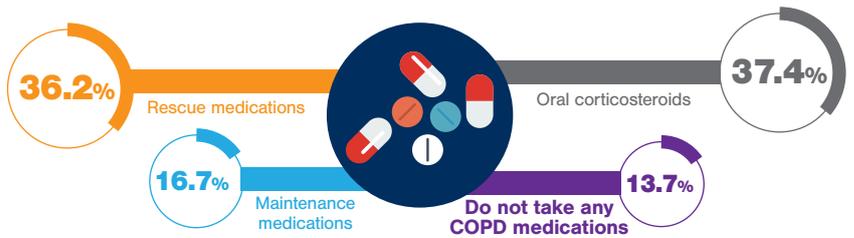
**About 50% of patients were diagnosed by PCPs in all three regions**

## COPD patients in all three regions were complex with a variety of health conditions



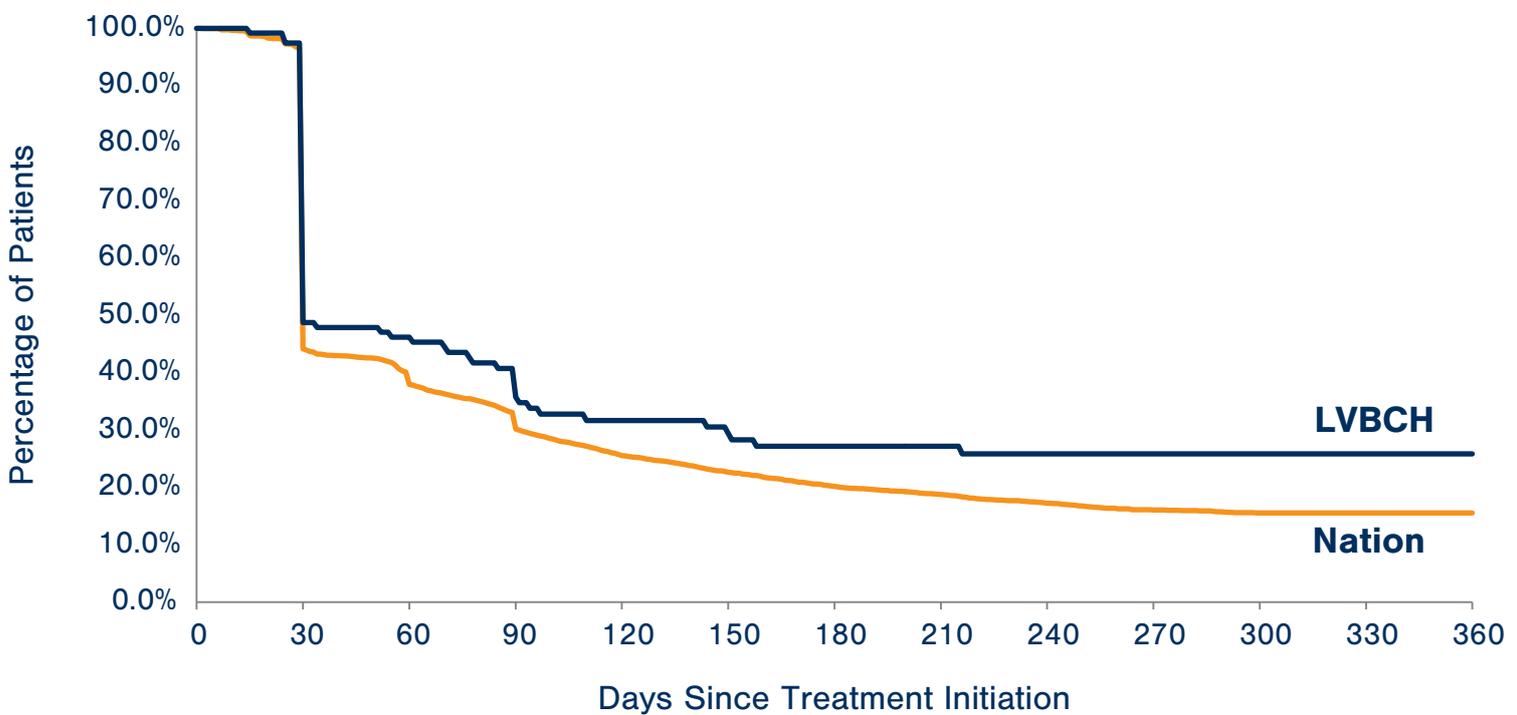
# RESULTS – HEALTHCARE RESOURCE UTILIZATION

Among all COPD patients, over a one-year period...



**About 50% of COPD patients that are newly prescribed maintenance medications discontinue their medication after the first month. However, it appears that if a patient does continue taking their medication beyond the first month, they are likely to continue doing so consistently over time.**

**PERSISTENCY OF COPD MAINTENANCE MEDICATIONS  
AMONG NEWLY TREATED PATIENTS**



**The high amount of healthcare resource utilization by COPD patients is very costly to the healthcare system each year.**

**The average cost of COPD-related healthcare resource utilization each year by resource category is**

**US**

Hospitalizations <b>\$1,674,905,918</b>	ER visits <b>\$145,724,071</b>	Doctor's office visits <b>\$107,730,655</b>
Medications <b>\$264,928,467</b>	Imaging tests <b>\$96,328,084</b>	Pulmonary Function Test <b>\$15,450,836</b>
	Arterial blood gas analysis/oximetry <b>\$1,140,973</b>	



The mean annual COPD-related costs among patients with ≥1 exacerbation is **\$1,911,832,608**

**\$8,222 per patient**

**PA**

Hospitalizations <b>\$121,835,264</b>	ER visits <b>\$15,973,931</b>	Doctor's office visits <b>\$7,012,858</b>
Medications <b>\$20,955,061</b>	Imaging tests <b>\$7,413,297</b>	Pulmonary Function Test <b>\$1,288,421</b>
	Arterial blood gas analysis/oximetry <b>\$55,908</b>	



The mean annual COPD-related costs among patients with ≥1 exacerbation is **\$143,834,022**

**\$8,253 per patient**

**LVBCH**

Hospitalizations <b>\$28,685,675</b>	ER visits <b>\$3,138,136</b>	Doctor's office visits <b>\$1,683,346</b>
Medications <b>\$4,617,182</b>	Imaging tests <b>\$2,196,128</b>	Pulmonary Function Test <b>\$337,680</b>
	Arterial blood gas analysis/oximetry <b>\$11,579</b>	



The mean annual COPD-related costs among patients with ≥1 exacerbation is **\$32,758,109**

**\$8,705 per patient**

1. Wheaton AG, Cunningham, TJ, Ford ES, Croft JB. Employment and activity limitations among adults with chronic obstructive pulmonary disease—United States, 2013. MMWR. 2015;64 (11):290-295.

2. Centers for Disease Control and Prevention. Chronic Obstructive Pulmonary Disease among adults – United States, 2011. MMWR. 2012; 61 (46):938-943.

3. What is COPD? National Heart, Lung and Blood Institute. U.S. Department of Health & Human Services. <https://www.nhlbi.nih.gov/health/educational/copd/what-is-copd/index.htm>. Accessed April 2018.

**American Association for Respiratory Care (AARC)**

Founded in 1947, the AARC is the non-for-profit professional association for respiratory care in the United States, working to encourage and promote professional excellence, advance the science and practice of respiratory care, and serve as an advocate for patients and their families, the public, the profession and the respiratory therapist. <http://www.aarc.org/>

**American Lung Association**

Founded in 1904, the American Lung Association is the nationwide organization working to improve lung health and prevent lung disease through research, education and advocacy. <http://www.lung.org/>

**The COPD Foundation**

Founded in 2004, the COPD Foundation is a not-for-profit organization with the mission to prevent and cure Chronic Obstructive Pulmonary Disease and to improve the lives of all people affected by COPD through research, education and advocacy. <https://www.copdfoundation.org/>

**Global Initiative for Chronic Obstructive Lung Disease (GOLD)**

Founded in 1997 in collaboration with the National Heart, Lung, and Blood Institute, National Institute of Health, USA, and the World Health Organization, the GOLD works with health care professionals and public health officials to raise awareness of COPD and to improve prevention and treatment of COPD for patients around the world. <http://goldcopd.org/>

**National Institutes of Health (NIH)**

Founded in 1887, as part of the U.S. Department of Health and Human Services, NIH is the nation's medical research agency with the mission to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability. <https://www.nih.gov/>