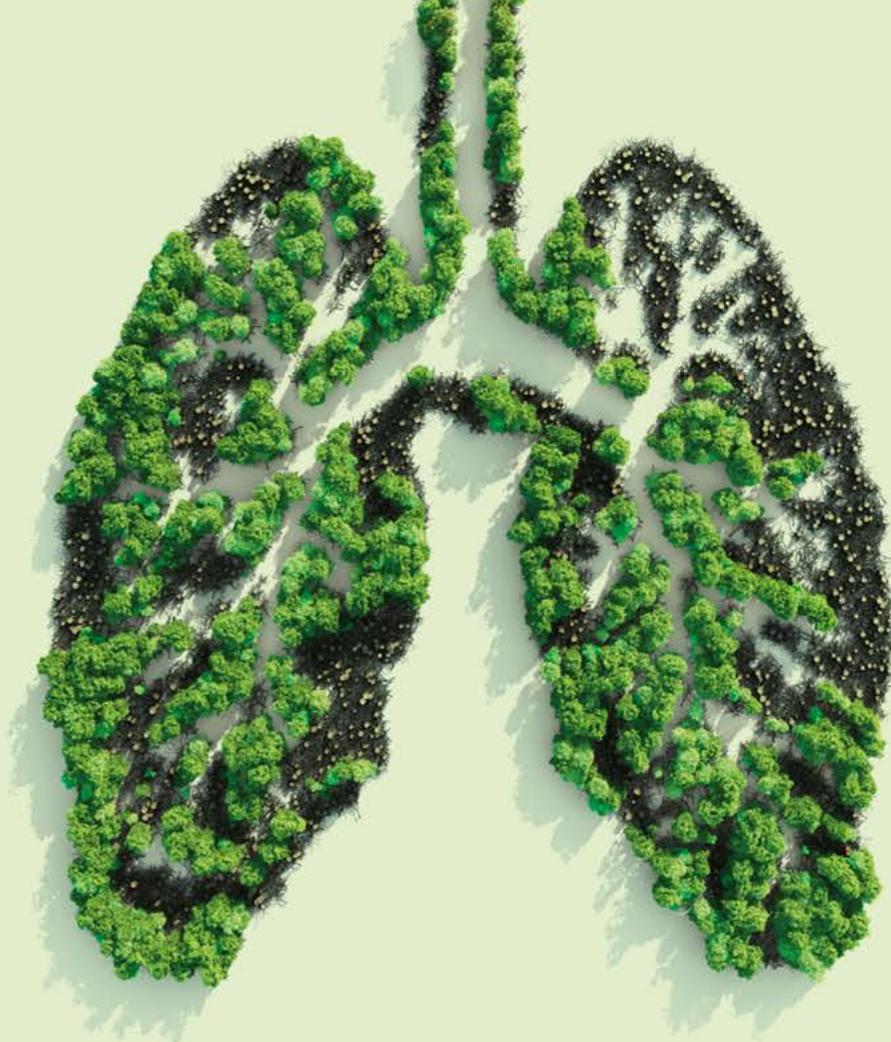


COPD & Rural Health:

A Dialogue on
the National
Action Plan.



#COPDRuralHealth



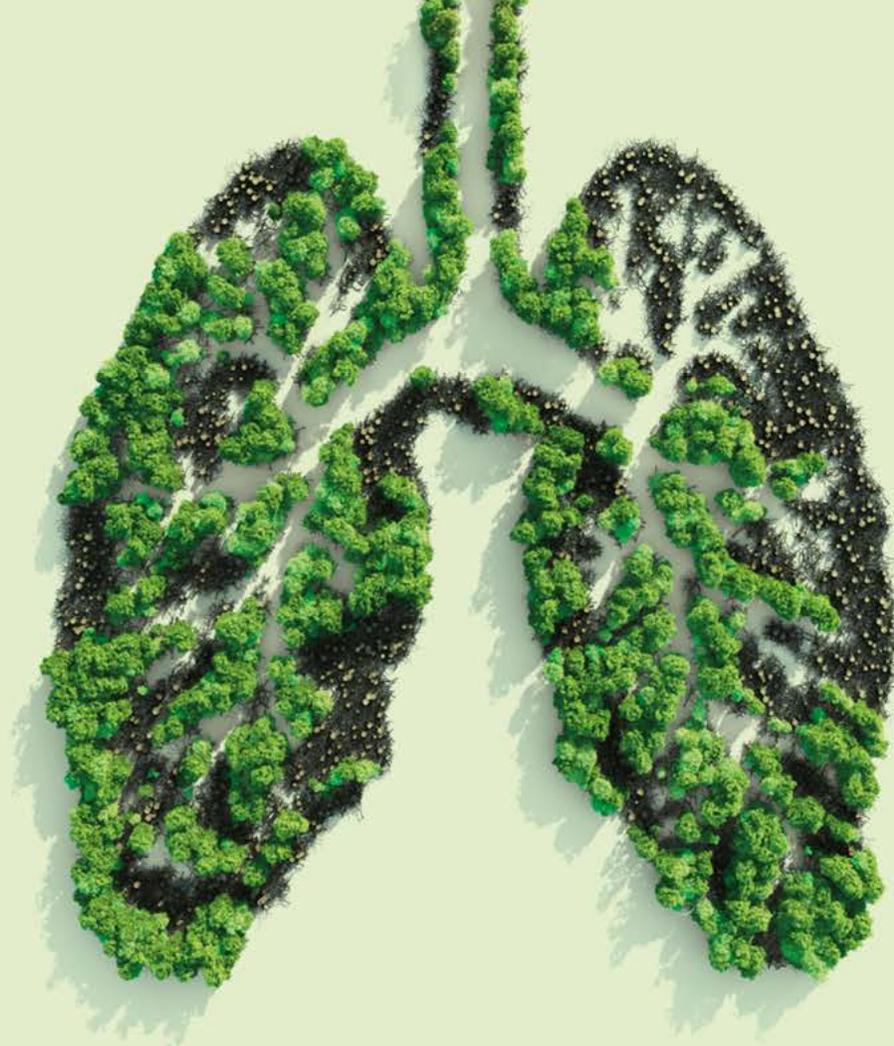
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Agenda

8:00 a.m. - 8:30 a.m.	<i>Registration</i>	12:45 p.m. - 2:00 p.m.	Goal 3 Discussion
8:30 a.m. - 9:00 a.m.	Welcome & Opening Remarks	2:00 p.m. - 3:15 p.m.	Goal 4 Discussion
9:00 a.m. - 10:15 a.m.	Goal 1 Discussion	3:15 p.m. - 3:30 p.m.	<i>Break</i>
10:15 a.m. - 10:30 a.m.	<i>Break</i>	3:30 p.m. - 4:45 p.m.	Goal 5 Discussion
10:30 a.m. - 11:45 a.m.	Goal 2 Discussion	4:45 p.m. - 5:00 p.m.	Closing Remarks & Adjournment
11:45 a.m. - 12:45 p.m.	<i>Lunch</i>		

Goal 1:

Empower people with COPD, their families, and caregivers to recognize and reduce the burden of COPD.

Presenter:

John Linnell, U.S. COPD Coalition; COPD Foundation

Panel:

Barbara Yawn, COPD Foundation; University of Minnesota
Stephanie Cramb, Cigna-HealthSpring
Eugenia Wyatt, Cigna-HealthSpring

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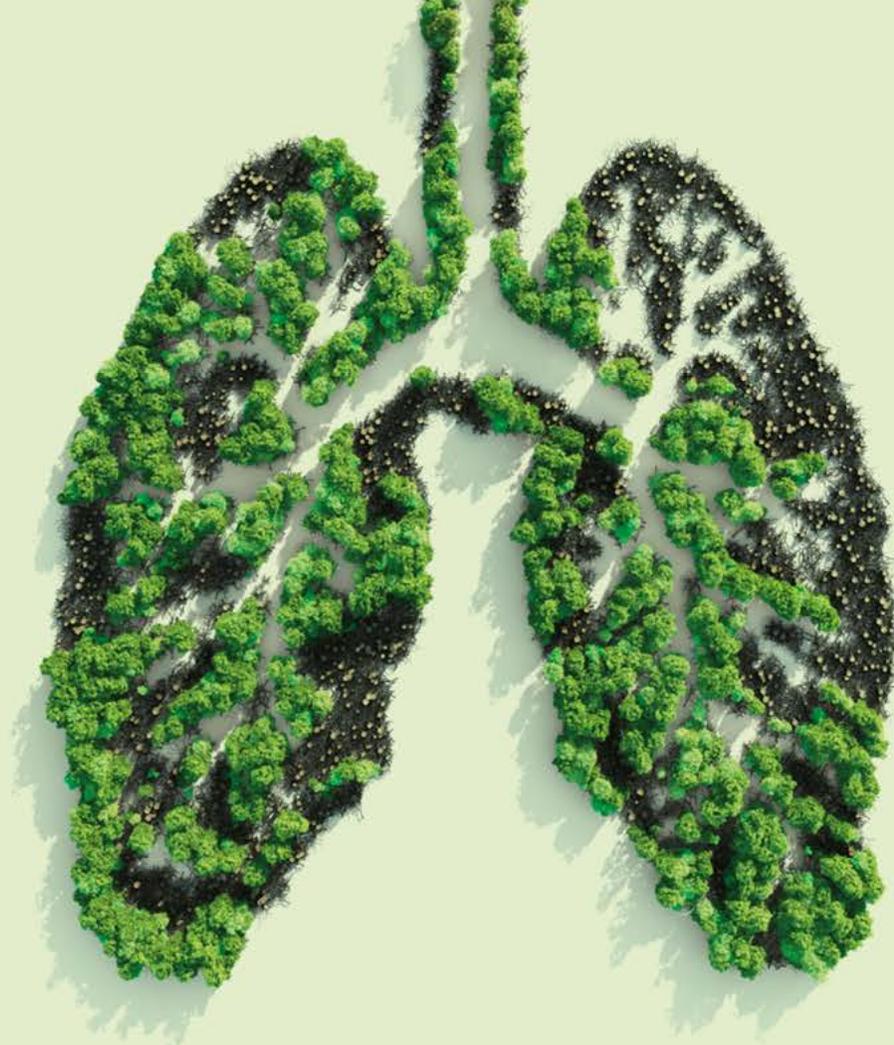
Goal 1:

1. How do COPD patients in rural areas currently navigate access to care issues (primary care who know COPD, pulmonologists, pulmonary rehab, pharmacy, oxygen, and devices)?
2. What is the role of COPD caregivers in rural settings? What are the barriers that need to be removed? Are there examples from other conditions?
3. Is there a role for telemedicine in COPD patients' education and empowerment in rural settings? Are there pilot telemedicine programs or similar efforts that have shown benefit for patients with COPD or other conditions?
4. How do we grow awareness of COPD signs and symptoms and encourage earlier diagnosis in rural settings? How do we need to modify outreach tactics (e.g., digital media vs. reliance on community/senior centers/libraries) for rural areas?

The Appalachian Pulmonary Health Project

Dr. Dan Doyle

*Family Physician, New River Health Association, FQHC
Cabin Creek Health System FQHC
Clinical Director, Appalachian Pulmonary Health Project*



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Disclosures

- No financial or commercial conflicts
- UN Declaration of Human Rights. Article 25. “Health care is a human right.”
- Expenditure of public funds for health care should be based on cost-effectiveness not profitability.



Pulmonary Rehabilitation in the National Action Plan

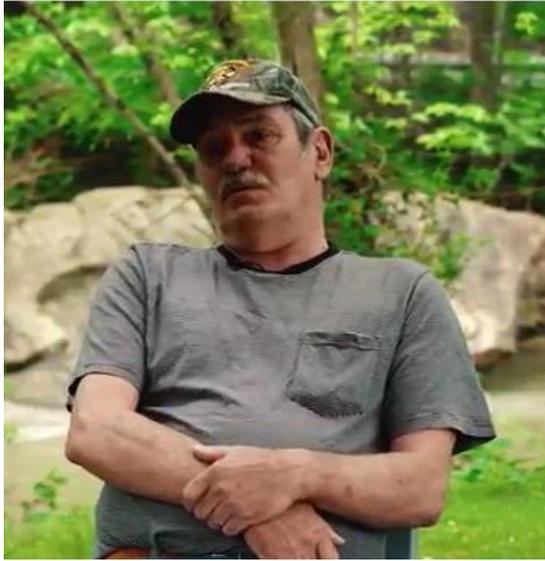
Goal 2, Section 5, Item b.

5. **Improve access to care for people with COPD, particularly for those in hard-to-reach areas.**

b. Improve awareness of quality **pulmonary rehabilitation** treatment available through Medicare, Medicaid, and private health insurance. Additional recommendations include the following:

- i. Adapt pulmonary-rehabilitation regulations to facilitate broader access to programs outside the hospital setting.
- ii. Consider opportunities to identify novel ways to help health care providers start and sustain pulmonary-rehabilitation programs and retain patients through the full course of the program — for example, by promoting awareness of best practices and evidence-based guidelines.

The Patient's Voice



https://www.youtube.com/watch?v=44S9KpmL_S4



What is Pulmonary Rehabilitation

ATS/ERS definition 2013

“Pulmonary rehabilitation is a comprehensive intervention based on a thorough patient assessment followed by patient-tailored therapies that include, but are not limited to, exercise training, education, and behavior change, designed to improve the physical and psychological condition of people with chronic respiratory disease and to promote the long-term adherence to health-enhancing behaviors.”

What is Pulmonary Rehabilitation?

- What does it look like?
 - AACVPR model. 24 sessions over 12 weeks
- Who is eligible?
- What are outcome measures?
- What are proven benefits?



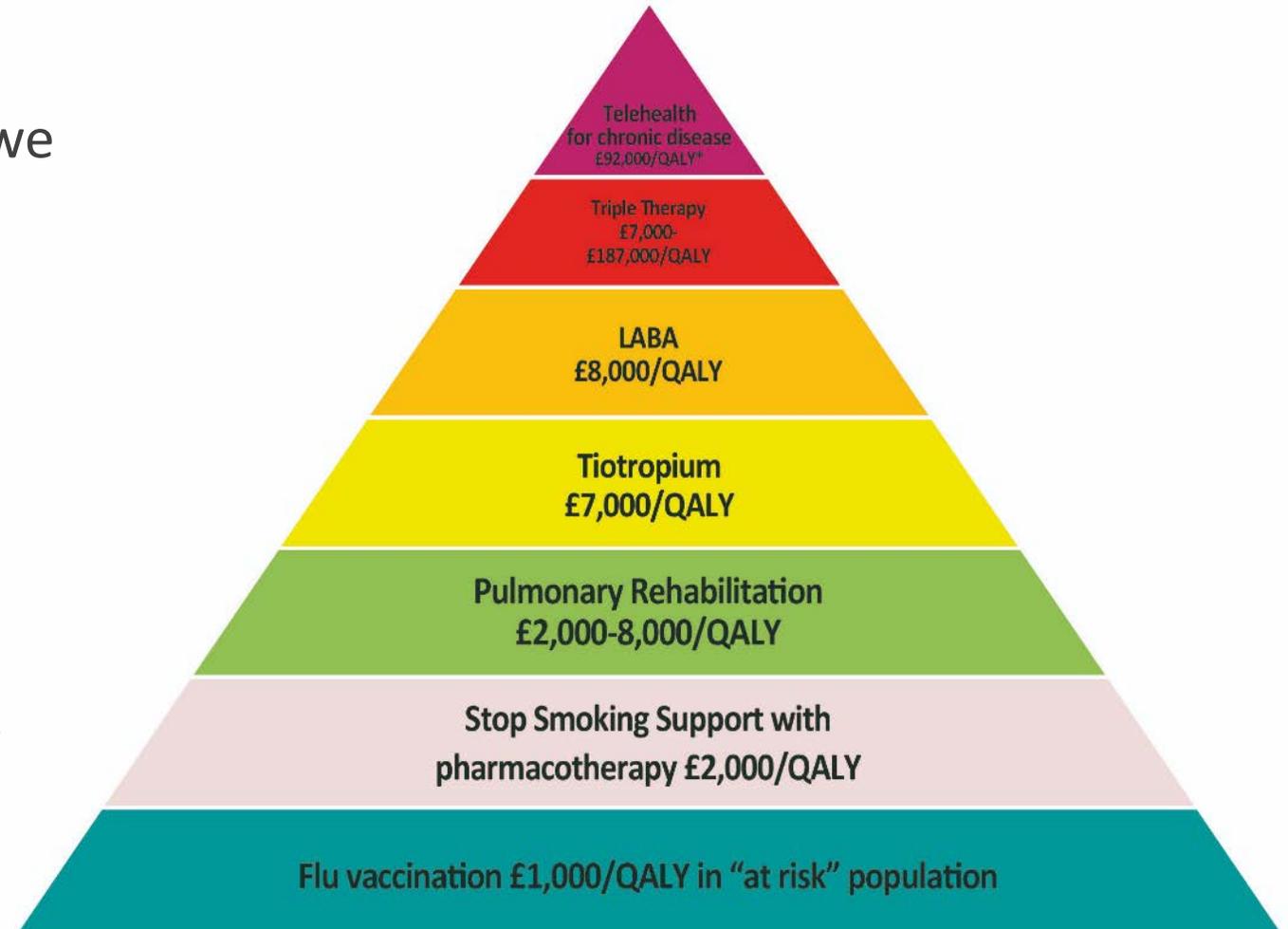
GADPRP-WV. Clinical outcomes for first 20 months. N=111

	Pre	Post	Mean change	
Dyspnea level. mMRC	3	1.8	-1.2	<.001
Six-minute walk test. Feet.	760	1019	259	<.001
NIF. cmH20*	78.2	88.7	10.5	<.001
Knowledge. Test Score. *	15.8	17.7	1.9	<.001
SGRQ	54.6	48.4	-6.2	<.001
BODE index	3.4	2.3	-1.1	<.001

The COPD Value Pyramid

(Developed by the London Respiratory Network with The London School of Economics and reproduced with permission from the London Respiratory Team report 2013)

This 'value' pyramid reflects what we currently know about the cost per QALY of some of the commonest interventions in COPD. It was devised as a tool for health care organizations to use to promote audit and to ensure adequate commissioning of nonpharmacological interventions.



Rural Pulmonary Rehab

In Autumn 2013, three sites in rural WV received funding from Dorney-Koppel, Benedum, and others to provide Pulmonary Rehabilitation services.

- Cabin Creek Health Systems (an FQHC)
- New River Health Association (an FQHC)
- Boone Memorial Hospital (a critical access hospital)

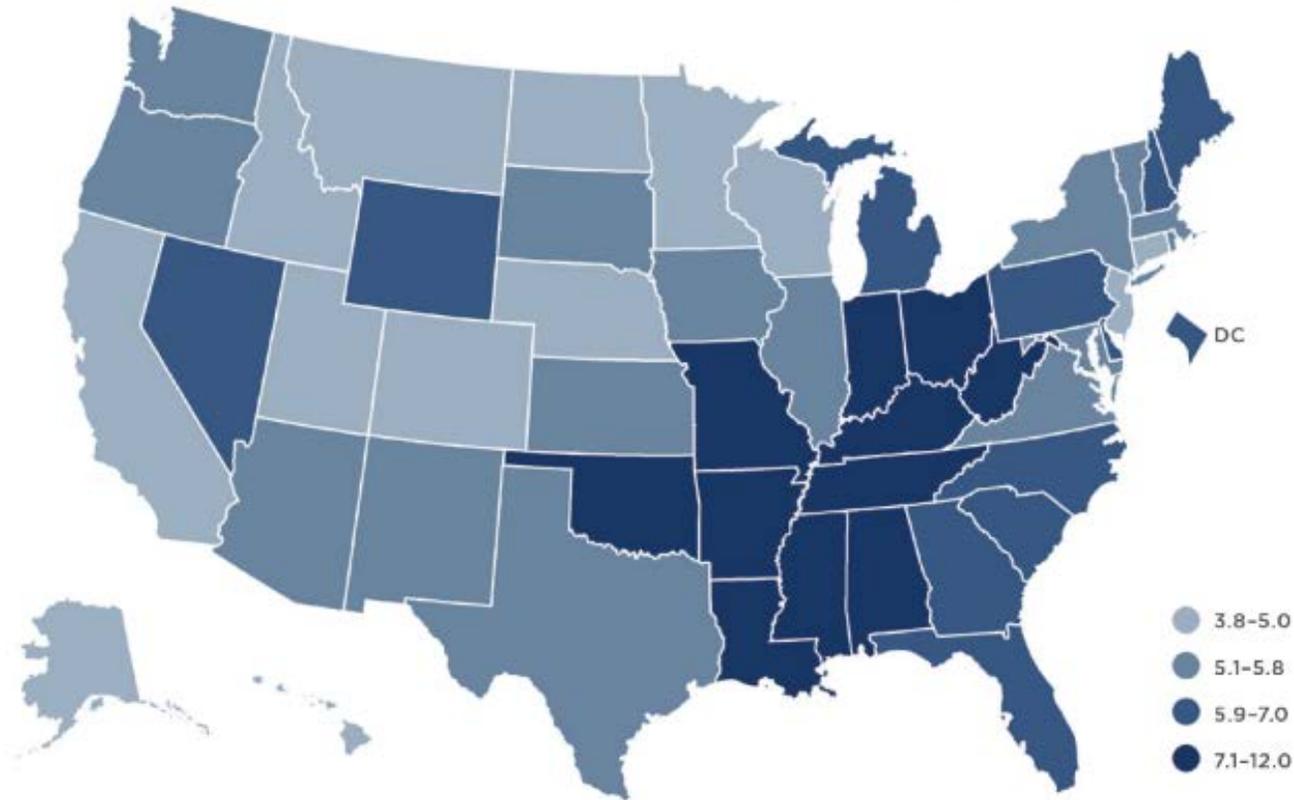


Grand Opening November 2, 2013



High Prevalence of COPD Appalachia and South Central US

16 MILLION PEOPLE HAVE BEEN DIAGNOSED WITH COPD
AND MILLIONS OF OTHERS DO NOT REALIZE THEY MAY HAVE IT.^{2,3}



AGE-ADJUSTED PREVALENCE OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AMONG
ADULTS AGED ≥ 18 YEARS — BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, UNITED STATES, 2015

The First 5 Years: 2013-2017

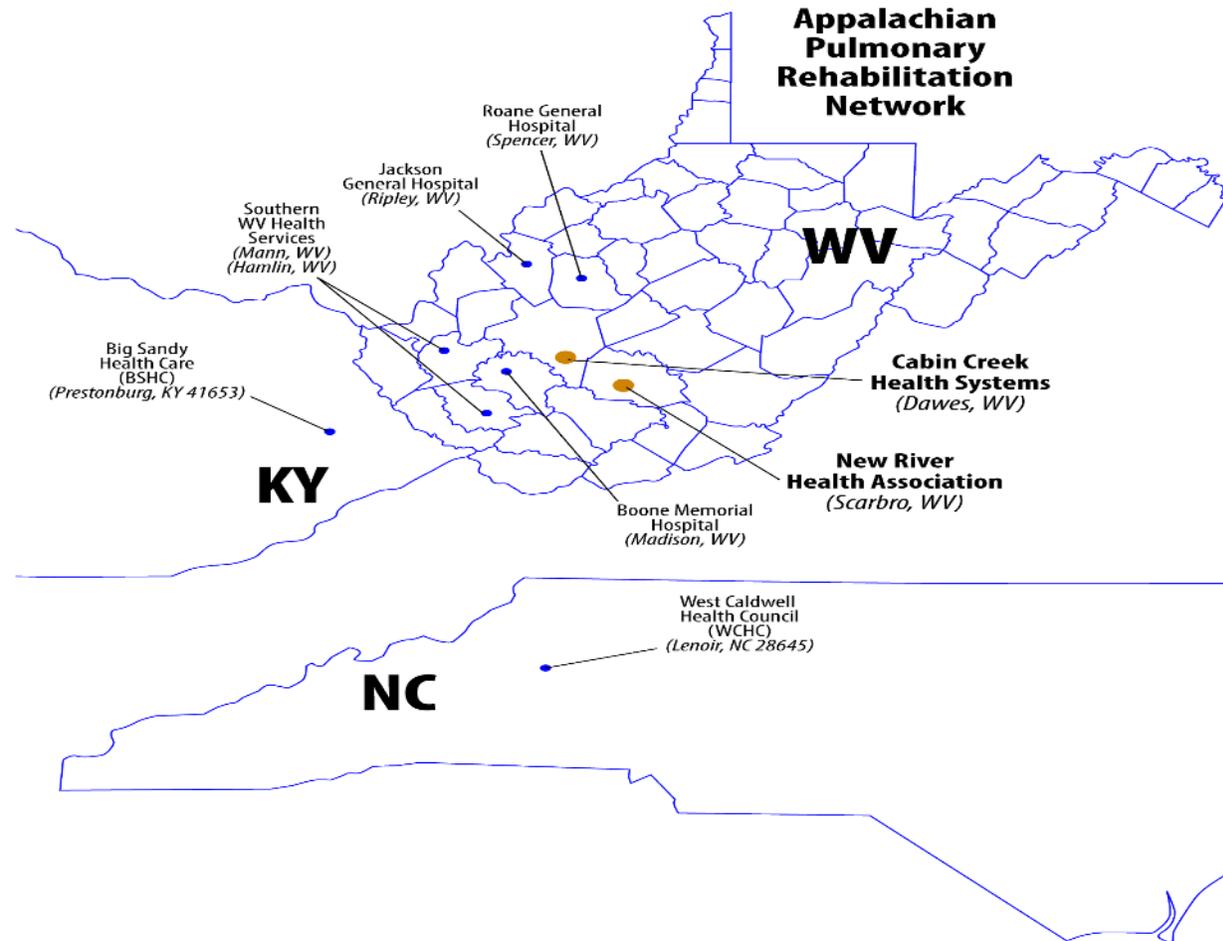
- Starting out
- The PDSA Cycle
- Networking



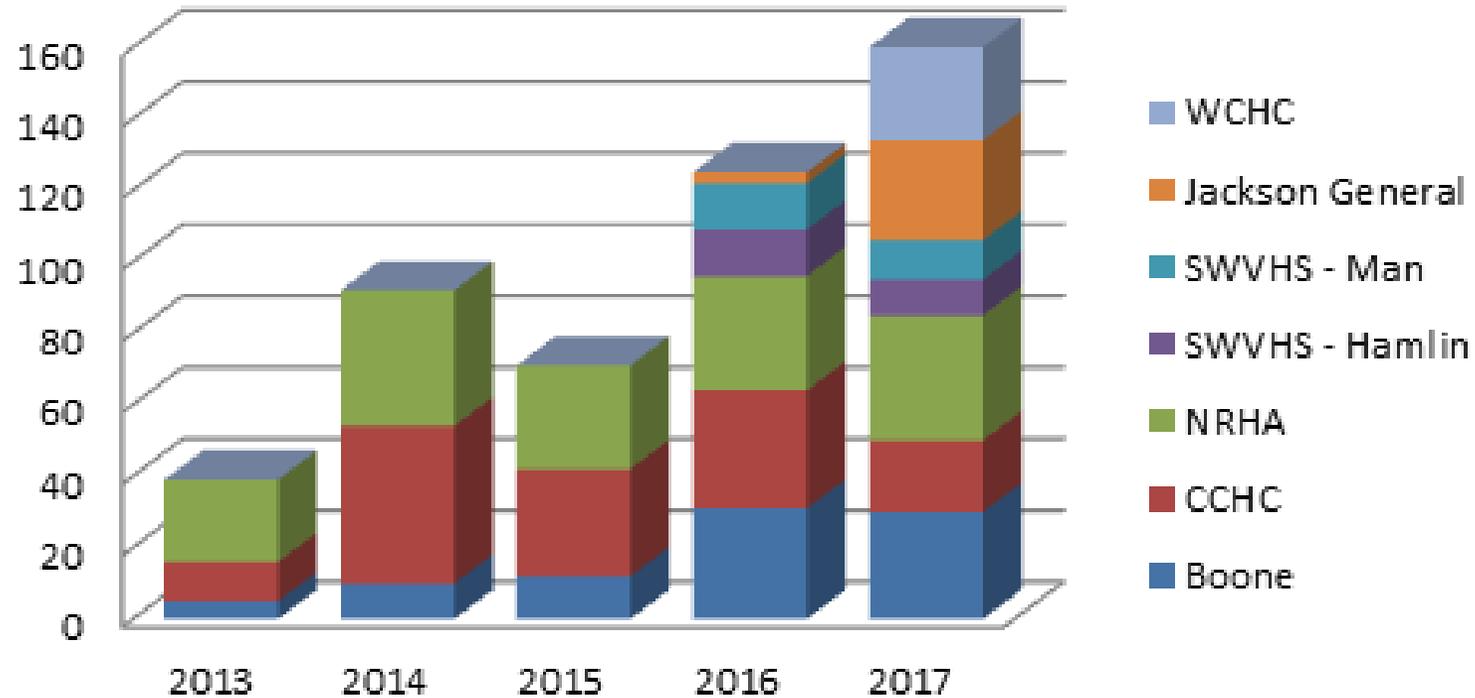
Appalachian Pulmonary Health Project

8 organizations, 9 sites, 3 states

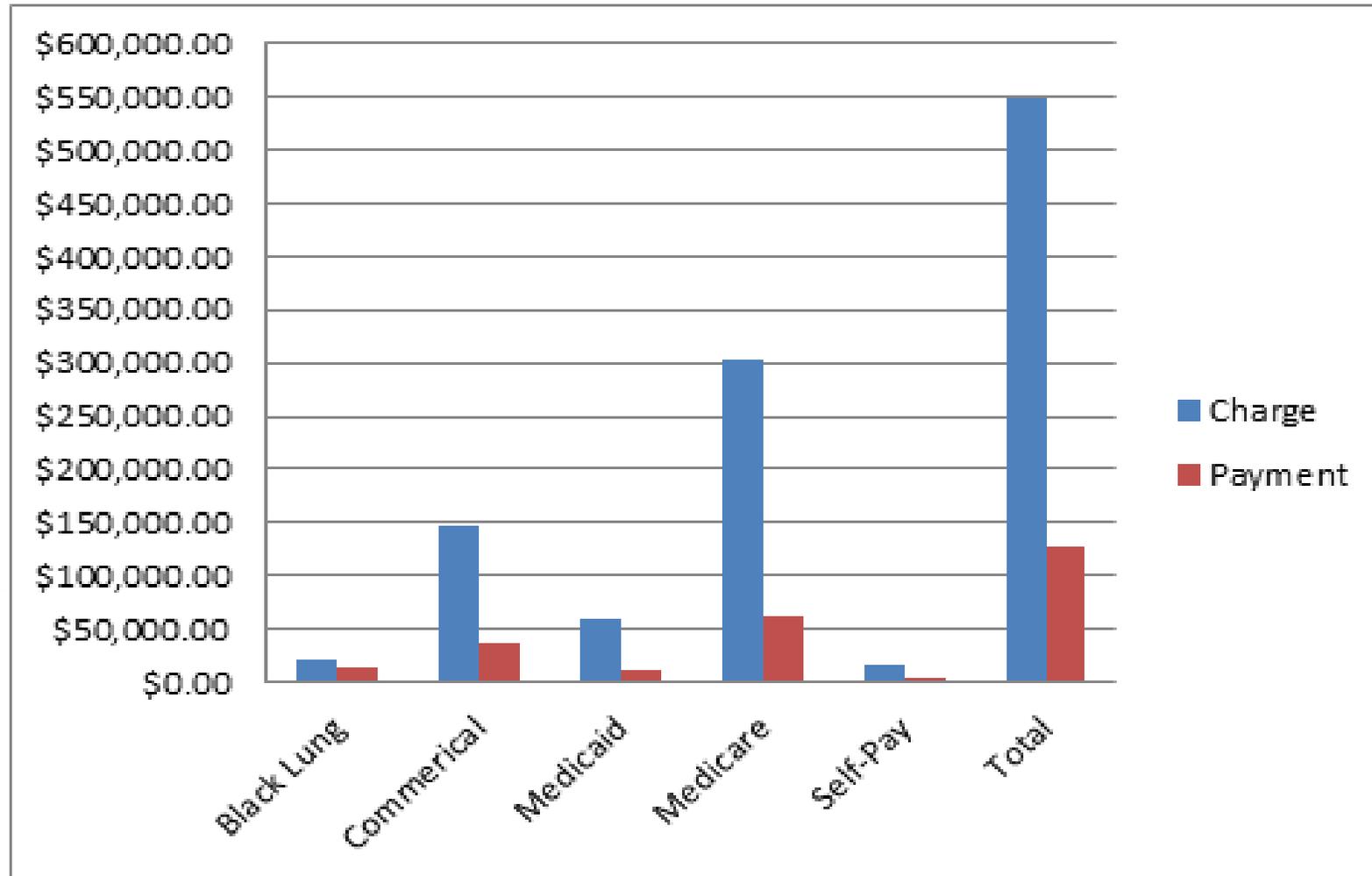
March 2018



PR Intakes by year by facility



APRN Charges and Payments FY 2017 Payer



Appalachian Pulmonary Health Project Goal Statement 2018

- To work for the primary prevention of COPD.
- To expand access to quality-assured spirometry in rural areas.
- To expand access to pulmonary rehabilitation in rural areas.
- To provide care management for persons with chronic lung diseases.



APHP Learnings and Recommendations

- Respiratory therapists are vital in primary care.
- Build it and they will come. Patients love PR.
- This is a low-cost intervention. \$120k/yr/site. \$2500 per patient.
- Evidence-based model and infrastructure for replication are in place.
- 1375 CAH, 800 rural FQHC.
- HRSA and CMS assistance for FQHC is needed (billing, scope change).
- Reimbursement issues threaten sustainability.
- Value-based experiments by Medicare and Medicaid are needed.

The Next 5 Years: 2018-2022

- Consolidation
- Innovation
- Expansion



GADPRP Respiratory Therapists Quarterly Meeting 10-20-2017



Patient Voices



https://www.youtube.com/watch?v=44S9KpmL_S4



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Goal 2:

Improve the diagnosis, prevention, treatment, and management of COPD by improving the quality of care delivered across the health care continuum.

Presenter:

Dan Doyle, New River Health Association;
Cabin Creek Health System; Appalachian
Pulmonary Health Project

Panel:

Claibe Yarbrough, Veterans Health Administration

Akshay Sood, University of New Mexico School of Medicine

David Weissman, National Institute for Occupational Safety and Health, Centers
for Disease Control and Prevention

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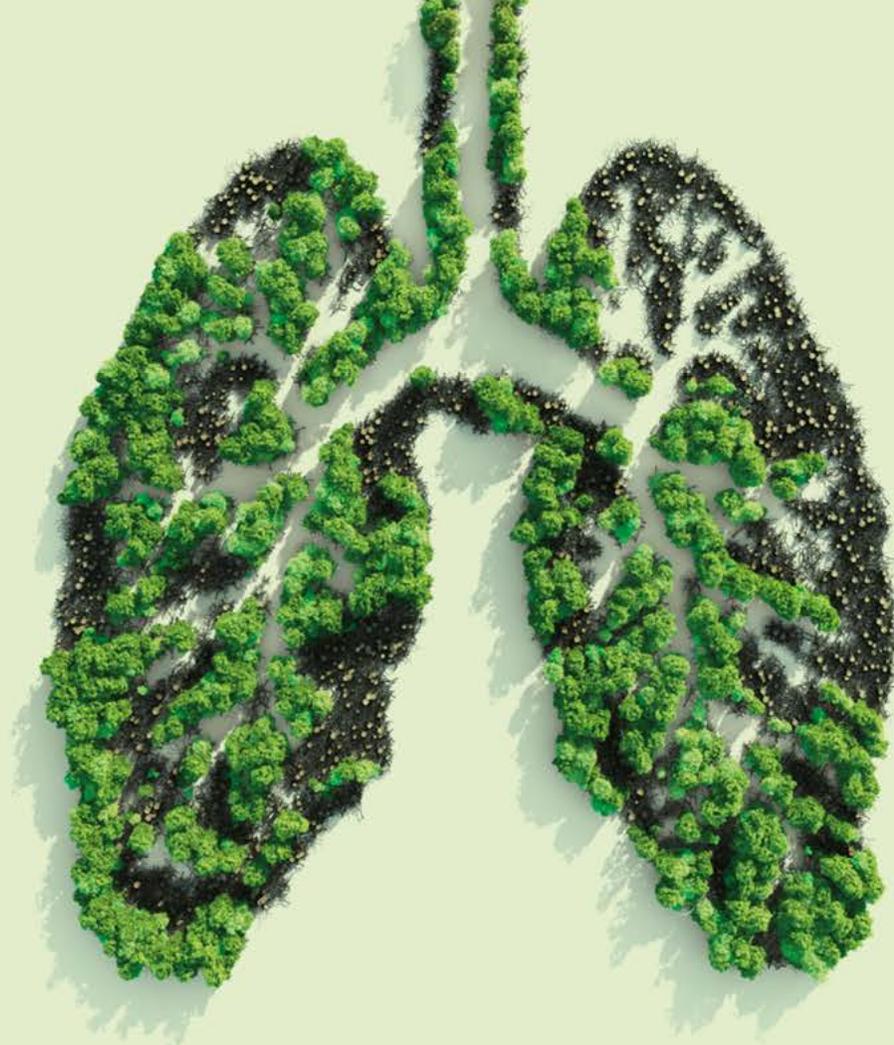
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Goal 2:

1. How do we empower and educate health care providers to provide the best possible care for COPD patients in rural settings? What are the barriers? Are there examples from other conditions? Are we making progress?
2. How is pulmonary rehabilitation delivered in rural settings? What are the barriers and opportunities to increase access and service quality?
3. Is there a role for telemedicine and telementoring in education of COPD health care providers in rural settings? Are there successful examples to follow? How and where do rural providers get training and support on emerging treatments and techniques for COPD and smoking cessation? What continuing education resources are available? What about for uptake in smoking as well? Do curriculums need to be developed?
4. How do we leverage providers (i.e., family physicians, physician assistants, nurses, pharmacists, respiratory therapists, and medical assistants, etc.) who are not pulmonologists?

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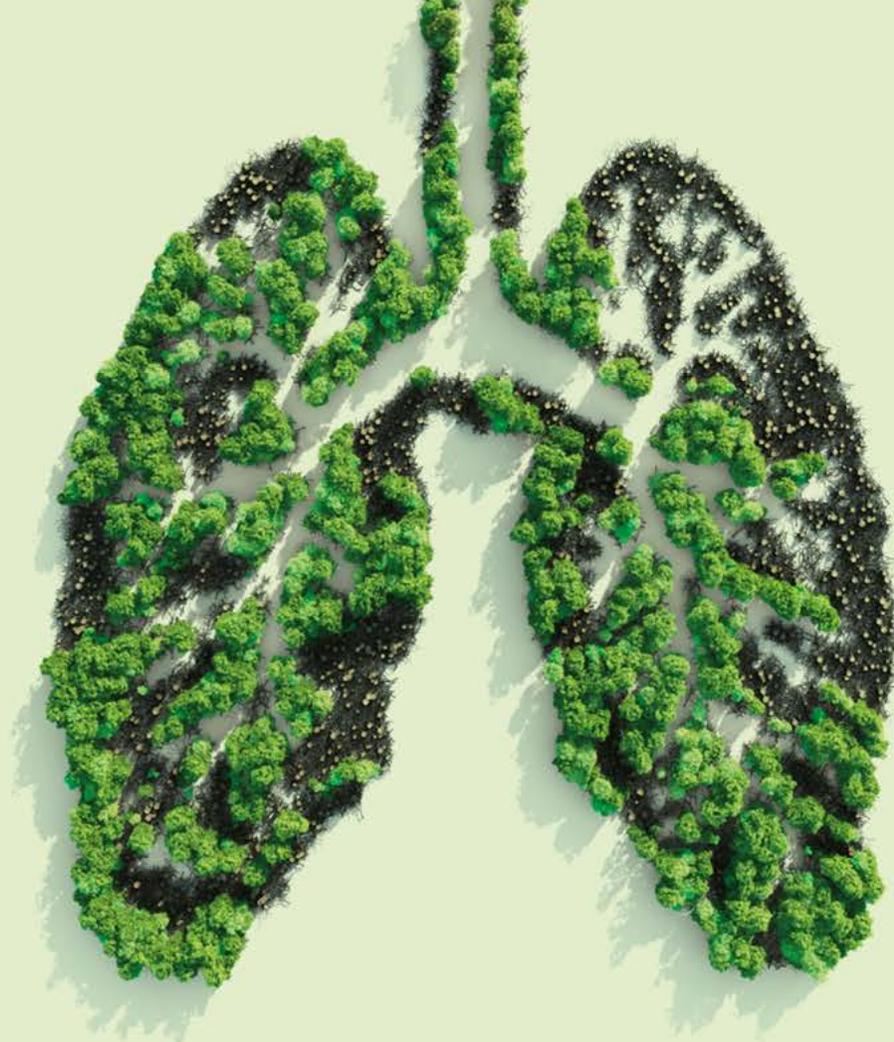
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Goal 3 Discussion:

**Collect, analyze, report,
and disseminate COPD-
related public health data
that drive change and
track progress**

Janet B Croft, PhD

Centers for Disease Control and Prevention



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Existing annual databases - rural data on COPD

1. **CDC National Vital Statistics System – death certificate data**
 - Public use at wonder.cdc.gov – number of deaths, crude and age-adjusted death rates, and 95% CI
 - Categorized by age, race/ethnicity, age group, **6 urban-rural categories**
 - Years can be combined for county-level data
2. **CMS 100% Medicare Part A FFS hospital claims and enrollment records**
 - County-level prevalence of COPD and 18 other conditions among Medicare FFS enrollees available to public at www.cms.gov
 - Special access through a Research Data Center for more detailed analyses
 - FIPS county can be coded to **6 urban-rural categories**

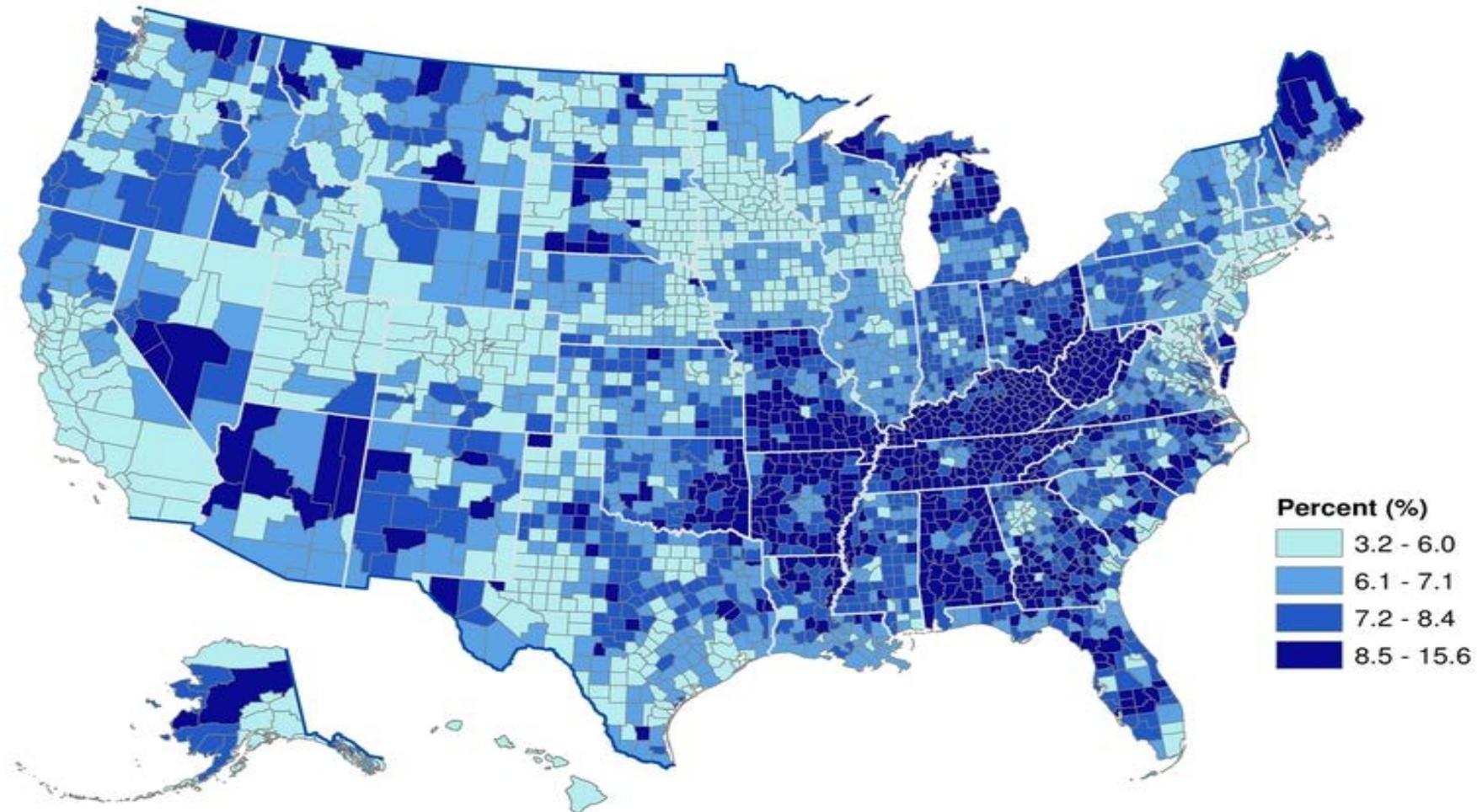
3. CMS National Provider Identifier Registry – COPD Provider

- Available at www.cms.gov – address locations of primary care providers and specialists who submit Medicare and Medicaid claims
- Expert geographer can geocode to FIPS county and **6 urban-rural categories**

4. CDC Behavioral Risk Factor Surveillance System (BRFSS) – prevalence

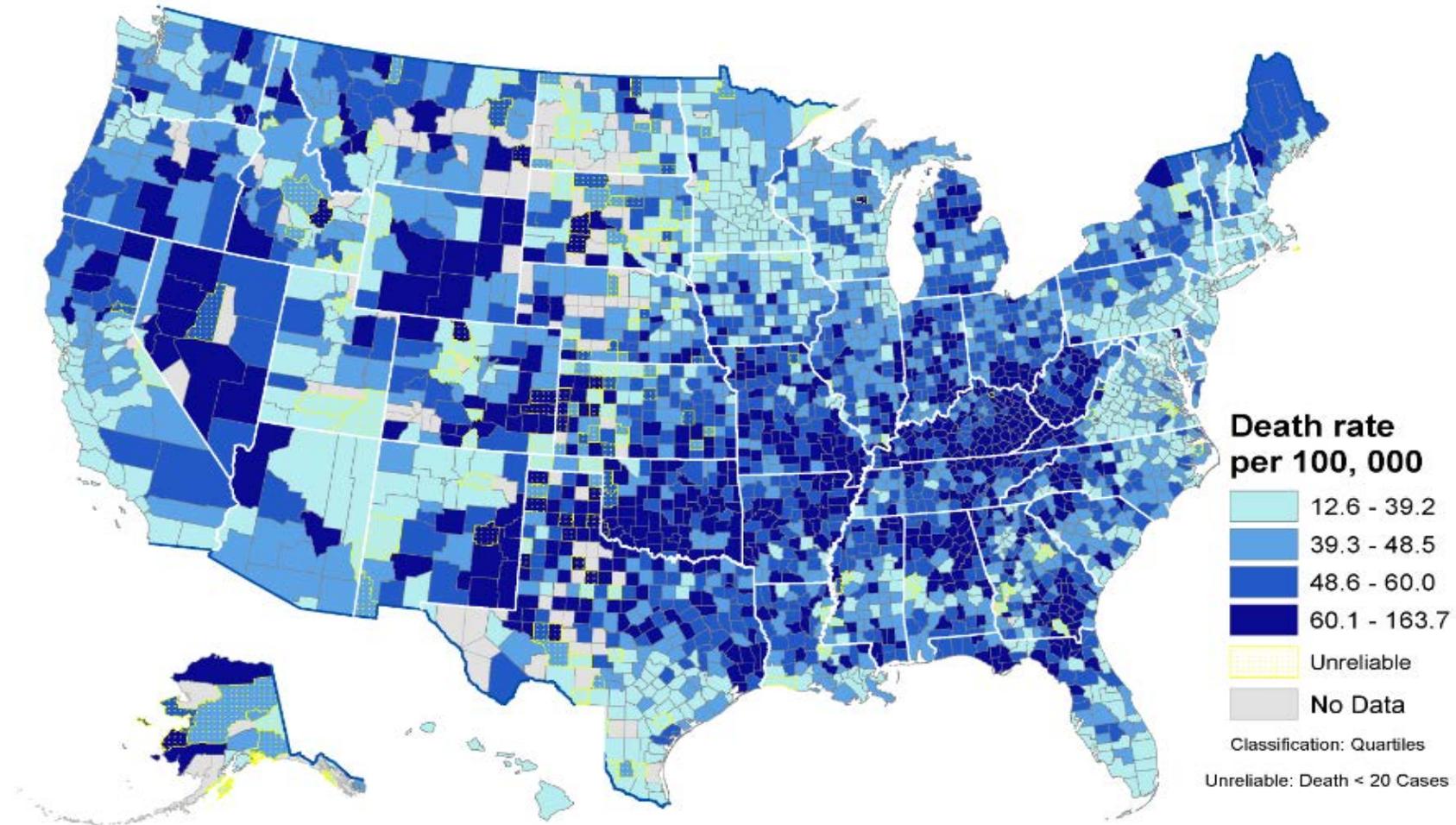
- Public use dataset at www.cdc.gov/brfss - requires statistical expertise in using weighted analyses (SUDAAN)
- Approx. 450,000 annual adult sample (all 50 states, DC, and territories)
- Self-reported doctor-diagnosed COPD and asthma history, smoking history, sociodemographic characteristics, other chronic diseases and risk factors
- FIPS county-level data can be accessed at a Research Data Center
- FIPS county can be coded to **6 urban-rural categories**

Age-adjusted prevalence of **doctor-diagnosed COPD** among adults aged ≥ 18 years: BRFSS, 2015



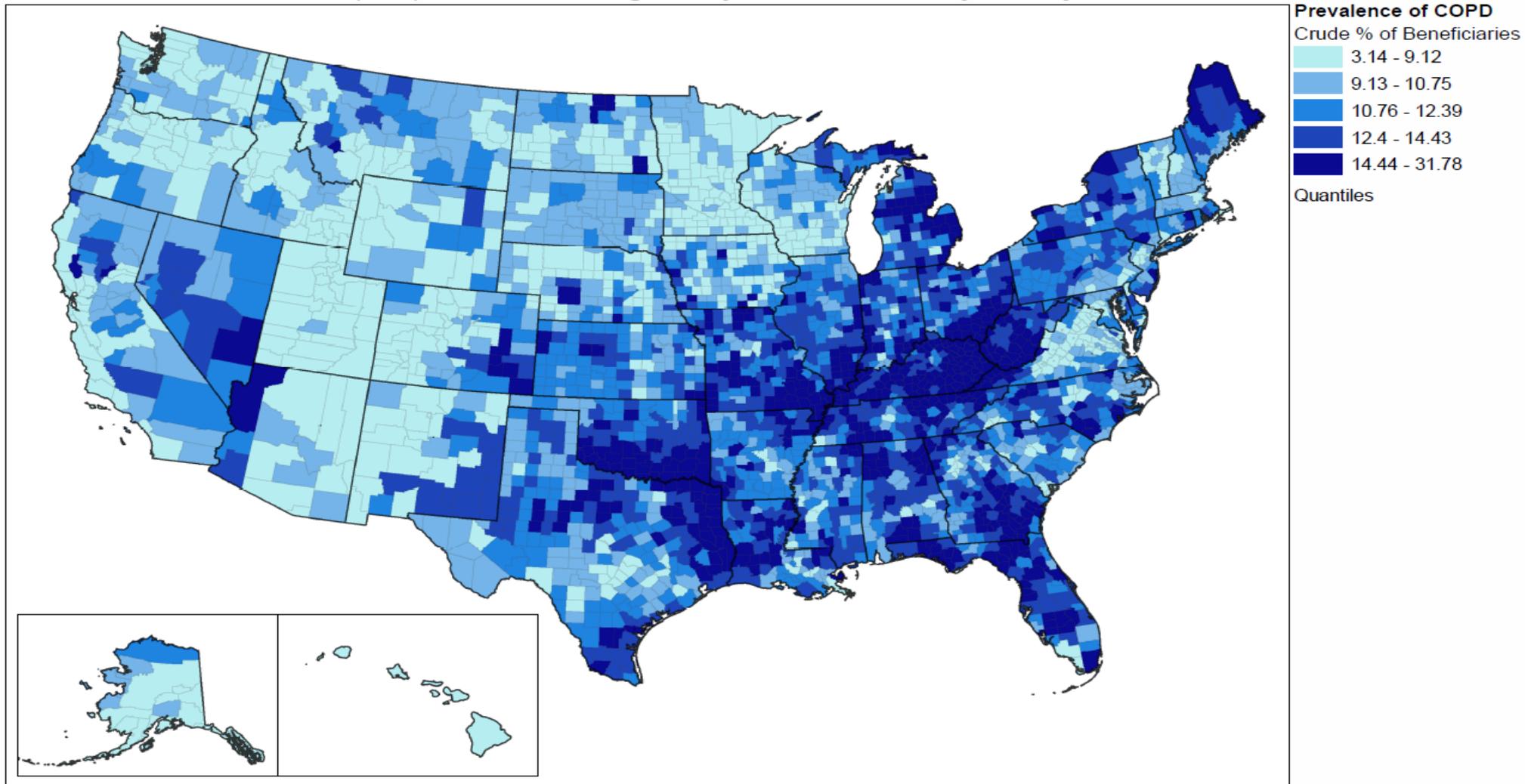
CDC. *MMWR* 2018;67(7):205-211.

Age-adjusted death rate for COPD as the underlying cause of death: National Vital Statistics System: 2010-2015



CDC wonder.cdc.gov death certificate data, 2010-2015.

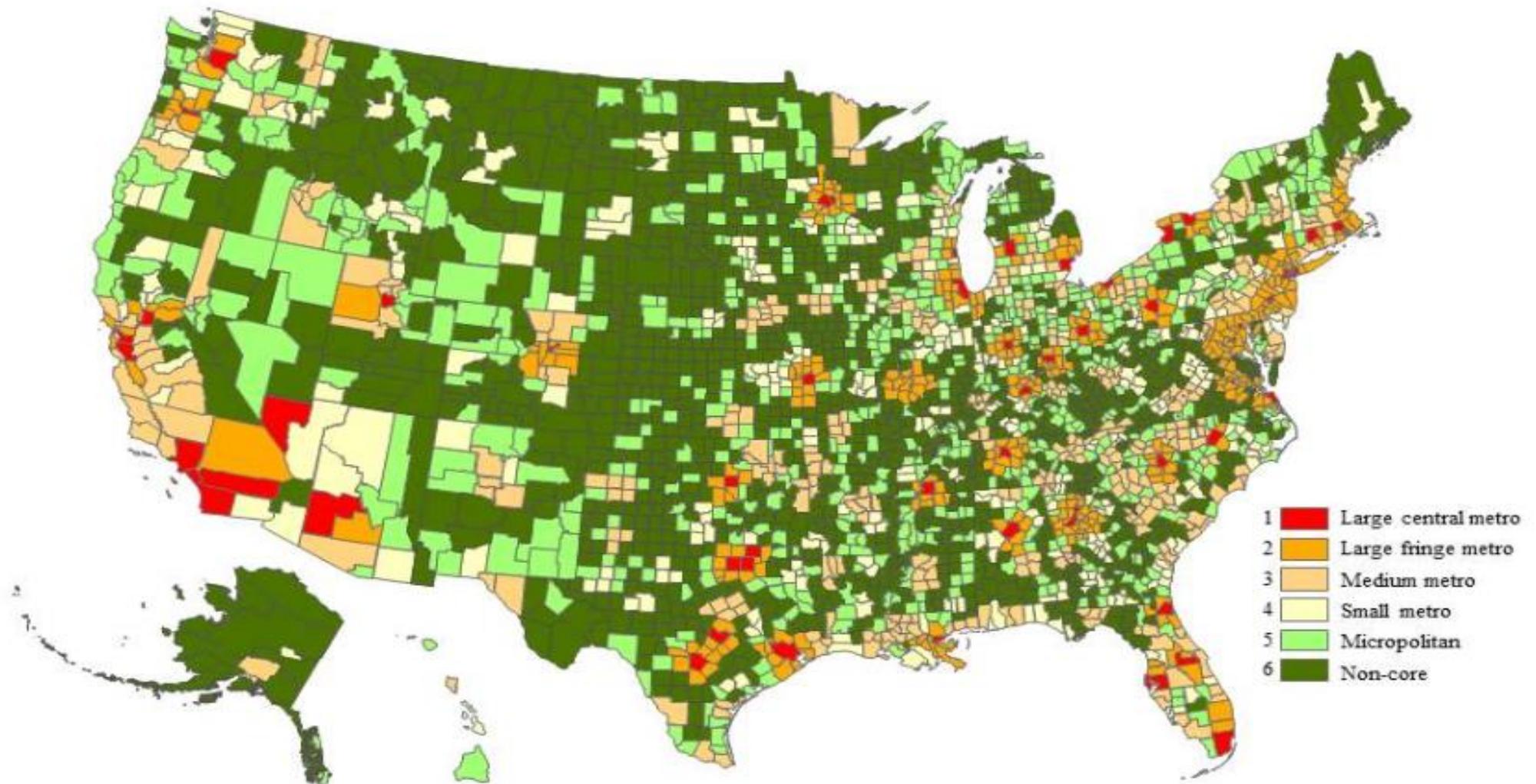
Prevalence of Chronic Pulmonary Obstructive Disease (COPD) among Medicare Fee-for-Service (FFS) Beneficiaries Aged 65 years and Older, by County, 2014



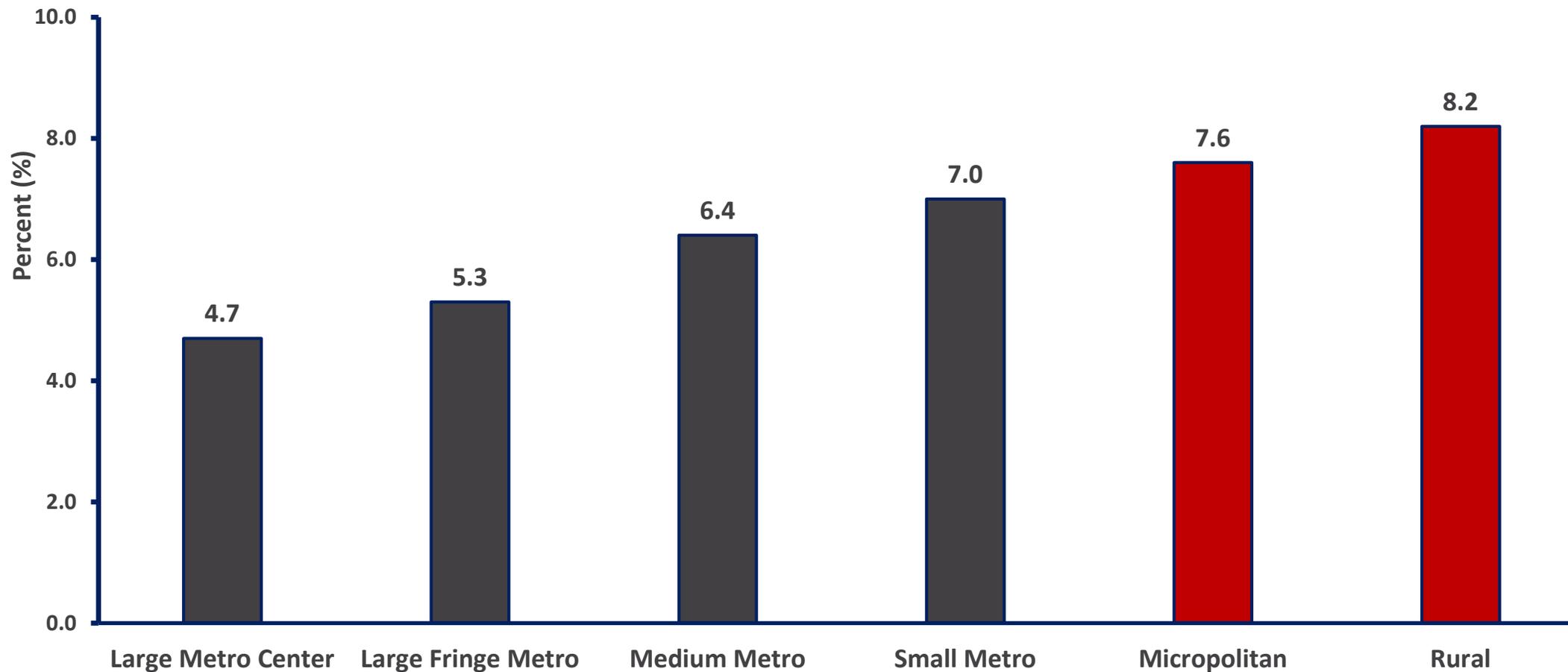
Source: CMS Chronic Condition Warehouse - Public Use Data: 2014. For the diagnostic definition of COPD, see: <https://www.ccwdata.org/web/quest/condition-categories>

https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html

National Center for Health Statistics 2013 Urban-Rural Classification Scheme for Counties

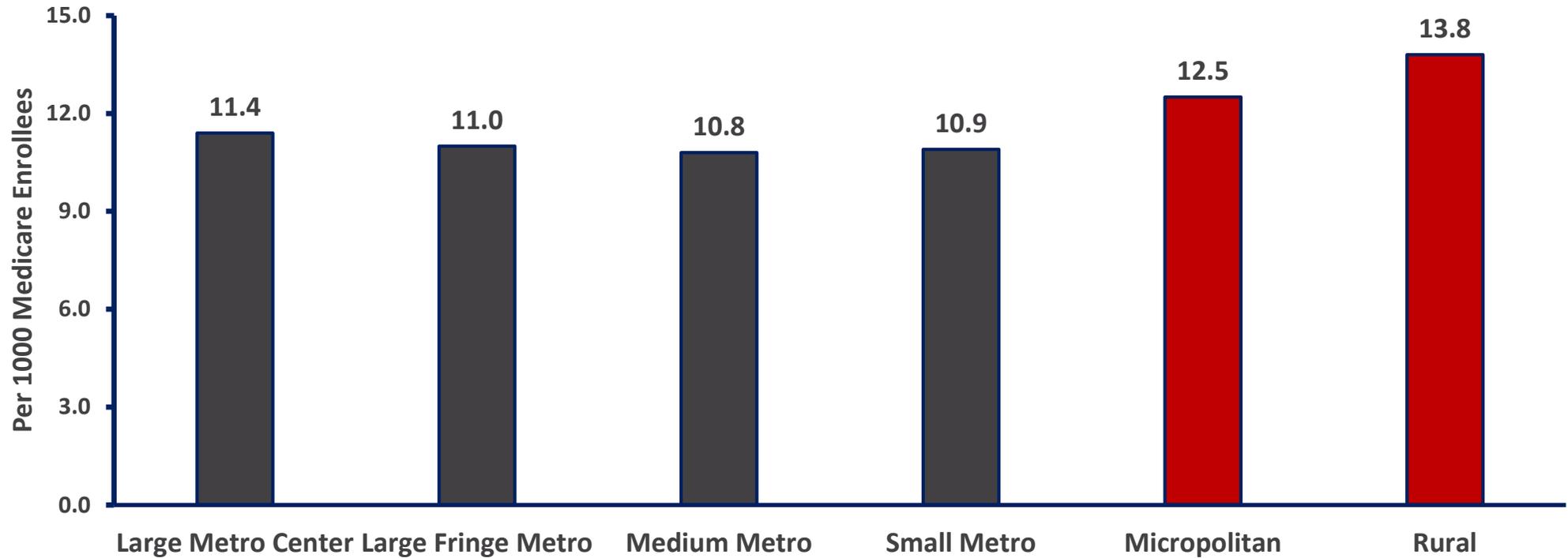


Age-adjusted prevalence of doctor-diagnosed COPD among adults aged ≥ 18 years, by urban-rural status: BRFSS, 2015

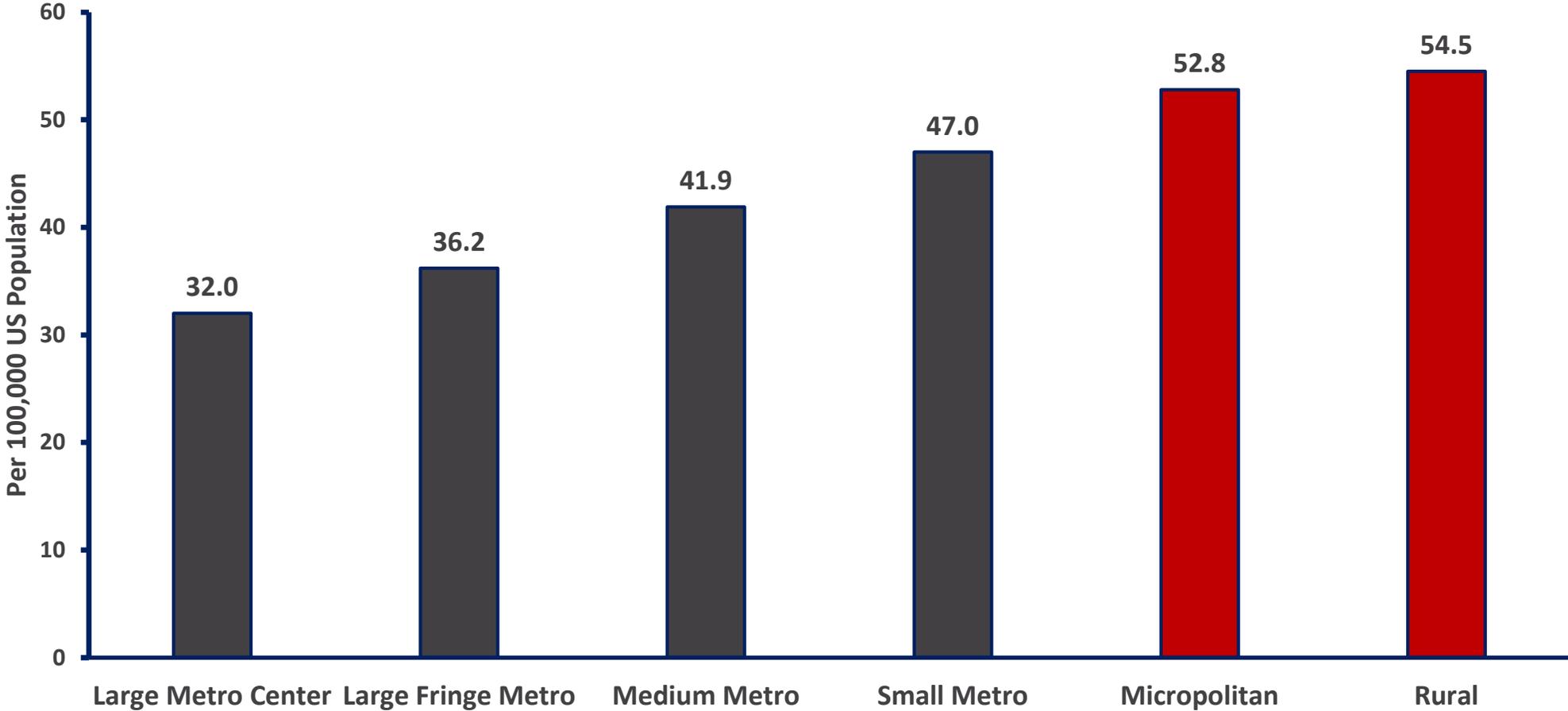


CDC. *MMWR* 2018;67(7):205-211.

Age-adjusted hospital discharges (per 1000 Medicare enrollees) for COPD as first-listed diagnosis among enrollees aged ≥ 65 years, by urban-rural status: Medicare fee-for-service claims, 2015



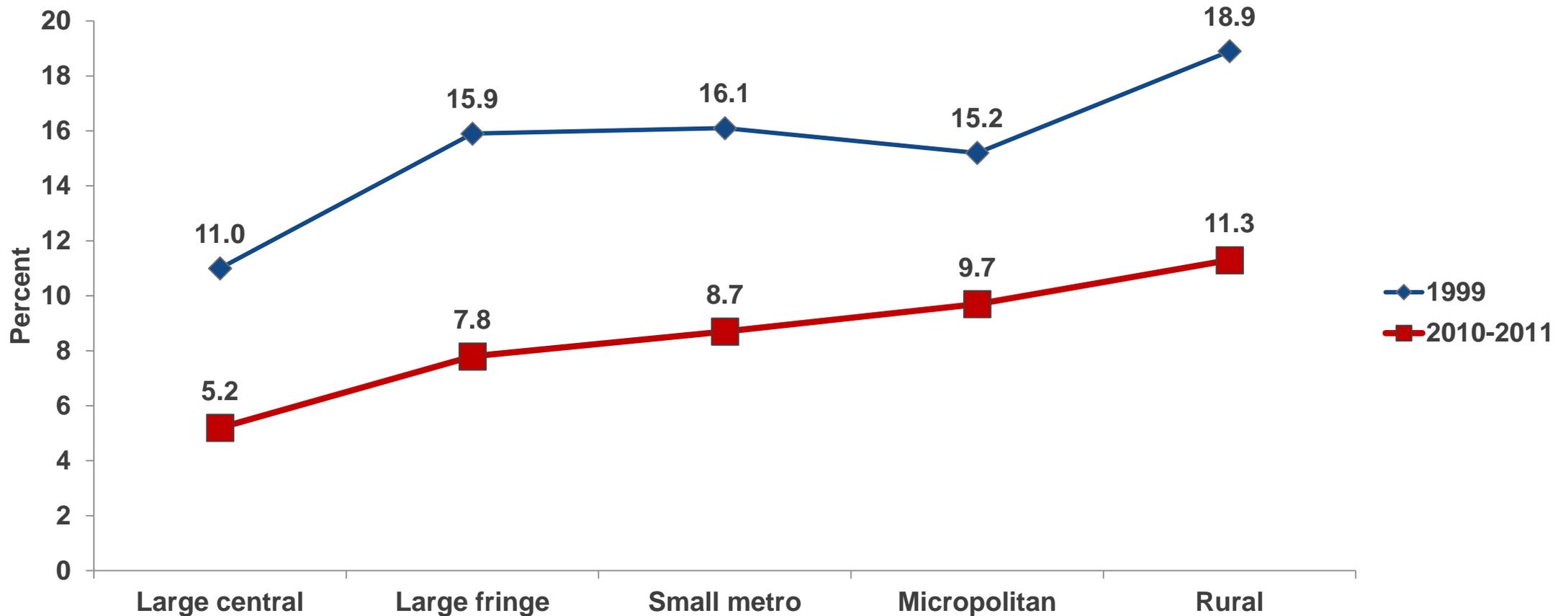
Age-adjusted death rates (per 100,000) for COPD as underlying cause of death, by urban-rural status: US Vital Statistics, 2015



CDC. *MMWR* 2018;67(7):205-211.

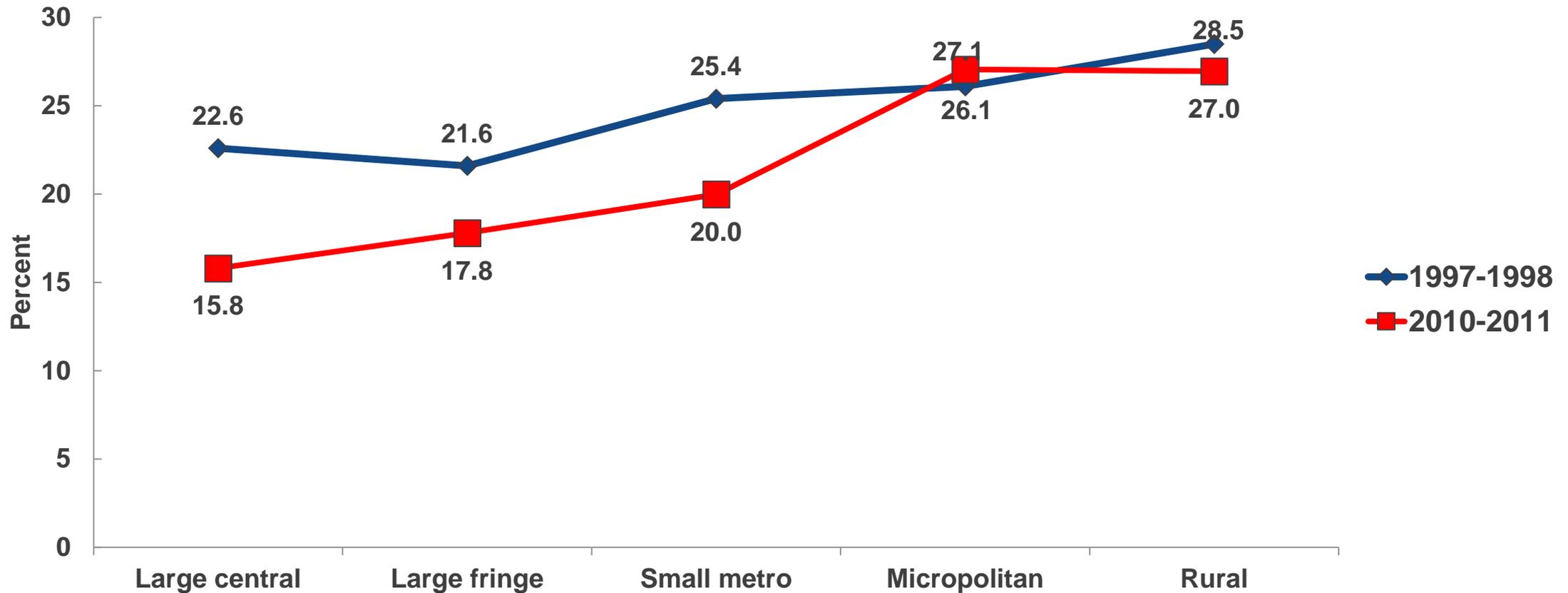
Risk Factors: Adolescent Smoking

Cigarette smoking in past month among adolescents aged 12-17, by urban-rural status: National Household Survey on Drug Abuse, 1999 and 2010-2011

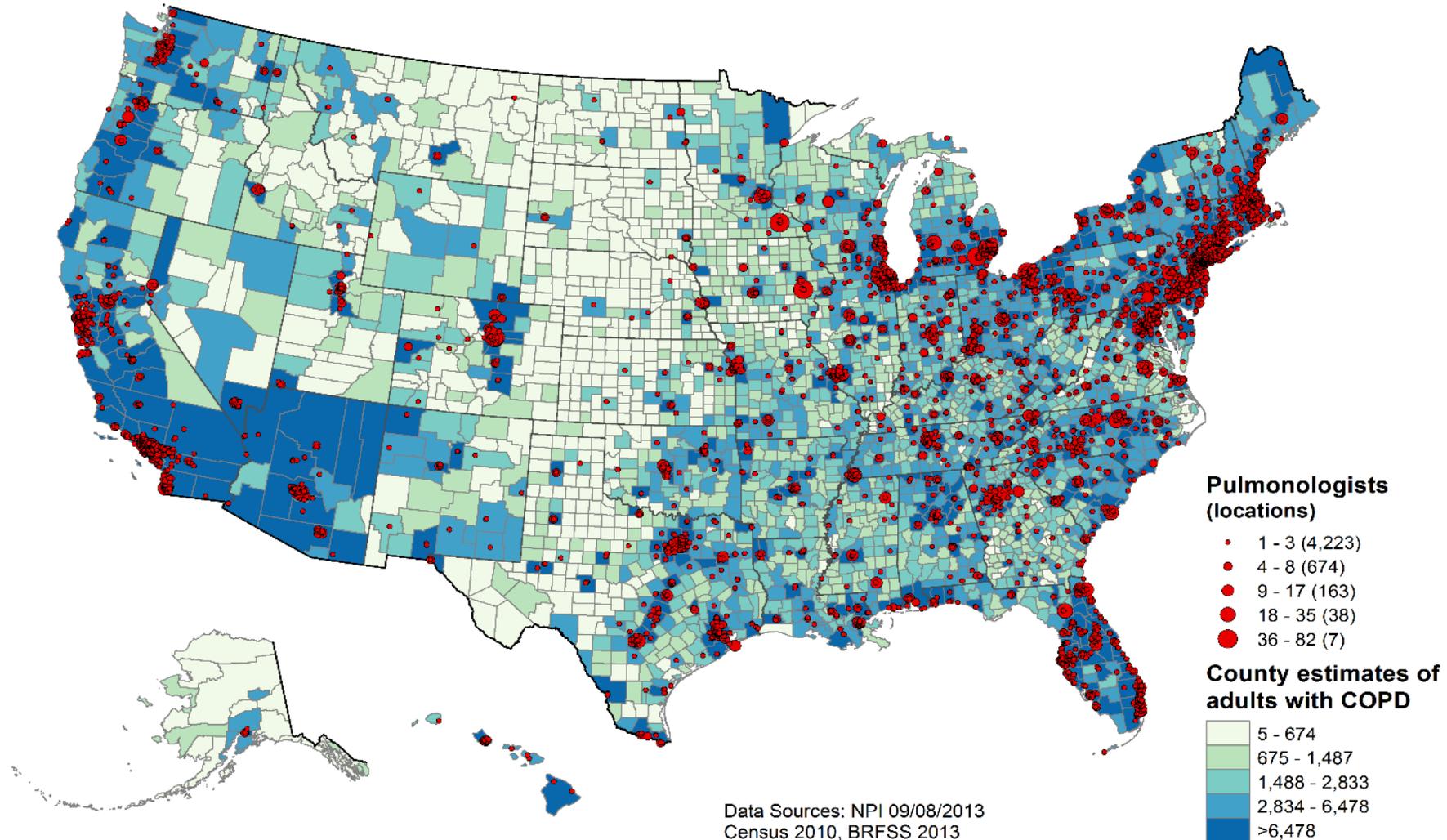


Risk Factors: Adult Smoking

Cigarette smoking among adults aged ≥ 18 years, by urban-rural status:
National Health Interview Surveys, 1997-1998 and 2010-2011

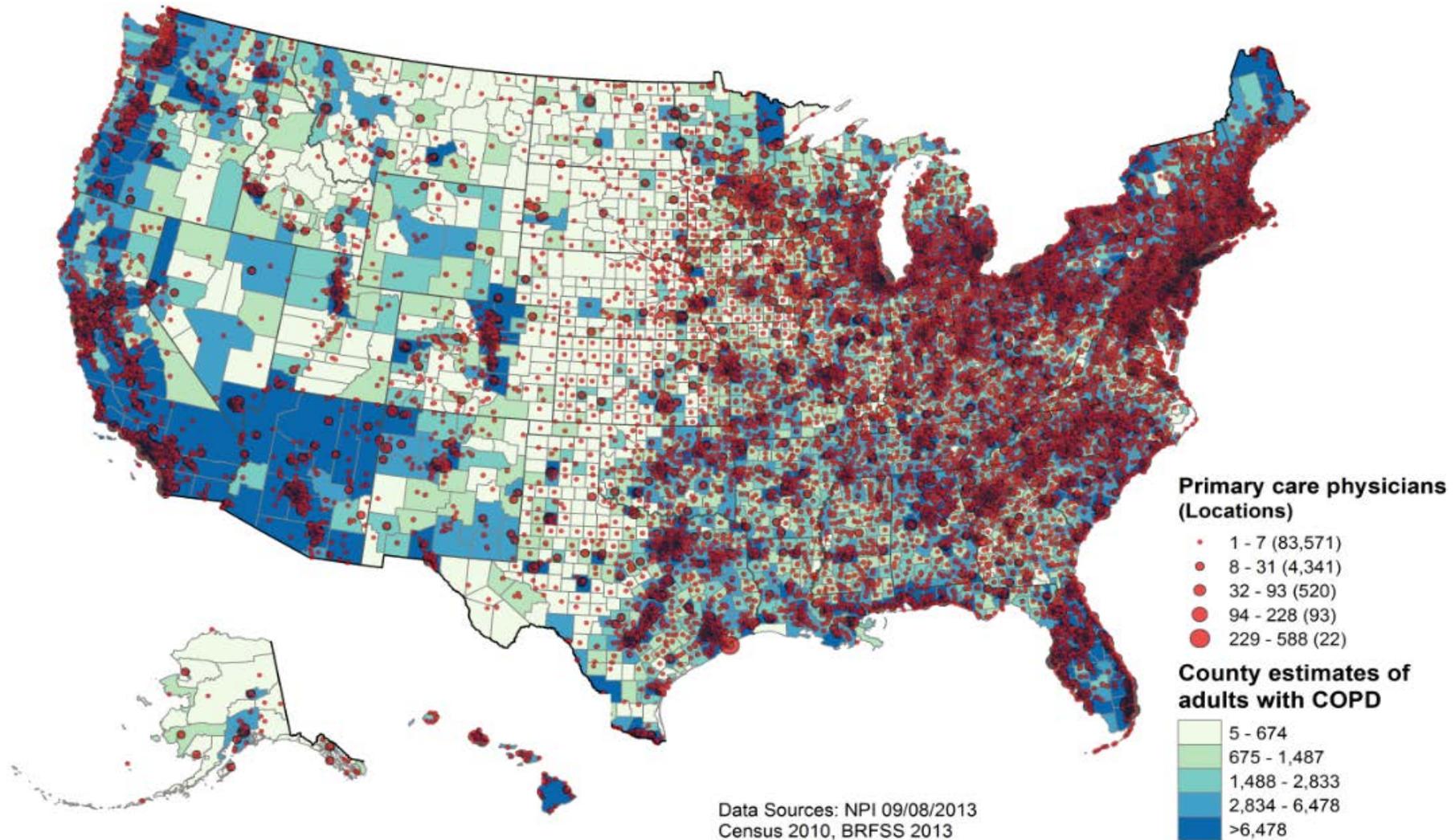


Locations of 12,392 pulmonologists and number of adults with diagnosed COPD, by county: National Provider Identifier Registry 2013



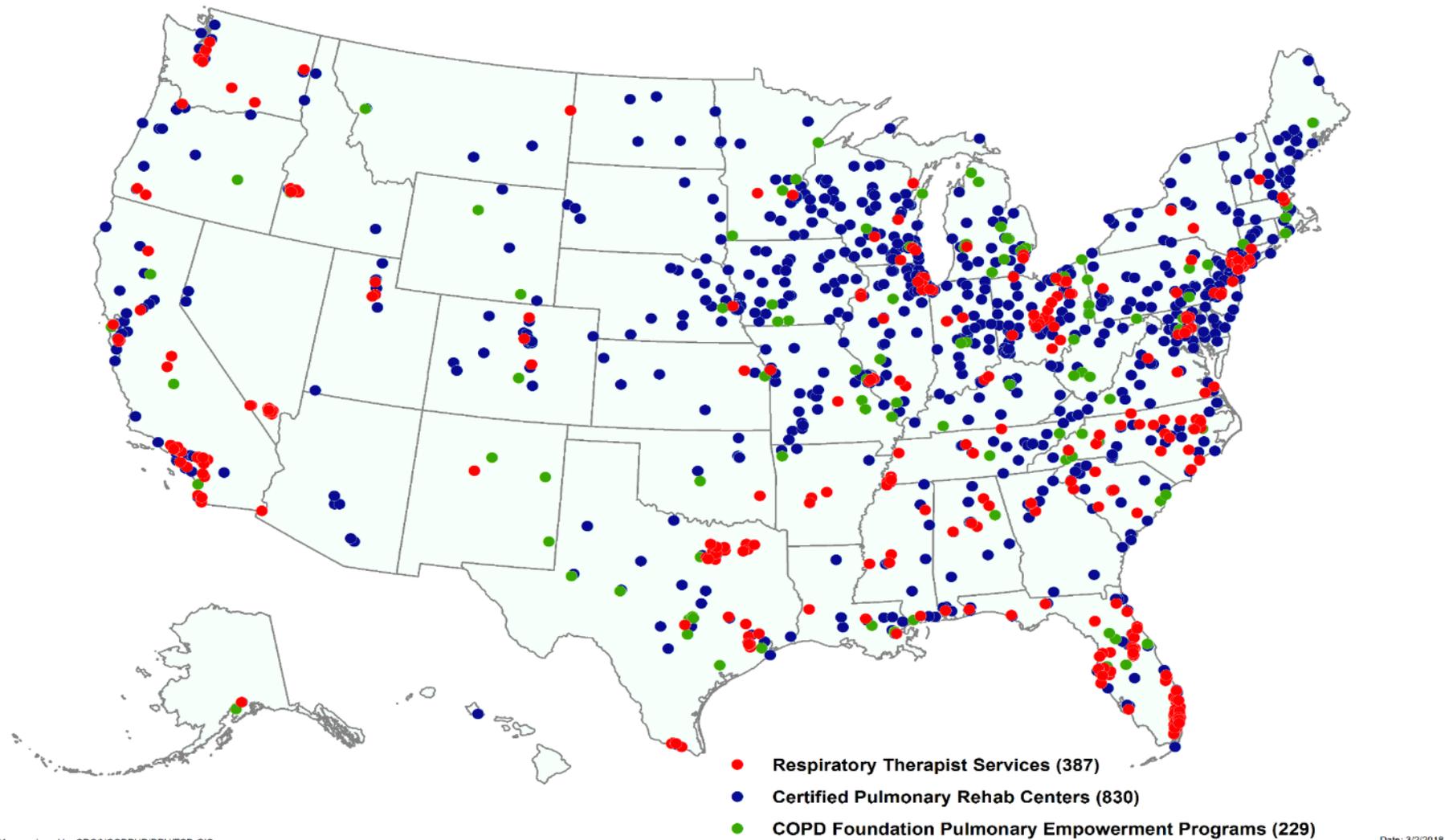
Croft et al. Chest 2016;150: 544-553

Locations of 248,160 primary care physicians and number of adults with diagnosed COPD, by county: National Provider Identifier Registry, 2013



Croft et al. Chest 2016;150: 544-553

Locations of 1,446 accredited pulmonary rehabilitation or respiratory therapy services: Multiple Sources, 2015-2017



CDC. Unpublished pulmonary rehabilitation location data, 2015-2017.

Important Data Gaps

1. Cross-sectional data only – no longitudinal follow-up in rural populations
2. BRFSS collects **diagnosed** COPD prevalence among all adult respondents
 - Gap - **undiagnosed COPD** symptoms
 - Gap - diagnosis and treatment (meds, pulmonary rehab, oxygen therapy)
 - Gap – barriers to health care utilization
 - Gap – rural-specific environmental exposures
3. Gap - Unique public use data collection portal with rural COPD data
 - That does not require special access
 - Similar to www.cdc.gov/500cities which allows community users to link other data sets at the census-tract level and target limited resources



www.cdc.gov/copd

Disclaimer: The author has no conflict of interest to report.

The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Goal 3:

Collect, analyze, report, and disseminate COPD-related public health data that drive change and track progress.

Presenter:

Janet B. Croft, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Panel:

Eric Stockton, Appalachian Regional Commission

Cara James, Office of Minority Health and Rural Health Council, Centers for Medicare and Medicaid Services

Alana Knudson, National Opinion Research Center Walsh Center for Rural Health Analysis, University of Chicago

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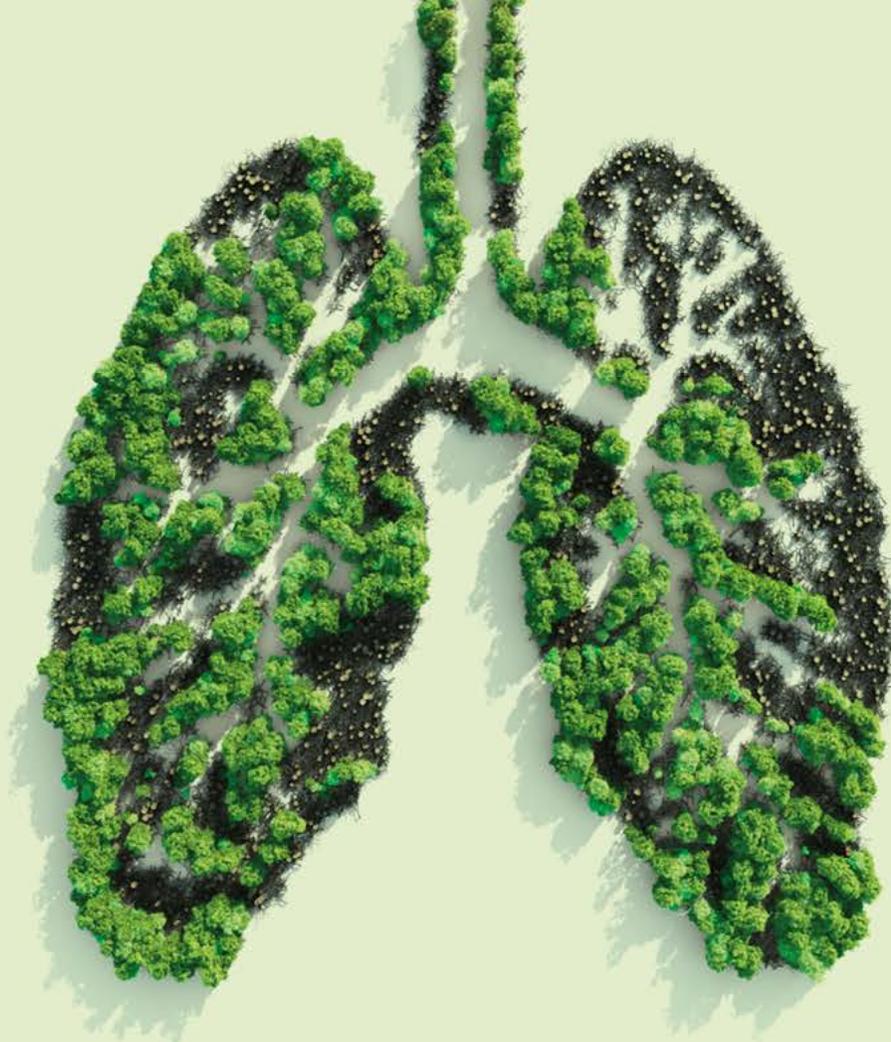
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Goal 3:

1. What are the existing databases that collect data on COPD in rural setting? How frequently are data collected? Is there a need for harmonization and/or common data elements?
2. How can databases inform the public and policymakers on the status of COPD and the need for change in rural settings? Who are the champions for making this happen?
3. Are there examples from other areas for how to successfully conduct public health research and implement successful health improvement programs in rural communities?
4. How can we translate data into actionable data that can be easily accessed?
5. What do we think we need to move the needle? Do we need a database? Do we already have data that we can maximize?

**Goal 4 Discussion:
*Increase and sustain
research to better
understand the
prevention,
pathogenesis,
diagnosis, treatment,
and management of
COPD***



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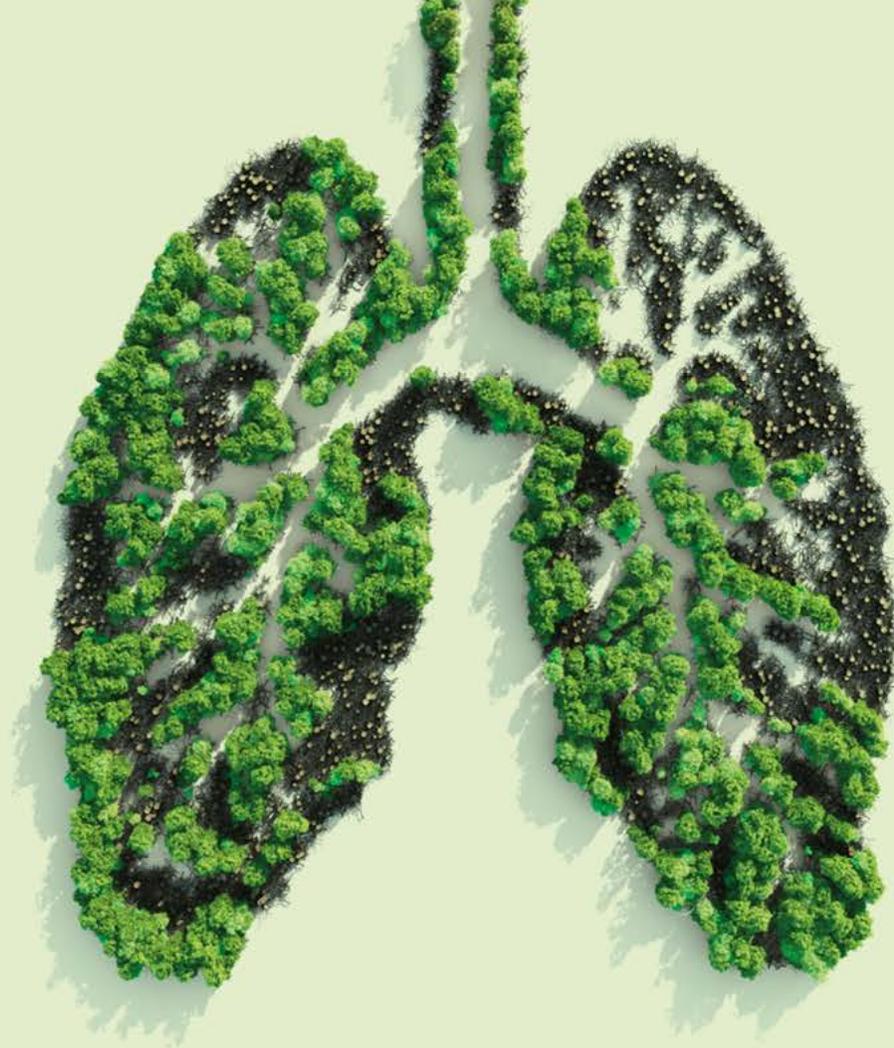
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Practice-Based Research Networks (PBRNs)

*Linking questions from
communities
to answers from communities*

Rowena J. Dolor, MD, MHS

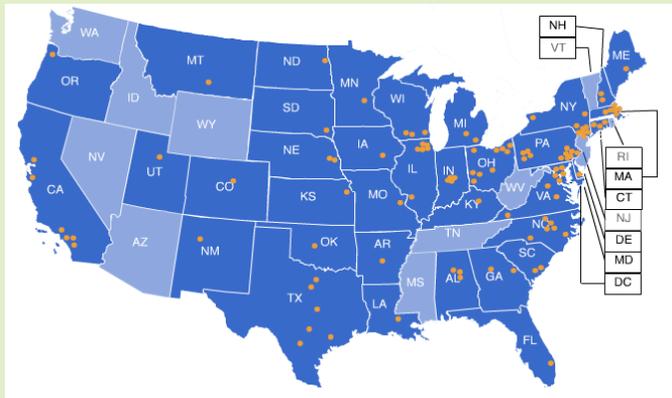


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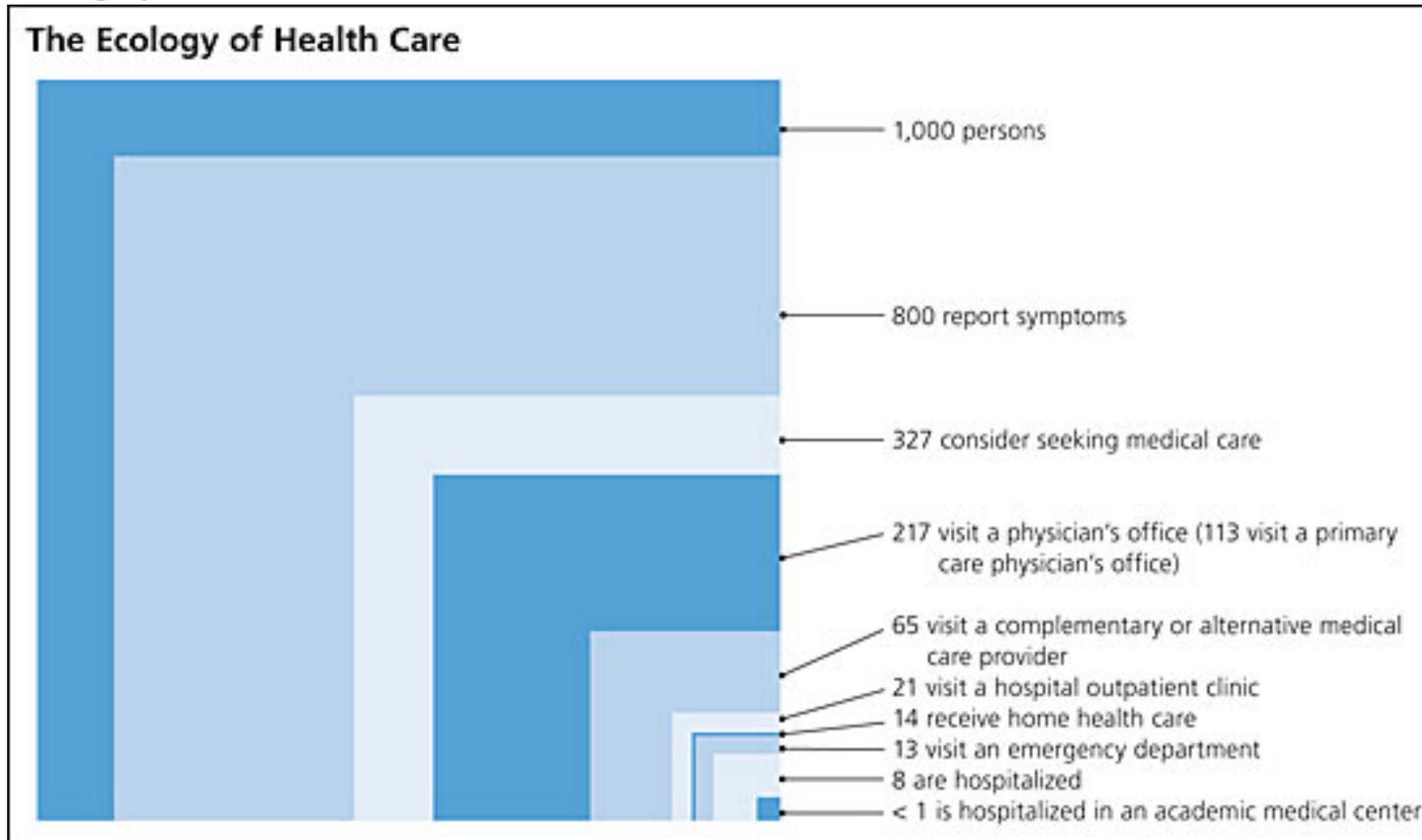
Practice-based Research Networks

“Putting Practice into Research”

- A PBRN is a group of ambulatory practices devoted principally to the clinical care of patients, affiliated with each other in order to investigate questions related to community-based practice
- PBRNs often link practicing clinicians with investigators experienced in clinical and health services research, while at the same time enhancing the research skills of the network members
- PBRNs provide a sense of ongoing commitment to the research endeavor and an organizational structure that transcends a single study

Health Serv Res. 2002 Feb; 37(1): 1–14.

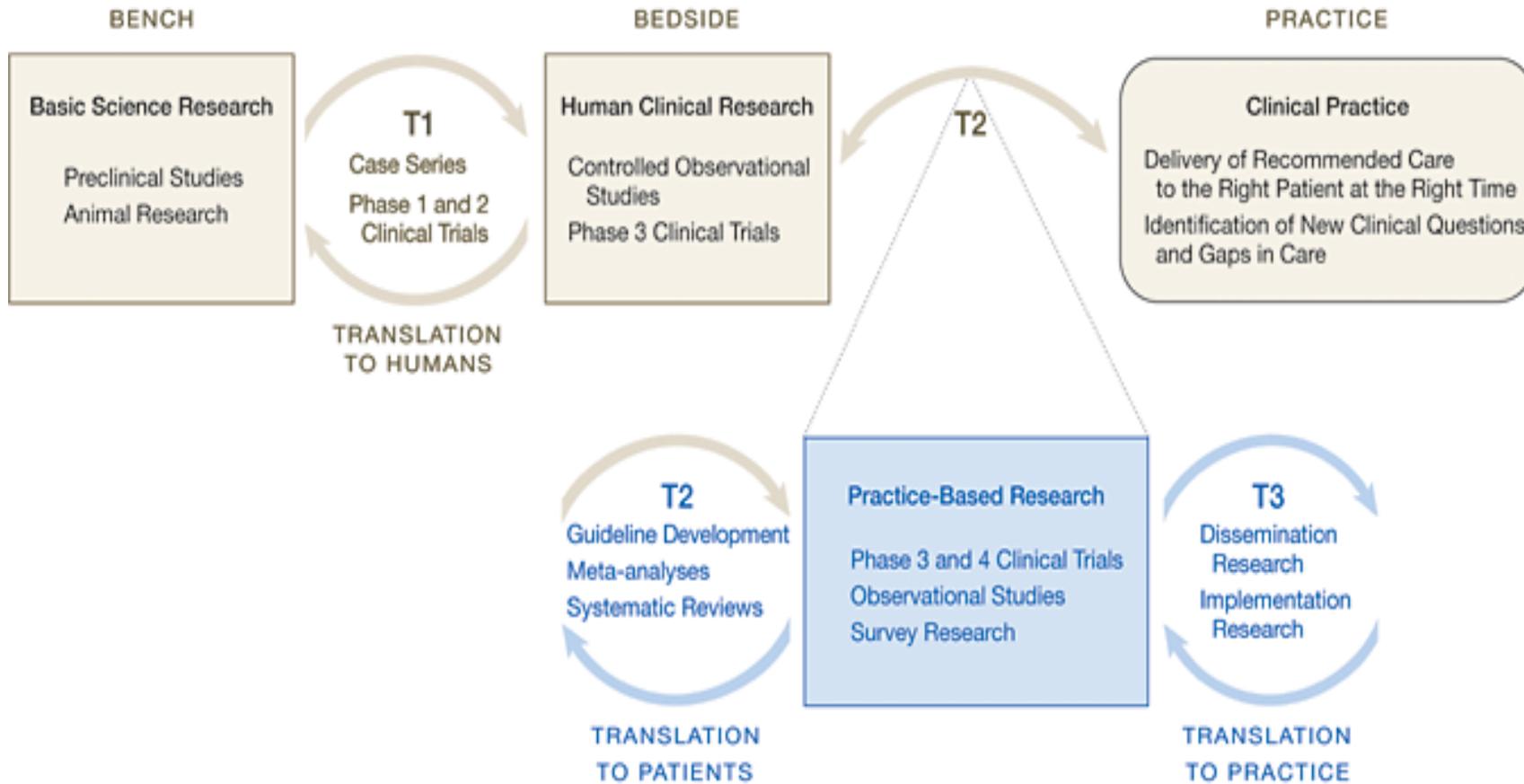
The Ecology of Health Care^{1,2}



¹ Green LA, et al. The Ecology of Medical Care Revisited. *N Engl J Med* 2001; 344(26):2021-5.

² White KL, Williams TF, Greenberg BG. The ecology of medical care. *N Engl J Med* 1961;265:885-92.

“Blue Highways” on the NIH Roadmap



Westfall JM, Mold J, Fagnan, LJ. JAMA 2007;297:403-406.

PBRNs Have Diverse Populations

Clinical Trials

- Well educated, middle-upper income white
- Well insured
- No co-morbidity
- Avoid elderly, childbearing age, kids

Routine Practice

- Full spectrum of education, income, race
- Plenty of Medicaid, Medicare
- Plenty of complex patients
- Plenty of elderly, child-bearing age women and kids

What Skills/Resources Can PBRNs Bring to the Research Enterprise?

- Access and deep knowledge of communities & their needs
- Quality Improvement, Implementation & Dissemination, Comparative Effectiveness Research
- Measuring treatment outcomes in routine care
- Helping physicians and policy makers be more discriminating in the use of new technology
- Opportunities to:
 - Blend Community-Based Participatory Research (CBPR) with a Practice Based Research
 - Demonstrate population impact of research

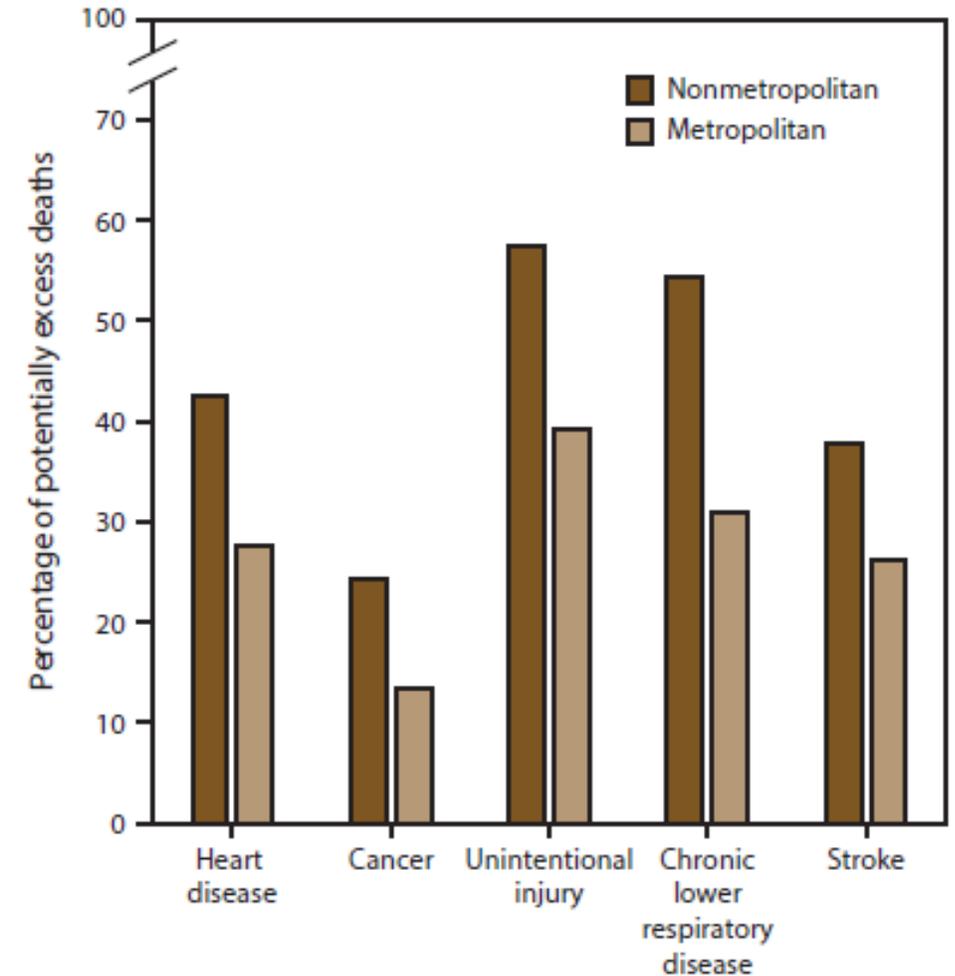
Rural Setting for Practice-Based Research

Rural Disparities¹

- Rural counties make up two-thirds of all counties and 20% of the US population
- Rural areas have higher rates of cigarette smoking, hypertension, obesity and physical inactivity.
- Higher prevalence of poverty in rural vs. urban areas (18.1% and 15.1%)
- Residents are more likely to report less access to health care and lower quality of health care.

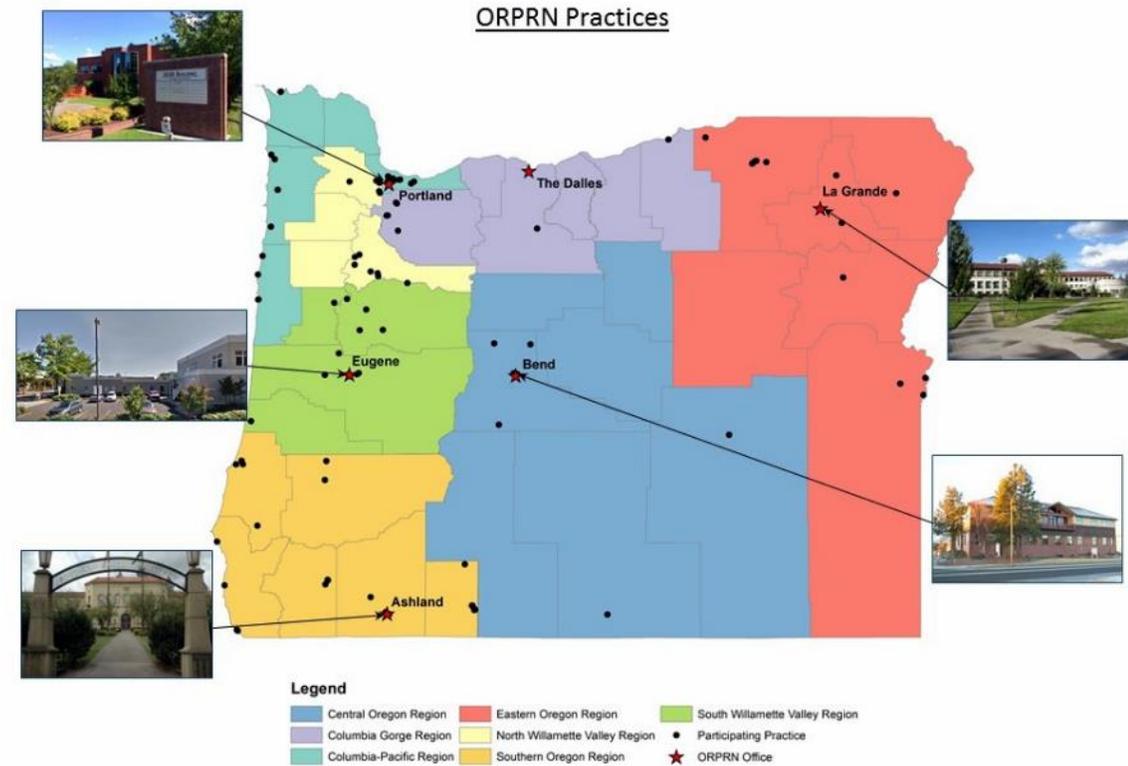
¹Leading Causes of Death, U.S., 1999-2014, MMWR, 13Jan.2017

FIGURE 4. Percentage of potentially excess deaths* among persons aged <80 years for five leading causes of death in nonmetropolitan and metropolitan areas[†] — National Vital Statistics System, United States, 2014



Practice and Provider Profile

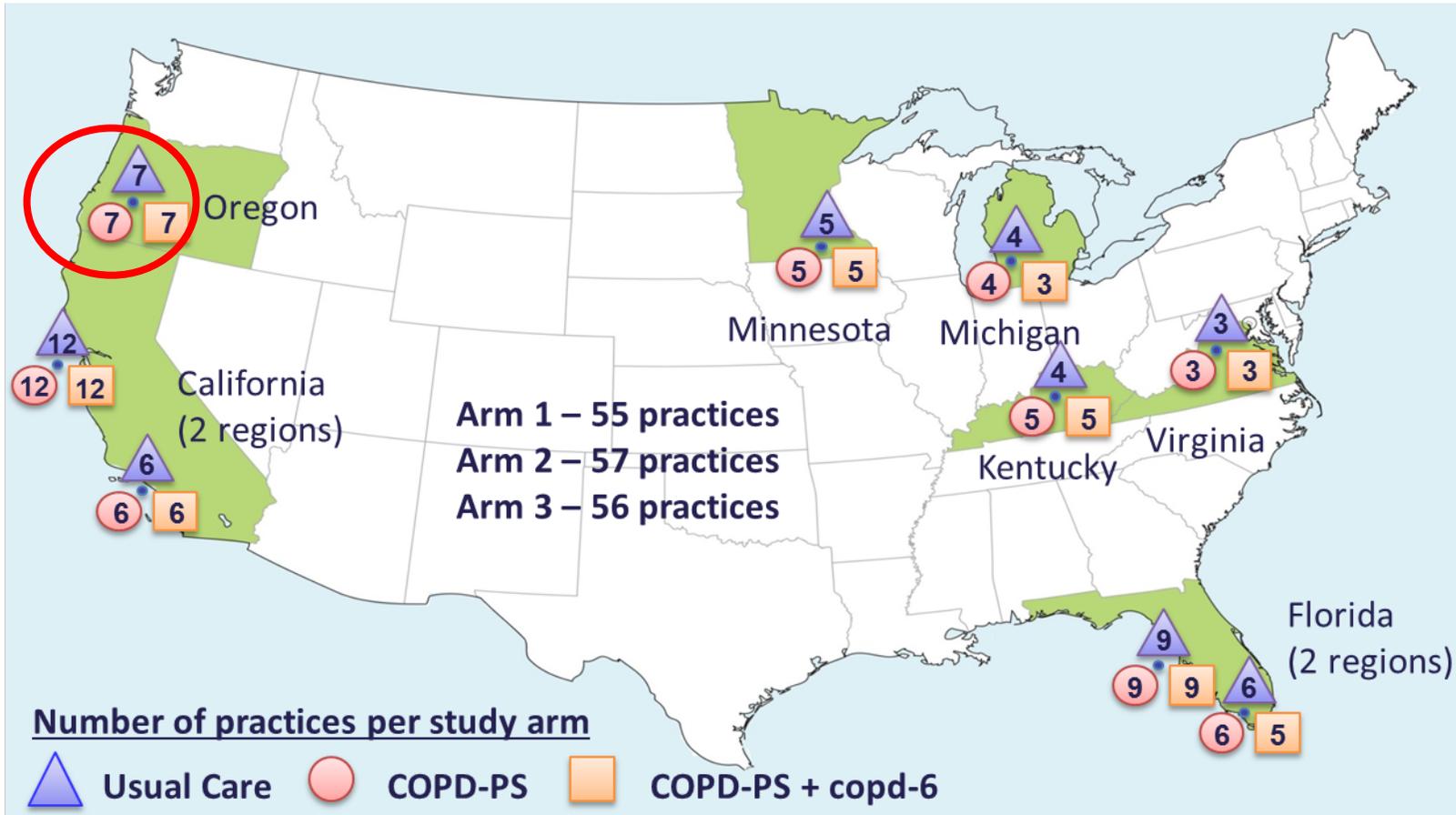
- 281 practices, 26 counties
- 700 providers (FM, IM, Peds, NP/PA)
- Unique adult patients: ~500,000
- Annual adult Encounters: 800,000 +



SEARCH1 – Screening, Evaluating, and Assessing Rate Changes of diagnosing respiratory conditions in primary care

- Prospective, cluster randomized trial
- To assess the impact of the COPD-PS (5-item survey) alone and in combination with the copd-6 hand-held, spirometric device on rates of COPD diagnosis and respiratory-related clinician actions in US primary care

SEARCH1 – Sites



- 9704 patients enrolled at 168 sites
- 8770 had no prior diagnosis of COPD (~2900 per study arm)

SEARCH1 Conclusions & Limitations

- Questionnaire-based screening with the COPD-PS in primary care practices can have a significant impact on rates of COPD diagnosis
- Dual-screening using the COPD-PS and the copd-6 hand-held spirometric device can impact clinician actions related to diagnosis and diagnostic approach
- Screening programs may benefit from clinician education programs on COPD diagnosis to improve their impact
- No mandated follow-up spirometry for patients who received a new diagnosis of COPD
 - New diagnoses of COPD were not all confirmed by spirometry
- No historic data on the diagnosis rate of COPD were collected from participating practices
 - Potential changes in practice of usual care could not be detected
- No assessment of patient-oriented outcomes
 - Unknown if patient disease management or quality of life were altered by diagnosis of COPD

Oregon SEARCH1 differences

Compared to overall study population, Oregon participants were:

- Older (62 Oregon vs. 60 Total), White (96% vs. 83% Total) and had more current or ex-smokers (57% vs. 49% Total)

In those who were given a new COPD diagnosis, Oregon participants:

- Had higher percentage of current or ex-smokers (93% vs. 78% total)
- Had higher incidence of diabetes, depression/anxiety, and cancer

Practice and Provider Profile



- 16 counties – rural and frontier
- 30,000² miles
- 150,000 people
- Clinical encounters – 220,000 est
- 16 hospitals
- 54 practices
- 176 physicians, PA, NPs
- 75-300 miles from HPRN headquarters

Colorado - Lots of wind – Dust & Tumbleweed



John Haynes Cheyenne Wells, CO 2002



Exploratory Study on Wind and Respiratory Hospitalizations in HPRN:

- Wide range of average and highest wind speed throughout the year.
- Days with high winds were correlated with higher than normal admission rates for asthma and COPD (Pearson correlation = .158, $p=.02$).
- During the 72 hours after highest wind speeds, hospital admission rates were significantly higher than for less windy days.



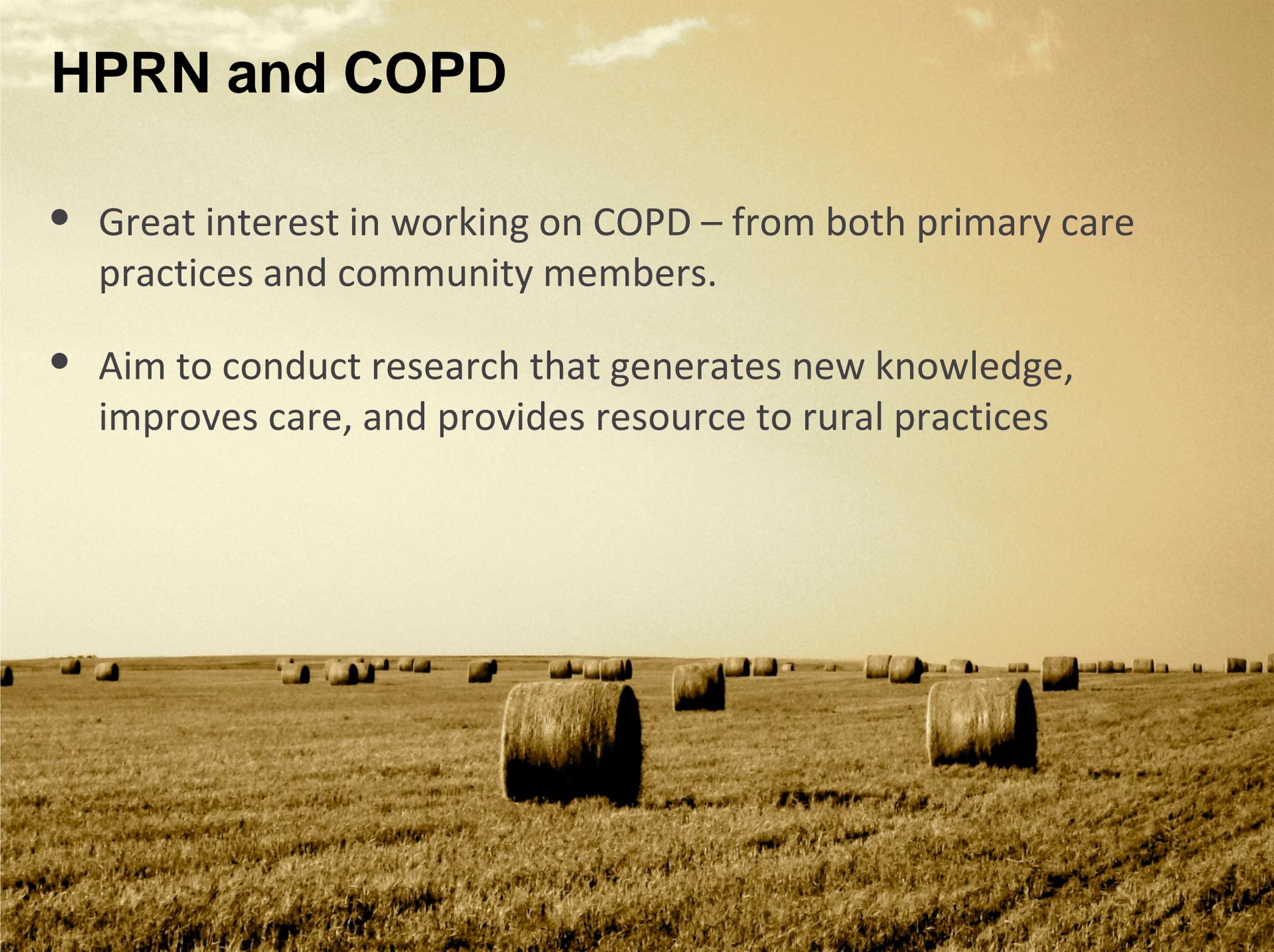
What do we do with this information?

- Clinical Considerations:
 - Educate patients
 - Stay indoors
 - Increase use of prescribed controller medications on windy days
- Potential researchable interventions to decrease exacerbations
 - Exposure control
 - Additional medication



HPRN and COPD

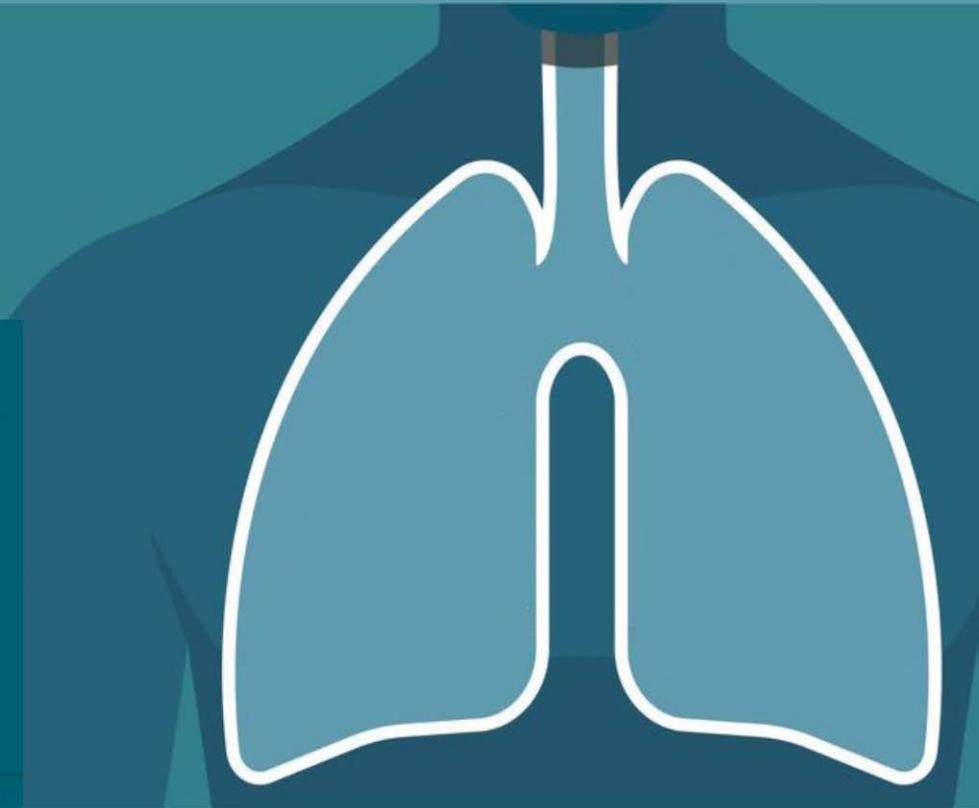
- Great interest in working on COPD – from both primary care practices and community members.
- Aim to conduct research that generates new knowledge, improves care, and provides resource to rural practices



A New Approach to **CAPTURE™** COPD*

An NHLBI-funded study

COPD
Assessment in
Primary Care
To Identify
Undiagnosed
Respiratory Disease and
Exacerbation Risk





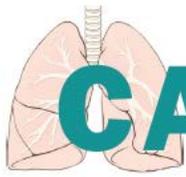
Study Goal & Aims

Study goal: To validate the sensitivity, specificity, and predictive value of the CAPTURE approach (survey & peak expiratory flow) to identify undiagnosed, clinically significant COPD patients in a primary care population.

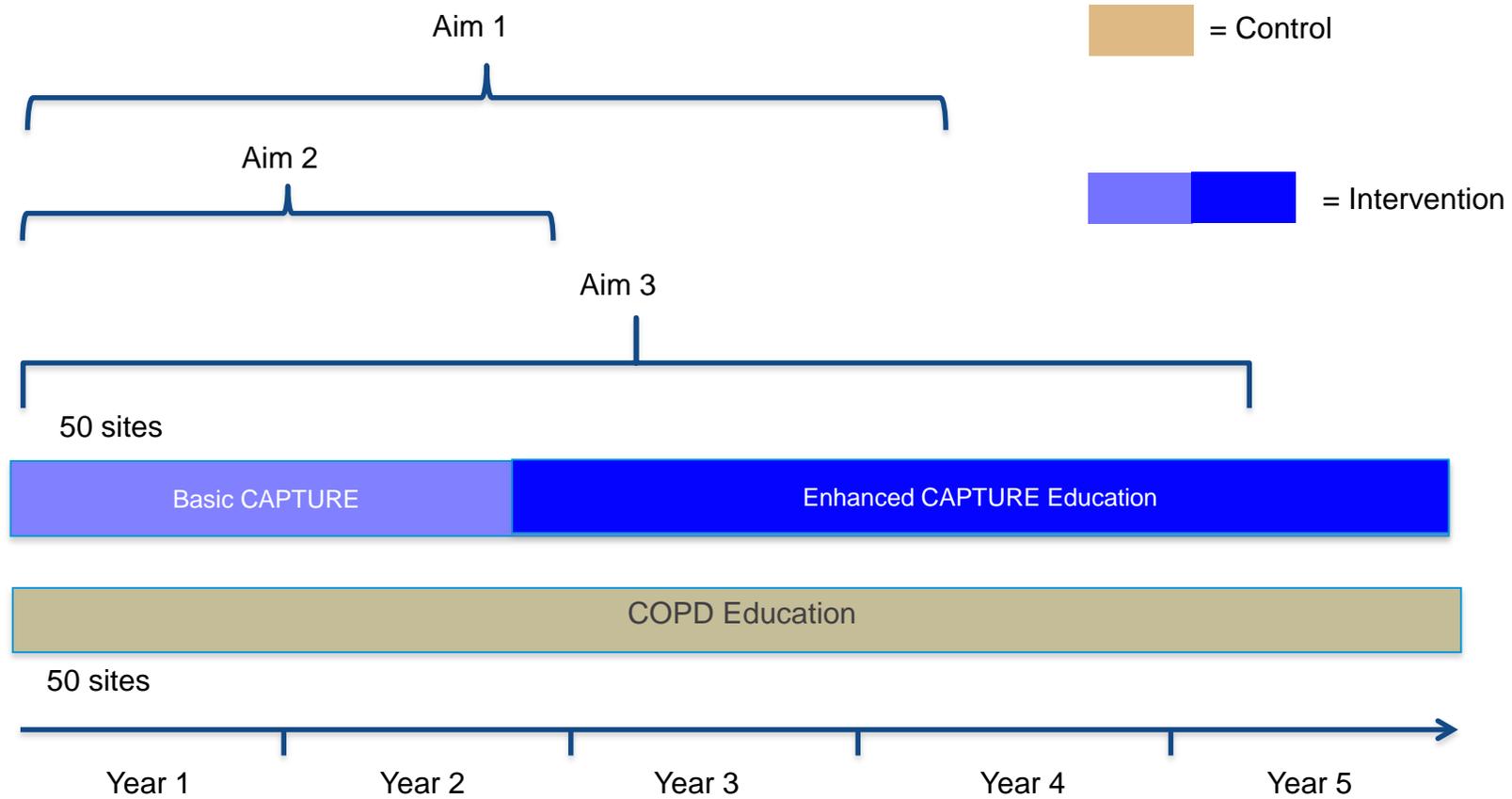
Aim 1---validation (sensitivity/specificity) of CAPTURE

Aim 2---Feasibility of CAPTURE screening implementation in practices

Aim 3---impact of CAPTURE screening on COPD diagnosis & patient care



CAPTURETM COPD





Participating PBRNs

Enrollment Goal =
5000 patients
(1000 per PBRN)



CAPTURE™ Instrument

For each question, place an X in the box with the answer that is best for you. There are no right or wrong answers, only answers that are right for you.

Please answer each question	No	Yes	
1. Have you ever lived or worked in a place with dirty or polluted air, smoke, second-hand smoke, or dust?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Does your breathing change with seasons, weather, or air quality?	<input type="checkbox"/>	<input type="checkbox"/>	
3. Does your breathing make it difficult to do things such as carry heavy loads, shovel dirt or snow, jog, play tennis, or swim?	<input type="checkbox"/>	<input type="checkbox"/>	
4. Compared to others your age, do you tire easily?	<input type="checkbox"/>	<input type="checkbox"/>	
	0	1	2 or more
5. In the past 12 months, how many times did you miss work, school, or other activities due to a cold, bronchitis, or pneumonia?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>For Clinic Use -</i>		
Peak Expiratory Flow (PEF) (L/Min) - Best of Three (3) Tests		
(Recommended for scores ≥ 2)		
	No	Yes
Males: ≤ 350 L/M	<input type="checkbox"/>	<input type="checkbox"/>
Female: ≤ 250 L/M	<input type="checkbox"/>	<input type="checkbox"/>

BRIEF* Screening is a biennial assessment for patients 40 to 80 years of age.

COPD National Action Plan

GOAL 4: OPPORTUNITIES FOR ENGAGEMENT AND PARTICIPATION

 Invest in, facilitate, and promote basic, clinical, and applied research to improve the diagnosis and treatment of people with COPD; assess the impact of the home environment on patient management and treatment.

 Create COPD patient registries that help evaluate and improve patient management, clinical care, and treatment.

 Invest in, facilitate, and promote the development, regulatory review and approval, and use of new technologies to improve the COPD care continuum.

 Investigate the biological effects of nicotine and its delivery devices and products to better understand emerging threats to lung health that may modify the onset or progression of COPD.

 Promote the inclusion of information relevant to COPD in programs for training medical professionals and the next generation of biomedical scientists.

 Identify risk factors and targets for preventive interventions for chronic lung disease using ongoing NHLBI-supported cohort studies. Test the feasibility of strategies for the prevention of COPD and demonstrate proof of principle in early phase clinical studies.

 Leverage NHLBI-funded programs, such as LungMAP, to develop novel approaches for cell-based therapies and lung regeneration that could be applied in late-stage emphysema.

 Leverage observational cohorts, such as the NHLBI-supported COPD Gene and SPIROMICS studies, to identify subgroups of patients with COPD in which particular molecular pathways or pathophysiological mechanisms are critical in pathogenesis. Develop and test panels of biomarkers that can be used to identify individual patients within these subgroups.

 Conduct clinical trials for COPD that are designed to allow analysis of efficacy in predefined subgroups of subjects, thereby providing an evidence base for precision medicine. This applies both to trials of drugs that target particular molecular pathways and to trials of other interventions, such as pulmonary rehabilitation.

 Design approaches for the implementation of effective strategies for the case finding, diagnosis, and treatment of COPD in the community, home, and primary medical care environments.

 Investigate the prevalence and incidence of COPD in nonsmokers to contrast and compare them—and their responsiveness to currently available therapeutics—to patients with cigarette-smoke-induced COPD.

GOAL 4

Increase and sustain research to better understand the prevention, pathogenesis, diagnosis, treatment, and management of COPD.

Design and test novel approaches for better implementation of effective strategies for case finding, diagnosis and treatment in the community and primary care.



The PBRN Learning Community

“If we want more evidence-based practice we need more practice-based evidence”

L.W. Green, ORPRN Convocation Plenary Speaker, 2005

Questions?

Goal 4:

Increase and sustain research to better understand the prevention, pathogenesis, diagnosis, treatment, and management of COPD.

Presenter:

Rowena Dolor, Duke Primary Care Research Consortium, Duke University

Panel:

Jean M. Rommes, Patient Advocate; American Lung Association Iowa; EFFORTS

David Mannino, GlaxoSmithKline Pharmaceuticals

Graham T. Atkins, Dartmouth-Hitchcock Medical Center; Geisel School of Medicine, Dartmouth College

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Goal 4:

1. What evidence-based models exist for preventing, diagnosing, and treating COPD in rural populations?
2. What models of diagnostic and therapeutic delivery, including pulmonary rehabilitation, are best adapted for COPD patients in rural settings?
3. How can public-private partnerships, including with industry, facilitate research on COPD in rural settings?
4. How can we better facilitate research participation amongst rural patients, both in registries and in clinical trials?
5. Are there additional causes of COPD in rural settings that have not yet surged to the attention of the investigators (e.g., occupational exposures, biomass fuel, organic dusts)?

Goal 5:

Translate national policy, educational, and program recommendations into research and public health care actions.

Presenter:

Paul Moore, Federal Office of Rural Health Policy, Health Resources and Services Administration

Panel:

Maggie Elehwany, National Rural Health Association
Lisa Davis, Pennsylvania Office of Rural Health
Mike Witte, California Primary Care Association

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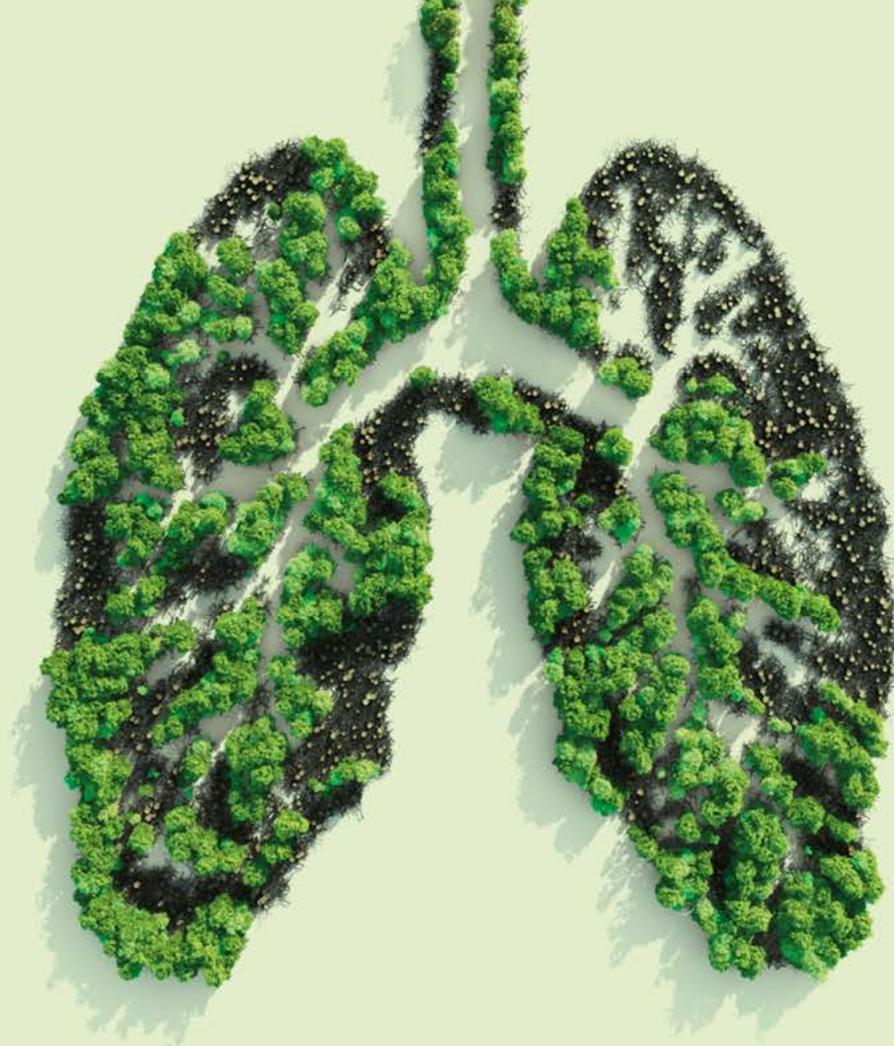
Goal 5:

1. How can we better organize the activities of rural patient groups, state and federal health services agencies, and payers at the state and federal level?
 - What are the different roles that federal agencies; state, local, and tribal health departments/organizations; health centers; community- and faith-based organizations; etc., can play in increasing access to COPD diagnosis and treatment and awareness of the disease in rural settings?
2. What are the challenges to translating COPD national policy, educational, and program recommendations into improved research and public health care actions in rural settings?
3. What federal agencies and private community organizations are most involved in rural health issues and could be important partners for COPD work in rural areas?
4. How do we communicate federal and state policies and programs to local stakeholders?

COPD & Rural Health

Closing Remarks and Adjournment

*(Hans Brinker “I saw the dike
leaking, so I stuck my finger in the
hole” and getting to Mars)*



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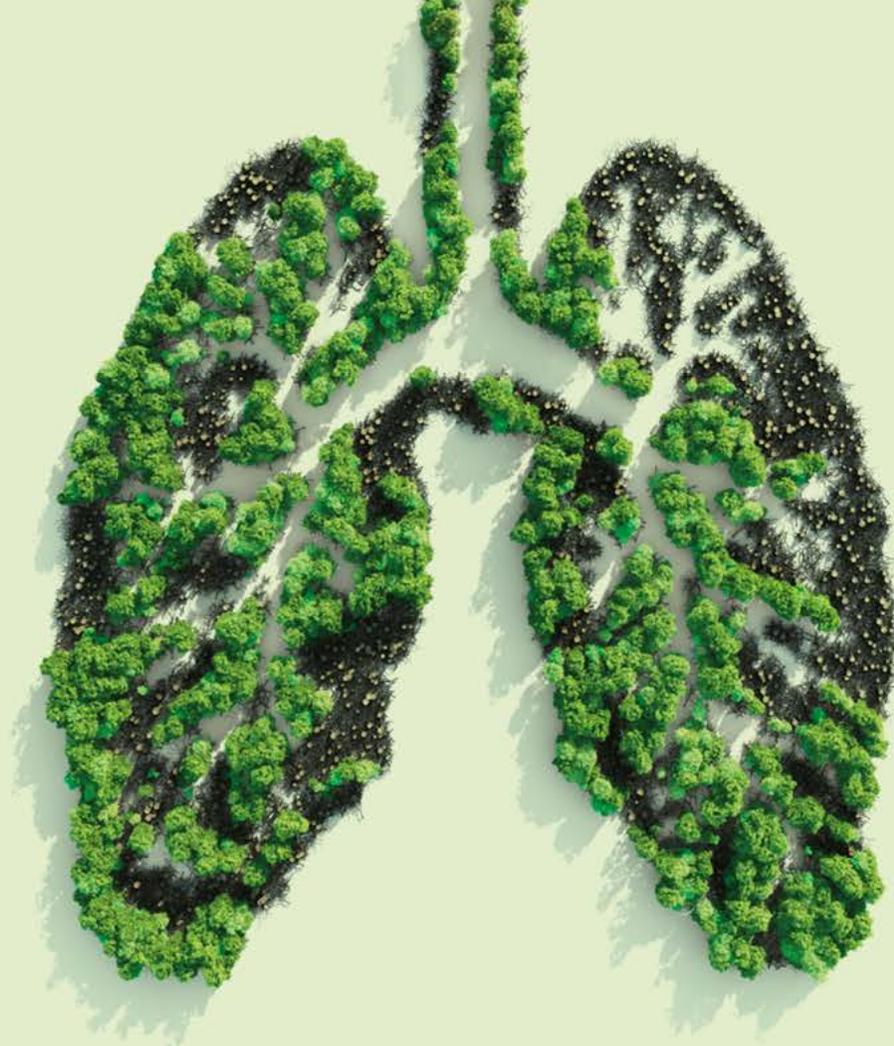
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GOAL 1

- Living with it, I am a person with COPD. Getting people diagnosed and getting them treated
- Patients are the untapped resource for COPD. Empower the patients (and their caregivers)
- Opportunity to participate in trials, access, share experiences, socialize
- Smoking in rural areas how do we improve awareness and treatments (NCI venue)?
- Web local vs national
- Rural and inner city similarities, but rural is not rural and success comes through relationships
- Use technology in customized fashion, centers of faith, local pharmacies, community health workers, etc., as conduits to access?
- Agrobusiness: connect with those affected, patients and their caregivers
- Closing of health care centers and increased difficulty of access (education i.e. use of inhalers)
- Disconnect between patients and awareness of disease (booths on the ground, RTs, PAs)
- Cost of care, transportation, transition from the hospital, education of providers, connecting the dots



GOAL 2

- Approaches to pulmonary rehabilitation, importance of education (Dr. Doyle said “I’ve got educated”) and continuous education
- Value of intervention (cost effectiveness)
- Sustainability of interventions, reimbursements (how do we show value to payers so that reimbursements are adequate?)
- Primary care is key to COPD care, but how do we make it real, transfer care into practice?
- De-pulmonologise COPD, democratize knowledge, (ECHO) build reciprocity and trust. BUT evidence based needs to be tested
- Tipping point what team do you need (spread out the tasks)
- Talking wall to help physicians?
- How do we carve out time with the patient and the provider (who that may be). Proper recognition of RT role in COPD. Is this an economic opportunity for rural communities too?
- Fight provider isolation; build a team with expertise at different levels



GOAL 2

- Partnering of rehab with local facilities (YMCA)
- Mileage reimbursements (programs existing, but distance is a big issue)
- ATS: what is the target, quality measures for referrals, remote rehab do we need additional studies?
- Simplify treatment algorithms that would help (all speak the same language)
- Flex monitoring program (\$2,000 / patients reimburse \$1,000) a consortium of the Rural Health Research Centers at the Universities of Minnesota, North Carolina-Chapel Hill, and Southern Maine, funded by the Federal Office of Rural Health Policy to evaluate the impact of the Medicare Rural Hospital Flexibility Grant Program (<http://www.flexmonitoring.org/>)



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GOAL 3

- Data accessible at CDC (wonder, BRFSS) or CMS BUT access needs to be sustained
- Underdiagnoses appears to be a problem in rural areas
- Relevance of smoking in rural areas >2 as urban HS students smoking today (tot pop 27% still smoking, nat'l 21%)
- Need for longitudinal follow up in rural populations
- GAPS in data collection need funding (i.e. O2 use meds, rehab use, rural exposures)
- ARC funds economical develop interventions (i.e. health care infrastructure)
- Additional data from CMS ccw.org chronic condition warehouse, go.cms.org/omh medicare disparities tool
- CMS supports researchers in disparity related projects, will have an announcement
- Access to data is costly, funding for State Hdep comes 90% from CDC, building capacity is costly, there is no pipeline
- Importance of state surveillance systems
- Accountable care organizations are another source of data (COPD priority #3)



GOAL 3

- Address COPD as a business case
- Social determinants data are also relevant to the disease to bring data to community-level resources
- How do we create a portal?
- Rural health information portal, increase its potential?
- COPD Foundation State report card
- CMS is looking at readmission data
- How people can use data at the local level



GOAL 4

- Ways to facilitate research in COPD PBRN, bringing research to communities
- Trust is needed for access and knowledge of communities and their needs
- Local situations may exacerbate (cause?) COPD (dust storms, occupational exposures, others fungus?)
- Increase diagnosis in rural settings through CAPTURE
- Prevention of COPD pediatric disease (exposures in utero and in early years)
- What is early COPD (the earlier we find them the earlier we can make a diff, spirometry needs to be updated old tech)
- Treatment (symptoms oriented now we need disease modifying agents)
- Reimbursement for smoking cessation treatment
- Treat with the treatments available we need data, mapping and make best known practice as rural practice importance of the local practice
- Research that aims at expanding access to pulmonary rehab (local approach) is needed



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GOAL 4

- Research that aims at engaging people using a local approach works
- Good model is the Appalachian cancer coalition
- Quality metrics for COPD (HbA1c) offer pulmonary rehab (spirometry, LABA)
- Disparities within the rural population
- Opportunities for common conditions to be reimbursement modification (pay a different wage to a physician and see outcomes)
- Testing for alpha-1
- Access to O2 & equipment
- Air monitors
- Need to create 30 million people (and their caregivers) cohort (understand behavioral aspects)
- Treatment of comorbid conditions



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GOAL 5

- Challenges on the Hill and in rural America. Rural hospitals are operating in financial loss (44%). Many closures. Medicare imposed cuts. Life expectancy has declined in RA
- Rural providers have to wear many hats. Reimbursement rates are slowly being eroded again. Readmission penalties in rural hospitals are brutal. Need to develop treatment plans that if not followed may lead to penalties
- Transfer of policy from fed to state to local seems to have lost the sense of the people targeted by that policy. Funding is siloed, not necessarily directed to rural settings
- Rural analysis by CMS of the proposed programs
- Think outside the box connection with USDA (office of rural innovation)
- Education of health professional needs to be on the radar



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GOAL 5

- Effects of limited resources for a disease that requires teams for care
- Is stigma counterproductive for developing adequate care measures?
- Model for opioid treatment (behavioral based model) team approach as for rehab
- Need to work toward a payment system not based on incentives
- Use connection between Congress and State Governors association
- Broadband deployment in underserved rural areas
- Propose the next quality measures



GOAL 5

- O2 can we measure quality provision as a quality measure?
- Develop evidence based results to ask for coverage
- Health care providers Hosp adm dialogue for reimbursement
- Long view of data for congress reports
- Strategy based on scientific annual reports on rural analysis (MEDPAC)
- Interoperability of HER
- Use already in place collaborative structures to make a change and abate siloes
- Take a bite at a time



Next Steps

- The conference has been recorded and will be available to anybody (link to be forwarded)
- The panelists will contribute a 200-250 words paragraph, with references and recommendations, so we can compile a paper to be submitted to a widely read scientific journal
- Additional reports will be made through many other means (i.e. Rural Health Information Hub, webinars)
- COPD is complex and multi-faceted, only collaborative solutions can tackle this disease.
- We owe to the patients to work together to increase efficiencies of existing efforts, but also open new paths to curb the disease, its treatment, and its prevention.
- Making commitments, following through, asking of others to commit



Next Steps

- The NHLBI *COPD Learn More Breathe Better* (LMBB) program plans to issue a small request for proposals (RFP) to support rural awareness/outreach for COPD in the summer
- Stimulating T4 Implementation Research to Optimize Integration of Proven-effective Interventions for Heart, Lung, and Blood Diseases and Sleep Disorders into Practice (clinical trials not allowed) @ <https://grants.nih.gov/grants/guide/rfa-files/RFA-HL-19-014.html>
- HRSA will convene and coordinate (possibly with the help of patients organizations like COPD Foundation and others) a COPD and Rural Health Working Group for implementing the National Action Plan





Thank You!

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