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Your *First STOP* for  
*Rural Health*  
**INFORMATION**



## Introducing the Rural Chronic Obstructive Pulmonary Disease Toolkit

### Housekeeping

- Q & A to follow – Submit questions using Q&A area
- Slides are available at  
<https://www.ruralhealthinfo.org/webinars/copd-toolkit>
- Technical difficulties please call 866-229-3239

# Featured Speakers



**Grace Anne Dorney Koppel, MA, JD**, President, Dorney-Koppel Foundation



**Tricia Stauffer**, MPH, Principal Research Analyst, NORC Walsh Center for Rural Health Analysis



**Stephanie Williams**, BS, RRT, Director of Community Programs and Volunteer Management, COPD Foundation



**Donna Dittman Hale**, MHA, Executive Director, Bay Rivers Telehealth Alliance, the Area Health Education Center for the Rappahannock Region

## Chronic Obstructive Pulmonary Disease (COPD) and Rural America

**Grace Anne Dorney Koppel, MA, JD**

President, Dorney-Koppel Foundation

**“Hope has two beautiful daughters.  
Their names are anger and courage;  
anger at the way things are, and  
courage to see that they do not remain  
the way they are.”**

**St. Augustine of Hippo**

**3.5 million people living in rural counties  
have been diagnosed with COPD.**

And hundreds of thousands  
more don't know they have it.



**NIH**

National Heart, Lung,  
and Blood Institute

**COPD**  
LEARN MORE  
BREATHE BETTER

[COPD.nhlbi.nih.gov](http://COPD.nhlbi.nih.gov)

COPD Learn More Breathe Better™  
is a trademark of NIH.

Reid, L. Free Research (2016, May 2016). "What Cities and Counties Know, Suburban and Rural Communities"  
J. White Rural County and State Differences in Chronic Obstructive Pulmonary Disease - James Waters, PhD,  
2017 E. Craft, PhD, Anna G. Wharton, PhD, Yang Liu, MD, et al. NIH's Rural Health Policy Brief 19-00000-00

## Why Rural COPD?

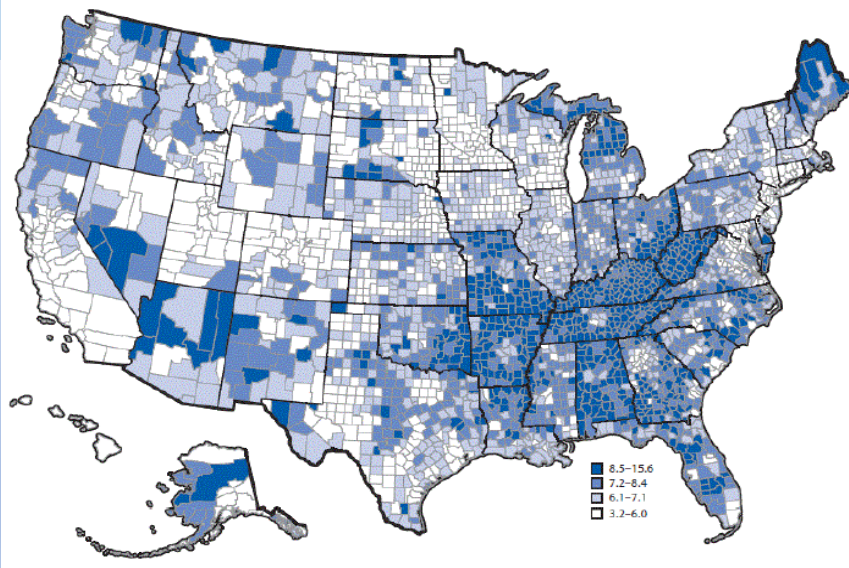
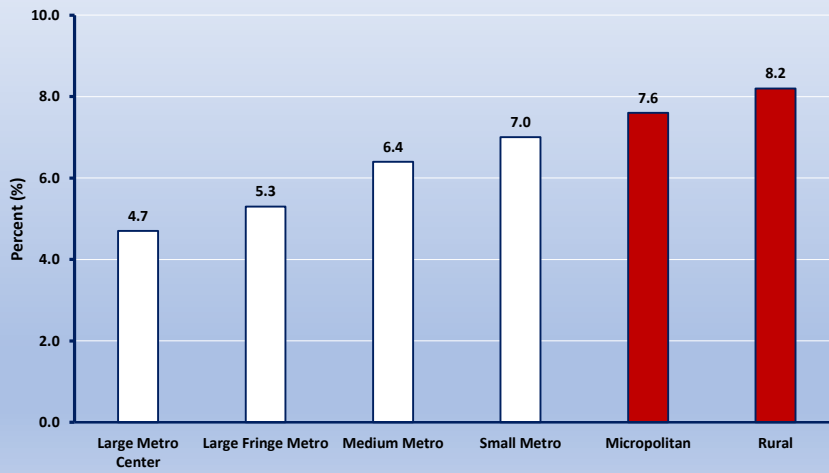


Figure: Unadjusted prevalence of COPD among adults ages 18+, by county – United States, 2015[1]

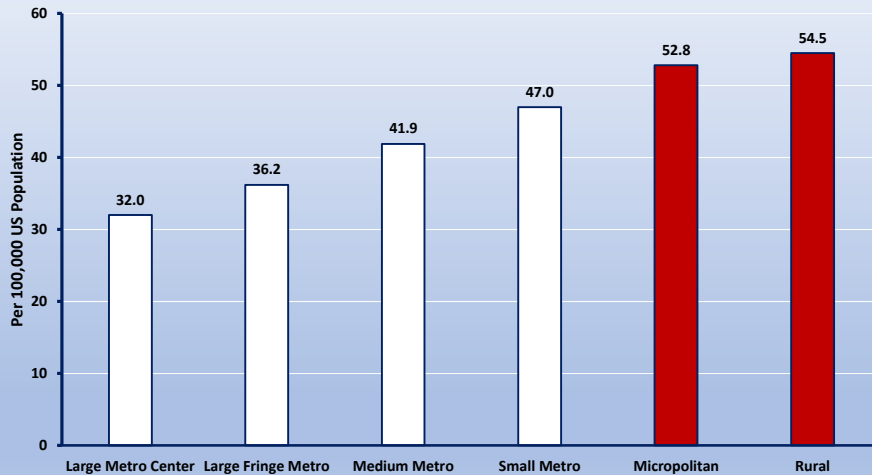
[1] Croft, Janet B., et al. "Urban-rural county and state differences in chronic obstructive pulmonary disease – United States, 2015." MMWR Report, 67.7 (2018): 205-211. DOI: 10.15585/mmwr.mm6707a1.

## Doctor-diagnosed COPD among adults is higher in rural settings : BRFSS 2015



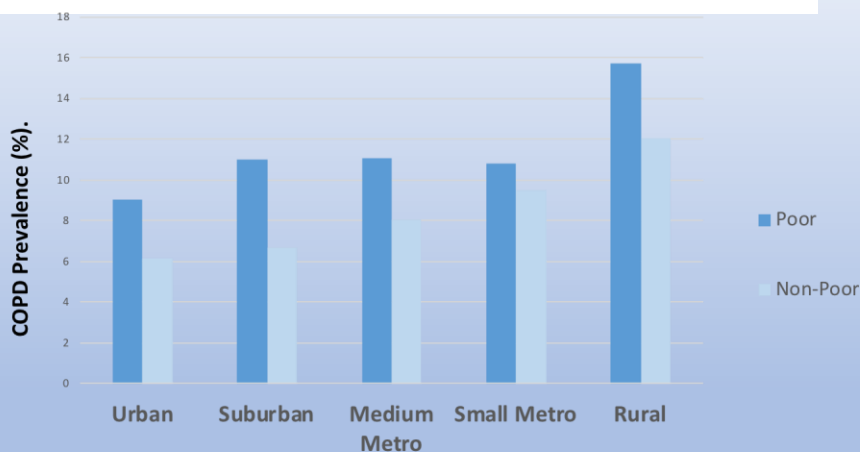
CDC. MMWR 2018;67(7):205-211.

## Death rates for COPD are higher in rural settings: US Vital Statistics 2015



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

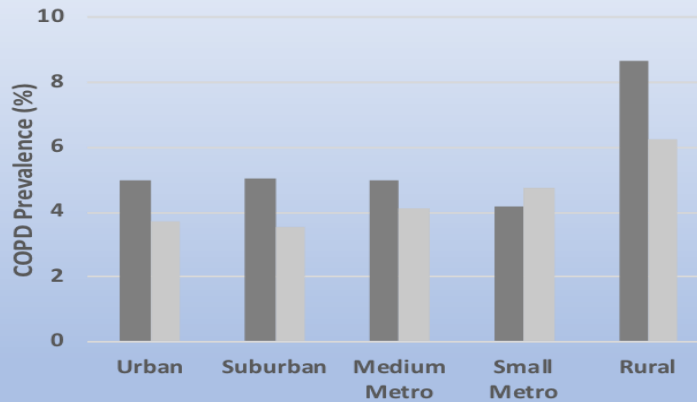
## In a nationally representative sample, increased COPD prevalence in rural, poor regions



The prevalence of COPD was 8.4% nationwide with the highest prevalence of 15.7% in rural, poor communities.

Raju, Sarath, "Rural Residence and Poverty are Independent Risk Factors for COPD in the United States." *American journal of respiratory and critical care medicine* 2018

## Residents in rural, poor regions had increased prevalence of COPD among never smokers



Among never smokers, community level use of coal for fuel was associated with COPD prevalence.

Raju, Sarath. "Rural Residence and Poverty are Independent Risk Factors for COPD in the United States." *American journal of respiratory and critical care medicine* 2018

**“Hope is like a path in the countryside. Originally, there is nothing—but as people walk this way again and again, a path appears.”**

Lu Xun, Chinese Essayist, Philosopher 1921

## Rural Chronic Obstructive Pulmonary Disease Toolkit



November 20, 2019

Patricia Stauffer, MPH

NORC Walsh Center for Rural Health Analysis

### Rural Health Outreach Tracking and Evaluation Program

- Funded by the Federal Office of Rural Health Policy (FORHP)
- NORC Walsh Center for Rural Health Analysis
  - Michael Meit, MA, MPH
  - Alana Knudson, PhD
  - Alycia Bayne, MPA
- University of Minnesota Rural Health Research Center
  - Ira Moscovice, PhD
  - Amanda Corbett, MPH
  - Carrie Henning-Smith, PhD, MSW, MPH
- National Organization of State Offices of Rural Health
- National Rural Health Association

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## Rural Health Outreach Tracking and Evaluation Program

- Programs funded by the Outreach Authority of Section 330A of the Public Health Service Act seek to expand rural health care access, coordinate resources, and improve quality of care.

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## Rural Evidence-Based Toolkits

**1. Identify**  
evidence-based and  
promising  
community health  
programs in rural  
communities



**2. Study**  
experiences of  
these programs  
including  
facilitators of  
their success



**3. Disseminate**  
lessons learned  
through Evidence-  
Based Toolkits



Rural Health Information Hub: <https://www.ruralhealthinfo.org/>



## Evidence-Based Toolkit on COPD

- Rural communities are developing, expanding, and sustaining COPD programs.
- These programs focus on:
  - Prevention and Risk Reduction
  - Pharmacologic Treatment
  - Non-Pharmacologic Treatment
  - Palliative Care
- The toolkit is designed to disseminate promising practices and resources.

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## Rural Chronic Obstructive Pulmonary Disease Toolkit

The screenshot shows the RHIhub website interface. At the top, there is a navigation bar with links for "Updates & Alerts", "About RHIhub", and "Contact Us", along with social media icons for Facebook, Twitter, and YouTube. A search bar is also present. Below the navigation bar is a horizontal menu with categories: "Online Library", "Topics & States", "Rural Data Visualizations", "Case Studies & Conversations", and "Tools for Success". The main content area features a sidebar on the left titled "IN THIS TOOLKIT Modules" with a list of seven modules: 1: Introduction, 2: Program Models, 3: Program Clearinghouse, 4: Implementation, 5: Evaluation, 6: Sustainability, and 7: Dissemination, followed by "About This Toolkit". The main content area displays the "Rural Chronic Obstructive Pulmonary Disease Toolkit" with a green header and a graphic of lungs. Below the header, a welcome message states: "Welcome to the Rural Chronic Obstructive Pulmonary Disease (COPD) Toolkit. The toolkit compiles evidence-based and promising models and resources to support organizations implementing COPD programs and expanding capacity." On the right side of the main content area, there is a "RHIhub This Week" section with a sign-up for a weekly newsletter, including an email input field and a "Subscribe" button. Below this is a "RELATED RHIhub CONTENT" section featuring a link to the "Chronic Disease Topic Guide" with a description: "provides information and resources on a variety of".

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## Organization of the Toolkit

### ↓ IN THIS TOOLKIT Modules

- 1: Introduction
- 2: Program Models
- 3: Program Clearinghouse
- 4: Implementation
- 5: Evaluation
- 6: Sustainability
- 7: Dissemination
- About This Toolkit



#### 2: Program Models

- Prevention and Risk Reduction Models
- Pharmacologic Treatment Models
- Non-Pharmacologic Treatment Models
- Palliative Care Models

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## Prevention and Risk Reduction Models

1. **Smoking cessation** is one of the most effective ways to manage COPD symptoms among individuals who smoke.
2. Individuals with COPD are strongly recommended to receive influenza and pneumococcal **vaccines**.
3. **Early diagnosis** allows opportunities to decrease the rate of decline in lung function. Beginning treatment in the early stages of the disease can produce more favorable outcomes and improve quality of life.



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## Pharmacologic Treatment Models

1. **Pharmacologic therapy**
  - Long-acting bronchodilators
  - Rescue medications
2. **Oxygen therapy**
  - For patients with severe resting hypoxemia



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## Non-Pharmacologic Treatment Models

1. **Pulmonary rehabilitation** interventions focus on the adoption of and adherence to health-promoting behaviors.
  - Education
  - Exercise
2. **Chronic Care/Chronic Disease Management** programs are based on the Chronic Care Model. Structure and delivery may vary, but typically include: information about COPD, offering education about behavior change, and providing information about medication adherence and management.



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## Palliative Care Models

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- Designed to make symptomatic patients as comfortable as possible while managing their COPD.
- Typically occurs alongside treatment and can help relieve suffering by offering help with symptoms like shortness of breath, fatigue, pain, depression, and anxiety.
- The topic is frequently avoided, as many people confuse palliative care and hospice.

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## Lessons Learned

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- Key barriers to COPD in rural areas:
  - Access to specialty pulmonary services
  - Transportation
- Comorbid conditions
  - Medication management and cost
- Planning for sustainability during program development is critical
- Occupational exposures related to farming and coal mining
- Considerations for different populations

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## Contact Information

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**Toolkit Project Team**

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[@WalshCenter](https://twitter.com/WalshCenter)

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The Walsh Center for Rural Health Analysis  
NORC AT THE UNIVERSITY OF CHICAGO

UNIVERSITY OF MINNESOTA  
RURAL HEALTH  
RESEARCH CENTER



# TOUCH

Teaching and Outreach  
in Underserved  
Communities and Health  
Improvement



Our Concern:

Limited support for  
Skilled Nursing  
Facility (SNF)  
COPD patients  
and staff

## TOUCH COPD HYPOTHESIS



## WHAT DO PATIENTS NEED?

Will I be on the same medicines at home?

Can you make sure I am doing my pursed lip breathing right?

Tell me there  
will be bad days.

Help me by building an  
action plan with me.

How do I take my  
medicine?

I don't even know what to  
ask. I have no idea what  
I need to know.

Will what I eat affect my COPD?

Why am I short of breath, but my oxygen sats are ok? Am I crazy?

Can you help me make a medication  
schedule for when I go home?

Where to find support.

Understand I may be in denial.

Can I have Pulmonary Rehab? Can I sign up before I go home?

Can my COPD impact my other illnesses?

Help me understand what causes my breathing problems.  
I don't understand why I get short of breath sometimes and sometimes not.

# Patient Voice



## WHAT WE FOUND

- Frequent, unplanned discharge back to hospital
- Limited reporting protocols for detection of status change
- Unsure of action when symptoms change or worsen
- Limited education for patients and families
- Providing support when discharging home



## WHAT ABOUT FOLLOW UP POST DISCHARGE?



Case Management usually does not follow up with patients discharged to SNF – our sickest patients.





## WHAT DID WE DO?

- Found SNF partner East TN
- 5 Facilities
- Multidisciplinary Teams
- 2 webinars and 1 workshop

## HELP WITH REPORTING

### Stop and Watch Tool

Educated about COPD symptoms and recognizing exacerbations.

Encourage EVERYONE to use these.

Nurses, Dietary, Environmental Services, Family Members... Everyone

### **Stop and Watch** Early Warning Tool

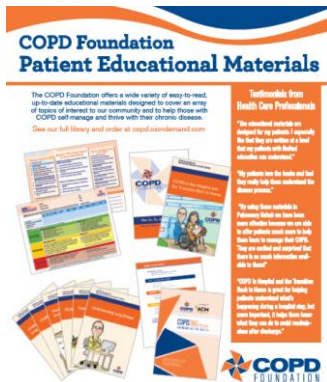


If you have identified a change while caring for or observing a resident, please circle the change and notify a nurse. Either give the nurse a copy of this tool or review it with her/him as soon as you can.

<b>S</b>	Seems different than usual
	Talks or communicates less
	Overall needs more help
	Pain – new or worsening; Participated less in activities
<b>T</b>	Ate less
	No bowel movement in 3 days; or diarrhea
	Drank less
<b>W</b>	Weight change
	Agitated or nervous more than usual
	Tired, weak, confused, or drowsy
	Change in skin color or condition
<b>A</b>	Help with walking, transferring, toileting more than usual

☐ Check here if no change noted while monitoring high risk patient





**Update if needed on:**

	COUGH	WHEEZE	SHORTNESS OF BREATH	EXHAUSTION	WHEEZE	COUGH	EXHAUSTION	COUGH
Can do this								
Can do this with some limitations								
Can't do this								

**My Green Days:**

- My breathing is normal
- My cough and mucus are normal
- My energy is normal
- My weight is normal
- My sleep is normal

**My Yellow Days:**

- I have a cold or flu
- I have a change in my breathing pattern
- I have a change in my cough or mucus
- I have a change in my energy
- I have a change in my weight
- I have a change in my sleep

**My Red Days:**

- I have a change in my breathing pattern
- I have a change in my cough or mucus
- I have a change in my energy
- I have a change in my weight
- I have a change in my sleep

## COPD REFERENCE GUIDE

Understanding COPD can be confusing and scary, but there are things you can do to feel more comfortable and more in control. Learning more about COPD can help you feel better and stay on top of your health and safety.

**What is COPD?** COPD is a lung disease that makes it hard to breathe. It is caused by damage to the lungs. The air sacs in the lungs are called alveoli. In COPD, the alveoli are damaged and the air sacs lose their shape. This makes it hard to breathe. COPD is a chronic disease, which means it lasts a long time and it can get worse over time. There are two main types of COPD: chronic bronchitis and emphysema. Chronic bronchitis is inflammation of the bronchial tubes, which carry air to and from the lungs. Emphysema is damage to the alveoli, the small air sacs in the lungs. COPD is a leading cause of death in the United States. It is most common in people who have smoked for many years. However, it can also be caused by exposure to air pollution or dust. COPD is a progressive disease, which means it gets worse over time. There is no cure for COPD, but there are things you can do to manage it. These include quitting smoking, avoiding secondhand smoke, and taking medications as prescribed. It is important to see your doctor regularly to monitor your COPD and to make sure you are taking your medications correctly. There are also things you can do to keep your lungs healthy, such as exercising and eating a healthy diet. COPD is a serious disease, but with the right care, you can live a full and active life.

## SUPPLEMENTAL OXYGEN

Supplemental oxygen is used to help people with COPD breathe better. It is usually delivered through a nasal cannula, which is a small tube that goes into your nose. Supplemental oxygen can help you feel better and live longer. It is important to use supplemental oxygen as prescribed by your doctor. There are several things you should know about supplemental oxygen. First, it is not a cure for COPD. It is only used to help you breathe better. Second, it is not a substitute for your medications. You should continue to take your medications as prescribed. Third, it is not a substitute for quitting smoking. If you smoke, you should quit as soon as possible. Fourth, it is not a substitute for avoiding secondhand smoke. If you are around secondhand smoke, you should leave the area. Fifth, it is not a substitute for exercising. You should exercise regularly, as long as you are able. Sixth, it is not a substitute for eating a healthy diet. You should eat a diet that is low in fat and high in fruits and vegetables. Seventh, it is not a substitute for seeing your doctor regularly. You should see your doctor every year for a check-up. Eighth, it is not a substitute for taking your medications correctly. You should take your medications exactly as prescribed. Ninth, it is not a substitute for keeping your lungs healthy. You should avoid all sources of lung irritation, including dust, pollen, and mold. Tenth, it is not a substitute for staying up-to-date on your vaccinations. You should get a flu shot every year and a pneumonia shot every five years. Supplemental oxygen is a valuable tool for people with COPD. It can help you breathe better and live longer. It is important to use it as prescribed by your doctor.

## BEFORE YOU GO HOME, ASK:

Will the medicines I take when I go home be the same as the ones I've had here?

Will they be the same as the ones I was on before my hospital stay?

Can you help me with my medication schedule?

What is the best order for me to take my medicines?

Can you help me make sure I have enough medications until I can get to the pharmacy?

Will a nurse or respiratory therapist come to my home? If not, can the doctor order this?

Can I be referred to Pulmonary Rehab?

Can a physical therapist work with me at home until I build up strength?

When should I see my primary doctor for a follow up?

Can you teach me about Pulmonary Rehab?

# WHAT DID WE PROVIDE?

## FOLLOW UP — SUPPORT AFTER DISCHARGE

Provided information to get patient connected to support network.

**COPD360°social**  
IT'S OUR COMMUNITY ONLINE

**40,000 STRONG AND GROWING!**

**ACTIVITY FEED**  
Be heart of our community featuring real-time conversations, happenings and actionable content.

**QUESTIONS AND ANSWERS**  
The one-stop-shop for our members to pose questions about treatment options, living with COPD and research opportunities—and receive quality answers in return.

**COPD DIGEST**  
Inspiration community featuring tips from the COPD member perspectives and articles on COPD featured!

[WWW.COPD360SOCIAL.ORG](http://WWW.COPD360SOCIAL.ORG)

Welcome to the **COPD PPRN**  
and COPD - a lung disease that affects 30 Million Americans

PPRN, a lung health research registry and only one of its kind for lung disease in which has been impacted with. We can't do this without you. Every bit of information helps us discover the leading cause and living time.

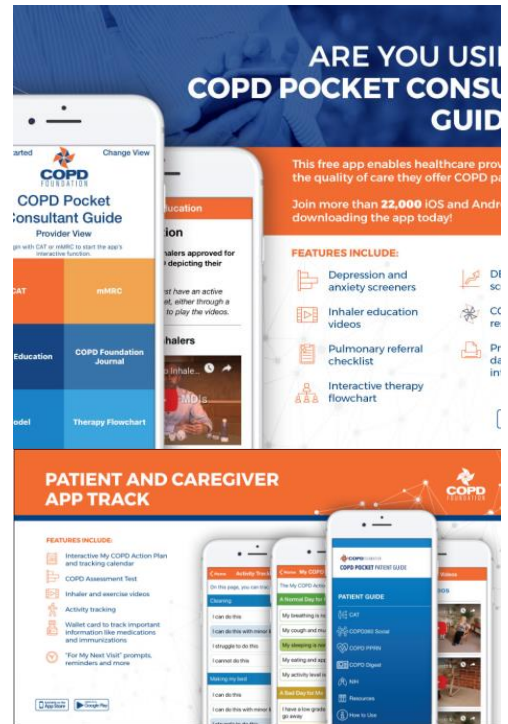
Join:

Learn more about COPD PPRN:

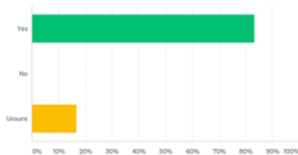
# THE COPD POCKET CONSULTANT GUIDE APP

The newest version of the app, now available for download at the [APP STORE](#) and [GOOGLE PLAY](#), has several exciting new features, including:

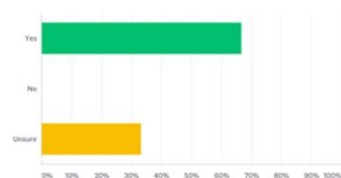
- An interactive "My COPD Action Plan" and tracking calendar
- Inhaler and exercise videos
- Activity tracking
- Wallet card to track important information, including medications and immunizations
- "For My Next Visit" prompts and reminders
- Information about the COPD Patient-Powered Research Network and COPD360social
- Direct access to the 25 latest articles posted in the COPD Foundation's patient blog, the COPD Digest



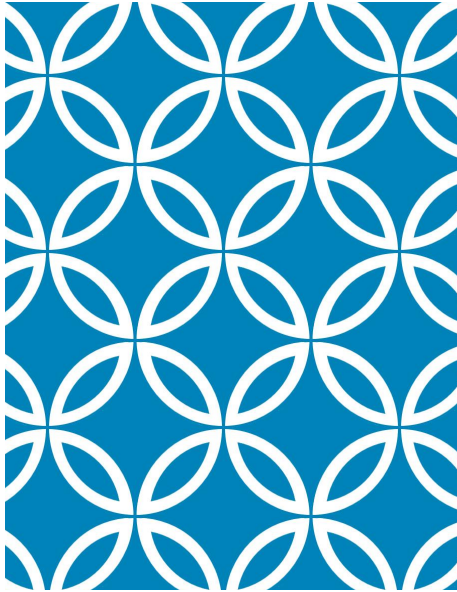
Question: Do you feel that the information shared in this workshop has improved care of COPD patients in your facility?



Question: Did this information change the way you work with the COPD patients you care for?



## WHAT WERE THE RESULTS?



## LESSONS LEARNED?

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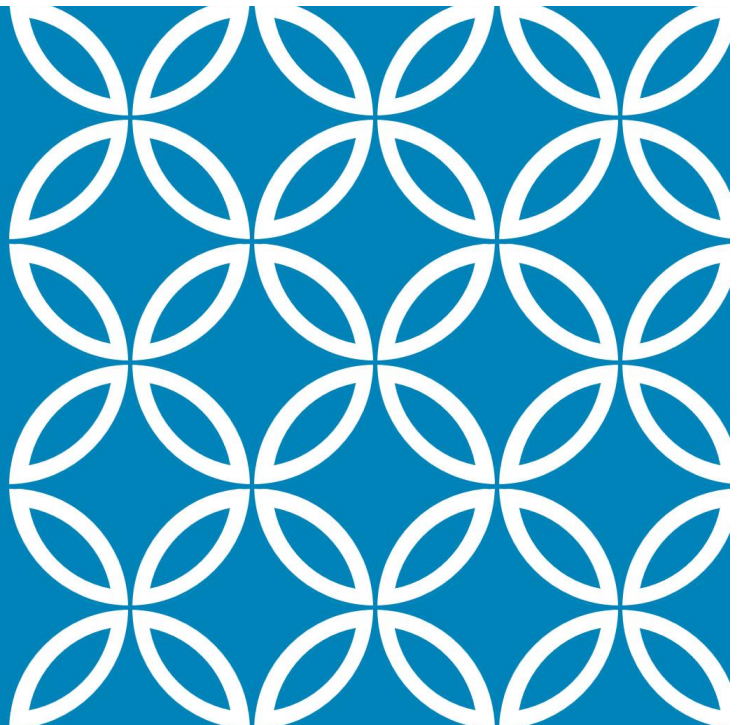
With more time, more data follow up with long-term improvement in readmission rates

Continued education provided for new hires and yearly skills testing.

## THANK YOU

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Stephanie Williams, BS RRT  
Director of Community Programs  
COPD Foundation





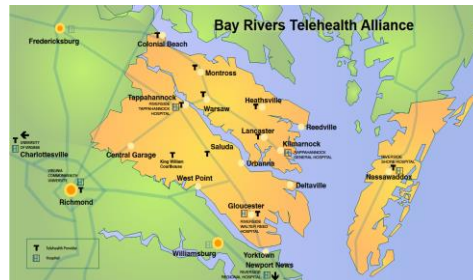
# Tackling Chronic Illness Using Remote Patient Monitoring

Donna Dittman Hale, MHA, CTC, Executive Director  
November 20, 2019



**BRTA's Mission:** To serve communities by developing telehealth projects that: Improve access to health services; Engage patients as partners; Reduce professional isolation among health service providers; and Provide access to training and development of the health care workforce.

- ▶ Established in 2003
- ▶ Operating in 17 rural localities
- ▶ Manages 4 federal/state grants
  - ▶ Behavioral Telehealth
  - ▶ Remote Patient Monitoring
  - ▶ Area Health Education Center
  - ▶ School Based Telehealth Integration



## Bridges to Care Transitions: Preliminary Results

- ▶ 134 patients received Remote Patient Monitoring Services upon discharge
- ▶ 398 received Care Transitions Coaching and Chronic Disease Self Management(CDSM) Tele-Education
- ▶ 27 enrolled in Healthy IDEAS® Behavioral Health Coaching
- ▶ 2566 participated in community CDSM activities

*2018 HRSA Rural Health Community Champion  
Award for Evidence Based Practices*

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## Findings

Status	Avoided (>1) Readmission	Readmission = 1	Readmissions > 1	Unscheduled MD Visits
Grant patients (with coaches)	78%	19%	1%	13%
Non-grant patients	34%	47%	19%	10%

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## Cost Savings

- The grant program saved approximately **\$344,000 or \$3,510.20 per person** in hospital readmission costs for 98 people.
- Chronic and diabetes self-management programs resulted in an additional **\$106,957 or \$363.80 per person** in savings through decreased ER visits and admissions.

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Inpatient Hospital Readmissions	Intervention		Comparison	
	Percent	Dollars	Percent	Dollars
High Risk	10%	\$ 95,770	37%	\$ 341,324
Congestive Heart Failure	7%	\$ 43,715	19%	\$ 115,408
Chronic Obstructive Pulmonary Disease	4%	\$ 20,288	8%	\$ 36,823
Pneumonia	0%	\$ 6,492	3%	\$ 17,139
Total	22%	\$ 166,265	66%	\$ 510,693

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Improve access to care

Health promotion & disease management

Improve mental health

Ensure sustainability



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## Bridges to Cardiovascular Population Health: Key Program Components

### Primary Care Practices

- Identify at risk patients with CHF
- Provide Care Management support for enrolled patients with use of virtual visits for in home support
- RPM Monitoring via Riverside Connected Care Center
- Diabetes Management Consultations

### Coaching and Behavioral Health (Bay Aging & CSB)

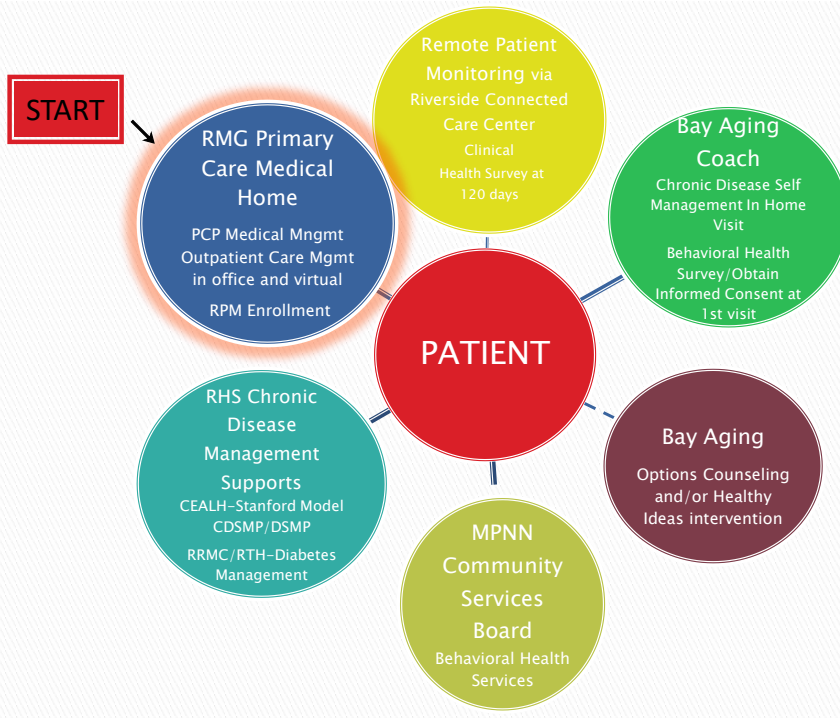
- Home visit for Chronic Disease Self Management Education
- Consent Patients and support RPM use.
- PHQ9 and Behavioral Health Coaching as needed
- Behavioral Health Training and Services (CSB)

### Training and Evaluation

- Process, Outcomes and ROI (RCEALH)
- Community Based CDSMP Training
- Rapid Cycle Quality Improvement (Project Team)

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## Grant Inclusion Criteria

- ▶ Patient has an RMG PCP
- ▶ Patient lives in HRSA defined rural county
  - Essex, Northumberland, Middlesex, Richmond, Westmoreland, Lancaster
- ▶ Diagnosis of CHF, or CHF and Diabetes. COPD added by RMG
- ▶ Patient and/or caregiver is willing to participate in RPM and Health Coaching program

<http://hpsafind.hrsa.gov/>

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## Reimbursement Strategies to Develop Sustainability

- ▶ Optimize current and future reimbursement models:
  - Commercial contracting
  - Medicare
    - RPM Billing Codes
    - 99490 Chronic Care Codes
    - ACP Billing
  - Medicaid
  - Tricare
- ▶ Retail RPM option with lower end equipment?



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## CHF Patient Stratification

- ▶ HCC Potential Score  $>1.5$  (70% of pts)
- ▶ On Diabetes Registry (40% of pts)
- ▶ LACE+ Score  $>59$  (32% of pts)
- ▶ General Risk Score  $>6$  (30% of pts)
- ▶ Hospital or ED Admission Risk  $>40\%$  (34% of pts)

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*Thank You!!*



For More Information contact

Donna Dittman Hale

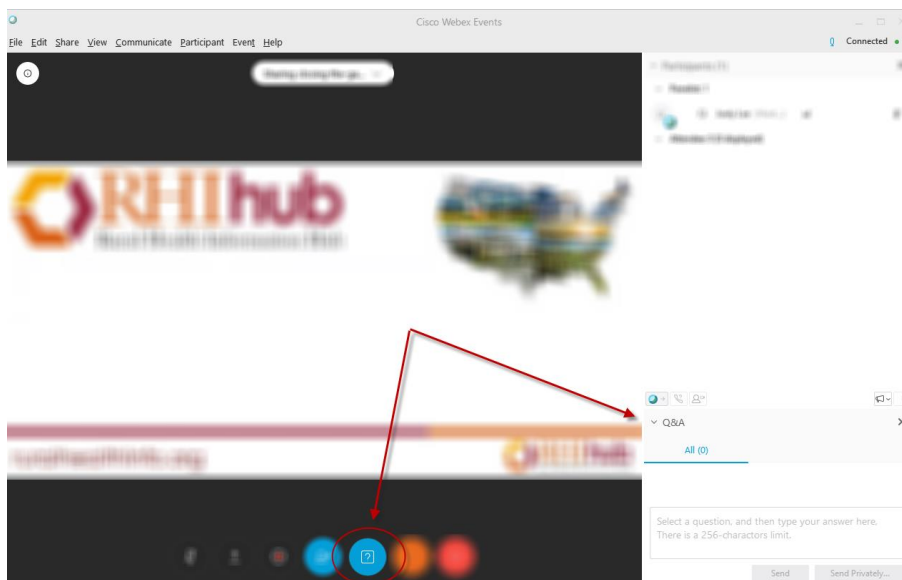
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804.443.6286



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Questions?



# Thank you!

- Contact us at [ruralhealthinfo.org](http://ruralhealthinfo.org) with any questions
- Please complete webinar survey
- Recording and transcript will be available on RHIhub website