TASC 90 Webinar: Overview of the Chronic Obstructive Pulmonary Disease (COPD) Manual and Pulmonary Rehabilitation Assessment

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Purpose of the Manual

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- The overall purpose of this manual is to **provide information about COPD and clarity around best practices of care management for those with COPD** in rural communities
- The objective is to help rural hospital leadership **develop a thorough understanding of COPD services in rural areas, clinical diagnosis and treatment** including treatment options available and new developments in technology that are useful to rural populations
- Rural hospitals should use this manual to **identify areas for improvement in diagnosis, treatment, and long-term care of COPD patients** in their communities
- State Offices of Rural Health (SORH) partners may also benefit from this guide when meeting with hospital leadership, to assist them in **thoughtful discussion related to improving the community's health**

Intended Audience

- This manual is intended for:
  - State Flex personnel and programs
  - Rural hospitals, including Critical Access Hospitals (CAHs)
  - Provider-based Rural Health Clinics (RHCs)
- <u>Goals</u> of the manual are to **increase awareness** on the benefits of COPD services, including disease burden and clinical aspects, and to **support the development of pulmonary rehabilitation services**, including:
  - Expanding existing services or developing services
  - Financial viability of services
  - Conditions of participation
  - Billing/coding
  - Workforce development
  - Operational efficiencies

What Topics are Covered in the Manual?

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- Introduction to Chronic Obstructive Pulmonary Disease in America
    - Urban Versus Rural
    - Importance of COPD Services
    - Current State of COPD Services in Rural America, Including Barriers
- Clinical Diagnosis and Treatment of COPD
    - Risk Factors for COPD
    - Signs and Symptoms
    - Assessment and Diagnosis
    - Clinical Treatment Options
    - Treatment Compliance
    - Performance Measurement
    - Research-Based Clinical Practices
- Models of Treatment Services
    - Oxygen Therapy and Ventilator Support
    - Smoking Cessation
    - Pulmonary Rehabilitation Services
- Care Management
- Community Support Services
    - Community Health Workers
    - Community Paramedics
    - Home Health
- Technology to Deliver Healthcare for Effective Rural COPD Services

TASC COPD Work Group Force

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Neyal Ammary-Risch	Suzan Michele Collins	Grace Anne Dorney Koppel
Dr. Dan Doyle	Lannette Johnston	Dr. Mark Lindsay
Ira Moscovice	Dr. Antonello Punturieri	Pat Schou
Karla Weng		

- Work group provided the oversight from various perspectives including:
  - Clinical
  - Research
  - Patient
  - Advocacy
  - Quality
  - State partner

COPD in America

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- **Chronic obstructive pulmonary disease (COPD):** a common, preventable and treatable disease that is characterized by persistent respiratory symptoms and airflow limitation
- COPD was the third leading cause of death in the United States in 2015, and the fourth leading cause in 2016
- In 2015, **15.5 million adults** were diagnosed with COPD in the U.S.
  - That is over 6% of the U.S. adult population in 2015 diagnosed with COPD in the span of one year!
- While 15.5M adults were diagnosed, **350K Medicare patients were hospitalized**, and approximately **150K deaths occurred** as a result of this preventable and treatable disease
- **More than $32B was spent on COPD-related patient** care in 2010, and this is projected to **increase to $49B by 2020**

Source: Croft JB, Wheaton AG, Liu Y, et al. Urban-Rural County and State Differences in Chronic Obstructive Pulmonary Disease — United States, 2015. MMWR. Vol. 67, No. 7. February 23, 2019. https://bit.ly/2GNfukb

COPD in Rural America

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- Prevalence rate for COPD is about **12% for individuals living in rural communities** compared to 7% across the U.S.
- **Age-adjusted prevalence of COPD for adult populations in rural areas is 8.2%,** almost twice the prevalence rate for adults in metropolitan areas of 4.7%
- Why such a divide?
  - Rural populations have a greater exposure to the risk factors associated with COPD
    - ✓ Tobacco exposure
    - ✓ Respiratory infections
    - ✓ Occupational and environmental exposures
    - ✓ Genetics
  - Higher proportions of lower socio-economic residents

Source: Croft JB, Wheaton AG, Liu Y, et al. Urban-Rural County and State Differences in Chronic Obstructive Pulmonary Disease — United States, 2015. MMWR. Vol. 67, No. 7. February 23, 2019. https://bit.ly/2GNfukb

COPD in Rural America, Continued

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- Why such a divide? (continued)
  - Limited access to appropriate healthcare services for COPD
    - ✓ Smoking cessation programs
    - ✓ Specialty care
  - Barriers to access healthcare services
    - ✓ Transportation
    - ✓ Geographic accessibility
    - ✓ Uninsured/under-insured
    - ✓ Cultural perception

Source: Croft JB, Wheaton AG, Liu Y, et al. Urban-Rural County and State Differences in Chronic Obstructive Pulmonary Disease — United States, 2015. MMWR. Vol. 67, No. 7. February 23, 2019. https://bit.ly/2GNfukb

Pulmonary Rehab in Rural

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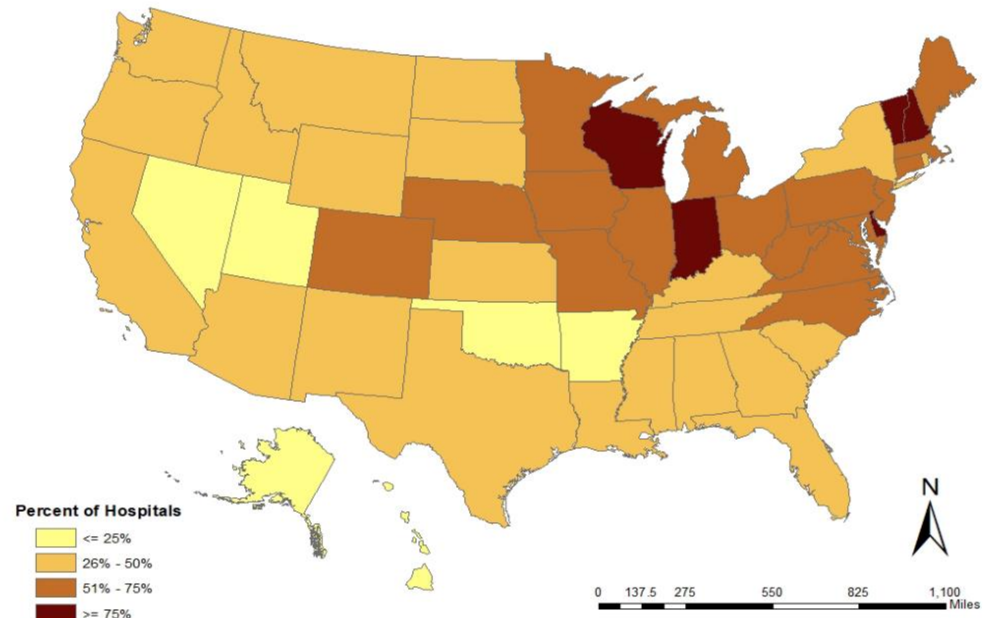
- 1,366 US counties or county equivalents have at least one hospital outpatient pulmonary rehab program, while **1,776 counties do not have a pulmonary rehab program, including 697 counties that do not have a hospital**
- **36.3% of CAHs and 46.7% of rural PPS hospitals have an outpatient PR program**, along with 53.2% of urban PPS hospitals

Percent of Hospitals With Outpatient Pulmonary Rehab by Sta
2018



Source: Moscovice IS, Casey MM, Wu Z, Disparities in Geographic Access to Hospital Outpatient Pulmonary Rehabilitation Programs in the U.S., CHEST (2019), doi: https://doi.org/10.1016/j.chest.2019.03.031

Value Proposition

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- Overall improvement health and education
- Decreased admission/readmissions – profitability, quality
- Decreased ED visits
- Outmigration
- Additional service offering to support patient needs
- Value-based healthcare
    - Provide high-quality, low cost patient care

Pulmonary Rehab Assessment

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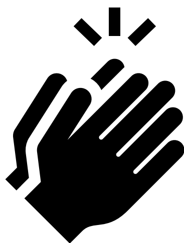
- Stroudwater in partnership with TASC, developed a assessment for Critical Access Hospitals (CAHs) to gain insight on current services currently being offered related to pulmonary rehabilitation.

- Assessment topics included: COPD disease prevalence, program certifications, workforce, operational performance, program operations, and quality.



THANK YOU! To the State Partners for sharing the assessment with your CAHs!

Assessment Respondents

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State	Count of Response
AL	12
AR	11
AZ	2
CA	5
FL	4
GA	9
IA	47
IL	35
KS	27
KY	14
MA	4
MO	18
MS	5
MT	22
NC	6
NE	21
NH	6
NM	6
NV	5
NY	17
OK	14
PA	6
SD	16
TN	13
UT	5
WV	10
WY	5
Grand Total	**345**

Non Duplicate Hospital Count =

Type of Organization	# of Respondents
Critical Access Hospital (CAH)	301
Provider Based Rural Health Clinic	12
Rural Health Clinic	4
Rural Prospective Payment System Hospital	4
Other (please specify)	24
Grand Total	**345**

Does your organization currently offer PR?

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- 50% of the respondents do currently offer PR service, while 49.1% do not

- Top barriers attributed to not supporting a PR program:
  1. Staffing (72.8%)
  2. Capital (60.9%)
  3. Space (55%)
  4. Medical Oversight (42.6%)

- Other reasons include:
  - Low patient volume
  - Reimbursement
  - Unfamiliar with program

Organizations who are in planning phase

- 59.8% of the organization who are currently not offering a PR program, plan on doing so in over a years time

- Top reasons for wanting to implement a PR program include:
  1. High rate of COPD patients within the community (45.5%)
  2. Limited access to local treatment options (38.5%)

- Other responses include:
  - Not planning on implementing
  - Improving case management / chronic disease management will support the need

Program Characteristics

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- 80.2% of PR programs are located in the hospital
- Last year (2018), respondents had approximately **4,050** enrolled patients in their PR programs
- On average hospitals offer PR program **3 days per week**, each session is **2 hours** and the duration of the program on average is **16 weeks**
- Top healthcare professionals who refer to PR program include: **Pulmonologist** (92.5%) and **Primary Care Practitioner** (91.7%)

Patient Characteristics, Continued

- Top medical diagnosis of patients participating in PR program: **COPD, Pulmonary Fibrosis, Emphysema, Asthma**
  - **83% patients have a co-morbidity** (i.e., diabetes, cardiovascular disease, hypertension, osteoporosis, physiological disorder) in addition to their primary diagnosis
- 51.9% of enrolled patients met the **GOLD Stage III (Severe)**
  - Must meet GOLD Stage II to qualify for PR services
- Majority of the enrolled patients had a **recent exacerbation** (42.2%)
- Enrollee demographics: **70.1% (61-70 years old**), even distribution between male and female, **74.6% have Medicare** coverage

PR Program Components

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- Only **11.7% of organizations with PR programs are certified** by the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)

- 78.4% of organizations conduct individual PR sessions, while 67.6% offer in a group setting

- Top exercise components within program :
  1. Aerobic Exercise (treadmill)
  2. Breathing Exercises
  3. Aerobic Exercise (cycling)
  4. Resistance Training (upper extremity)

PR Program Components, Continued

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- 51.4 % of organizations offer Tobacco Cessation programs

- Top education subjects offered within the PR program:
  1. COPD Disease
  2. Energy Conservation Technique
  3. Effect of Exercise and Physical Activity
  4. Nutrition
  5. Oxygen Therapy

- 76.8% of **families are allowed to participate** in the educational sessions, typically led by a **respiratory therapist** (71.8%) or a **nurse** (52.7%)

PR Program Outcomes

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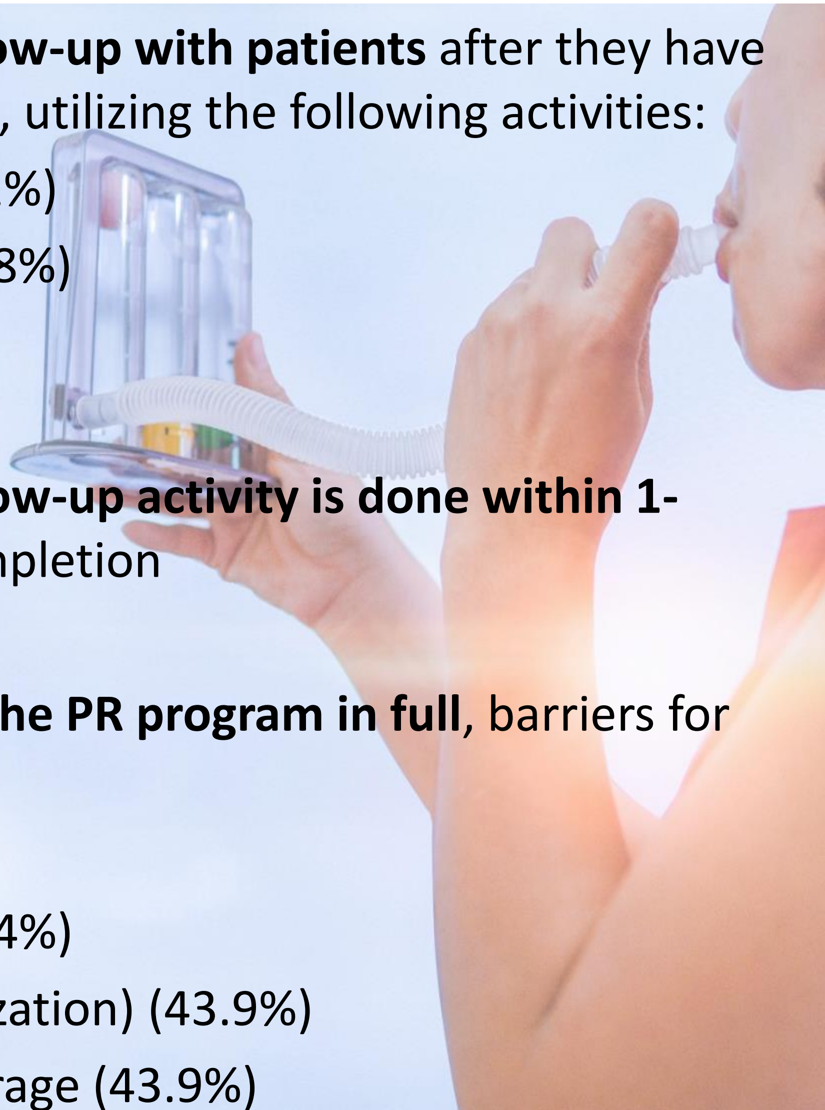

- **50.4 % of organizations follow-up with patients** after they have completed their PR program, utilizing the following activities:
  - Telephone Support (71.2%)
  - Supervised Exercise (50.8%)
  - Reassessment (47.5%)
- **Majority (56.9%) of the follow-up activity is done within 1-month** post PR program completion
- **70.4% of patient complete the PR program in full**, barriers for non-completion include:
  1. Transportation (64.5%)
  2. Lack of Motivation (51.4%)
  3. Exacerbation (hospitalization) (43.9%)
  4. Lack of Insurance Coverage (43.9%)

Healthcare Professionals

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- Top members of the PR program team include:
  1. Respiratory Therapist (84.4%)
  2. General Practitioner (60.6%)
  3. Dietician (63.3%)
  4. Nurse (56.9%)

- Family Practice Physician (32.4%) or a Pulmonologist (23.8%) provides medical directorship

Additional Highlights

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- 75% of the organization utilize Home Health to support PR program
- **95.3% of organizations do not utilize telehealth** for PR program
- Readmissions of patients who participated in PR program are not being tracked (59.4%) and there is **no readmission risk assessment** for new PR program patients (67.4%)
- Of the organizations currently offering PR, **49.7% are also offering Cardiac Rehab**

Next Steps

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- Distribution of COPD Manual
- Hold education sessions regarding the manual, if necessary for State Partners / Hospitals
- Present on Manual and Assessment Findings @ NRHA CAH Conference in September

Questions?

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