



STATE PLAN FOR ADDRESSING

COPD

IN ILLINOIS



CONVENED BY





May 2008

Dear Friends:

Respiratory Health Association of Metropolitan Chicago is pleased and proud to have convened the Illinois COPD Coalition and to have worked on the development of the *State Plan for Addressing COPD in Illinois*.

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When we opened as Chicago Tuberculosis Institute in 1906, our founders never anticipated the lung health challenges we would face in the future, the victories we would share, or the challenges that lay ahead. Over the past century, our primary focus has shifted from lung health threats such as tuberculosis (although tuberculosis persists today) to the modern challenges of COPD, the number four cause of death in the United States and Illinois. Our work on the State COPD Plan for Illinois is an important step forward in meeting the needs of Illinoisans living with COPD.

The ultimate goal of this effort is to improve the care and treatment of COPD patients and to prevent COPD and reduce the prevalence of the disease. If we are to achieve our goal, we must work hard together to implement the recommendations of the Plan. The benefits of success are tremendous—decreased medical costs, improved quality of life for COPD patients, and fewer people with the disease. Simply stated, that would mean more grandparents seeing their grandchildren graduate from school, and more parents walking their children down the wedding aisle.

Please read the Plan and get involved. Achievement of our goals will require work by every facet of society, from government to private employers, from giant medical systems to individual health care providers and people living with COPD. For more information and ways to get involved, please visit www.copdillinois.org or call Respiratory Health Association at 312.243.2000. We need your help.

Formerly known as:

*American Lung Association
of Metropolitan Chicago**
(1993-2007)

Chicago Lung Association
(1972-1993)

*Tuberculosis Institute of
Chicago and Cook County*
(1937-1972)

Chicago Tuberculosis Institute
(1906-1937)

**Respiratory Health Association
of Metropolitan Chicago is not
affiliated with American Lung
Association.*

Sincerely,

Joel J. Africk
President and Chief Executive Officer

Dear Readers:

On behalf of the Illinois COPD (chronic obstructive pulmonary disease) Coalition, a group of health professionals, patients, and organization representatives concerned with the lung health (or breathing health) of the citizens of Illinois, I am pleased to present the *State Plan for Addressing COPD in Illinois*. The Plan is a call to action for addressing the COPD epidemic in Illinois. Developed from a collaboration of approximately 100 individuals from around the State, the *State Plan* lays out recommendations for increasing general awareness of COPD, for reducing COPD-related morbidity and mortality, and for improving the quality of life of those living with the disease.

COPD is currently the fourth leading cause of death in the United States, and is poised to become the third unless measures are taken to prevent it, to diagnose it early, and to ensure that people with COPD are provided access to appropriate therapies. Many people do not realize that smoking is the primary risk factor for COPD, or that exposure to occupational and environmental hazards also place them at risk of developing COPD. Moreover, those at risk may not be diagnosed at a point when medical intervention is most likely to be successful, if they are diagnosed at all. COPD is both treatable and manageable. Seeking prompt treatment and engaging in self-management activities can improve one's quality of life and even length of life.

Members of the Illinois COPD Coalition are unified in their desire to bring more attention to COPD in Illinois. The diversity of Coalition membership, which includes representation from community agencies, public health departments, health care providers, patients, and caregivers, reflects the great impact felt by this disease.

It has been my honor to serve as Chairperson of the Illinois COPD Coalition and the *State Plan for Addressing COPD in Illinois*. I am grateful to the dedicated Coalition members and other partners who helped make the Plan a reality, and I hope it will help Illinoisans live longer, healthier lives. I look forward to progress in changing the face of COPD in Illinois as a result of the *State Plan*, and to a continued and growing collaboration to implement the recommendations of the Plan.

Sincerely,

Jeffrey Glassroth, MD

Executive Summary

The *State Plan for Addressing COPD in Illinois* was developed through the work of the Illinois COPD Coalition – a 100 member coalition, convened by Respiratory Health Association of Metropolitan Chicago (RHAMC). Coalition members represent a broad group of stakeholders from throughout the State, including community-based organizations, public health departments, professional organizations, patients, caregivers, health care providers (physician, nurses, respiratory therapists, and physical therapists), as well as pharmaceutical companies and home health care providers.

Chronic obstructive pulmonary disease (COPD) refers to a group of diseases that cause airflow blockage and breathing-related problems. COPD, also referred to as emphysema and chronic bronchitis, is one of the most significant public health issues in the United States today. It is a preventable, treatable disease that is the 4th leading cause of death, and is projected to be the 3rd leading cause of death by 2020. It is estimated that 12 million people in United States have been diagnosed with COPD, and that an additional 12 million are believed to have the disease and don't even know it. COPD is also the 4th leading cause of death in Illinois. It is estimated that 557,120 Illinoisans have been diagnosed with either chronic bronchitis, emphysema, or a combination of both. This does not take into account those that may have the disease, but have not yet been diagnosed. Therefore, more detailed prevalence in Illinois is not known at this time.

To focus more attention on this chronic condition, the Illinois COPD Coalition was brought together to create a comprehensive COPD State Plan for Illinois that outlines strategies for reducing the burden of COPD in Illinois. The State Plan will serve as a guide to reduce the incidence of COPD and COPD-related morbidity and mortality as well as improve the quality of life for those living with COPD. Some objectives for doing this include:

- Enhance the prevention of COPD, by promoting smoking cessation activities and increasing awareness of environmental causes of COPD;
- Educate primary health care providers to help increase diagnosis rates and to provide patients with the GOLD standard of COPD care;
- Increase COPD awareness among at-risk populations and others to improve health care decision-making;
- Provide a statewide network of resources for those living with COPD to increase self-management skills and adherence to treatment; and
- Increase surveillance through the Behavioral Risk Factor Surveillance System and other data collection tools to provide specific information about COPD in Illinois.

Five working groups were formed to develop the *State Plan for Addressing COPD in Illinois*:

The *Prevention, Early Detection, Surveillance and Data* working group developed recommendations for COPD prevention and improving early detection practices. It also examined existing data sources to define recommendations around monitoring COPD. Key points include:

- Promote public health campaigns directed at patients and health care providers that: a) help smokers quit; and b) increase the use of spirometry to diagnose COPD in those with risk factors and respiratory symptoms.
- Increase the availability and affordability of high quality smoking cessation programs.
- Increase the availability of accurate, high quality diagnostic testing with spirometry, a noninvasive breathing test that determines how well a person's lungs are working.
- Promote clean air, both indoor and outdoor, to reduce the risk of developing COPD and to reduce morbidity in people who already have COPD.

The *Treatment and Management* working group focused on COPD care – ensuring that health care providers offer state of the art care for patients and that patients have access to pharmacologic and non-pharmacologic therapies. Key points include:

- Increase awareness among health care providers about appropriate treatments for COPD through the formulation of a COPD curriculum for medical students and residents, creation of a COPD Disease Expert Network, and dissemination of a newsletter for medical professionals about standards for COPD care.
- Increase patient knowledge about COPD (cause, treatment, prognosis, and strategies to live with the disease) through delivery of educational opportunities for patients and their caregivers, and dissemination of patient materials and newsletter for COPD patients and their caregivers.
- Ensure access to non-pharmacologic therapy, including pulmonary rehabilitation and home medical equipment and oxygen, by collaborating with community fitness resources and establishing a standardized menu of home oxygen equipment options.

The *Public Awareness, Patient Education and Resources* working group focused on ways to increase overall awareness of COPD and proper medical management, as well as ways to link patients to resources. Key points include:

- Educate the general public, people living with COPD, and medical providers through implementation of National Heart, Lung, and Blood Institute's (NHLBI) *COPD Learn More Breathe Better Campaign*, and launching radio and print public service announcements utilizing NHLBI resources.
- Identify existing resources for COPD patients; create a comprehensive resource list and a resource driven website geared toward patients and providers.

The *Policy and Advocacy* working group explored policy approaches for improving COPD outcomes. Key points include:

- Remove barriers to access for diagnostic and care opportunities for COPD by determining public and private insurance coverage of smoking cessation treatments, spirometry, and pulmonary rehabilitation, and maximizing insurance coverage and reimbursement.
- Increase programming related to COPD through increased state funding for COPD, and encourage Illinois Department of Public Health to dedicate staff resources to COPD.
- Raise awareness among elected officials by holding annual COPD Awareness Days in Springfield, increasing district-specific visits, and creating a toolkit for legislators.
- Increase advocacy among patients by providing advocacy trainings and an advocacy toolkit.
- Increase COPD surveillance.

The recommendations generated for the *Research* section include:

- Increase communication among researchers statewide in the area of COPD by holding an annual COPD Research Conference.
- Promote research opportunities among people living with COPD by developing a centralized website for research opportunities.
- Improve communication on research advancements to the COPD patient community through the expansion of patient education materials, such as RHAMC's *Inspiration* newsletter.
- Commission future research that evaluates the effectiveness of strategies recommended in this plan.

The *COPD State Plan Outcomes and Evaluation* working group discussed ways to evaluate the implementation and effectiveness of the Plan as well as the sustainability and functioning of the Coalition itself. Key outcomes include:

- Decreased COPD-related mortality as measured by Illinois state mortality data.
- Increased prevalence data through the addition of COPD-related questions to the Behavioral Risk Factor Surveillance System.

- Decreased number of COPD-related hospitalizations, as measured by Illinois hospitalization data.
- Annual Coalition meetings for discussions on progress and implementation.
- Increase of Coalition membership by 5% each year between 2008 and 2011.
- Each year, at least one collaboration will be developed for implementation of one or more of the strategies of the Plan.

Organizational Acronyms Used in this Document

AACVPR	American Association of Cardiovascular and Pulmonary Rehabilitation
AAFP	American Academy of Family Physicians
AANP	American Academy of Nurse Practitioners
AAPA	American Academy of Physician Assistants
AAHE	American Association for Health Education
AARC	American Association for Respiratory Care
ACC	American College of Cardiology
ACCP	American College of Chest Physicians
ACOG	American College of Obstetrics and Gynecology
ACP	American College of Physicians
ACS	American Cancer Society
AHA	American Heart Association
ALA	American Lung Association
APTA	American Physical Therapy Association
ATS	American Thoracic Society
BCBS	Blue Cross Blue Shield
BRFSS	Behavioral Risk Factor Surveillance System
CDPH	Chicago Department of Public Health
CMS	Centers for Medicare and Medicaid Services
CTS	Chicago Thoracic Society
EPA	US Environmental Protection Agency
ERS	European Respiratory Society
ISCHR	Illinois Society for Cardiopulmonary Health and Rehabilitation
IAFP	Illinois Academy of Family Physicians
IAMES	Illinois Association for Medical Equipment Services
IDPH	Illinois Department of Public Health
IPHCA	Illinois Primary Health Care Association
IPLAN	Illinois Project for Local Assessment of Needs
IPTA	Illinois Physical Therapy Association
ISRC	Illinois Society for Respiratory Care
MSHA	Mine Safety and Health Administration
NHLBI	National Heart, Lung, and Blood Institute
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Health and Safety Administration
RHAMC	Respiratory Health Association of Metropolitan Chicago
YHP	Your Healthcare Plus Medicaid Disease Management Program

Chronic Obstructive Pulmonary Disease (COPD)

The Burden of COPD

COPD is one of the most significant public health issues in the United States today. COPD is a preventable and treatable disease and is currently the fourth leading cause of death in the nation.¹ Unlike the other leading causes of death, the prevalence of COPD continues to rise – it is predicted to be the 3rd leading cause of death by 2020. An estimated 24 million Americans have COPD, but it is estimated that fewer than half have been diagnosed or know they have it. Nationally, COPD kills more than 120,000 Americans each year¹ – that equals one death every four minutes. In addition, COPD is expensive, costing the nation an estimated \$42.6 billion in 2007.²

In Illinois, COPD was the 4th leading cause of death in 2005.³ An estimated 557,120 Illinoisans are diagnosed with either chronic bronchitis, emphysema or a combination of both.*

About COPD

COPD (chronic obstructive pulmonary disease) refers to a group of diseases that cause airflow blockage and breathing-related problems. COPD is also referred to as emphysema and chronic bronchitis.

Chronic bronchitis is the long-term swelling and thickening of the tubes that make up the airways, or bronchioles. Excessive mucus causes obstruction in the airways and coughing. Over time, the lungs become more sensitive to the irritation and air flow in and out of the lungs becomes more difficult.

Emphysema occurs when the air sacs, or alveoli, are damaged. This decreases the exchange of oxygen and carbon dioxide, causing shortness of breath. The damaged air sacs can also create large spaces in the lungs where air can become trapped.

Both chronic bronchitis and emphysema cause the lungs not to expand and contract as well as healthy lungs, making breathing difficult. People living with COPD usually have a combination of both chronic bronchitis and emphysema.

Causes

The most common cause of COPD is smoking, responsible for approximately 80% of COPD cases. Environmental exposure to chemicals, dust, fumes, high levels of air pollution, and secondhand smoke can also lead to COPD. Occupational exposure to those irritants is common in industries such as coal-mining, rock-mining, and welding, putting many people at risk for development or exacerbation of COPD. Evidence suggests that occupational exposures may contribute to COPD in 10 to 20% of patients with COPD. In addition, a genetic condition called alpha-1 antitrypsin (AAT) deficiency can lead to COPD. At least 100,000 people in the United States may have alpha-1 antitrypsin deficiency. In prior studies, 1 – 4.5% of patients diagnosed with COPD have been shown to have this disorder.⁴

Symptoms

The first signs of COPD can be very subtle. A person may begin to experience breathing problems while doing activities that never bothered him or her before or during daily activities like bathing, cooking, or cleaning.

Signs & Symptoms include:

- Deep, chronic wet cough
- Shortness of breath

* This number was derived from Illinois population data and estimates of the number of COPD cases diagnosed nationwide.

- Mucus production
- Wheezing
- Chest tightness

Often people do not realize that they have COPD because it develops slowly over time. Frequently, people who have COPD will unconsciously reduce certain activities, such as walking or gardening, to accommodate their breathlessness.

Diagnosis

Everyone at risk for COPD (i.e. those with exposure to tobacco or occupational hazards) who demonstrates symptoms such as cough, mucus, or shortness of breath should get spirometry tested. Spirometry is a noninvasive breathing test that determines how well a person's lungs are working. This test is done with a device called a spirometer, which measures both the amount of air and the speed at which a person can blow it out of his or her lungs. This test is able to detect very small changes in breathing that are not apparent to the patient. Spirometry tests take only a couple of minutes, do not involve needles, are not painful, and do not require patients to remove any clothing. For individuals already diagnosed with COPD, screening for alpha-1 antitrypsin deficiency is recommended for the individual and can allow for appropriate family counseling.⁴This test may require only a finger prick and in many cases is cost-free.

Treatment

Smoking Cessation

The single most important thing a person diagnosed with COPD or at risk for COPD can do is to quit smoking. This is true regardless of the duration and severity of the disease. Cigarette smoking accelerates COPD and also minimizes the effects of established therapies. Smoking cessation is the only preventive measure that can increase survival rates for COPD.

Avoid Infection

People living with COPD are at greater risk for respiratory infections so avoiding infections or treating them quickly are both necessary for proper COPD management. All patients with COPD should receive an annual flu shot in advance of flu season. COPD patients 65 years of age and older should receive one pneumococcal vaccination. COPD patients receiving a pneumococcal vaccination while under the age of 65 should wait five years before receiving another dose.

Therapy with Medications

Most people with COPD take medications on a regular basis to improve breathing. Other medications are used on an as needed basis to decrease shortness of breath. Medications prescribed for people with COPD fall into one of three groups: (1) Bronchodilators, which are usually inhalers designed to open up the patient's airways; (2) Steroids, to reduce inflammation in the airways; and (3) Antibiotics, to treat infections. For patients with alpha-1 antitrypsin deficiency, data suggest that supplementation of the missing protein may slow the rate of loss of lung function and improve survival.^{4,5,6,7}

Oxygen Therapy

Oxygen Therapy is a treatment used for patients who have severe COPD or low oxygen in their bloodstream. Oxygen therapy can improve exercise capability, sleep, and cognitive performance, as well as decrease the risk of death for patients with chronic respiratory failure. Small, lightweight portable units allow patients to continue employment and fully participate in recreational activities away from home, including travel.

Pulmonary Rehabilitation

Pulmonary rehabilitation is an individually designed program of care for patients with COPD designed to restore them to maximum level of functioning and to optimize physical and social performance. The goals of pulmonary rehabilitation are to reduce symptoms, improve quality of life, and increase physical and emotional participation in daily activities. Research has demonstrated that pulmonary rehabilitation decreases shortness of breath and improves quality of life scores. Emerging research is also showing that pulmonary rehabilitation may reduce health care costs.⁸

Developing a COPD State Plan for Illinois

Background

In 2007 Respiratory Health Association of Metropolitan Chicago (RHAMC) formed the Illinois COPD Coalition – a Coalition of approximately 100 members throughout the State of Illinois. RHAMC convened this group to create a comprehensive COPD State Plan that outlines sustainable solutions for reducing the burden of COPD in Illinois through the coordinated implementation of multiple strategies that address the challenges of COPD. Coalition members represent a broad group of COPD stakeholders including community-based agencies, public health departments, professional organizations, patients, caregivers, health care providers (physicians, nurses, respiratory therapists and physical therapists), as well as pharmaceutical companies and home health care providers.

The overall purposes of the State Plan are to:

- Identify goals and specific strategies to prevent COPD, increase public awareness of the disease, and improve the quality of life for people with COPD;
- Serve as a priority setting document that guides the development of programs and policies related to COPD in Illinois; and
- Articulate a comprehensive, multidisciplinary approach for addressing COPD in Illinois and reducing its burden.

Specific objectives include:

- **Enhance the prevention of COPD**, including promotion of smoking cessation activities that are integrated into health care, workplace, and government institutions, thereby addressing the root cause and reducing the future burden of the disease,
- **Educate primary health care providers** to help increase diagnosis rates and provide patients with the GOLD standard of COPD care,
- **Increase COPD awareness** among at-risk populations and others to improve lifestyle and health care decision-making,
- **Provide a statewide network of resources** for those living with COPD that increases self-management skills, thereby decreasing hospitalizations and emergency room visits, and
- **Increase surveillance** through the Behavioral Risk Factor Surveillance System (BRFSS) and other data collection tools to provide specific data on the state of COPD in Illinois and to evaluate the impact of health interventions.

The Illinois COPD State Plan is intended for use by policymakers, organizations, providers, patients, and others to help improve COPD outcomes in Illinois. The content of the State Plan is fluid, and may change over time in response to shifting and emerging needs. The Illinois COPD Coalition will continue to function as an advisory body and will continue to meet and assess, revise, and implement components of the Plan.

Methods

To ease development of the Illinois COPD State Plan, coalition members were divided into five working groups, each of which was led by a working group chair. Working groups held several meetings in late 2007 and early 2008 to generate and refine recommendations for their sections of the State Plan.

Working groups included:

Prevention, Early Detection, Surveillance and Data

The Prevention, Early Detection, Surveillance and Data working group developed recommendations for addressing COPD prevention and improving screening and early detection practices to decrease the number of new COPD cases while increasing the number of COPD diagnoses made early. This working group also examined existing local, state, and other data sources to generate recommendations around defining and monitoring the burden of COPD in Illinois.

Treatment and Management

The Treatment and Management working group focused on COPD care and ensuring that health care providers offer state of the art care for COPD. This working group also developed recommendations for increasing access to non-pharmacologic therapies, such as pulmonary rehabilitation and home oxygen care for people living with COPD.

Public Awareness, Patient Education and Resources

The Public Awareness, Patient Education and Resources working group focused on ways to increase awareness of COPD and proper medical management of COPD among the general public and those living with COPD. This working group also generated recommendations for linking people with COPD to appropriate resources in Illinois.

Policy and Advocacy

The Policy and Advocacy working group explored policy options for improving COPD outcomes in Illinois, through increases in COPD funding and resources as well as ongoing, effective advocacy by government leaders and people with COPD. This working group also made recommendations for reducing access and cost barriers to appropriate COPD treatment.

COPD State Plan Outcomes and Evaluation

The COPD State Plan Outcomes and Evaluation working group discussed ways the Illinois COPD Coalition and its partners could evaluate the implementation and effectiveness of COPD State Plan recommendations. This evaluation will also assess the sustainability and functioning of the Illinois COPD Coalition itself.

A sixth section addressing Research is also featured in this State Plan, but was not the focus of a specific working group. Rather, content of this section was developed in collaboration between Respiratory Health Association of Metropolitan Chicago and the Chair of the Illinois COPD State Plan, Dr. Jeffrey Glassroth, Vice Dean & Chief Academic Officer at the Feinberg School of Medicine of Northwestern University.

Prevention, Early Detection, Surveillance and Data

Goal

Increase awareness among the public, health care providers, and advocacy groups of symptoms and risk factors for COPD to promote accurate diagnosis by spirometry; develop and implement aggressive

interventions to stop harmful exposures such as tobacco and to improve air quality on the job and in the environment.

Objectives

Prevention, Screening and Early Detection

1. Increase awareness among the public of respiratory hazards, including tobacco smoke, as well as methods available to prevent and detect COPD.
2. Increase access to state-of-the-art tobacco cessation interventions and state of the art spirometry testing of populations at risk for COPD who have symptoms of cough, sputum production, or shortness of breath to make an accurate diagnosis and to guide therapy.
3. Promote smoking cessation and appropriate use of spirometry by community-based organizations and existing health care programs.
4. Expand the pool of certified or recommended providers for smoking cessation and spirometry testing in community-based and primary care settings.
5. Provide guidelines for and assistance with equipment, training, and interpretation of spirometry to ensure high quality testing for COPD.
6. Engage employers and workers in high risk industries to promote clean air programs.

Surveillance and Data

7. Improve and expand tobacco and COPD surveillance in Illinois to characterize disease burden, financial impact, and outcomes of preventive intervention.

Rationale

Tobacco and COPD

In the United States, cigarette smoking is the principal cause of COPD and is a significant contributing factor in up to 80 % of cases. Continued cigarette smoking in patients with established COPD accelerates the deterioration in lung function found in COPD. Quitting smoking can help to curb this deterioration. Of the treatments that have been shown to improve survival in patients with COPD, only tobacco cessation has been found to both (1) prevent the development of COPD in the vast majority of cases, and (2) help to slow or prevent disability and death in patients who have already developed COPD. Responsibility for cessation should not be directed toward individual smokers only, but should be evenly shared throughout layers of society to reflect the many influences on health behavior. Institutionalization of smoking cessation activities in health care settings, workplaces, and government institutions, in addition to policies that increase access to tobacco cessation interventions will help reduce the number of current smokers and perhaps the number of new COPD cases in Illinois.

Occupational COPD

Workplace exposures are a significant contributing factor to the development of COPD in our society. Occupational exposure to dusts, fumes, vapors, and gases have been shown to have smoking adjusted population attributable risks of between 10 and 20% (median 15%) for COPD.^{9,10} According to the American Thoracic Society Statement published in 2003, “occupational exposures account for a substantial proportion (i.e., from 10-20%) of either symptoms or functional impairment consistent with COPD...a value of 15% is a reasonable estimate of the occupational contribution to the population of the burden of COPD,” suggesting that COPD incidence could be reduced by 15% if occupational exposures were controlled. This percentage may be even higher in nonsmoking populations. These data come from industry specific studies, such as those of coal miners, rock miners, welders, as well as community-based studies. In Illinois, nearly one million workers are employed in mining, construction, and manufacturing industries and are at risk of exposures linked to the development of COPD.¹¹

Environmental Exacerbations of COPD

Certain environmental exposures can be risk factors for development of COPD and for exacerbations among those living with the disease. For example, exposure to outdoor air pollution increases the amount of inhaled particles in the lungs; this exposure over time may increase one's chance of developing COPD, and has been shown to significantly increase the risk of death. Implementing and enforcing air quality standards that reduce the number of air pollutants, while also educating people about environmental hazards and their connection with respiratory illnesses, are necessary to help reduce the burden of COPD in Illinois.

Spirometry Testing

Numerous studies have examined the use of spirometry screening for early detection of COPD.^{12,13} Spirometry can identify patients with previously undiagnosed COPD, early disease, and patients with more rapid declines in lung function. Evidence-based practice guidelines assign a central role to spirometry in the diagnosis and management of patients with respiratory symptoms such as cough, sputum production, or shortness of breath who are at risk for COPD.^{14,15,16,17,18} As most of those patients are detected and treated in primary care, these guidelines are particularly relevant for general practice. There is evidence that application of spirometric testing in general practice may reduce the number of undetected cases and reduce the risk of diagnostic misclassification, which may lead to overall improved respiratory health.^{19,20} There is no strong evidence to recommend screening asymptomatic at risk populations at this time.¹⁵ More research in this area is needed.

Surveillance and Data

Ongoing surveillance and improvements in data collection methods and targets are necessary to detect trends in COPD-related morbidity and mortality throughout Illinois, while also demonstrating the need for effective, tailored interventions. Surveillance over time will help evaluate the impact of these interventions, and assess our progress in yielding better health outcomes and in minimizing known health disparities. Current data sources on the statewide burden of COPD are limited. Examples of available data include hospital discharge data, Medicare and Medicaid diagnosis data, and state mortality data.

Strategies

1. **Increase awareness among the public, with particular focus on women, minorities, and younger individuals, of respiratory hazards as well as methods available to prevent and detect COPD**
 - a. Launch a public education campaign with the following messages:
 - i. Limit exposure to respiratory hazards, including smoking, environmental tobacco smoke, occupational exposure to vapors, gases, dusts, and fumes, and environmental air pollutants.
 - ii. Symptoms of COPD include cough, sputum production, shortness of breath, wheezing, and chest tightness.
 - iii. Smoking is a dangerous and expensive habit.
 - iv. Smoking cessation resources and interventions exist.
 - v. Poor workplace and environmental air quality can put people at risk.
 - vi. Certain occupations and industries put people at risk.
 - vii. People exposed to respiratory hazards and experiencing respiratory symptoms should talk to their health care providers and get their lungs tested using spirometry.

Rationale: A campaign focusing on respiratory hazards and effective interventions will help increase general awareness of COPD risk and encourage people to be more proactive in their health and health-seeking behavior. Given that patients are often the first to request health services, it is necessary to improve their ability to recognize their own risk. Finally, there are existing materials, such as those associated with NHLBI's *COPD Learn More Breathe Better Campaign*, which can be used to spread these messages throughout Illinois.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, ALA, health departments, health care institutions, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- Campaign launched by December 2008 in three counties.
- Campaign extended to three additional counties by May 2009.

2. **Increase access to state-of-the-art tobacco cessation interventions and to state of the art spirometry testing of populations at risk for COPD who have symptoms of cough, sputum production, or shortness of breath to make an accurate diagnosis and guide therapy.**
 - a. Recommend that health care providers and hospitals perform spirometry among patients with respiratory symptoms and risk factors for COPD as well as those with exacerbations.
 - b. Promote smoking cessation programs that meet minimum standards including behavior change counseling and information about smoking cessation medications.
 - c. Encourage providers to offer referrals to community-based smoking cessation resources (see *Appendix A* for a sample of tobacco control programs in Illinois).
 - d. Increase reimbursement rates for diagnosis of COPD and provision of smoking cessation intervention.
 - e. Reduce out-of-pocket costs for smoking cessation medications.
 - f. Establish a state-funded local smoking cessation counselor certification process.
 - g. Incorporate smoking cessation programs into spirometry screening programs and vice versa.

Rationale: Access is a significant barrier to health service utilization. Increasing the capacity of providers to perform recommended health services (through increased reimbursement rates or reliance on practice extenders) will increase the likelihood that these services will be offered to their clients. Similarly, reducing financial and other constraints for patients can also increase access.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, ALA, hospital associations, CMS, private insurers, pharmaceutical companies, YHP

Measures:

- Increased reimbursement for smoking cessation and spirometry testing through private or public insurance programs.
- Using administrative databases or surveys, assessment of delivery and utilization of various smoking cessation interventions.
- Baseline percentages of COPD patients that are still smokers and are making quit attempts or are interested in quitting (available through YHP for Medicaid population).
- Increased participation rates for community-based cessation programs.
- Establishment of a smoking cessation counselor certification process in Illinois.

3. **Promote smoking cessation and appropriate use of spirometry by community-based organizations and existing health care programs, particularly those serving minority and vulnerable populations.**
 - a. Target state-sponsored programs such as IDPH Faith-Based Initiative, Center for Minority Health, Healthy Homes, and substance abuse programs.
 - b. Target programs sponsored by advocacy organizations such as AARP, alpha-1 advocacy groups, COPD advocacy groups, AHA, ACS.

- c. Target Organized Labor including steelworkers, sheets metal workers, united mine workers and agricultural workers.
- d. Target health fairs, vaccination campaigns, and workplace-based screening programs to ensure that spirometry testing for people with respiratory symptoms and COPD risk factors is offered along with other free screenings or services (e.g., alpha-1 antitrypsin deficiency, blood pressure, flu shots).
- e. Target faith-based organizations.
- f. Target pharmaceutical and spirometry equipment manufacturers.
- g. Target VA population.
- h. Target individuals living in nursing homes.
- i. Create a toolkit that enables health departments and other organizations to deliver smoking cessation and guideline-driven spirometry testing to underserved populations using non-traditional models (e.g. mobile units).

Rationale: Widening the scope of existing programs and community-based or grassroots organizations to include emphasis on COPD preventive and diagnostic activities will increase the availability of smoking cessation intervention and spirometry testing in Illinois, and has the potential to reach large populations of people who would not normally request these services or access the health care system in a formal manner.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, ALA, AARC, ISRC, Better Breathers Clubs, academic medical centers, YHP, and the groups and organizations listed above

Measures:

- Number of programs newly offering smoking cessation.
- Number of programs newly offering spirometry testing for the population of people exposed to respiratory hazards who have significant respiratory symptoms.
- Number of workplace-based smoking cessation programs throughout Illinois.
- Number of workplace-based spirometry events throughout Illinois.
- Toolkit developed.

4. **Expand pool of certified or recommended providers for smoking cessation and spirometry testing in community-based and primary care settings**

- a. Expand pool of providers for community-based programs.
 - i. Provide spirometry equipment, materials, technicians, interpretation, referral information, and record keeping.
 - ii. Provide educational and smoking cessation materials.
- b. Expand pool of providers for office/clinic-based spirometry screening and smoking cessation intervention.
 - i. Create an educational intervention for health care providers regarding the appropriate use and interpretation of spirometry targeting internal medicine, family practice, obstetrics/gynecology, and cardiology through presentations at meetings and CME courses.
 - ii. Develop easy to use materials to help providers incorporate spirometry into their practice.
 - iii. Develop easy to use materials to help providers incorporate smoking cessation intervention into their practice and to institutionalize this work through:
 1. Vital sign stamps.
 2. Provider prompts.
 3. Guidelines for delegating smoking cessation intervention to other clinical staff (e.g., intake nurses, medical assistants).

- iv. Train providers in best practices for cessation (see *Appendix B* for summary of best practices for cessation).
- v. Include education on environmental and occupational hazards for COPD.
- vi. Supply education regarding appropriate post diagnosis testing for alpha-1 antitrypsin deficiency.

Rationale: Efforts to increase the number of providers who are able to offer smoking cessation intervention and to perform spirometry testing can increase the availability and reach of these particular health services. Ensuring that Illinois health care providers understand for which patients spirometry is indicated and how to interpret the test will assist in diagnosing COPD in a timely manner.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, COPD Foundation, ALA, ISRC, NHLBI-funded providers, Pulmonary Fellowship Program Directors, ACCP, CTS, private wellness screening companies, IAFP, AAFP, ACP, ACC, public health clinics, state and local medical societies, academic medical centers, ACOG, AANP, AAPA, YHP

Measures:

- Development of a resource list of trained spirometry technicians and community-based spirometry providers.
- Increased number of community-based spirometry providers receiving training in smoking cessation practices.
- By June 2009, established spirometry curriculum that is distributed among members of Illinois professional societies, followed up six months later with a spirometry “quiz” to Illinois health care providers.
- By June 2009, implementation of a screening questionnaire for “Who Should Have Spirometry?” to be used in a variety of health care settings.
- Number of presentations on spirometry testing and/or best practices for cessation administered within health care settings throughout Illinois.
- Development of “how to” materials for spirometry and smoking cessation intervention and distribution of these materials through primary care professional societies.
- Using administrative databases, assessment of utilization of spirometry and adherence to established guidelines in health care settings, as well as delivery of smoking cessation intervention.

5. **Provide guidelines for and assistance with equipment, training, and interpretation of spirometry to ensure high quality testing for COPD.**
 - a. Define standards for community and primary care providers using 2005 ATS/ERS standards.
 - b. Provide assistance in interpretations.
 - i. Develop a pool of spirometry expert physicians as a resource to community and primary care testing programs.
 - ii. Develop system of e-spirometry to allow for electronic transmission and interpretation of studies.
 - iii. Search for funding sources to pay for expert assistance in interpretations.
 - c. Establish website to serve as central resource for spirometry programs for health professionals.
 - i. Register all programs with the State.
 - ii. Register all trained spirometry technicians.
 - iii. Provide information on high quality equipment and training resources.
 - iv. Link to NIOSH spirometry courses in Illinois.
 - v. Link to NIOSH website and training materials.

- vi. Provide info on smoking cessation programs.
- vii. Provide referrals to industrial hygiene experts.
- d. Promote NIOSH spirometry training as a minimum model for technician training for screening purposes.
 - i. Encourage faculty to become NIOSH course providers.
- e. Develop partnerships to improve spirometry testing.

Rationale: Spirometry plays an important role in diagnosing COPD and in guiding therapy, but its usefulness is limited in the absence of reliable results. Both community-based and primary care providers that offer spirometry should be furnished with high quality equipment and adequate training to establish technical understanding and a minimum level of competence in performing this test.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, NIOSH, University of Illinois, CTS, ATS, ACCP, AARC/ISRC, Pulmonary Fellowship Program Directors, ACCP, spirometer manufacturers

Measures:

- Annual scan of spirometry reports generated by community-based programs and within primary care settings to ensure that standards for performance and interpretation are being met.
- Website for spirometry testing programs developed by January 2009.
- E-spirometry transmission and interpretation system added to website by May 2009.
- Number of physicians signed on as spirometry interpretation providers.
- Number of faculty members signing on as NIOSH course providers.

6. Engage employers and workers in high risk industries to promote clean air programs.

- a. Develop educational materials describing the burden of occupational COPD for use by industry and occupational groups.
- b. Train unions, OSHA, etc. in air quality and presence of vapors, gas, dust, and fumes.
- c. Promote partnerships between workplace health and safety representatives and industrial hygienists to improve air quality.

Rationale: Increasing knowledge among industrial populations about their respiratory risk may empower them to advocate for improved air quality. These advocacy efforts are more likely to be successful with the support of people who are directly affected. In addition, while many of the health risks imposed by certain occupational exposures are well-known among industry workers, less attention has been devoted to the link between these exposures and COPD. Finally, industrial hygienists, who are trained to monitor the workplace environment, to measure the extent of dangerous exposure, and to implement or recommend practices that minimize or control these exposures, can be linked with workplace health and safety representatives in Illinois to conduct regular workplace evaluations and ongoing measurement of workplace hazards, including poor air quality. Based on these analyses, industrial hygienists can make recommendations for improving workplace conditions.

Potential Partners: Illinois COPD Coalition, National Mining Association and other industry groups, Organized Labor, OSHA, MSHA, NIOSH, EPA, RHAMC, ALA, American Industrial Hygiene Association, University of Illinois School of Public Health, agricultural groups

Measures:

- Educational materials developed by summer 2009.
- Number of union trainings.
- Number of OSHA trainings.

- Survey of union and OSHA representatives to evaluate the effectiveness of educational materials and trainings, and to determine understanding of occupational risk for COPD.
- Number of partnerships formed between workplace health and safety representatives and industrial hygienists.

Surveillance and Data

7. **Improve and expand tobacco and COPD surveillance in Illinois to characterize disease burden, financial impact, and outcomes of preventive interventions.**
 - a. Develop annual comprehensive COPD surveillance report using government and corporate data sources.
 - b. Using state-added questions to the Illinois BRFSS, obtain measurements of COPD prevalence to assess current and future burden.
 - c. Improve acquisition of data related to disability and cost of COPD.
 - i. Use Illinois BRFSS to gather information on quality of life, activity limitation, and health care utilization.
 - ii. Ensure that IPLAN addresses COPD.
 - d. Develop and promote quality measures for processes of care related to COPD, including use of smoking cessation and spirometry in patients with COPD as well as testing for alpha-1 antitrypsin deficiency. Consider incentives, such as pay-for-reporting, to increase data available for surveillance.
 - e. Develop and maintain a COPD patient registry that can be used to send patients new health information.
 - f. Launch COPD research database in conjunction with patient registry that a) provides researchers a list of patients who may be interested in joining research studies; and b) provides data to track health care and outcomes of COPD in Illinois.
 - g. Determine number of referrals made to pulmonary rehabilitation programs statewide.

Rationale: Improved COPD surveillance is necessary to illustrate current COPD trends in Illinois, to fill gaps in existing data, to assess the effectiveness of preventive and treatment activities, and to identify high-risk populations for targeted intervention.

Potential Partners: Illinois COPD Coalition, IDPH, local health departments, RHAMC, UIC School of Public Health, academic medical centers, health plans, AACVPR, Illinois Public Health Institute, YHP, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- IPLAN includes COPD as health indicator by 2010.
- COPD module added to Illinois BRFSS by 2010.
- COPD quality measures developed.

Treatment and Management

Goal

Ensure that patients in Illinois have access to and receive state of the art care of COPD.

Objectives

1. Increase awareness among health care providers of appropriate treatments for COPD, including secondary testing for alpha-1 antitrypsin deficiency and its implications for inherited transmission of risk.
2. Increase patient knowledge regarding COPD, its causes, treatments, prognosis, co-morbidities, and strategies to live with the disease.
3. Increase awareness of non-pharmacologic COPD therapies among patients and health care providers and ensure access to pulmonary rehabilitation programs.
4. Ensure that patients receive all necessary oxygen and home medical equipment in the most efficacious and convenient manner available.
5. Ensure that patients receive state-of-the-art tobacco cessation treatment.

Rationale

COPD is the 4th leading cause of death in Illinois and it poses a major economic burden while also adversely affecting the quality of life of individual patients. Emerging data reinforce that COPD is a treatable disease. Existing COPD therapies improve quality of life for patients, reduce COPD exacerbations and hospitalizations, and, in the case of oxygen, improve COPD mortality. Alpha-1 antitrypsin replacement therapy for those with deficiency may slow the loss of lung function and improve survival while providing the opportunity to counsel families to prevent further morbidity. Ensuring that patients have the best available COPD care will lessen the burden this disease places on the health care system in Illinois and will improve the lives of individual patients who have COPD.

Strategies

1. **Increase awareness among health care providers of appropriate treatments for COPD, including secondary testing for alpha-1 antitrypsin deficiency and its implications for inherited transmission of risk.**
 - a. Formulate a “Standard COPD Curriculum” for medical students and medical residents in Illinois as well as nursing students and physician’s assistant students.
 - b. Curriculum, at a minimum, should include information on smoking cessation, annual influenza vaccinations, pharmacologic therapies, non-pharmacologic therapies (pulmonary rehabilitation and oxygen therapy), surgical intervention, as well as co-morbidities associated with COPD including but not limited to anxiety, depression, heart disease, and peripheral muscle weakness.
 - c. Promote The Joint Commission’s Certificate of Quality Distinction for COPD.

Rationale: Despite being the 4th leading cause of death in the United States, COPD has not been a major focus in medical education. The first step in expanding the knowledge and awareness of Illinois health care providers regarding COPD therapy is to enhance their knowledge and provide emphasis in the earliest phases of training.

Potential partners: Illinois COPD Coalition, Illinois medical schools, Illinois nursing schools, Illinois academic medical centers, American Hospital Association, AAHE, YHP, alpha-1 advocacy groups, COPD advocacy groups, The Joint Commission

Measures:

- By June 2009, formulate a current ready to use Standard Training Curriculum for medical professionals.
- Follow distribution of the COPD curriculum with periodic surveys to medical trainees assessing their knowledge regarding COPD, and its manifestations and treatments.
- Commitments from leadership of medical training programs to implement a COPD curriculum and enhance training regarding this disease.

- d. Develop a grassroots campaign to create a “COPD Disease Expert Network” of health care providers who can provide local expertise and educational seminars to their individual communities.

Rationale: Developing a network of health professionals who are aware of and up-to-date on COPD, its manifestations, and current approaches to treatment is key to improving and sustaining quality care for COPD. CME and related certification programs will serve as an incentive for medical professionals to receive the training.

Potential partners: AMA, Illinois State Medical Society, Illinois medical schools, schools of nursing, American Hospital Association, AAHE, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- By June 2009, establish a statewide network of 100 health care providers who have undergone enhanced training in the treatment and management of COPD, and who are equipped to provide educational programs to their local health care communities.
- Commitments from hospitals, community practices, and other health care providers to annually host a COPD Disease Expert who will conduct an educational update on the care of COPD.

- e. Create a bi-annual “COPD Update for Health Care Providers” newsletter.

Rationale: A newsletter can be used to keep providers updated on issues relating to COPD diagnosis, treatment, training, and legislation, and can help facilitate communication among providers, and between providers and their patients.

Potential partners: Illinois COPD Coalition, AMA, medical schools, schools of nursing, hospitals, private practices, health centers, American Hospital Association, CTS, ATS, ACCP, AAHE, patients and caregivers, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- Number of newsletters and number of articles covering each topic area.
- Number of initial subscriptions and increased distribution of the newsletter over time.

- d. Develop a mechanism to assess the quality of COPD care delivered by health care providers in Illinois by partnering with hospitals and physician groups.
- i. Develop a “COPD Scorecard” that encompasses guideline adherence, patient satisfaction, and disease control.

Rationale: The “COPD Scorecard” can be used to gauge current care practices and to improve the overall quality of care delivered to people with COPD.

Potential partners: Hospitals, private practices, health centers, home care associations, hospice and other long term home care facilities, American Hospital Association, AAHE

Measures:

- Increased number of hospitals and physician groups using “COPD Scorecard” to assess the quality of COPD care delivery.
- Improved patient satisfaction and disease control by certain percentage each year.

2. **Increase patient knowledge regarding COPD, its cause, treatments, prognosis, co-morbidities, and strategies to live with the disease.**

- a. Conduct local COPD outreach programs/education days for patients with COPD in Illinois communities.
 - i. Develop a curriculum for programs to be given by multidisciplinary panels of disease experts.

Rationale: COPD outreach programs will increase public awareness and understanding about COPD, including its symptoms, diagnosis, treatment, and management, and potentially decrease the societal burden of this disease.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA, health care providers, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- Within one year, survey individuals with COPD to determine perceived educational needs.
- In a one year period, sponsor a minimum of twelve outreach programs across the state to increase patient knowledge regarding COPD.
- Survey COPD program participants to evaluate knowledge attainment following education and the impact of the educational programs on their physiological, social, and psychological well-being.

- b. Expand dissemination of patient materials that discuss COPD treatment and management issues, such as RHAMC's *Inspiration* newsletter, for people with COPD throughout Illinois.

Rationale: Health education is essential throughout the course of COPD and plays an important role in enhancing self-care strategies, ability to cope with the illness, and health status.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA, health care systems, health care professionals, pulmonary rehabilitation groups

Measures:

- Within one year, a "COPD Update for Patients" newsletter will be created and disseminated across the state.
 - Survey persons with COPD within one year to evaluate the effectiveness of the newsletter, and to determine their understanding of advances in COPD, as well as self-care management strategies.
- c. Distribute, via health care providers and directly, patient information materials about COPD, such as NHLBI's *Breathing Better with a COPD Diagnosis* and ACCP's *Living Well with COPD: Chronic Bronchitis and Emphysema*.

Rationale: Increased awareness of COPD among health professionals and the general public will improve the prevention and management of COPD.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA, health care professionals, pulmonary rehabilitation groups

Measures:

- Within one year, COPD informational brochures will be in circulation across the state.
 - Survey health care providers to determine the number of brochures distributed.
 - Distribute a COPD knowledge questionnaire to persons with COPD to evaluate the effectiveness of the informational brochure.
- d. Create and distribute “inhaler-teaching toolkits” to health care providers to ensure proper use of medication by their patients.
- i. Include inhaler education, outlining the correct steps in administering medication with an MDI, information on how to clean the MDI and how to assess the amount of medication remaining in the MDI, and the rationale for when to use the various MDI medications.

Rationale: Inhaler medications are central in the management of COPD; therefore, facilitating and reinforcing inhaler education is important to improve the quality of life of persons with COPD.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA, health care systems, health care professionals, pharmaceutical companies

Measures:

- By June 2009, toolkits will be developed and disseminated across the state.
- Health care providers will incorporate the distribution of “inhaler-teaching toolkits” into each patient’s plan of care, as appropriate.
- By June 2010, health care providers will be surveyed to assess the number of toolkits distributed.
- By June 2010, individuals with COPD will be surveyed to identify the impact of the “inhaler-teaching toolkits.”

3. **Ensure access to non-pharmacologic COPD therapy in Illinois.**

- a. Recognizing that pulmonary rehabilitation is not accessible to all patients with COPD, create a set of home videos that include a curriculum similar to the educational components in a traditional pulmonary rehabilitation program.
- b. Recognizing that pulmonary rehabilitation is not accessible to all patients with COPD, partner with park districts and other community centers to create “COPD Fitness Programs” so patients can achieve the exercise goals of pulmonary rehabilitation programs.

Rationale: Education, cardiovascular fitness training, and muscle strengthening are key elements of a pulmonary rehabilitation program. Patients with chronic illnesses become unfit as their level of activity declines. Deconditioning results in a feeling of malaise that may be mistakenly attributed to the primary illness. Deconditioning is associated with a shorter lifespan and an increased incidence of illnesses such as heart disease and cancer. Muscle strengthening is important to help the COPD patient carry on his or her activities of daily living.

Potential Partners: Illinois COPD Coalition, academic medical centers, Illinois pulmonary rehabilitation programs, AACP, AACVPR

Measures:

- By June 2009, establish a core committee to develop both educational and fitness programs.
- Establish a network of professionals to teach appropriate fitness tools to leaders at local park districts and community centers so they can be conveyed to COPD patients.

- Survey participants who have participated in these educational programs to determine their perceived benefit as well as objective measures of quality of life, breathlessness, and general health status.

4. **Ensure that patients receive all necessary oxygen and home medical equipment in the most efficacious and convenient manner available.**

- a. Establish a standardized menu of home oxygen equipment options from which patients and their providers can select the most appropriate mode of delivery.

Rationale: While oxygen is frequently prescribed to patients with COPD, the multitude of forms of delivery mechanisms and their advantages and disadvantages are unknown to many patients and health care providers.

Potential Partners: IAMES, ISRC, RHAMC, ALA, health care providers, accreditation agencies, HE Providers

Measures:

- By June 2009, develop a booklet that reviews all available oxygen products and describes, in general terms, which patients are appropriate for each mode of oxygen delivery.
- Create a mechanism whereby this booklet is updated and distributed to Illinois health care providers on an annual basis.

5. **Ensure that patients receive state of the art tobacco cessation treatment.** [Refer to Objectives 2, 3 and 4 under Prevention, Early Detection, Surveillance and Data.]

Public Awareness, Patient Education and Resources

Goal

Increase awareness of COPD, its signs and symptoms, and COPD diagnosis and treatment among people with COPD and the general public.

Objectives

1. Educate the general public, people living with COPD, and providers on COPD using NHLBI's *COPD Learn More Breathe Better Campaign* materials.
2. Identify existing health care providers and resources that offer COPD support, and increase awareness of these resources among providers and people with COPD.
3. Generate media interest in and coverage of COPD to improve understanding among the general public.
4. Increase awareness of the potential genetic component of COPD, the availability of testing for alpha-1 antitrypsin deficiency testing, and implications for therapy and genetic counseling.
5. Encourage communication, advocacy, and self-management among people with COPD.

Rationale

Expanding and enhancing activities focused on raising COPD awareness will help to improve the ability of the general public to engage in preventive measures and to recognize symptoms of COPD.

Consequently, greater numbers of people may seek diagnostic testing and appropriate health care intervention at an earlier stage, improving overall disease prognosis. Promoting existing awareness and educational materials, such as the NHLBI's *COPD Learn More Breathe Better Campaign* materials, can

also be helpful in assisting people who are living with COPD to become effective consumers of health care, as well as effective disease self-managers. As COPD awareness increases, and people develop a greater understanding of the treatment and educational outlets available throughout Illinois, an ongoing, interconnected, interactive network of providers, patients, and COPD-related resources may be possible.

Strategies

1. **Educate the general public, people living with COPD, and providers on COPD.**
 - a. In partnership with NHLBI, launch a public awareness campaign using *COPD Learn More Breathe Better Campaign* materials among hospitals and health care providers and encourage display of materials in central locations.
 - i. Encourage hospital and health care groups to host links to campaign materials on their websites.
 - ii. Collaborate with marketing experts.

Rationale: A campaign using existing NHLBI materials within health care settings can help to increase awareness among patients, providers, and visitors on COPD.

Potential Partners: Illinois COPD Coalition, RHAMC, NHLBI, ALA, Illinois hospital associations, ACCP

Measures:

- Campaign launched by October 2008.
 - Number of hospitals/health care groups targeted by campaign initially.
 - 25% increase in number of hospitals/health care groups targeted by campaign by July 2009.
 - Number of hospitals/health care groups linking campaign materials through website.
 - Number of NHLBI campaign materials distributed.
- b. Target diverse populations and high-risk groups by distributing or displaying materials in senior centers, outpatient physical therapy locations, community organizations, primary care centers, OB/GYN offices, nail salons, churches, barber shops, and nursing homes.
 - c. Develop new partnerships with organizations that serve underrepresented populations to increase COPD awareness, such as the AIDS Foundation.

Rationale: High-risk groups often remain underserved and may be unaware of their risk for COPD. Targeting settings frequented by these groups is a viable option for outreach and for increasing understanding.

Potential Partners: Illinois COPD Coalition, RHAMC, minority health coalitions, physical therapy groups, primary care societies, community-based organizations, faith-based organizations, health clubs, nail salons, barber shops

Measures:

- Number of NHLBI materials distributed to identified outlets by October 2008.
- Number of outlets displaying NHLBI materials by December 2008.
- 25% increase in number of outlets displaying NHLBI materials by May 2009.

- d. As necessary, develop and distribute additional messages around smoking cessation, pulmonary rehabilitation, and COPD as a women's issue.
 - i. Create a series of pamphlets or one-pagers for the general public that discuss smoking cessation and COPD, pulmonary rehabilitation, and COPD and women; release these materials simultaneous with campaign.

Rationale: Even among the portion of the general public that knows about COPD, less may be understood about the link between COPD and smoking cessation, the use and availability of pulmonary rehabilitation as therapy for those with COPD, and the increasing prevalence of COPD among women.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA

Measures:

- Materials developed by November 2008.
- Number of materials distributed.

2. **Identify existing health care providers and resources that offer COPD support, and increase awareness of these resources among providers and people with COPD.**

- a. Gather information on resources available in Illinois.
- b. Develop comprehensive resource list of health care professionals, pulmonary rehabilitation groups, support groups, education and advocacy groups and reputable websites/hotlines.
- c. Coordinate with patient advocacy and other groups to distribute resource list to those with vested interest in COPD.

Rationale: Awareness-raising efforts should be geared toward increasing knowledge and understanding about the basics of COPD but should also include information on the resources available throughout Illinois to support people with COPD and their families and caregivers at various disease stages. A first step in building this awareness is to develop a clear understanding of what these resources are, what they provide, and where they are located.

Potential Partners: Illinois COPD Coalition, RHAMC, IDPH, patient advocacy groups, health care professionals, pulmonary rehab centers, YHP

Measures:

- Resource list developed by July 2008.
- Number of entities/organizations/providers/resources featured on list.
- Number of lists distributed.

- d. Create a resource-driven COPD website for patients, providers and other audiences.

Rationale: A COPD website can offer a reliable, affordable option for web savvy individuals to access understandable and updated information on COPD, and the resources available to address COPD (e.g., health care, pulmonary rehabilitation, better breathers clubs) throughout Illinois.

Potential Partners: Illinois COPD Coalition, NHLBI, RHAMC, ALA, patient and caregiver groups, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- Website developed by January 2009.
- Number of website hits.
- Consumer survey on website assessing usefulness and gaps.
- Quarterly updates made to website.

3. **Generate media interest in and coverage of COPD to improve understanding among the general public.**

- a. Increase the number of media stories featuring patients with COPD.
 - i. Using patient databases, outreach to patients to encourage them to tell their stories to local news media outlets.
 - ii. Draft stories and film short video spots on people with COPD for media use, as well as use at wellness events, health fairs, and provider waiting rooms.

Rationale: Media coverage can increase statewide awareness and put a face on the disease. Increased awareness can increase the likelihood that people will seek appropriate care for the diagnosis and management of this complex and progressive disease. Personal stories of success and hope need to be emphasized rather than focusing on COPD as a leading cause of death. Encouraging patients to contribute to media pieces may also instill in them a sense of pride and accomplishment to the extent that use of their voices helps others.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA, local news media outlets, patient groups

Measures:

- Stories and video spots developed.
- Initial survey of statewide media outlets regarding coverage of COPD news items.
- Determine baseline number of media hits on COPD.
- Increased number of media hits on COPD over the next year.
- Assessment of use of video spots at wellness events and health fairs, and within provider waiting rooms.

- b. Increase COPD presence at health fairs, and take advantage of media presence to raise public profile of COPD.

Rationale: Using community-based events, such as health fairs, as venues for COPD education can reach large numbers of people who may not otherwise have access to educational materials or opportunities. Health fairs are often accompanied by significant media coverage, which can be used to encourage attendance or provide information for those who cannot participate. In addition, health fairs that provide free spirometry testing for people who are at risk for COPD and who have significant respiratory symptoms serve as prime diagnostic opportunities for people who do not normally access the health care system for preventive care.

Potential Partners: Illinois COPD Coalition, RHAMC, alpha-1 advocacy organizations, COPD advocacy organizations, pharmaceutical partners

Measures:

- Number of new health fairs statewide discussing lung health and COPD.
- Number of health fair attendees visiting COPD or lung health booths/exhibits.
- Media coverage of health fairs where COPD is featured.

- c. Launch radio and print public service announcements using NHLBI campaign materials.

Rationale: NHLBI has developed radio and print PSAs through its *COPD Learn More Breathe Better Campaign* that are available for use by any state COPD program throughout the US. These can be distributed to and aired on local stations, reaching large numbers of viewers and listeners.

Potential Partners: Illinois COPD Coalition, NHLBI, RHAMC, media outlets – including Latino channels

Measures:

- Radio spots secured by June 2008.
- At least one PSA prepared by June 2008.
- PSA posted on website when launched in January 2009.
- Number of NHLBI PSA airings on local stations throughout Illinois.
- Increase in calls to RHAMC for more information on COPD.

4. **Increase awareness of the potential genetic component of COPD, the availability of testing for alpha-1 antitrypsin deficiency testing, and implications for therapy and genetic counseling.**

- a. Disseminate fact sheets on alpha-1 antitrypsin deficiency for patients and family members.
- b. Include information on COPD website about alpha-1 antitrypsin deficiency.
- c. Incorporate information on alpha-1 antitrypsin deficiency in patient educational events and opportunities, such as Respiratory Rally.

Rationale: Alpha-1 antitrypsin replacement therapy may be appropriate for those who have this deficiency to slow the loss of lung function and improve survival. In addition, testing can inform family members of the potential genetic contribution to COPD and enable them to seek counseling as appropriate.

Potential Partners: alpha-1 advocacy groups, pharmaceutical companies, Illinois COPD Coalition

Measures:

- Alpha-1 antitrypsin information posted on website.
- Information included in Respiratory Rally.

5. **Encourage communication, advocacy, and self-management among people with COPD.**

- a. Increase funding or support for better breathers clubs in Illinois.

Rationale: Better breathers clubs serve as educational outlets and support groups for those with respiratory problems, including COPD. Through attendance, people with COPD can learn more about managing their disease, share ideas and brainstorm on issues they may be facing, and connect with others who relate to their experiences.

Potential Partners: Illinois COPD Coalition, RHAMC, ALA, pharmaceutical companies, sources of funding support, hospitals, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- Number of new better breathers clubs established by June 2009.

- Number of better breathers club participants.
 - Continued funding for better breathers clubs.
- b. Continue to provide educational programs such as Respiratory Rallies and expand opportunities for patients to learn and collaborate with health care providers.

Rationale: It is important for people with COPD to become effective self-managers, and to receive education on disease management, treatment, and the role of physical activity and nutrition in optimal health. Respiratory Rallies can be a source of this education and offer opportunities for social interaction. RHAMC-hosted Respiratory Rallies have been well-attended and met with much success. Future events should be held throughout Illinois to maximize reach and allow for those with limited mobility to participate.

Potential Partners: Illinois COPD Coalition, RHAMC, patient groups, physical therapists, respiratory therapists, pulmonary rehabilitation groups, sources of funding support

Measures:

- Two Respiratory Rallies held annually beginning November 2008 (COPD Awareness month).
- Attendance at Respiratory Rallies.
- Increased sponsorship of Respiratory Rallies.

Policy and Advocacy

Goal

To increase COPD advocacy by government, community leaders, patients and others affected by COPD in order to increase COPD-directed resources and to improve medical outcomes.

Objectives

1. Remove barriers to access for diagnostic and care opportunities regarding COPD.
2. Increase programming related to education about COPD and the diagnosis and treatment of COPD.
3. Raise awareness among legislators about COPD as a major health issue.
4. Increase COPD advocacy among patients and others through education and empowerment.
5. Target high-risk groups to encourage involvement in COPD-related policy and advocacy efforts.
6. Make increased surveillance data for COPD a permanently funded measurement.

Rationale

Policy level activities are necessary to fully address a public health problem such as COPD, to the extent that they target the external determinants (e.g., social environment, public policy) that influence an individual's health and health behavior. For example, advocacy for policy development or change can support prevention of COPD by increasing health care coverage of smoking cessation intervention. Similarly, advocacy for policy development or change can help to ensure availability of and access to the best possible treatment for those already diagnosed. To alleviate the health and financial burden of COPD in Illinois, it is imperative that multiple interested parties – professional groups, patient advocacy groups, and public policy leaders – collaborate to influence policy, to educate and to empower the public, and to reach others who are at risk for COPD.

Strategies

1. **Remove barriers to access for diagnostic and care opportunities regarding COPD.**
 - a. Maintain and improve access to smoking cessation medications through Medicaid.
 - b. Determine what is covered by private insurers in terms of office diagnostic spirometry, smoking cessation, etc.
 - c. Encourage CMS and other insurers to cover tobacco cessation counseling and pulmonary rehabilitation.
 - d. Encourage insurers to fill gaps in coverage for smoking cessation, and diagnostic and rehabilitation programs for COPD, and then promote their use among patients and their families.
 - e. Work with existing task forces to spread the word on how to expand and maximize coverage and reimbursement for COPD diagnosis and treatment.
 - f. Ensure delivery of appropriate COPD care among provider groups by advocating for reimbursement for smoking cessation, spirometry, and pulmonary rehabilitation.
 - g. Ensure that patients are allowed access to the most appropriate and qualified health care professionals to assist them.

Rationale: Currently many patients and caregivers are prevented from utilizing optimal care due to lack of knowledge about available options or are prevented from accessing them due to inappropriate regulations and barriers that are out of touch with current diagnostic and treatment standards for COPD. Similarly, health care providers may receive inadequate reimbursement for COPD preventive measures, diagnostic testing, and treatment options, and therefore may not offer these services in a regular, institutionalized capacity.

Potential Partners: Illinois COPD Coalition, RHAMC, BCBS, Aetna, Humana, AAFP, ACCP, ATS, Chicago Medical Society, CMS, ACC, AHA, ACS

Measures:

- A clear understanding of what is covered under Medicare, Medicaid, and the largest private insurers.
- Improved spirometry, smoking cessation, and pulmonary rehabilitation coverage under public and private insurers.
- Increased reimbursement for smoking cessation, spirometry, and pulmonary rehabilitation.
- Utilization of smoking cessation interventions, spirometry, and pulmonary rehabilitation among patients.
- Adherence to established COPD care guidelines among providers.

2. **Increase programming related to education about COPD and the diagnosis and treatment of COPD.**
 - a. Increase state funding for COPD programs.
 - b. Encourage IDPH to focus staff resources on COPD.

Rationale: In spite of its prominence as a major cause of morbidity and mortality, COPD has a very low profile as a major public health problem. Allocating IDPH staff to the issue of COPD, for example, would help to increase attention given to COPD statewide, and would also be cost-saving to the department.

Potential Partners: Illinois COPD Coalition, IDPH

Measures:

- Legislation drafted for IDPH staff for COPD.

- Designated IDPH staff for COPD by July 2009.
3. **Raise awareness among legislators about COPD as a major health issue.**
 - a. Plan annual COPD Awareness Days in Springfield. Include visits to legislators and their staff, and emphasize the role of spirometry testing.
 - b. Coordinate district specific COPD patient visits to local legislators statewide when they are not in session.
 - c. Focus on minority and women leaders in the legislature, and legislators that conduct summer health fairs.
 - d. Identify and work with COPD “champions” in the legislature.
 - e. Coordinate a letter-writing campaign by COPD constituents in each district.
 - f. Develop a COPD informational/educational toolkit for legislators and staff; use individual meetings and presentations to distribute.

Rationale: The public profile of COPD needs to be substantially raised to significantly reduce COPD-related morbidity and mortality. Legislators must support funding to make needed resources available.

Potential partners: Illinois COPD Coalition, Black, Hispanic, and Women’s caucuses, legislative champions, patient groups, pulmonary rehabilitation groups

Measures:

- COPD day in Springfield held in November 2008 and on regular intervals thereafter.
- Number of individuals in attendance at COPD day.
- Number of district-specific COPD patient visits to local legislators out of session.
- Number of COPD champions identified.
- Prominence of COPD champions.
- Number of letters sent by COPD constituents.
- Informational/educational toolkit developed by August 2008.
- Number of toolkits distributed.

4. **Increase COPD advocacy among patients and others through education and empowerment.**
 - a. Develop and distribute a patient advocacy toolkit for patients, health care providers, and other health professionals to increase awareness and education about COPD.
 - b. Coordinate statewide advocacy training for patients with COPD to empower them to speak on behalf of their needs.
 - c. Develop web-based training module for those with access to the internet.
 - d. Expand pool of potential participants for lay activities (use pulmonary rehabilitation patient population).
 - e. Increase participation among the COPD patient and caregiver community in RHAMC’s annual State and Federal Advocacy Days.

Rationale: Patient advocacy can be effective in achieving financial and treatment goals, and in mobilizing others to take action on important health care issues, such as COPD. Compared to other disease states, patient advocacy for COPD is somewhat low and needs revitalization.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, pulmonary rehabilitation groups, medical associations, Better Breathers clubs, local public health departments, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- Patient Advocacy Toolkit developed by November 2008.
- First Advocacy 101 training held in November 2008.
- Web-based advocacy training tools developed.
- Number of Advocacy 101 trainings held through Illinois.
- Number of Patient Advocacy Toolkits distributed statewide.
- Number of persons signed on as COPD advocates.
- Number of individuals that attend RHAMC State and Federal Advocacy Days.

5. **Target high-risk groups to encourage involvement in COPD-related policy and advocacy efforts.**

- a. Meet with Chicago and Illinois Department of Aging, AARP, African American Women Evolving, Hispanic Health Coalition, Mujeres en Accion, IPHCA, Minority and Women's Caucuses, local alpha-1 antitrypsin deficiency support groups, VA population, nursing homes and other targeted groups.
- b. Outreach to rural areas to target other high-risk groups (e.g., agricultural workers).

Rationale: Members of these groups are at increased risk for COPD, although they are not sufficiently aware of the epidemiologic realities. Activating them and soliciting their involvement in COPD policy and advocacy efforts can be helpful in reaching underserved populations, and will also increase awareness of their own risk for developing COPD.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, patient advocacy groups, minority health coalitions, city and community colleges

Measures:

- Increased number of contacts.
- Expanded Illinois COPD State Plan Coalition membership to include more high-risk groups.
- Dissemination of educational materials to websites and at meetings/conferences of participating organizations.
- Availability of COPD diagnostic testing and treatment at venues accessed by high-risk groups (e.g., senior centers, local health department clinics).

6. **Make increased surveillance data for COPD a permanently funded measurement.**

- a. Work with IDPH to add COPD-related questions to the BRFSS.
- b. Research other surveillance databases that do or should measure COPD indicators.

Rationale: Increased COPD surveillance is necessary to describe the true burden, both health and financial, of COPD in Illinois.

Potential Partners: Illinois COPD Coalition, IDPH, University of Illinois School of Public Health, regional medical schools

Measures:

- COPD-related questions will be added to BRFSS by 2010.

Research

Goal

Increase understanding of COPD causes, diagnosis, and treatment by accelerating communication on research opportunities and developments.

Objectives

1. Increase collaboration and communication among scientists/researchers statewide in the area of COPD.
2. Promote research opportunities among people with COPD and other Illinois residents.
3. Expand efforts to communicate research developments to the patient community.
4. Commission future research that critically evaluates the cost-effectiveness of the multiple strategies recommended in this Illinois COPD State Plan document.

Rationale

Ongoing and appropriately funded research is needed to advance our understanding of COPD and to contribute to the range of therapies used to treat this chronic disease. Clinical trials, in particular, can help us learn more about COPD and are dependent upon continued patient participation. In order to stimulate COPD research in Illinois, we need to consider activities that are not only focused on expanding the knowledge base, but are also intended to increase collaboration among those in the field, and to facilitate linkages between people with COPD and appropriate clinical research opportunities. Although it is outside the scope of this Illinois COPD State Plan document to recommend major research projects, there is a benefit to ensuring that new data are made available, with appropriate confidentiality and protection, to investigators and policymakers.

Strategies

1. **Increase communication among scientists/researchers statewide in the area of COPD.**
 - a. By July 2009, organize the first annual Illinois COPD Data and Research Conference – a gathering of Illinois scientists, researchers, and providers – to encourage professional networking, and to share updates on national and state activities related to emerging research areas, research findings, data collection, data needs, and potential collaborations.

Rationale: An annual conference will provide a forum for discussion of all types of COPD research (e.g., data, health services, clinical, translational) and can help to form the cornerstone of a sustainable COPD research collaborative across the state, to include researchers, providers, community-based organizations, policymakers, and funding sources.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, academic medical centers, ACCP, ATS, alpha-1 advocacy groups, COPD advocacy groups

Measures:

- First conference held by July 2009.
2. **Promote research opportunities among people with COPD and other Illinois residents.**

- a. By January 2009, develop website to serve as centralized resource of research opportunities that will be accessible by patients, providers, and researchers looking for study participants.
- b. Develop messages that promote public understanding of clinical trials and the potential benefits of participation in clinical trials.
- c. Encourage physicians and other providers to advise their patients on participation in clinical trials.

Rationale: All patients should have access to information about their potential involvement in research, and should be able to consult with their physicians on the benefits and risks of their own participation as a means of strengthening the patient-physician relationship. Additionally, for many patients, clinical trials serve as effective and appropriate treatment options.

Potential Partners: Illinois COPD Coalition, IDPH, RHAMC, patient advocacy groups, health care providers, research institutions

Measures:

- Website developed by January 2009.

3. **Improve communication on research developments to the patient community.**

- a. Beginning January 2009, expand patient education materials, such as RHAMC's *Inspiration* newsletter, to disseminate research findings in the area of COPD.
- b. Recommend that physicians and pulmonary rehabilitation centers distribute patient education materials that discuss research findings.

Rationale: Advancements in COPD understanding made possible by research should be communicated to patients and the general public to expand consumer knowledge relating to prevention and treatment.

Potential Partners: IDPH, RHAMC, patient advocacy groups, pulmonary rehab centers, health care providers

Measures:

- Newsletter developed or expanded beginning in January of 2009.

4. **Commission future research that critically evaluates the cost-effectiveness of the multiple strategies recommended in this state plan document.**

Rationale: A thorough cost-effective analysis can identify which strategies have the biggest impact; enabling members of the Illinois COPD Coalition to prioritize implementation steps based on available funding at a given time.

Potential Partners: IDPH, universities, research community

Measures:

- Develop committee and partnerships to plan for the analysis.

Illinois COPD State Plan Outcomes and Evaluation

Outcomes that measure the impact of the goals, objectives, and strategies identified as key to reducing the burden of COPD in Illinois:

1. Decreased COPD-related mortality over time, as measured by Illinois state mortality data.
2. Legislation that promotes access to preventive programs and state of the art treatments.
3. Increased prevalence data on COPD, through the addition of COPD-related questions to BRFSS.
4. Increased visibility of COPD as measured by number of placements for radio and print PSAs utilizing NHLBI's *Learn More Breathe Better Campaign*.
5. An ultimate decrease in the number of hospitalizations due to COPD, as measured by Illinois hospitalization data, although due to increased awareness and diagnosis, we may see a short surge initially.
6. Increased number of people with COPD participating in smoking cessation programs.

Outcomes that reflect the effectiveness and the sustainability of the Illinois COPD Coalition:

1. Beginning in fall 2008, funding will be made available for implementation of portions of the State Plan.
2. Beginning in summer 2008, Illinois COPD Coalition updates will be distributed twice annually to membership base and other relevant partners.
3. Over the next four years, the Illinois COPD Coalition will meet annually to discuss progress in implementation of the State Plan, areas where improvements are needed, and additional issues to consider in reducing the burden of COPD in Illinois.
4. Attendance rates at annual meeting will represent at least 70% of coalition membership.
5. Each year between 2008 and 2011, coalition membership will increase by 5%.
6. Each year, at least one collaboration will be developed for the implementation of one or more of the strategies of the plan.
7. An annual Coalition survey will be implemented to assess: use of member time and abilities, COPD State Plan development process (one-time measure only), personal commitment to coalition, interest in implementing one or more of the strategies, confidence that coalition will make strides in reducing burden of COPD, expectations that recommended activities will be implemented, satisfaction with operations and accomplishments, and benefits of participation.

Contributors

Illinois COPD State Plan Chair

Jeffrey Glassroth, MD
Vice Dean & Chief Academic Officer
Feinberg School of Medicine
Northwestern University

Working Group Chairs

Robert Cohen, MD, FCCP
Associate Chair
Division of Pulmonary Medicine/Critical Care
John Stroger Hospital of Cook County
Chair, *Prevention, Early Detection, Surveillance and Data*

Donna Frownfelter, DPT, MA, CCS, RRT, FCCP
Rosalind Franklin Medical School
Illinois Physical Therapy Association
Chair, *Public Awareness, Patient Education and Resources*

Nick Gross, MD, PhD
Loyola University
Hines VA Hospital
Chair, *COPD State Plan Outcomes and Evaluation*

Ravi Kalhan, MD, MS
Assistant Professor of Medicine
Director, COPD Program
Division of Pulmonary and Critical Care
Feinberg School of Medicine
Northwestern University
Chair, *Treatment and Management*

James Webster, MD, MACP
Professor of Medicine
Feinberg School of Medicine
Northwestern University
Associate Executive Director
Institute of Medicine of Chicago
Chair, *Policy and Advocacy*

Working Group Members

Prevention, Early Detection, Surveillance and Data

Joyce Bruno
American College of Chest Physicians

David Goldberg, MD
Director
Section of Preventive Medicine
Division of General Medicine
John Stroger Hospital of Cook County

Audrea Hardwicks-Williams, CRT, RCP
Public Relations Coordinator
Illinois Society for Respiratory Care

Joseph Harrington
Assistant Commissioner
Chicago Department of Public Health

Frank Hass
Technical Director, Pulmonary Function Lab
Jesse Brown VA Medical Center

Joann Hurd, RRT, CPFT, AE-C
Respiratory Therapist
Caregiver
Red Oak Medical

H. Ari Jaffe, MD
Chief, Pulmonary, Critical Care and Sleep
Medicine
Jesse Brown VA Medical Center

Marty Kohr
Senior Vice President
Group Business Director
DDB Chicago

Jerry Krishnan, MD, PhD
Associate Professor of Medicine and Health
Studies
Director, Asthma and COPD Center

University of Chicago

Michael Mark, RRT, RN
Senior Vice President
American Lung Association of Illinois

Chandana Nandi, MS, RD, LDN
Former Chief
Division of Chronic Disease Prevention and
Control
Illinois Department of Public Health

Lynda Preckwinkle, BA, RRT
Manager
ALA HelpLine and Tobacco Quitline
Illinois Tobacco Quitline

Pam Rybak, RN, BSN
Regional Clinical Consultant
Infusion Systems
Baxter Health care Corporation

Esther Sciammarella
Executive Director
Chicago Hispanic Health Coalition

Trudy Shady, MD, FCCP
American College of Chest Physicians

Dorothy Shapiro, MS, APN, CNP
Suburban Lung Associates

Valerie Webb, MPH
Regional Health Officer
Cook County Department of Public Health

Christina Welter, MPH
Deputy Director
Cook County Department of Public Health

Treatment and Management

Brandy Adams, RN
Clinical Liaison
SelectCare Health

Jorge Bolano, RRT, RCP
Director of Clinical Services
Health Care Solutions Group, Inc.

John Butler, MD
Director of Critical Care Services and
Respiratory Care
OSF St. Anthony Medical Center

Brenda Celmer, RRT
Advocate Christ Medical Center

Ed Diamond, MD, MBA, FCCP
Suburban Lung Associates

Peter England
President & CEO
Chicago Children's Museum

Brian Lawlor, MS, RRT, RCP
Manager
Cardiopulmonary Services
St. Anthony Medical Center

Ric Leary, MD
Medical Director
McKesson Health Solutions

Akash Patel
Chief Operating Officer
SelectCare Health

Diana Pratt
OSF St. Anthony Medical Center

Michael Ries, MD, MBA
Chest Medicine Consultants

Trudy Shady, MD, FCCP
American College of Chest Physicians

Jeff Speckhart, CRT, RCP
Owner
First Choice Medical Equipment, Inc.

Kate Valentine
Education Manager
Illinois Academy of Family Practice

Helena Wang, MD
Loyola University Medical Center

Jill Weberski, RN, MSN, CNS
College of Nursing
St. Francis Medical Center

Jing Zhang, PhD
Vice President
Clinical Services & Workforce Development
Illinois Primary Health Care Association

Public Awareness, Patient Education and Resources

Barbara Barron
Community Representative
VITAS Hospice

Jackie Brenchley, RCP, CPFT, AE-C
Coordinator
Pulmonary Diagnostics
Advocate Illinois Masonic Center
Illinois Society for Cardiopulmonary Health and
Rehabilitation

Nanette Clauson, RRT
Pulmonary Rehab Coordinator
Proctor Hospital

Lloyd Corrigan
Patient

Colleen Felts, RN, BSN, AE-C
Nurse Case Manager
Rockford VA Primary Care Clinic

Hannah Hedrick
Aloha Self-Care
Peer Support

Gail Huber
Feinberg School of Medicine
Northwestern University

Tom Hurd
Patient

Marty Kohr
Senior Vice President
Group Business Director
DDB Chicago

Kitty McAndrews
Manager
Program Services
American Lung Association of Illinois

Kami Norris
Proctor Hospital

Pam Pagone
Chicago Department of Senior Services

Adele Plotkin
Patient

Bill Plotkin
Caregiver

Ankur Roy
Chief Executive Officer
SelectCare Health

Trudy Shady, MD, FCCP
American College of Chest Physicians

Donna Serlin
Edwards Hospital Pulmonary Rehab

Sara Shull
OSF St. Francis Medical Center
Wellness Department at the Riverplex

Policy and Advocacy

Sandie Benen
Account Director
State Government Affairs
GlaxoSmithKline

Cheryl Byers
Senior Director
Programs and Policy
Respiratory Health Association of Metropolitan
Chicago

Dan Cantrell
Office of US Representative Danny Davis

Clarisol Duque
Office of US Senator Dick Durbin

Debra Flores
Regional Manager of Government Affairs
Boehringer-Ingelheim Pharmaceuticals

Cindy Gronkiewicz, APRN, RN, MS, AE-C
Pulmonary Nurse Consultant

Jennifer Herd, MHLA
Senior Health Policy Analyst
Chicago Department of Public Health

Theresa Juday, RPh, AE-C
Specialty Program Manager, Cystic Fibrosis
Caremark

Matt Maloney
Director of Policy
Respiratory Health Association of Metropolitan
Chicago

Angie McDonnell, RRT, RPFT
Supervisor
St. John's Hospital

Julie Mirostaw
Dan Shomon, Inc.

Roy Pura
Manager
State Government Affairs
GlaxoSmithKline

Celeste Younger
Office of US Representative Roy LaHood

Lisa Zaenger, RRT
Pulmonary Exchange, Ltd.

COPD State Plan Outcomes and Evaluation

Barbara Holtzman, CPFT, RCP, AE-C
Advocate Illinois Masonic Medical Center

Theresa Juday, RPh, AE-C
Specialty Program Manager, Cystic Fibrosis
Caremark

Kurt Meyer, RRT, RCP
Manager of Respiratory Care and Neurodiagnostics
Northwest Community Hospital

Chandana Nandi, MS, RD, LDN
Former Chief
Division of Chronic Disease Prevention and Control
Illinois Department of Public Health

Sydney Parker, PhD
Vice President
Development and Outreach
American College of Chest Physicians

Jane Reynolds
Malcolm X College

Steve Saunders, MD
Medical Director
Illinois Department of Health Care and Family Services

Helena Sibilano, PhD, RN, CNP
Jesse Brown VA Medical Center

Jackee Wuellner, RN, MPH
Deputy Director
Occupational Nursing Program
University of Illinois College of Nursing

Respiratory Health Association of Metropolitan Chicago Staff:

Joel Africk, President and Chief Executive Officer
Mamta Gakhar, MPH, Lung Health Program Manager
Stacy Ignoffo, MSW, Senior Director, Programs and Professional Services

APPENDIX A – RESOURCES

COPD Resources

American Association for Respiratory Care (AARC) www.aarc.org

The AARC is a professional membership organization for respiratory care professionals and allied health specialists interested in cardiopulmonary care.

American College of Chest Physicians (ACCP) www.chestnet.org

Founded in 1935, the ACCP works to promote the prevention and treatment of diseases of the chest through leadership, education, research, and communication. To achieve this mission, the ACCP publishes *Chest*, delivers clinically focused continuing medical education programs, participates in advocacy issues, and more.

American Lung Association of Illinois (ALA) www.lungil.org

The American Lung Association of Illinois, an affiliate of the national American Lung Association, is a statewide health organization whose mission is to promote lung health and eradicate lung disease, including COPD.

American Thoracic Society (ATS) www.thoracic.org

With more than 18,000 members, the American Thoracic Society is a leading medical association dedicated to advancing lung, critical care, and sleep medicine.

COPD Foundation <http://www.copdfoundation.org/>

The COPD Foundation is a nonprofit organization that supports development of programs that improve the lives of those affected by COPD. The COPD Foundation works toward its goals through research, education, access to treatment, and public awareness.

Emphysema Foundation for Our Right to Survive (EFFORTS) <http://www.emphysema.net/>

A nonprofit organization formed, funded, and operated by people living with COPD that provides support and education for patients and providers.

Global Initiative for Chronic Obstructive Lung Disease (GOLD)

<http://goldcopd.com/index.asp?l1=1&l2=0>

GOLD was launched in collaboration with the National Heart, Lung, and Blood Institute, the National Institutes of Health, and the World Health Organization, and works with health care and public health professionals around the world to raise COPD awareness and to improve preventive and treatment practices. The GOLD guidelines for prevention, diagnosis, and treatment of COPD continue to serve as the evidence-based standard of care for COPD.

National Heart, Lung, and Blood Institute (NHLBI)

<http://www.nhlbi.nih.gov/health/public/lung/copd/lmbb-campaign/index.htm>

The National Heart, Lung, and Blood Institute, a division of the National Institutes of Health, supports basic research, clinical trials and investigations, and demonstration and education projects related to diseases of the heart, blood vessels, blood, and lungs, such as COPD. NHLBI has developed a national campaign called Learn More Breathe Better in an effort to increase COPD awareness and understanding and to education health care providers; campaign resources and materials are available for use by state COPD programs throughout the US.

Respiratory Health Association of Metropolitan Chicago

http://www.lungchicago.org/site/epage/23867_487.htm and <http://www.copdchicago.org>

Respiratory Health Association is committed to increasing the awareness of COPD and improving the quality of life for those who are living with COPD, their families, and caregivers. RHAMC's COPD Initiative is focused on public education, increased early detection, communication on research, and COPD-related policy development.

Tobacco Cessation Resources

Chest Foundation www.chestfoundation.org

The mission of the Chest Foundation is to provide resources to advance the prevention and treatment of diseases of the Chest. The Chest Foundation offers prevention and education programs and resources, including several focused on tobacco control.

Courage to Quit http://www.lungchicago.org/site/epage/23866_487.htm

RHAMC recently launched its new adult smoking cessation program called Courage to Quit. Courage to Quit is a comprehensive, flexible program for groups or individuals that offers up-to-date information, practice skills, and support to help participants quit smoking for good.

Project Ex www.lungchicago.org

Delivered by RHAMC, Project Ex is a program for teens 14-19 years of age to help them stop or reduce smoking. The program emphasizes stress management, dealing with nicotine withdrawal, and relapse prevention. Project Ex has been identified as a model program by the Substance Abuse and Mental Health Services Administration of the U.S. Department of Health and Human Services.

QuitNet www.quitnet.com or www.cookcounty.quitnet.com (for residents of Cook County)

Launched in 1995, QuitNet is the Web's original quit smoking site. QuitNet is owned by Healthways and operates in association with Boston University School of Public Health.

Freedom From Smoking <http://www.lungil.org/tobacco/ffs.cfm>

Freedom From Smoking is an ALA cessation program developed to help smokers at all stages of the quitting process.

Not On Tobacco <http://www.lungil.org/tobacco/not.cfm>

The ALA's Not On Tobacco is a voluntary smoking cessation program for teenagers. Throughout the course of the program, participants learn to identify their reasons for smoking and to identify healthy alternatives.

Illinois Tobacco Quitline <http://www.quityes.org/> (866) QUIT-YES

The Illinois Tobacco Quitline, operated by IDPH and the American Lung Association of Illinois, is staffed by trained counselors equipped to provide callers information about and support for quitting, as well as information on other smoking cessation resources throughout the state.

American Legacy Foundation – Become an Ex www.becomeanex.org

American Legacy Foundation is dedicated to building a world where young people reject tobacco and anyone can quit. The Ex program is about re-learning your life without a cigarette.

Tobacco Education and Training Resources

Youth Tobacco Action Network www.lungchicago.org

RHAMC's Youth Tobacco Action Network allows youth to become involved in their communities through anti-tobacco education and advocacy. RHAMC educates participants on tobacco use, deceptive practices of the tobacco companies, and ways youth can make a difference in their communities by educating their peers and advocating for change.

Teens Against Tobacco Use (TATU) <http://www.lungilia.org/il/tobacco/tatu.asp>

ALA's TATU is a teen education program through which high school students are trained to educate elementary and middle school students about hazards of tobacco.

Illinois Coalition Against Tobacco Use <http://www.ilcat.org/index.htm>

The Illinois Coalition Against Tobacco Use is composed of over 100 groups and individuals committed to reducing tobacco use in Illinois. Coalition resources include tools for media advocacy and community mobilization.

Kids Can't Buy 'Em Here Tobacco Program <http://www.state.il.us/lcc/tobacco/kcbeh.htm>

A program of the Illinois Liquor Control Commission that promotes awareness of and compliance with youth tobacco laws and offers technical assistance to communities wishing to improve retailer compliance

Partners for Tobacco Free Lake County <http://www.tobaccofreelakecounty.org/>

Partners for Tobacco Free Lake County is a Coalition committed to improving the lives of Lake County residents through awareness, advocacy, and prevention of tobacco-related diseases.

APPENDIX B – STATE-OF-THE ART FOR SMOKING CESSATION INTERVENTIONS

Clinical Settings

Smoking cessation counseling

There is strong evidence to indicate that counseling to promote smoking cessation is effective. Interventions consisting of several sessions 10 minutes or longer over >8 weeks resulted in quit rates of about 20%. Guidelines recommend the use the "5 As" (Ask, Advise, Assess, Assist, and Arrange): ask each patient every visit if they use tobacco; advise users to quit using a strong personalized message and assess their willingness to quit; assist them with a plan that includes strategies to avoid triggers for smoking, coping with withdrawal symptoms, and effective medications; arrange a follow-up contact to review progress and reinforce key points. Unfortunately, rates of reimbursement for providing smoking cessation counseling are too low for most practices to provide this service.

Medications

Nicotine is the addictive part of tobacco smoke, but is not the most dangerous part of smoking cigarettes. There are more than 4000 toxins in cigarette smoke which can cause lung disease, cancer, and other problems. Nicotine-replacement treatment options help patients to quit smoking by reducing withdrawal symptoms. These treatment options include nicotine patch, nasal spray, inhaler, chewing gum, and lozenge. Nicotine patch is long-acting and is used each day to prevent withdrawal symptoms. The other nicotine replacement treatment options are short-acting and are used to reduce withdrawal symptoms as they occur (used as needed). There are also 2 medications that work by other mechanisms: varenicline, a partial nicotine agonist, and a sustained-release formulation of bupropion, an anti-depressant. Both of these medications are long-acting and are more effective compared to treatment strategies based on nicotine replacement alone.

Treatment with varenicline alone is generally more effective than bupropion with or without concurrent use of nicotine-replacement therapy. To be effective, these medications require 12 or more weeks of use and work better when used with patient counseling with clinical trials, with quit rates approaching 30 to 40% at 1 year. Success rates may be lower in clinical practice. Each medication has its own adverse effect profile; the choice of medications, therefore, depends on the patient's underlying health problems and patient preference. Another consideration is the cost of medications and insurance coverage, which varies across plans. More consistent insurance coverage and lower out-of-pocket costs may help increase the use these medications and increase quit rates.

The public health service guideline recommends counseling combined with medication use, when appropriate. While single brief clinical interventions for all patients in out-patient settings will yield modest sustained cessation (2.4% quit rate for counseling alone and 5.0% quit rate for counseling combined with medication), it has been estimated that annual interventions over the lifetime of smokers will boost quit rates by 23% with cost savings of over \$500 per smoker receiving the service. For the population of the United States, annual cessation interventions are projected to save 2.5 million quality adjusted life years.²¹

Hospital-Based Smoking Cessation Programs

Because of the negative health effects of smoking, smokers are hospitalized more than non-smokers. The non-smoking environment of hospitals is considered to be an effective way to jump-start cessation, and research interventions have been tested to this end. To date, only programs that combine intensive bedside counseling with early and sustained relapse prevention contacts have been shown to be more effective than usual care, with an OR for cessation of 1.65. While most studies have used telephone contacts for relapse prevention, out-patient contacts following discharge are also effective in promoting cessation. Less intensive counseling or stand-alone pharmacotherapy interventions do not have demonstrated effectiveness.

Optimization of smoking cessation in clinical settings will require institutional leadership and support, be it at the medical center, hospital, or clinic/office level. Institutions are most likely to integrate cessation interventions when they are developed as part of the institutional culture and work-life, incorporated into the information technology, sensitive to the various needs of smokers from all walks of life, designed with an understanding of best practices, and integrated with community resources. Institutional leaders will ideally cooperate with the work-force to guide development of appropriate intensity cessation activities into routine workflow activities with patients. This will likely require clarification of roles (who does what) and enhanced training for doctors, nurses, dentists, dental hygienists, respiratory therapists, and medical assistants. It will require development and/or incorporation of written cessation materials. Some activities may be optimized by a small cadre of cessation specialists. A quality improvement approach is reasonable with short and long term goals, improvement teams, cycles of implementation and assessment, and tracking of smoking related outcomes.

Non-clinical Settings

Outside of clinical settings, there have been important and creative public health interventions that increase cessation. Quitlines and computer expert systems are two such interventions.

Quit lines

Quitlines provide a variety of telephone-based cessation programs and supports. *The Guide to Community Preventive Services* strongly recommends quitline interventions, and estimates the median change in cessation rates with quitlines at 2.6%. In the research literature, quitlines are often described as either proactive (in which the quitline delivers a package of counseling sessions after the initial contact) or reactive (in which all contacts are initiated by the smoker). Proactive quitline counseling has been demonstrated to be more effective than reactive quitline counseling. The volume of calls is often dependent upon marketing of

the quitline services. Offers of free nicotine replacement therapy by quitlines has been demonstrated to boost the volume of calls by as much as 25-fold.

Computer expert systems

Computer expert systems, based on stages of change model, or the trans-theoretical model of change, developed by James Prochaska and colleagues, are built on over 20 years of empirical research of the model studying how people change their smoking behaviors. The expert system tailors feedback to the individual smoker's stage and three other model constructs (decision balance, processes of change, and self-efficacy). While clinical programs primarily focus on those willing to quit, the expert system offers in-depth feedback to smokers who are and are not ready to quit. Studies of the expert system have demonstrated 80-85% participation rates in population-based recruitment strategies and quit rates of 20-25%. Thus, these programs have uniquely high participation and effectiveness, making them high impact public health programs.

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