The American Association for Respiratory Care and the National Lung Health Education Program: Partnering for Our Patients

This year marks a milestone in the continuing development of our profession and our Association. In 2004 the National Lung Health Education Program (NLHEP) and the American Association for Respiratory Care (AARC) have joined forces to provide staff and administrative support for NLHEP.[1] This most recent partnership formalizes an already vibrant collaboration between AARC and NLHEP. This is not surprising given that NLHEP's goal is to promote lung health and prevent lung disease. Even though this overarching goal appears simple, we all know better. It's an extraordinary goal. Given the fact that chronic obstructive pulmonary disease (COPD) is the number 4 killer in the United States and the world, and is the only chronic disease in which the death rate continues to increase, there appears to be a lot of work to be done. And that's just COPD.

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But how do we actualize this extraordinarily profound goal? Well, let's consider what the impact might be if access to office spirometry would be available to all persons who smoke or have smoked and are 45 years of age or older, and have frequent cough. Would more COPD patients be identified? Would this lead to an opportunity to intervene and encourage behavioral changes that lead to better lung health and slow the progression of the disease? Would early detection permit the use of the new generation of medications? Could early detection and intervention guide moderate-stage COPDers into exercise programs to avoid the deconditioning that occurs with the natural progression of the disease? Finally, could early detection, coupled with a change to healthy lung behaviors, earlier access to medications, and maintaining general physical fitness lead to a longer life with a higher quality than what is currently experienced by many COPD patients who are not diagnosed with the disease until reaching the moderate or severe classification levels?

Good Business?

Now let's ask ourselves if early detection and intervention are good business in the health care system. The short answer is, of course they are. For once COPD is diagnosed in the early stages, the chances for it being managed outside of the most expensive care settings in the health care system are very good. In effect, by early detection we contribute to a health care business model that can balance the quality of care with the cost of such care because demand for health care resource consumption should be lessened commensurate with the severity of the disease.

The foregoing demonstrates promise. But we've got a long road to travel to realize our goal. Once again the value of a partnership between AARC and NLHEP is reinforced as we pursue the previously stated goal. NLHEP and AARC will work together to address the issues confronting this movement of early detection for COPD. And, with your help, we will succeed.

Steps to Success

First, we need to increase public awareness of COPD. We've got several things working against us in this endeavor, not the least of which is the term "COPD." Most laymen have not a clue of what the acronym stands for. But, then again, it can be worse. They can *know* what it stands for—chronic obstructive pulmonary disease. How many times have you been asked by laymen what that means? I've done a few media tours with comedian Robert Klein, and when we're on the road he always brings up these 2 issues. The fact is that we on the medical side of the fence use our own language. Unfortunately, when it comes to making the transition to the public, we don't seem to be able to come up with a term that is both understandable by the public and adequately describes the diseases that fall within the acronym's meaning. The good news is that it's great to have an umbrella term—COPD. The bad news is that with that term it's harder to describe emphysema and chronic bronchitis. The majority of the public needs a simple, yet descriptive, term that falls more into their lexicon than ours if we expect them to become as aware of COPD as they are of hypertension, obesity, stroke, and heart disease (or should I say cardiovascular disease).

Rather than wait for the perfect term, AARC/NLHEP and many other organizations have recognized the value of increasing awareness of COPD in the minds of our target

audience, which is everyone in the United States—not just those who are at risk. How do we get it done? We'll continue efforts to put a face on the disease. Robert Klein is a perfect example of the benefits of having a celebrity with the disease. His celebrity has opened many media doors for us to help get the word out about the disease, its symptoms, and how to get tested for the disease.

Once the consumer becomes aware of the disease, taking the next step opens both opportunities and challenges. In recent years office spirometers have come on the scene. While these spirometers are limited in what they can do, they can be assessed against standards that NLHEP has developed in order to assure the reliability of these devices designed for physician office use.[2]

Having a very accurate piece of equipment, or at least one that you know can give you a case finding, will most likely be one of the more manageable challenges. Human factors, along with the business aspects of providing early detection through use of office spirometry, will prove to be a bit more daunting.

Even though device-makers of all types, when appropriate, play up the simplicity of the device, we must understand that spirometry is patient effort-dependent. Here we are in the 21st century and our dependence on "fire and forget" technology continues to increase. Unfortunately, we don't have "fire and forget" patients—thank God. Even though devices have been made simpler, more reliable, and less expensive, this does not mean that those who provide the test can be simpler, indeed. AARC's current clinical practice guideline on spirometry[3] calls for a firm and comprehensive grounding in pulmonary diagnostics, the conditions for which patients are tested, and the ability to recognize bad spirometry maneuvers and take remedial action. Moreover, the American Thoracic Society's Committee on Proficiency Standards for Clinical Pulmonary Function Laboratories, Standardization of Spirometry calls for at least a year of post-secondary education.[4] Now, you say, what's wrong with this picture? First, office spirometry can be done by persons other than respiratory therapists or pulmonary function technologists or physicians. However, they must undergo enough education to satisfy the previously mentioned standards and guidelines, albeit with education and training more narrowly focused for the job at hand. We need to bear in mind that office spirometry is not a substitute for pulmonary function studies, but it can be an effective screen that will be used as the first step toward a case finding. There is evidence that when persons are not adequately trained, they simply do not provide spirometry results that are adequate to get COPD ruled in or ruled out, which, as you may recall, is the entire point of the exercise.

Addressing Challenges

The AARC/NLHEP partnership will encourage appropriate use of office spirometers. This will include taking actions that contribute to the reliability of both the device and the person using the device. If we do not act to address the challenge manifest in unreliable measurements, then all the good that can be brought about by increasing awareness of COPD and increasing access of pulmonary screens to those who are at risk will set us back for years.

While we will always think that respiratory therapists and pulmonary function technologists can easily handle getting a patient to provide accurate FEV_1 and FEV_6 results, we must assure that respiratory therapists, both in the work force today and undergraduates, are adequately educated and tested for proficiency and early detection techniques. This has not always happened, nor is it always the case.

What happens, though, if a primary care physician simply does not have the critical mass of patients to justify employing respiratory therapists to do spirometry screening, even on an as-needed basis? This is the case more often than not. We must genuflect to the realities of our system, and through the AARC/NLHEP collaboration, develop reliable educational offerings specifically designed for physician office personnel.

Once we're assured the device and the operator of the device are up to standard, we must also develop a mechanism that will provide ongoing quality control in order to assure that both the equipment and the operator continue to provide reliable results to the physician.

There are a few other challenges, not the least of which is unwittingly hurting our own cause by making spirometry more accessible to the at-risk population, many of whom are still smokers.[5] What happens when their spirometry results are normal? Is this going to encourage them to continue to smoke? Or can we leverage off the normal result to encourage the smoker to quit while he or she is ahead? Part of the answer lies with us. Part of the answer lies with the attending physician. And, of course, most of the answer resides with the patient.

While relatively little is known about the impact of office spirometry on the behaviors of patients, we must undertake efforts to learn about those effects. In this endeavor, however, I don't believe we'll be starting from scratch, since we know that screening for hypertension, diabetes, and a host of other diseases has been in place long enough that we can learn from them and thus improve our efforts. We must be prepared to pose the questions within a scientific method and make course corrections based on the results of the investigation.

Some well-intentioned, outstanding investigators caution us to ease back a bit on our more aggressive approach to increase public awareness and promote early detection of COPD until we get answers to the aforementioned very legitimate concerns. Others believe that increasing public awareness and making consumers aware of early detection will help attack the problems we have in 2004 and beyond. There's an estimate that about 12 million people with COPD are undiagnosed. The costs of the disease are above $30

billion per year. The death rate for the disease continues to increase and the morbidity of the disease is increased more now in women than in men. It is expected that mortality from COPD will move from the number 4 killer to the number 3 killer by 2020, not just in the United States, but in the world, according to the World Health Organization.

There is no question that as we pursue our goals, we must be aware of the potential mine field we walk through. We must keep focused on our goals and remain committed not just to increase awareness and spirometry access but also to assure that early detection efforts for COPD will not backfire through the use of unreliable equipment, under-trained staff, and false signals sent to consumers and patients.

The American Association for Respiratory Care is honored to have a closer working relationship with the National Lung Health Education Program.

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