

Summa Health Uncovers Hidden COPD Using ndd's Point of Care PFT Devices



EasyOne Pro® LAB used in Summa Health Groundbreaking Population Health Management Program

Industry: Hospitals, Healthcare Systems, Outpatient Clinics

Solution: EasyOne Pro LAB

Challenges

- Underdiagnosed COPD
- Availability of Point of Care PFT testing
- Aging cumbersome equipment
- High maintenance cost

Solutions

- Standardization of Equipment
- Accurate Ultrasound Technology
- No warm up time
- Testing Anytime, Anywhere
- Quick assessment of patients
- Increased efficiency

The Challenge

Summa Health is an Akron, Ohio-based health care system in the northeastern region of the state, covering 230,000 lives. Ohio is one of the top 15 states in terms of smoking prevalence. Not surprisingly, smoking and obesity were identified as the top two concerns in a 2013 Community Health Needs Assessment conducted by Summa Health and other area health systems.

“It seems like everyone in this area smokes,” comments Tim Buckley, MS, RRT, Summa’s System Director of Respiratory Care.

Although the prevalence of smoking in the Akron area is well known, Chronic Obstructive Pulmonary Disorder (COPD) is surprisingly under-diagnosed. This mirrors a national trend: 12 million adults in the U.S. are thought to have unrecognized COPD, highlighting the need for earlier diagnosis, when the disease can be arrested.

Buckley takes Summa’s commitment to population health management—keeping patient populations as healthy as possible through prevention and good control of chronic disease—very seriously. One of his goals for his department is to better identify and manage patients struggling with COPD. Currently, when people are recognized as having respiratory difficulties, they are often managed as if they have asthma or allergies because PFT testing was unavailable at the point of care—a symptom-centric approach that doesn’t address the underlying disease, and therefore leads to a decrease in quality of care and decrease in the efficiency of the health care system, according to Buckley.

The Solution

Buckley has been a long-time fan of spirometers made by spirometry leader ndd Medical Technologies, which have been used for several years to assess every hospitalized Summa Health pulmonary patient at the bedside. But the need to better diagnose COPD prompted him to purchase six EasyOne Pro® devices—a portable device that performs Diffusion Capacity (DLCO) testing, spirometry and full lung volumes in just 20 minutes at the point of care. DLCO testing is commonly used to differentiate between COPD and asthma, as well as to evaluate cardiovascular symptoms.

The Easy One Pro devices replace the health system’s aging traditional PFT equipment. One immediate benefit of the new equipment is that it standardizes test results regardless of where the patient is tested, something that wasn’t true with the old

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equipment, according to Buckley. EasyOne Pro is also simple to use and unlike the replaced equipment, not subject to mechanical failure. “Because the EasyOne Pro uses ultrasonic technology, you don’t have to worry about replacing this valve or that piece,” adds Buckley.

The decision to invest in the EasyOne Pros was economic as well, he explains. “The cost of a traditional pulmonary function testing system, even without a body box, is almost twice as much as an EasyOne Pro, because those systems are so hardware intensive,” says Buckley. “And most importantly, EasyOne Pro can do everything a traditional system can do.”

In addition to that being able to quickly test patients anytime and anywhere it is required, reduces wait times, misdiagnosis and patient transport and increases the number of patients who can be tested. This makes for a much smoother workflow and drastically increases the efficiency of the health system.

The Results

The ndd devices help Summa Health put its money where its mouth is when it comes to population management. Traditionally, some health care providers have been reluctant—because of cost pressures and complexity with traditional systems—to perform comprehensive pulmonary function tests on a wide swath of patients if they can’t be reimbursed.

But that short-sighted approach ignores the importance of population health management, according to Buckley. “Respiratory therapists need to take leadership roles in regard to the populations they’re managing and that’s what we’re doing at Summa Health,” he explains. “If we do a better job of identifying who has COPD, we will eventually decrease the burden of disease, improve the health of the community and ultimately save dollars. And with the EasyOne Pro we finally found a cost-effective device that allows us to do exactly that.”

Now, with the EasyOne Pro, not only pulmonologists and primary care physicians, but also cardiothoracic surgeons and oncologists at Summa Health are receiving better information about their patients’ pulmonary status, enabling them to improve treatment of a range of diseases.

About ndd Medical Technologies

With a 40 percent of the U.S. spirometry market share, ndd Medical Technologies, Inc. offers innovative, easy-to-use pulmonary function testing instruments that help clinicians diagnose and treat lung disease with greater precision. Its EasyOne® portable instruments take lung testing wherever it is needed, measuring DLCO, FRC, LCI and FVC. ndd’s patented Ultrasonic TrueFlow™ technology eliminates problems associated with traditional methods of flow measurement, making testing fast, reliable and error free. To learn more, visit www.nddmed.com.