

RESEARCH DEMONSTRATES

**NUVOAIR HOME  
SPIROMETRY  
DELIVERS RESULTS  
COMPARABLE TO  
THOSE OF IN-CLINIC  
SPIROMETRY**

**In-home spirometry offers multiple advantages to clinical research, but can it deliver the same quality of data that in-clinic spirometry offers? And, can it be reliable when medical professionals are not present virtually or physically to provide support with technique?**

Four recent studies demonstrate that patients with asthma and patients with cystic fibrosis—including children—are able to independently conduct accurate and repeatable home spirometry with NuvoAir, which includes an in-app responsive coaching feature that assists users in performing the test with the right technique.

In each case, patients received initial training on the NuvoAir platform but then went on to use it successfully in their own homes without medical personnel present.



**THE [AIR NEXT] SPIROMETER HAS ALLOWED ME TO STAY CONNECTED TO MY CLINIC [RBH] EVEN AS I'M CURRENTLY WORKING IN A DIFFERENT PART OF THE WORLD.**

# DETAILS

**Data were collected from 37 patients with cystic fibrosis in a study at Royal Brompton Hospital, London, UK.**

Spirometry conducted unsupervised at home was found to be equivalent in quality to supervised spirometry in clinic.

**13 children with cystic fibrosis, ages 6 to 17, were enrolled in a study at a pediatric Cystic Fibrosis Center, Sahlgrenska University Hospital Goteborg, Sweden.**

Researchers concluded, "It is possible for children to perform spirometry and other health-related measurements at home."

**30 adolescent patients with cystic fibrosis or bronchiectasis were enrolled in a study at Children's Respiratory and Sleep, Royal London Hospital, London, UK**

Results showed that 74% of adolescents were able to perform reproducible spirometry maneuvers unsupervised at home.

**9 patients with asthma were enrolled in a study at the outpatient asthma clinic of the Respiratory Medicine Department of the University Hospital of Ioannina, Greece.**

Researchers said at study conclusion, "Our results support the unsupervised home use of Air Next from NuvoAir in combination with the coaching system to reliably collect high-quality measurements and to remotely monitor patients with asthma."

# TAKEAWAY

## The NuvoAir platform

provides diverse patients with the comfort and convenience of spirometry in their own homes, eliminating both the need for travel and the stress that a clinical setting can place on patients.

Healthcare professionals, in turn, can be confident that when properly instructed at the outset, even pediatric patients are able to use the NuvoAir platform to provide valid, reproducible results from spirometry conducted at home.



**Validation study of the quality of home spirometry performed by Air Next spirometer in combination with mobile coaching system: preliminary results**

ERS | Publications

**Quality of home spirometry in adolescent cystic fibrosis and bronchiectasis patients**

Poster Session Abstracts

**Quality of home spirometry in patients with cystic fibrosis**

Poster Session Abstracts

**A virtual clinic and remote monitoring in children with cystic fibrosis**

Poster Session Abstracts

# TAKEAWAY

With the Air Next spirometer, you can give patients the exceptional convenience of portable Bluetooth® spirometry without compromising on accuracy.

To learn more visit [nuvoair.com](https://nuvoair.com)

