



Check for updates

# Digital technology access among patients with chronic respiratory diseases

Cristina Isabel Oliveira Jácome, Fábio Marques, Cátia Paixão, Patrícia Rebelo, Ana Oliveira, Joana Cruz, Célia Freitas, Marília Rua, Helena Loureiro, Cristina Peguinho, Adriana Simões, Madalena Santos, Carla Valente, Paula Simão, Alda Marques

European Respiratory Journal 2019 54: PA3955; DOI: 10.1183/13993003.congress-2019.PA3955

[Article](#)[Info & Metrics](#)

## Abstract

Pulmonary rehabilitation (PR) is an evidence-based intervention to manage chronic respiratory diseases (CRD), but its benefits diminish over time. Web-based approaches may have a key-role in supporting patients to comply with their maintenance action plan, if familiarity with this technology exist. This study explored if patients with CRD have access to digital technology and if they feel confident in using it.

This was a cross-sectional study with patients referred to community-based PR programs. Patients were surveyed regarding the use of the internet, computers, smartphones/tablets and cell phones. Their confidence in using these technologies was assessed using a scale from 0 (not at all confident) to 10 (completely confident). Patients were considered confident when a score >5 was selected. A multivariate logistic regression to predict use of internet was performed using the Enter method.

141 patients (61% male; 67±11y) were included. Chronic obstructive pulmonary disease (60%) and asthma (18%) were the most common diagnoses. Most patients (n=115; 81.6%) used digital technology, namely smartphone/tablets (44%), computers (38%) and cell phones (37%). 114 (81%) patients reported to be confident in using these devices (Median-M 7, Interquartile-IQR 5-9.5). More than half (n=75; 53%) used the internet and 85% of them felt confident in using it (M 8, IQR 5.75-10). Lower age (odds ratio-OR=.935; 95%CI .889-.982) and

## THANK YOU FOR ACCEPTING COOKIES

You can now hide this message or find out more about cookies.

[Hide](#)[More info](#)

## Footnotes

Cite this article as: European Respiratory Journal 2019; 54: Suppl. 63, PA3955.

This is an ERS International Congress abstract. No full-text version is available. Further material to accompany this abstract may be available at [www.ers-education.org](http://www.ers-education.org) (ERS member access only).

Copyright ©the authors 2019

---

## We recommend

Frailty in chronic respiratory disease: prevalence and comparison of rehabilitation clinical outcomes

Ken Johnston et al., European Respiratory Journal, 2019

A Comparison of Pulmonary Rehabilitation Outcomes in Interstitial Lung Disease and Chronic Obstructive Pulmonary Disease

Christopher Huntley et al., European Respiratory Journal, 2019

Pulmonary rehabilitation closer to patients – feasibility and effectiveness study

Alda Sofia Pires De Dias Marques et al., European Respiratory Journal, 2019

Is attendance and completion of a pulmonary rehabilitation programme associated with patient activation?

Shauna Sheridan et al., European Respiratory Journal, 2018

Cardiovascular safety of fixed dose combination long acting bronchodilators in stable patients with Chronic Obstructive Pulmonary Disease.

Sudip Ghosh et al., European Respiratory Journal, 2018

Secular Trends in Information Communications Technology: Access, Use, and Attitudes of Young and Older Patients With Diabetes

Timothy L. Middleton et al., Diabetes Spectr, 2019

Home-Based Nocturnal Ventilation in COPD Patients

Marieke L Duiverman et al., Medscape

Real-time beam shaping without additional optical elements

Felix Fries et al., Light: Science & Applications, 2018

Mobile Technologies in the Study, Assessment, and Treatment of Schizophrenia

Dror Ben-Zeev, Medscape

Relationship Between Handgrip Strength and Pulmonary Function

PracticeUpdate, 2018

---

Powered by **TREND MD**

I consent to the use of Google Analytics and related cookies across the TrendMD network (widget, website, blog). [Learn more](#)

**THANK YOU FOR ACCEPTING COOKIES**

You can now hide this message or find out more about cookies.

Hide

More info