
primary studies - published, non RCT

Assessing exercise capacity using telehealth: a feasibility study in adults with cystic fibrosis.

Code: PM22711058

Year: 2013 **Date:** 2013

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Study design (if review, criteria of inclusion for studies)

observational, feasibility study

Participants

Adults with CF

Interventions

Provision of healthcare from a remote site. Monitoring an assessment of exercise capacity using telehealth technology. Patients completed two 3-min step tests, monitored in-person or remotely via videoconferencing, in randomized order.

Outcome measures

Measurements were physiological responses to exercise, system usability, ease of clinician interaction, metronome acoustics, and participant comfort.

Main results

Ten adults (5 male), mean \pm SD age 32 \pm 7 years, and FEV1 55.4% of predicted (range 38-90% of predicted), completed both tests. Participants reported good system usability, with a mean (95% CI) System Usability Scale score of 85.63 out of 100 (79.8-91.5). Metronome acoustics were rated as significantly poorer remotely ($P = .006$). There were no differences in measurements of oxyhemoglobin saturation or heart rate between assessment settings.

Authors' conclusions

Exercise capacity assessment using the 3-min step test is feasible and accurate via remote videoconferencing in adults with CF.

<http://dx.doi.org/10.4187/respcare.01922>

See also

Respir Care. 2013 Feb;58(2):286-90. doi: 10.4187/respcare.01922.

Keywords

adult; telemedicine; non pharmacological intervention - psyco-soc-edu-org; Home; non pharmacological intervention - devices OR physiotherapy; Organization;