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primary studies - published, non RCT

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

**Code:** PM22711058

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**Author:** Cox NS

### 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;