

# Skype led therapy

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# Defining our problem

## **Infrastructure**

- OP services at capacity
- Lack of gym space availability
- Infection control challenges
- Widespread geographical patient list
- Travel costs

## **Patient perspective**

- Appetite for a new model of care
- Health tech savvy
- Indications that patients felt skype led sessions would add benefit to their care

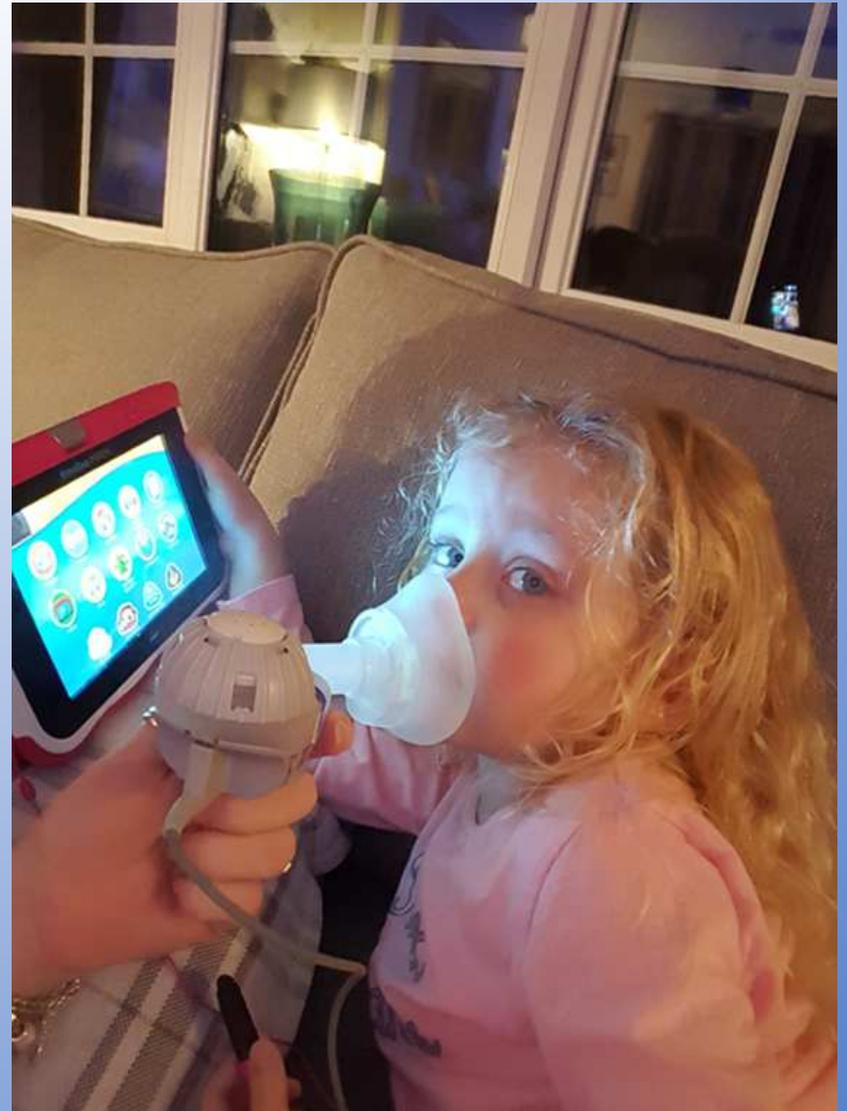
## Adult OP clinic questionnaires

- Adult patients (sample of 40)  
85% of respondents had a skype account and 75% felt that this would enhance their CF care.



# Paediatric population

- Paediatric patients (sample 20)  
85% of respondents already had a skype account or had facilities to set one up. 65% of respondents felt skype would be a useful addition to the CF service whilst 35% were not convinced of this.



# Parents of babies, infants and toddlers

Parents of CF patients aged 4 and below (10 respondents) None felt skype led sessions would be beneficial. Prefer face to face contact with team in clinic or as a home visit.



FEASIBILITY OF USING ONLINE VIDEO CALLING TO ENGAGE PATIENTS IN THE MANAGEMENT OF CYSTIC FIBROSIS.

SHELLEY, J., TROTT, J., TOMLINSON, O., ENDERBY, B., CHAUHAN, R. & SHELDON, C

- The aim of the study is to test the feasibility of delivering one aspect of health professional lead care via video calling. Impact on engagement and the acceptability of this method of delivery will also be tested.
- 9 participants will be recruited to join an 8-week individualised home based exercise programme facilitated via video calling.

# Criteria

## Identification criteria for CF consultant

- Male/female  $\geq 14$  years of age
- CF diagnosis based on clinical features, supported by an abnormal sweat test (sweat chloride  $>60 \text{ mmol} \cdot \text{L}^{-1}$   $> 100 \text{ mg sweat}$ ), genotyping would be desired.  
Patient can understand and co-operate with the study protocol
- Clinically stable

## Exclusion criteria for Patient's Consultant and lead researcher

- Any non-cystic fibrosis conditions that impair exercise ability, such as musculoskeletal disorders (active arthritis, joint or muscle disease), cardiovascular disease (congenital heart disease or cardiomyopathy), and psychiatric illness.
- Unstable co-morbid asthma (daily PF variability of  $>20\%$ )
- Unable to understand/co-operate with study protocol due to learning difficulty
- Awaiting transplantation

# Exclusion at familiarisation

- Onset of acute infection
- Unable to understand or co-operate with study protocol
- Technical difficulties preventing effective communication
- Child and/or parent/guardian do not wish to participate further
- Patient known to desaturate  $< 80\%$  SpO<sub>2</sub> during exercise in the last year
- Not clinically stable

# Baseline measures

- Height
- BMI
- Body fat/muscle mass estimated using bioelectrical impedance device
- Compliance
- Physical activity collected using accelerometry

# Exercise intervention

- 8-week individualised home based exercise training programme delivered via video calls.
- Dependent on the equipment and space
- National recommendations for physical activity and incorporate aerobic and resistance based exercises at a moderate to vigorous intensity (UK Department of Health, 2011).
- Supervised exercise sessions using video calling and unsupervised exercise recorded using a diary or accelerometer.
- Supervision will be individualised depending on requirement for monitoring of oxygen saturation and Borg perceived breathlessness during exercise.
- Variable contact time

# Outcome Measures

- All participants will be re-tested on all of the dependent variables to assess the magnitude of changes at the end of the 8-week (plus 2-weeks if needed) training intervention and at one month follow up
- Primary: Compliance, Adherence, patient satisfaction and acceptability of the technology.
- Secondary: Anthropometric measures, HRQoL, PA
- Post-tests





# RBH experience in technology enabled skype reviews – Helen Parrott, Clinical lead

- Survey monkey – make us a better service – identified a cohort of CF patients post exacerbation
- Skype business video calling
- Self Assessment kits
- Clinical assessment of recovery from exacerbation
- Clinic by Specialist Physiotherapist and Nurse Specialist
- CF consultant allocated to the service to review plans for ‘poor recovers’ or additional medical issues

# Ongoing issues

- Variable Wifi connection at the RD&E.
- Technical issues with regular updates needing IT to authorise.
- Needing lots of dry runs to check connections.
- Consultants on board with a Skype delivered clinic appointments.  
Need a lot of support and 2 PC's to be available.