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ImPACt study

Improving physical activity of older people in the community through trained volunteers

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1. The original study
2. Adaptions to the study
3. Learning experience

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Background

Strong evidence on the health benefits of physical activity for older people:

1. Improvement in physical function
2. Reduction in falls
3. Improvement/ maintenance of frailty status

Physical activity for adults and older adults

- Benefits health
- Improves sleep
- Maintains healthy weight
- Manages stress
- Improves quality of life

Reduces your chance of

- Type II Diabetes -40%
- Cardiovascular disease -35%
- Falls, depression etc. -30%
- Joint and back pain -25%
- Cancers (colon and breast) -20%

Some is good, more is better

Make a start today: it's never too late

Every minute counts

Be active

at least **150** minutes moderate intensity per week
increased breathing able to talk

OR

or a combination of both

at least **75** minutes vigorous intensity per week
breathing fast difficulty talking

Swim
Brisk walk
Cycle

to keep muscles, bones and joints strong

Build strength

on at least **2** days a week

Gym
Yoga
Carry heavy bags

Run
Stairs
Sport

Minimise sedentary time

Break up periods of inactivity

Bowls
Tai Chi
Dance

For *older adults*, to reduce the chance of frailty and falls

Improve balance

2 days a week

The problem

- UK study (n = 238) age ≥ 65 years, physical activity levels measured using accelerometers, **2.5%** achieved recommended 150 minutes weekly moderate intensity (Harris et al, BJSM 2009)

- UK study, 25 towns, (1593 men, 857 women), accelerometer-based study, only **7%** and **3%** respectively achieved ≥ 150 min moderate activity per week (Jefferis et al, BMC Public Health 2014)

The problem exacerbated:

COVID-19 pandemic

- Social distancing measures
- Shielding of high risk groups
- Closure of groups and facilities
- Deconditioning

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The proposed solution:

Volunteer-led exercise groups within social clubs

PPI

Older adults (n=50) and volunteers (n=7) from 3 clubs

- Strongly agreed (54%) and agreed (44%) to the idea of having exercise classes during their club sessions.
- Strongly agreed (42%) and agreed (51%) to the idea of having the volunteers lead the exercise groups

- 42% respondents preferred the exercise session to <15 min,
- 37% respondents preferred it to be between 15 – 30 min and
- 16% respondents preferred it to be between 30 – 45 min.

- Strongly agreed (9%) and agreed (47%) to the idea of doing the exercises at home

Aims (pre-COVID-19)

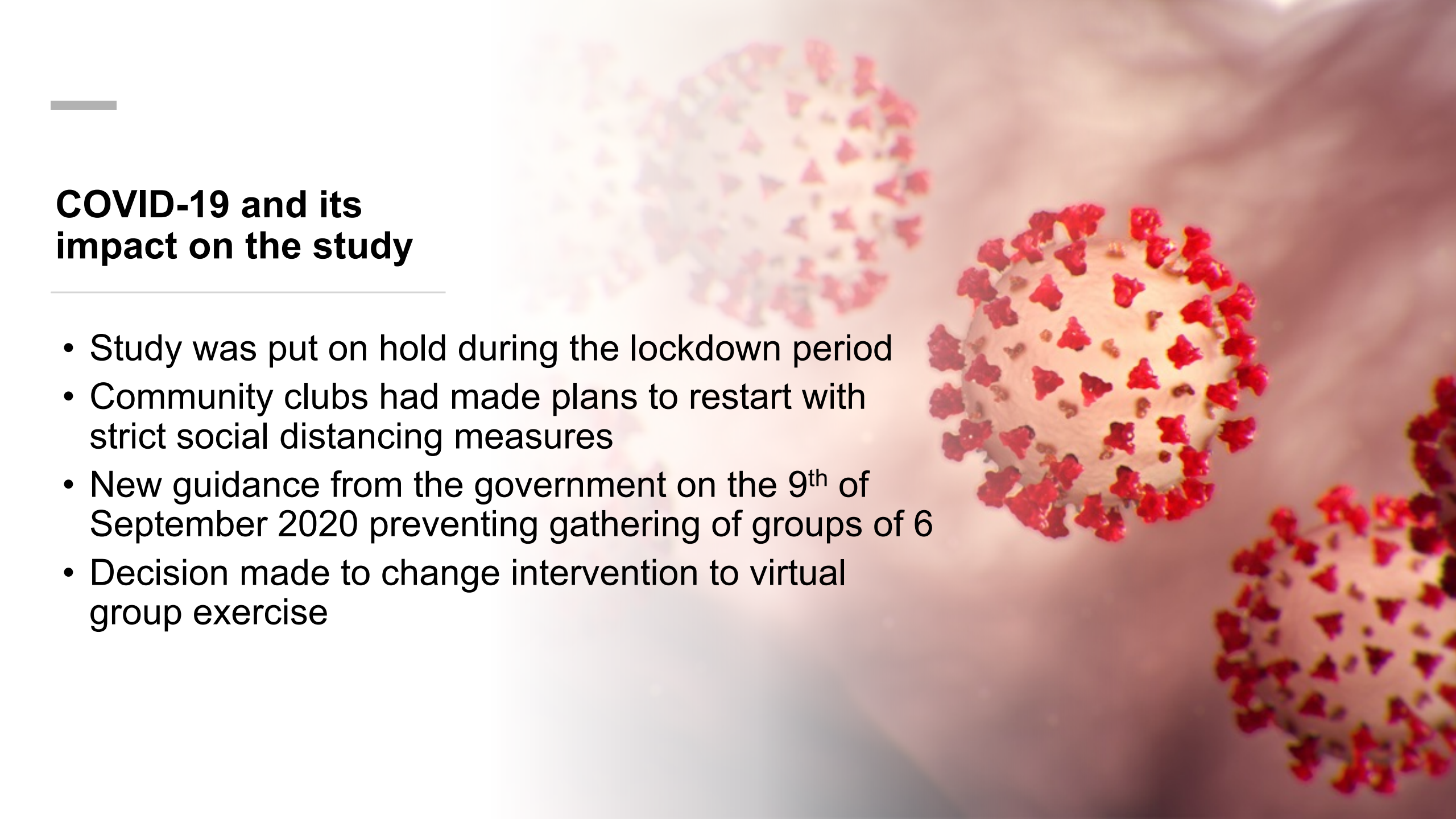
- To develop and **evaluate the volunteer training programme** for the exercise intervention for community-dwelling older adults.
- To **assess the feasibility** of training volunteers to deliver the exercise session in community clubs.
- To determine if the proposed intervention is **acceptable to volunteers, older adults and their carers**, and to identify facilitators and barriers to the intervention.
- To examine the **impact** of volunteer-led exercise sessions on the **physical activity levels and functional outcomes** of older adults

Original intervention

- Once weekly exercise class
- Brendoncare community clubs in the Dorset and Hampshire region
- 30 min sessions
- Progressive resistance exercise group lessons led by volunteers
- Therabands

COVID-19 and its impact on the study

- Study was put on hold during the lockdown period
- Community clubs had made plans to restart with strict social distancing measures
- New guidance from the government on the 9th of September 2020 preventing gathering of groups of 6
- Decision made to change intervention to virtual group exercise



Challenges

- Workforce
- Recruitment
- Volunteer training
- Exercise intervention
- Data collection
- Interviews

Adaptations to the study

- Brendoncare online clubs (led by staff and volunteers)
- Online volunteer training
- Training video
- Seated exercises – based on PHE guidance
- Data collection
- Telephone interviews

Volunteer training

- Dr Samantha Meredith
- Developed training manual
- Staff and volunteers online training
- 1 and a half hour training session
- Additional one to one session
- Competency assessment

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Intervention

- Once weekly online group exercise classes
- 15-30 min
- Seated exercises
- Participants will be provided with a video link and exercise sheets

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Outcomes

Feasibility:

1. Number of volunteers recruited, trained and retained
2. Number of sessions delivered and adherence to intervention (recorded by volunteers)
3. Fidelity in the delivery of the exercises (by Sam)

Acceptability:

Telephone/ Zoom interviews with older adults, their carers and volunteers

Outcomes

- CHAMPS questionnaire for physical activity levels
- Step count (Accelerometer)
- Barthel Index
- Telephone MMSE
- EuroQol
- Measured at baseline and repeated after 6 months
- Adverse events
- Cost-analysis

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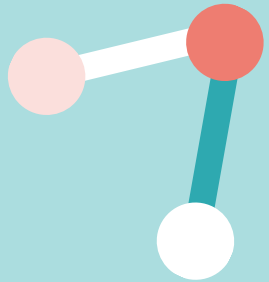
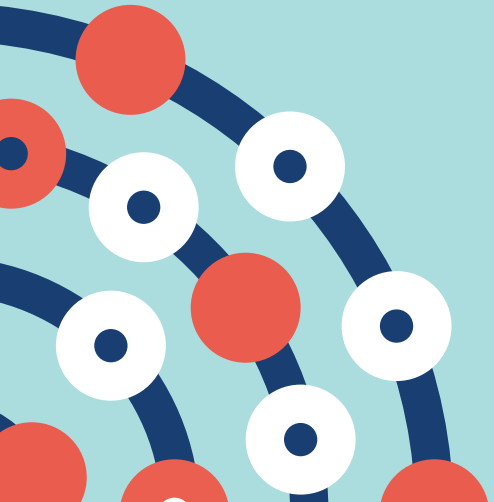
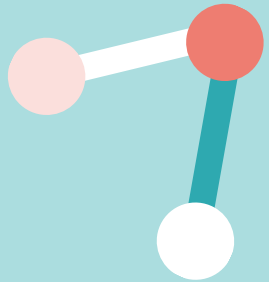
Turning challenges into opportunities



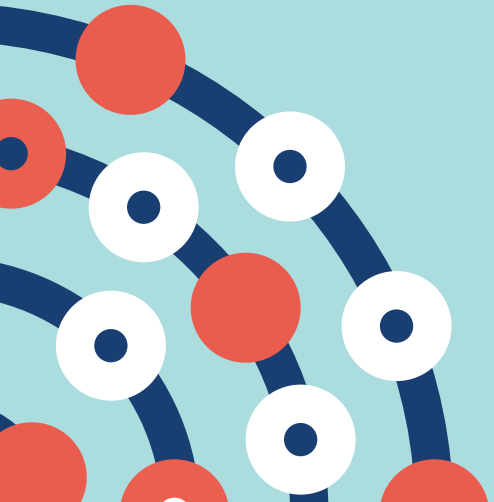
1. Wider reach geographically
2. Address the issue of social isolation and loneliness during the pandemic
3. Gained experience in delivery online exercises
4. Working with older adults through the digital platform



Learning experience



- Ongoing process
- Importance of being adaptable to meet the needs of older people
- Future directions



Any questions/ comments?

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Public partnerships through COVID

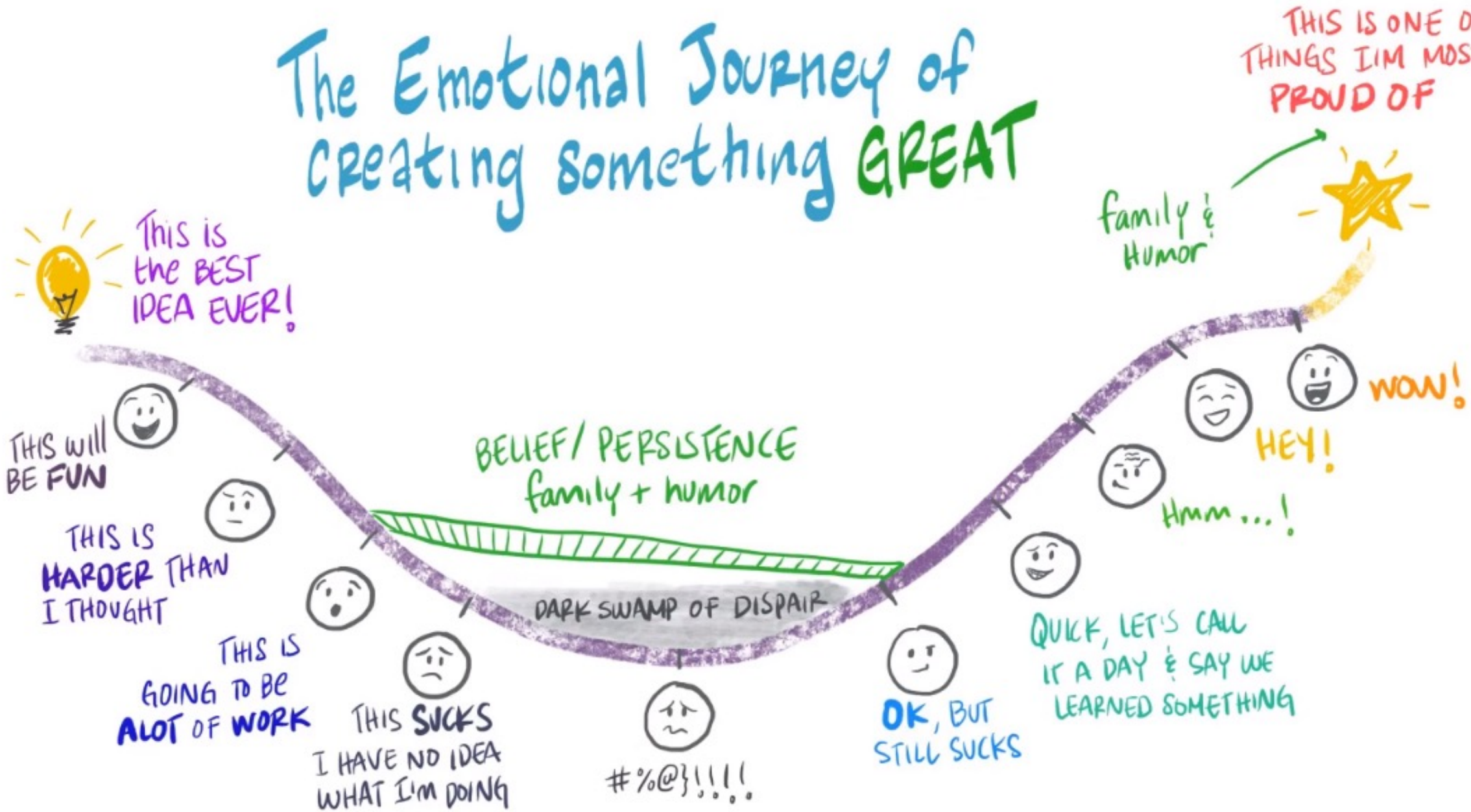
Caroline Barker

Patient and Public Involvement Lead

University Hospital Southampton NHS FT
NIHR Clinical Research Facility
NIHR Biomedical Research Centre

WESSEX Public Involvement Network

The Emotional Journey of creating something GREAT




WELL-THIS MAY BE A REVOLUTIONARY PILL...
BUT I'M NOT SURE THE PUBLIC WILL BE WILLING TO SWALLOW IT...
djamk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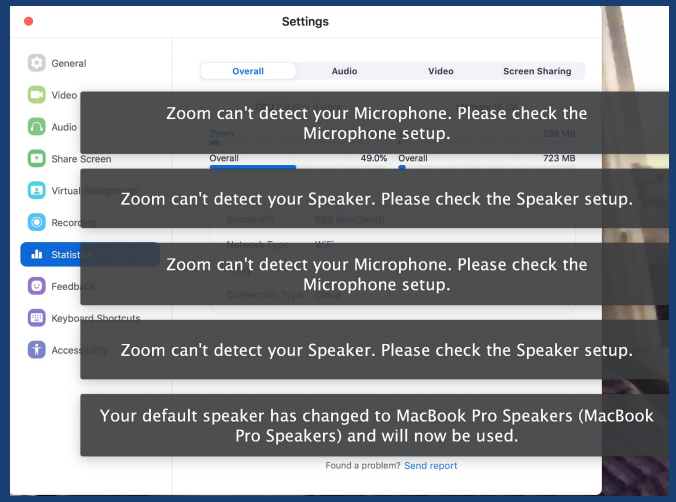
Volunteers needed for latest UK COVID-19 vaccine study launched in Southampton
Updated: Apr 29


CENTRE for PUBLIC SCRUTINY

Pushed ourselves

Readdressed Power



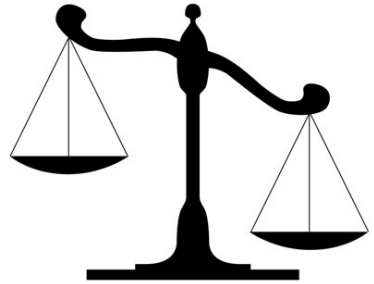
Delivered at pace

Exploring public attitudes to a human challenge study with coronavirus taking place in the UK

Mixed-methods study to explore public attitudes

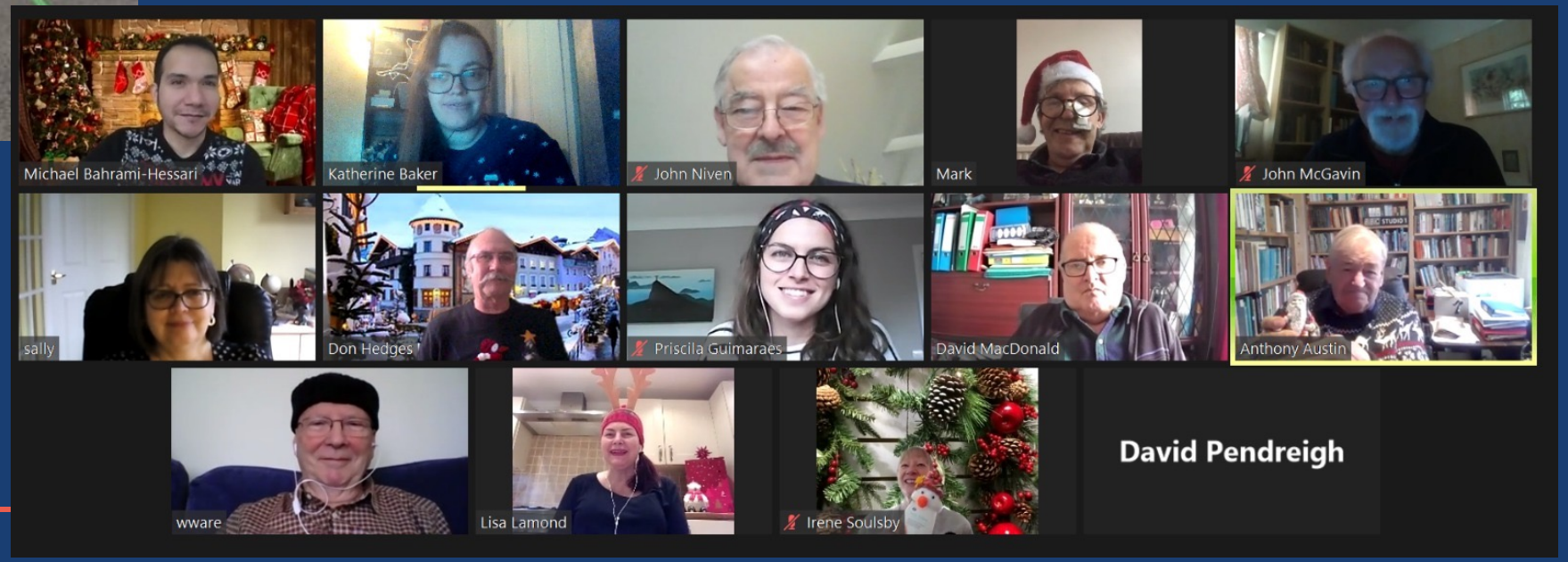
Online survey	Focus groups
2442 responses Representative sample across UK	9 groups, 57 participants

Human challenge with coronavirus study public involvement activities



Improve the study information sheet and experiences of participants	Discuss ethical considerations of inclusion/ exclusion criteria	Reflecting on study now vaccine rollout has begun

Invested in relationships

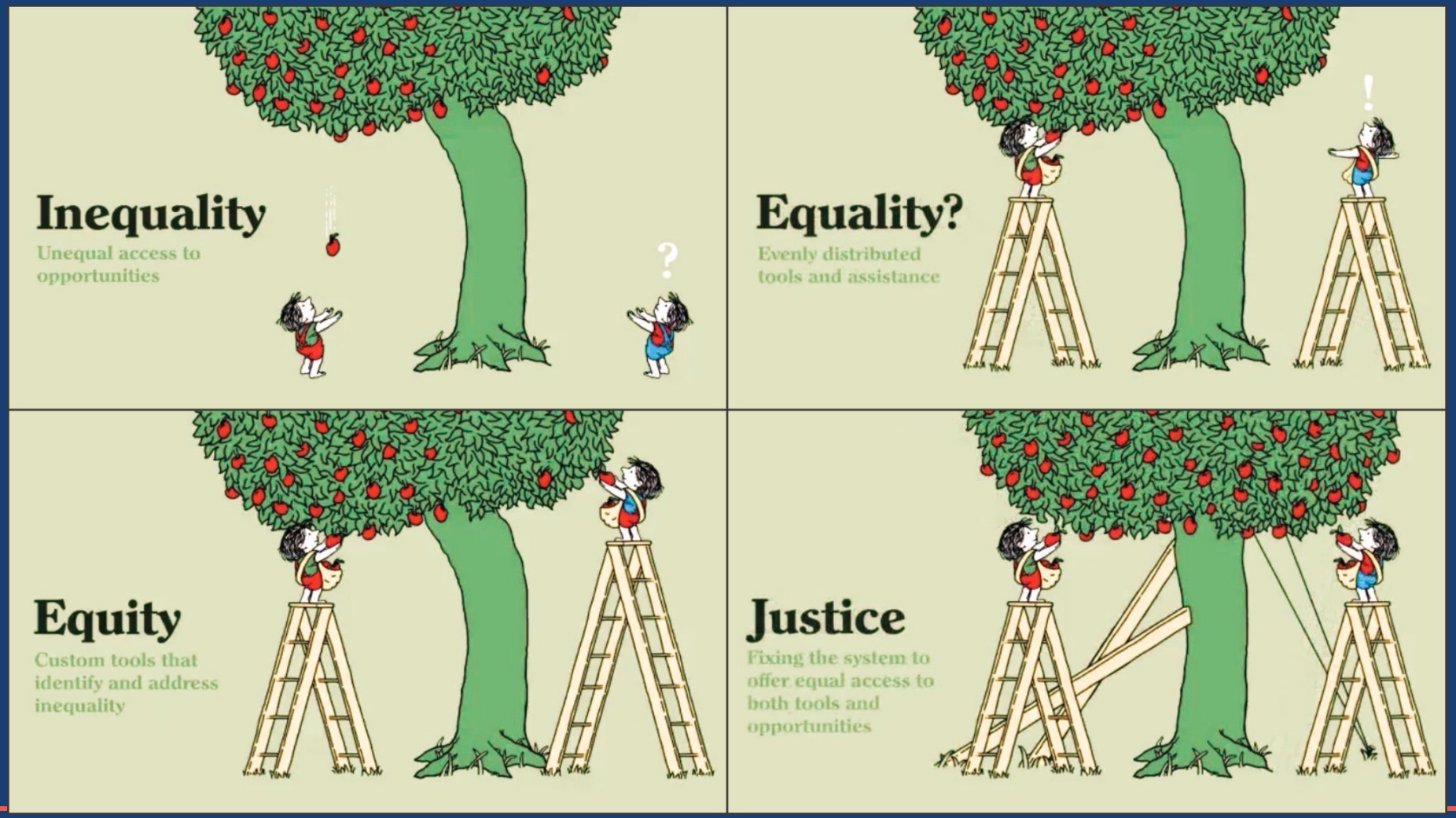


Received support

“I returned to ITU to work as a nurse during the first lockdown. I will never forget [the PPI members] genuine efforts to look out for my wellbeing and I consider myself lucky to work with such inspirational and caring people.”

Carmel McGrath, PhD student in PPI

Recognised inequalities

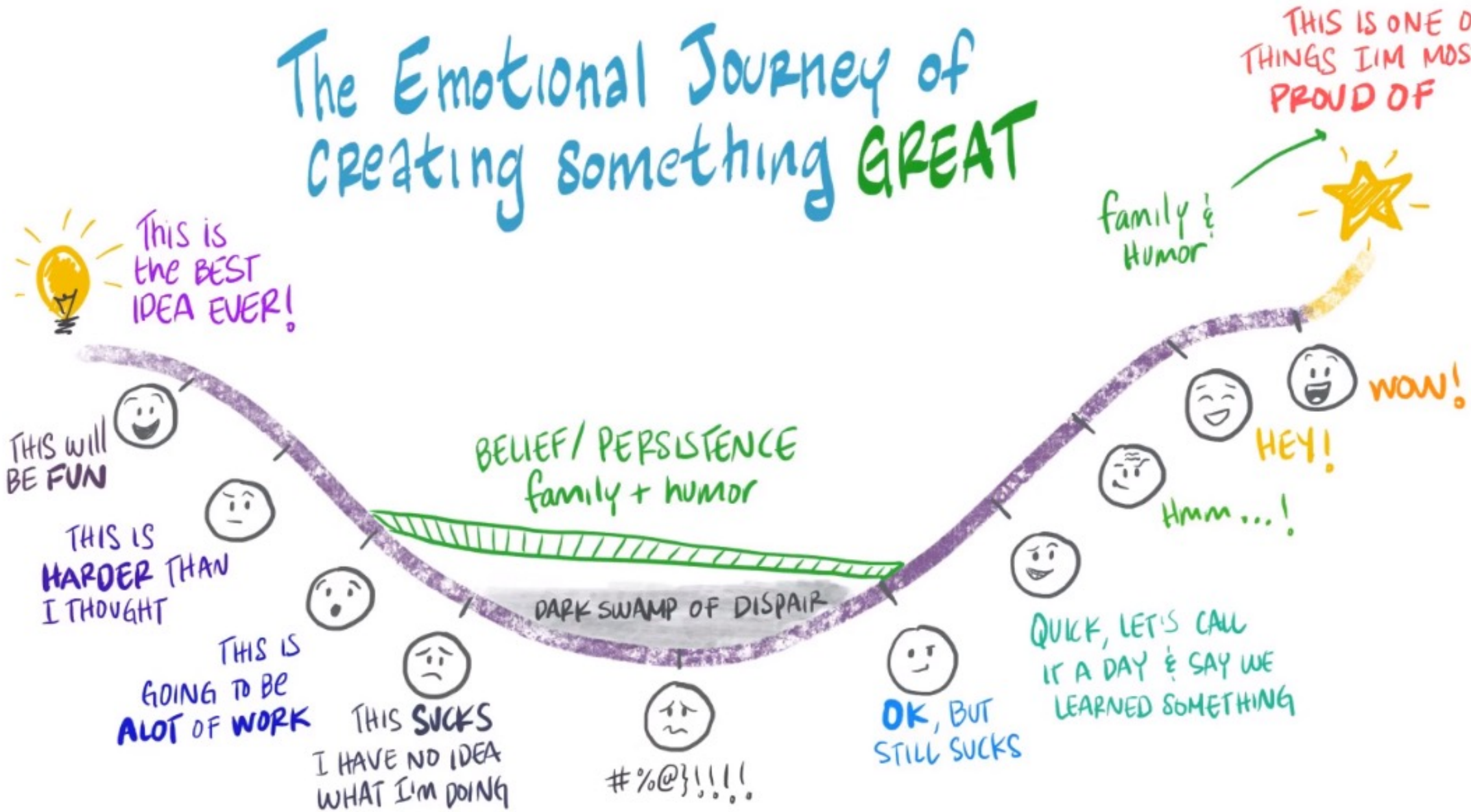


Created impact

“The Wessex ARC has a growing reputation (and envy) for the way PPI/E is being handled. It has a reputation for supporting younger Researchers in their skills in putting together cases for Research… There is not one among us who doesn’t value how much we have grown and become better skilled thanks to [the PPI Team]… It has been a two-way process. We have watched hesitant Researchers try out their presentation skills on us while seeking support in the understanding and value of their research proposals in return. ”

Anthony Austin, Public Contributor, Dorset

The Emotional Journey of creating something GREAT



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How has COVID-19 changed my research?

Dr Katherine Bradbury

Impacts of Covid

- N of grant applications increased dramatically (risk of burn out).
- Grant applications have quick turn around time and are hugely competitive (e.g. 500 applications for 1 call).
- Some existing research has had to change – e.g. couldn't recruit patients from some services (e.g. DFU clinics) during the first year of the pandemic.
- Some research studies had to change significantly – e.g. preventing respiratory infections work (impact on intervention development, impact of social distancing/shielding on trial design).

Case study – NIHR Long Covid study

Highly variable, disabling and distressing symptoms, persisting months after Covid infection

Many symptoms: Fatigue, Breathlessness, “Brain Fog”, Anxiety / Depression

Amenable to treatment / rehab

But:

Services at capacity

Symptom based

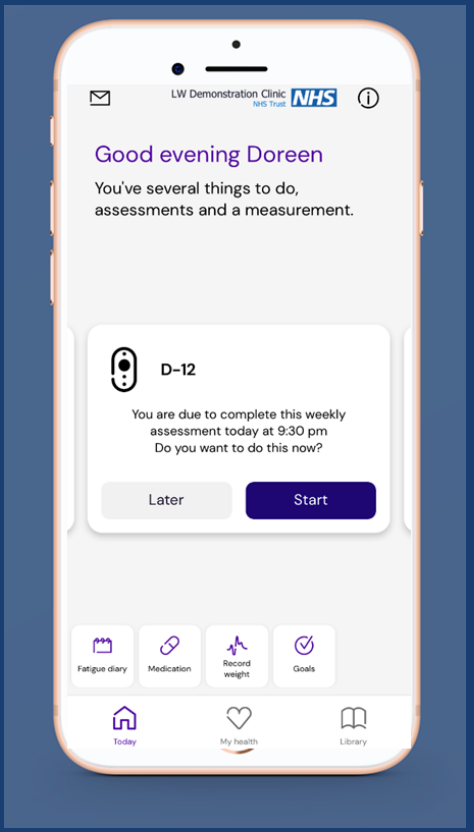
Patients reluctant to attend clinics / hospitals

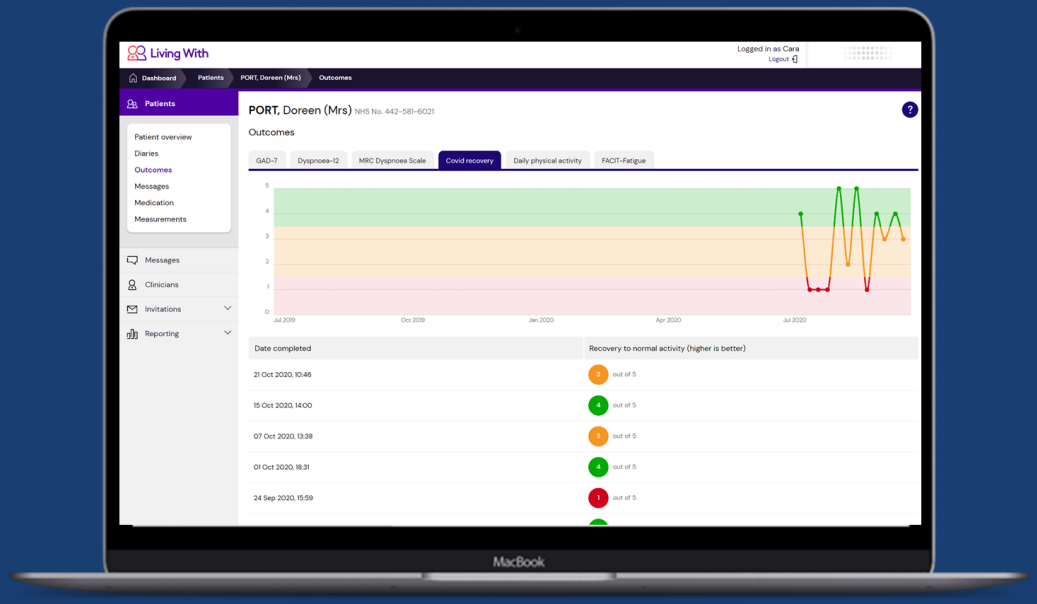
Could a digital solution help?

Aim: Rapidly develop, deploy and evaluate a digital intervention to treat adults with long covid, whilst mitigating against health inequalities.

Living With Covid Recovery:

- App for patients
- Dashboard for clinicians
- Clinical pathway (varies)
- The digital service is integrated alongside support from a clinician





Pandemic effects on intervention development

- Began with a minimum viable product in one trust and rolled out to others whilst we improved it…very different to my usual methods.

Challenge: relying on PPI input, rather than patient feedback.

- Real life service with no control over what clinicians are doing as they are creating their own new service at the same time as us.

Challenge: the need to develop an intervention that works across multiple scenarios.

Opportunity: Zoom allows weekly meetings with experts/PPI/clinicians from all over the country – speeds up the process.

Implications for evaluation and implementation

- Providing a **service at scale -** evaluation methods have to fit with this, so service evaluation methods (e.g. process evaluation), no comparator etc.

- Implementation happened very rapidly as urgent need and national mandate to provide services.

Challenge: Hugely time consuming, need contracts in place to use any data.

Facilitators: ARC and AHSN contacts + influence on infrastructure. AHSN ongoing role in collecting feedback to improve the service.

Other challenges

- Must start before contracts…without staff.
- Tension between NIHR processes and normal business for the commercial provider.
- Under resourced: Essentially a 5 year programme grant of work delivered in 2 years, but costed at less than half.
- Competitor product launched just after ours – though much feedback indicates this is less of a problem than anticipated.

Early days, but some initial findings

- Now spread across 14 trusts, 12 more going through contracting, nearly 900 patients using the app.

- Clinician feedback positive and positive comparisons drawn compared with YCR: Appreciate its usability, integrated approach, efficiency in patient management, co-design with HCP and patients, promotes MDT team working/learning.

Patient feedback

- *It's really thorough and guides you through advice and a really good way of tracking recovery and identifying problems. Makes you feel not alone in recovery process and illness is understood*
- *First impressions, I love it! The library is brilliant and easy to navigate and the photos just make it so much more attractive and user friendly. Genuinely helpful information, well laid out and hugely appreciate the reassuring, supportive tone*
- *It tells you what you need to do! Helps with appointments etc so you don't have to worry about chasing things and you can record how you feel in one place for a clinical team to see to guide recovery.*
- *Really useful to be able to send additional information back to the (clinical) team via message and receive messages back which is great as a really great individualised support.*

Conclusions

- Hard work has paid off – making an impact across very stretched services.
- Implementation at the same time as development has worked well in this context – would it have scaled as quickly in a non-pandemic scenario?
- Opportunities for increased team working with experts across institutions a massive gain.

The team:
Elizabeth Murray, co-PI
Henry Goodfellow, Co-PI
Fiona Stevenson, Fiona Hamilton, Manuel Gomes; Ann Blandford, Delmiro Fernandez-Reyes (UCL)
Hannah Hylton, John Hurst, Mel Heightmann, Paul Pfeffer, Will Ricketts, Richa Singh (RFH / UCLH / Barts /),
William Henley (Exeter)
Chris Robson / Living With
Julia Bindmann (PPI)