Does it work?
Evaluating Digital Health

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My Background

- Senior Lecturer in Digital Health and Wellness

- BSc. Psychology (1998)
- PhD Computing Science (2002)
- Smart Home Technologies and Independent Living
- Technology enabled self management of LTCs
- Implementation and evaluation of digital health at scale

- £37m ‘dallas’ prorgramme – Innovate UK 2012-2015

The Opportunity

Citizens expect health and care to be part of their digital lifestyle

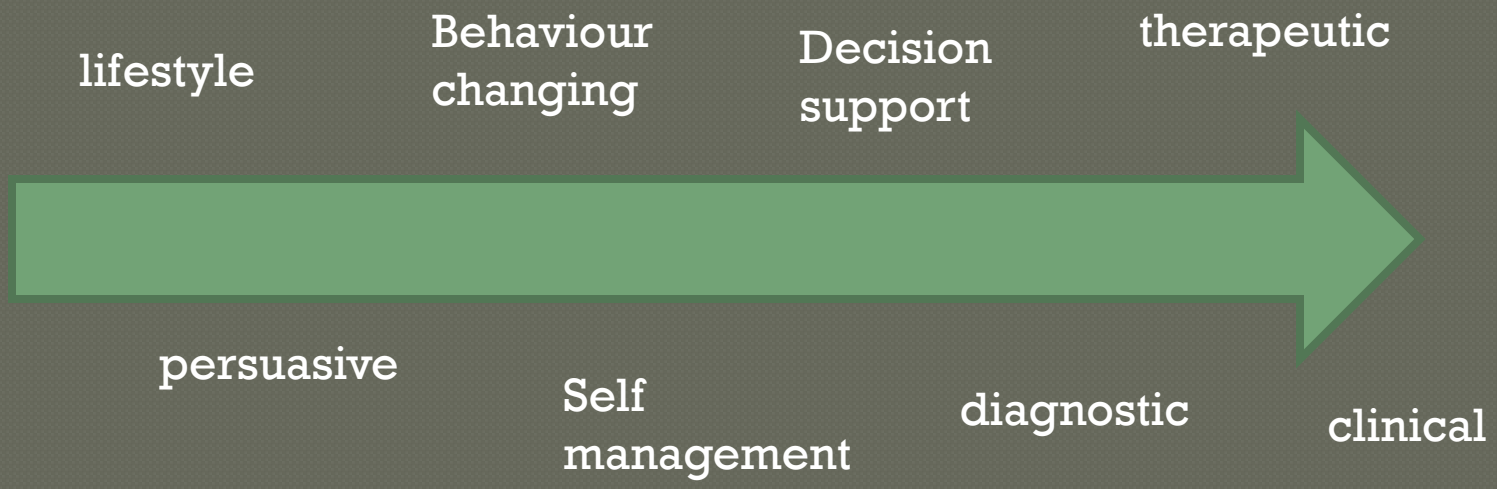
The Challenge

How do we know if our solution 'works'?

How do we get products and services routinized at scale….

……quickly?

Depends how you pitch it….

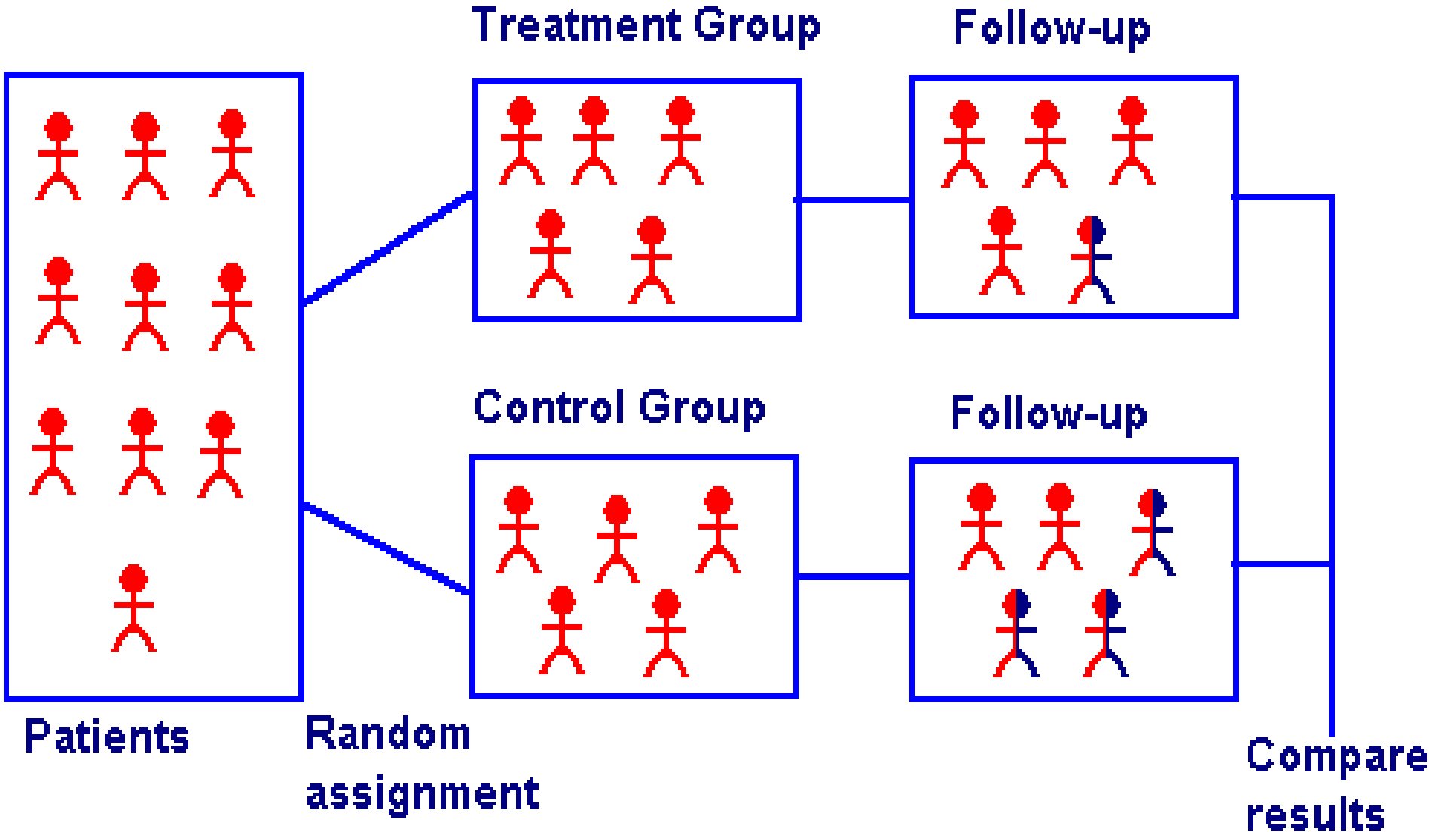


How do you evaluate mhealth?

The Medical Device Perspective:

1. **Is it Safe**
   - **Does not cause harm**
2. **Is it Effective**
   - **Does what it is supposed to do (acne example)**

The Drug Testing Model



How do you evaluate mhealth?

The Technologists Perspective:

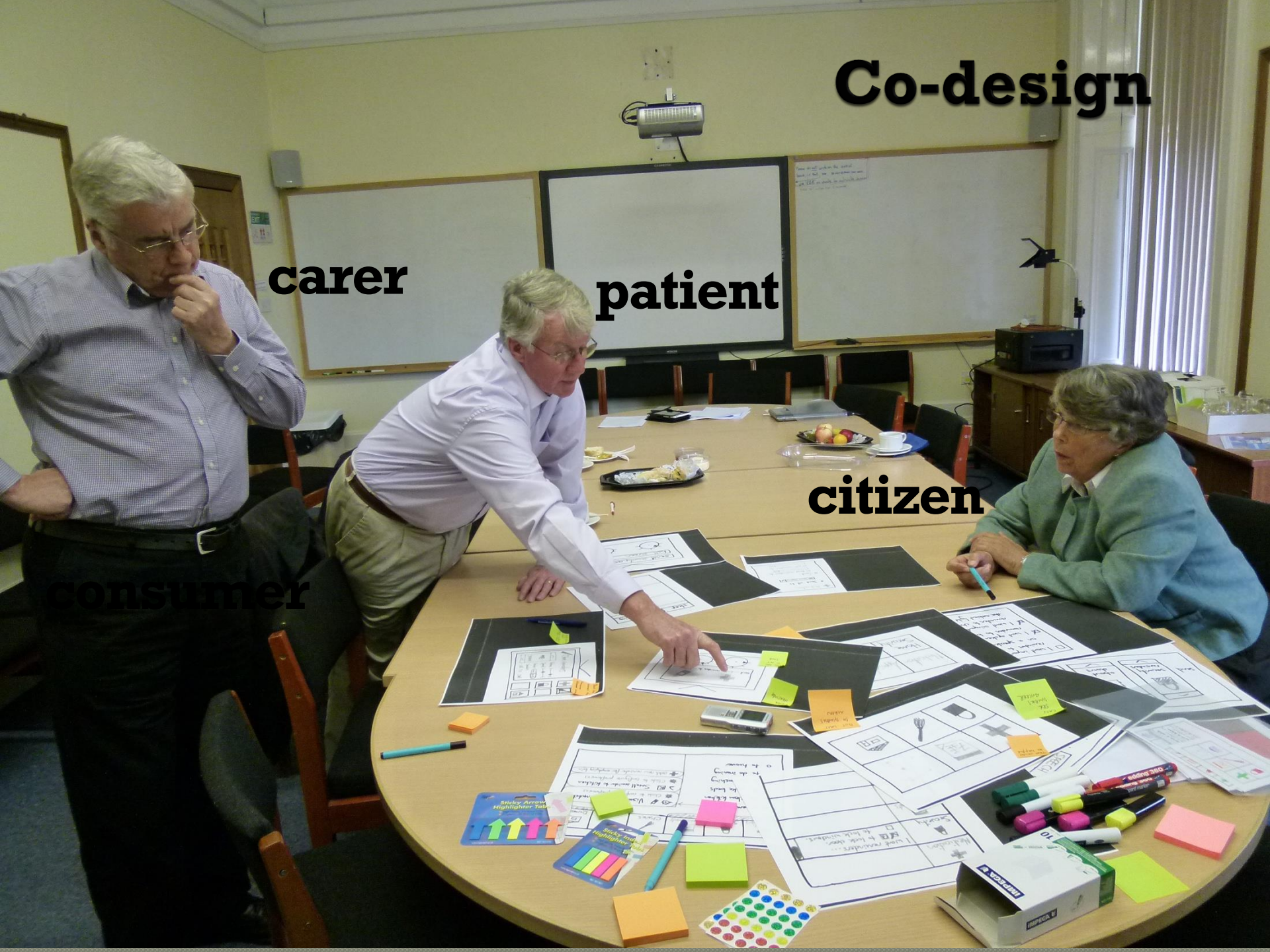
3. **Is it technically sound / does it function as intended?**

Controlled Lab Studies

How do you evaluate mhealth?

A User Centered Perspective:

- **Usable**
- **Accessible**
- **Has Perceived Utility**
- **Source of content**
  - **clinical / evidence based / sponsored**


Co-design
carer
patient
citizen
consumer

How do you evaluate mhealth?

An economist/commissioner/funder view:

- **Cost Effective**

£4.4bn

could be invested back into the NHS with better use of information and technology

Source:
PwC

£1.3bn

worth of prescriptions were dispensed in the community in 2013

Source:
Health and Social Care Information Centre

29%

of key stakeholders believed the ambition to go paperless by 2018 was realistic

Source:
Health Service Journal magazine

How do you evaluate mhealth?

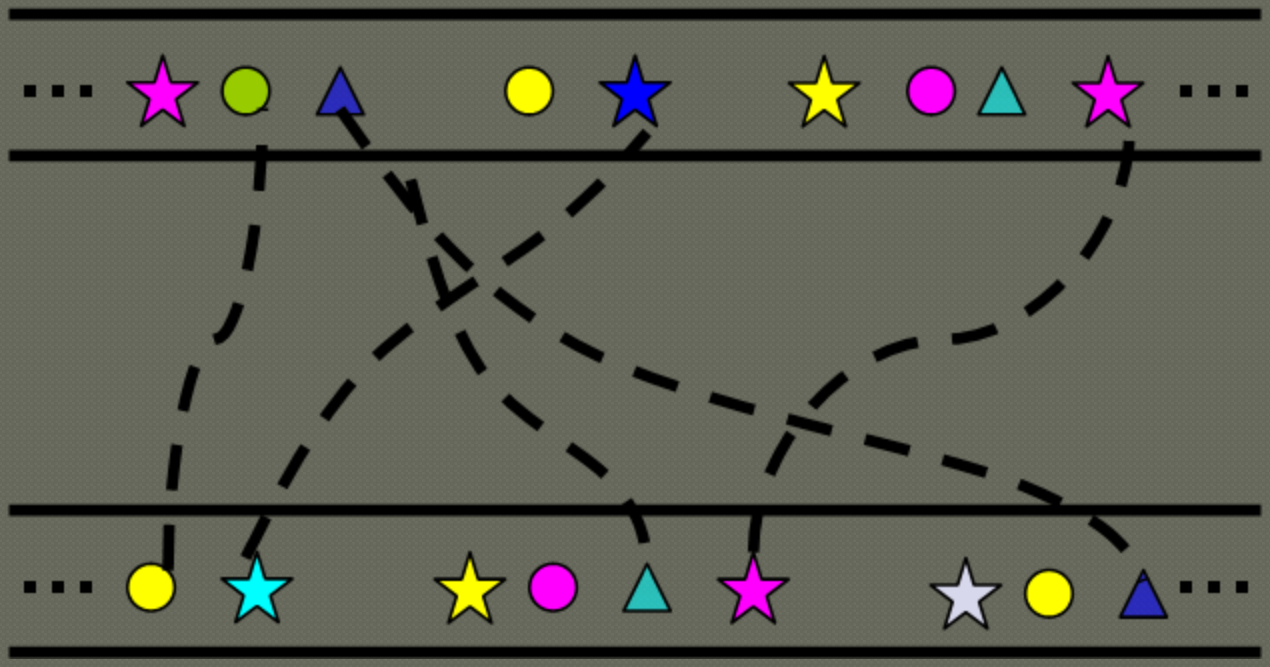
A policy makers view?

- **Does it change the way we do/deliver something?**
- **Does it improve quality of care?**
- **Does it demonstrate ROI?**

So how do we satisfy all these requirements and keep everyone happy?

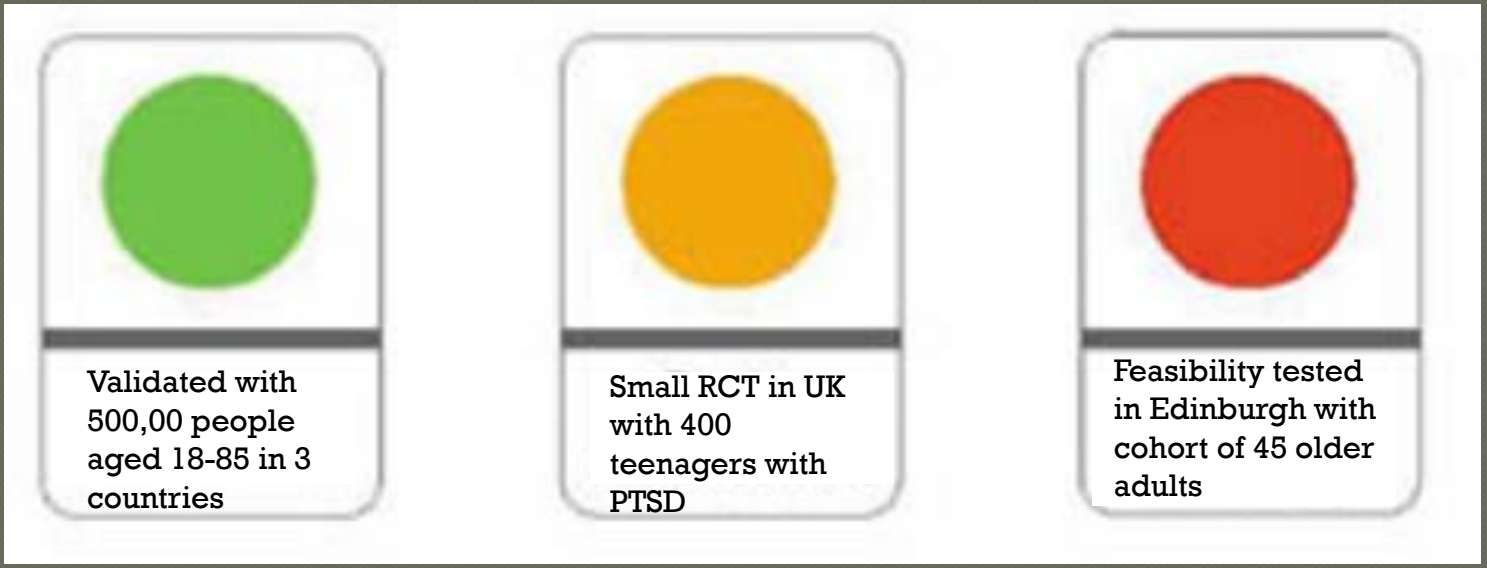
1: Build evaluation metrics into your product/service

2: Link and share data from different research programmes and systems on a larger scale



3: Re-use techniques and tools that have been tested and work

4: Be transparent about the 'quality' of your final product/service



Validity, evidence, confidence transferability

Innovation, transformation, scale, routinisation

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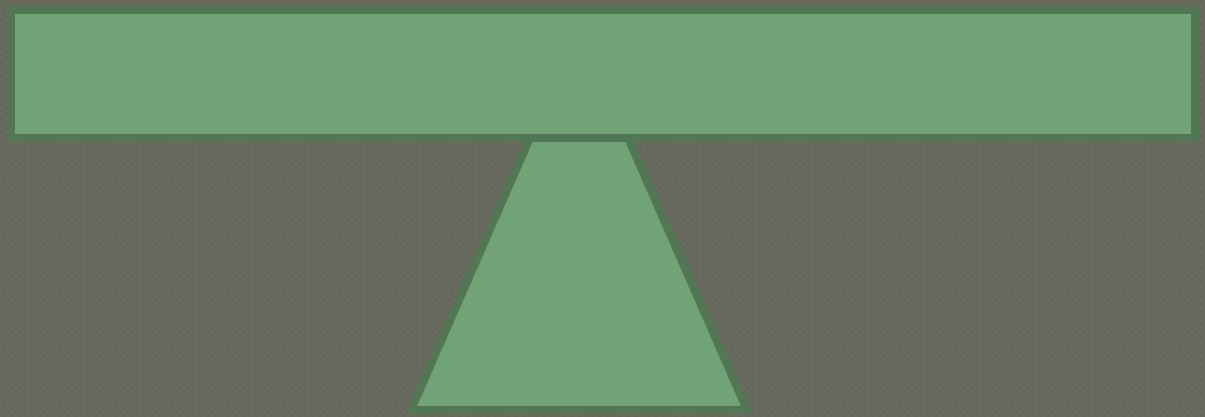

Thank You

Collaborate with us

Digital Health and Wellness Group @ Strathclyde University

We work with NHS, businesses, charities, private and public sector and other researchers to design, develop and evaluate effective mobile health and wellness related technologies and services to improve personal and population health and wellness.

Email us if you are interested in collaborating

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