

# Scotland's Digital Mental Health Innovation Cluster Launch Event

Thursday 10 March 2022

1300-1630



Digital Health & Care  
Innovation Centre



Scottish Government  
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# ON AIR

## Attendees please note

1. We are **recording this event** and it will be hosted on our DMHIC webpage resources so it can be watched on demand
2. If you **do not** wish to appear on the recording, you must keep your camera and microphone turned off for the duration of the event
3. As a courtesy to our speakers and guests, we ask all attendees to **turn off** microphones and cameras during presentations
4. Drop your **questions in the chat field**, where they can be answered



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# Today's event

Chris Wright, Digital Mental Health Programme Lead



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# Agenda

1300 Welcome and Introductions - **Chris Wright** Digital Mental Health Programme Lead

1305 Setting the Scene Digital Mental Health

- Digital Mental Health Programme **Chris Wright** (10 minutes)
- Academic Perspective **Andrew Gumley** (10 minutes)
- Commercial Perspective **Silver Cloud** (10 minutes)
- Clinical Perspective **Andy Keene** (10 minutes)
- Scottish Government Perspective **Margaret Whoriskey** (10 minutes)
- Global Best Practice Report **Joanne Boyle** (5 minutes)

1400 Matter of Focus Workshop

Digital Mental Health Innovation Cluster focus and Impact

1500 Refreshment break

1515 Matter of Focus Workshop

Digital Mental Health Innovation Cluster focus and Impact (continued)

1630 Summation/ Close



# Welcome and Introductions

Chris Wright, Digital Mental Health Programme Lead



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# Setting the Scene Digital Mental Health

Different perspectives...

# Digital Mental Health Programme Activity

Chris Wright, Digital Mental Health Programme Lead



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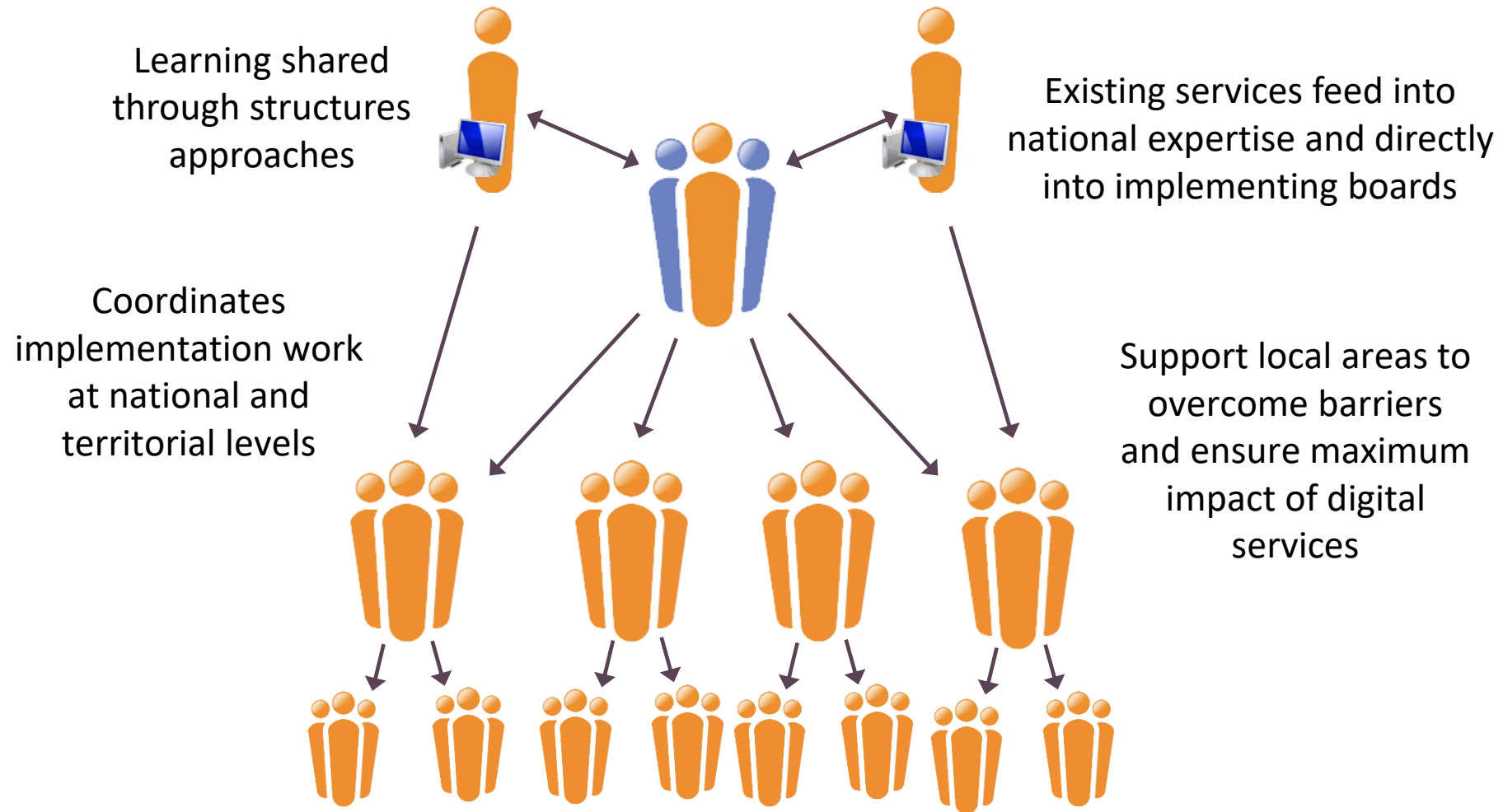
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# Digital Mental Health Programme



# Digital Mental Health Programme

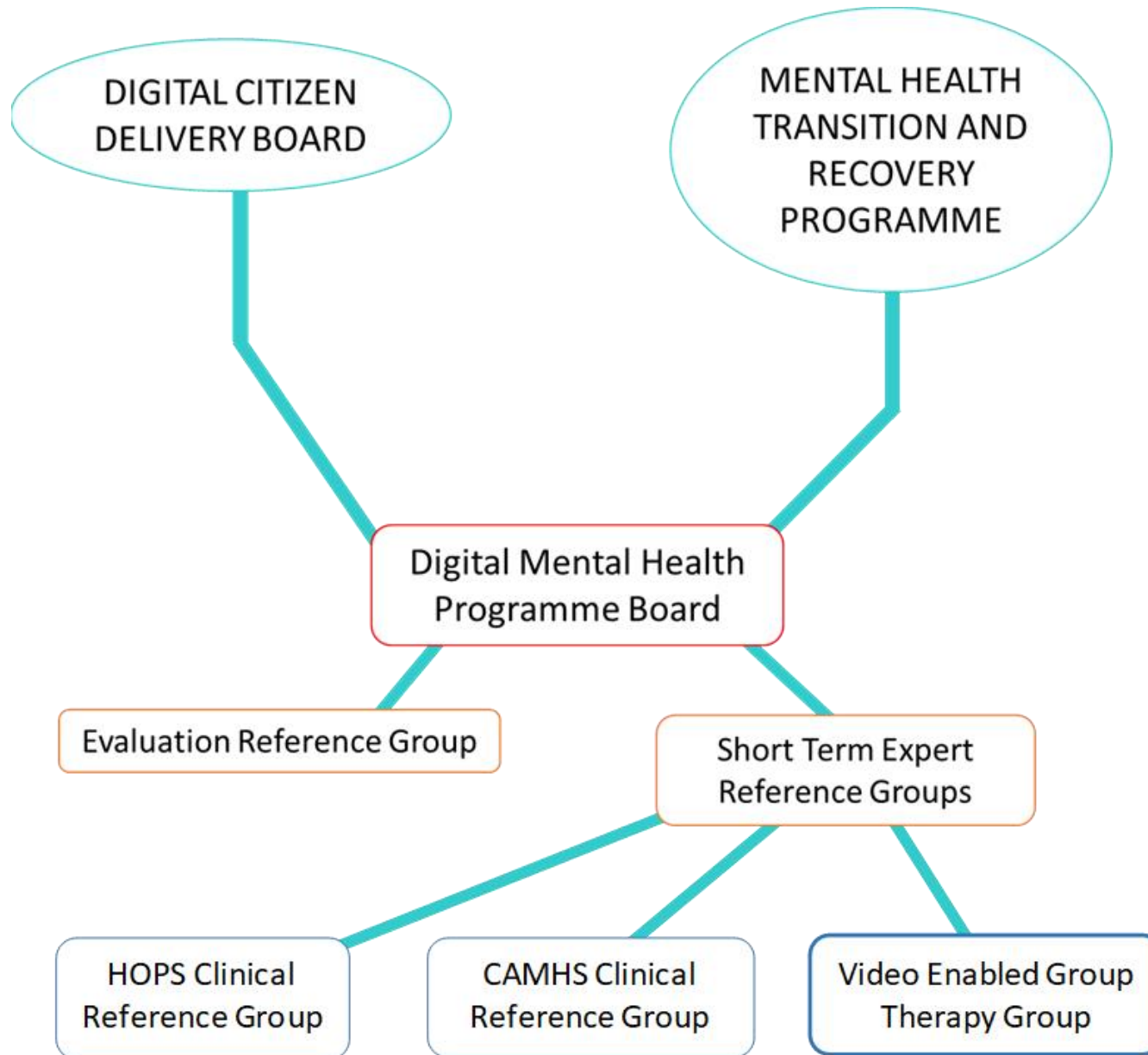
National Programme Team established December 2020



***Supports national implementation greatly reducing set-up time***

# Governance Structure

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# Barriers to Implementation

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Overcoming barriers to ensure large scale deployment of digital

# Collaborative Approach

Clinical  
Implementation  
Service Delivery  
Technical  
Policy



Partners from all  
regional health and  
care territories

**Development of  
shared understanding  
of need**

**Ownership  
and buy in**

**Common Goals**

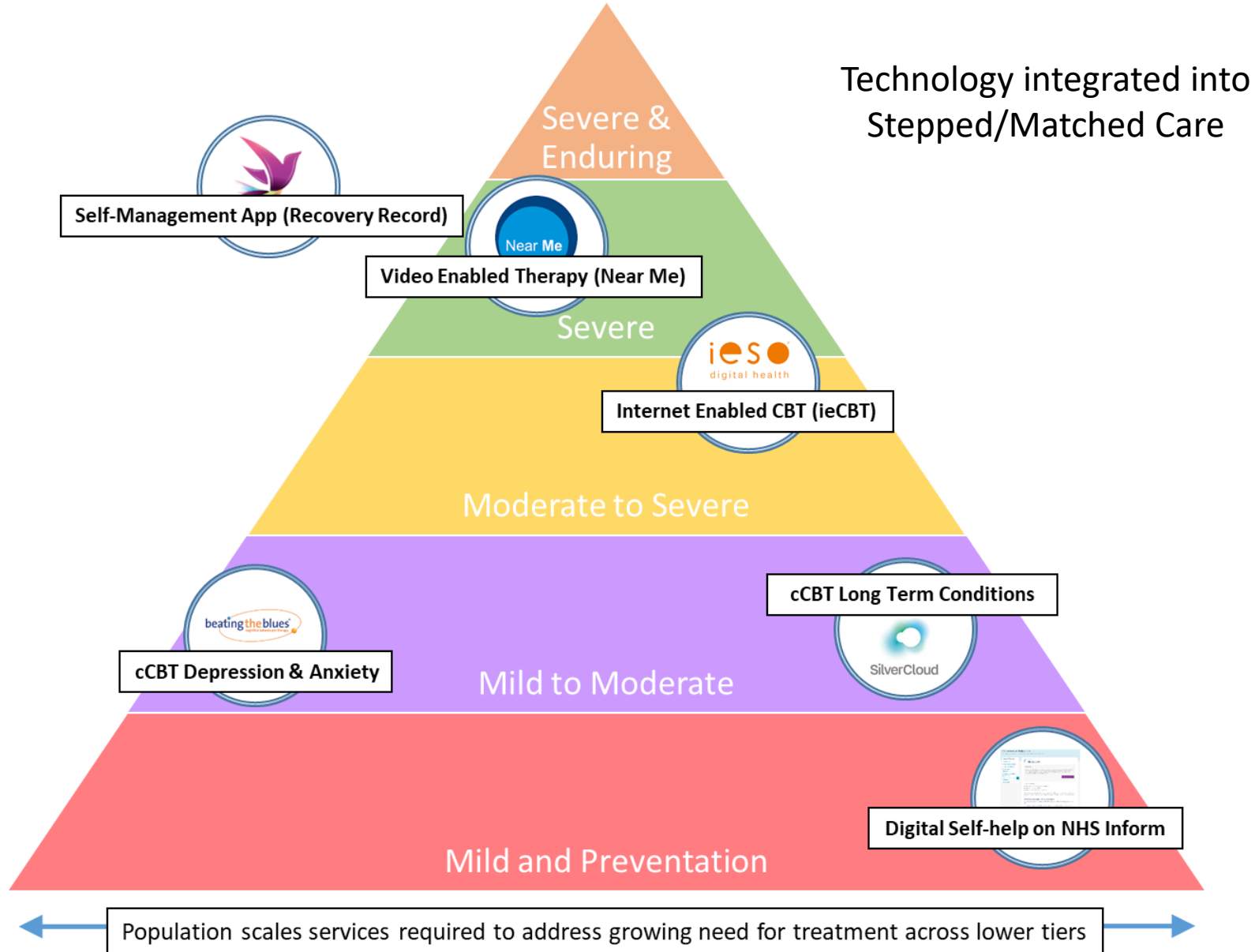
Building shared and defined responsibilities across all partners

# Digital Services

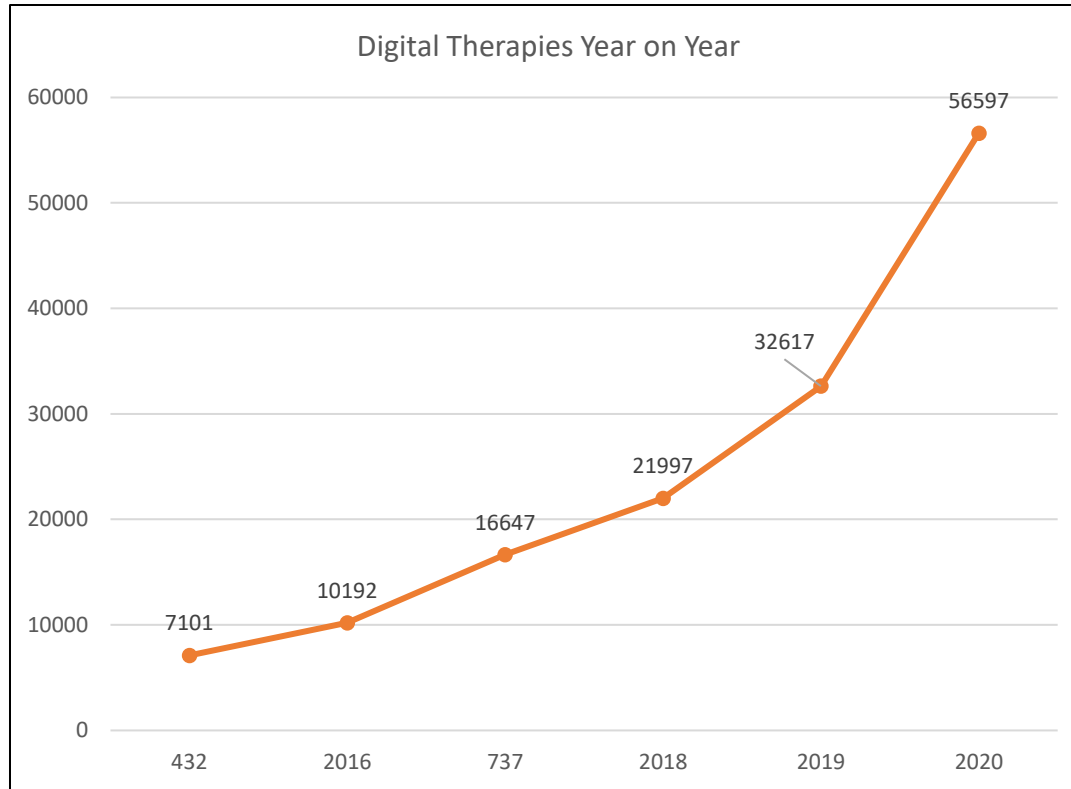
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|                                       |   |
|---------------------------------------|---|
| <b><i>cCBT</i></b>                    | Online sessions, deliver across short 20 minutes CBT modules, animated sequences, video clips, case studies and CBT exercises   |
| <b><i>ieCBT</i></b>                   | Clinician lead CBT treatment delivered in written form, overcomes geographical barriers   |
| <b><i>Near Me (video enabled)</i></b> | Tele-psychiatry and tele-psychology integrated into existing services, deliver via Attend Aware Video Conferencing Platform   |
| <b><i>Online Self-help</i></b>        | Online interactive psychological self-help guides hosted on national site NHS Inform  |
| <b><i>Self-management</i></b>         | Categories: Self monitoring, Mindfulness/Relaxation, Reminders, Peer Support, Mood Trackers, Self & Risk Management. Conditions; ADHD, Autism, Addictions, Anxiety, Bipolar, Depression, Eating Disorders, Panic, Phobias, Stress, Brain Injury |

# Integration into Service Model



# Usage



**56,597 referrals in 12 month period**

17,653 through self-referral

13,937 in October and November

Suicide ideation of over 4,000 citizens actively monitored per month

6,338 Health and Care staff supported

## **In addition to this:**

341,425 mental health self-help guides accessed through NHS Inform

Over 27,000 video consultations being carried out per month through Near Me

# Increasing Digital Treatments

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## 21 digital therapy treatments now available

*Beating the Blues:*

Depression/Anxiety

*Silver Cloud:*

Social Anxiety

Health Anxiety

LTC Depression and Anxiety

(diabetes, respiratory, heart conditions, chronic pain, rheumatoid arthritis)

Stress

Resilience

COVID-19

Panic

OCD

Phobias

Perinatal

CYP

Supporting An Anxious Child

Supporting An Anxious Teen

*Big Health:*

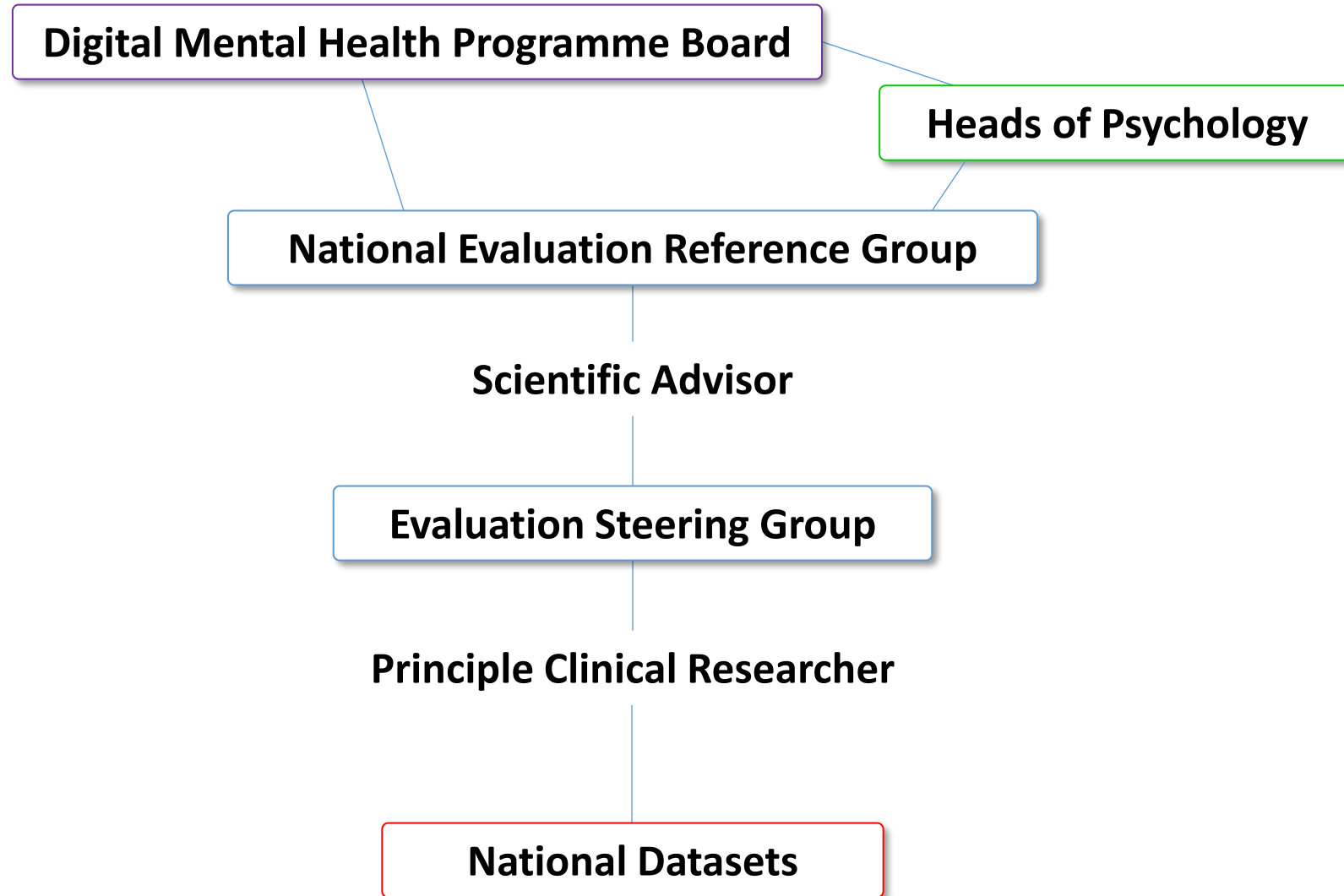
Insomnia (Sleepio)

GAD (Daylight)



# National Approach to Evaluation

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# Future Priorities

## Service Development

Child and Young People  
Expansion of Adult Services  
Self-referral Services  
Self-management

## Priority Areas

Older Adults inc. Care Home Residents  
Drug Deaths and Homelessness  
Autism and Learning Disability  
Suicide Prevention  
Staff Wellbeing

## Infrastructure

Patient management systems and  
interoperability of digital therapies  
Digital inclusion  
Workforce training, skills development  
Evaluation and innovation  
Data  
Cultural Change

## Ongoing Challenge

Finance model that promotes  
stability and growth  
Local capacity and prioritisation  
Organisational personalities i.e.  
different approaches and  
requirements

# Technological Opportunities

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## Emerging Technologies

iCBT = Internet Cognitive Behavioural Therapy

Video Enabled Therapy

Remote Monitoring

Gamification Technology

Virtual Reality

Machine Learning

AI Chat Bots

## Current Opportunities

*Video Enabled*; regional model, national groups, local group therapy

*Peer Support*; CYP, Adult, Specialities

*Expansion of ieCBT*; self-referral

*Expansion of cCBT*; self-referral, prisons, treatments, higher education

*Self-management/self-help*; assessment, infrastructure, digital apps

**Thank you**

**and please get in touch:**

`chris.wright@gov.scot`

# Academic Perspective

Andrew Gumley



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of Glasgow

# Scotland's Digital Mental Health Innovation Cluster Launch Event

Speaking from the academic perspective

Professor Andrew Gumley



# Digital Mental Health Innovation

- Significant opportunities for the development and implementation of scalable digital mental health interventions.
- These opportunities present important challenges research challenges including:
  - Evidence at each stage of the development process
  - Inclusive methods involving multiple stakeholders
  - Recognising and incorporating complexity
  - Implementation and scalability concerns from outset



# Innovation challenges reflect complexity challenges

- Creation of digital ecosystems where digital mental health interventions can sit within care pathways.
- The development of DHIs that are both highly effective and engaging
- Innovation that is geared towards addressing inequalities
- Building trust in digital tools

Roland J, Lawrance E, Insel T, Christensen H. The digital mental health revolution: Transforming care through innovation and scale-up. Doha, Qatar: World Innovation Summit for Health, 2020.

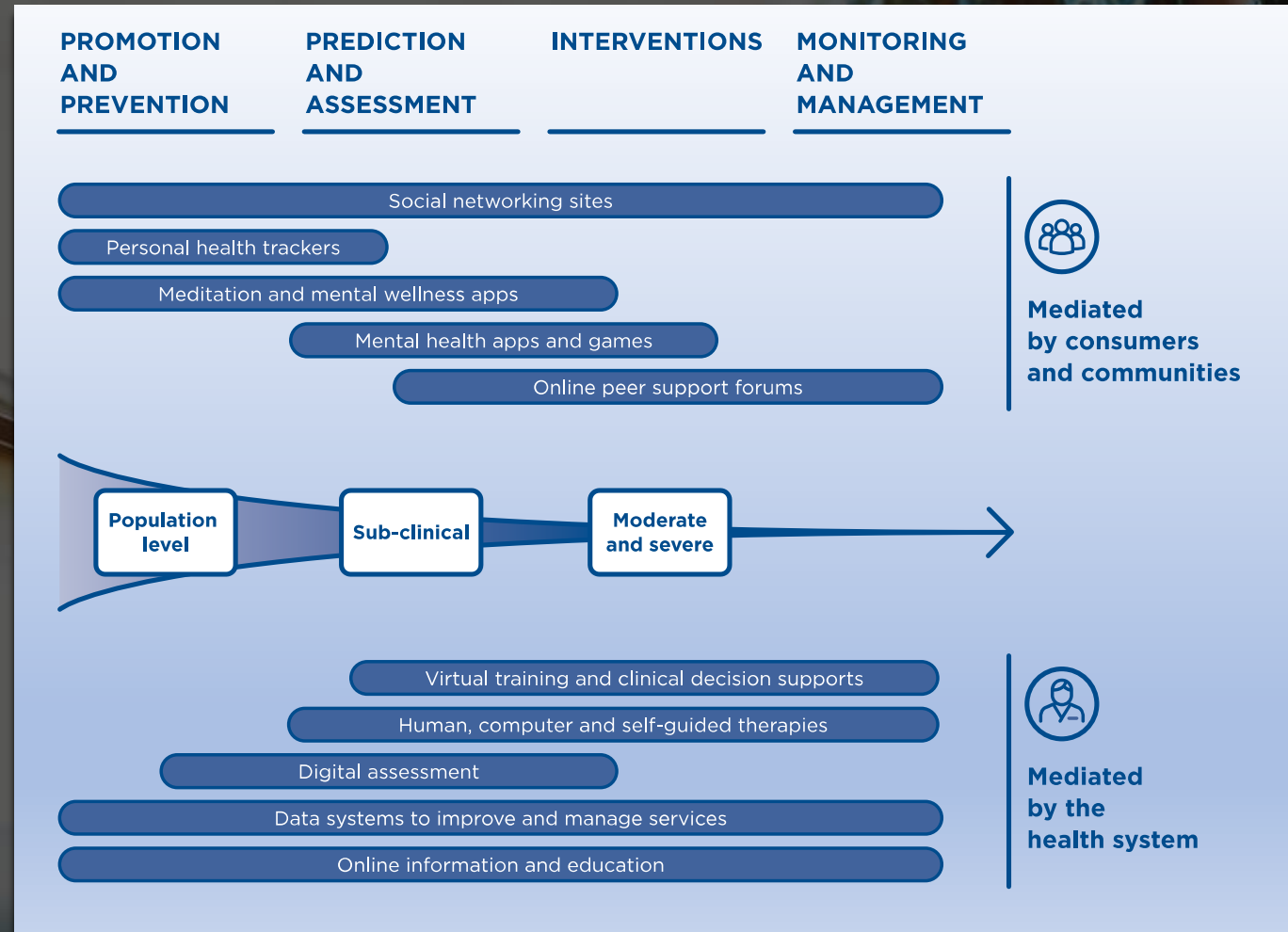




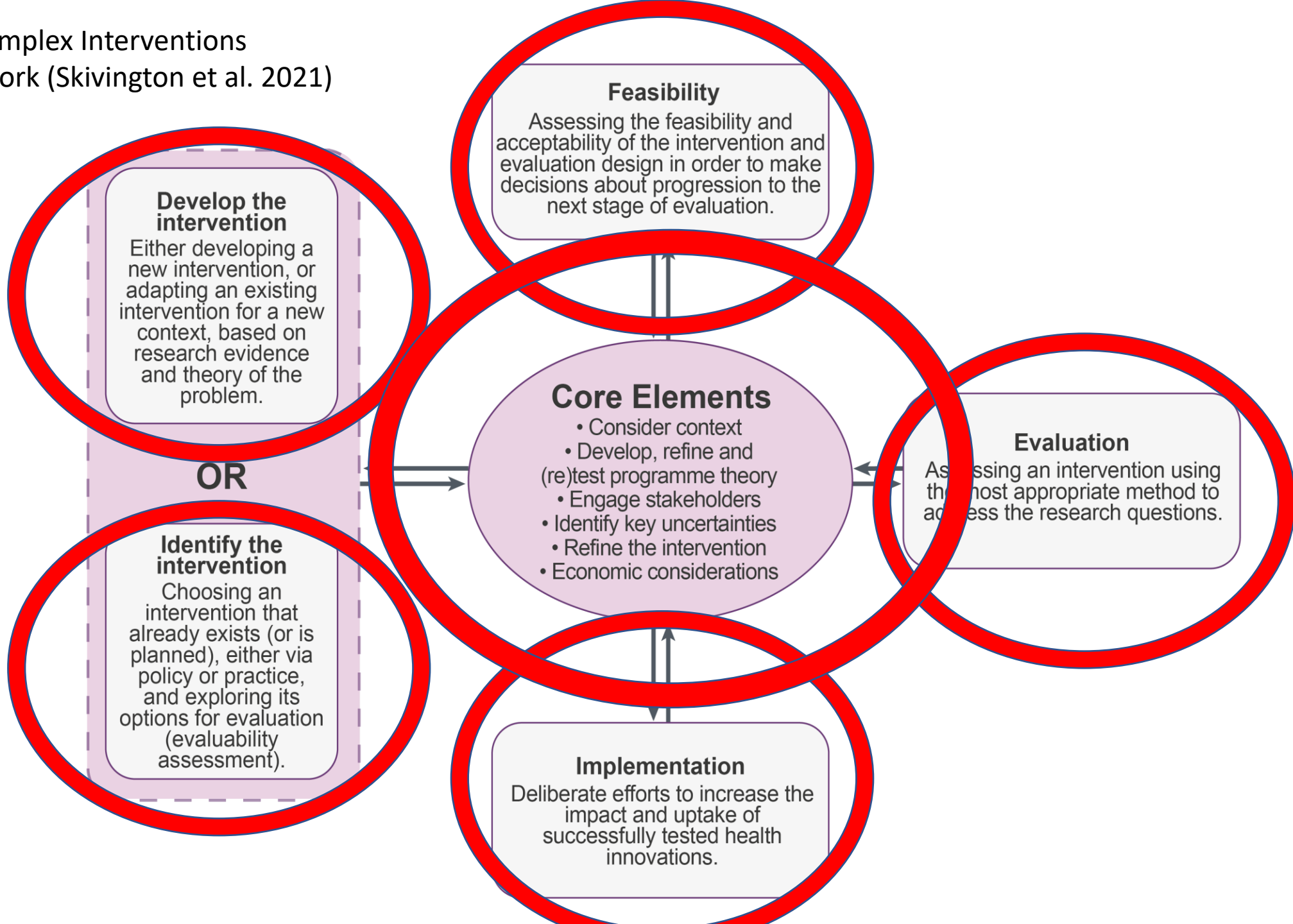
# Complex Interventions Framework

- A complex intervention is defined as an intervention that has multiple components (or activities) that interact with each other and are sensitive to context.

Skivington K, Matthews L, Simpson S A, Craig P, Baird J, Blazeby J M et al. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance *BMJ* 2021; 374 :n2061 doi:10.1136/bmj.n2061

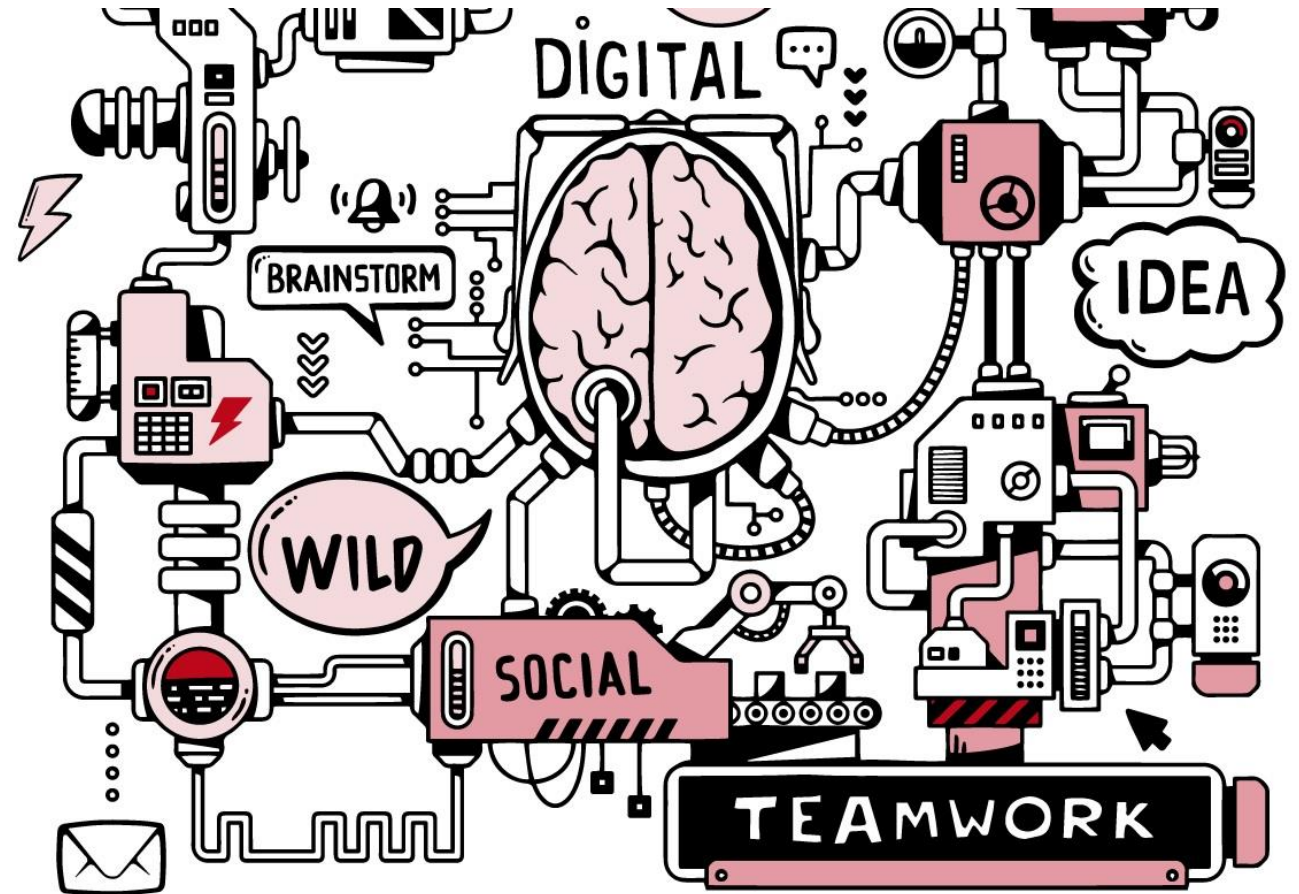


# MRC Complex Interventions Framework (Skivington et al. 2021)



# The need for a Team Science approach

- Team Science is a collaboration between a group of scientists to address a particular scientific challenge.
- The team may be chosen from a broad range of disciplines, bringing together their individual skills and knowledge to solve a particular problem.
- Opportunity to develop inclusive environments bringing together diverse stakeholders and experiences





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of Glasgow

Professor Andrew Gumley

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@andygumley



# Commercial Perspective

Silver Cloud - Derek Richards and Steve Roberts



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SilverCloud

# Digital mental health care

Proven Outcomes Delivered at Scale

March 2022





**30+**

Global Programs/  
Therapy Areas



**17+**

Years of  
Research



**800k+**

Active Users

### Provider Systems



**65%+**

Significant Clinical  
Improvement

**83%+**



**NHS**

NHS IAPT services



**8m+**

Clinical  
Interactions

**93 NPS**

US Healthcare Organizations  
(Jan 2021)



**94%** User satisfaction

# Tools, Programs & Coaching

Money Worries  
Self-Esteem  
Relaxation  
Anger Management  
Employment Support  
Challenging Times

Communications & Relationships  
Sleep Difficulties  
Behavioral Experiments  
Mindfulness  
Grief & Loss



**Stress**



**Resilience**



**COVID-19**



**Core Beliefs**  
Anxiety & Worry  
Facing Your Fears



**Insomnia & Sleep**  
Sleeping Less To Sleep Better  
Sleeping Less To Sleep Better (Shiftwork)



**Diabetes**



**Managing Worry**  
Low Mood & Getting Active



**Depression & Anxiety**  
Core Beliefs  
Facing Your Fears



**Chronic Pain**  
Core Beliefs

**Stand Alone Sessions**

**WELLBEING PROGRAMS**

**INTERVENTIONAL PROGRAMS**

**Coached Delivery**  
Escalation: Low to high intensity

**Self Care**



# A flexible delivery approach.

SilverCloud can be used as self-guided or coached, depending on the level of need/complexity of mental health.

It fits into existing pathways and complements current services.

Flexible delivery model helps when resources are constrained



## Self-guided model

SilverCloud programs offered unsupported or self-guided for positive mental health and wellbeing.

**Settings:** Primary (Lower intensity), Specialty (Lower intensity)

**Referral Path:** Self referred; Referred by clinicians/employer



## Coached model

SilverCloud programs offered with asynchronous support, where the coach provides short, motivational feedback to keep the user progressing through the program.

**Settings:** Primary, Specialty

**Referral Path:** Self referred; Referred by clinicians/employer



## Therapy (blended) model

A blended therapy model, where SilverCloud used as an adjunct to face-to-face therapy (in-person or virtual).

**Settings:** Secondary (Higher intensity), Specialty Care (Higher intensity), At risk populations

**Referral Path:** Referred by clinician

# Research & Outcomes: Core of Our DNA

**1,700+**  
citations in  
peer-reviewed  
publications

**20+**  
active research  
projects

**50+**  
peer-reviewed  
research papers



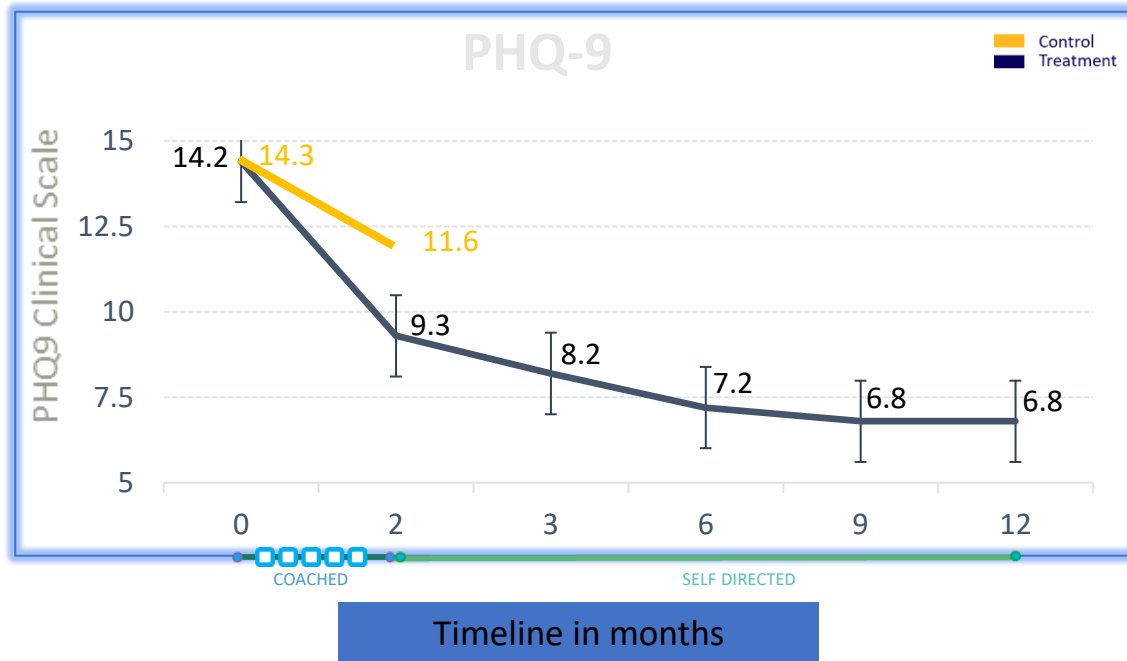
**20+**  
Years of research  
heritage

We have  
partnered with leading  
academic and  
commercial partners to  
understand, validate  
and improve  
effectiveness and  
outcomes

# Proven Lasting Effectiveness and Impact.

Continued Improvement of mental health shown post coaching and over 12 months

## Depression Symptoms



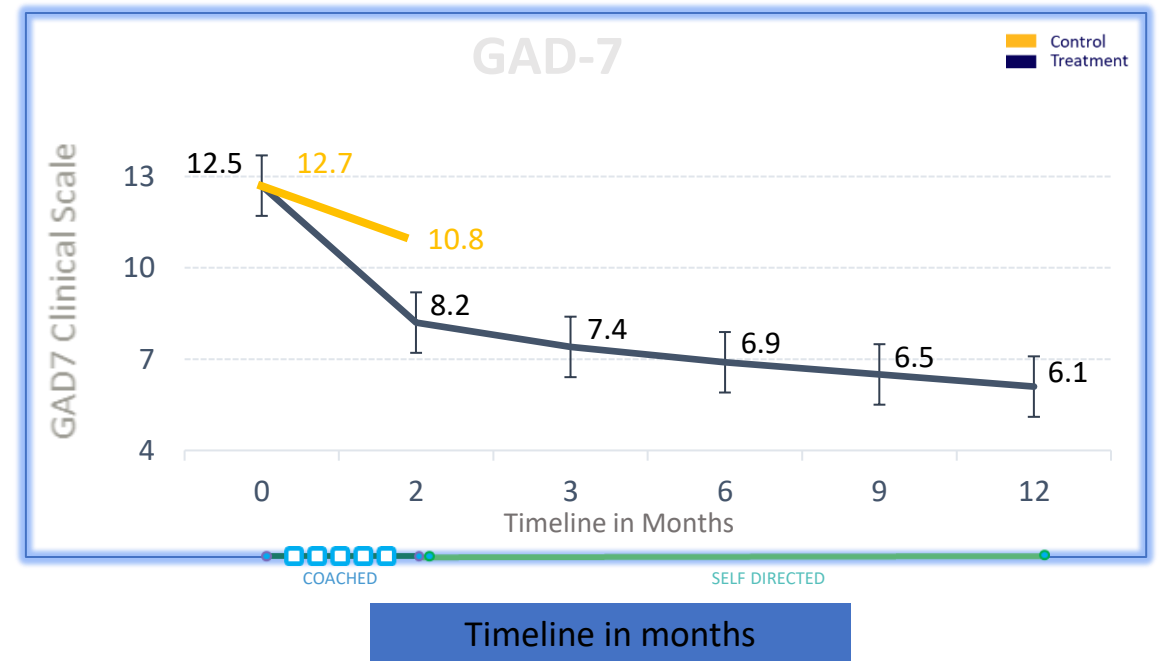
| PHQ9 Score Range | Depression severity |
|------------------|---------------------|
| 20-27            | Severe              |
| 15-19            | Moderately Severe   |
| 10-14            | Moderate            |
| 5-9              | Mild                |
| 0-4              | Minimal             |

For reference & date

Publication ref:

N:

## Anxiety Symptoms



| GAD7 Score Range | Anxiety severity |
|------------------|------------------|
| 15-21            | Severe           |
| 10-14            | Moderate         |
| 5-9              | Mild             |
| 0-4              | Minimal          |

# Real World Results:

## SilverCloud Clinical Outcomes at All Severity Levels

| Before Using SilverCloud |                   |         | PHQ9<br>(Depression Score) |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      |      |          |      |      |      |      |                   |      |      |      |      |        |      |      |      |
|--------------------------|-------------------|---------|----------------------------|------|------|------|------|------|------|---------|------|------|------|------|------|------|------|------|------|----------|------|------|------|------|-------------------|------|------|------|------|--------|------|------|------|
|                          |                   |         | Subclinical Range          |      |      |      |      |      |      | Minimal |      |      |      |      | Mild |      |      |      |      | Moderate |      |      |      |      | Moderately Severe |      |      |      |      | Severe |      |      |      |
| User: n=235,207          |                   |         | 0                          | 1    | 2    | 3    | 4    | 5    | 6    | 7       | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17       | 18   | 19   | 20   | 21   | 22                | 23   | 24   | 25   | 26   | 27     |      |      |      |
| GAD7<br>(Anxiety Score)  | Subclinical Range | Minimal | 0                          | 0.3% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0%    | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   |         | 1                          | 0.1% | 0.1% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1%    | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          |                   |         | 2                          | 0.1% | 0.2% | 0.2% | 0.2% | 0.2% | 0.1% | 0.1%    | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% |
|                          |                   |         | 3                          | 0.1% | 0.2% | 0.3% | 0.3% | 0.3% | 0.3% | 0.2%    | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% |
|                          |                   |         | 4                          | 0.1% | 0.2% | 0.3% | 0.4% | 0.5% | 0.4% | 0.4%    | 0.3% | 0.2% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% |
|                          | Mild              | 5       | 0.1%                       | 0.1% | 0.3% | 0.4% | 0.5% | 0.6% | 0.6% | 0.5%    | 0.4% | 0.4% | 0.3% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   | 6       | 0.1%                       | 0.1% | 0.2% | 0.4% | 0.5% | 0.6% | 0.7% | 0.7%    | 0.6% | 0.5% | 0.4% | 0.3% | 0.3% | 0.2% | 0.1% | 0.1% | 0.1% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   | 7       | 0.0%                       | 0.1% | 0.1% | 0.2% | 0.3% | 0.5% | 0.6% | 0.7%    | 0.8% | 0.6% | 0.6% | 0.6% | 0.4% | 0.3% | 0.3% | 0.2% | 0.2% | 0.1%     | 0.1% | 0.1% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          |                   | 8       | 0.0%                       | 0.0% | 0.1% | 0.2% | 0.3% | 0.3% | 0.4% | 0.5%    | 0.6% | 0.6% | 0.6% | 0.5% | 0.4% | 0.3% | 0.2% | 0.2% | 0.1% | 0.1%     | 0.1% | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          |                   | 9       | 0.0%                       | 0.0% | 0.1% | 0.1% | 0.2% | 0.3% | 0.4% | 0.5%    | 0.6% | 0.6% | 0.6% | 0.6% | 0.5% | 0.4% | 0.3% | 0.2% | 0.2% | 0.1%     | 0.1% | 0.1% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          | Moderate          | 10      | 0.0%                       | 0.0% | 0.1% | 0.1% | 0.2% | 0.3% | 0.3% | 0.4%    | 0.5% | 0.6% | 0.6% | 0.6% | 0.5% | 0.5% | 0.4% | 0.3% | 0.2% | 0.2%     | 0.1% | 0.1% | 0.1% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   | 11      | 0.0%                       | 0.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.3% | 0.3%    | 0.4% | 0.5% | 0.5% | 0.6% | 0.6% | 0.5% | 0.4% | 0.4% | 0.3% | 0.2%     | 0.2% | 0.1% | 0.1% | 0.1% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          |                   | 12      | 0.0%                       | 0.0% | 0.0% | 0.1% | 0.1% | 0.2% | 0.2% | 0.3%    | 0.4% | 0.4% | 0.5% | 0.6% | 0.5% | 0.5% | 0.5% | 0.4% | 0.4% | 0.3%     | 0.2% | 0.2% | 0.1% | 0.1% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          |                   | 13      | 0.0%                       | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2%    | 0.3% | 0.4% | 0.4% | 0.5% | 0.5% | 0.5% | 0.5% | 0.4% | 0.4% | 0.3%     | 0.3% | 0.2% | 0.2% | 0.1% | 0.1%              | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          |                   | 14      | 0.0%                       | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2%    | 0.3% | 0.3% | 0.4% | 0.4% | 0.5% | 0.5% | 0.5% | 0.5% | 0.4% | 0.4%     | 0.3% | 0.3% | 0.2% | 0.1% | 0.1%              | 0.1% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% |      |
|                          | Severe            | 15      | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.2%    | 0.2% | 0.3% | 0.3% | 0.4% | 0.4% | 0.4% | 0.4% | 0.5% | 0.4% | 0.4%     | 0.4% | 0.3% | 0.3% | 0.2% | 0.1%              | 0.1% | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   | 16      | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1%    | 0.2% | 0.2% | 0.2% | 0.3% | 0.3% | 0.4% | 0.4% | 0.4% | 0.4% | 0.4%     | 0.4% | 0.3% | 0.3% | 0.2% | 0.2%              | 0.1% | 0.1% | 0.0% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   | 17      | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1%    | 0.1% | 0.2% | 0.2% | 0.2% | 0.3% | 0.3% | 0.3% | 0.3% | 0.4% | 0.4%     | 0.4% | 0.4% | 0.3% | 0.3% | 0.2%              | 0.2% | 0.1% | 0.1% | 0.0% | 0.0%   | 0.0% |      |      |
|                          |                   | 18      | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1%    | 0.1% | 0.1% | 0.1% | 0.2% | 0.2% | 0.2% | 0.2% | 0.3% | 0.3% | 0.3%     | 0.3% | 0.4% | 0.4% | 0.4% | 0.3%              | 0.3% | 0.2% | 0.2% | 0.1% | 0.1%   | 0.0% | 0.0% |      |
|                          |                   | 19      | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%    | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2% | 0.2% | 0.2% | 0.3%     | 0.3% | 0.3% | 0.3% | 0.3% | 0.3%              | 0.3% | 0.3% | 0.2% | 0.1% | 0.1%   | 0.0% | 0.0% |      |
|                          |                   | 20      | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%    | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2%     | 0.2% | 0.2% | 0.2% | 0.2% | 0.3%              | 0.2% | 0.2% | 0.1% | 0.1% | 0.0%   | 0.0% |      |      |
| 21                       |                   | 0.0%    | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%    | 0.0% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2% | 0.2%     | 0.2% | 0.2% | 0.3% | 0.3% | 0.3%              | 0.3% | 0.4% | 0.3% | 0.2% | 0.2%   |      |      |      |

# Real World Results:

## SilverCloud Clinical Outcomes at All Severity Levels

| After Using SilverCloud |                   | PHQ9<br>(Depression Score) |      |      |      |      |      |      |      |      |      |          |      |      |      |                   |      |      |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------|-------------------|----------------------------|------|------|------|------|------|------|------|------|------|----------|------|------|------|-------------------|------|------|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                         |                   | Subclinical Range          |      |      |      |      |      |      |      |      |      |          |      |      |      |                   |      |      |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                         |                   | Minimal                    |      |      |      |      | Mild |      |      |      |      | Moderate |      |      |      | Moderately Severe |      |      |      | Severe |      |      |      |      |      |      |      |      |      |      |      |      |      |
| User: n=235,207         |                   | 0                          | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10       | 11   | 12   | 13   | 14                | 15   | 16   | 17   | 18     | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   |      |      |      |      |
| GAD7<br>(Anxiety Score) | Subclinical Range | Minimal                    | 0    | 2.5% | 0.8% | 0.6% | 0.3% | 0.2% | 0.1% | 0.1% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |      |
|                         |                   |                            | 1    | 0.7% | 0.8% | 0.8% | 0.6% | 0.4% | 0.2% | 0.2% | 0.1% | 0.1%     | 0.0% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   |                            | 2    | 0.5% | 0.8% | 1.0% | 0.9% | 0.6% | 0.4% | 0.3% | 0.2% | 0.1%     | 0.1% | 0.0% | 0.0% | 0.0%              | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
|                         |                   |                            | 3    | 0.4% | 0.6% | 1.0% | 1.1% | 1.0% | 0.7% | 0.5% | 0.3% | 0.2%     | 0.1% | 0.1% | 0.1% | 0.1%              | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
|                         |                   |                            | 4    | 0.3% | 0.5% | 0.8% | 1.1% | 1.2% | 1.0% | 0.8% | 0.5% | 0.4%     | 0.2% | 0.2% | 0.1% | 0.1%              | 0.0% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
|                         | Mild              | 5                          | 0.2% | 0.3% | 0.6% | 0.9% | 1.2% | 1.2% | 1.1% | 0.9% | 0.6% | 0.4%     | 0.3% | 0.2% | 0.1% | 0.1%              | 0.1% | 0.0% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 6                          | 0.1% | 0.2% | 0.3% | 0.6% | 0.9% | 1.2% | 1.3% | 1.2% | 0.9% | 0.6%     | 0.4% | 0.3% | 0.2% | 0.1%              | 0.1% | 0.1% | 0.0% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 7                          | 0.0% | 0.1% | 0.2% | 0.3% | 0.5% | 0.7% | 1.0% | 1.2% | 1.4% | 1.2%     | 0.6% | 0.4% | 0.3% | 0.2%              | 0.1% | 0.1% | 0.1% | 0.0%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 8                          | 0.0% | 0.0% | 0.1% | 0.1% | 0.2% | 0.4% | 0.5% | 0.5% | 0.6% | 0.6%     | 0.6% | 0.4% | 0.3% | 0.2%              | 0.2% | 0.1% | 0.1% | 0.1%   | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 9                          | 0.0% | 0.0% | 0.0% | 0.1% | 0.2% | 0.2% | 0.3% | 0.4% | 0.5% | 0.6%     | 0.5% | 0.5% | 0.4% | 0.3%              | 0.2% | 0.1% | 0.1% | 0.1%   | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         | Moderate          | 10                         | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.2% | 0.2% | 0.3% | 0.4% | 0.5%     | 0.5% | 0.5% | 0.4% | 0.3%              | 0.2% | 0.2% | 0.1% | 0.1%   | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 11                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.2% | 0.3% | 0.3% | 0.4%     | 0.4% | 0.4% | 0.4% | 0.4%              | 0.3% | 0.2% | 0.2% | 0.1%   | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 12                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.2% | 0.3% | 0.3%     | 0.3% | 0.4% | 0.4% | 0.3%              | 0.3% | 0.3% | 0.2% | 0.2%   | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 13                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2%     | 0.3% | 0.3% | 0.3% | 0.3%              | 0.3% | 0.3% | 0.2% | 0.2%   | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         |                   | 14                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.2%     | 0.2% | 0.2% | 0.3% | 0.3%              | 0.3% | 0.3% | 0.2% | 0.2%   | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |
|                         | Severe            | 15                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1% | 0.1%     | 0.2% | 0.2% | 0.2% | 0.2%              | 0.2% | 0.2% | 0.2% | 0.2%   | 0.2% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |      |
|                         |                   | 16                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1% | 0.1%     | 0.1% | 0.1% | 0.2% | 0.2%              | 0.2% | 0.2% | 0.2% | 0.2%   | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |      |
|                         |                   | 17                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1% | 0.1%     | 0.1% | 0.1% | 0.1% | 0.1%              | 0.2% | 0.2% | 0.2% | 0.2%   | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |      |      |
|                         |                   | 18                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.1%     | 0.1% | 0.1% | 0.1% | 0.1%              | 0.1% | 0.2% | 0.2% | 0.2%   | 0.2% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% |      |      |
|                         |                   | 19                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.1% | 0.1%              | 0.1% | 0.1% | 0.1% | 0.1%   | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% |      |      |
|                         |                   | 20                         | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.1% | 0.1%              | 0.1% | 0.1% | 0.1% | 0.1%   | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% |      |      |
| 21                      |                   | 0.0%                       | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0%     | 0.0% | 0.0% | 0.1% | 0.1%              | 0.1% | 0.1% | 0.1% | 0.2%   | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.4% | 0.3% | 0.2% | 0.4% |      |      |      |      |

# SilverCloud Digital Mental Health Comparison

## Implementation & integration

Complete yet light lift  
 True platform across workflows, care delivery protocols  
 EHR/Case systems, SSO, portals,  
 Zero to digital delivery in 8 weeks

## Therapeutic value / outcomes

Demonstrate significant lasting clinical change via validated measures and assessments – Real World delivery

## Clinical validation & research

Evidence based vs evidence informed  
 Peer reviewed, Impact factor, RCT power.  
 Continued investment in innovation and research

## Cost effectiveness / ROI

Demonstrable direct and indirect cost saving  
 earlier and easier access to better healthcare

## Increase scale & access

Ability to increase scale and access to healthcare – One to Many.  
 Multiple onboarding methods - meet the user where they are

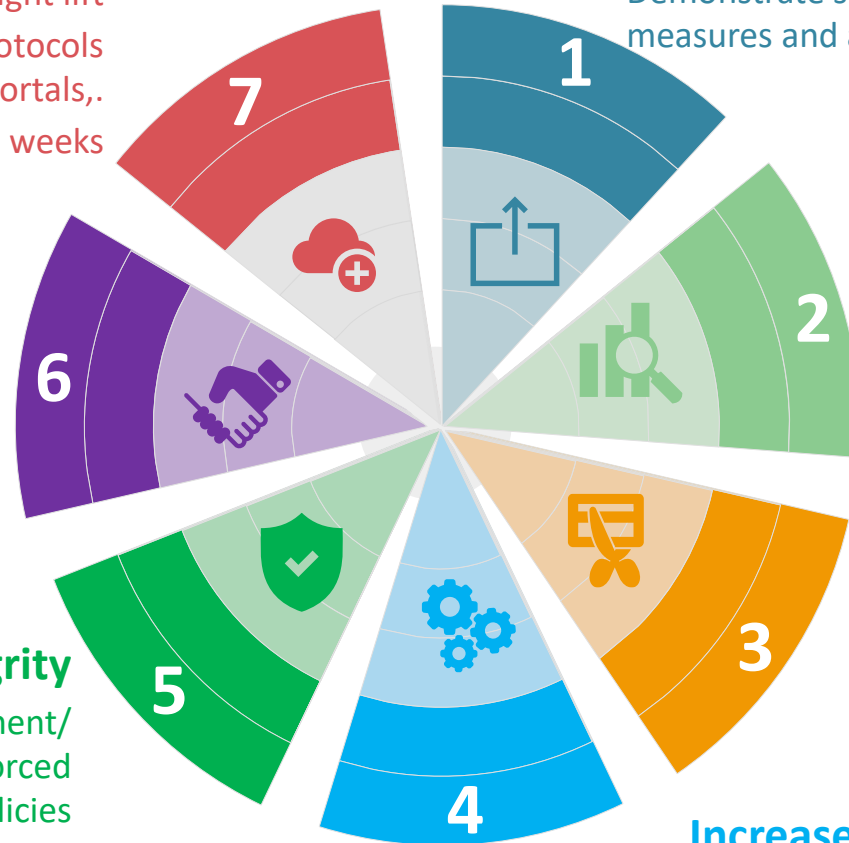
## Usability for adherence & engagement

User acceptance & suitable, in context, via multiple devices.  
 True user engagement over time – across demographics and acuity spectrum

## Security / risk / privacy / data integrity

Member safety and risk protocol management/  
 ID/escalation, data security & privacy enforced policies

Certification: HIPAA, ISO27001, ISO13485,



# Clinical Perspective

Andy Keene



Digital Health & Care  
Innovation Centre



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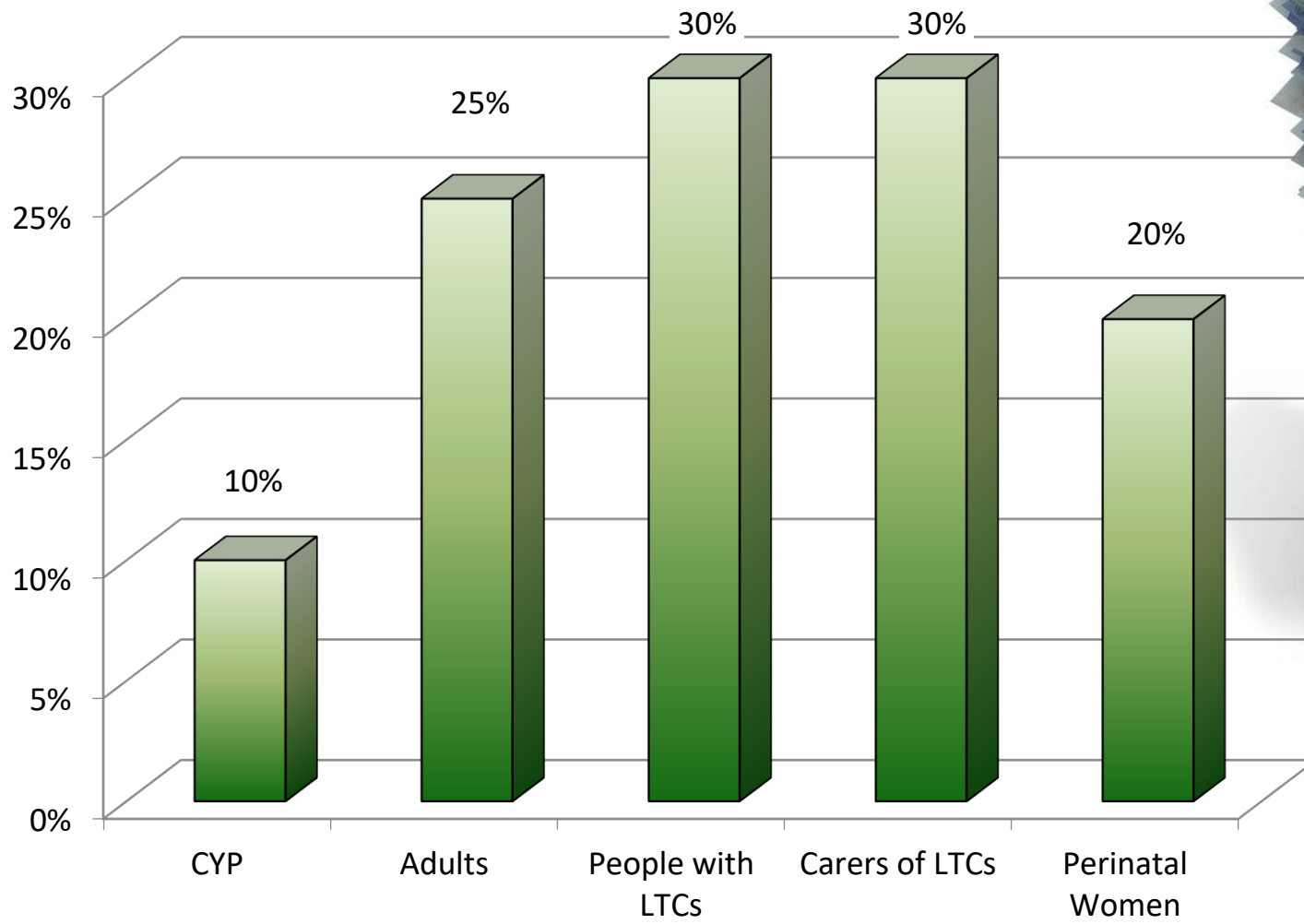
# Innovation: Clinical Perspective

*Dr Andy Keen*

*Consultant Health Psychologist*

*Clinical Lead for Innovation*







3/8/22, 4:26 PM

NHS workforce: our position | The King's Fund

## NHS workforce: our position

Part of [The King's Fund position](#)

Last updated: 23 February 2022

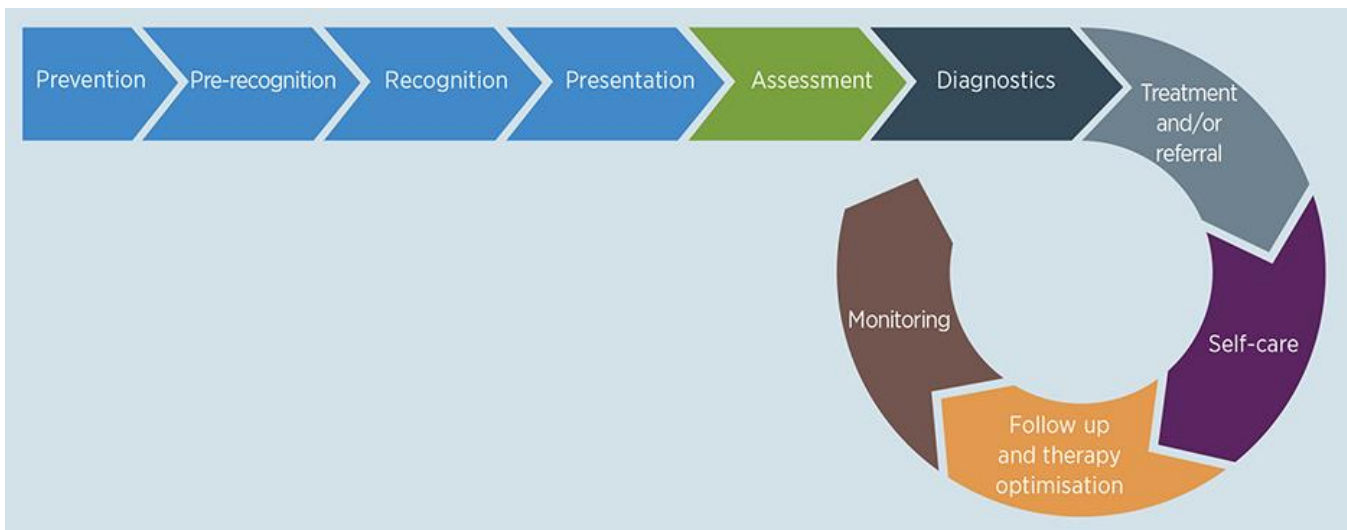
**The NHS workforce in England is in crisis: urgent action is required to tackle a vicious cycle of shortages and increased pressures on staff, which has been exacerbated by the Covid-19 pandemic.**

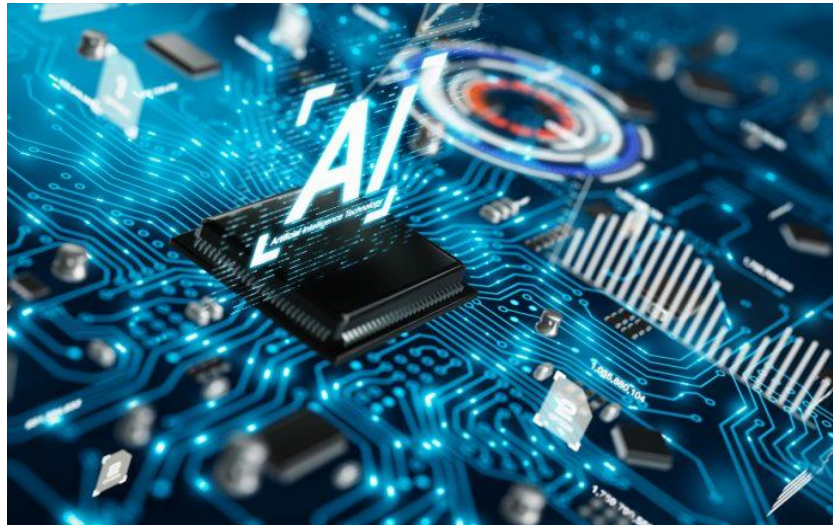
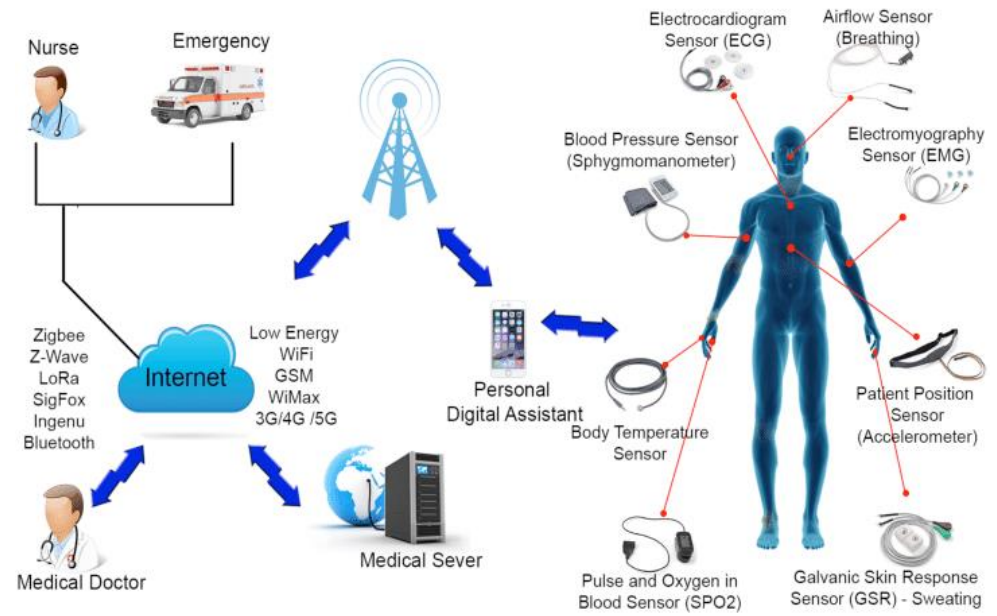
### What we think

The people who work in the NHS are its greatest asset and are key to delivering high-quality care. This has been evident throughout the Covid-19 pandemic with staff demonstrating remarkable resilience and commitment. However, a prolonged funding squeeze between 2008 and 2018 combined with years of poor workforce planning, weak policy and fragmented responsibilities mean that staff shortages have become endemic. As such, the workforce crisis will be the [key limiting factor](#) (<https://committees.parliament.uk/publications/8352/documents/85020/default/>) on efforts to boost NHS activity and tackle the rising backlog of care.

<https://www.kingsfund.org.uk/projects/positions/nhs-workforce/what-we-think>









**Thanks**

# Scottish Government Perspective

Margaret Whoriskey Deputy Director of Digital Health and Care



Digital Health & Care  
Innovation Centre



Scottish Government  
Riaghaltas na h-Alba  
gov.scot



Scottish Government  
Riaghaltas na h-Alba  
gov.scot

# Enabling, Connecting and Empowering: **Care in the Digital Age**

Scotland's Digital Health and Care Strategy

Scottish Government and COSLA



Digital Health  
& Care Scotland

# Vision

## Our Vision

“To improve the care and wellbeing of people in Scotland by making best use of digital technologies in the design and delivery of services.”





# Stakeholder Key Messages



- Digital needs to be a **choice**
- ‘Do digital right’
- Address infrastructure
- Develop skills and leadership

# More Key Messages

- The need to encompass and recognise the role of health, social care, housing, research and innovation, including the third and independent sector as well as the statutory sector.
- Data needs to flow through and across services, breaking down silos in the way that services work, in a way that works for people.



# Strategic Aims



**Aim 1:** Citizens have access to, and greater control over, their own health and care data – as well as access to the digital information, tools and services they need to help maintain and improve their health and wellbeing.



**Aim 2:** Health and care services are built on people-centred, safe, secure and ethical digital foundations which allow staff to record, access and share relevant information across the health and care system, and feel confident in their use of digital technology, in order to improve the delivery of care.



**Aim 3:** Health and care planners, researchers and innovators have secure access to the data they need in order to increase the efficiency of our health and care systems, and develop new and improved ways of working.

# Priority Areas



## Digital access

- People have flexible digital access to information, their own data and services which support their health and wellbeing, wherever they are.

## Digital services

- Digital options are increasingly available as a choice for people accessing services and staff delivering them.

## Digital foundations

- The infrastructure, systems, regulation, standards, and governance are in place to ensure robust and secure delivery.

## Digital skills and leadership

- Digital skills are seen as core skills for the workforce across the health and care sector.

## Digital futures

- Our wellbeing and economy benefits as Scotland remains at the heart of digital innovation and development.

## Data-driven services and insight

- Data is harnessed to the benefit of citizens, services and innovation.

# Digital Futures

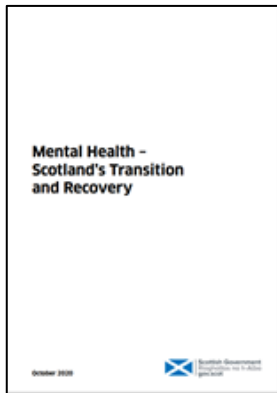
- Continue to place Scotland at the heart of international digital health and care business development with successful collaborative bids for UK, European and International funding opportunities to drive innovation locally and globally.
- Work with organisations including DHI and other Innovation Centres, 5G Centre, Centre for Cyber Resilience, Centre for Sustainable Delivery, and Public Health Scotland to realise the potential of digital health and care.
- Enhance our industry networks and clusters, collaborating to support our small and medium enterprises (SMEs) to be innovative and offering a clear product route from development to implementation at scale.
- Provide a permanent digital testing environment that allows potential new technology to be developed and tested in a safe environment, whilst providing greater opportunity for success.
- Provide an assurance process to ensure digital innovations are developed in an ethical, standards-based way.
- Promote and facilitate appropriate, safe and secure access to clinical, biomedical, care and other data for approved research, development and innovation in the public interest.

# Delivery Plan for Digital Health & Care

- **Publish 3-year delivery plan from April 2022**
- **Success measures, outcomes and milestones**
- **Confirm moves to Cloud and future interoperability**
- **Link to Net Zero and Climate priority**

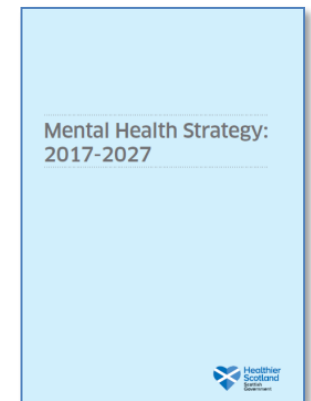


Digital treatments and online resources are now an integral part of mental health service delivery across Scotland and integrated into Mental Health Policy.



***Mental Health Transition and Recovery Plan:*** “The value of digital therapy during our Covid-19 response has been clear, and has enabled services to continue in spite of physical restrictions.”

***Mental Health Strategy Action 25:*** “Develop more accessible psychological self-help resources and support national rollout of computerised CBT with NHS 24 by 2018”



***Suicide Prevention Action Plan Action 6:*** “The NSPLG will work with partners to develop and support the delivery of innovations in digital technology that improve suicide prevention”

# Global Best Practice Reports

Joanne Boyle, Head of Engagement

Digital Health & Care Innovation Centre



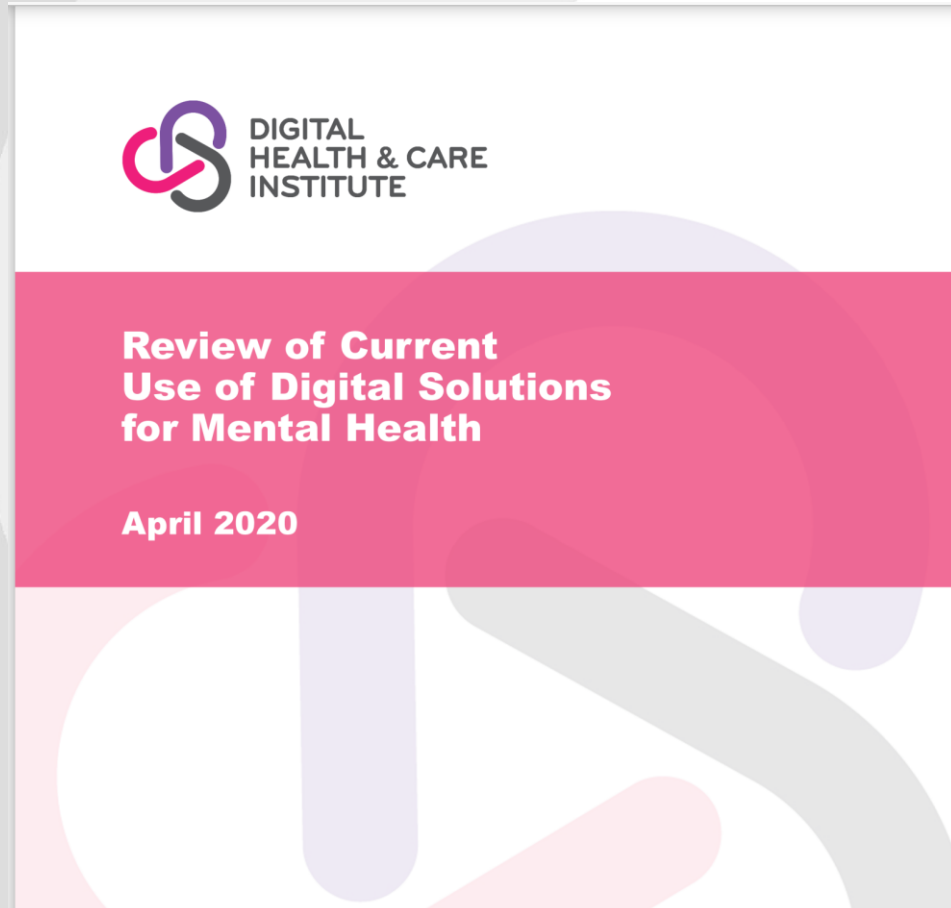
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# Report findings



- Market and strategic analysis
- Reviewed current usage of digital solutions used in managing mental health conditions
- Focus on digital solutions to aid prevention, diagnosis and treatment
- Mental Health Strategy- Delivery Plans
- Improved and increased accessibility using 21st Century approach

# Report findings



- Artificial Intelligence
- Digital Phenotyping
- Gameification
- Virtual Reality
  
- Next steps

# DMHIC - Get involved and learn more

Join our network

[www.dhi-scotland.com/join-our-network](http://www.dhi-scotland.com/join-our-network)



Visit the DMHIC webpage

[www.dhi-scotland.com/innovation/innovation-clusters](http://www.dhi-scotland.com/innovation/innovation-clusters)



# Matter of Focus Workshop

Digital Mental Health Innovation Cluster focus and Impact



Digital Health & Care  
Innovation Centre



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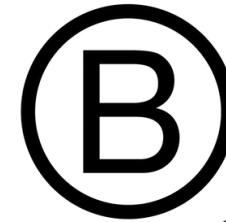
# Digital Mental Health Innovation Cluster

Launch Event 10/03/22

# Matter of Focus

*Evidence. Action. Change.*

Certified



Corporation

This company meets the  
highest standards of social  
and environmental impact



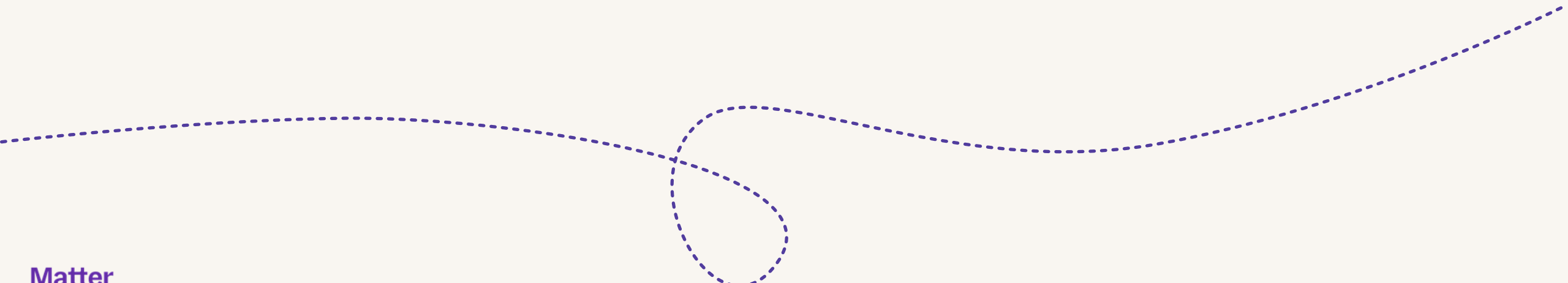
**OutNav**

# Some of our clients



# Our role and purpose

- Appointed evaluation partner for the Cluster
- Map the context for digital mental health and explore what success looks like
- First part of work to develop an outcome map and evaluation framework for the cluster





# Our programme today

---

| <b>When</b>        | <b>What</b>                                       |
|--------------------|---|
| 14.00-14.15        | Welcome and introductions                         |
| 14.15-14.25        | Introduction to context mapping                   |
| 14.25-15.00        | Context mapping group work                        |
| <b>15.00-15.15</b> | <b>Break</b>                                      |
| 15.15-15.30        | Whole group discussion                            |
| 15.30-15.40        | Our evaluation approach and success story mapping |
| 15.40-16.10        | Success stories group work                        |
| 16.10-16.20        | Whole group discussion                            |
| 16.20-16.30        | Summation and close                               |

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# Context mapping

# Aims of this session:

Develop a shared understanding of the **context** of this work.  
That is, the factors that **help and hinder**  
the development and implementation of digital mental  
health solutions.



# We map your context using the ISM

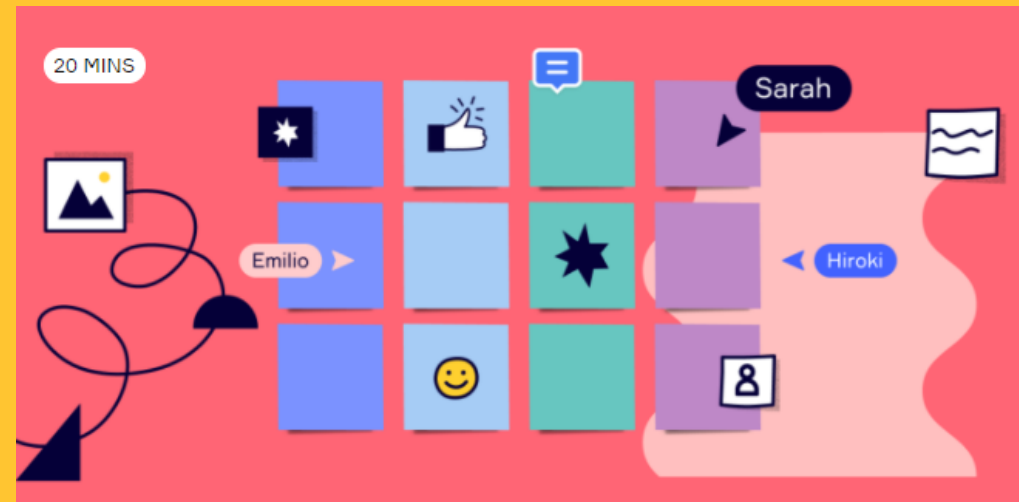
- Step one in outcome mapping
- This will help you to:
  - Recognise **complexity** and your **contribution**
  - Identify **risks** and **assumptions**
  - Establish expectations given this context
- Informs the analysis and reporting of the evaluation



ISM Behaviour Change Model, Scottish Government (2013)



# miro



# Matter of Focus approach

# Outcomes that matter to people

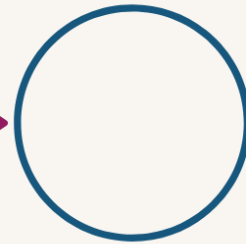
- Outcomes that matter are hard to measure
- *“we still measure the success of public services by short-term, service-specific measures”* (Auditor General, 2021)
- Multiple factors affect realisation of outcomes
- We need pragmatic and realistic approaches – *making complexity manageable*



# ATTRIBUTION...

## What you do

Relationship with what difference this makes is linear and direct.



## System

Is closed.  
External influences are predictable.



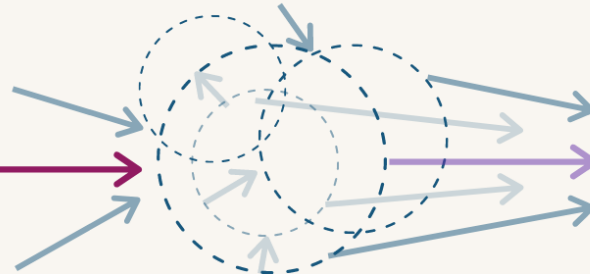
## Outcome/Impact

The change can be attributed to what you do

# CONTRIBUTION...

## What you do

Interacts with multiple other factors to influence change.



## System

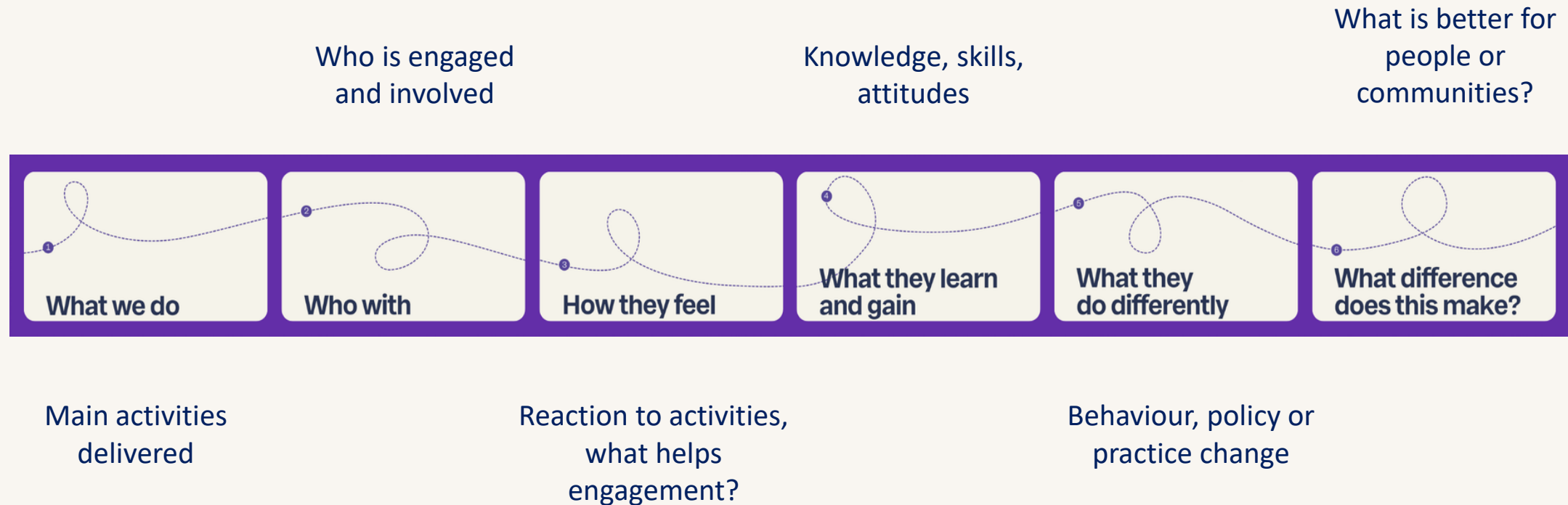
Is complex and fast-changing.  
Influenced in unpredictable ways by internal external factors.



## Outcome/impact

What you do contributes to change

# How we map contribution to outcomes



## 5. 1. Support people to improve wellbeing

### Pathway progress

|                 | Great Progress | Some Progress | No Progress |
|-----------------|----------------|---------------|-------------|
| High Confidence |                |               |             |
| Some Confidence |                |               |             |
| Low Confidence  |                |               |             |

| What we do   | Who with  | How they feel  | What they learn and gain   | What they do differently  | What difference does this make?   |
|--|---|--|--|---|---|
| <p>Have good conversations with people about factors impacting on their wellbeing and what they can do to change</p> <p>Progress: Great<br/>Confidence: High</p> | <p>People experiencing pain, health and wellbeing</p> <p>Progress: Great<br/>Confidence: Some</p> | <p>This is a good conversation and I feel ready to make a change</p> <p>Progress: Great<br/>Confidence: Some</p> | <p>People know what matters to them and have the knowledge, confidence, skills to change</p> <p>Progress: Great<br/>Confidence: High</p> | <p>People make changes and address things that worry them</p> <p>Progress: Great<br/>Confidence: Some</p> | <p>People have improved wellbeing</p> <p>Progress: Some<br/>Confidence: Low</p>       |
| <p>We run group sessions</p> <p>Progress: Great<br/>Confidence: High</p>   |   | <p>This is for me</p> <p>Progress: Some<br/>Confidence: Some</p>   | <p>Access to a range of relevant community supports and services</p> <p>Progress: Great<br/>Confidence: Low</p>                          | <p>People access support from appropriate agencies</p> <p>Progress: No<br/>Confidence: Some</p>           | <p>Services are used more appropriately</p> <p>Progress: Some<br/>Confidence: Low</p> |



# Typical process



## Context mapping

What helps and hinders achievement of outcomes?



## Success stories

What does success look like against the headings?



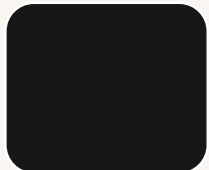
## Outcome mapping

Building on the first workshops to develop a theory of change



## Data audit and planning

What data exists and what will we need?



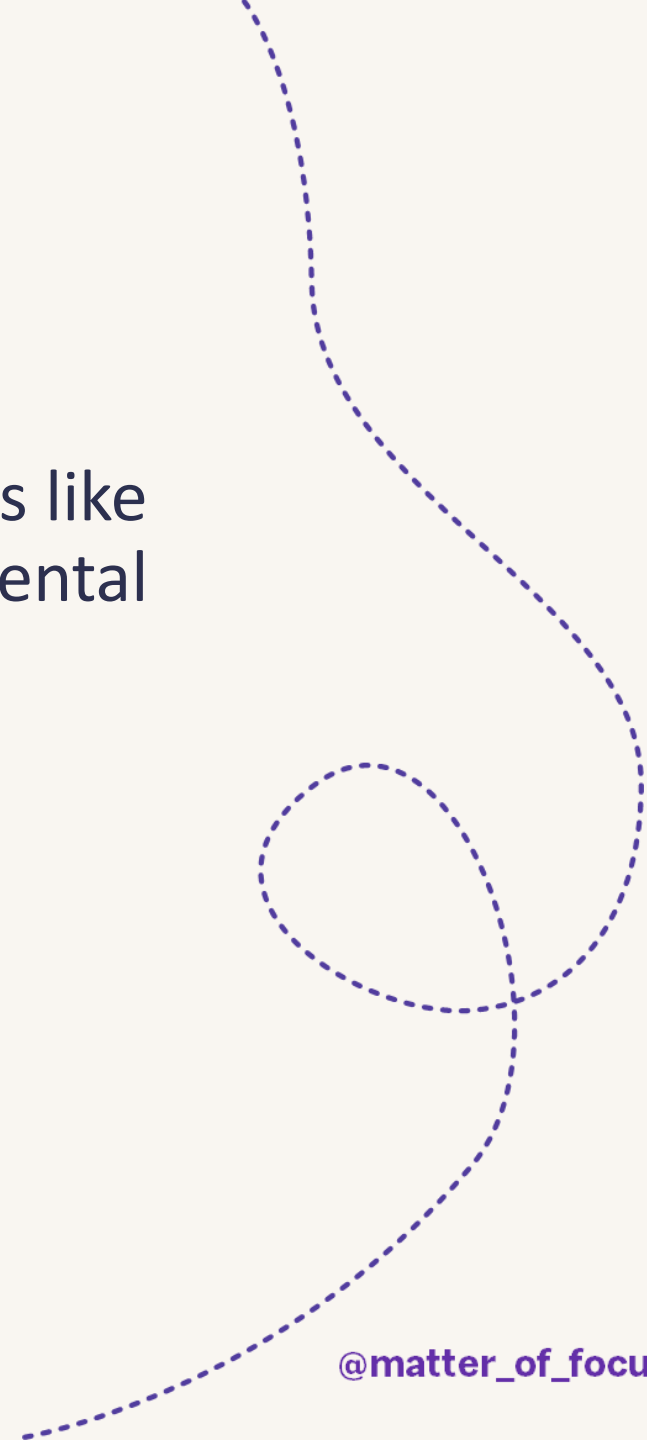
## Analysis and reporting

What can we conclude from the evidence we have reviewed?

# Success stories

# Aims of this session

- Develop a shared understanding of what success looks like for the development and implementation of digital mental health solutions
- Can be from different perspectives



# Thank you!

Let's keep the conversation going:

Website: [www.matter-of-focus.com](http://www.matter-of-focus.com)

Twitter: [@matter\\_of\\_focus](https://twitter.com/matter_of_focus)

LinkedIn: [.../company/matter-of-focus](https://www.linkedin.com/company/matter-of-focus)



Our brief workshop evaluation

# Refreshment break

(15 minutes)



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# Matter of Focus Workshop

Digital Mental Health Innovation Cluster focus and Impact



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# Summation/ Close

Chris Wright, Digital Mental Health Programme Lead



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# DMHIC - Get involved and learn more

Join our network

[www.dhi-scotland.com/join-our-network](http://www.dhi-scotland.com/join-our-network)



Visit the DMHIC webpage

[www.dhi-scotland.com/innovation/innovation-clusters](http://www.dhi-scotland.com/innovation/innovation-clusters)



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