



Public Health  
England

Protecting and improving the nation's health

Good Thinking

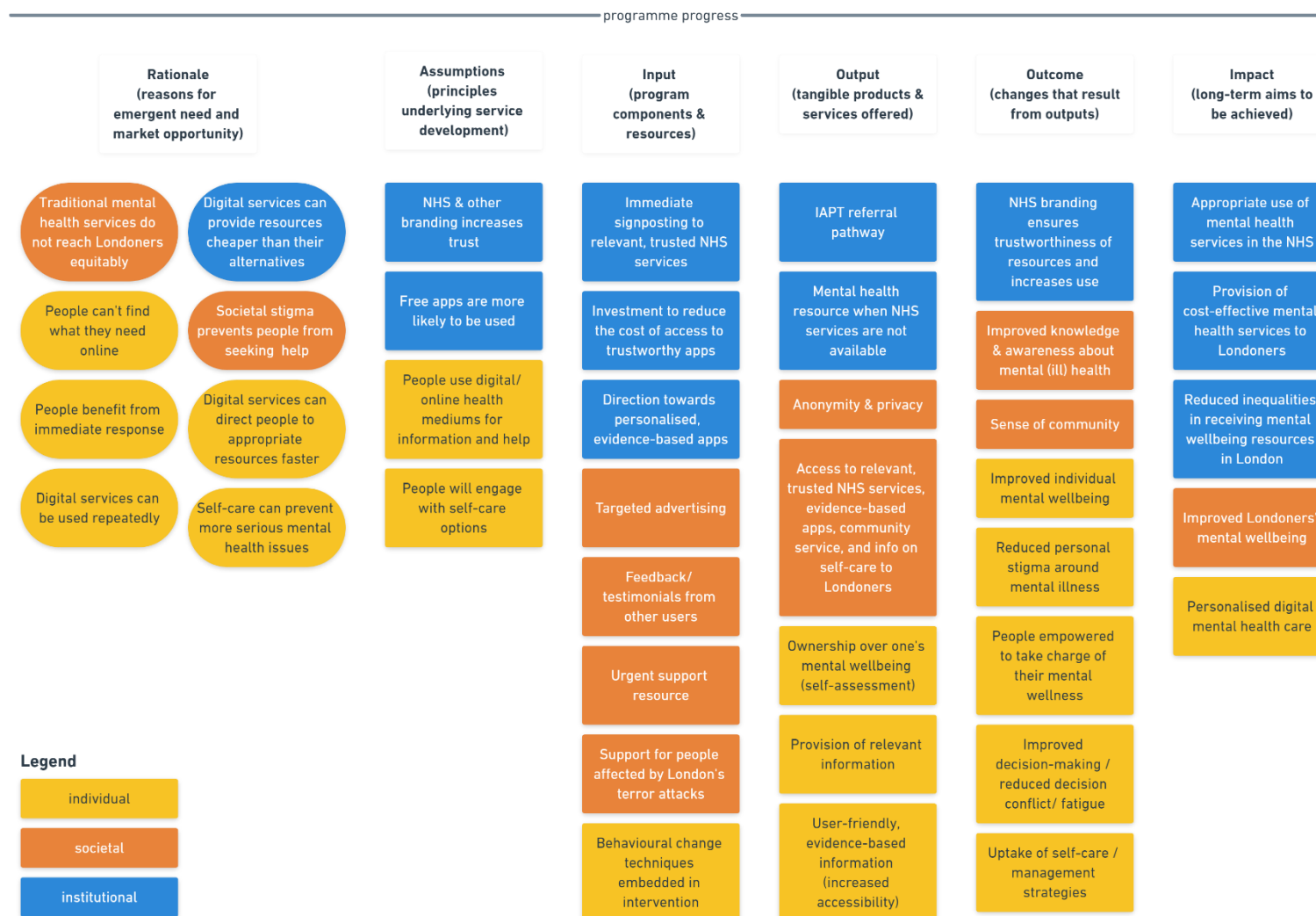
# Embedding Behavioural Science in Good Thinking

## Behavioural change and theory of change model

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# Logic model of Theory of Change





Public Health  
England

Good  
Thinking

# Rationale and emergent need

## Legend

individual

societal

institutional

Digital services can  
provide resources  
cheaper than their  
alternatives

Traditional mental  
health services do  
not reach Londoners  
equitably

People benefit from  
immediate response

Digital services can  
direct people to  
appropriate  
resources faster

Societal stigma  
prevents people from  
seeking help

People can't find  
what they need  
online

Digital services can  
be used repeatedly

Self-care can prevent  
more serious mental  
health issues



# Underlying principles

## Legend

individual

societal

institutional

NHS & other  
branding increases  
trust

Free apps are more  
likely to be used

People use digital/  
online health  
mediums for  
information and help

People will engage  
with self-care  
options



# Inputs (programme components)

## Legend

individual

societal

institutional

Immediate  
signposting to  
relevant, trusted NHS  
services

Investment to reduce  
the cost of access to  
trustworthy apps

Direction towards  
personalised,  
evidence-based apps

Targeted advertising

Urgent support  
resource

Feedback/  
testimonials from  
other users

Support for people  
affected by London's  
terror attacks

Behavioural change  
techniques  
embedded in  
intervention



# Output (products and services)

## Legend

individual

societal

institutional

IAPT referral  
pathway

Mental health  
resource when NHS  
services are not  
available

Anonymity & privacy

Access to relevant,  
trusted NHS services,  
evidence-based  
apps, community  
service, and info on  
self-care to  
Londoners

Ownership over one's  
mental wellbeing  
(self-assessment)

Provision of relevant  
information

User-friendly,  
evidence-based  
information  
(increased  
accessibility)



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# Outcomes

## Legend

individual

societal

institutional

NHS branding  
ensures  
trustworthiness of  
resources and  
increases use

Improved knowledge  
& awareness about  
mental (ill) health

Sense of community

Improved individual  
mental wellbeing

Reduced personal  
stigma around  
mental illness

People empowered  
to take charge of  
their mental  
wellness

Improved  
decision-making /  
reduced decision  
conflict/ fatigue

Uptake of self-care /  
management  
strategies



# Impact (long-term aims)

## Legend

individual

societal

institutional

Appropriate use of  
mental health  
services in the NHS

Provision of  
cost-effective mental  
health services to  
Londoners

Reduced inequalities  
in receiving mental  
wellbeing resources  
in London

Improved Londoners'  
mental wellbeing

Personalised digital  
mental health care



# Behavioural science approach

Stage 1: Understanding  
the behaviour

Stage 2: Identify  
Intervention Options

Stage 3: Identify content  
and implementation options



Discovery

Conducting user  
research and  
understanding user  
needs

Alpha

Developing and testing  
prototypes with small  
user groups



Checklist for the Alpha phase (version 1.0)

Activity (Activities can be completed in parallel or in sequence, as suggested below)	Who needs to do it				Completed			Reason for not completing or not applicable
	PO	BI	SM	DI*	Y	N	N/A	
1. Specify behaviour change intervention modules					X			
2. Develop 'white-boards' to present a schematic of the intervention content					X			
3. Develop 'wire-frames' (screens and how they will be interacted with) for more detailed representation of the intervention					X			
4. Develop prototype intervention								Mandatory
5. Test prototype intervention among stakeholders and revise until it is suitable for further testing					X			
6. Test prototype intervention among potential users and revise until it is suitable for further development					X			
7. Identify and operationalise a clear optimisation criterion given constraints (i.e. time, cost, participants logistical or cognitive burden)					X			
8. Test intervention components experimentally and evaluate against optimisation criterion identified in #7								Partial
9. Depending on findings from #8, revise the intervention if needed and develop the intervention to the point where it is reasonable to expect that it may have a worthwhile effect								Mandatory
10. Pilot test procedures and the delivery of the intervention in a given context					X			
11. Estimate recruitment and retention								
12. Determine sample size requirements for definitive evaluation *, finalise analysis plan and submit protocol for evaluation								
13. Identify team involved in the Beta phase					X			

PO: Project Owner; BI: Behavioural Insights; SM: Social Marketing; DI: Digital; \*A variety of digital skills could be brought in to deliver the product, as PHE Digital team may not be able to get involved beyond the spend controls process; \*\* involve people with statistical expertise

Beta

Developing at larger  
scale, making test  
version available to  
the public



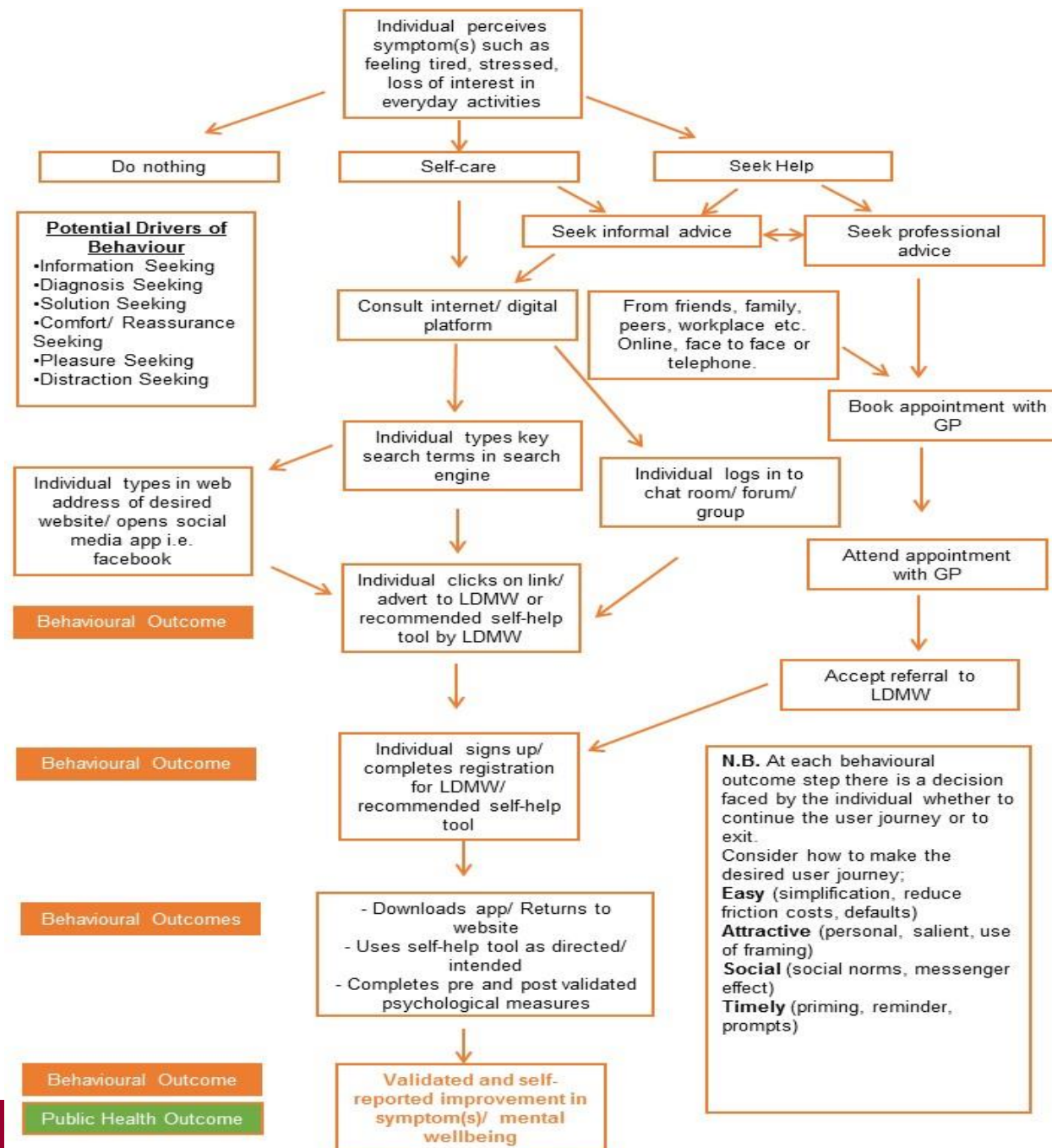
# Behavioural Science embedded

1. A behaviour change strategy to underpin the whole programme based on theory and evidence
2. Advise on and help analyse qualitative and user needs research
3. Identified drivers of behaviour and developed the behavioural pathway to advise on design of the end-to-end user journey
4. Recommendations on user targeting, platform design and digital format to maximise the flow of users to and through the system
5. Enhancement of the national app endorsement process for increased due diligence on evidence of effectiveness





# Behavioural Pathway

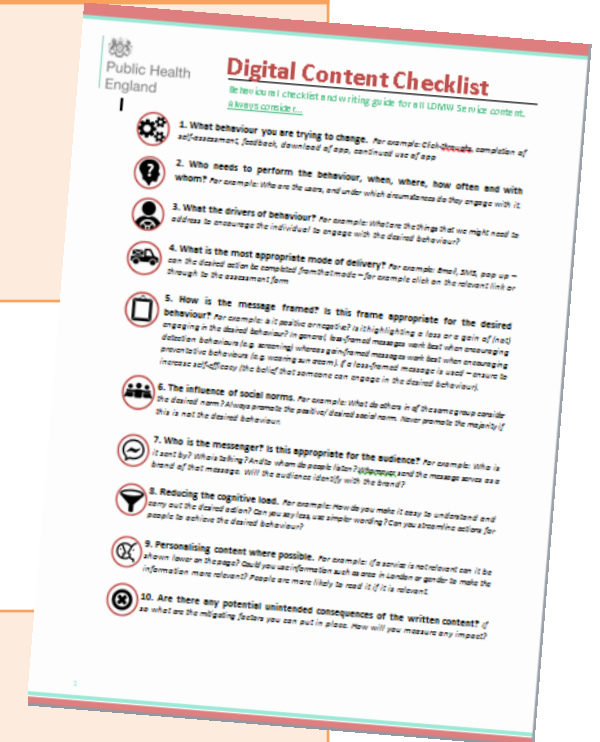




# Behaviour Change Options for Service design

## Potential examples of intervention options using the EAST Framework

Intervention	EASY (or NOT)	ATTRACTIVE (or NOT)	SOCIAL (or NOT)	TIMELY (or NOT)
Reduce stigma of seeking help for symptoms related to mental health by increasing social norms.	<b>Ordering effects:</b> Health professionals encouraged to mention mental wellbeing at the beginning or the end of the therapy/visit.		<b>Messenger effect:</b> Work places promote Good Thinking	
Increase visibility of the service/ advert/link		<b>Personalisation:</b> Consider personalising the advert/ link depending on the search that triggered its appearance, making it more relevant and salient for the searcher	<b>Messenger effect:</b> Health professional recommends Good Thinking. Consider importance of branding/ logo – from a trusted reliable source.	
Increase adherence, users first experience of the website	<b>Reduce Friction costs - goal-setting + chunking:</b> Users should be able to see their progress on Good Thinking and complete small objectives	<b>Personalise + Salience:</b> Homepage should be as relevant as possible to the users initial search and their profile	<b>Descriptive norm:</b> consider the use of descriptive norms to encourage the user. i.e. other people like you are finding this service helpful	<b>Prompt, reminder</b> or push notifications as part of app to encourage continued use/ engagement.



# Example: Optimising engagement



Bad sleep getting you down? You're not alone.

We've teamed up with the NHS and Sleepio to provide a free 30 day app trial to help you find a better night's sleep.



**Get A Better Night's Sleep**

Free 30 Day App Trial

[londonminds.co.uk/sleepio](https://londonminds.co.uk/sleepio)

Download

*Ambiguity around 'you're not alone'*

*Should be more explicitly about support*

*Some people will feel extremely isolated  
- being told they are not alone just may  
not connect in with their experience*



# Example: Optimising app uptake

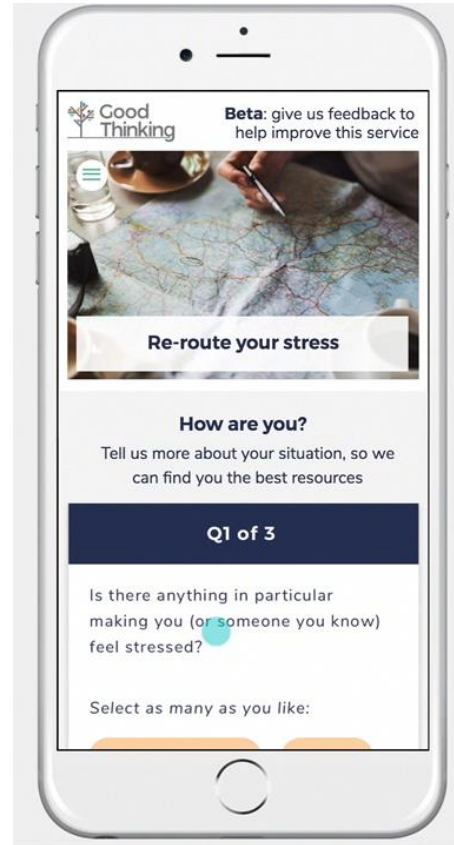
*Some users struggled to find the right resource for them*

*High number of resources shown  
Did not feel personalised*

*Majority of users complete the 3 personalisation questions*



So I have 26 resources, that's a lot of resources for someone suffering from anxiety. That's way too much, it's like which one is going to work? Should I use this or should I not?



*Improvements to the filtering interface*

*Hide resources until options selected*

*Show a "loading" screen after user selects "get your results"*

*Reduce number of resources shown*



If I'm going on this to find the best one for my specific condition and you give me 47 options it doesn't feel like it's really narrowed it down that much.



# Enhanced app selection: three domains

## Engagement Features

App	Reviewer 1	Reviewer 2	Average	Descriptive
Chill Panda	62.5	62.5	62.5	OK
Catch it	75	80	77.5	Good
Feeling Good	82.5	87.5	85	Excellent
My Possible Self	72.5	72.5	72.5	Good
Pzizz	87.5	72.5	80	Excellent
My Cognition	47.5	65	56.25	OK

Gamification	Novelty features				Present			1
Notifications								1
In-app communication	ADJECTIVE RATINGS						Present	1
Sharing on social media								0
Integration with other devices								0

WORST IMAGINABLE

POOR

OK

GOOD

EXCELLENT

BEST IMAGINABLE

0

10

20

30

40

50

60

70

80

90

100



# PHEBI: Making healthy behaviours easier

Develop and embed effective behavioural science evidence into public health practice

## Analyse

- ✓ Strategic Behavioural Analysis
- ✓ Systematic literature review
- ✓ Qualitative research

## Design

- ✓ Interventions
- ✓ Programmes
- ✓ DIGITAL

## Trial

- ✓ RCTs
- ✓ Quasi-experimental studies
- ✓ Evaluation

## Advise

- ✓ Policy
- ✓ Programmes
- ✓ Communication

## Train

- ✓ Masterclasses
- ✓ Workshops
- ✓ Seminars

### INTENTION – BEHAVIOUR GAP:

We all have good intentions but often don't follow through.

“Changing behaviour by changing minds is unscaleable, increases inequalities, not very effective”

*Professor Theresa Marteau, Cambridge*

<https://www.gov.uk/government/collections/behavioural-insights-public-health>