Technology based behaviour change interventions
Stakeholder workshop
22nd May 2018

Area of scope	Questions	Stakeholder responses
3.1 Who is the focus? (Population groups which will be covered)	1. The scope currently focuses on technology-based behaviour change interventions to address specific lifestyle behaviours in: – people without a chronic physical or long-term mental health condition – people with the chronic physical or long-term mental health conditions listed in section 3.3 of the scope. a. Is this an appropriate approach? b. Are the lifestyle behaviours listed in section 3.3 of the scope appropriate? Are any missing or	*Approach* • Group A suggested dividing the groups by age. • Group B was content with the population groups as they were presented in the scope. • Group C felt this division represented the general public and patients. They felt this implied diagnosis was required and queried how people with undiagnosed conditions would fit in. They noted the importance of effectiveness for all groups. *Lifestyle behaviours* • Group A suggested recreational drugs be added, possibly grouped with harmful drinking and unsafe sexual behaviours as 'risk taking behaviours'. They noted that for

	are any there that shouldn't be? If so why? c. Are the chronic physical or long-term mental health conditions listed in section 3.3 of the scope appropriate? Are any missing or are any there that shouldn't be? If so why? d. Although mental health was not identified in the surveillance review of PH49, 'strategies to improve mental wellbeing' are currently included in the scope as a behaviour and 'mental health conditions including anxiety and depression' as a condition that will be considered. Do stakeholders feel this is appropriate?	mental wellbeing it would be important to list behaviours/ strategies that promote wellbeing rather than mild to moderate mental health conditions. Building resilience, sleep hygiene and reducing social isolation, particularly in older people, were suggested. • Group B felt weight management was an outcome as opposed to a behaviour and noted that self-care could be included. They felt the list was negatively framed (lack of physical activity, unsafe sexual behaviour etc). They also discussed "Keeping people well" as opposed to waiting until there is a problem. • Group C felt the term 'lifestyle' should be removed as it didn't adequately describe for e.g. nicotine addiction. *Conditions* • Group A were unclear if there was a relationship between the lists of behaviours and chronic conditions and felt it would be helpful to clarify this. They noted that the behaviours listed may help to manage some

		conditions not currently listed even if they weren't necessarily involved in the development of the condition. Examples given included: neurological conditions such as epilepsy, Parkinson's; some cancers; skin conditions; chronic pain. They noted however that if there needed to be prioritisation, it would be sensible to include conditions for which lifestyle factors contribute to the development of, and can help manage these conditions, but to be clear about this, • Group B felt metabolic syndrome should be included. They noted there were no conditions linked to unsafe sexual behaviours and commented that there needed to be improved synergy between the lists. • Group C queried use of the terms 'chronic' and 'long term' and if there was any difference between them. They suggested adding frailty and ageing, and adding hearing loss to the list. They queried why cancers were not included. They also queried if the focus on conditions distracted

		from the focus on changing behaviours. *Mental health* • Group A agreed this should be included and noted the need to differentiate between strategies that promote wellbeing, and mild to moderate mental health conditions. • Group B made a similar distinction and suggested adding dementia, personality disorders and social isolation. • Group C agreed this should be included and suggested that sleep, health seeking behaviours and gaming be included.
3.3 Activities services or aspects of care Key areas that will be covered	2. Technology based behaviour change interventions that include an intervention by a person e.g. through telephone counselling, face to face intervention, have been excluded from the scope as it is believed that it is difficult to distinguish	• Group A noted that in reality very few interventions would be delivered without any input from a practitioner. Most people, particularly in the chronic conditions group, would be referred to an intervention and receive some form of induction or orientation in its use. Often there would be some 'checking in' by the practitioner to see

	the effect of the technology from the person delivering the intervention. Do you agree with this approach? Should this approach be taken for the intervention only, or for comparator groups too?	how things were progressing. Excluding this element would exclude a lot of evidence. The group felt the key aspects would be that the intervention itself and in particular the 'active feedback loop' should be delivered by the technology not the person. It was noted this is a potential confounder and would be helpful to ask questions about the impact of this. • Group B agreed telephone counselling should be excluded though exceptions could be automated voice recordings. They noted interventions with a person were often used as comparators e.g. for online CBT comparison with CBT delivered by a person. • Group C agreed with the exclusion as it was outlined in the scope.
3.3 Areas that will not be covered	3. Interventions such as appointment reminders have been excluded. Do you agree with this approach?	• Group A did not agree with excluding appointment reminders or medicines adherence as they felt this could be considered a lifestyle behaviour for people managing a chronic condition. • Group B – some members noted the benefit of appointment reminders noting that attending appointments may result in improving other behaviours too. Some members were happy to exclude medicines

		adherence if links were made to relevant NICE guidance. Under areas not included, they noted the need for practitioners to develop skills in the area or technology based interventions • Group C agreed with excluding appointment reminders from the scope
3.1 Who is the focus? (Population groups which will be covered)	4. Are there any sub-groups that should be identified for special consideration?	• Group A noted that technology based interventions may potentially help improve access to behaviour change support for some groups e.g. those with learning disabilities, or sensory or physical disabilities, They noted the need for health literacy, and difficulties in accessing broadband in some rural areas, • Group B also discussed sensory disabilities, literacy levels and language skills. 'Not spots' where internet access is limited, were also identified as a potential issue. • Group C discussed groups with learning disabilities, and neuro-developmental disorders such as autism, needing special consideration. Sensory conditions were also discussed, as was digital exclusion.

3.5 Key issues and draft questions	5. Do most technology based behaviour change interventions that are evidence based have a behaviour change technique or theory underpinning them?	• Group A noted that while evidence suggests those that are most effective are based on behaviour change techniques, not all interventions have such a basis and health professionals may use those they experience to work. There was some discussion that key challenges for technology based interventions include how to personalise them. It was noted that the growth of artificial intelligence (AI) may help to address this and that as AI is developing rapidly, it will be a challenge to future proof the guidance. • Group B noted evidence underpinning some online mental health interventions and interactive voice response interventions (automated telephone messages). Some group members noted that many apps do not have an underpinning behaviour change theory. • Group C felt that most interventions would have an underpinning behaviour change theory.
1 Why the guideline is needed and general context	6. Are there any current contextual, policy or practice drivers/barriers that need to be considered?	• Group A mentioned rapid development of artificial intelligence and the analogue switch off in 2020. Also noted 'Digital Challenge' and the Care Act Green Paper

		• Group B mentioned the new GDPR legislation and queried if care homes use digital technologies • Group C also mentioned data management and sensitively handling data.
	Supplementary questions *(NB: due to time constraints, not all questions were discussed by all groups)*	
3.1 Who is the focus? (Population groups which will be covered)	7. Are stakeholders happy with the focus of the guidelines? a) If not, why? b) Are there any other specific groups that should be mentioned?	This question was covered under Q1
3.2 Settings	8. Looking at the list of **settings**, are there any missing?	• Group A noted social care settings, housing and prisons (digital healthcare interventions may be provided through a digital campus).

3.5 Key issues and draft questions	9. Looking at our **key issues and questions**, are there any missing? a) Are there any important areas here that would be crucial? If so why? b) Are there any areas that are included here that shouldn't be? c) Are there any additional key issues around commissioning of these interventions that should be included?	• Group A discussed some possible additions to question 1.5. Engagement and its association with effectiveness of an intervention, and the effect of design features /the design of the user interface.
3.6 Main outcomes	10. Are there any important **outcomes** that are missing, or any that should not be there? What are the most important outcomes for technology based behaviour change interventions?	• Group A discussed adding sustaining behaviour change, psycho-social functioning, and engagement as an outcome.
2. Who the guideline is for	11. Looking at the list of **who the guideline is for** are there any omissions or any	• Not covered

	groups included that should be removed?	
3.2 Settings	12. Looking at the list of **settings**, are there any missing? Is the list of settings that will not be covered appropriate?	• Covered under Q8
Research to inform the guidance	13. Are there any **key research studies** you aware of that would be relevant to these guidelines and when are they due to be published?	• Group A noted UCL are carrying out research on engagement and its association with effectiveness. Noted that some weight management programmes are being delivered online in Nottinghamshire and Derbyshire. • Group B discussed broadcast and narrowcast messages and framing messages for different age groups. Research due in 2020 on using technologies to support behaviour change in young people. A study at Airedale hospital also mentioned, on using telemedicine to reduce hospital admissions.
Equality issues	14. Are there any **equity** issues that need to be considered?	• Captured under Q4

Prioritisation	15. If we identify we have too much to cover within the resource available, **which areas should be prioritised** over others? a) Why is that? What are the factors that drive your thinking? b) Which areas are not a priority?	• Group A noted that if there needed to be prioritisation of chronic conditions, it would be sensible to include conditions for which lifestyle factors contribute to the development of, and can help manage, the condition.
Committee constituency	17. Who do stakeholders think are essential to have **representation** from on the Public Health Advisory Committee (PHAC) in the development of this guideline and why?	• The committee constituency was discussed by two of the groups • Group A noted the need for technical expertise and that this may be from the private sector. They noted it would be helpful to have someone who could help to future proof the guidance and agreed with needing lay members. • Group C mentioned named individuals.
Plenary session	**Key areas of discussion**	• Whether the uptake of behaviours such as smoking, harmful drinking, unsafe sexual behaviour should be considered.

		• The involvement of a person in delivering the intervention and how this may moderate effectiveness. • The future impact of artificial intelligence. • Chronic conditions to be included and their link with the behaviours included.