



Optimising vaccination uptake for Covid-19

UNDERSTANDING VACCINATION UPTAKE BEHAVIOUR

To design effective public health policies, campaigns, messages and practices, it is important to first understand the target behaviour.¹ The target behaviour for this guidance document is getting the recommended dose(s) of the Covid-19 vaccination (referred to going forward as getting the vaccination and vaccination uptake).

UNDERSTANDING INFLUENCES ON VACCINATION UPTAKE USING A COM-B BEHAVIOURAL DIAGNOSIS

To help understand vaccination uptake, the COM-B model^{2,3} suggests there should be considerations made for the target population in relation to their:

Capability to enact the behaviour, this relies on both psychological (e.g. knowledge and skill) and physical (e.g. ability) capability factors;

Opportunity to enable the behaviour, this considers both social (e.g. norms, support) and physical (e.g. resources, environment) opportunity factors; and

Motivation to perform the behaviour, this involves both reflective (e.g. attitudes, beliefs, confidence, intentions, identity) and automatic (e.g. emotion, habit) motivational processes.

Table 1 highlights the likely influences related to capability, opportunity and motivation towards vaccination uptake that should be considered and addressed as part of the global public health strategy. These may differ between people and populations, and within the same person at different times (e.g. if the vaccination requires two doses). Members of different communities will likely have different barriers linked to capability, opportunity, and motivation. The same person may have some barriers that change over time (e.g. concerns around vaccine safety may be relevant for a first dose, but may be less relevant for a second dose) or with successful intervention.

Table 1: A COM-B behavioural diagnosis of the likely positive influences on vaccine uptake for consideration in policies, campaigns, messaging and practice

Capability psychological/physical	Opportunity social/physical	Motivation reflective/automatic
Knowledge of why each dose of the vaccine is needed (Psychological)	Social support from others (e.g. help with planning, transport) to get the vaccination (Social)	Belief that getting the vaccination will lead to positive health outcomes personally, and/or for others and the wider society (e.g. lower risk of severe disease for self and others; end to pandemic restrictions) (Reflective)
Knowledge of who should be vaccinated, in addition to when, where and how to access the vaccination (Psychological)	Encouragement and approval from significant others (e.g. family, friends) to get the vaccination (Social)	Having the confidence towards getting the vaccination when eligible (Reflective)
Knowledge of vaccination safety (e.g. highlighting that side effects are likely to be mild and short-term; and challenging myths) (Psychological)	Social and cultural norms for vaccination uptake (Social)	Holding strong intentions and goals to getting the vaccination when offered (Reflective)
Knowledge of cultural appropriateness of the vaccine (e.g. it does not contain animal products or alcohol) (Psychological)	Encouragement and approval from a range of relevant credible sources (e.g. cultural or community leaders, healthcare professionals, scientists) and wider society to get the vaccination (Social)	Beliefs about the positive value of the vaccination that outweigh concerns of side effects (Reflective)
Ability to plan getting the vaccination (e.g. what is needed to book a vaccination appointment, when it should be done, how and by whom) (Psychological)	Access to environments (e.g. local vaccination centre; accessible buildings; home vaccine service) that enables getting the vaccination (Physical)	Holding an identity of someone who would get a vaccination (Reflective)

The interpersonal skills (e.g. communicating with healthcare staff) to arrange what is needed to get the vaccination (Psychological)	Access to resources (e.g. vaccine availability) that enables getting the vaccination (Physical)	Overcoming negative emotions (e.g. fear of needles) related to physically getting the vaccination (Automatic)
The cognitive skills (e.g. cognitive ability to remember the appointment day/time) to get the vaccination (Psychological)	Accessible information and communications about the vaccine translated into different languages, and appropriate for those who are deaf, hard of hearing, or who have visual impairments or learning difficulties (Physical)	Overcoming negative emotions (e.g. worry of leaving the home) related to practical aspects of getting the vaccination (Automatic)
The physical ability (e.g. to book an appointment; attend the vaccination centre) to get the vaccination (that may be limited by disability, e.g. visual/auditory/verbal) (Physical)	Removal of practical and cost barriers to be able to get the vaccination (e.g. flexible appointment slots to reduce loss of earnings or difficulties with caring responsibilities) (Physical)	Getting the vaccination being something that does not require much thought as it is linked to past behaviours (e.g. getting vaccinated for other diseases) (Automatic)

BEHAVIOURAL SCIENCE RECOMMENDATIONS

The guidance below aims to highlight ways to optimise public health messaging to increase vaccination uptake in the population. The guidance draws on a systematic review of the factors that may influence people's responses to public health messages about vaccination uptake during pandemics or epidemics⁴.

In order to optimise vaccination uptake, we recommend **six principles regarding optimising public health messaging and increasing access to the vaccination**:

U – UNDERSTANDING

Help the public understand: (i) the safety of the vaccine; (ii) the benefits of vaccination to protect personal health and that of others; (iii) the side effects of the vaccination, (iv) the need to maintain disease prevention behaviours e.g. physical-distancing, hand hygiene and the use of face coverings post-vaccination; and (v) the requirements for the full vaccination (e.g. more than one dose of the vaccine if required).

P – PERSONALISE FOR THE POPULATION

Personalise the message to meet the needs of individuals or target population groups through appropriate media and messages tailored to individual differences such as language, literacy level and disability. Present messages in a way that increase perceptions of personal relevance (e.g. combine factual information with a personal case study) and include target populations in the design and delivery of messages.

T – TRUST

Messages need to be trustworthy by stating facts and dispelling misinformation (see references⁵⁻⁷ for information regarding communicating about the vaccination and fighting misinformation). Trusted messengers and communication channels should be used, and these will vary between different communities and populations.

A – ADDRESSING BARRIERS TO ACCESS

Identify barriers to access, and include ways to address these such as information on the locations of vaccination clinics, priorities for availability, and the psychological or physical restrictions to vaccination uptake such as cost to the individual, accessible appointments, travel and an enabling environment.

K – KEEP IT BRIEF

Use short and clear messages (or a series of messages), avoiding scientific and vaccine-related jargon, such as by using ‘increased widespread protection’ rather than ‘herd immunity’. Use an appropriate message type (e.g. such as highlighting gains to society from vaccination), which can help deliver a message that can be remembered and understood (see our guidance on public health messaging).⁵

E – EVIDENCE FOR EFFECTIVENESS

Where available, provide evidence of the effectiveness of the vaccination for all variants of Covid-19, for individuals, their loved ones, and for society as a whole (not just individual benefit), through the communication of clear science on the effectiveness of vaccination and how it works.

All of the above vaccination UPTAKE factors need to be considered for each target population group* as different groups may experience different barriers.¹ Each group will have different levels of knowledge and understanding, different needs for personalisation, different beliefs, different barriers to access, different experiences of effectiveness and needs for evidence of effectiveness.

Therefore, it is important to consult your target populations and include credible sources (e.g. scientists/medical professionals from the target population) who are trusted in their communities. It is important to include target populations and credible sources in the co-design of tailored health messages and in efforts to provide support.^{6,8} This should be done without creating or increasing stigma in groups with low vaccination uptake.⁸

USING A BEHAVIOURAL SCIENCE APPROACH

These guidelines and examples can be used to optimise existing public health campaigns and to guide longer-term strategies in public health to support vaccination uptake. This document should be used alongside the Achieving Behaviour Change (ABC) guide for local government and partners⁹, the Improving People’s Health Behavioural and Social Science strategy¹⁰ and the British Psychological Society’s Behavioural Science and Disease Prevention Psychological guidance.¹ For further support, you can contact the BPS Division of Health Psychology (with the subject title Covid-19). We would also encourage you to contact your local university, or one with expertise in behaviour change, and/or find a psychologist here.

* For example, older adults, young people, people living with disabilities, LGBT groups, minority ethnic groups, people who are homeless, religious groups, people who are pregnant, low socio-economic status groups, people with substance use problems, prison populations, sex workers

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- ¹⁰ Public Health England. (2018). *Improving people's health: Applying behavioural and social sciences to improve population health and wellbeing in England*. London: Public Health England.