

# **Recommendations to increase adherence by healthcare workers to personal protective behaviours aimed at reducing nosocomial SARS-CoV-2 transmission**

SPI-B Note: 12 June 2020

## **Background**

Reducing nosocomial transmission requires a multi-faceted approach; this includes motivating and supporting healthcare workers (HCW) to enact recommended personal protective behaviours. These include 1) behaviours that are recommended to all members of the community (e.g. social distancing, self-isolating when ill), and 2) behaviours that are specific to their role (e.g. appropriate use of PPE).

SPI-B was asked to review factors relating to adherence to these behaviours in HCWs and produce recommendations to improve HCW adherence. To support this, the Health Protection Research Unit in Emergency Preparedness and Response produced an analysis of Department of Health and Social Care polling data<sup>1</sup> and a rapid evidence review<sup>2</sup>. Copies of these were provided directly to NHS England and the Hospital Onset Covid-19 Working Group.

When considering how to improve adherence to behavioural recommendations, it is useful to classify the potential levers of change in terms of improvements in capability, opportunity and/or motivation. These three factors form part of a dynamic interacting system as set out in the COM-B model<sup>3</sup>.

## **Aims**

This note summarises recommendations from the work undertaken to date, classified in terms of how far they address key levers of change, namely increasing Capability, Opportunity, and/or Motivation, as specified in the COM-B model of behaviour.

## **Results**

### **Increasing capability**

Education and training should be developed in tandem with frontline staff to address the requirements below in a way that is clearly relevant to the specific challenges they face. Guidelines and educational and training resources should be concise, updated only when necessary and provided through a single trusted source, to maximise value and prevent conflicting information being disseminated.

#### *Psychological capability*

This includes knowledge and understanding of what behaviours are required, when and why, as well as how to perform them. It is important to ensure that HCWs:

1. understand all the mechanisms of transmission of SARS-CoV-2 including a) airborne and fomite routes, b) how clinical procedures can lead to transmission by different routes, e.g. aerosol creation, and c) risk of infection from symptomatic and currently asymptomatic people;
2. understand how to enact all the personal protective behaviours effectively in all the contexts in which they are required;
3. understand the importance of adhering to personal protective behaviours outside of, as well as inside, their work environment, including in rest and recreation areas and corridors in healthcare facilities as well as all locations outside of these facilities and in their homes and social networks;
4. are fully familiar with the symptoms of COVID-19 that indicate the need to be tested and to self-isolate.

### *Physical capability*

Use training, testing and audit to ensure that HCWs have the necessary physical skills:

1. relevant to their specific roles and locations as well as more generally;
2. to minimise generation of fomites (contaminated objects and surfaces) and secondary contamination of objects and surfaces, e.g. when using, donning or removing PPE.

### **Increasing opportunity**

Consultation with staff is needed to identify those issues that are most problematic and help to identify possible solutions to achieve the following objectives.

#### *Physical opportunity*

Ensure that the working environment and available resources mean that:

1. effective PPE is provided in a suitable array of sizes and is readily accessible in all the locations where it is needed;
2. logistical or practical issues within the workplace that inhibit using, donning or removing PPE are identified and resolved;
3. the physical environment in clinical and non-clinical areas (e.g. rest areas, canteens, lift lobbies) have been assessed and, where necessary, reconfigured to enable staff to use PPE and to maintain physical distancing.

#### *Social opportunity*

Ensure that the working arrangements and practices mean that:

1. strong norms around personal protective behaviours are established in all scenarios;
2. high workload, and the time taken to use PPE, do not create barriers to adherence. Schedules, workloads and managerial expectations must take into account the additional time that staff require to adhere to guidance.

Additionally, it has been reported that “historic racism and poorer experiences of healthcare or at work may mean that individuals in BAME groups are less likely to seek care when needed or as NHS staff are less likely to speak up when they have concerns about Personal Protective Equipment (PPE) or risk” (4). Issues surrounding equality and diversity must be taken into consideration as part of any initiative in this area.

### **Increasing motivation**

It is essential that HCW feel strongly motivated to enact personal protective behaviours and build it into their routines.

#### *Reflective motivation*

HCWs need to experience a strong sense of imperative to enact protective behaviours. To achieve this, it is important to:

1. address staff concerns about the impact of PPE on their ability to perform their duties effectively;
2. make it clear that adherence to personal protective behaviours is routinely monitored and to regularly provide feedback to staff on levels of adherence together with action plans where needed to improve it.

#### *Automatic motivation*

HCWs must feel comfortable about enacting personal protective behaviours and it must be built into their everyday routines. To achieve this it is important to:

1. consider the comfort of PPE in procurement decisions;
2. ensure that senior staff lead by example;
3. ensure that staff feel appropriate levels of concern, particularly when in high risk scenarios.

#### **References**

1. Smith LE, Fear N, Potts HWW, Michie S, Amlôt R, Rubin GJ. Personal protective behaviours in NHS workers. Available from [gideon.rubin@kcl.ac.uk](mailto:gideon.rubin@kcl.ac.uk)
2. Brooks SK, Greenberg N, Wessely S, Rubin GJ. [Factors affecting healthcare workers compliance with social and behavioural infection control measures during emerging infectious disease outbreaks: Rapid evidence review](#). *BMC Public Health*, submitted
3. Michie S, van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science* 2011; 6:42.
4. Public Health England. [Beyond the data: Understanding the impact of COVID-19 on BAME groups](#). 2020.