Appendix 1: Characteristics of study participants

Profession al role	Sector/ Type of Facility	Time in service (years)	Education level	Ethnicity	Age	Gend er
Occupationa I Therapist	Orthopaedics	9	Undergradu ate Degree	Unknown/not reported	Unknown/ not reported	F
Service Manager in Theatres	Theatres & Anaesthetics/ Intensive Care	20	Undergradu ate Degree	Mixed – White British & Black Caribb ean	41	F
Geriatric Registrar	Geriatrics	9	Medical Degree	White British	Unknown/ not reported	М
Charge Nurse	Intensive Care	7	Unknown/no t reported	White Other (European)	31	М
Consultant Anaesthetist	Theatres & Anaesthetics/ Intensive Care	2	Medical Degree	White Other	52	М
General Practitioner	General Practitioner Surgery	>6	Medical Degree & Masters	White British	29	М
Consultant Anaesthetist	Theatres & Anaesthetics/ Intensive Care	16	Medical Degree & Masters	White Other	46	F
Nurse	A & E	7	Masters	White Other	26	F
Specialist Nurse	Oncology	Unknown/ not reported	Unknown/no t reported	Mixed- Black & Scottish	Unknown/ not reported	F
Divisional Manager	Theatres & Anaesthetics	20	Masters	White Other	45	М
Consultant Anaesthetist	Acute care	17	Medical Degree	British	48	М
Consultant Anaesthetist	Theatres & Anaesthetics	27	Medical Degree & Masters	Indian	51	F
Neuro- physiothera pist	Outpatients & Community	15	Masters	British	37	F
General Manager	Intensive Care	26	Masters	Mixed- British & Asian	26	F
Plastic and reconstructiv e surgeon	Oncology	Unknown/ not reported	Medical Degree & Masters	White Other (Greek)	Unknown/ not reported	М
Nurse	A & E/ Intensive Care	13	Unknown/no t reported	Unknown/not reported	35	F
Consultant anaesthetist and Clinical Director	Theatres & Anaesthetics	33	Medical Degree & Masters	White British	56	F
Senior Clinical Pharmacist	Pharmacy	21	Masters	British Asian	43	F

Data Manager	Bone Marrow Transplant	6	Masters	Asian (Sri- Lankan)	28	F
Clinical Specialist Physiothera pist	adolescent and the young adult rheumatology.	23	Undergradu ate Degree	White British (European)	53	F
Specialist Nurse	Gastroenterolo gy/ Surgical Ward	>5	Masters	White Other (Italian)	55	F
Consultant Anaesthetist	Theatres & Anaesthetics	18	Masters & Medical Degree	British Indian	40	М
Consultant Anaesthetist	Theatres & Anaesthetics	13	Medical Degree & Masters	Asian Other	36	F
Pathway Coordinator	Interventional Oncology Service	10	Degree	Black British	54	F

Appendix 2: Interview topic guide

"How much time do you have available today? The interview takes about 30 minutes on average, but it can go on longer depending on how much you want to say"

First, I want to ask you again about your work and the services you provide.

Frame questions 1-4 around reflecting on the differences between wave 1&2

- How are things compared to wave 1/ last time you did an interview?
- Can you give me a picture of how things are now? How do you feel about the changes?

1. Background: Can you tell me about your role?

- Can you tell me a bit about your role? (e.g., Daily tasks, department, responsibilities)

2. How has the COVID-19 outbreak affected health services in your department? *Probes:*

- How has this affected your normal daily tasks/responsibilities? Change of role?
- Impact of COVID-19 on the delivery of services to non-COVID-19+ patients (i.e., cancellation of elective surgeries)
- What tasks are you able to do more or less effectively?
- How do you manage the isolation of suspected cases and confirmed cases?
- Has there been appropriate transfer of patients within and out of hospital?
- Has there been an impact on staff's ability to make diagnoses and act on them?
- Has the supply of drugs, equipment and PPE been affected?
- Have staff been redeployed from or within your health facility?

3. Do you currently have any concerns or fears in relation to ...

- Work (response efforts, PPE, services)
- The national effort

4. How has your life at home been impacted by COVID-19?

5. Mental health support (to address risk of moral injury, trauma and developing severe mental health problems)

- Are you aware of any support available for staff wellbeing and mental health?
- Have you had the opportunity to talk about your mental health with your supervisor/team leader?
- Have you had worrying experiences in the last week? Did you receive support after?
 If so, what type of support? (including formal and informal support)
- Interactions between peers: Do you have time to socialise with your team? What has changed with COVID-19?

6. Do you feel your experience has been different from other HCWs? Does gender play a role? How about race or ethnicity?

Probes (relevant to non-BAME participants who mention ethnicity/race too):

 Have you been impacted by the news that BAME HCWs have been disproportionately dying of COVID-19? [Probe for how they have been impacted (e.g. emotionally, practically...) and whether (and how) they have been supported by management]

- Have you received a risk assessment as a BAME HCW? [Whether they answer yes or no:] How do you feel about it? [Background information for the interviewer: NHS England, in response to disproportionate impact of C19 on BAME HCWs, introduced risk assessments that specifically consider the physical and mental health of BAME
- Have wider news of BAME population in the UK being disproportionately impacted by COVID-19, as well as the wider BLM movement, affected you alongside your experiences working through the pandemic? [Probe on how they were affected]
- How was redeployment approached at your facility? [Probe on any patterns of redeployment and if certain groups, e.g., BAME HCWs, seemed more likely to be redeployed]

7. VACCINATION QUESTIONS

- Have you heard anything about COVID-19 vaccines? Where?
- 2. What do you think about these vaccines?

Effectiveness:

General question – How effective do you think the vaccine will be?

Example prompts:

- What are the potential benefits of the vaccine?
- Do you think it will provide immunity? If so, how long do you think it will provide immunity?
- Do you think "booster" shots will be necessary to extend immunity?
- Do you think it will it be effective in fighting different mutations of the virus?

Sub-question: (effectiveness of) different vaccine types:

- Did you know that there are different types of vaccines?
- Do you think the effectiveness of these vaccines varies?
- Does the general public feel differently about these vaccines?

Safety:

- What do you think about the potential risks and benefits of having the vaccine? Example prompts:
 - If so, do you think they will be long-term?
 - Are you personally willing to accept any of these risks?
 - Have you ever discussed these potential risks with family, friends, or patients?
 - Do you feel obligated to promote the vaccine?

Vaccine delivery:

(Delivering the vaccine to the population) What do think about the work of delivering the vaccine at scale??

Example prompts:

- How practical and probable do you think mass vaccination is?
- Have you heard anything about the strategies the UK will use to deliver the vaccine?
- Will you play a role in vaccination? If so, what role specifically?
- (Delivering the vaccine to HCWs) How should we prioritise access to the vaccine for HCWs?

Example prompts:

- Do you think everyone will have access immediately or will a ranking system be implemented?
- What place in the ranking do you think HCWS will occupy?
- 3. What impact do you think vaccination will have on the NHS?

Personal choices/decisions:

- 1. Do you think HCWs should be vaccinated? Should they be a priority group?
- 2. If the vaccine were available tomorrow, would you get vaccinated?

GENERAL REFLECTIONS

Again – framing in relation to the first wave – 'Based on what you have learnt and experienced over the past few months... '

8. How have health services been strengthened, or how could they be strengthened during the outbreak?

Probes:

- Support to HCWs from the health system and partners?
- Capacity for rapid response
- Policies? e.g., Guidance and emergency protocols?
- What would help HCWs to maintain normal services as well as COVID related services?
- If GP: Health promotion and community engagement. How?
- If GP: Linkage to other support organisations, e.g., charities, schools?

9. Is there anything you feel should be changed to make health services more effective in future emergencies?

Probes:

- Support to HCWs? From whom and How?
- Coordination and official guidance of COVID-19 response.
- Early detection and reporting.
- On-going health promotion and community education. E.g., potential sources of infection, safe practice?
- Mobilisation? E.g., identifying and coordinating trusted community volunteers and support?
- Disease outbreak control activities?
- Testing (public and staff)

10. Do you have any caring responsibilities, such as children or elderly family members?

If yes:

- a. How are you managing care during the COVID-19 pandemic?
- b. (If they have children) How has being a HCW during the pandemic impacted your ability to parent?
- c. What fears, worries, or emotions arise from the responsibility of caring for others during this time?

11. Are you pregnant?

- a. If so, how has this impacted your work and experience as a HCW during the COVID-19 pandemic?
- 12. Is there anything else you would like to mention that you feel is important?

Thank you for your time and for sharing your opinions and experiences with us.

Appendix 3

Policy review inclusion criteria:

- Published between 1 December 2020 and 15 February 2021;
- Related to the COVID-19 pandemic;
- Related to the UK's mass vaccination programme.

Appendix 4

Policy/guidance title	Publication location	Date of publication	Scope	Healthcare sector
Week One: Implementing the Covid Vaccination Programme	NHS England and NHS Improvement	4-Dec-20	50 hospital hubs only (in England - from Policy ID 3)	Secondary/tertia ry care
COVID-19 vaccinator competency assessment tool	Public Health England	Document created 27- Nov-20 and updated 6-Dec- 2020	United Kingdom	Facilities involved in the COVID-19 vaccination programme
COVID-19 vaccinations and care homes: programme launch	GOV.UK	4-Dec-20	England	Secondary/tertia ry care
COVID-19 vaccination programme: Information for healthcare practitioners	Public Health England	Document created 27- Nov-20 and republished 31- Dec-20	United Kingdom	NA
Greenbook chapter 14a	GOV.UK	Document first published 27- Nov-20 and last updated 31-Dec-20	United Kingdom	NA
Joint Committee on Vaccination and Immunisation: advice on priority groups for COVID-19 vaccination	GOV.UK	30-Dec-20	United Kingdom	NA
COVID-19 vaccination: protection for healthcare workers	GOV.UK	Document first published 7- Dec-20 and last updated 31-Dec-20	United Kingdom	NA

COVID-19 vaccination: guide for older adults	GOV.UK	Document first published 7- Dec-20 and last updated 31-Dec-20	United Kingdom	NA
COVID-19 vaccination: a guide for women of childbearing age, those currently pregnant or breastfeeding	GOV.UK	Document first published 6- Dec-20 and last updated 31-Dec-20	United Kingdom	NA
COVID-19 vaccination: a guide for social care staff	GOV.UK	Document first published 7- Dec-20 and last updated 31-Dec-20	United Kingdom	Social care
The safety of COVID-19 vaccines when given in pregnancy	GOV.UK	Published 18- Dec-20	United Kingdom	NA
Training recommendations for COVID-19 vaccinators	GOV.UK	Last updated 8- Dec-20	United Kingdom	NA
Vaccination in pregnancy	GOV.UK	Published 1- May-10 and last updated 31-Dec-20	United Kingdom	NA
Annex A: Report to JCVI on estimated efficacy of a single dose of Pfizer BioNTech (BNT162b2 mRNA) vaccine and of a single dose of ChAdOx1 vaccine (AZD1222)	GOV.UK	Published 22- Dec-2020	United Kingdom	NA
Annex B: comparison between 1 and 2 dose prioritisation for a fixed number of doses	GOV.UK	Published Jan- 2021	United Kingdom	NA
COVID-19 vaccination programme	ВМА	Published 15- Feb-2021	England	General practice
COVID-19 vaccination programme: Information for healthcare practitioners	GOV.UK	Re-published 11-Feb-2021	United Kingdom	NA
PHE immunisation inequalities: local action plan template	GOV.UK	Published Feb- 2021	England	NA

National Immunisation Programme: health equity audit	GOV.UK	Published Feb- 2021	England	NA
PHE Immunisation Inequalities Strategy	GOV.UK	Published 2- Feb-2021	England	NA
Integration and Innovation: working together to improve health and social care for all	GOV.UK	Published Feb- 2021	England	NA
Optimising the COVID- 19 vaccination programme for maximum short-term impact	GOV.UK	Last updated 26-Jan-2021	United Kingdom	NA
UK COVID-19 vaccines delivery plan	GOV.UK	Published 11- Jan-2021	United Kingdom	NA