

Supplementary Appendix

Appendix 1- LFT Training

Face-to-face

Contact was minimised by using electronic consent, training and communication via email and the CVm-Health+ Education app where possible.

All FACTS sites followed Public Health England infection prevention and control guidance regarding collection, processing and disposal of samples, including that regarding personal protective equipment for face-to-face training.

Trainers were staff at University of Oxford's Nuffield Department of Primary Care Health Sciences who had completed Good Clinical Practice Training within the past 3 years and received training on the FACTS study and lateral flow testing. Trainers were required to complete a self-test each day prior to delivering training to confirm that they were COVID-19 negative.

On arrival at the training centre, each participant was required to wear a face mask before entering the training room. If anyone was 'mask exempt' they were provided with a face shield which they were instructed to sanitise before and after use. Hand sanitiser and sanitising wipes were provided at the entrance and throughout the training room. Yellow hazard bins were also placed throughout the room. Each participant sat at a socially-distanced desk when they entered the room and did not get up until the end of the session. Each desk was equipped with an Innova LFT device (Innova Medical Group) (32), sample tube containing buffer solution, a swab, tissues and marker pen.

Trainers confirmed that each participant was eligible, had downloaded the app, completed the consent process, or were happy to once they had asked questions, and had watched the short video guide on how to self-swab. If anyone was ineligible, or decided not to consent, they were thanked, asked to clean down their area and leave. The aims of the study were explained to the participants, and a live demonstration of the swabbing, sample preparation and sample application process was given. The trainers clearly explained how to record and interpret the test result. Participants were instructed that, if they got a positive test result, they were required to self-isolate and book a PCR test through the University student and staff COVID-19 testing service. They were also asked to report via the app that they had booked a PCR test, and to confirm that they were self-isolating. Students were also reminded that a negative test still meant that they had to follow all COVID-19 protocols. Following the demonstration, participants were asked whether they felt confident to perform the swabbing and test. Participants were then instructed to initial and date their test device, and to proceed with the swabbing and perform the test, with support from the trainers, if required.

Once the sample had been applied to the test device, each participant was asked to set a timer for 30 minutes before reading and interpreting the result. After 15 minutes, however, the trainers asked each participant to confirm whether they had a control line on the test device. For those who did not, the trainers examined the device and offered the participant a second device to repeat the test. In the event of a participant having to do a second test, the self-swabbing step did not have to be repeated as there was sufficient solution prepared from the initial swabbing to carry out a second test if necessary. If a participant's second test was inconclusive, they were not asked to repeat the test a third time, but to log their result as inconclusive.

When the 30 minutes had elapsed, participants were asked to interpret the result, record this on the app, and photograph the entire test device and result using their smartphone camera, as instructed by the app. The trainers visually checked each of the tests performed and confirmed whether the participant's interpretation of the test result was correct. These interpretation results were recorded on a paper data collection form. If the participant had interpreted the device result incorrectly, the trainer explained again how to read the result and checked the individual's understanding. Independently of correct or incorrect result interpretation, the participant was instructed not to alter their initial result entry, as test result interpretation was one of the outcomes of interest.

The participants were then prompted to answer questions on ease and acceptability of conducting the test via the app. When finished, the participants cleaned their work area, disposed of their used test kits and left.

On-line training

On-line training was offered to a limited number of individuals who were required to collect the test kits in advance. Full step-by-step guidance was provided in advance to all individuals who booked a place for online training. The sessions were delivered by two trainers via Zoom. Similar to the face-to-face training, the trainers first confirmed participant eligibility, that everyone had downloaded the app, had watched the video on how to self-swab and had completed, or after asking questions, were now happy to complete, the consent process. The trainers gave a presentation on the study, its aims and objectives, and gave a live demonstration of how to perform the test and how to interpret the result. The participants were then asked to carry out the swabbing and testing process and to start their timers for 30 minutes once the sample have been applied to the device. After 15 minutes, the trainer checked that each participant had a control line. When 30 minutes had elapsed, the participants took a photograph of the result using their smartphone camera, as instructed by the app, and recorded their interpretation of the result in the app. The trainers joined each participant in breakout rooms to check the test interpretation. This step allowed participants to keep their test result confidential from the group.

Appendix 2

Survey Online Questionnaire

Study Title: The Feasibility and Acceptability of community COVID-19 rapid Testing Strategies (FACTS) study

Chief investigator: Professor Richard Hobbs, University of Oxford

This survey asks about your views on using tests as part of the FACTS study. This survey takes approximately 5 minutes to complete.

Your demographic details

Q1. Please confirm that you are a university:

- student (undergraduate)
- student (postgraduate)
- staff member

Q2. What type of training did you receive? (Face to face training/ Online Training)

Please confirm your email address, by which you received this survey link, so we can link your answers to the demographic information you have already provided in the app.

Your symptoms

Since receiving the FACTS training, have you had any of the following symptoms:

- a. Feeling feverish: (Yes / No)
If yes, when did your symptoms start/end?
- b. A new, continuous cough? (New: means a cough that you've not had before, or if you usually have a cough, it's got worse. Continuous: means coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours) (Yes / No)
If yes, when did your symptoms start/end?
- c. Feeling unusually short of breath? (Yes / No)
If yes, when did your symptoms start/end?
- d. A loss or change to your sense of smell or taste? (Yes / No)
If yes, when did your symptoms start/end?
- e. Feeling unusually tired? (Yes / No)
If yes, when did your symptoms start/end?

- f. Feeling so ill that you've stopped doing all of your usual daily activities? Answer unable to do usual activities if you can't do anything you usually would, such as watch TV, use your phone, read or get out of bed. (Yes/No)

If yes, when did your symptoms start/end?

I have had no symptoms since attending the FACTS training (YES/NO).

Are you taking any medicines for your symptoms? YES/NO. If yes, please tell us the name of the medicines [free text]

Views on testing

Please respond to the statements below using the scale provided. Please give only one answer per statement.

Strongly agree (7), Agree (6), Slightly agree (5), Neither agree nor disagree (4), Slightly disagree (3), Disagree (2), Strongly disagree (1).

I have been provided with [give choice of tests being used in study] self-test.

1. I believe [The test] provides reliable and accurate results
2. I believe it is safe to use [the test].
3. It is important for me to know whether I have COVID-19 or not

Are you carrying out the COVID tests yourself? YES/NO

If YES, go to 4

If NO, go to 8

4. Self-testing with [the test] is easy to fit into my usual activities
5. Self-testing with [the test] every [X] days is easy for me to remember to do
6. I am confident I can carry out [the test]
7. I am confident I can interpret [the test] results
8. Testing for COVID weekly is beneficial to me
9. If I have weekly COVID tests it is beneficial to people who live with me
10. If I have weekly COVID tests it is beneficial to my friends and family
11. If I have weekly COVID tests it is beneficial to the wider community
12. I intend to self-test again in the next week.
13. I would self-isolate if I received a positive test result from [the test]
14. I would self-isolate if I received a positive test result from a laboratory (e.g. NHS or university) test

Please enter any additional comments you have about self-testing for COVID in the free text box below:

Thank you for completing this survey.

If you have any queries about this survey please contact [insert researcher's name and contact details].

Appendix 3: Topic Guide

Topics to be explored

Below is a list of topics to be discussed in this study. The work will remain flexible with respect to participants' agendas. Therefore, we may add new topics as the interviews progress and data collection continues. However, the key topic of participants' views and experiences using the tests, the perceived benefits of testing, barriers and facilitators to undertaking regular testing, trust in test results and intentions to act on positive result, will remain the same.

1. Participants' views and experiences of using the tests.
2. Participants' views and experiences on barriers and facilitators to undertaking regular testing.
3. Participants' views on trust in test results.
4. Participants' views and experiences of perceived benefits of testing.
5. Participants' intentions to act on positive result.

Using the tests

1. Can you tell me about your experience of self-testing for COVID so far?
2. Can you tell me about the training you had on how to self-test, as part of the FACT study?
Prompts: What did the training involve? What did you think about the training? Is there anything which would make the training easier for you? How confident did you feel about doing the test?
3. How did you feel about doing the test for the first time?
4. How have you found self-testing over time?
Prompts: Have you had any difficulties in doing the test? If, so what happened and what did you do? How did you overcome difficulties?

Barriers and facilitators to undertaking regular testing; perceived benefits of testing

1. Can you tell me why you signed up to this study?
2. How have you found self-testing so far?
Prompts: What has been most difficult in relation to doing the tests?
3. Is there anything which would making the experience easier for you?
4. What is the main reason for you for continuing in the study?
5. What are the benefits for you in taking part in this study, if any?
Prompts: Are there benefits for you/your family/your friends?

Trust in test results

[For those who have not tested positive]

1. How accurate do you think your test results have been?
Prompts: Have you had any reason to question your test result?
2. Have you had any other COVID test during the time you have been in the study?
If yes: How did you access this test? Why did you have this test carried out?

Intentions to act on positive result

[For those participants who have had a positive result]

1. How did you feel about the positive result?
2. What happened when you got your positive test?

Prompts: What did you do next?

3. Did you have another COVID test?

Prompts: How did you access this test? When did you have this test?

4. What were the consequences of you getting a positive result?
5. How accurate do you think your self-test results have been?

Follow up:

1. Is there something that you think we didn't cover that is relevant to what we have discussed?
2. Is there anything else you would like to add?