

# Video consultations: a guide for practice

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## Summary

COVID-19 creates an unprecedented situation. Many GP practices are considering introducing video consultations as a matter of urgency to reduce risk of contagion.

This preliminary document covers five questions:

1. When are video consultations appropriate in primary care?
2. How can a GP practice get set up for video consultations?
3. How can a clinician conduct a high-quality video consultation in primary care?
4. How should patients prepare for, and participate in, video consultations?
5. What is the research evidence for the quality and safety of video consultations?

## Introduction

The advice in this document is based on our research,<sup>1-3</sup> guidance produced by the Scottish Government (to which we contributed),<sup>4</sup> guidance for patients which we developed for a hospital trust,<sup>5</sup> and a brief review of the wider literature.<sup>2</sup> Those sources are summarised below:

1. A large body of research, most of which has been done in hospital outpatient settings, suggests that video consultations using modern technologies appear broadly safe for low-risk patients. **There is limited research on the use of video consultations in acute epidemic situations or general practice settings.**
2. The research literature consists mainly of underpowered randomised controlled trials on highly-selected populations who are not acutely ill. In such trials, video consultations were associated with high patient and staff satisfaction, similar clinical outcomes and (sometimes) modest cost savings compared to traditional consultations. These studies have not turned up any unforeseen harms but their **relevance to the current COVID outbreak is limited.**
3. The qualitative literature suggests that introducing video consultation services in a healthcare organisation or clinical service is far more difficult than many people assume. Major changes to organisational roles, routines and processes are often needed. Such initiatives tend to be **more successful if the mindset is “improving a service” rather than “implementing a technology”.**

4. Our own research (see also Shaw et al, J Med Internet Research, under review) shows that **dependability and a good technical connection** (to avoid lag) are important. If technical connection is high-quality, clinicians and patients tend to communicate in much the same way as in a face-to-face consultation. Minor technical breakdowns (e.g. difficulty establishing an audio connection before getting started, or temporary freezing of the picture) tend not to cause major disruption to the clinical interaction. Major breakdowns, however, disrupt the ethos and quality of the remote consultation and clinicians experience them as “unprofessional”.
5. We have also shown that **it is possible but difficult to undertake a limited physical examination** via VC, especially if the patient has monitoring equipment at home and is confident in using it. However, such examinations **place a high burden on patients**, who need to not only take measurements but also ensure that the remote clinician is able to see that they are doing the examination correctly.
6. Limited evidence from natural disasters (e.g. Australian bushfires) suggests that with careful planning and additional resource, **VC services can be mobilised quickly in an emergency**.

The diagrams below provide an outline guide to deciding when video is appropriate and setting up video services in a general practice setting. We also offer preliminary template for conducting a video consultation.

## VIDEO CONSULTATIONS IN PRIMARY CARE 1:

# When is video appropriate?

There is no need to use video when a telephone call will do. The decision to offer a video consultation should be part of the wider system of triage offered in your practice.

Patients who just want general information about COVID should be directed to a website or recorded phone message. But video can provide additional diagnostic clues and therapeutic presence.

Below are some rules of thumb, which should be combined with clinical and situational judgement.

### **COVID-related consultations: video may be appropriate when**

- The clinician is self-isolating (or to protect the clinical workforce)
- The patient is a known COVID case or is self-isolating (e.g. a contact of a known case)
- The patient has symptoms that could be due to COVID
- The patient is well but anxious and requires additional reassurance
- The patient is in a care home with staff on hand to support a video consultation
- There is a need for remote support to meet increased demand in a particular locality (e.g. during a local outbreak when staff are off sick)

### **Non-COVID-related consultations: video may be appropriate for**

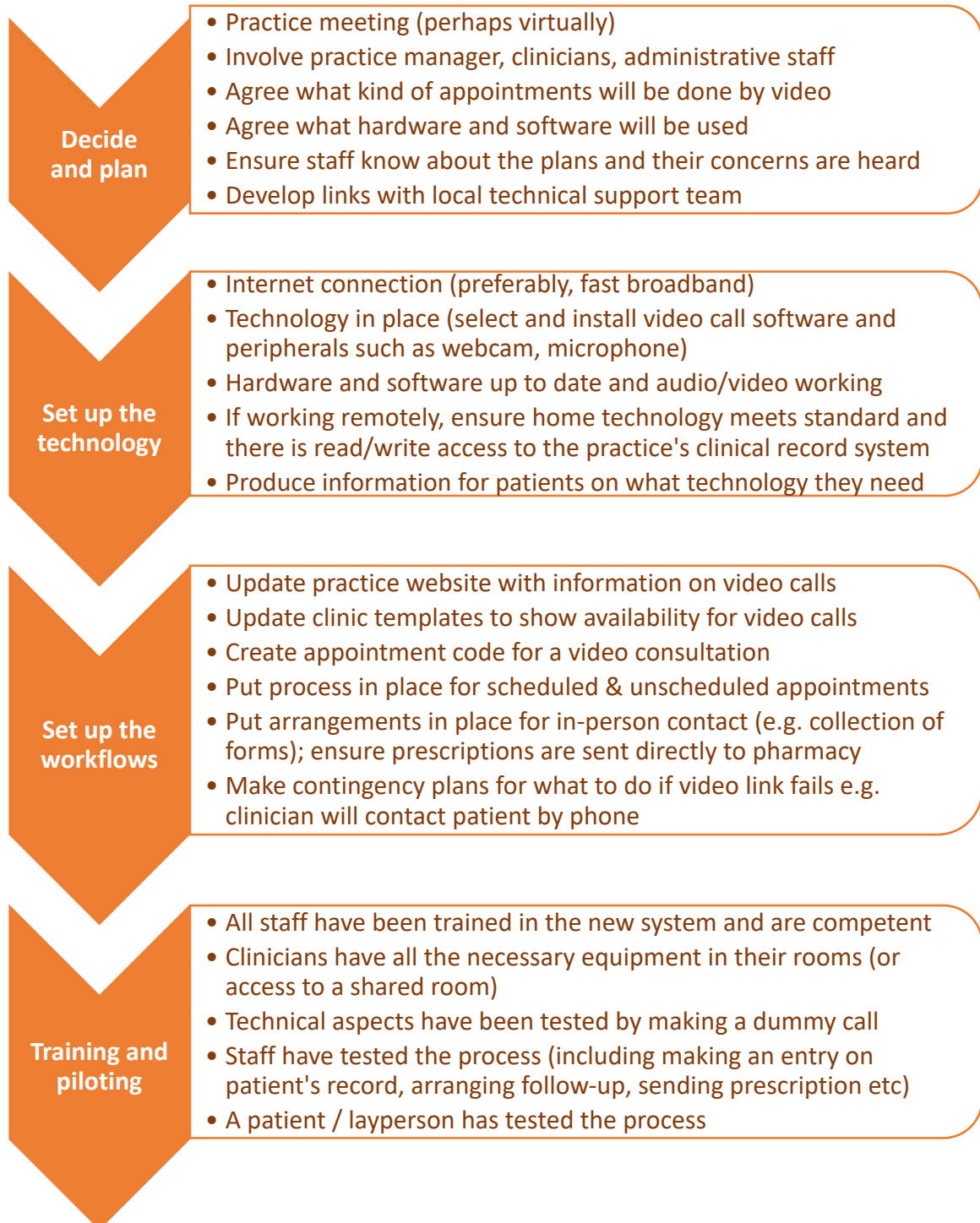
- Routine chronic disease check-ups, especially if the patient is stable and has monitoring devices at home
- Administrative reasons e.g. re-issuing sick notes, repeat medication
- Counselling and similar services
- Duty doctor/nurse triage when a telephone call is insufficient
- Any condition in which the trade-off between attending in person and staying at home favours the latter (e.g. in some frail older patients with multi-morbidity or in terminally ill patients, the advantages of video may outweigh its limitations)

### **On the basis of current evidence, we suggest that video should not generally be used for:**

- Assessing patients with potentially serious, high-risk conditions likely to need a physical examination (including high-risk groups for poor outcomes from COVID who are unwell)
- When an internal examination (e.g. gynaecological) cannot be deferred
- Co-morbidities affecting the patient's ability to use the technology (e.g. confusion), or serious anxieties about the technology (unless relatives are on hand to help)
- Some deaf and hard-of-hearing patients may find video difficult, but if they can lip-read and/or use the chat function, video may be better than telephone

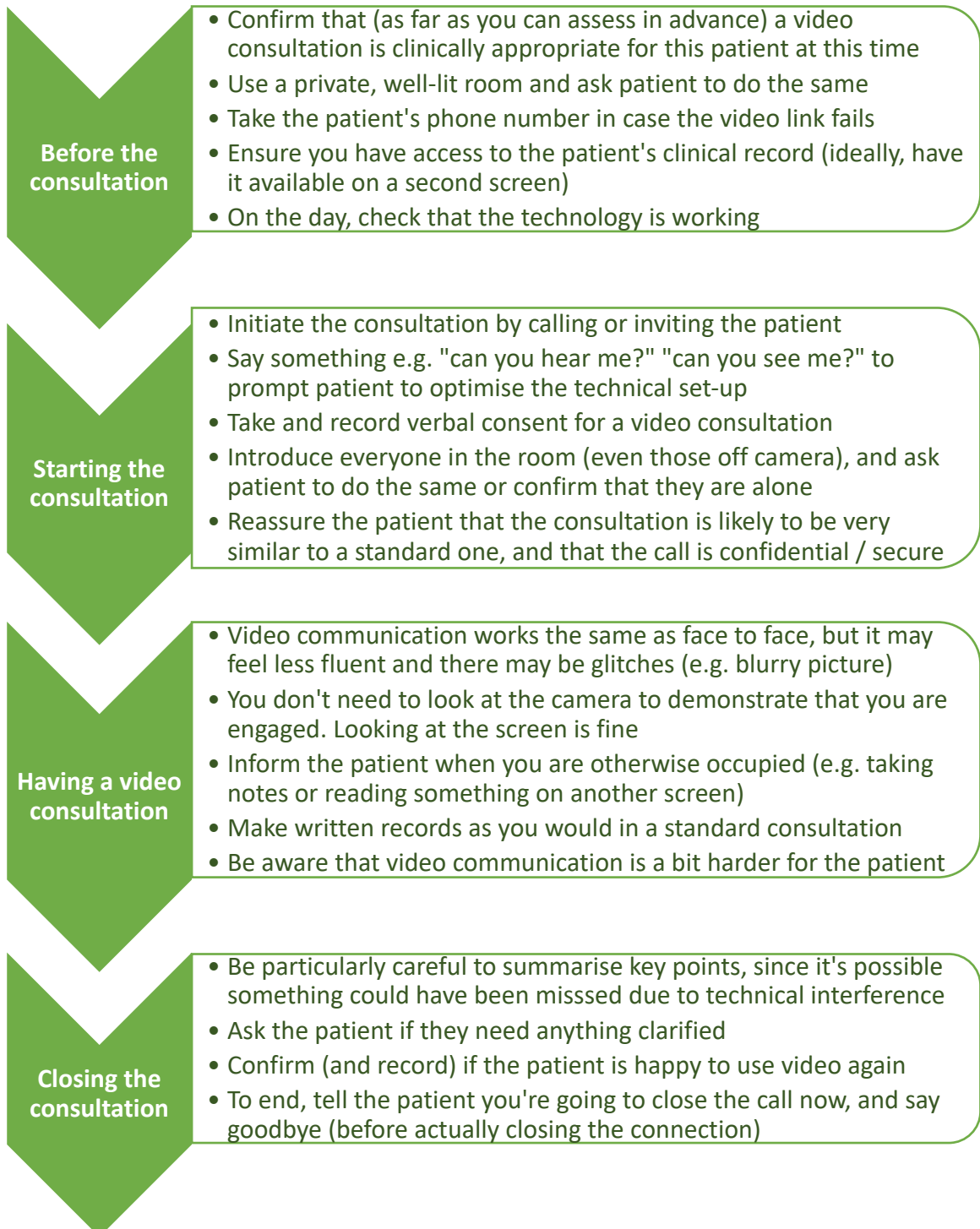
## VIDEO CONSULTATIONS IN PRIMARY CARE 2:

# How can our practice get set up?



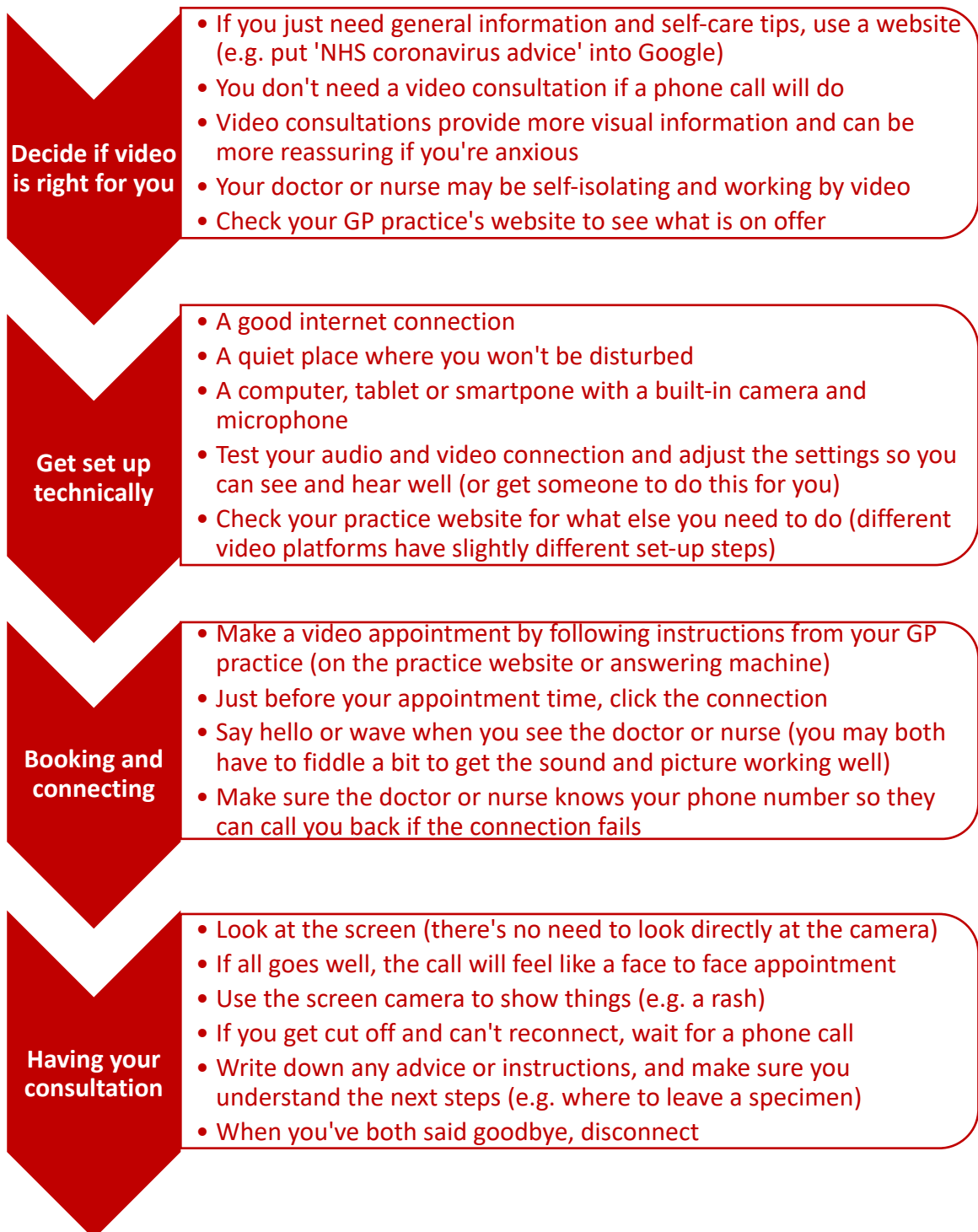
# VIDEO CONSULTATIONS IN PRIMARY CARE 3:

## How to do a high-quality consultation



# VIDEO CONSULTATIONS IN PRIMARY CARE 4:

## A guide for patients on consulting by video



## Preliminary template for a video consultation in primary care with a patient who may have COVID

*This template is under development and may change as new data emerges*

### Get set up technically

- Follow local procedure to make the link
- Check video and audio ("can you hear/see me")
- If necessary, prompt the patient to check and adjust their microphone (you may need to call them on an ordinary telephone to troubleshoot this)
- Open the patient's medical record, preferably on a second screen
- Note the patient's phone number in case you need to call them back

### Get set up professionally

- Confirm the patient's identity (e.g. if not known to you, ask name and date of birth)
- Ask where they are right now (at home – or somewhere else?)
- Confirm that you are alone (or introduce anyone else in the room, even if they are off camera), and ask the patient to do the same
- Assure them that the conversation will be private and confidential, like a standard clinic encounter
- Scan their medical record summary and tailor the rest of the consultation accordingly

### Begin the consultation

- Assess the patient visually (do they look sick? are they distressed? too breathless to talk?) and go straight to key clinical questions if appropriate
- Establish why the patient has chosen to consult now, by video (e.g. are they or a family member very anxious?)
- Establish what the patient wants out of the consultation (e.g. clinical assessment, sick note, referral, advice on self-isolation, reassurance)
- Check medical record for high-risk status including immunocompromised (diabetes, chronic kidney or liver disease, pregnancy, chemotherapy, steroids or other immunosuppressants), cardiovascular disease, asthma or COPD

### Take a history

- COVID contact, especially confirmed cases with < 1m contact for > 30 minutes (incubation period is 2-14 days, mean 5.5)
- Is anyone else in the immediate family unwell?
- Travel to a known hot spot (e.g. put "WHO Situation Report" into Google for latest)
- Temperature: how high? For how many days? (COVID typically > 38.0 and persists beyond 5 days)
- Cough (dry, persisting for > 5 days)
- Shortness of breath
- Note date of first respiratory symptom to date-stamp onset of disease
- Coryza and allergic symptoms make COVID less likely
- Gastro-intestinal symptoms are rare (< 5%) in COVID but can occur

- Red flag symptoms for other serious conditions (e.g. passing urine regularly? eating and drinking OK? severe headache? neck stiffness? non-blanching rash?)

#### Remote examination

- General physical assessment e.g. skin colour, view of pharynx plus assessment of relevant comorbidities
- Assess respiratory function: high respiratory rate occurs only in advanced cases but inability to complete sentences is common in COVID\*
- Assess relevant comorbidities
- Psychological assessment e.g. do they look upset or distressed? Do you need to use a formal mental health instrument for anxiety/depression?
- Are there relevant family issues in view e.g. small children?

#### Tests

- Patient may be able to take own peak flow, temperature, pulse, BP, and oxygen saturation if they have instruments at home
- Bring your own device into camera view to show them how to use their equipment if necessary (they may have only recently purchased it)
- Fitbit-type gadgets and smartphone apps may measure biomarkers but their accuracy can be hard to judge
- Advise on local procedure for how to undertake self-swabbing

#### Discussion and shared decision making

- Share information and explain uncertainties
- Provide therapeutic presence (active listening, empathy)
- Offer options and invite questions
- Advise and reassure as appropriate
- Discuss and agree on next steps

#### Arrange follow-on as appropriate

- Unwell and needs admission (→ 999 protocol)
- Unwell and needs monitoring
- Safety netting: if becomes more unwell, difficulty breathing, faint, stops passing urine, unable to keep down fluids, call GP or out of hours service as appropriate
- Needs management of comorbidities
- Needs reassurance and clear advice on self-management
- Medication, certification, home swabs etc

#### Ending the consultation

- Ask if anything else?
- Wish the patient better, say goodbye and "I'm going to sign off now"
- Document and code the encounter on patient's record

\* There is some evidence for the validity of the Roth or '8-second test': Ask patient to take a deep breath and count from 1 to 30 their native language as fast as they can. If they take less than 8 seconds before taking the next breath, hypoxia is likely.<sup>6</sup>



## References

1. Greenhalgh T, Wherton J. Greenhalgh T, Wherton J. Evaluation of Attend Anywhere in Scotland 2019-20. . Oxford: Nuffield Department of Primary Care Health Sciences, March 2020. 2020.
2. Greenhalgh T, Wherton J, Shaw S, et al. Video consultations for covid-19: British Medical Journal Publishing Group, 2020.
3. Seuren LM, Wherton J, Greenhalgh T, et al. Physical Examinations via Video for Patients With Heart Failure: Qualitative Study Using Conversation Analysis. *Journal of Medical Internet Research* 2020;22(2):e16694.
4. Morrison C, Archer H. Coronavirus resilience planning: Use of Near Me video consulting in GP practices. . Edinburgh: Scottish Government (Technology Enabled Care Programme), March 2020. Accessed 17.3.20 at <https://tec.scot/wp-content/uploads/2020/03/Near-Me-Covid19-Primary-Care-Guidance-v1.pdf>.
5. Anonymous. Quick guide for patients on video consultations. . London: Barts Health. Accessed 17.3.20 at <https://www.bartshealth.nhs.uk/video-consultations-for-patients>. .
6. Chorin E, Padegimas A, Havakuk O, et al. Assessment of Respiratory Distress by the Roth Score. *Clinical cardiology* 2016;39(11):636-39.