Remote Consultations Handbook

Strategies to ensure a safe and effective consultation via video or telephone

Dr Adam David Abbs MBBS mRCGP PGCCE fHEA

Dr Abby Hyams MBChB mRCGP DRCOG DFFP

Dr Zubair Ahmed MBChB MBA mRCGP

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Arc

In order to support doctors all over the globe at this challenging time in history, all royalties from this handbook are being donated to Médecins Sans Frontières (Doctors without Borders).

Table of Contents

Introduction 7

Setting 8
- How to dress 8
- Camera position 9
- Lighting 9
- Background 9
- Quiet 10
- Keyboard 10

The Consultation 11
- Your eyes 11
- Hands 11
- Check in 12
- Reassure 12

Initiating the Consultation 13
- Establish your credentials 13
- Confirm details 13
- Documentation 14
- Capacity 14
- Audience 15
- Privacy 15
- Mark the starting point 16

During the Consultation 17
- Signpost 17
- Health education 17
- Don't multitask 18
- ICE and "why now?" 18

Closing the Consultation 19
- Safety-netting 19
- Consider early presentations 19
- Further resources 20
- Arrange follow up 20
- Closing the consultation 21

Paediatrics 21
- Social history 21

The Patient-Doctor Relationship 23

Establish your humanity 23
Patient uncertainty 23
Be patient 24
Allow them to speak 24
Be kind 25
Biopsychosocial 26

Paediatrics 27
Parents 27
Identification 27
Environment 27
Undress 28
Low threshold 28
Injuries 28
General exam 28
Red flags 29
Paediatric multisystem inflammatory syndrome 29

General Examination 30
ABC 30
Patient location 30
Patient appearance 30
Social support 31
Alertness 31
Pain 31
Tools 31
Blood pressure 32
Appropriateness 32

Ear, Nose and Throat Examination 34
Palpation 34
Oropharynx 34
FeverPAIN score 35
Liverpool Peritonsillar Abscess Score 35
Mumps 36
Hum test 37
Safety netting 37
Paediatrics 37

Cardiovascular and Respiratory Examination 39

Observations 39
Heart rate and saturations 39

Pulse Taps 39
Sit-stand test 40
Breathing 40
Quantify breathlessness 41
Observe 41
Peripheries 41

Paediatrics 42
Respiratory rate 42

Abdominal Examination 44
Peritonism 44
Palpation 44
Bloating 44
Urinary tract infections 45
Safety netting 45

Paediatrics 45
Red flags 46
Jump test 46

Dermatological Examination 47
Lighting 47
Double check 47
Measurement 47
Expose the patient 47
Angles 48
Palpation 48
Glass test 48
Paediatrics 48

Neurological Examination 50
Cranial nerves 50
Sensation 51
Power 51
Coordination - upper limb 52
Coordination - lower limb 52
Cerebellar signs 53
Muscle wasting and fasciculations 53
Cuada equina symptoms 53

Musculoskeletal Examination 54
Look 54
Feel 54

Move 54
Paediatrics 55
Mental Health Examination 56
Timing 56
Perception 56
Privacy 56
Encourage 57
Adapt 57
Body language 58
Environment 59
Suicidal thoughts 59
Safety 59
Treatments 60
Links 61
Special Situations 63
Care homes 63
Overseas patients 64
Safeguarding concerns 64
Emergencies 64
Poor hearing or vision 65
Medication requests 66
Angry patients 66
About the Authors 68
Dr Adam Abbs MBBS mRCGP PGCCE fHEA 68
Dr Abby Hyams MBChB mRCGP DRCOG DFFP 68
Dr Zubair Ahmed MBChB mRCGP MBA 68
Further Information 69
References 70

Introduction

Remote consultations are suddenly a part of everyday practice. The Covid-19 pandemic has made it necessary to limit physical contact between clinicians and patients. In April 2019, 80%[1] of GP consultations in the UK were face-to-face. Only one year later, at the start of the Covid-10 pandemic in April 2020, only 30%[2] were face-to-face.

Today's medical students and doctors receive many hours of training over and over again, for years in how to undertake a face-to-face consultation. The sudden introduction in remote consultations has left the majority of clinicians unprepared for this new way of seeing patients. I hope that the information and advice in this handbook will help to not only educate, but also reduce anxiety.

The doctor-patient relationship is even more important to maintain when the patient isn't physically sitting in front of the doctor. Therefore, I have endeavoured to thread this throughout the document.

Whilst the majority of primary care consultations can safely be undertaken remotely, the General Medical Council (GMC) recommends a constant assessment of the appropriateness of consulting each patient remotely. Maximise the opportunities of remote consultations whilst ensuring the safety of your patients.

Setting

Remote consultations are new, and some patients may not have the same deference for a doctor who they see in person. It is important to introduce yourself and make it clear who they are seeing.

When a patient attends a hospital or GP surgery they are greeted with a professional building, there is a clear sign outside, a clean waiting room, a professional receptionist, and you are sat in an official office, maybe with your name on the door. All this conveys professionalism and credibility to the patient, so you will need to present yourself in such a professional manner so as to make up for absence of these. Your setting, clothing and approach to the patient will be essential for them to feel that you are someone who they can trust and confide in.

How to dress

- You may be at home, but dress professionally; how you dress dictates how you are perceived. The definition of "professional dress" is difficult to define; but a simple rule of thumb is, to ask yourself "would I wear this at work?" If not, it's not appropriate on a video consultation either.
- Dress realistically, don't wear a stethoscope. This is something that may vary according to the cultural setting.
- Solid colours that contrast with the background will allow you to be seen more clearly. A shirt or blouse full of patterns may look nice in your surgery, but when seen on the screen it may be a little too much.
- There may be times you need to stand up in order to demonstrate how a patient should use the examination equipment. Bear this in mind when choosing your clothing.

Camera position

Take the time to position your computer and mouse to allow you not only present a professional image, but also to allow you to be comfortable whilst you work.

- The majority of communication is non-verbal.[3] Ensure that all of your face is in full view. Ideally you would also include the tops of your arms. The more body language on show, the better.
- When you are talking use your hands more than you normally would and bring your hands higher so that they are in view. Small adjustments like this will help the patient to feel more comfortable with video consultations.[4]
- A camera in landscape view will allow the patient to see what they need to see of you, and some background. Place your camera at, or just above, eye level. The closer to the top of your screen the better, so that when you're looking at the screen you're not looking too far away from the camera.

Lighting

If you are working on camera frequently, it is worth paying attention to your lighting as it makes a big difference to the image the patient sees.

- Backlighting can often make it hard to see, so any lights or bright windows should be behind the camera. If the light is coming from behind you; the patient will most likely see a shadow. Patients expect to at least see the face of their doctor.[5]
- Two lights, one each side of the monitor, at eye level, providing indirect light, would be ideal. Be aware of new LED lights as these provide direct beams which look very spotlight-like.

Background

The background is hugely important and patient perception of you will be heavily influenced by this.

- Ensure the whole area the patient can see is as clear and clinical as possible. A white wall would be perfect.
- If a white, or clear, wall isn't possible, ensure the background looks professional and tidy. Shelves with books on are appropriate. Coat racks, children's toys and the washing up is not what you want to see behind your doctor.

Quiet

Try to find somewhere quiet, background noise can sound unprofessional.

- Find a private place to ensure that confidentiality can be maintained. Other people, including your family, should not be able to hear what you or your patients are saying. This is just as important as if you are in the surgery.
- Find a quiet place to ensure that your patients' confidence is maintained. If they can hear background noise, they will be worried who can hear them

Keyboard

- A noisy keyboard will be distracting for the patient on the phone or webcam. The patient can't see your hands typing on the keyboard like they can in a face-to-face consultation. Try to find a quiet keyboard, even if you need to buy an external one.

The Consultation

The remote consultation should have the same basic qualities of a face-to-face consultation, with a patient having confidence that the doctor will assess all their needs. There are some techniques that you can use to enhance the patient experience and improve the outcomes of each consultation.

Your eyes

With remote consultations your ability to see non-verbal cues is reduced, so it is important that you can look at the patient's face throughout the consultation to read their facial expressions.[6]

- However, there are times when you need to stop, listen, and look directly into the camera for a moment. If a patient is distressed, you may need to reassure them that you are truly present and focussed.
- You can rearrange your browser window, so the video of the patient is close to the camera, so the patient perceives eye contact, even if you aren't looking directly into the camera.

Hands

We use our hands for a large proportion of our non-verbal communication, so consider how to include your hands in a video call.

- When the patient can't see your hands, because you are using them to scroll through the patient record, or type the history, tell them what you're doing.[7]
- As already discussed above, make an effort to use your hands more than you normally would in a face-to-face conversation, and move them up into the view of the camera. Try to compensate for the limited view the patient has of you by exaggerating hand movements.

Check in

Stopping to ask the patient how the consultation is going once or twice will not only check that the patient is okay but will also demonstrate your consideration for their wellbeing.[8]

Reassure

This technology is new to the patient, so reassure them that they are doing okay; a patient who is comfortable and calm will give you a more complete and coherent history.

- When problems occur, patients and doctors working collaboratively can overcome problems in remote consultations.[54]
- Take the responsibility for any problems, when things go wrong due to technical error, or user error. Remember the patient hasn't been trained on this; in fact, you are the teacher here.
- Reassure them using phrases such as: "Don't worry. If something doesn't work, that's my responsibility, not yours."

Initiating the Consultation

A strong and confident yet calm start will set the tone for the rest of the consultation. Before starting the consultation ensure that you are ready to give it 100% of your attention.

Establish your credentials

In a face-to-face consultation the patient sees you sitting in an office, having waited in a waiting room and been ushered in by a receptionist or voice over the speaker. There is some structure and formality, and with that an expectation and recognition that you are a professional. Without this you need a firm, professional start to the consultation,

- Introduce yourself and set the tone with an opening sentence such as: “My name is Dr Smith. Before we start, can we confirm some details please?”
- Without the usual structure of the initiation of a face-to-face consultation, the patient can feel uncertain and unconfident. It's important to make them feel comfortable and that you know what you are doing, even if they haven't done it before. This helps them to gain trust in you and the consultation.

Confirm details

With a remote consultation there are some additional checks required at the start of each consultation.

- As per GMC guidance, you will need to check 3 patient identifiers, such as name, date of birth and telephone number.
- Don’t assume that the patient is at their home address; confirm their current location. It may be an important part of the social history, and if there is an emergency you may need to pass this onto emergency services.
- Check the telephone number on record is the one you’ll be calling if there’s a problem with the connection. Ideally this will be

for a different device to the one that they are using for the video or telephone call.

Documentation

It may be useful to have a separate document open to copy and paste some key phrases from. This will act as a time saver, and a prompt to ensure you don't miss anything. Some to consider include:

- "Confirmed privacy, identity, location and telephone number"
- "Consultation undertaken during Covid-19 pandemic, management may differ from guidelines due to current access to healthcare resources"
- "Consent to access notes and undertake video consultation"

Capacity

As per GMC guidance a capacity assessment is essential at the start of all consultations, including those undertaken remotely.[9]

- Capacity is assumed in all adults, including the elderly.
- When a younger family member takes over the consultation because the patient can't take part via video or phone consider if a remote consultation is appropriate. Amongst the 65 to 74-year age group, internet use increased from 52% in 2011 to 83% in 2019.[10]
- Don't assume that older adults are unable to use the technology.
- Be aware that technical problems or patient hearing may impair the communication so that you are unable to assess capacity.
- If the patient doesn't appear to have capacity, offer an alternative in a timely manner, or obtain consent from someone who has authority for them.
- In some situations, you may be required to continue without consent in the patient's best interests, but make sure you document this robustly in the patient's notes.

Audience

In remote consultations you don't have the same control over who is in the consultation, like you do in a face-to-face appointment.

- Ask for the names of other people in the room, especially if they are speaking *for* the patient. You may not always be able to see all the people in the room so this will clarify who is present.
- If you have some doubt about what you are being told, especially if you have safeguarding concerns, ask the patient to use the camera to give you a 360-degree view of the room.
- Where someone is speaking for a patient, firmly and politely advised the 3rd party that you appreciate their assistance but initially you'd like to try to speak to the patient directly. Maybe the patient was just too nervous, or maybe the 3rd party has an ulterior motive for not letting the patient speak themselves.
- If a 3rd party is necessary in the consultation, ensure that you don't exclude the patient from the consultation; always keep both patient and 3rd party in view and try to continue to address them directly where possible.
- Always assume that other people can, or will, see or hear you. Some mobile devices have screen recording software, so you may be being recorded. Additionally, you don't know who is in the next room.
- Where there is someone else in the room, if you need to ask any potentially sensitive or personal questions, clarify they are happy to do this around in front of the third person.

Privacy

We need to ensure that the consultation has the privacy and focus that you would expect if you were to see the patient face-to-face.

- Ensure that the patient is in a place where they can talk freely. If they are sat in a public place, or amongst relatives, they may withhold information from you that they wouldn't want making public.

- If there are distractions such as a TV or children playing, the patient will not be able to focus on the consultation, may miss what you say, and may be in a rush to finish.
- Remote consultations require both the clinician and the patient to be fully engaged, so ask the patient to minimise distractions where possible.

Mark the starting point

The start of the consultation may feel a little awkward and messy.

- You may feel like an administrator rather than a doctor, checking patient details and dealing with technical problems, so it is important that you mark the start of the clinical consultation and reset the tone to a patient-doctor interaction.

- The patient may also feel frustrated by being held back from telling their story, so telling them "now that the administration is done, we can finally get started...".

During the Consultation

Try not to lose the pace of the consultation. It may be difficult to control the consultation in the same way as a face-to-face, but constant attention to the focus and pace will give to you and the patient a more satisfying consultation.

Signpost

- This will be new for the patient so let them know what is going to happen and is happening throughout the consultation.
- If you don't have access to the patient's medical records, you might need to ask them for more background information than usual. This may be frustrating for the patient, but it is absolutely essential for appropriate and safe management.
- Breaking the consultation into blocks also helps to set the pace of the consultation, preventing the patient from racing ahead.

Health education

As remote consultations become the norm rather than the exception in primary care, it is important not to let health promotion be forgotten.

- Don't forget to give advice about smoking, alcohol, diet and exercise.
- Remember chronic health conditions such as diabetes and blood pressure. Use a patient's own sphygmomanometer and blood glucose meter to record readings if they have them available.
- If you have the ability to email patients health advice, use this opportunity.

Don’t multitask

In a face-to-face consultation multitasking is a useful time-saving skill. This doesn’t work as well remotely

- Try to stick to one thing at a time. If the patient is self-examining with your guidance, also asking them questions you forgot to ask them in the history taking will cause confusion, so be patient and wait.
- If you do try to multitask you will likely find that both tasks are halted, thus adding to the consultation time.

ICE and “why now?”

Exploring Ideas, Concerns and Expectations is also important in remote consultations. What's more, asking the patient why they presented now can be helpful in assessing for decline in the patient’s condition. Patients may initially feel that they can't talk in the same way as a face-to-face consultation, so asking these sorts of questions allows them to talk more openly. Try to identify a timeline, so you know when the symptoms started.

Closing the Consultation

A well-structured end to the consultation will not only affect the outcomes of this consultation, but also set the tone for future consultations with that patient.

Safety-netting

Even more so than in face-to-face appointments, where it is easier to assess understanding, effective safety netting is absolutely essential.[11] Effective safety netting ensures that the patient knows confidently the what, when, where and how:

WHAT should prompt them to act?	"If your temperature is still above 38 degrees"
WHEN does your advice apply?	"In 48 hours from now"
WHERE should they go?	"Go to the emergency department"
HOW they should get there?	"Via ambulance"
CHECK understanding	"Can you repeat that plan back to me"

Consider early presentations

There are key differences between patients arriving at a face-to-face appointment and patient arriving at a remote consultation. Patients attending a remote consultation may be in the very early stages of an illness, when they may appear less unwell, and their symptoms may be more vague, making it more difficult to give a definitive diagnosis. The risk inherent in this is that the clinician gains false reassurance from a well-looking patient, and the patient then worsens following the consultation. As such, thorough history taking, examination, and clear

safety netting is even more important in remote consultations. Reasons for earlier presentations for remote consultations include:

- Barriers to travel
    - Patients with very mild symptoms might not see the value in taking the time and energy to travel to a face-to-face consultation, but a remote consultation can be done from their own home, so they might ask for a remote consultation appointment sooner.
- Timing
    - Finding a suitable face-to-face appointment time in a busy schedule can be difficult and can take time, but remote consultations are often available earlier and don't require any travel time, so it is easier to attend remote consultations.

Further resources

The ability to email, WhatsApp or SMS patients is a powerful communication tool.

- Patient information leaflets such as those on patient.co.uk are useful for educating patients about their condition and management.
- Redirecting patients to the resources of third sector organisations such as Diabetes UK adds another level of education and, importantly, support for patients which may be of greater value if you're managing them remotely.
- As discussed above, safety netting is incredibly important. This can be reinforced with written advice sent electronically.

Arrange follow up

Arranging follow up gives both the patient and the clinician reassurance. It is particularly useful in certain scenarios. This may be a follow up with you or another health professional; don't forget community paediatric nurses and health visitors.

- Where you are uncertain about the diagnosis and you would like to monitor response to treatment.
- Where the patient has a condition that is known to have periods of rapid decline, such as around day 7 post-onset of symptoms in Covid-19.
- For paediatric patients where you're not certain that the parents will seek help as quickly as you'd like.[12]

Closing the consultation

It can feel awkward at the end of a video or telephone consultation, so just like the start of the consultation needs to be clearly defined, the end does too.

- Ask the patient how their remote consultation experience was. Asking the patient will show them that you care, and the feedback will help you improve the system, and your consultation, in future.
- Confirm, and record, if the patient consents to video consultations in future.
- Ask the patient if they have any questions before you go. Giving the patient this final opportunity is valuable as they might have been waiting for the right moment to ask something.
- If you tell a patient you're glad they came, they're more likely to come back if things get worse.
- Make an unambiguous closing statement: "I'm ending the call now, take care", and smile and wave.

Paediatrics

Social history

A remote consultation should not be an incomplete consultation. Extra care must be taken to ensure the safety of the child, this includes taking a full social history.

- Are the family known to social services?
- Who lives in, and visits, the house?
- What is the reason for a remote, rather than face-to-face, consultation?
- Has there been a delay in presentation?

The Patient-Doctor Relationship

The importance of the patient-doctor relationship is not something that is in any doubt, so we mustn't forget this in remote consultations.[13] Patient compliance with management plans and their subsequent health outcomes are dependent on this relationship.[14] Clinicians must endeavour to overcome the *actual* distance of a remote consultation with some strategies outlined below. As many patients will potentially benefit from greater access to medical care due to the convenience of home consultations, such as reduced travel time, we need to work to maximise the value of these patient interactions.

Establish your humanity

Remote consultations add a physical distance that needs to be overcome to maintain the patient-doctor relationship.

- The patient needs to be reassured that, even though this is online, you are still a human, still the doctor they trust in the GP surgery or hospital clinic.
- Be explicit if necessary, using phrases such as: "I realise this may be new to you, but don't worry. I'm here to listen to you and to help you."
- Empathy isn't conveyed as easily online or over the phone, so you'll need to emphasise, perhaps even exaggerate your understanding and concern for the patient's problems.
- Smile and show you are at ease to help them feel that way too.

Patient uncertainty

The majority of patients are satisfied with video consultations, but you may face initial scepticism.

- Some patients may be unhappy that they aren't having direct access to a face-to-face consultation. If this is their first video consultation, they can be forgiven this scepticism and you may wish to acknowledge this.

- By guiding the patient through the consultation and working hard to attend to the patient-doctor relationship, you can expect that the vast majority of patients will be converts by the end of the consultation.
- If a patient is particularly frustrated or sceptical at the start, there may be some value in starting the consultation with the offer of a face-to-face appointment if they aren't satisfied by the end of the consultation. It is then your challenge to win them over.

Be patient

There may be challenges with the technology, the internet connection, the sound or the patient themselves, so your patience will be tested.

- The more relaxed you are, the more relaxed the patient will be, and the more effective the consultation will be.
- In the same way that you understand the mum who attends a face-to-face consultation with 4 unruly children because there's no one else to look after them, try to be as forgiving with the patient who requires extra time for a remote consultation.
- Technology scares some people and understanding this and gently guiding them through will help them relax and talk more easily to you.

Allow them to speak

Not feeling listened to is a major source of patient dissatisfaction.[15]

- Delays in connection makes allowing the patient to finish additionally challenging, but also more important. To allow the patient to finish their story you may find that just waiting 1 or 2 seconds after you think they have finished their sentence will considerably reduce the number of interrupted sentences.
- As discussed above, be patient. A couple of seconds at the end of a sentence is not going to add a significant amount of time to the overall length of your consultation. However interrupted and

restarted sentences will slow the progress of the consultation and leave both the patient and the clinician frustrated.
- Slowing down your speech will help to set the pace of the consultation. This will give both you and the patient more time to communicate effectively.[16]
- With the reduced visual feedback, you may be tempted to increase the verbal feedback you give the patient, so you may find yourself saying "okay" or "I see" more often. Delays in connection may mean these occur at inappropriate moments, interrupting the patient. A simple solution is to use feedback that doesn't interrupt, so sounds, not words, such as "mmhmm".
- If there is a significant lag considering closing other programmes on your computer that may be slowing your internet connection, or switching to an alternative connection, i.e. Wi-Fi to 5G.

Be kind

By definition your patient is not with you, they may be alone, they're probably ill and may well be nervous. They may feel vulnerable and they are trusting you with their physical and mental health, so be aware of this throughout the consultation.

- Work to show them that you are engaged and empathic. You might not need to work to do this in a face-to-face appointment, but in a remote consultation you will need to consider how well you are conveying your attention and concern over video or phone.
- As with face-to-face consultations the patient may have found it difficult to come to you and may have held onto their problem for some time before having the courage to do so.
- Some patients find talking to a doctor on a computer a little easier to talk about embarrassing problems. Allow them space to do this if they need to and listen to the cues they may be providing.

Biopsychosocial

Don't forget the biopsychosocial model. As remote consultations are new, both patients and doctors may risk being too matter of fact, sticking to the basic medical information to get the consultation completed in a timely manner. But if this is the only contact the patient is having with their doctor, it is important that all their needs, including psychological and social, are attended to. Patients might not expect this from a remote consultation, so don't forget to prompt them "how is this affecting you?".

Paediatrics

The advice given above about taking time to take a full history and complete a full examination applies to paediatrics especially. Be aware of your local policies as some organisations have age limits for consulting online. The physiology of children allows them to compensate, but when these mechanisms fail, they can decline rapidly. A low threshold for referral to a face-to-face assessment, or to secondary care, is essential in children.

Parents

The history, examination and management advice for paediatric patients are entirely reliant on the parents of the child. You need to be confident that the parents:

- are giving you a complete and truthful history,
- can fully understand you,
- and will appropriately act on the agreed plan and safety netting advice.

If you cannot be certain of any **one** of these, refer for a face-to-face assessment.

Identification

You should ask for the name and relationship to the child of any adult present in any paediatric consultation. In video consultations it is preferable to also see some form of photo identification, such as passport or driving licence. If the child presents with an adult that is not their parent or legal guardian it is important to establish the reason why.

Environment

When a child attends a face-to-face appointment you automatically assess their overall appearance and rapport with their parents. With

video consultations you may have the advantage of seeing their home environment, make use of this, ask the parent to sweep the room with the camera.

Undress

You may not know the family and you may have limited information about them, so an extra degree of curiosity is required in order not to miss a child at risk. Asking the parents to undress the child if it is appropriate to do so, will reveal any marks on the child, and will allow you to assess the parental response. This is an additional opportunity to see the rapport between parent and child.

Low threshold

If you have **any** questions about a child's safety, physical or social, you must have a **low** threshold for referring them for a face-to-face assessment. Trust your instinct.

Injuries

Each organisation will have different guidelines, but caution needs to be taken in assessing injuries in children remotely. Aside from the risk of missing a physical injury, a greater concern would be if you were to miss a non-accidental injury.

General exam

Ask the parent to bring the child into the view of the camera whilst they're giving you the history to allow you to undertake a general examination of the child.

- Tone - is the child active or listless?
- Interactions - is the child engaging and grasping for objects?
- Consolability - if the child is crying, is it comforted by the parent?

- Gaze - is this child following faces or is it staring blankly?
- Cry - are there any unusual characteristics to the child's cry or voice?

Red flags

Consider referring for a face-to-face assessment children of any age presenting with any of the following features:

- Physical injuries or concerned parents
- Comorbidities or developmental delay
- Cold hands or feet
- Reduced urine output or inability to keep fluids down
- Reduced consciousness, fits, convulsions or head injuries
- Inconsolable crying or irritability
- Skin that is clammy, cold, pale, blue or patchy
- Rash that is non-blanching
- A fever with no identifiable focus
- A fever for more than 5 days or that doesn't respond to antipyretics

Paediatric multisystem inflammatory syndrome

At the time of writing this, in June 2020, there are reports of a Kawasaki disease-like inflammatory condition in children, possibly related to Covid-19.[17]

- Urgent referral for further assessment is advised for any child with:
    - Persistent fever (>38.5°c), hypotension and hypoxia.
- Suspicious symptoms include:
    - Abdominal pain, confusion, cough, diarrhoea, headache, breathlessness, sore throat, syncope or vomiting.
- Suspicious signs include:
    - Lymphadenopathy, conjunctivitis, mucus membrane changes, neck swelling, rash, or swollen hands and feet.

General Examination

Other than observations (such as blood pressure and pulse rate), the majority of the general examination of a patient can be undertaken via video. There are some adaptations required though as maybe you won't see the patient as well; however, you do get to see their environment, which can be very revealing.

ABC

All examinations start with an assessment of ABC. Where the patient is remote, and they don't have any examination equipment, a modified assessment can be carried out:

Airway - Are they talking okay, is there any wheeze, stridor or cough?

Breathing - Is their breathing regular and at a normal rate?

Circulation - Is there any for confusion or mottled skin?

Patient location

Look at where the patient is. Are they where you would expect them to be at that time of day? A patient who is in bed at 4pm is likely much more unwell than a patient sitting in the lounge watching television with the family at 10pm.

Patient appearance

Another way to assess the severity of illness is the attention the patient has given to their own appearance. Naturally this is considered within the context of the individual. It is reassuring if someone who has taken the time and energy to dress smartly, wash and style their hair, and put on make-up or shave. Conversely, the absence of these may point towards difficulties in carrying out activities of daily living.

Social support

Look for the presence of family members and if you can see if the environment the patient lives in is clean and tidy? You may be able to see signs of neglect, particularly in patients who are vulnerable due to age or comorbidities. Do you think this patient, or their family members, will seek help when appropriate as per your safety netting advice?

Alertness

Is the patient alert and engaging or distant and incoherent? If the patient is anything other than alert it is probably not suitable to assess them remotely.

Pain

As well as asking them about pain, assess for objective signs of pain or discomfort. Engaging them in distracting conversation will reveal a lot about the pain, such as if it's worse on breathing, moving or looking at light. Don't forget to ask their view of the pain; at the very least a pain score will allow the next clinician to know if the pain is improving or worsening. As you may not be able to see their whole body it can be difficult to assess this and may need more direct questioning. In a consultation in the surgery you will probably have seen them make their way to their seat, and learnt a lot about them before they even sit down. It is likely that you won't have had the benefit of this in a remote consultation and so you will have to be more vigilant due to this.

Tools

Does the patient have any examination tools at home? Some patients will have some equipment that will allow you to measure some basic observations. Ask about a sphygmomanometer, pulse oximeter, thermometer, blood glucose meter or peak flow meter. Smart phones and watches sometimes have some of these capabilities too. Do take into consideration that these are rarely validated, and so some degree of

caution is required in interpreting the results. If patients are unsure how to use the equipment, bring your own into view and demonstrate good technique to them.

Blood pressure

Even where the patient doesn't have a sphygmomanometer, an assessment of hypovolaemia can still be carried out.

Critical	Confusion
Very severe	Mottled skin, cool peripheries
Severe	Dizzy all the time
Moderate	Dizzy when standing up from the bed
Mild-moderate	Dizzy when standing up from the chair

Appropriateness

In the same way as a general practitioner is aware of the limitations of assessing and managing a patient in the community, away from specialists and access to investigations, the clinician acting remotely must do the same. The GMC has clear guidance on this in its ethical hub.[18] Always consider if a remote consultation is appropriate for this person, with this condition, in this situation. Examples of potentially inappropriate consultations include:

- The patient who has had 2 remote consultations for the same condition that isn’t improving.
- Where an intimate examination is required.
- Patients who cannot use the technology due to age, confusion or impairment.
- At-risk patients who may need a consultation outside of their home environment.
- Severely unwell patients.

Remote general examination

Some video consultation platforms allow the collection of additional clinical data with diagnostic tools to improve the quality of the consultation and to allow you to manage more consultations remotely.

Ask the patient to use a digital stethoscope so you can:

- listen to their heart assessing rate, rhythm and heart sounds
- listen to their chest for added sounds such as wheeze, stridor and crepitations

Ask the patient to use a pulse oximeter so you can:

- take their oxygen saturations
- take their pulse rate to identify sepsis

Ask the patient to use a blood pressure machine so you can:

- take sitting or standing blood pressure to identify sepsis

Ask the patient to use a thermometer so you can:

- measure body temperature to identify sepsis

Ear, Nose and Throat Examination

Without the ability to look in the ear or the throat, you may feel unable to undertake an ENT examination, but this is not true. There are techniques you can employ to ensure you make a safe assessment. What's more, following the Covid-19 pandemic, there has been a reassessment of the need to examine the throat.

Palpation

Ask the patient to palpate their own cervical lymph nodes. They will certainly be able to identify tenderness even if they aren't certain about any increase in size. They may have to put their phone down to do this. Ask them to prop the phone up so you can see where they are identifying tenderness. Don't forget to assess for tenderness overlying the mastoid bone, around the temporal arteries and close to roots of the teeth. Don't be afraid to demonstrate on yourself where the patient should press.

Oropharynx

The patient or a family member may be able to use the phone in a video consultation to provide you with a view of the back of the oropharynx. This can be one of the most challenging areas for patients to show you remotely without a tongue depressor. It is important to explain clearly how to do it and be patient with them. Most people get the hang of it in the end with a clear explanation. If this fails to work, ask the patient to take a photo of the back of their throat using a smartphone with a good light; often patients have done this already. They can then send this to you. If this fails you will then need to decide the next course of action, your options are:

- Treat according to modified scoring systems.
- Refer for assessment using remote examination tools to gain views of the oropharynx.
- Refer to ENT specialists for assessment using full PPE.

FeverPAIN score[19]

This scoring system provides some confidence in assessing the need for antibiotics in a patient with possible bacterial (streptococcal) tonsillitis. The Royal College of Paediatrics and Child Health has recommended a pragmatic approach when it is not possible to examine the oropharynx, by starting with a baseline score of 2.[20]

Give one point for each of the following:

- Fever in last 24 hours
- Purulent tonsils
- Attended rapidly (less than 3 days since the onset of symptoms)
- Inflamed tonsils
- No cough or coryza

Interpretation

- 0-1 No antibiotics recommended
- 2-3 Delayed, or no, antibiotic may be appropriate
- 4-5 Consider immediate antibiotics

Liverpool Peritonsillar Abscess Score[21]

A quinsy commonly follows an episode of tonsillitis, and it has the potential to be very serious as it may progress posteriorly and obstruct the airway. To help differentiate between tonsillitis and quinsy, a scoring system has been developed. This has been adapted following the Covid-19 pandemic to remove the need for examination of the oropharynx.[22,23]

The Liverpool Peritonsillar Abscess Score is as follows:

Unilateral sore throat	3	
Trismus	2	(Inability to open mouth more than 3cm)
Male gender	1	

Pharyngeal voice change	1	("hot potato" voice)
*Uvular deviation	1	*Requires examination capability

Without examination of the oropharynx the threshold for urgent ENT referral has been reduced to a score of 4+. The positive predictive value of this is only 60% but the seriousness of a missed quinsy justifies referring these patients. However, if you are able to view the oropharynx adequately, the threshold for referral is 6, and this has a PPV of 80%. Patients scoring a 4 or above in a remote examination should not have their ENT referral delayed by a further review in a face-to-face primary care appointment, as the need for a referral will not change.

Mumps

Public Health England (PHE) reported a dramatic increase in cases of Mumps recently[24], at 5,042 in 2019 compared to 1,066 in 2018, thought to be due to the poor uptake of the MMR vaccine in the late 90s and early 2000s. Consider this in any patient with unilateral or bilateral facial swelling. Clinical features include:[25]

- Single parotid gland swelling for the first 2-3 days
- Bilateral parotid gland swelling subsequently
- Extension of the swelling up to the angle of the mandible and the ear lobe
- Tenderness on palpation of the affected gland(s)
- Earache and difficulty with chewing or talking

Treatment is supportive but it is important to notify PHE and warn the patient to monitor for signs and symptoms of encephalitis or meningitis and orchitis.

Hum test[26]

To assess patients presenting with ear/hearing symptoms, the Hum test can form a useful part of the remote clinical assessment. Asking the patient to reproduce a high-pitched tone and tell you which side was louder has a sensitivity of 93% and specificity of 100% for conductive hearing loss in the louder side.

Interpretation

- Louder in the affected ear suggests a conductive deafness, possibly wax or fluid, such as in otitis media with effusion.
- Quieter in the affected ear suggests a sensorineural deafness, possibly a pathology in the inner ear or nervous system.
- Equal volume in both ears suggests neither of the above.

Safety netting

Patients presenting with ENT symptoms can cause anxiety due to the risk of serious complications. Some specific things to think of and safety net for are:

- Mastoiditis secondary to infections of the ear
- Peritonsillar abscess following tonsillitis
- Meningitis or epididymo-orchitis as complications of Mumps
- Dehydration from any upper respiratory infection

Paediatrics

Consider early referral in children presenting with ENT symptoms and any of the following:

- Discharge from the ear
- Pain so severe that it wakes them up
- Children under 2 with bilateral ear symptoms
- Evidence of mastoid tenderness, redness or swelling
- Loss of balance or dizziness

- Refusing fluids or unable to swallow saliva

Remote ear, nose and throat examination

Some video consultation platforms allow the collection of additional clinical data with diagnostic tools to improve the quality of the consultation and to allow you to manage more consultations remotely.

Ask the patient to use a digital otoscope or Medicam so you can:

- visualise inside of their ears
- look into the back of their throat
- take pictures of any pathology for your records

Cardiovascular and Respiratory Examination

Do a general assessment. Are they able to give you a history? If not, they are likely too unwell to be assessed remotely (unless that is normal for them).

Observations

Respiratory rate

This can be done on video but not on the telephone.[27] Whilst current research doesn't demonstrate a change in respiratory rate when the patient is aware of being observed,[28] you may still wish to tell the patient you need them to rest and not talk for 1 minute because *after* that you want to do a test of their breathing. Ask them to put their hand on their chest to help you to see the rise and fall of the chest more clearly.[29] Whilst they are waiting for this test, you will be counting their respiratory rate. Asking a family member to do this for them may be useful in a telephone consultation.

Heart rate and saturations

Some mobile phones and smart watches may be able to report heart rate and oxygen saturations but bear in mind that these aren't validated. They should be disregarded if the results don't match the clinical picture. Some patients, especially those with COPD or other long-term respiratory conditions, will have their own pulse oximeter.

Pulse Taps

Whilst demonstrating (if on camera), ask the patient to put two fingers on their opposite thumb and then slide those two fingers down to where their wrist strap normally is. If they can't feel the pulse after a few seconds, ask them to take some time to feel for a pulse around that area.

Once they have found it, ask them to say "tap" each time they feel the pulse. That is all *they* do; *you* will both count the number of "taps" and keep track of the time. If the patient fails to find their pulse, try the same on the inside of the elbow.

Sit-stand test

To assess exertion-induced oxygen desaturation, the 1-minute sit-to-stand test can be performed.[30]

1. Check oxygen saturations of the resting patient
2. Ask the patient to go from sitting to standing as fast as they safely can for one minute
3. Check their oxygen saturations again
4. Observe oxygen saturations for 1 minute to observe for desaturation
5. A 3% or greater desaturation necessitates urgent referral to secondary care

Breathing

Consider using the NHS symptom checker:[31]

- "Are you so breathless that you are unable to speak more than a few words?"
- "Are you breathing harder or faster than usual when doing nothing at all?"
- "Are you so ill that you've stopped doing all of your usual daily activities?"

Include assessing for decline (this is more concerning than stable breathlessness):

- "Is your breathing faster, slower, or the same as normal?"
- "What could you do yesterday that you can't do today?"
- "What makes you breathless now that didn't make you breathless yesterday?"

Quantify breathlessness

Assess the level of breathlessness.

- Are they breathless at rest or unable to complete full sentences?
- Particularly important during the Covid-19 pandemic; ask the patient to walk upstairs, or 20 yards and back, and when they return ask them a question which will prompt an answer of several sentences, such as "tell me what you did yesterday". This will give you a good indication of the degree of breathlessness on exertion. A patient who you would describe as "verbose following exertion" is very reassuring.

Observe

Take a moment to look at the patient more generally. This may require you to ask the patient to move away from the phone/camera, to allow for a wider view.

- Look for recessions. Ask them to remove their shirt if possible and appropriate.
- Can you hear a rattling chest, wheeze or stridor? Assess this when assessing respiratory rate, when the patient is quiet.
- Look at how they're sitting, are they leaning forward or avoiding full breaths?

Peripheries

You may need to explain to the patient why you need to do it, but don't forget to look at the peripheries such as the hands and feet, where appropriate.

- Skin - is it mottled?
- Hands - are they cold, pale or blue?
- Lips - are they blue or pursed?
- Nostrils - is there any flaring?

- Legs - is there any swelling... uni- or bi-lateral? Are they cold? Are they blue? Is there any redness?

Paediatrics

Have a low threshold for referring paediatric patients with respiratory symptoms for further assessment as they may decline rapidly.[32]

Consider referring children presenting with respiratory symptoms and any of the following:[33]

- Audible stridor or wheeze
- Evidence of respiratory distress
- Mottled skin
- Cold hands and feet
- Drowsiness
- Inconsolable crying
- Reduced urine output
- Known respiratory disease

Respiratory rate

One of the few observations that you can reliably take in paediatrics, over video and without examination equipment, is the respiratory rate. As such, it is essential to assess this in children presenting with an illness. It is important that the child is relaxed and not crying while you carry this assessment out in order to get a reliable result. Encourage the accompanying adult to distract them and reassure them in order to manage this. The following are the respiratory rates that would prompt an urgent referral to secondary care:[33]

<1 year	>50 breaths/minute
1–5 years	>40 breaths/minute
6–11	>25 breaths/minute
≥12 years	>20 breaths/minute

Remote cardiology and respiratory examination

Some video consultation platforms allow the collection of additional clinical data with diagnostic tools to improve the quality of the consultation and to allow you to manage more consultations remotely.

Ask the patient to use a digital stethoscope so you can:

- listen to their heart assessing rate, rhythm and heart sounds
- listen to their chest for added sounds such as wheeze, stridor and crepitations

Ask the patient to use a pulse oximeter so you can:

- take their oxygen saturations
- take their pulse rate

Ask the patient to use a blood pressure machine so you can:

- take sitting or standing blood pressure

Abdominal Examination

Patients presenting with abdominal symptoms don't always require a face-to-face assessment. Those with symptoms typical of a simple UTI or mild gastroenteritis can safely be managed with a thorough remote assessment. However, as with all other symptoms, if you're not comfortable, refer for a face-to-face assessment.

Peritonism

Peritonism is a late sign in abdominal pathologies, so you would hope not to be assessing patients with peritonitis. However, it is important to rule this out on all patients with abdominal symptoms.

- You can gain reassurance by asking them to suck in their umbilicus and then push it out as far as possible. Watching their face as they do this will allow you to observe for signs of pain.[34]
- If peritoneal involvement is suspected in a remote examination, the patient requires immediate referral to secondary care, not to another primary care consultation.

Palpation

Ask the patient to localise abdominal pain by pointing with a single finger to the centre of the pain; this will be more accurate if done when they are stood up.[35] Patients can also palpate their own abdomen, this time lying flat, splitting the abdomen into 6 zones, top, middle and bottom, left and right. If they are actively avoiding tender areas, be concerned, this is the self-palpation equivalent of guarding. The renal angle can also be palpated by the patient. They should palpate it whilst lying down but get them to show you where they have palpated afterwards.

Bloating

Many patients will describe bloating, it's a common symptom that occurs in many pathologies.

- A *sudden* (less than one week) change in belt size, is more likely to be bloating than weight gain.
- Bloating that is persistent is a red flag and warrants urgent assessment.[36]

Urinary tract infections

NICE guidance allows for appropriate antimicrobial treatment without urine microscopy in non-pregnant females under the age of 65 for the first presentation with a urinary tract infection.[37] But a clinical assessment is required to ensure there are no systemic features suggestive of pyelonephritis.

Safety netting

Safety netting has additional importance for patients with abdominal pain. Many intra-abdominal pathologies start with vague symptoms and become more localised and severe with time. Consider that any patient with abdominal pain in a remote consultation could be a patient at the very early stages of a severe pathology. Give specific safety netting, warning the patient what should prompt them to seek further help. Consider which conditions *could* develop?

- Ovarian cysts - it will get worse and they will not be able to jump up and down
- Appendicitis - it will move to the right-hand side above their hip
- Pyelonephritis - they will feel generally unwell with vomiting and lower back pain
- Peritonism - simple movements of the abdomen will become painful

Paediatrics

Managing paediatric patients with abdominal symptoms remotely can be very challenging. Where symptoms are very mild, or chronic, it may be appropriate to manage them online with rigorous safety netting. Where

a referral for further care is required the decision will be whether this will be to primary or secondary care.

Red flags

Consider an *urgent* referral for children presenting with abdominal symptoms and any of the following:

- Acute onset of pain
- Not keeping fluids down
- Pain on movement or not settling with analgesia
- Pain that wakes them up
- Polyuria, dysuria, urgency or new enuresis
- Weight loss
- Evidence of dehydration
- Reduced urine output
- Parental concern

Jump test

Asking the paediatric patient to do a star jump, with their hands being lifted towards the ceiling, and assessing their facial expression, can give you an indication of peritoneal irritation. If they can do this they are unlikely to be suffering from peritoneal inflammation.[38]

Dermatological Examination

Most dermatological conditions can safely be assessed remotely if a patient can adequately show you the lesion and tell you the things that you can't assess on camera, such as dryness and texture. Below are some techniques you can use to ensure you maximise the opportunities to assess the skin of your patients.

Lighting

You are trying to assess the skin in detail so it's important that the skin is well lit. Natural light from windows is better than artificial light, so simple things such as asking the patient to move closer to the window may help.

Double check

It can be helpful to check with the patient if the picture they can see on the screen looks the same as the rash in person. This will either give you reassurance that you are getting an adequate view, or prompt you to obtain a more representative view.

Measurement

It is difficult to assess the size of something using a webcam, so you will need to use something as a reference. Ask if the patient has a ruler to place alongside any lesions. If they don't have a ruler you can use any reproducible object such as a £1 coin (23mm).

Expose the patient

Don't be shy in asking a patient to remove clothing (other than underwear) to expose other areas of the body in a widespread rash.

Angles

Try to get an appreciation of any lesion in all 3 dimensions. Take the time to ask for views of the lesion, both from above and from the side, so you can assess the projection/height of the lesion. When directing the patient to move the camera, try using landmarks rather than directions, i.e. "move towards your elbow" rather than "move further up".

Palpation

Ask the patient to brush a hand over any lesion. Most patients will be able to clearly recount any of the following characteristics:

- Heat
- Texture (smooth or rough)
- Tenderness
- Moistness (wet or dry)

Glass test

Non-blanching rashes are a red flag in any examination, face-to-face or remote.

- Ask the patient to get a wide glass and roll it over any rash, if it doesn't fade treat this as a medical emergency.[39]
- This is true for both petechiae (0-2mm) and purpura (>2mm), but the presence of purpura increases the likelihood of meningococcal disease.[40]
- The absence of a non-blanching rash does not rule out meningococcal disease.

Paediatrics

Consider referring children presenting with a rash with any of the following features:

- Red lips, tongue or mouth

- Pain, blistering or peeling
- Covering most of the body
- Associated systemic features such as fever or drowsiness

Remote dermatological examination

Some video consultation platforms allow the collection of additional clinical data with diagnostic tools to improve the quality of the consultation and to allow you to manage more consultations remotely.

Ask the patient to use a digital dermatoscope or Medicam so you can:

- take a closer look at the rash
- take pictures of any rash for your records

Neurological Examination

Whilst you can't do a complete neurological examination remotely, there are adjustments that you can make to existing techniques to identify gross deficits.

Cranial nerves

Most cranial nerves can still be examined online, you just need to modify the examination a little.

1 - Olfactory nerve

- Ask the patient if they've lost their sense of smell

2 - Optic nerve

- Ask the patient if there has been a decline in their vision or their field of vision
- Or ask the patient to read from a book or newspaper

3,4,6 - Oculomotor, Trochlear and Abducens nerves

- Ask the patient to keep their head still and move their eyes slow from left to right. Observe the light reflection on the eyes. It should be the same on each eye, wherever the eyes look. If there is asymmetry, there is a likely deficit. Also observe for nystagmus.

5 - Trigeminal nerve

- Ask the patient to use a soft object such as a twisted tissue and stroke their face in the all 3 zones of the nerve, comparing left with right.
- Whilst they are palpating, ask them to rub the temporal areas to assess for tenderness to the temporal artery.
- Ask the patient to move open and close their mouth and then move their jaw from side to side; again you're looking for asymmetry.

7 - Facial nerve

- Assess the face for asymmetry at rest
- Ask the patient to raise their eyebrows, then close their eyes tightly, then blow out their cheeks and finally smile.

8 - Vestibulocochlear nerve

- Ask the patient to stroke their thumbs and fore-fingers quickly next to their ears and report any asymmetry.
- If there is asymmetry the hum test (see ENT section) can be used to differentiate between sensorineural and conductive hearing loss.
- Ask the patient if they've felt dizzy or drunk recently.

9, 10, 12 - Glossopharyngeal, Vagus and Hypoglossal nerves

- Ask the patient to cough
- Ask the patient to stick their tongue out and say ah, as you assess for asymmetry of the uvula and any asymmetry, fasciculations or wasting of the tongue

11 - Accessory nerve

- Ask the patient to shrug their shoulders as high as possible, as you assess for asymmetry

Sensation

Patients can use an object such as a piece of twisted tissue paper to assess light touch. Certainly, it would not be appropriate for them to use their own finger.

Power

Gross loss of power can be assessed online with a few movements:

- Upper limb power can be grossly assessed by examining for pronator drift, with a sensitivity of 92%. Ask the patient to hold the pose whilst answering questions for approximately 30 seconds.[41]
- Lower limb weakness can be screened for by asking the patient to:

Squat down and stand again L3/4

Stand on their heels L4/5

Stand on their toes S1/2[42]

Coordination - upper limb

The finger to nose test can be used to assess upper limb coordination by asking the patient to:

- Move an arms-length back from the screen
- Pick a specific point just next to the camera (this is the replacement for your finger)
- Touch their nose and then that chosen point repeatedly

You should be able to identify any hesitation. In particular you will be looking for sudden changes in direction, suggesting dysmetria, which would indicate a possible cerebellar pathology.

Coordination - lower limb

You can ask the patient to walk to the furthest end of the room and back heel to toe, demonstrating this with your hands. They may need to move furniture and set the camera so that you can view them walking. This will assess lower limb coordination and proprioception.

Cerebellar signs

- Dysdiadochokinesia can be assessed as well online as it is in person, you will need to give clear advice whilst demonstrating this to the patient with your hands on screen.
- The Romberg's test can be carried out if safe to do so, such as if there is someone who can steady the chair behind the patient.

Muscle wasting and fasciculations

Where appropriate ask the patient to remove some items of clothing to assess for muscle asymmetry and any fasciculations.

Cuada equina symptoms

Don't forget to assess for any signs or symptoms of cauda equina in patients with lower back pain or lower limb symptoms.

- Loss of power or sensation in one or both legs
- Bilateral leg pain
- Saddle anesthesia (altered sensation when wiping following toileting)
- Bladder dysfunction (retention or incontinence)
- Bowel incontinence

Musculoskeletal Examination

The main elements of the musculoskeletal examination are applicable in a remote consultation: look, feel, move. If there are any concerns about a possible bony injury or non-accidental injury, a referral to face-to-face is essential.

Look

To look at affected body parts, ask the patient to use their phone or camera to give you a close-up view.

- Look for swelling, erythema, muscle wasting or signs of trauma.
- Remember to assess other joints as well, particularly the joints above and below, and the contralateral joint.
- Ask the patient to give you a side view to assess swelling in a joint.

Feel

To feel affected body parts, ask the patient to put the phone on the side so that they have both hands free.

- Patients can palpate their own joints and tell you if there is any warmth, crepitus on moving, or tenderness.
- Take the time to identify exactly the location of any tenderness to allow you to make a more accurate diagnosis.
- Ask them to feel joints in different positions to see if this affects the tenderness

Move

To move the affected body parts, ask the patient to stand back from the camera so that you can see both left and right to identify any asymmetry.

- Ask the patient to move affected limbs allows you to assess pain, range of movement and function.

- The ability to stand on one leg is a good screen for lower limb fractures as this eliminates compensation from the healthy limb.
- Ask the patient to walk to the back of the room and back to assess their gait.
- Demonstrate them what you want them to do yourself.

Paediatrics

Any child presenting with an injury, as opposed to illness, will need to be referred for face-to-face assessment. Fractures are easily missed and harder to assess in children, and non-accidental injuries may not be identified in a remote consultation.

Mental Health Examination

It is estimated that 40 percent of all primary care consultations are related to mental health conditions.[43] As the examination of these patients is usually entirely non tactile, a remote consultation can be as thorough as a face-to-face assessment, in fact systematic reviews have demonstrated the efficacy of remote consultations for mental health conditions.[44] As with the physical examinations above, the information below is focussed on how to adapt your existing examination skills online.

Timing

If you are undertaking a full consultation, rather than triaging a patient, ensure that an appropriate amount of time is set aside. If this is the first time you are meeting the patient, or the first time they are presenting with a mental health problem, 10 minutes is unlikely to be sufficient. If you are unable to undertake an adequate consultation, due to time restraints, it may be preferable to ensure the patient is safe and make another appointment with time an appropriate time allocation.

Perception

It may be that some patients prefer video consultations to face-to-face appointments. Research has highlighted that some younger patients feel more able to talk openly when the clinician isn't physically sat in front of them.[53] Assessing the patient perception of online consultations will enable you to adjust your approach accordingly

Privacy

Mental health patients may be sceptical about the efficacy and privacy of a consultation undertaken remotely.

- From the start, reassure them that you are able to undertake a full consultation remotely, and that you are able to help them.

- Talking about sensitive topics on a camera can make patients fear that they are being recorded, so reassure them that you aren't.
- If you are recording them clearly define who will have access to the recording and how long it will be held for.
- Reassure them that no-one can hear them other than you, and if that is not the case where they are, check if they want to move before starting.
- It is useful to confirm the principles of confidentiality, which will include informing them of the limits of that confidentiality.

Encourage

When a patient attends with a mental health problem, they have taken a leap of faith, and this is a potentially unique opportunity to help a patient who may be vulnerable or at risk. This opportunity must be treasured.

- Thank the patient for coming in to see you, be welcoming and open.
- Acknowledge the courage it took for the patient to attend and commend them for this. You are setting the tone for their interactions with you on this subject.
- Acknowledge that by simply attending, a patient with a mental health problem is taking a very important first step.
- Let them know you are listening and are able to give them space and time to talk

Adapt

The consultation techniques discussed earlier in this document need some adjustment when patients are presenting with mental health problems.

- Whilst it's important to gather a complete history, if you are spending all your time typing you may miss some subtleties in verbal and non-verbal communication. The patient may also be suspicious of being "recorded", but do be open with the fact that you are typing.

- "Almost eye contact" is normally sufficient, but actual eye contact may be required more frequently if a patient is upset. Although be careful not to stare, looking into a camera doesn't allow for the normal movement of your eyes around the face of a patient, which can result in you appearing a little intense.
- The "why now?" question can be the most important question you ask in a mental health consultation as this is an indirect way of eliciting a patient's fears or thoughts of harm.

Body language

Adjusting body language when a patient appears upset or is talking about something sensitive is something that we do almost instinctively, but when the patient isn't sitting in the same room as you, this doesn't come so automatically.

- Moving back from the camera will allow more of you to be on the screen, so the patient can read your body language more easily. But lean forward to demonstrate your interest.
- Change the angle of the camera so that there is less "sky", the patient needs to see as much body language as you can show.
- Look at the camera and at the screen, as discussed above. Find a balance between showing the patient you're focussed and being able to read their face on screen.
- Don't look up or away from the screen as that suggests that you've been distracted or that someone else is in your room, especially if the patient is a little paranoid. They will know that you have the screen and the camera; looking anywhere else is not going to look good.
- Tell them if you're going to type, they may see or hear you doing this, but stating it demonstrates honesty to the patient.
- Ask them to give you a good view, so you can see their body language. Ask them to sit back a little, bring the camera down to show less "sky" and more arms and hands, this will allow you to look for fidgeting hands, and psychomotor agitation or retardation.

Environment

Assessing the environment of the patient is an important part of your assessment to ensure patient safety.

- Take a telephone number that you can call them on if you become disconnected.
- Ask for the address of where they are consulting from, in case you have concerns for their safety and you lose connection.
- Asking if anyone else is in the house will help you consider if you need to be worried about the other people or, conversely, if you need to be concerned about the patient. This is particularly pertinent if you are worried about use such as slavery or neglect.
- Any background in view may give useful clues about their social situation and mental state. A tidy home shows they are still caring for themselves but a messy dirty one implies otherwise. Bear in mind that some people choose to live differently anyway.

Suicidal thoughts

Patients often reveal details of suicidal thoughts only when asked. So, it is important that you ask every mental health patient about this, assess the extent of the thoughts and enquire about ongoing thoughts. Finding the right terminology can be difficult, but options include:

- Have you felt that life wasn't worth living?
- Have you thought of ending it all?
- Did you actually do anything to harm yourself?
- Do you still think that way?
- Do you have any plans to end your life?[45]

Safety

The wellbeing and safety of patients is always the primary concern of any medical professional. Ensuring this remotely necessitates additional care being taken in the history taking. Don’t forget to ask about the following,

even if they don't seem applicable to that patient, you don't know until you ask.[46]

- Hallucinations - seeing or hearing things that other people don't
- Delusions - having thoughts that other people don't understand
- Suicidal thoughts - thoughts of ending it all (see above) and previous attempts
- Self-harm - harming yourself, even if it was just to get a release
- Risk to others - thoughts about hurting someone else, for any reason
- Previous mental health problems, including treatments
- Drug or alcohol use - asking about "use" is preferable to asking about "abuse"
- Marijuana use - ask specifically as many patients don't see this a drug[47]
- Social support - this can be work, family or friends
- Coercion - this is becoming increasingly prevalent
- Slavery - especially among migrants from less developed countries
- Childhood - if observed in childhood, the adult is more likely to be a victim or perpetrator of abuse

Treatments

Most treatments that you would give in a face-to-face appointment can also be delivered in a remote assessment, with the exception of some prescription medication, according to your local guidelines.

Listening

- Don't underestimate the power of you simply listening to the patient. The well-known phenomenon of the "doctor as a drug" has added value for patients with mental health concerns.[48] Maybe that is all they need but reassure them that that is a valid use of a consultation so that they feel empowered to return in future.

Referrals

- Many referrals to mental health services are now a self-referral process, but if the patient is high risk, or has any reason why they might not initiate the referral despite consenting to it, don't hesitate to do the referral on their behalf.

Follow up

- If at the end of the remote consultation the doctor, or the patient, are not entirely satisfied, then a face-to-face assessment needs to be arranged, ideally by the clinician. Hopefully, the patient will be satisfied and a follow up remote consultation can be arranged.

Medication

- Refer to local guidelines for the online prescribing of psychoactive medication. The prescribing of SSRIs with appropriate safety netting and follow-up is commonly permitted.

Your accessibility

- Give them clear instructions how they can contact you again if they need to before an arranged date or if they experience problems sooner. Remote consultations can make patients feel more removed and the doctor less accessible.

Links

With remote consultations there is often the opportunity to send the patient an email with links to websites. There are lots of useful resources on the internet, including:

Royal College of Psychiatrists

www.rcpsych.ac.uk/mental-health

- A resource centre for patients, including information leaflets, videos and links to further sources of help.

Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust

web.ntw.nhs.uk/selfhelp

- A bank of comprehensive yet thorough self-help guides for many mental health conditions.

Special Situations

In medicine we encounter new situations and challenges every day and dealing with these are the key qualities of any doctor. But it is useful to think about some special situations that you may come across.

Care homes

As care homes and nursing homes work to prevent transmission of diseases such as Covid-19, remote assessments are becoming more common. New technology presents some great opportunities here, but there are some potential challenges too. The GMC has issued related guidance, some of which is detailed below.[49]

- Often you will be dealing with a member of care, or nursing staff, who are under a lot of pressure and want to get to the conclusion as much as possible. Ensure that adequate time is taken to assess and prescribe safely.
- Not attempting to speak to the patient due to a lack of time is not a full and safe assessment. If the patient cannot be brought to the phone or camera, the assessment can be rescheduled for later in the day.
- If the patient is unable to talk, you will still want to physically see them where possible. Your visual assessment is an important part of your assessment where this is available.
- Ensure the examination is as thorough as it would be if you were seeing them face-to-face. Elderly or immobile patients can take longer to get into the correct position for examination. This is however even more important when seeing them remotely, so be patient and give clear instructions to the carer how to help you carry out the correct examination.
- If you don't know the patient, or have access to their medical records, ask for a past medical history and medication history.
- Make your instructions clear, including administration of medication and monitoring of the patient's condition.
- Where possible send written confirmation of the agreed plan.

Overseas patients

Now that patients have online access to their doctors, they may initiate consultations whilst they are overseas. Whilst they are your patients, they are in a different environment. There are a few things to consider, as discussed by the GMC.[50]

- Access to medical care for monitoring of their condition, especially if they decline.
- The limitations of your indemnity cover.
- If the patient is in a country that requires you to be registered with a local regulatory body.

Safeguarding concerns

If you have a safeguarding concern you will need to report it to the appropriate body based on the location of the patient, not you. Not reporting, or asking someone else to report it on your behalf, would not be appropriate.

- Follow your organisation's own safeguarding policies.
- Report all concerns to the safeguarding lead for the organisation you're working in.
- Report your concerns to the authority local to the patient, which may be different to your authority.

Emergencies

Hopefully you there won't be too many emergency situations in your remote consultations, but just as it happens in face-to-face consultations, it may happen in any consultation.

- Obtain a telephone number and location of every patient at the very start of the consultation.
- As soon as you suspect that this is an emergency get help; ask the patient to get help from a family member or neighbour.

- If the assisting 3rd party is able to call emergency services, ask them to do so.
- Try to stay "on the line" until emergency services arrive.
- Where patients disclose a risk of harm to themselves or others, you are permitted to break confidentiality, but every attempt, where appropriate, should be made to gain their consent for this.[51]
- If you need to call emergency services, give your name but make sure it is very clear that you are not physically with the patient. This affects the priority the ambulance service will place on your call.

Poor hearing or vision

A patient with poor hearing or vision should not have their access to medical care disadvantaged because of this. This does not mean making all their appointments face-to-face, as some adjustments to a remote consultation may be all that is needed.

- Speak to the patient or someone they live with prior to the consultation and ask them what they think would help to give the patient access to remote consultations.
- Ask the patient to use a large device with good speakers; so a laptop as opposed to a mobile phone.
- Give the patient some time to create a quiet environment, shutting doors and windows and turning the television off.
- Slow down your speech and speak more clearly. Do not shout as this distorts your voice and makes it more difficult for them to understand you.
- Stay calm and let the patient know that a face-to-face appointment is available to address their anxieties.
- Pay particular attention to your own camera and lighting, ensuring the patient can clearly see your face, particularly your lips, as they may be lip reading.
- Make use of the same family members who come into the surgery to sign for you and speak for the patient, but be sure to include the patient in this process, looking at them when you're

talking and glancing back at them when you're listening to the family member.
- For patients with significant visual impairment, more verbal responses will be required throughout the consultation. Let the patient know you're still there and they haven't lost connection.

Medication requests

Requests for repeat medication in remote consultations are no different to those done in person. The general consensus is that extra care should be taken when prescribing potential drugs of abuse, observe local guidance and restrictions.[52]

- Ensure the dose is correct, even if it's the same as the patient had previously.
- Check with the patient that appropriate monitoring is taking place (for example: blood pressure and renal function monitoring on patients using ACE inhibitors).
- Only write prescriptions that you are permitted to write given the information available (this relates to things like shared care agreements).
- Inform the patient's own GP is aware of any changes you have made to their regular medication if that is not you.
- If prescribing medication such as benzodiazepines ensure you check the patient's identity and discuss the risks and appropriate alternatives.

Angry patients

Angry patients are a challenge in all types of consultations; there are some considerations for how to manage these in a remote consultation. Check the local guidelines where you work.

- Where a patient is aggressive in a remote consultation you have the advantage of them not being able to physically hurt you, but you have a right not to be abused verbally. Most commonly patients will be given one warning for unacceptable behaviour or

language; if they continue after this you can politely but firmly end the consultation.

- Trying to understand why the patient is angry will give you the key to diffusing the situation.
- Stay calm throughout the interaction, slow down the speed of your speech and lower your tone.
- Speaking more quietly may also help to reduce the heat in the conversation.
- Listen to the patient without interrupting, let them talk until they run out of steam, giving them the opportunity to be heard, maybe that's all they need.
- Empathise, maybe they are frustrated with something and they want to be understood. Empathising with them doesn't mean that you have to agree with them.
- Be aware of patients using anger or aggression to try to pressure you to do something that you're not comfortable with.
- Patients can feel that as you are not physically in the room with them they are safer to express their anger more aggressively. If this happens making it clear this is still not acceptable behaviour as you are still their doctor, even if you're not in the same room, can stop it and help them temper their behaviour.

About the Authors

Dr Adam Abbs MBBS mRCGP PGCCE fHEA

Adam is a GP who has worked in numerous hospital specialties including neurosurgery, neurology, respiratory and accident & emergency in addition to his career in primary care. After qualifying as a GP Adam used his experience of working in the emergency department to set up a highly successful GP-led same-day care facility in Manchester, England.

More recently Adam has developed an interest in the innovative field of remote medicine, and has seen thousands of patients online, building up a wealth of knowledge on how to safely assess patients in often imaginative ways. Adam strives to overcome the challenges of remote consultations whilst also maintaining the immensely important patient-doctor relationship.

Dr Abby Hyams MBChB mRCGP DRCOG DFFP

Dr Abby Hyams grew up in Manchester and did her medical training in Bristol. She has been a GP for over ten years, many of them as a partner in an NHS practice in Hemel Hempstead. Dr Abby Hyams is an early-adopter of remote consultations and has seen thousands of patients using Arc technology.

Dr Zubair Ahmed MBChB mRCGP MBA

Dr Zubair Ahmed is a GP and the Co-founder and CEO of Arc and Medicspot. He is passionate about improving the quality of online healthcare.

After obtaining his medical degree from University of Aberdeen, he worked across a wide array of specialities including cardiology, accident and emergency, and geriatrics before focusing his energies on becoming a General Practitioner. Dr Ahmed is very excited about how technology can help both doctors and patients alike.

Further Information

Arc

With Arc, you can remotely perform clinical examinations and video consultations with care home patients from your surgery. Using an integrated stethoscope, high definition camera and other diagnostic devices, you can auscultate heart, lung and abdominal sounds, examine ears, throat and skin, and measure patient observations.

- Complete 94% of consultations without needing a face-to-face appointment
- Remotely assess deteriorating patients to avoid unnecessary hospitalisation
- Undertake virtual ward rounds to reduce transmission of Covid-19

See how other GP surgeries and PCNs use Arc to minimise care home visits:

archealth.io/care-homes

Online education hub

Arc has developed an education hub for remote consultations to share best practices in this evolving field of medicine. You can visit this hub at:

archealth.io/education

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