


Fifteen-minute consultation: A practical approach to remote consultations for paediatric patients during the COVID-19 pandemic

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ABSTRACT

Objective This practical approach to the use of telehealth aims to offer clinicians a framework for video and telephone interactions with children and families accessing healthcare.

Design Using a standardised case to illustrate how video and telephone consultations can be used during the COVID-19 pandemic.

Setting The emergence of 2019 novel coronavirus (COVID-19) is having a massive impact on society. Routine face-to-face consultations were reduced to reduce potential spread of the virus. Clinicians still need to provide ongoing safe care, particularly for more complex patients. Telehealth is the delivery of healthcare services across geographical barriers using information and communication technologies to improve health outcomes.

Intervention In this article, we describe a 'How to' approach to using virtual consultations based on our experience and a review of expert guidelines.

Conclusion Virtual consultations can be more convenient and have the potential to improve access for patients. Many have embraced these technologies for the first time during this pandemic.

INTRODUCTION

The emergence of novel coronavirus (COVID-19) is having a massive impact on society. Routine face-to-face consultations have been suspended to reduce potential spread of the virus. Clinicians still need to provide ongoing safe care, particularly for more complex patients. Telehealth is the delivery of healthcare services across geographical barriers using information and communication technologies to improve health outcomes.¹ Virtual consultations can be more convenient and have the potential to improve

access for patients.² Many have embraced these technologies for the first time during this pandemic. In this article, we describe a 'How to' approach to using virtual consultations based on our experience and a review of expert guidelines.

THE CASE

Annie is 14 years old and well known to the asthma clinic. She is due for clinic review, but they cannot meet face to face because of COVID-19 restrictions.

Annie's mother is sent an appointment letter for a virtual consultation, with detailed instructions on how to access the service and advised to have inhalers at hand.

PREPARATION FOR VIRTUAL CONSULTATION

A structured approach to video consultation for parents and clinicians is detailed in figures 1 and 2.³ Prior to commencing a virtual consultation, it is important that the parent/guardian is sent clear instructions on how to access the web-based platform you are using for the video consultation. They must be aware who is contacting them and when. Ideally, the video consultation should be carried out via a doubly encrypted platform to ensure confidentiality. Consideration should be made to data protection issues. Local policies need to be developed and followed with regards to this. We suggest using a generic email address or telephone number. The parent/guardian should be supplied with the specific contact details of the team for future concerns.

Consider what preparation parents can make prior to the consultation, for example;



Figure 1 A guide for patients/parents on consulting by video³ (adapted from video consultations: a guide for practice, <https://bjgp.life.com/2020/03/18/video-consultations-guide-for-practice/>).

- ▶ Weigh the child on home scales (enabling more accurate prescription).
- ▶ Medications, for example, inhalers at hand
- ▶ Setting up toys or activities to observe certain movements.
- ▶ Complex patients may have medical equipment available, for example, physiotherapy adjuncts, mobility aids, saturation monitors and so on.

Case continues

Prior to the clinic, the asthma team review her notes and electronic records. They prepare a personalised asthma action plan to go through with her parent during the call.

VIDEO CONSULTATION

It is essential that our normal good practice for face-to-face consultations is maintained. Introduce yourself, explain your role and confirm the identity of the carer. In the case of a new consultation, clarify if they have parental responsibility. They should be asked if they consent to the consultation proceeding in this format and this consent should be documented. To begin the clinical assessment, we suggest relaying a short summary of your understanding of the child's condition and medications to date. Next, ask specifically about any healthcare concerns related to your specialty. Ensure that no patient identifiable material is visible in your consultation room.

Prepare

- Choose a quiet room with minimal distractions
- In video calls ensure no patient sensitive information is on show
- Check video and audio equipment
- Review the patient's notes and have any relevant information at hand
- Discuss the patient in advance with the multidisciplinary team

Introduction

- Introduce yourself and your role including team members and their roles
- Ask who you are talking to and their relationship to the child
- Confirm if the parent/guardian is happy to continue with the consultation
- Advise if any adjustments need to be made if this is a video call
- Explain what will happen if there is a technical problem during the consultation

Set the context

- Explain the reason for the telephone/ video call
- The parent/guardian must be present for the duration of the call
- Summarise the patient's history and confirm current medications

Take a history

- Over the phone this requires additional concentration
- Proceed to take a clinical history as normal
- Careful use of open ended and closed ended questions are important
- Address any parental/guardian concerns

Clinical assessment

- Advise the parent/guardian that this will be a limited assessment
- If using a telephone consult you can still ask for descriptions (e.g. "What does the rash look like?", "Could you send me a picture/ video?")
- With a video consult carry out a visual inspection of the patient. Ask the parent/guardian to position the camera at specific areas

Plan and conclusion of consultation

- Agree a management plan with clear instructions
- Summarise the consultation outcome back to the parent/guardian and ensure 'safety netting' of what to do if things deteriorate
- Address any further questions
- Conclude by agreeing a review appointment and ensuring the parent/guardian knows who to contact for further advice.
- The parent/guardian should be asked to hang up the call first

Follow up

- Document the consultation in the notes and dictate a letter
- Send a copy of the letter to the parent/guardian
- Ensure that you follow up on your plan
- Ask parents for feedback to ensure quality improvement

Figure 2 Summary of how to conduct a telehealth consultation.

Case continues

Annie's mother, Lisa, takes the video call from the consultant. She is happy to proceed with the consultation. Annie has had an increasing cough over the past week, which is wakening her at night. She becomes breathless and wheezy on minimal exertion. She needs her reliever inhaler both day and night.

CLINICAL ASSESSMENT

It is important to acknowledge that video consultation is a limited tool, but it can provide some useful clinical information in lieu of the usual physical examination in a face-to-face consultation.

Advise the parent/guardian to choose a well-lit quiet location. During the consultation, you should explain clearly if an area of the child's body needs closer observation. The parent/guardian may also require direction in positioning their video device appropriately. Video consultation also allows other aspects of the child's care to be assessed such as physiotherapy or inhaler technique.

Case continues

The consultant is able to 'eye-ball' Annie. There are no signs of respiratory distress. Annie does not need to come to hospital immediately.

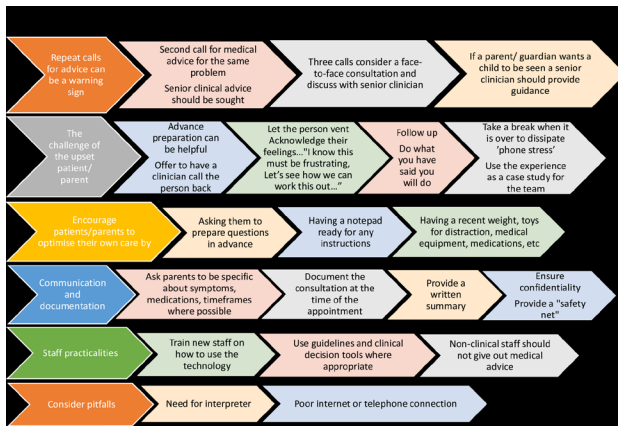


Figure 3 Sources of adverse outcomes.¹¹ Adverse outcomes can be related to three main areas.

The consultant then asks Annie to demonstrate how she takes her inhaler and notes poor inhaler technique.

MANAGEMENT PLAN

Video consultation allows a treatment plan to be discussed and agreed. This can be summarised and parental understanding checked. The clinician may also interact with the child and check their understanding where appropriate. Accompanying information such as medication leaflets, information packs or links to websites can be mailed or emailed after the consultation.

Case continues

The consultant teaches Annie how inhalers work and how to use them. Annie, her Mum and her consultant agree on a plan. The consultant sends a prescription for a 3-day course of oral steroids directly to the patients general practitioner (GP) and concludes by summarising the management plan. She discusses signs of deterioration and reminds Annie's mother that if things get worse, they should attend hospital for immediate assessment. The consultation is documented in the notes, and a full clinic letter is sent to the GP.

The following week, the asthma nurse specialist conducts a follow-up video consultation to ensure symptoms are settling and to further observe and reinforce the inhaler technique. Annie's symptoms have settled, and her improved inhaler technique has been maintained.

DISCUSSION

Information technology has the potential to improve patient care by removing barriers to patient access, reducing school and parental work absences and re-enforcing patient education. It may also be more economically viable than a face-to-face encounter.²⁻⁴⁻⁶ A 2015 Cochrane review noted similar health outcomes for chronic patients receiving remote monitoring or video-conferencing compared with in-person or telephone reviews.⁷ Another systematic review of telehealth

services found that all 32 included studies showed good levels of patient satisfaction.⁸

Challenges with technology

Using technology to assess patients is not without challenges. An infrastructure to train and support administrative and clinical staff is essential. Safeguards for privacy and security must be built in.⁹ Parents may not be able to access this technology. Low-income families, or those who have low digital literacy, may be disadvantaged.¹⁰ It may be difficult to arrange for those children who require an interpreter, have a complex family arrangement or have social work input.

Employing technology relies on both doctor and carer having adequate operational knowledge and the ability to deal with problems should they arise. A poor internet connection, time delay in transmission or simply lacking the non-verbal clues that regulate usual conversation can result in difficulty transmitting information. The disjointed conversation that ensues could lead to frustration on both sides.

As paediatricians, we analyse the subjective assessment of children by their parents in our history taking and balance this with our examination findings. In virtual consultations, we are reliant on thorough history taking alone. Using video consultation permits a limited clinical assessment. However, we must acknowledge that we will be missing information that only face-to-face assessment can provide. Importantly, virtual consultations may also limit our opportunity to engage with the child directly. This is particularly important for the adolescent patient who we want to empower to manage their chronic disease or the younger child whose social communication skills we want to assess.

A delayed diagnosis is reported as one of the most common complaints in litigation cases involving telehealth.¹¹ Multiple calls should be considered a red flag. Have a low threshold for seeing younger children (especially those under 2 years) face to face.¹²

By creating guidance on risk management and patient confidentiality, establishing protocols for triage of calls and standardising documentation through pro formas, errors may be prevented (figure 3). It is important to allocate as much time to a virtual consultation and as much diligence to documentation as with a face-to-face consultation (figure 4). Strong 'safety-netting' should be established by giving guidance on how to recognise and manage deterioration.¹³

For clinicians in training, there are additional difficulties. Virtual consultations work best when the clinician and patient have a pre-existing relationship.¹⁴ It may be even more difficult for a trainee to establish a rapport through a virtual consultation, particularly without the aid of non-verbal cues to demonstrate qualities such as empathy and to assess if the parent is truly satisfied by the end of the assessment.

Adverse outcomes can be related to 3 main areas:

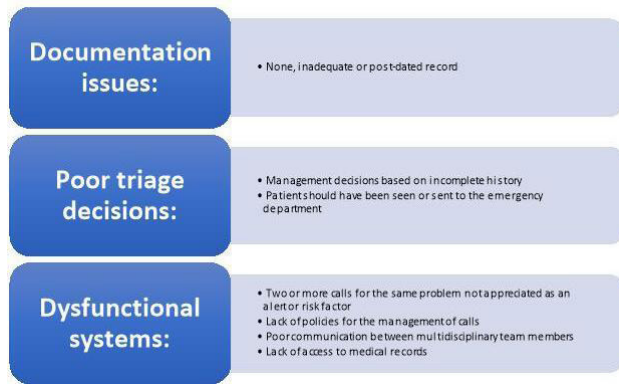


Figure 4 Practical tips for success.

CONCLUSION

COVID-19 precautions have led to virtual consultations being established throughout paediatrics. Many are considering using these technologies beyond the pandemic as part of the ‘new normal’. It is convenient and, when used correctly, has the potential to enhance the support provided to families.⁶

Attention must be paid to developing an infrastructure to support and train staff, protocols should be created to ensure that consultations are handled in a safe manner and documentation could be standardised to encourage thorough history taking.⁸ Rigorous processes should be established to prevent a delay in diagnosis and the patient receiving the treatment they require.

What is already known on this topic

- ▶ Telehealth is the delivery of healthcare using information and communication technologies.
- ▶ The use of telehealth has increased during the COVID-19 pandemic.

What this study adds

- ▶ An approach to the use of telehealth in children’s healthcare during the COVID-19 pandemic.
- ▶ A practical framework for telehealth consultations in children’s healthcare.

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