

# What are the medicolegal implications of virtual clinics?

## Abstract

Recently there has been increased interest in the use and development of virtual clinics, particularly in the wake of the COVID-19 pandemic. The need to provide clinical care, while minimising patient interaction, has led to wider adoption of both telephone and online consultations, with the potential complications and pitfalls that accompany such a change in practice. A literature search was performed using the Pubmed, MEDLINE and Embase databases, from database inception up to 25 January 2021. A total of 21 papers were identified as discussing virtual clinical assessment and the medicolegal implications. The main areas of concern included consent, misdiagnosis, lack of physical examination, privacy and patient satisfaction. This article assesses these areas and suggests techniques to address them.

**Key words:** Consultation; Medicolegal; Telemedicine; Telephone; Virtual

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## Introduction

Recently there has been an increased interest in the use and development of virtual clinics, particularly in the wake of the COVID-19 pandemic (Bruhn, 2020; Gilbert et al, 2020; Howgego et al, 2020; Makhni et al, 2020; Murphy et al, 2020; Stirling and McEachan, 2020). The need to provide clinical care, while minimising patient interaction, has led to wider adoption of both telephone and online consultations (Gilbert et al, 2020; Jayadev et al, 2020). Virtual clinics or ‘telemedicine’ clearly has many benefits: it allows a patient to be assessed in familiar surroundings, minimises time and cost incurred with travel, allows patients in more remote areas access to clinical care (Roberts et al, 2012; Ateriya et al, 2018) and allows staff to work from home, for example those required to shield during the COVID-19 pandemic (NHS England and NHS Improvement, 2020). There are significant benefits to healthcare trusts of providing virtual consultations, including decreasing the number of face-to-face consultations, which in turn will allow staff to adhere better to social distancing requirements.

However, concerns remain about the potential medicolegal implications of virtual consultations (Smith, 2001; Blue et al, 2020; Golash, 2020; Howgego et al, 2020; Murphy et al, 2020) which, before COVID-19, may have prevented widespread adoption of virtual consultations (De Santis et al, 2020; Makhni et al, 2020). The rapid expansion of these virtual services greatly increases the risk to the clinician, patient and the healthcare trust and it is vital that the medicolegal issues are understood. However, little has been reported as to what these medicolegal issues are. Therefore, a review of the literature was performed to answer the following questions:

1. What are the medicolegal implications of virtual clinics?
2. How can these risks be minimised?

In answering these questions, the benefits and potential pitfalls of virtual clinical assessment are reviewed and discussed.

## Methods

A literature search was performed using the Pubmed, MEDLINE and Embase databases, from database inception up to 25 January 2021. Keywords searched included ‘virtual clinic’ or ‘telemedicine’ or ‘telehealth’ and ‘medicolegal’. Search limitations included human participants and being published in English. Articles were excluded if no full text

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was available or if the article referred to teleradiology or telepathology, as these were not the clinical encounters that were being reviewed.

## Results

A total of 21 papers were identified as discussing virtual clinical assessment and its medicolegal implications. The main areas of concern included consent, misdiagnosis, lack of physical examination, privacy and patient satisfaction. Jurisdiction, licensing and reimbursement were also raised as areas of concern, but are less relevant in the UK and so will not be considered in detail here.

### Consent

Valid consent is vital in any patient interaction. Multiple papers (Ateriya et al, 2018; Golash, 2020; Howgego et al, 2020; Medical Defence Union, 2020) stress the importance of obtaining consent before carrying out a virtual consultation. However, it is not clear whether the fact that the patient has accepted the invitation for a virtual consultation and engaged with the technological process is sufficient consent (Jayadev et al, 2020). This form of consent would be an implied consent similar to that obtained when a patient offers their arm for venepuncture.

### Misdiagnosis

Misdiagnosis appears to be a key area of concern in the adoption of virtual consultations (Lane, 2002; Katz et al, 2008; Gardiner and Hartzell, 2012; Jenkins et al, 2016; Ateriya et al, 2018; Davies, 2020; Golash, 2020; Makhni et al, 2020; Perrone et al, 2020). Perrone et al (2020) state that: 'medical examination remains the cornerstone of practice'. While elements of clinical examination are possible during a video consultation, they are clearly not during a telephone consultation. Different clinicians will deem different aspects of clinical examination as integral to a particular consultation and the inability to perform a physical examination as part of a virtual consultation is an area of concern (Riew et al, 2021). Assessing a patient via a video call also requires the clinician to rely on what the patient and/or carer is telling them, ie their clinical descriptions. Not being physically in the same room as the patient could cause certain non-verbal cues to be missed (Davies, 2020), particularly if combined with a poor internet connection. If communication is compromised by difficulty hearing, time delay using the video conferencing programme or for any other reasons, then the quality of the consultation can be compromised, and this could increase the risk of misdiagnosis, as the clinician may be basing their diagnosis on limited information.

Failure to diagnose and poor communication are two common themes in malpractice suits, as identified by Katz et al (2008) in their assessment of 40 defendants from 32 malpractice cases concerning telephone-related consultations. These limitations to the consultation would need to be expressed to the patient before the consultation to gain informed consent. If the clinician or patient feel at any point that these limitations are impacting upon their ability to perform the consultation then this would need to be highlighted and a face-to-face consultation arranged instead.

### Privacy

Concerns surrounding privacy and/or confidentiality were mentioned in multiple papers as potential areas for medicolegal issues (Stanberry, 2006; Wu, 2008; Clark et al, 2010; Pirris et al, 2010; Gardiner and Hartzell, 2012; Ateriya et al, 2018; Blue et al, 2020; Ferorelli et al, 2020; Howgego et al, 2020; Iyengar et al, 2020; Jayadev et al, 2020; Mahajan et al, 2020). There are two aspects to consider: the confidentiality surrounding the consultation, and the data protection following the use of a telephone or online platform. Considering the confidentiality of the consultation, the patient will not be able to see everyone in the room that the clinician is with, which may make patients uncomfortable as they do not know who can see and hear them. Not every patient will have a private room from which they can make the call, therefore others in their household or workplace may be able to hear or see the consultation.

The other point of confidentiality to consider is data protection. For patients to have confidence in engaging in a virtual consultation, they need to be assured that their information

is held and transmitted securely. There have been reports of data breaches (Kelion, 2020), which may make some patients anxious about engaging in virtual consultations. Computer hackers (Wu, 2008) remain an ongoing concern for any organisation using technology, and healthcare is no exception (NHS Digital, 2020; National Cyber Security Centre, 2021). Virtual platforms are commonly provided by external companies and their technology and security measures vary. It is important that the clinician and trust are confident that these measures are sufficient to protect the data and the patient.

### Patient satisfaction

Patient satisfaction is an important area to consider as it affects clinical outcomes and medical malpractice claims (Stelfox et al, 2005). The use of a virtual consultation may be more difficult for some patient groups (for example, those who are older, deaf or confused), lower socioeconomic class, areas of limited internet access and capability to name but a few (Gilbert et al, 2020; Rhind et al, 2020; Riew et al, 2020). Roberts et al (2012) noted that ‘the physical barriers of distance and technology may affect the relationship the patient has with the physician, and his or her perception of the care received’. Difficulties in these areas could in turn lead to miscommunication and inadequate diagnosis, culminating in malpractice claims (Katz et al, 2008).

## Discussion

Having considered the medicolegal issues facing clinicians who perform virtual consultations, this article now considers ways of mitigating these issues.

### Consent

Howgego et al (2020) state that ‘most aspects of clinical good practice remain unchanged and remote consultations should be approached in a similar manner to in-person appointments’. The face-to-face clinical encounter is considered the gold standard of care, and there is no documented consent obtained for that particular episode. Ensuring that the patient explicitly states their consent for the virtual or telephone consultation is, therefore, going one step further than the accepted standard for a face-to-face consultation. Iyengar et al (2020) suggest that if the patient initiates the consultation then implied consent is valid; however, if the clinician initiates the consultation then explicit consent is required. In their advice regarding remote consultations the Medical Defence Union (2020) advise that ‘you should inform them (the patients) of any limitations of clinical assessment by remote consultation and also of any potential security risks associated with the consultation taking place via the internet’. If the patient does not wish to proceed at this point, then arrangements can be made for a face-to-face consultation, as there are limitations to the virtual assessment (Jayadev et al, 2020) for both the patient and the clinician. It is not clear whether a written statement signed by the client would be more legally binding, but obtaining this would be challenging when faced with a large number of patients with different levels of information technology (IT) skills.

### Misdiagnosis

Minimising incorrect diagnoses is vital in all consultations. Not physically seeing and examining the patient and thereby missing or misdiagnosing is an area of concern in virtual consultations (Jenkins et al, 2016). This is assuming that the face-to-face consultation is the gold standard and that it does not lead to a missed or incorrect diagnosis, which is clearly not true. In their presentation on the establishment of a virtual hand service, Stirling and McEachan (2020) make the point that ‘the risk of a traditional system is usually under-appreciated, whereas the risk of change appears inflated’. They acknowledge that as most surgeons are trained in an environment where it is viewed that all patients must be examined in clinic, any change to this is then perceived as involving significant risk. Anecdotally, the level of clinical examination carried out will vary tremendously between clinicians.

Both the Royal College of Surgeons and NHS England have produced guidelines on management of remote consultations, recommending that they not be used if any type of examination is required (NHS England and NHS Improvement, 2020; Royal College of Surgeons, 2020). Concerns about missed or incorrect diagnoses may be assuaged somewhat

### Key points

- Obtain verbal or written consent for the virtual consultation and document the consent.
- Do not proceed with a virtual consultation if an examination is likely to be required.
- Take steps to ensure confidentiality during the virtual consultation for both the clinician and the patient.
- Find out from the Trust what measures are in place to ensure that the patient's data are protected.
- Ensure thorough documentation, including any discussion related to consent and confidentiality and any technological issues that may have caused miscommunication between the parties during the consultation.
- Have a source of information available to the patient if required on their injury area to complement the consultation.

by the fact that in the five years following the implementation of a virtual clinic pathway, there were no complaints of medicolegal actions, for diagnosis or management (Jenkins, 2016). Clear understanding of the limitations of a virtual clinic is important for both the clinician and the patient, so if either feels it is impacting upon the consultation then it should be highlighted and a face-to-face consultation arranged.

### Privacy

There are two aspects to consider, first, the confidentiality surrounding the consultation, and second, the data protection following use of a telephone or online platform. Considering the confidentiality of the consultation, the clinician should introduce everyone in the room to the patient, whether or not they are on camera (Howgego et al, 2020). The patient needs to take steps to ensure their confidentiality is not breached on their end of the call, by being somewhere private, where they cannot be overheard (Howgego et al, 2020; NHS England and NHS Improvement, 2020). For some patients this may be impossible, so they may not be suitable candidates for a virtual consultation or the appointment should be rearranged.

It is vital that healthcare providers ensure patients' personal information is protected securely (Stanberry, 2006; Gardiner and Hartzell, 2012; Ateriya et al, 2018; Golash, 2020; Jayadev et al, 2020). This is not just the responsibility of the healthcare providers but also of the patient as they choose which device to use. The Royal College of Surgeons (2020) state that: 'although video consultations are securely encrypted, it is the patient's responsibility to ensure that they have adequate anti-spyware and anti-virus protection on their devices' and that 'if patients are using a mobile phone, they must be made aware that it can only be as secure as any other phone call on that mobile network'.

### Patient satisfaction

Ensuring that patients receive high quality care is an essential part of clinical practice. While many patients will welcome the increased use of virtual clinics, some will not (Stirling and McEachan, 2020). A virtual consultation will not be appropriate for all clinical encounters (General Medical Council, 2020; Howgego et al, 2020; Jayadev et al, 2020; Royal College of Surgeons, 2020), so careful triage and selection of the best type of clinical review is essential in the management of outpatient workload. When a virtual service is implemented into a healthcare trust it is vital that patient satisfaction is assessed to allow the best service to be delivered.

### Conclusions

As the COVID-19 pandemic continues there is the ongoing need for social distancing, while providing high quality patient care. Virtual clinical reviews have been shown to be a valuable tool in achieving this, but it has limitations that the clinician and the patient need to be aware of before a consultation takes place.

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**Conflicts of interest**

The authors declare that there are no conflicts of interest.

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