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Video consultations for covid-19

An opportunity in a crisis?

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The rapid spread of covid-19, and the fact that healthcare facilities could be sources of contagion, has focused attention on new models of care that avoid face-to-face contact between clinician and patient. There has been particular interest in video consultations, which are already being rolled out in many countries as part of national digital health strategies. How appropriate are video consultations for dealing with the coronavirus crisis—and what are the challenges of scaling up this model at speed?

Randomised trials (most of which were underpowered) have shown that clinical consultations conducted through a video link tend to be associated with high satisfaction among patients and staff; no difference in disease progression; no substantial difference in service use; and lower transaction costs compared with traditional clinic based care. However, almost all this evidence pertains to highly selected samples of hospital outpatients with chronic, stable conditions and is largely irrelevant to the current escalating situation involving patients with an acute and potentially serious illness.

Organisational case studies have shown that introducing video consultations is a complex change that disrupts long established processes and routines. Some clinicians express concerns about technical and clinical quality, privacy, safety, and accountability (for example, in relation to litigation if something goes wrong). Whether justified or not, these reservations can be a major barrier to expanded use.

When are video consultations appropriate?

Not all clinical situations are appropriate for video consultations. For clinicians who are self isolating, video is certainly appropriate. For patients consulting about covid-19, video could be useful for people with heightened anxiety (for whom a video consultation may be more reassuring than a phone call¹¹), those with mild symptoms suggestive of coronavirus (for which visual cues may be useful), and those with more severe symptoms (when a video consultation may reduce the need to visit a potentially contagious patient). Well patients seeking general advice could be directed to a website or recorded phone message. There may be a trade-off between staying at home and coming to clinic for a full examination—for example, in frail older patients or immunosuppressed patients.¹⁰

Other types of consultations for which a video encounter could avoid an in-person visit include chronic disease reviews, counselling or other talking therapy, administrative appointments (for example, for sick notes), some medication reviews, and triage when telephone is insufficient. Video consulting to patients' homes is unlikely to be appropriate for severely ill patients, when a full physical examination or procedure cannot be deferred, or when comorbidities (eg, confusion) affect the patient's ability to use technology (unless relatives are on hand to help).

Video should supplement, not replace, the telephone, for which there is a considerable evidence base from research studies¹²⁻¹⁴ and some guidance.¹⁵ It may form part of a wider strategy of remote care for covid-19 that includes automated triage, isolation of potentially contagious patients within care facilities, and electronic monitoring in intensive care units monitoring.¹⁶

Improved dependability, lower cost, better audio and video quality, and the emergence of bespoke products that mirror clinic workflows (for example, by providing a virtual waiting room and information about current place in the queue) rather than imposing a "conference call" ethos on clinician and patient, have all helped to make video consultations an easier and more scalable option. However, video consultations are often attempted using platforms designed for video conferencing. As well as being poorly aligned with clinic workflows and routines, 10 17 they may require software downloads that breach local information governance policies. Some healthcare organisations may have insufficient bandwidth to scale video consultations across all services. 10

Important lessons

The general literature on spread and scale-up of innovations has some important lessons for those seeking to mainstream video consultations quickly. We must be clear that the change is not merely installing or using new technology but introducing and sustaining major changes to a complex system. The implementation process is likely to be difficult and resource intensive. It will need both national and local strategic leads. It should be championed by respected opinion leaders, with attention paid to the overall narrative or "organising vision" within which the change is framed. Professional bodies and defence societies (nursing as well as medical) have an important

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role in revisiting traditional definitions of good clinical practice and establishing more contemporary ones.

If the required pace of change were slower, a quality improvement collaborative might be an excellent catalyst for spreading video consultations as an option within primary care, 20 but time is not a luxury we currently have. Existing online communities of practice using closed platforms such as Facebook or Microsoft Teams may prove important for sharing ideas, concerns, and resources and generating collective learning.

Experience in the Scottish video consultation programme suggests that in-person support may be needed to tackle both technical issues (such as assessing technical readiness and installing web cameras and monitors) and operational ones (such as identifying and redesigning key workflows—for example, for picking up prescriptions or medication) in the early stages of implementation. Training of clinical and non-clinical staff (preferably delivered remotely), and guidance for clinicians and patients on how to make the most of a video consultation, is likely to help widespread adoption. Resources should be made available now for organisations to release staff from other duties (ideally for 100% of their time) to deliver and monitor the change.

Finally, given the many clinical, technical, organisational, and policy questions raised by this promising service model and the natural experiment we are probably about to witness, we strongly recommend a research call to ensure that we maximise the lessons learnt.

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