Scottish Government Health Directorates Chief Scientist Office

Feasibility, acceptability and nature of video consultation via the internet in general practice

Researchers
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Aim: We aimed to assess the feasibility, acceptability and utility to patients and primary care clinicians of consulting by video (VC) and to assess the potential differences between such consultations and telephone consultations (TC) and face-to-face consultations (FTFC) with a view to planning a larger trial to explore the impact of VC on NHS and patient resource use.

Project Outline/Methodology: We installed VC equipment in six GP practices and asked doctors and nurses to audio-record follow-up consultations conducted by VC, FTFC and TC. We chose follow-up consultations as usually a diagnosis has been made and physical examination is not required. We analysed these recordings for content and quality. Additionally, we interviewed clinicans and patients about their views on VC and asked them to complete questionnaires about their consulation experience.

Key Results: Clinicians and patients were generally positive about consulting by video. Patients who chose to consult by VC were younger and many had experience in video communication tools such as Skype. Clinicians and patients thought that VC was particularly helpful for working people and for people with mobility or mental health problems, and considered it superior to TC in terms of forming rapport, providing reassurance, making a general health assessment, communication (particularly in hearing-impairment) and body language assessment. Technical issues were problematical and clinicians felt that future VC systems would have to seamlessly integrate with current IT and appointment systems in order to be adopted at scale.

Analysis of the recorded consultations showed VCs and TCs were of similar length (mean VC 5.9 and TC 5.6 mins) but considerably shorter than FTFCs (mean 9.6 mins). VCs and TCs addressed fewer problems (mean VC=1.5, TC=1.7 FTFC = 2.0) and overall demonstrated fewer instances of information giving by clinicians and patients than FTFC (but this partly reflects the numbers of problems raised).

Conclusions: VC has certain distinct advantages over TC, and when it is integrated with current systems will provide an alternative to FTFC, where formal physical examination is not required particularly when discussing test results, medication changes and in mental health consultations. For consultations which do not require a physical examination, it offers considerable time savings to patients over FTFC

What does this study add to the field?
This is the world's first in-depth study of VC in primary care.

Implications for Practice or Policy: VC shows promise for many types of consultation in primary care. Rising ownership of smart devices and experience of video-calling will increase demand for such services. However, further investment in IT infrastructure in GP practices is required to enable VC to become a routine service.

Where to next? We aim to confirm our research in a larger number of practices with better integrated VC systems, exploring acute as well as follow-up consultations to determine its utility, safety and impact on subsequent resource use. To facilitate this we are carrying out work on the automated assessment of consultation content/quality using machine learning approaches.

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