

# Effectiveness of Telehealth Consultations

## Clinical Conditions

### What is the evidence for the effectiveness of telehealth?

The research evidence in telehealth is very large. This brief summary focuses only on recent systematic reviews of video consultations in clinical practice. Specifically:

#### Mental health

This is the most researched area of telehealth. Video consulting is:

- As accurate as in-person consultation for psychiatric diagnosis(1).
- Produces similar outcomes in psychotherapy treatment including cognitive behavior therapy. The evidence covers conditions such as PTSD, other anxiety disorders, anorexia, and mood disorders(2).
- Equivalent for assessing and treating psychosis; does not trigger symptomatology in patients with schizophrenia(3).
- Effective in treating children and adolescents(4).

#### Specialist diagnosis via videoconferencing

Across the areas of dermatology, psychiatry, psycho-geriatrics, neurology, minor injuries in the emergency department, and rheumatology, there was consistently good to excellent diagnostic agreement when video consultation is compared to the traditional in-person consultation(5).

#### Specialist consulting

Video consulting is feasible and effective, comparable to in-person consultations in clinical oncology(6), and clinical genetics(7).

#### Chronic disease management

- Diabetes: video consulting direct to patients produced some improved outcomes, but pooled HbA1c over all studies was not significantly different from usual care(8, 9).
- Rehabilitation: with a broad group of long term conditions; physical, mental health and chronic fatigue, video interventions produced similar outcomes to in-person treatment(10).
- Chronic diseases in older people: video management had generally positive outcomes, more so than telehealth without personal contact(11).

#### Other points about telehealth research:

- Patients generally report very high rates of satisfaction with video consultations. Clinicians' rates of satisfaction are adequate, but not as high as patients.
- Apart from the reviews cited above there are many individual research articles about a much wider range of clinical applications of video consulting, including burns and wound care, plastic surgery, anaesthetic assessment, speech therapy and physiotherapy, to name a few.
- A lot of telehealth research is situation specific so caution must be exercised in generalising to other health care settings and countries.
- For the vast bulk of studies the methodology is fairly average.

## In Summary

The research on video consulting has mainly been done in areas of practice that are either highly visual, need detailed history taking, or require good interpersonal communication. There does appear to be enough evidence to support the use of video consultations under these conditions, and we believe that clinicians can extrapolate to other areas of clinical practice with similar characteristics.

### **Deciding on the use of video consultation**

Decisions about the clinical appropriateness of telehealth usually includes consideration of the nature and complexity of the consultation, and the role of physical examination to inform management of the patient.

### **Video consultations can be categorised into three groups:**

#### **Interview-based**

Usually suitable for simple videoconferencing, for example, lifestyle advice, counselling, dietetics, pre-op assessment, post-op follow up, oncology, transplant assessment, or endocrinology. The clinician with the patient may do basic examination such as taking blood pressure or arranging for blood tests.

#### **Interview plus peripheral device**

In addition to the videoconferencing, the clinician with the patient needs to use other devices, such as still photos with dermatology, or video otoscope for ENT. Some training in using the device is usually needed.

#### **Interview plus physical examination**

In this situation, the distant specialist needs the clinician with the patient to conduct a physical examination, as for example with inpatient consultations, or conducting a neurological assessment. The clinician and specialist need to be able to work together closely and trust each other's judgment.

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