

## TELEMEDICINE AND WEIGHT MANAGEMENT



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**From mobile working to Skype consultations, Berkshire Healthcare NHS Foundation Trust community dietitians have embraced the use of technology to offer more patient choice in their weight management consultation venues. This article looks at how they did this, how the processes they introduced are working one year on and asks you to consider whether you might apply this to your setting.**

The NHS is challenged to move with the times to offer innovative solutions to meet the demand of the expanding population and healthcare costs. The use of and confidence with technology is increasing, with a rising number of homes having access to the internet. In Great Britain, 84% had internet access in 2014 compared to 27% in 2006.<sup>1</sup> Skype and other forms of video conferencing also continue to grow.

To address this, our service was interested to find out whether our patients wanted to access the dietetic service via interactive technologies. A three-month survey showed that 33% of new patients were interested in having a dietetic Skype appointment. Following on from this, from August 2014, Berkshire Healthcare dietitians introduced Skype consultations to our patients in addition to face-to-face outpatient appointments. The rationale behind offering these e-clinics was to make our dietetic service more accessible to patients. Benefits include reducing time off work, transport problems, clinic car park pressures and stress/anxiety, particularly in time of acute illness.

### TELEMEDICINE

Telemedicine is defined as the use of technology to deliver care at a distance. It is rapidly growing and can potentially access more patients, enhance patient/healthcare professional collaboration, improve health outcomes and reduce medical costs. Examples include:

- remote patient monitoring using technological devices which can be transmitted back to a monitoring centre for evaluation and stored in patients' medical records, e.g. undernutrition monitoring using 'Health Call' from Focus on Undernutrition Team (County Durham and Darlington NHS Foundation Trust);<sup>2</sup>
- mobile technology such as smartphone applications and text messages to manage and track health conditions or promote healthy behaviours;
- real-time interactive technologies such as a two-way video, e.g. Skype.

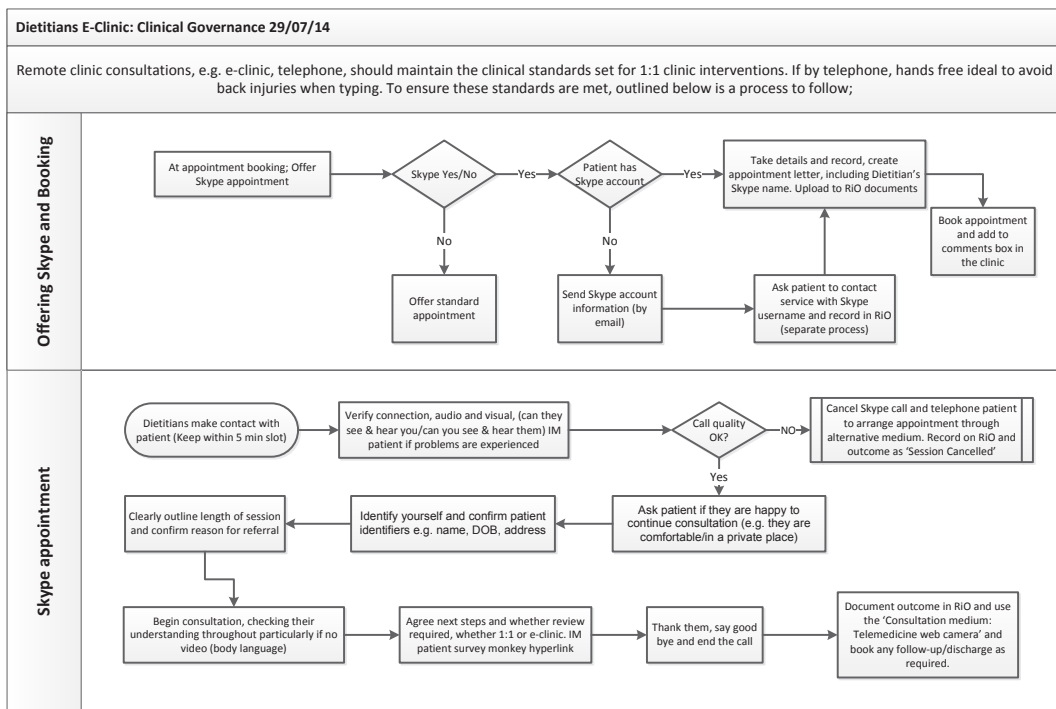
### APPROVAL PROCESS

As part of a staff engagement programme (Listening into Action), our application was chosen by the Trust's Executive Committee. We became a pioneer team with ongoing support from senior managers over a period of six months. Our team included an IT specialist who guided us through gaining clinical governance approval and creating a Standard Operating Procedure (SOP).

We obtained Caldicott Guardian approval from our Clinical Director. Patient information leaflets were created to support Skype consultations, including guidance on how to download Skype. Patients were instructed that the dietitian would initiate the Skype call at their appointment time. ▶

Noelle and Carolyn have both worked in dietetics for over 20 years, with experience of working in acute and community settings. They currently work for Berkshire Healthcare NHS Foundation Trust.

Figure 1: Technology Dietitian Workflow



**TECHNICAL REQUIREMENTS**

IT uploaded Skype software onto department computers and sourced both headphones and web cameras. The aim was to ensure that the quality of our virtual consultations were on a par with face-to-face consultations.

**STAFF TRAINING**

Staff were offered in-house Skype training to ensure competency and confidence in delivering a good virtual consultation. Team members already using Skype on a personal basis were good advocates.

As expected, there were some initial staff reservations for those unfamiliar with this form of communication, particularly around dealing with technical problems. These were overcome by the development of an SOP, enabling a consistent approach, along with troubleshooting tips.

**MARKETING**

Administrative staff play a key role in recruiting and booking Skype appointments into our community outpatient clinics. These appointments are well promoted and once agreed, further details are collected including a patient's Skype

username and contact phone number in case of failed technology.

There are clear benefits to virtual consultations including a greater choice of where they are seen. Patients who are not able to attend an outpatient appointment and do not meet domiciliary criteria are now being offered a Skype appointment instead of a phone call. Clinic utilisation has also improved, as patients are being offered a Skype appointment when they phone to cancel their appointment.

Skype appointments were first introduced in August 2014 and have now been running a year. Recruitment was initially slower than anticipated, partly due to the waiting times. For new patients, there is still a preference to be seen face-to-face whenever possible. The numbers are now increasing with approximately seven patients receiving dietetic advice via Skype per month.

**PATIENT FEEDBACK**

Following a Skype appointment, patients were asked to complete an online survey. To date, 24 patients have reported their experience to be as follows:

Table 1: The benefits of offering Skype appointments to patients, staff and the Trust

Patient outcomes	Staff outcomes	Trust outcomes
Saves on time off work and travel.	Good patient clinic attendance.	Efficiency and cost savings, e.g. less car park congestion.
Saves on fuel and parking costs.	Superior to email or telephone as can see body language and cooking environment. Better understanding of portion sizes through seeing plate sizes, etc.	Positive patient experience.
Safe alternative in adverse weather conditions.	Saves on clinical time due reduction in clinic travel.	Working together increasing patient choice.
More choice where to be seen with increased access for some patients.	Better able to meet patient needs in timely manner.	Optimal clinical outcomes, seeing patients at right time and place.

- 100% requested a future appointment and would recommend a friend
- 100% said the appointment was convenient
- 95% rated the experience as 'good' or 'excellent'
- 67% reported time off work was not needed
- 63% would have been unable to attend a face-to-face appointment
- 78% did not experience any technical issues

#### STAFF FEEDBACK

Overall, the experience has been positive with increasing staff confidence and competence. Technical issues were overcome by training as well as following the SOP and clinical governance pathway.

In our favour, technology is an important part of our working day with all staff having access to mobile working and using an electronic patient record system (RiO) to document dietetic intervention.

A disadvantage of Skype appointments is the reliance on patient self-reporting, e.g. body weight. However, there is recent evidence that self-reporting has become more accurate amongst overweight and obese patients.<sup>3</sup> For those unable to self-weigh, other measures could include clothes or waist size.

#### OUTCOMES

A wide variety of clinical conditions are being seen including nutritional support, weight management, gastroenterology, diabetes and paediatrics. Over the last year (Sept 2014 to August 2015), we have seen 66 patients (28 new patients and 38 follow ups) from all age groups (early 20s to late 70s).

The following table shows the benefits of offering Skype appointments to patients, staff and the Trust:

#### CONCLUSIONS

Over the last year we have shown that Skype appointments can be successfully applied to our dietetic practice without impacting on service delivery. Although Skype consultations are not suitable for everyone, they are an addition to and not a replacement for the traditional face-to-face appointments, hence giving wider patient choice.

We have been fortunate to have Trust support in introducing Skype appointments early on and we envisage that, as patient demand increases, we will have the expertise and confidence to be able to meet this demand. As technology has become the norm in most people's lives, the public is becoming more open to telemedicine as a form of healthcare delivery for preventive care, acute care and chronic disease management.

Through the use of Skype appointments, we have raised the profile of the dietetics service across Berkshire Healthcare. The opportunity to run Skype clinics is now being opened up to other services within the organisation. We would encourage other dietetic services to consider patient benefits and introduce virtual consultations.

For the future, dietetic e-clinic consultations could one day complement evidence-based online programmes and approved smart phone apps.

For article references please email:  
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