

## Appendix 3: Qualitative report from interviews and focus group

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#### **Background**

This one year pilot study aimed to provide more accessible and cost-effective care by replacing routine follow-up outpatient appointments not requiring physical examination with web-based consultations, using readily available technology. Specifically we aimed to improve:

- Efficiency (through a reduction in 'do not attends' and a reduction in avoidable A&E admissions during year one; greater efficiencies would be expected longer term)
- Effectiveness (improve patient self-management and clinical outcomes through improved access and patient empowerment)
- Patient experience and person-centredness

#### **Design and research methods**

The aim of the qualitative evaluation was to gather user-focused feedback on the experiences of users of the web cam initiative, with a small sub-group of non-users for comparison. The research methods used to gather this data were focus groups (FG) and telephone interviews (TI). Focus groups were chosen because they typically generate interactive (between participants) data, which is useful when combined with other forms of data collection to increase the validity of research findings. Telephone interviews were chosen because of convenience, the greater chance of including a more dispersed and diverse population and a higher response rate than on-line surveys. Initially, it was proposed that two focus groups –

one 'older' group and one 'younger' group would explore a range of topics around their experience of having follow-up appointments using web cam. Age specific focus groups were chosen with the aim of increasing greater homogeneity. In the end, only the 'younger' age cohort took place because of difficulties recruiting sufficient attendees within the available time period to make the older focus group viable.

The focus group was held at a local clinic in the early evening, food was provided and each participant was given £20 and travel costs. The group was moderated by an independent health service researcher and co-moderated by a member of the project team. The moderators were unknown by the group, the participants were unknown to each other. The participants were asked and talked about a mixture of introductory, open ended, un-cued and focused topics and questions. The focus group discussion lasted 75 minutes and was recorded with a full transcript made subsequently.

The number of telephone interviews was increased to compensate for the lack of contributions from older participants. The interviews took place over a period of six weeks in November and early December 2011 and were carried out by the same independent health service researcher. The interviews were arranged at the convenience of the interviewee and participants were paid £10 for taking part. The interviewer used a semi-structured interview schedule as a basis for discussion. Some questions were open ended and designed to illicit spontaneous responses and some questions were very specifically designed to answer certain questions. Some questions were repeats of those used in the on-line survey which web cam users had also been encouraged to complete after each web cam appointment but which the uptake of which had hitherto been low.

### **Sample**

A total of 24 diabetic patients participated in this evaluation, of whom 19 were interviewed by telephone (TI) and five took part in the focus group (FG):

Telephone Interview (TI)	Focus Group (FG)
19 patients	5 patients
Mixed age group including five 'older' patients (41 to 92 years old)	The 'younger' patient cohort aged between 19 and 24
13 patients had used web cam appointments 6 had not used web cam appointments (comparison group)	All 5 patients had used web cam appointments
Ten women and Nine men	Three women and two men
Self described ethnicity: 7 white, 4 Pakistani, 5 Indian, 2 Bangladeshi, 1 'other'	Self described ethnicity: 1 white, 2 Indian, 1 Black African, 1 Black Caribbean
15 patients had type 1 diabetes, 4 patients had type 2  The length of time since a diagnosis of diabetes was between 1 and 33 years.	All 5 had type 1 diabetes  All diagnosed in early childhood.

### **Comparison to wider sample of diabetic patients**

The patients in our evaluation were broadly representative of the wider group of diabetes patients within the clinic, in terms of ethnicities and gender. However, due to difficulties with recruitment, our evaluation sample did contain a higher proportion of patients under 30 and with type 1 Diabetes.

The characteristics of all patients in the clinic (under the consultant and nurse in this study) who had appointments scheduled since Jan 2011 (up to including Jan 2012), are as follows;

- A total of 374 patients had follow up appointments scheduled since Jan 2011, up to end Jan 12 (of these 65 were scheduled to have at least one webcam appointment)
- 47% were under 30 (66% of the webcam patients)
- 40% had type 1 diabetes (69% of the webcam patients)
- Approx. half were male / female
- The main ethnicities were as follows:
  - 23% White (40% of the webcam patients)
  - 16% Indian
  - 12% Pakistani
  - 11% Bangladeshi
  - 11% Black Caribbean
  - 9% Black African
  - (all other ethnic groups were small)

### Recruitment

Patients were initially selected from the clinic records to provide us with a suitable range of patients, of different ages, who had either;

1. Declined to take part in a webcam appointment, for various reasons
2. Accepted but then 'did not attend' their webcam appointment
3. Accepted and had taken part in one or several webcam appointments
4. Those who were not considered 'suitable' for a webcam appointment
5. Those not recruited to a webcam appointment because they did not attend any of their scheduled face to face appointments

With the difficulty getting hold of patients, and then getting them to agree, it soon became apparent that we needed to take a pragmatic approach. Some effort was made to contact those in group 5, however this was not successful. Patients in group 3 were the easiest to recruit because the research seemed more relevant to them. They also provide us with the greatest insight into what it is like to have a webcam consult and hence form the largest part of our sample (18 of the 24 patients).

### Results

As the small 'proof of concept' had shown in February 2010, replacing routine follow-up appointments not requiring physical examination with web based consultations, demonstrated again high patient satisfaction among those taking part in this pilot study.

### Convenience

Most notable in this study was how convenient patients found using web cam, both in terms of time saved travelling to and from clinic, the amount of time taken out of their day to attend clinic and avoiding or reducing waiting times in clinic. Everyone in the TI web cam group said how convenient web cam appointments were.

'It's brilliant. I was at home. It was a ten-minute appointment. Getting to the clinic takes longer. It saved so much time. It's for busy people with busy lives' (TI female over 30 web cam)

If I'm going to clinic I have to plan the whole day plus waiting in the waiting room, which can vary. I think I'm saving five hours which is why I'm happy helping to try it out' (TI female over 30 web cam)

...I find them [web cam appointments] quite convenient because I can just go 'ok, I've got an appointment in ten minutes' and just switch the laptop on (FG male under 25 web cam)

There was consensus too amongst the focus group participants that web cam was very convenient for working people and those at University but some did worry that it would make them 'lazy' about going in for blood tests and regarded going into clinic for an appointment as a necessary means of making them get out of the house. The convenience of a web cam

appointment, one young woman suggested, should not be seen as an alternative to or a replacement for the doctor, '...you still got to see your doctor... it's about having a balance'

Patients attending clinic only reported ways of making their clinic based appointments convenient too: trying to get a first appointment before going on to work, very flexible and helpful clinicians who will talk to them over the phone and/or over lunch time, making appointment times in advance at a time and day that suited the patient. Some in the focus group also spoke about how convenient it was to be able to just pop into clinic for a five - minute chat or ring at the last minute for an appointment.

The nurse is amazing. Like if you need to speak to her she is always on the end of the phone and if she's not there then someone else is there to support you (FG female under 25 web cam)

### **Saving time**

As well as being hugely convenient for many of the patients taking part in the web cam pilot, the findings also show considerable amounts of time saved. Even by employing time saving strategies such as first appointments on the way to or on the way back from work, many patients (Web cam users and clinic attendees) allowed two or more hours for each 15-20 minute (average) for a follow-up appointment in clinic. Some mentioned having to take annual leave to attend appointments.

In clinic I used to get a 9 o'clock or a 9.15, leave home at 8.30. I would give four hours before I got to work. Sometimes it can run over by an hour. Work's ok about taking time off if it's an appointment but it goes on your sick leave record so it's not a financial but an employment consideration (TI female under 30 web cam)

I don't like taking time off work, I always feel really bad taking time off work. It fits in really well as I can just go into another room for 20 minutes for an appointment and I'm back out again as opposed to a couple of hours off site (FG male under 25 web cam)

'It's not just travel saved but waiting times too. [Web cam appointments] save time overall' (TI male under 30 web cam)

One patient pointed out that if you had to wait for your webcam appointment, the advantage was you could use the waiting time more effectively;

'The difference about webcam appointments is, if I did have to wait I would be able to occupy my time to how I would prefer it to be, which is doing my work' under 25, college student

For some patients living a long distance from the clinic or with other health issues, having a web cam appointment was important, if not essential.

' 'It's a good idea for me as I don't live near the clinic. It saves me time from taking time off work and childcare too. Being able to do it from home is brilliant' (TI female over 30 Web cam)

For the younger FG patients, some of them were already using web cam and SKYPE at work or at university and reported it to be a successful way of avoiding having to take time off and others were already looking forward to when they would be at work and how useful web cam or SKYPE would be for them then.

My dream is to make movies and stuff like that, so you know you are not always going to be around to be able to attend my appointments in clinic and then web cam appointments would be ideal for me then (FG female under 25 web cam)

Telephone interview patients reported that the webcam appointments were on average between 15 and twenty minutes, but can be longer or shorter.

On average the appointments were no different [whether on web cam or in clinic]. Normally [the appointment] is 15 to 20 minutes depending on what it's for: If it's a blood test and a general discussion it's 15 to 20 minutes and it's over but if it's about the [insulin] pump it's a bigger topic so it's longer about 25 minutes... (TI male under 30, Web cam)

### Saving money

For everyone, saving time appeared to be a bigger issue than monetary or cost savings. The main financial expenditure mentioned by both web cam users and clinic attendees was associated with travel (bus, train) and car usage (petrol, parking). Only three patients specifically mentioned walking to clinic, otherwise everyone else incurred some kind of travel cost. As most public transport users had an Oyster Card or monthly travel card they did not interpret having to travel to clinic or, conversely, have a web cam appointment, as incurring or saving them any extra financial cost. For two patients who had moved out of the area, web cam was a considerable financial saving and was one of the reasons they were able to keep attending this particular diabetic service rather than move to one nearer.

There was less discussion of what other 'costs' might be saved by having a web cam appointment apart from taking time off work (as annual leave or before/after work) except for those who accompanied someone to clinic, particularly the elderly and infirm.

The daughters take half a days leave to accompany mum – it always takes three people (TI daughter of woman over 30 Web cam)

### Quality of care

The pilot study used a number of indicators to assess whether the quality of care was affected in any way – either diminished or enhanced, by having web cam appointments. Overall, patients reported high levels of satisfaction with the care they had received. 12 out of 13 of TI web cam users rated the quality of care they had received in the last six months as 'very good' (10/13) or 'Good' (3/13) and 'the same' (10/13), 'better' (1/13) or 'a lot better' (1/13) than the quality of care they had received in a clinic appointment.

"The same because face to face you can talk same as on web cam. I don't see any difference" (interview 13; male, over 25)

"The same. Not much difference really. It's the same amount of advice as when I go. It's the same overall care as I had before web cam" (interview 6, male, over 25)

Better. The quality of care for her to be in her own environment is much better – no car, no waiting (interview 8, daughter reporting on the experience of an elderly lady)

"The same. Completely happy. Dr V really cares about every patient. I couldn't feel any different whether I was sitting next to her or not. If you go to hospital she can check your feet but if you don't need to be checked every time".

Focus group patients also said that the quality of care was about the same as going into clinic but talked in a lot of detail about how sitting in front of a computer was not the same as seeing the clinic nurse in person, mainly because it felt a bit impersonal.

'It's more to do with that personal connection with people that are taking care of you and sometimes you don't get that on a web cam. Web cams are like...I don't know, TV? (FG male under 25 web cam)

Two TI web cam patients also reported a sense of remoteness and missing seeing the clinicians in person. One woman said web cam 'felt a bit strange' but by the third one it was fine.

Almost all web cam users mentioned and were well aware of the need for regular physical examinations of feet, eyes, weight and blood sugar levels (recorded in log books and print outs) which usually took place in clinic. FG patients talked at length about coming into clinic and outlined several reasons why seeing the nurse on a regular basis was necessary and essential to their well-being:

- To have your medicines and treatments checked
- For the nurse to insist you have a blood test before she will even look at you (you could avoid doing a blood test if you just had web cam appointments)
- To check and verify your blood test results
- For you to see her and importantly for her to see you (she can tell if you are well or not, she can tell if you fine or not even if you say you are fine)
- For added privacy (so that mum can't keep popping up around the corner every two seconds)
- To avoid second guessing 'weird' blood results and self-diagnosing if you are feeling unwell and run down

I think it's ok for a general overview for how I'm getting on – blood test results but if something is more detailed – foot care and eye drops, you go in for that. But in a general chat and they can give suggestions as well

There was some concern around how glucose and blood sugar monitoring would work using web cam. Some patients were used to having the clinician plugging in their monitors and interpreting the results, whilst others monitored the results themselves. Some web cam users had used the text facility to type in their results for the clinician to see, whilst another had read out her results. Not everyone in the FG or TI group were aware or knew how to download monitor data onto the computer for the clinicians to read.

Had web cam users felt as comfortable talking to the clinicians when on-line as those in clinic? Ten out of the 13 TI web cam users rated it as *about the same* as in clinic and two said it was *better*.

You are in the comfort of your own home. Sometimes in hospital I've felt the doctor was in control and you don't want to waste their time but I want to get back to work...you feel liberated in your own home, it's on your terms (TI female under 30 web cam)

'I was in the comfort of my own home and felt relaxed (questionnaire response no. 13)'

Only one TI patient said it was 'a bit odd' having the clinician in their home instead of the usual scenario of the patient in the clinic setting. Most said they felt comfortable with this arrangement: 'they can only see my face not the mess in my kitchen' (female over 30 Web cam). For one house bound patient, the comfort of being in her own home was essential, 'she sat in bed and talked to Dr V from her own bed...they waved goodbye to each other at the end'.

Focus group patients didn't seem to be at all concerned or 'bothered' about the nurse seeing them in their own home.

No, it's quite funny, the nurse asked me 'oh is that your room, it looks really nice' and I don't mind her seeing my room because I am comfortable with the nurse because she knows what I'm about... (FG female under 25)

The notion of the nurse knowing what they were all about was key to feeling comfortable with her seeing them at home. The majority of FG patients were quite sure that this level and feeling of comfort was only achieved after some time (years) had been spent getting to know one another through face-to-face appointment visits. So, 'obviously', web cam wasn't suitable for someone newly diagnosed or if your doctor or nurse changed – implying a new relationship would have to be built before a web cam appointment became appropriate again.

For one focus group patient, it was up to the discretion of the doctor or nurse to decide when a web cam appointment was suitable and for him personally, he had felt ready for web cam and felt he had established a relationship with the clinicians really quite quickly.

### **Privacy**

All but two TI and two FG patients said that using web cam had felt as private as a consultation in clinic. For most, talking about their diabetes in front of family and friends was not problematic or a privacy issue. A few TI patients mentioned that they had a laptop and could move to another room if they needed to (all the focus group patients had laptops). One young woman in the telephone interview group said that sharing a bedroom and not having a lock on the door had made her feel that it wasn't as private or confidential as she had hoped.

For two FG patients, privacy was an issue in that they felt unable to stop their mums joining in for an on-line chat because over the years they too had established a good relationship with the nurse and doctors. This made it difficult for them to share really personal information. Sometimes they were quizzed afterwards. Partly this was because they (parents) were 'suspicious' about who and what was talked about. This was summed up by one of the group as parents 'just being worried about you having a web cam because of the stereotype of web cams' and 'parents just being parents'. Fortunately, the nurse had written to everyone explaining the whole procedure so that 'everyone was at ease'.

As the majority of web cam and SKYPE patients had been at home when they had their appointments, would privacy be a problem in another setting such as a work place or university? One patient (TI male under 30) specifically mentioned that it would be difficult having an appointment in a shared office at work, that it would be 'unprofessional', whereas another FG patient (male under 30) said that he had already had a web cam appointment in his place of work without any privacy issues or discomfort that he was aware of.

### **Effectiveness and ease of use of the technology**

In February 2010, the Newham diabetes team conducted a small technology audit using web based consultations to follow-up young people (18-25) with diabetes and a three-month scoping exercise to explore the further potential of web-based consultations looking specifically at broadband usage and acceptability of remote consultations, so this pilot of the subsequent roll out of web based consultations possessed prior knowledge of some of the technical issues that may occur. The software was designed to be simple and easy to use and so it proved to be. There was some concern that there could be issues or problems with the technology or patients using the technology, but in the event this concern, for this group of patients, turned out not to be the case. TI patients who had used web cam were asked how they had found the technology - was it easy, had they encountered any problems, what was the quality like? Over half said it had been easy to use (no reported difference between male or female, younger or older, first time users or 'techies').

To be honest I'd never used it before. I'm not the most modern technology person but they sent me the instructions and it was easy. Today was SKYPE and it was even easier  
(female over 30 web cam and SKYPE)

I was sent a download. It has easy instructions. It's copy and paste – no problem!  
(female under 30 web cam)

Both telephone interview and focus group patients reported some initial technical hitches or problems setting up but these seemed to have been resolved very quickly and easily by switching from Adobe to SKYPE and/or by using headphones to improve sound quality. Clinicians, they said, were on hand to talk them through these problems, none of which had put patients off using web cam.

The young people in the focus group made two suggestions as to how existing technology could be used to make web cam appointments even more accessible: download the SKYPE Application onto IPHones, IPads and Smart phones and use front facing camera phones, both

of which would allow patients to have their appointments from anywhere, 'then people won't need to carry their laptops around' (female under 25 web cam focus group).

### Why some patients had not used web cam

Six of the TI patients in this pilot study had not yet used web cam. Anecdotally, it was understood that some patients turned down the offer of web cam because of lack of access to a computer or inexperience with the technology but when asked, all but one patient from this particular group said they were not adverse to having a web cam appointment but that for a variety of reasons (turned up at clinic instead, needs help at home to set it up, can't remember the discussion about it, was at work, don't understand the technology) it had not happened, yet. When asked in more detail to describe what they liked and disliked about the idea of having a web cam appointment, again, all but one patient (TI female under 30) appeared to be very receptive to the idea.

I think a web cam would be great then I wouldn't have to travel but I don't know because I haven't experienced it. I would give it a try (TI male under 30 clinic)

There's nothing I dislike about it. I've just changed jobs so it would benefit me quite a bit now. There are no obstacles to using it now so long as I could choose the times when I could use it and it was convenient, it wouldn't be a problem (TI male under 30 clinic)

It could be that circumstances have changed since the initial offer for some in this group making web cam appointments more possible, whilst others may have needed some time to think about it and the telephone interview prompted them into reviewing how they felt about web cam. One young woman remains clear about her decision not to have web cam appointments and that, she explained, is because she likes coming to clinic, seeing the clinicians and getting out of the house. She also said she didn't like the idea of sitting on the computer or 'see the point of web cam' if she still had to attend clinic for blood tests.

### Diabetes management

One of the aims of this pilot study was to see if web cam follow-up appointments would have any effect on the way patients managed their diabetes. Several questions were asked and topics discussed in both the telephone interviews and the focus group to explore this in more depth. These can be grouped into: managing and controlling diabetes, missing appointments (DNA) and emergency admissions and the future.

When asked how effectively they thought they were currently managing their diabetes, over half of the TI patients (58 per cent, 11/19) said they were managing it *effectively*, with a further three patients reporting that they were managing it *very effectively*. Four out of the five FG patients said they thought they were managing their diabetes *effectively*, with one who said *ineffectively*.

I've got my foot down and I'm on it. I'm trying 101% to keep it under control (TI female under 30 clinic)

I manage it a lot but I usually don't get the results. I put in a lot of effort but because of other things it could be better (TI female over 30 web cam)

The small percentage of TI patients who said they were *ineffective* (2/19, both male, both web cam users, both under 30) or *neither effective or ineffective* (3/19), put this down to not managing their blood results and/or by eating the wrong foods or by simply knowing they could do better at managing it.

It's a bit negative but I should be doing more with my blood tests. I don't do enough. (TI male under 30 web cam)

TI and focus group web cam users were asked specifically if they thought using web cam had made any difference to how they controlled their diabetes. 10 out of 13 of the TI group said

they had the same level of control over their diabetes, and 3 said they had better or 'more' control, compared to before they started using web cam.

About the same, the SKYPE won't make me better controlled - it's just an easier way of having an appointment. (TI female over 30, SKYPE)

Slightly more, It's [web cam] has come at a good time for me. It started just after I moved and it wasn't easy to attend clinic appointments but webcam has given me more contact

More because you attend more [webcam] appointments more regularly

The total number of patients in this pilot is too small to say conclusively if webcam appointments had yet made a real difference to how patients managed their diabetes.

### DNA and emergency admissions

Everyone taking part in the telephone interview was asked what they thought were the main reasons patients missed follow-up appointments (they could list as many reasons as they wished to). The question was asked in a non-judgemental way so that they could respond as both someone who may themselves have missed appointments and/or as someone who had an informed viewpoint on this issue. The responses to this question were many and varied but can be grouped into five main reasons why these patients thought appointments were missed.

- Taking time off work (10/19, 53 per cent)
- Forgetting the appointment (8/19, 42 per cent)
- Feeling unwell or conversely feeling really well (4/19, 21 per cent)
- Denial and/or avoidance because of weight gain for example (3/19)
- Lack of time or time pressures (3/19)

Generally it's been because I forgot – I didn't realise my appointment was the next day (TI male under 30 web cam)

There were a number of other reasons given such as problems leaving a message to cancel and re-arrange the appointment, bad weather, being disorganised and appointment times.

Four patients (three web cam users and one clinic attendee) reported that they had never missed an appointment.

I haven't missed any [appointments] but I'm wary of how many appointments I have and how much time I have to take off from work so I try and juggle it (TI female over 25 web cam)

61 per cent (8/13) of TI web cam users thought using web cam would make it easier to keep appointments and would 'attend more [webcam] appointments more regularly':

"Yes, because I think it saves you the hassle of going in, the convenience of your own home – just be organised" Interview 7, female, over 25

"If I'm at home and I'm free I'd think twice about going to clinic so it's easier on line" Interview 1, male, over 25

Emergency admission due to diabetes is a problem for the patient and the National Health Service. However, emergency admissions do not appear to be a feature of hospital usage amongst the TI (both web cam and clinic only) group: some 17 (89 per cent) said that they had not come into hospital through Accident and Emergency in the last six months, if indeed ever. Five patients mentioned coming into hospital as emergencies when first diagnosed or

incidents in the distant past but nothing lately. Two patients had come into A&E, but for other conditions and which were further complicated by their diabetes.

NO, I have never come into A&E because of my diabetes (TI female under 30 web cam)

One explanation for this could be the flexibility and accessibility of the clinicians and diabetic team at Newham that these patients experienced.

No, I've never come into A&E. I came close once but I phoned the [diabetic] nurse and took advice over the phone (TI female under 30 web cam)

Of the five FG patients, two had received treatment from the emergency services in the last six months – one had come in to A&E because she had passed out at University and the other had received treatment from a paramedic called to her home. Both were due to low blood sugars. Nevertheless, of this group, four out of five said they thought they were managing their diabetes effectively.

### The Future

One piece of future behaviour has already been identified – that there are some diabetics who previously said no, or who was thought to have declined the offer of web cam, who might now wish to use it. Even those who still need to come into clinic on a regular basis now might be able to use web-based consultations in time.

All TI web cam users were asked if they would like all their appointments via web cam and did they think they would be more or less likely to attend them. Nobody said they wanted all their appointments via web cam, for three main reasons: they still needed physical examinations on a regular basis; they still wanted and needed an annual review of their health and care; they still wanted to see the clinicians in person.

The follow-up appointments can all be done through web cam but not the annual one where they check your feet (TI female over 30 Web cam)

No, it's impossible [for all the appointments to be done via web cam]. Sometimes you've got a once a year appointment with Dr V who wants to examine you (TI male over 30 Web cam)

I do actually like to see [diabetic nurse T] in person and she weighs me and gets to see in my book and she does my blood pressure (TI female over 30 Web cam)

FG patients said that having a web cam appointment was not always appropriate and that there are times when you really need a face-to-face appointment, such as when newly diagnosed or when you change doctor or nurse. They talked at length about how the relationship with the nurse (in particular) had been built up over years to the point where they felt completely comfortable with her.

I'd be uncomfortable [having a web cam appointment], only because I don't know this person, it's the first time I'm meeting him and it's just awkward (FG female under 25 web cam)

But would they actually be more likely to attend a webcam appointment in the future? Five TI web cam patients (all but 1 of which were under 30) said they would, and the remainder said there would be no change (mainly because they felt they always attended anyhow).

[I'm] much more likely [to attend a follow-up appointment]. I really like web cam and I really hope it rolls out to other clinics...everyone is quite jealous of me having web cam. For people like me with no time it's really helpful (TI Female under 30 Web cam)

### Ways of reducing missed appointments

All TI patients were asked if they had any suggestions for reducing missed appointments such as text reminders. Almost everyone had experience of receiving reminder texts – from GPs,

Dentists and other clinical or commercial services, which was thought of as a very good or 'brilliant' idea. One or two had mentioned earlier that they forgot to attend clinic appointments because letters were sent out too far in advance and unless they put the date and time in their diary these letters got left on the side and forgotten about.

It's a very good idea because sometimes you forget, you are busy, you realise you have an appointment. Almost everyone has a mobile so instead of letters it's cheaper and quicker... (TI male over 30 Web cam)

Other suggestions made were: more flexible appointment times, evenings, earlier than already offered appointment times or, conversely, later appointment times ('for the younger generation' – young woman). One more radical suggestion was that patients should incur a cancellation fee if they missed their appointment, 'I know you probably can't do this... it's more for people to show up than the money' (TI female over 30 Web cam user). There appeared to be no difference in suggestions between web cam users and those not using web cam.

### **Learning**

This qualitative data complements the wider evaluation, contributing a number of learning outcomes to be considered by provider and patient stakeholders in any future roll out of web-based services and evaluative research.

There are four main learning areas: how web cam appointments benefitted patients; the effectiveness of the technology; what the impact is on DNA and emergency rates; and future technology issues

#### **The benefits to patients of web cam appointments**

- Convenience
- Accessible, particularly from home
- An essential and more accessible service for the house bound or those with mobility issues
- Time savings in terms of reduced travel times incurred by clinic attendance
- Increased accessibility and attendance for those living long distances from the clinic
- The potential to reduce costs associated with travel
- High levels of satisfaction with the quality of care received
- As much time spent talking to clinicians as in clinic
- The quality of care rated the same or better than in clinic
- As private as in clinic (with one or two exceptions)
- Web cam users still want face-to-face appointments from time to time
- Young web cam users value the relationships they have built up with the clinicians
- The potential to reduce the impact of regular diabetic appointments on employment and education

#### **The effectiveness of the technology**

- Patients found web cam easy to use
- Some web cam patients experienced technical hitches and glitches setting up (mainly audio problems) but nothing serious enough to put them off using the service. By changing the software provider the technical hitches were also mostly overcome.
- Patients said they were well supported by clinicians if they had problems with the technology
- Not all web cam patients were making full use of the 'chat facility' which provides the ability to input text or data
- Young people in this pilot revealed the true extent of the energy, enthusiasm and technological know-how about how mobile phones, SYPE, IPADS and other computer systems could open up and revolutionise the way patients received health care

- Those patients not already using web cam expressed an interest in doing so providing they could have more help with and information about the web cam service slow broad band speeds and dial ups present a problem for some computer users.

#### **Impact of web based clinic appointments on DNA, emergency rates and other services**

- A small group of patients (5 out of the 19) confessed that they would be more likely to attend an appointment that was conducted via webcam than face to face (hence being open about missing face to face appointments), whilst the majority said there would be no change.
- Most patients had only had one or two web cam appointments, it is still early days
- The majority of web cam patients had not come into A&E because of their diabetes in the last year, if ever
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#### **Future technology issues**

- An increasing number of people across all ages have access to computers and mobile technology and or who work with Internet Technology. This offers an opportunity for the providers to learn from and work alongside patients (patient groups and representatives) in selecting appropriate technology in the development of new services
- Being able to use SKYPE on a mobile phone may trump using a computer for some patients
- Newham should choose carefully the software providers that it works with “Everyone has a smart phone”, expressed by a 26 year old Pakistani woman taking part in the focus group, and echoing the viewpoint of many others