



Implementing Skype Consultations in General Practice

Update report on the Cavendish Health Centre
Remote Consultation Service Pilot Project

December 2014

*Central London CCG is part of the CWHHE collaborative
of CCGs that also covers West London, Hammersmith
and Fulham, Hounslow and Ealing CCGs.*

Why Skype, why now?

It is well known that primary care services across the country are under increasing pressure to provide more responsive, flexible and accessible services to patients. This is due to the general increase in demand, for example, due to the aging population, and also the firm commitment to make general practice the centre of care for all patients, especially those who are most vulnerable.

Recognising this, the Government has confirmed its support for increasing access to high quality primary care services through a number of initiatives, including the Prime Minister's Challenge Fund (PMCF). Central London CCG has been working on improving access for some time and our patients are now able to see a GP within their local network of practices 8am-8pm, seven days a week. This will help many patients see a GP when they may not have been able to before, but we also know that there are many other reasons why people find it difficult to physically get to their GP practice. For example, some people find it difficult to visit their practice due to work commitments. Others have to rely on friends and family for transport due to mobility problems or frailty, and some have to bring the whole family with them due to difficulties in arranging childcare. Sometimes this means that people may not get the help they need.

Telephone consultations with GPs have been available for a number of years, but GPs often say that being able to see their patients greatly improves their ability to diagnose and advise. The widespread availability of personal video conferencing technologies on mobile devices and in people's homes means that more extensive use of visual consultations should be possible.

Skype video calls are one way of doing this and may have real benefits for patients in allowing access to their GPs that is more convenient, offers a better clinical service and makes the best use of time.

There are also potentially great benefits for GPs themselves in being able to provide consultations remotely from their practices. This can help to alleviate pressure on limited consulting room space (which is a particular problem in central London where estate is at a premium) as GPs can see their patients from any private location. This can also offer a flexible way for GPs to work that can fit around their family life or other commitments.

Trying it out

This strong case for change, as well as the focus on access to primary care and continuity in the PMCF, persuaded the CCG to fund a pilot proposed by Cavendish Health Centre in Marylebone to offer a **Remote Consultation Service**, aiming to find out:



**CAVENDISH
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- How patients feel about seeing their doctor remotely.
- What kinds of health issues these consultations are most appropriate for.
- Where people access the service from.
- Whether there is an impact on other urgent access services.
- What Information Governance issues arise and how they can be resolved.
- What kind of implementation issues arise so that other practices thinking about implementing Skype consultations can avoid common pitfalls.

This document

This document summarises key learning from the pilot's first 16 weeks so that these can be used by other practices thinking of implementing Skype consultations. The report includes:

- Key processes developed.
- Implementation challenges (including information governance) and key benefits.
- What the service is used for, and what patients think about it.

The final report will contain more data and a fuller assessment against the project aims in the context of Central London CCG's wider out of hospital strategy.

Authorship

This document has been jointly produced by Central London CCG and Cavendish Health Centre (CHC):

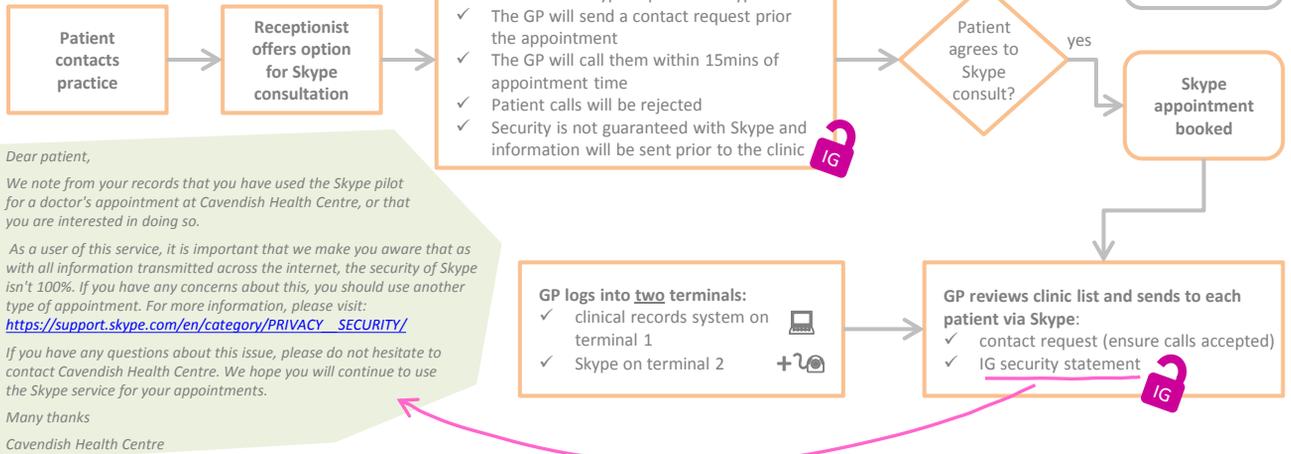
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- Kiran Chauhan, Deputy Managing Director, CLCCG
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- Lily Megaw, Central Locality Coordinator, CLCCG
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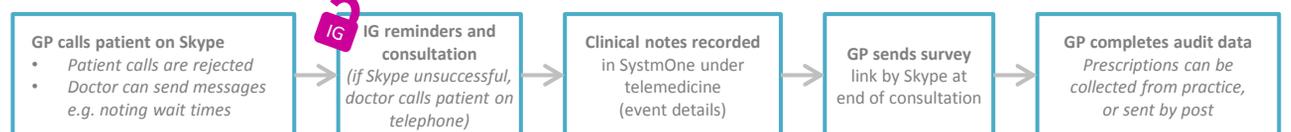
- Tamsin Dart, Practice Manager, CHC
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- Laura Gumbley, Project Administrator, CHC.

Cavendish Health Centre's process

Before the clinic...



Then, at the appointment time...



How it's done at Cavendish Health Centre

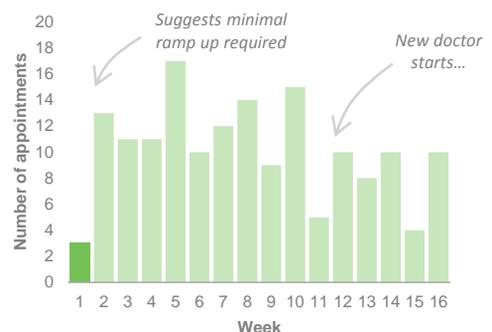
After a few weeks of trying out Skype consultations, asking patients for their feedback and refining the approach, the practice settled on the process shown above. This was achieved through understanding the challenges, discussions between the practice and the CCG at monitoring meetings, and finding solutions to trial. If these were found to work, they were embedded in the process.

So, what were the implementation challenges?

The practice found four main challenges in implementing Skype consultations.

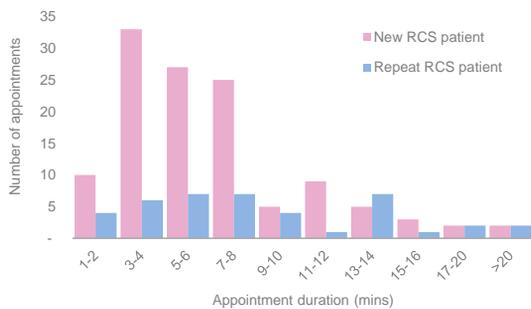
Reception staff were reluctant to discuss Skype consultations with patients at first. This was an additional conversation to have with patients and an additional method of booking appointments in an already time-pressured environment. To reduce the pressure, reception staff found it helpful to provide patients with a leaflet on Skype consultations, covering the process, appropriate health conditions and information governance. The practice feels reception and administrative staff could have been involved at an earlier stage of planning, so that there was more ownership of the project and better understanding of its innovations.

Skype clinics were not fully utilised at the start of the pilot. Although bookings picked up quite quickly as shown in the chart below, there are some learning points for practices thinking of implementing Skype consultations.



While the practice did undertake engagement with their Patient Participation Group (PPG) before the pilot (PPG discussions, survey, website and posters), CHC felt that a stronger advertising campaign prior to and throughout the pilot would have increased uptake, particularly if greater emphasis were placed on the simplicity of the process for patients. Having the whole practice team on board from the outset would have further strengthened the promotional message to patients. Another idea would be to invite reluctant patients to a training session on how to use the technology for their consultations.

It was challenging at first to plan appointments in a way that ensured clinics ran on time. The practice originally offered 15 x 5min Skype appointments per session as they would have for telephone clinics. However, it quickly became clear that Skype felt more like a face-to-face appointment that required more time so the clinic was changed to offer 5 x 5min and 5 x 10min appointments. The chart below shows the distribution of appointment lengths.



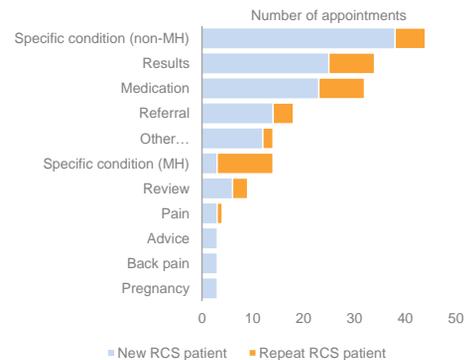
The practice found that planning appointments of varying lengths allowed patients enough time to speak with the GP and helped the clinics to run on time, with 5 minute appointments used for simpler discussions such as medication reviews and blood test results and 10 minute appointments for other consultations.

Finally, Cavendish Health Centre faced some IT challenges when setting up laptops for Skype consultations to be used by GPs working off-site. IT support is necessarily reduced when the clinician is, for example, at home using a wireless connection rather than the practice network. This may have been easier if local IT teams were more aware of the pilot and able to provide this kind of support to remote workers. After set-up, however, the practice experienced minimal IT problems.

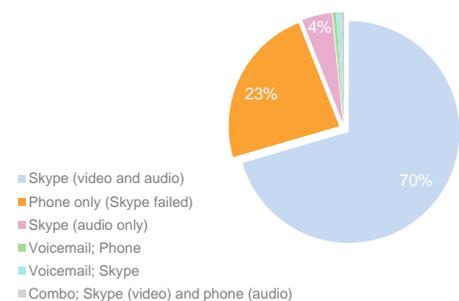
What are the main benefits?

Cavendish Health Centre found Skype consultations to be beneficial in three key areas.

First, **Skype provides enhanced diagnostic capability or an enhanced triage facility when compared with telephone consultations.** Patients use service for a variety of reasons (shown below).



The GPs conducting the clinics found the quality of the picture to be very good in general and high enough quality for video consultations, with one GP commenting: *“I saw skin cysts, breast infections and ingrowing toenails all quite clearly”*. When the picture quality and connection strength were not adequate the GPs would revert to a telephone consultation.



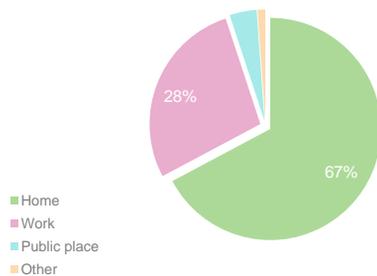
The range of people using the service was wider than expected. As well as younger people at work, older people and parents of young children all used the Skype service. It was inevitable that some patients would need to be seen face-to-face for a physical examination, which resulted in an additional appointment. The practice learned that educating patients and reception staff on which conditions are appropriate to discuss via Skype reduced this incidence. Some patients were assessed in their Skype appointments as needing to be seen face-to-face and were booked in to practice clinics as a result. In these few cases Skype provided enhanced triage of the patients’ health concerns.

Key Learning Points

- *Using two screens (or a split screen) is more effective than one as the GP can view Skype and the electronic patient record simultaneously.*
- *Patients appreciate being sent a message via Skype on the estimated waiting time if the clinic is running late.*
- *Time is saved when patients are added as Skype contacts prior to the clinic starting.*
- *Clinic time can be better managed if appointment times are varied (5 minutes for medication reviews and test results, 10 minutes for other consultations).*



Second, **the flexibility of remote consultations carries benefits for both the patient and workforce.** Skype has been convenient for all patients who have used it as it saves them from the travel time to the practice, and potentially waiting times as Skype appointments are thought to run more on-time than face-to-face appointments.



Registered patients have also contacted the practice via Skype from abroad, for medication reviews and queries about their test results. The ages of patients using the service ranges from people in their 30s to the over 70s. GPs at Cavendish Health Centre consider their young working population to be accessing healthcare more than they would have without Skype as these patients can seek help on a wider range of conditions without having to go to the practice. Many patients have been able to see and speak with a GP by calling from work via Skype.

Flexibility is helpful for clinicians who find remote working to be a more efficient and productive use of their time, such as those with a long commute and/or childcare or carer responsibilities. The lead GP at Cavendish Health Centre found Skype consultations to be: *“Amazing...With three small children and living outside of London, working via Skype meant less childcare to cover and less travel time. It was less tiring than doing face-to-face clinics all the time and therefore more productive”*. This GP considered working remotely to carry potential disadvantages for clinicians if they did this full-time as they would be working in isolation with a more limited variety of conditions in consultations.

Third, **Skype increases patients’ access to appointments by enabling practices to provide additional appointments without requiring more clinical space** (or the associated overheads). This benefit is best realised when Skype consultations are added as an enhancement to a practice’s normal activity, rather than when they are used to replace existing face-to-face clinic appointments.

Managing risks

The key risks identified at the start of the pilot were around the management of medical emergencies and information governance.

Medical emergencies. Reception staff, as they would do with any patient calling the practice to make an appointment, assess whether Skype consultations are appropriate in each case. No medical emergencies arose during the first sixteen weeks of the pilot indicating that this process is being undertaken appropriately.

Information governance. Advice and guidance was sought from Central London CCG’s Information Governance team and recommendations were implemented as planned. The key consideration is ultimately around effective communication with patients about the risks. Once these have been explained, patients are free to use this consultation method, or choose another as they please.

Professional indemnity - GPs at CHC approached their medical indemnity providers to check the impact of seeing patients remotely on their cover. While both the Medical Protection Society and the Medical Defence Union confirmed that seeing practice patients using Skype would not incur any additional charges for the GPs participating in the pilot, this was based on assurances about numbers of sessions and the CCG’s support for the scheme. It is recommended that practices thinking about providing Skype appointments confirm arrangements with their indemnity providers.

What do patients think?

All patients were sent a SurveyMonkey survey, via Skype, immediately after their consultation from week 5 of the pilot. To date, 18 people have responded and on the whole, had very positive feedback about the service describing it as “efficient”, “time saving”, and “convenient”.

Some of the questions patients were asked were:

How satisfied were you with the length of the time you had to wait for a Skype appointment?

All at least equivocal; 78% satisfied or better.

How satisfied were you with the length of your appointment?

All at least equivocal; 94% satisfied or better.

How satisfied were you that your medical needs were properly assessed during the Skype appointment?

All at least equivocal; 94% satisfied or better.

How satisfied were you that your privacy and confidentiality were maintained during your Skype appointment?

All at least equivocal; 83% satisfied or better.

Would you consult a doctor via Skype again?

95% said they would use the service again.

Areas for improvement were suggested as being around call quality, information around call set up and notification of delays.

So, is Skype cost effective?

From a macro-economic point of view, there are obvious benefits to patients and the workforce from being able to consult remotely. The reduction in time spent travelling by patients, the potential to avoid future illness through patients getting help sooner than if they had to arrange time off to visit their practice, as well as the increased flexibility for the workforce all improve productivity in the broadest sense.

Regarding the pilot itself, the CCG is providing funding for the cost of two additional clinical sessions per week and administrative support for 24 weeks. Clinic utilisation had settled at approximately seven appointments per session while CHC's GP partner was running the service. This decreased slightly when a new locum doctor took over the clinics, but is increasing again to the previous level as patients get used to the new doctor.

The original proposal for the pilot suggested that the service would be ramped up from two sessions per week to five sessions per week as the service bedded in. It was agreed at the outset that session numbers would not be increased unless there was sufficient evidence that these would be used; CHC and the CCG agreed that the first sixteen weeks of the pilot did not provide sufficient evidence to justify this, so the service has been running two sessions per week for the duration. This is being monitored as the pilot continues and could still be increased if demand warrants it.

Next steps...

We think the first sixteen weeks of the pilot have been a great success:

- We have understood some key issues around how to deliver consultations remotely (both from the patient and from the practice).
- We have learnt how patients can use these services and what they might use it for.
- We have also worked out how to overcome some of the technical and information governance challenges involved with running this kind of service.

In the final report, we aim to include:

- Further updates to the process map based on learning and feedback from patients.
- Further information about health conditions for which patients sought help.
- Further information (where known) about the demography of patients using the service.
- A more formal assessment against the key aims of the service and cost-effectiveness.

Further information

We hope these interim findings will be useful to other practices thinking of implementing Skype (or other) video consultation services to their patients.

If you would like more information about anything in this report, please contact us at clccg@nhs.net.



APPENDIX



Skype and information governance

This briefing has been prepared by Central London CCG's Information Governance team as advice to GPs in using Skype as method of undertaking patient consultations.

It has been prepared in good faith and to the best of their knowledge, but as the Information Governance landscape is evolving, the CCG cannot be held responsible for information which may become inaccurate.

Any parties using the information provided in this briefing are expected to undertake due diligence and keep up to date with their information governance responsibilities.

May 2014

This document has primarily been written to support GPs in deciding when and how to use Skype effectively and safely. The principles within it can also apply to other healthcare professionals considering using it for patient consultations.

Currently a number of GPs are using or planning to use Skype for patient consultations these include Camden CCG and Bolton CCG as well as four of the 20 Prime Ministers Challenge Fund Pilots include the use of Skype to improve access to GP services. This is often seen as a convenient method of communication that utilises freely available software. However, there are a number of risks that GPs, other clinical professionals and patients need to be aware of before making the decision to use Skype.

The risk of using Skype will need to be reviewed by individual providers as the facilities will differ. Approval to use this method and the safety measures to be implemented if it is decided to use it will be required by the practice's Caldicott Guardian. There is no clear evidence to suggest that Skype is unsuitable for clinical use but there are considerations. This document produced by the CCG's IG team offers advice to practices which will need to be incorporated when using Skype for patient consultations.

The document sets out considerations for the clinician and for the patient, some general points on security, and concludes with a collation of questions that have been posed to the IG team with answers.

Considerations for the GP

The clinician is to be in control of the call and always schedule, initiate and run the use of Skype.

Calls initiated externally to an N3 network may be blocked. Some networks such as N3 apply quality of service algorithms to network traffic which may adversely impact Skype communications reducing the call quality.

If Skype is used, a backup option should be in place such as a telephone as the Skype link is reliant on the internet and quality can fluctuate.

Skype is not to be used for emergency calls or as a replacement for other telecoms.

Service quality (including picture and sound) cannot be guaranteed and must be considered by the clinician depending on the nature of the call.

Sample Checklist for clinicians to use when conducting a Skype consultation:

- Skype has an open access address book and therefore a pseudonym should be used for a username and not obvious usernames such as Dr John Smith, ABC Surgery.
- GP is in a private area where conversation cannot be overheard or their computer screen observed and with adequate lighting
- Informed patient consent must be obtained before the Skype consultation. Best practice is to do this face to face ensuring that the patient has the capacity to consent and understand the risks of sharing data online
- Ensure that the patient's contact details are up to date and on their record. Only use details held on record to contact the patient
- A local procedure to identify the patient that is consistent and robust must be in place
- A Privacy Statement has been read out at the beginning of the call to inform the patient

Example of a privacy statement:

“During the course of this online consultation information will be shared between myself, the clinician and you, the patient. All information will be held in confidence and its use is covered by the Data Protection Act as well as the NHS Care Record Guarantee, which governs how the NHS can use your data.

Information will only be used by and shared with those who have a legitimate need to access the information to provide health care. The only information to be captured is the medical outcome of this discussion which will be included on your patient record. There are some security risks when using Skype as complete secrecy and anonymity cannot be guaranteed, further details can be provided if required.”

- Once the privacy notice has been provided all parties have the opportunity to opt out.
- Security risks of local IT infrastructure are understood and accepted and the online meeting service has been assessed as meeting the required level of security and confidentiality
- Audio visual recordings of meetings are NOT to be made by the clinician. Only the outcomes of the online consultation will form part of the patient record similar to that of a face to face consultation.

Patients

- Patients are to contact the practice to book an appointment as usual and provide their Skype user name and contact number which will be added to the patient contact details.
- Patients need to have a webcam, Skype link, privacy and good lighting to ensure call quality
- Skype cannot protect users against the introduction of spyware or malware, which could compromise security; therefore users are to ensure they have adequate spyware and anti-virus protection.
- Patients should be aware that some personal information is stored locally on the computer that is being used especially if using a public or shared computer

- Skype consultations should not be recorded and the clinician will record the outcomes of the consultation on the patient record, similar to that of a face to face consultation.

Security

An independent security assessment in 2005 (Skype Security Evaluation, Tom Berson, 2005) concluded that Skype can verify user identity and content confidentiality between systems. The aspects of the Skype architecture and communication protocols which use ‘standards based’ cryptography for the purpose of authentication and confidentiality appear to be implemented in a robust manner and use algorithms and key sizes which are commensurate with those recommended by the Infrastructure Security Team.

The Health and Social Care Information Centre (HSCIC) recommend that each organisation should conduct their own risk assessments before implementing new systems. (The Technology factsheet: Skype remote consultations, <http://systems.hscic.gov.uk/qipp/library/skypefs.pdf>)

Skype security (Skype Security Policy; <http://www.skype.com/en/security/#encryption>)

- Encryption of data end-to-end with 256-bit AES encryption keys
- Protection of encryption keys which aren’t revealed to users/third parties and are discarded when the session ends
- Use of credential based identities and end to end encryption
- The security model prevents anyone with a supernode or relay node from interfering or capturing any part of a Skype communication. It also makes it very difficult for anybody to eavesdrop on content by installing an internet computer in the theoretical path of Skype traffic. However, complete anonymity or secrecy cannot be guaranteed

Information is stored on the user’s machine, on a Skype server (but not information such as presence and location), and in the peer to peer network. Any information stored and processed is done in line with applicable privacy laws.



Information Governance: Questions and Answers:

1) Is Skype is ratified by NHS England for the purpose of medical consultations?

NHSE issued an article on 5th March 2-14 (NHSE using technology to beat cost of missed appointments) that encourages Skype consultations for patients that do not need a physical examination. In addition, four out of 20 successful Prime Minister's challenge fund pilots include the use of Skype.

2) Do you have a document that has IG sign off?

Many GPs and other health organisations are currently using Skype for patient consultations after assessing the risks. Each organisation should assess the risks and inform patients of these risks.

3) Is this cleared 'IG-wise' by NHS England? If so where is the policy?

As above.

4) Skype is not a secure internet traffic tunnel . Will the consultation be deemed a patient record? If so where will the video be saved?

No recordings will be made and only the outputs of the consultation will be recorded as part of the patient record, similar to that of a face to face consultation.

5) If we save the video (because we want to keep it as part of the official patient record) who will pick up the costs for the continued secure data storage? When this becomes gigabytes and then terabytes and then petabytes where will this be stored and backed up? Have we considered the continued costs of storage?

The video will not be saved and will not form part of the record. Only the outputs will form part of the patient record.

6) What if the patient records the consultation? It is very easy to do. Is this breaking Information Governance rules?

Parties of the call are able to record Skype conversations without the other person knowing. This is a risk that needs to be considered and the clinician and the patient should be clear about any recording that may be made.

7) What if sensitive patient information is passed through the video consultation and someone else is in the room that the doctor cannot see on cam?

The clinician will issue a privacy statement at the beginning of the call before the consultation begins which includes suggesting that the patient is in a private area and should ask the patient to confirmation that the consultation can go ahead without them being disturbed.

8) Skype is outside of Europe so how does this affect what you want to pilot?

Instant messaging, voice messages and video message content may be stored by Skype to convey and synchronise your message and to enable you to retrieve the message and history where possible. Depending on message type, messages are usually stored for a maximum of between 30 and 90 days unless otherwise permitted or required by law.

The Skype Privacy Policy states: Information that is collected by or sent to Skype and/or Microsoft may be stored and processed in the United States or any other country in which Microsoft or its affiliates, subsidiaries, or service providers maintain facilities. In this regard, or for purposes of sharing or disclosing data in accordance with this article 4, Skype reserves the right to transfer information outside of your country.

By using Skype software, Skype's websites or Skype products you consent to any such transfer of information outside of your country. Microsoft abides by the U.S.-EU Safe Harbor Framework and the U.S.-Swiss Safe Harbor Framework as set forth by the U.S. Department of Commerce regarding the collection, use, and retention of data from the European Economic Area, and Switzerland.

To learn more about the Safe Harbor program, and to view our certification, please visit www.export.gov/safeharbor.

Policy:
<http://www.skype.com/en/security/#encryption>

Due to possible off-shore data transfers GPs are advised that no medical content such as pictures or screen shots are exchanged during Skype consultations.



9) Will the camera at the patient's end be of specified standard in order to help to accurately convey by images detail of their condition?

Patients that need a physical examination will need to book a face to face consultation. Patients will be reminded to use a well lit room and to not have a light behind them, to ensure video quality is better.

END

