

Virtual Consultations: **Now or Never**

Summary: The use of virtual consultation and telemedicine is expanding rapidly due to the coronavirus crisis. Patients want to avoid hospitals and the health system prefers to keep non-infected patients away from hospitals to reduce congestion.

Oliver Wyman consulting ensures that more than 50% of medical appointments worldwide have been provided through telemedicine during the crisis (Oliver Wyman 2020). Some initiatives have been led by institutions already implementing tools and strategies, but independent doctors have also needed to find a way to connect with their patients. For this, standard communication tools like WhatsApp or Skype are being used even with the controversy generated around privacy and data protection.

For the Spanish insurance company, Sanitas, the increment has been exponential. The amount of daily video consultations has increased from 300 before the crisis to 5,000. Throughout 2019, Sanitas made 42,000 video consultations, while during March 2020 alone, 28,000 visits were telematic, with paediatric, gynaecology and psychology specialties being most in demand. Furthermore, the virtual follow up of pregnant women has grown by 59% (Minaya 2020).

By other hand, DKV in Spain launched an interesting initiative called "Doctors in front of Covid." Aiming to decongest the healthcare system and curb the contagion curve, DKV offers its telemedicine platform free of charge to make online medical consultations between volunteer doctors and patients. They have had more than 900 registered volunteer doctors answering health questions to patients and attending to medical needs from home without overloading the healthcare system.

It is clear that the COVID-19 crisis has boosted virtual consultation, and this trend should demonstrate its value for the future. A total of 65% of patients regard the use of video-conferencing for some medical appointments positively. Patients would like to receive copies of their reports and the majority of them (85%) would also like to view their imaging material (Cabarrus et al. 2015).

A virtual visit does not only imply the use of a videoconference system, as a doctor's appointment involves the examination and some exchange of medical documentation. The patient can bring previous examinations, and the doctor can deliver a report or prescription receipt. Therefore, to ensure the virtual appointment is properly executed there are three main tools that need to be put in place, all of them under the secure mechanisms required by data protection laws in each region:

- · A communication system such as video, phone or chat allowing interaction with the patient.
- An electronic prescription system for delivering a legal and certified prescription that the patient can use to get medication at the pharmacy. There are different regulations and entities involved country by country which would need a separate analysis.
- A medical document and image exchange service covering the need of the doctor to deliver a report, a clinical note or any other medical document after the medical appointment. It is also necessary for a set-up allowing receipt of medical documents or even radiology studies from the patient previous to or during the visit, in the same way he would bring them to an appointment.

Idonia is a platform that allows professionals to share diagnostic reports, clinical cases and medical images with their colleagues and with their patients in a safe way. This





improves the diagnostic process and contributes to the knowledge transfer of the scientific community. The cloud platform also allows patients to have a secure space where they can organise their documents and medical images to access them at any time and from any device (Shini 2012). European citizens, under GDPR, and as holders of

remotely.

Marina Salud, a European reference site in digital health (HIMSS Stage 7), rapidly implemented a system of virtual appointments to keep assisting their patients. Healthcare professionals of Primary and Specialised Care from the Health Department of Denia, in Eastern Spain, are offering

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data have the right to access and to obtain a copy of it in a common format and the right to the portability of data (Guanyabens 2019).

Idonia is a secure platform that uses an infrastructure certified by the National Security Scheme at a High Level, and that meets all the requirements of security and privacy of the European General Data Protection Regulation (GDPR) (EU 2016) and local regulations such as the LOPDD.

Hospital Initiatives for Virtual Service

Our priority and focus during this COVID-19 crisis is to support medical centres and doctors in delivery of consultation reports or even radiology images to their patients, as well as to help patients upload and exchange medical information ahead of a visit. The Idonia team has committed to offer their services to healthcare centres to promote telemedicine and virtual appointments, with the aim of reducing the number of unnecessary visits to hospitals.

We have helped many hospitals and individual doctors to better exchange medical information with patients

continued quality assistance by attending to their patients through a traditional phone communication system combined with Idonia for medical document exchange. Through the platform, physicians and patients can share any type of medical records safely in a controlled environment without using email.

Physicians and nursing staff in the healthcare space have reorganised in teams that work in turns at the hospital or in a telematic way. Primary Care facultative and nursing personnel carry out phone follow ups of patients, giving special emphasis to chronic patients and those with mild COVID-19 symptomatology. These follow ups are recorded in their Electronic Clinical History, thus remaining accessible to all healthcare professionals, both in Primary Care and at the hospital. The traceability of these clinical notes guarantees the continuity of medical care, which results in a greater security to the patient.

This way, doctors can keep their appointments with their patients in a telematic manner, whilst preserving the security and distance recommendations, although emergencies, care, analytics and anticoagulant dispensing are still carried out at the hospital.

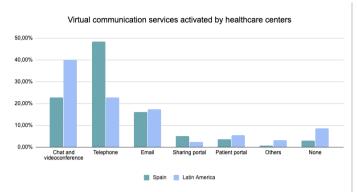


Figure 1. Results of the question "Have you activated any virtual communication service with your patients?" where users could chose more than one option

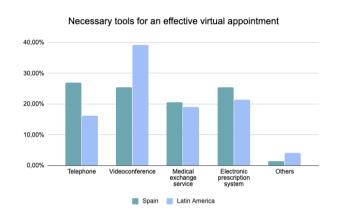


Figure 2. Results of the question "For an effective virtual appointment, which tools do you think are needed?" where users could chose more than one option

Usefulness of virtual appointments

Useful for professionals Useful for patients Useful for both Not useful

Figure 3. Results of the question "Who benefits most from the use of virtual appointments?"

The daily follow ups of COVID-19 patients provide information on the state and evolution, and allow the detection of the presence of severe symptoms. Patients that are considered to show severe symptoms after being evaluated by the Primary Care team are directed to the hospital. Through this remote assistance, patients receive daily attention and feel supported in the process. It also avoids the transmission of the infection, as they don't leave their home.

Another interesting initiative was engaged by Clínica Universidad de Navarra (CUN). CUN is a non-profit private academic hospital with two sites in Pamplona and Madrid.

Their patients are distributed across all Spanish regions and internationally, since they are a highly-qualified medical institution that receives many second opinions requests at an international level. In order to keep providing their medical service during the COVID-19 crisis, CUN has pushed teleconsultations across all the specialties. These video consultations are integrated in Idonia's patient portal and mobile apps. With the aim of facilitating receipt of clinical documentation and medical images from their patients to prepare these teleconsultations properly, CUN has decided to set up a new exchange service through Idonia.

A further health centre that has used Idonia to face this crisis is Clínica Tres Torres, in Barcelona. This clinic is using Idonia to upload medical documents and share them with their patients in a safe and easy way, in order to keep providing their services to the patients. So far, these initiatives have been well received by our professionals and patients.

In these times, where avoiding agglomerations is key to mitigate propagation of COVID-19, Idonia provides a great support in medical processes that can be carried out in a telematic way.

Opportunity to Learn

We also took the opportunity to analyse the market and measure the impact. For this purpose we launched a survey to medical professionals in Spain and Latin America (the markets where we have clients) in order to better know and understand the medical professionals' and hospitals' needs. We obtained 804 answers which provides a good basis for feedback.

The most relevant conclusion from our survey is that 94% of the responders have activated one or several tools for virtual communication with their patients. This shows the great value these systems have provided during the crisis.

It is remarkable to note that in Latin America users prefer videoconference (40%), while in Spain users prefer telephone (49%) for direct communication.

Secondly, we asked what the necessary tools they have identified are for keeping virtual consultations as



something permanent.

From the results we see again the difference in preference of telephone versus videoconference between Spain and Latin America. However, regardless of the communication system, in both markets there is a clear need of medical exchange and electronic prescription systems, to provide a thorough interaction with the patient, reducing as much as possible the obstacles posed by distance.

Lastly, we wanted a better understanding on who obtains more benefit from the virtual medical visit: patients or professionals. A total of 63% of responders think that both are benefitted. Patients can cover their medical needs without going to the clinic or hospital, and doctors can provide their medical service remotely. It is also interesting to note that about 16% of responders believe that virtual consultations have been useful during the coronavirus crisis but would not necessarily be permanently of use in normal times.

Final Thoughts

The survey reinforces the idea that the crisis has heavily pushed for virtual care adoption, since 94% of medical professionals responders have implemented some kind of virtual consultation tools during the COVID-19 crisis and 84% of them believe they will continue to be useful after the crisis.

Our hope is that the push that the crisis has meant for digital health adoption will remain and health managers and medical professionals will take the opportunity to definitively change processes and facilitate delivery of care using digital health (Cabrer 2018).

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Key Points

- A significant number of patients and medics have reacted positively to the presence and advantages of telemedicine during the crisis.
- One large healthcare company recorded that the most in-demand telemedical visits were paediatric, gynaecology and psychology specialities
- The potential of telemedicine has been leveraged successfully during the COVID-19 crisis and healthcare should harness opportunities for the future.

REFERENCES

Cabarrus M, Naeger DM, Rybkin A et al. (2015) Patients prefer results from the ordering provider and access to their radiology reports. J Am Coll Radiol, 12(6):556-562

Cabrer M. (2018) Let's change before we have to. Available $from\ \underline{healthmanagement.org/c/healthmanagement/issueart-}$ icle/let-s-change-before-we-have-to

Cepeda D (2020) El Coronavirus impulsa la telemedicina en España. Available from <u>cincodiaselpaiscom.cdn.ampproject.</u> org/c/s/cincodias.elpais.com/cincodias/2020/04/21/companias/1587487221 998649.amp.html

EUR-Lex (2016) Regulation (EU) 2016/679 of European Parliament and Council of 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Text with EEA relevance). Available from eur-lex.europa.eu/eli/reg/2016/679/

Guanyabens J (2019) Patient Trust Needed for Healthcare Data Success, Available from healthmanagement.org/c/ healthmanagement/issuearticle/patient-trust-needed-for-

healthcare-data-success

Shellenbarger D (2020) Telehealth is the 'New Front Door' Amidst a Pandemic. Available from health.oliverwyman. com/2020/03/COVID-19-19-executive-playbook--telehealth-isthe--new-front-door-.html

Shini SG, Thomas TD, Chithraranjan K (2012) Cloud Based Medical Image Exchange-Security Challenges. Procedia Engineering, 38:3454-3461.