Technology in times of crisis: How FORUM supports adaptable international care

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Peer perspectives in the ophthalmic practice



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In times of crisis, technologies rapidly evolve: companies and individuals seize the opportunity to implement innovative concepts in reality. The COVID-19 pandemic is a worldwide crisis, and even beyond vaccine development healthcare is making massive strides forward. This is true at many levels, but particularly when it comes to methods of care delivery, whether that means adapting workflows or the technologies themselves.

You need a crisis to push, and that's what we've seen with the pandemic. Between travel restrictions and new safety measures, remote care options are more important than ever. Here at the International Specialist Eye Centre (ISEC), we have combined our existing workflow, supported by the ZEISS integrated data management system, FORUM®, with new telehealth options in order to deliver care, even across international borders.

From travel to telehealth

The International Specialist Eye Centre (ISEC) has several satellite clinics—not just in Singapore and Malaysia but in Myanmar as well. Like all healthcare clinics, we experienced a sharp drop in patient volume going into the pandemic. Volume dropped to 25% of our usual numbers for a few weeks during the lockdown, and gradually rose as patients became more confident in the safety measures we put in place.

Our clinic's new workflow includes standard safety measures like personal protective equipment (PPE), temperature screenings, and a new scheduling model to limit the number of people in the clinic. We are also screening for red eyes, as they are a known symptom of COVID; patients with these symptoms are treated separately to limit exposure to other patients and staff. Currently, we have divided the staff and doctors at the Centre into two teams—our A team and B team—who take turns running the clinic. This is so that in case either team is exposed, the clinic can continue operations even if the staff must be placed in quarantine. Administrative staff are still working from home as much as possible to minimize the risk of exposure.

However, the biggest impact on our patient load once local lockdown measures were lifted came from the relationship between our main clinic and our satellite clinics. The borders between the countries in which our satellite clinics are located are currently closed. In the past, our usual way of coordinating care with our satellite clinics involved quite a bit of travel for the surgeons: we would have a roster of patients who needed consultations, and once a month a doctor would fly out to the satellite clinics to see those patients. While we did some remote consultations on an ad-hoc basis, we were not practising true telehealth.

Luckily, we had already set up FORUM to connect the satellite clinics with our main clinic: this was necessary for remote viewing of imaging, and we also used the software within our main clinic. We quickly realized when the borders closed that this software and secure telecommunications software would be necessary to continue to provide support and care to our satellite clinics.

How telehealth supported clinic recovery

Prior to the coronavirus pandemic, we were not utilizing telehealth to its fullest potential, because there was really no need—or at least no impetus to change our habits. The closest we came was using platforms like WhatsApp to communicate with patients and their primary care doctors for brief consults, but for anything more than answering a quick question we were travelling across the border to perform consultations in person.

Now, of course, that is impossible. COVID has instituted the necessity to implement a true telehealth platform in order to facilitate face to face consultations with patients and their doctors. With the combination of Zoom and the remote access to FORUM, I can speak with the patient, look at their diagnostic imaging and results, and give my advice to the patient and the primary doctor, no matter how far away they are.

We initially approached telehealth with trepidation, because we'd never done it before—but crisis spurs innovation and adaptation, and we are now becoming quite confident in giving our diagnosis or opinion across this platform.

Telehealth works very well with our satellite sites where there is a primary optometrist able to see patients. For more complex cases where ophthalmologists are being called in to consult, the primary optometrist can perform diagnostic imaging and exams, then upload the images and results to FORUM for the consulting doctor in our main site to view. With FORUM and similar software, these images can be viewed by the consulting physician in real-time, allowing for telehealth consults at a great distance while the patient is in the clinic, or even once they have returned home.

FORUM allowed for the upgraded telehealth workflow to operate more efficiently. Without FORUM, I cannot imagine how I would be able to give a confident diagnosis via telehealth. Imagine there weren't any platforms for us to use—my colleagues would not be able to share information as easily or as accurately as is possible through this software. Integrated diagnostic solutions like FORUM are absolutely necessary for telehealth.

We are now back to about 80%, almost back to normal. However, the patients we are no longer seeing in the clinic are those from overseas or international patients. Around 30% of our former patient load was made up of patients from overseas or Indonesia; at this time we are not seeing those patients.

Innovating to adapt: what technology will make possible

Telehealth is the first step towards a true remote delivery of care. I believe that as internet connectivity grows in scope and quality in the coming years, there is the potential for genuinely remote delivery of care. It's not unreasonable to expect that medical device companies will develop instruments and technologies that will allow for three-dimensional viewing systems and even remote robotic surgery.

For now, of course, surgery is done in-person—but healthcare doesn't have to be. I can speak with my colleagues and our patients across vast distances in real-time, through the network made possible by video and diagnostic software.

en-INT_31_200_0204I CV-I/2021

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