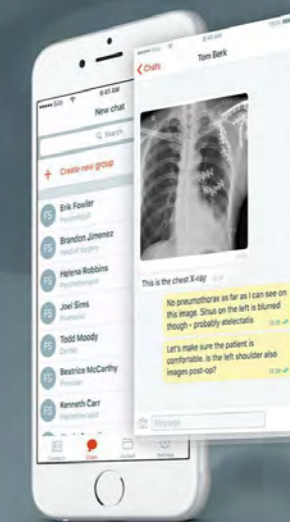


A Doctor's Perspective

How MOBILE MESSAGING IS PROVIDING FASTER & MORE COST EFFECTIVE CARE IN HOSPITALS

Dr Michiel van de Sande, oncological orthopaedic surgeon at Leiden University Medical Center (LUMC) in the Netherlands explains how mobile messaging has transformed the way in which he and his colleagues practice medicine, giving him unrivalled access to specialists across the country



Doctors are undeniably busy, consulting and treating a record number of patients every day; figures show that the NHS is dealing with over 1m patients every 36 hours. Similar to those practicing in the Netherlands, physicians in the UK are more often than not walking hospital corridors going from patient to patient, and often working in different locations rather than sitting behind a desk. This makes more traditional methods of communication more difficult to manage, and in some cases could lead to unnecessary delays in treatment.

Mobile messaging has been a staple since SMS was launched in the 90s, and we are now increasingly 'connected' and available 24/7. Not surprisingly, research has shown that more than 72% of British doctors want to use a secure messenger for their work; the convenience and speed at which we can collaborate and find solutions makes it an incomparable way to communicate.

Applications like WhatsApp have become second nature to many of us to the point where we barely think about sharing photos and videos, or checking if someone has read a message or typing a response. It is a low threshold form of communication that doesn't directly disturb the receiver, yet allows you to have direct live conversations. However, there are ongoing concerns about its suitability for the medical profession.

The Dutch seem to be a step ahead of the British, having already realised early on that a secure and fit-for-purpose alternative is needed in healthcare. The result is that already over 30% of Dutch doctors have collectively embraced one lead-

ing solution. So, what can the UK learn from the Dutch when it comes to using a secure mobile messenger in healthcare?

KNOWING THE LIMITS OF COMMERCIAL MESSAGERS

WhatsApp has been used for some time socially as a way of keeping in contact, and it is not difficult to imagine how patient care could become easier if consultants chose to use it to share details of interesting or challenging cases. When you search WhatsApp on PubMed, you will find approximately seventy hits of which the majority are publications that show how communicating via WhatsApp improves patient care and makes it more efficient. In general, the added value of WhatsApp in healthcare is faster decision-making, enabling earlier initiation of treatment and the ability to easily share medically substantive knowledge.

After building a reputation for being an effective communication tool, we began to see how it could be used to connect with other doctors; sharing cases, pictures of x-rays, lab results. It turned out to be an effective solution to query diagnoses and discuss treatment with colleagues to ensure the patient was getting the right treatment.

While it seemed to be a good method to communicate and collaborate, there were concerns about the vulnerabilities and security of WhatsApp. For example, the lack of additional logins and the potential to share it with unauthorised people. In February 2016, the Dutch Data Protection Authority opted to ban the use of the application entirely in all healthcare settings. While this was actioned before encryption was

introduced, it was made clear that there were fundamental privacy flaws that make WhatsApp an inappropriate solution.

Despite this, we still saw the substantial benefits to using mobile messaging to help us better manage our workload, share knowledge and ultimately provide better care to our patients. It is a low-key and effective method of contacting colleagues who may be doing ward rounds, or off duty but available for consultations. While I still value verbal communication, mobile messaging gets you instant access and allows responses whenever it's convenient in a matter of minutes, rather than finding the capacity for a phone consultation.

CHANGING THE WAY WE OPERATE

All doctors swear to the Hippocratic Oath, and that means we must act in the best interest of our patients. In my opinion that means going above and beyond to ensure they receive the best treatment, which in some cases means accessing specialists outside the department; sometimes even outside the hospital.

Together with some colleagues I decided to investigate alternative solutions on the market. We needed to find something that could deliver the same functionality as WhatsApp in terms of ease of use and convenience, but with added privacy measures that reduced the risk of patient data being synced or shared with external unauthorized sources.

In our search we came across Siilo; a mobile messaging application that has been designed specifically for the healthcare market. After our investigation it appeared that

this application was not only very secure, but also the simplest and fastest alternative on the market. It didn't require large-scale deployment or big investments. All we had to do was simply download it from our app store and then automatically connect with other healthcare professionals in our contact lists. This meant that we could get started right away, discussing and sharing case notes amongst ourselves.

However, Siilo offers much more than only secure messaging amongst direct colleagues. It lets us also access the database of thousands of doctors who have been verified by the app and who can find each other without requiring each other's contact details. With Siilo, I can discuss specific cases with doctors from all over the country and receive specialist advice within minutes. Safe in the knowledge that patient information shared cannot be accessed by external sources, with the practical convenience of the app feature that enables me to anonymise photos when sharing with doctors who don't have a patient relationship with the case at hand.

Siilo allows us to find specialists in differ-

ent ways; according to disease, physician's name, location, or their specialties. For example if you search for "orthopaedic oncologist" you get specialists in that area from the app's address book. Before, you would have to already know somebody in your network and need access to their contact information to start any direct communication. With Siilo, any registered doctor can be reached as long as they are verified on the application. To stay in control the blocking option allows you to ignore messages from possible undesirable users, although all users are professionals and I have never had to use it.

Siilo speeded up my transfers to relevant departments to just one or two days. As an oncology specialist my patients don't want to wait for a long time for answers regarding diagnoses. Traditionally we would have to send correspondence via fax, post or email, but that cycle is long and complicated. It is now much easier to have access to data, check scans on the go and refer patients.

For trauma surgeons, who are often on call alone, having the ability to discuss

urgent care with colleagues who are awake but not on site is key. If a patient comes in and you're not sure of the best course of action, you can message the group and get multiple responses before having to make a decision on treatment.

FINDING THE PERFECT BALANCE

One of the most important differentiators for Siilo is the separation between my personal and professional life. With other applications such as WhatsApp, sensitive and sometimes disturbing photographs would be stored alongside our personal images of family and friends. Using Siilo means your images are stored separate and encrypted in the app and not open on your phone. The blurring tool facilitates you to blur parts of patient photos as to protect patient identity. The app also provides you with the ability to conveniently create separate patient cases in a single group chat. This keeps all conversations grouped together based on cases, without cluttering the overall group chat. Doctors can then add these conversations to the appropriate patient records as PDF. For me these are compelling reasons why I believe Siilo has been embraced so swiftly in the Netherlands.

Mobile messaging can enhance patient care. It opens up the opportunities for specialists to collaborate remotely, easily share their expert knowledge, and reduce waiting times and worry by diagnosing a condition in days, not weeks. However, we have to be cautious to introduce applications that do not meet strict criteria, to avoid potentially damning information being leaked. Siilo provides us that balance; combining the usability of commercial messaging services, with the practical features designed for healthcare and iron-clad security. ■

