LETTER

WhatsApp Doc?

Donnchadh Martin O'Sullivan,[1] Eoin O'Sullivan,[2] Margaret O'Connor,[1] Declan Lyons,[1] John McManus[1]

[1]Department of Geriatrics, University Hospital Limerick, Limerick, Ireland
[2]Department of Renal Medicine, Royal Infirmary of Edinburgh, Edinburgh, UK

Correspondence to
Dr Donnchadh Martin O'Sullivan, Department of Geriatrics, University Hospital Limerick, Limerick, Ireland; dosullivan373@gmail.com

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Interest continues to grow around the most appropriate use of smartphones, tablet devices and related software in the modern healthcare setting. The meteoric rise of the smartphone in broader society has resulted in increasing numbers of healthcare professionals informally introducing this technology to the workplace. High-quality data to support device use in treatment and decision making are thus far lacking, but the potential benefits of deploying such technology are increasingly recognised.[1 2]

Research we have conducted at the University Hospital Limerick (UHL), Ireland, identified the widespread use of the instant messenger software 'WhatsApp' for communication between health professionals. Responding to an anonymised survey, 80% (n=41/51) of the intern cohort at UHL confirmed that instant messaging systems are already informally integrated into modern medicine in Ireland. We found that 100% of respondents have a WhatsApp account and that 100% have an active 'group chat' used for clinical medicine at UHL. These WhatsApp groups can vary, with approximately 10% including only interns, 70% also including senior house officiersand registrars, and up to 20% of groups including consultants. The use of smartphones and messaging has been explored previously in a UK population; however, this is the first such data describing the Irish experience.[3] Anecdotally, this pattern is repeated across the country in other institutions and is unlikely to be unique to Limerick.

The most concerning finding is the burgeoning data protection crisis. Worryingly, we found a high incidence of sensitive patient data exchanged between physicians. This is potentially in breach of the Data Protection Act of 1998 and 2003. A total of 97% of surveyed doctors routinely send sensitive patient information on instant messenger without acquiring patient consent, despite the fact that 68% are concerned about sharing this information in such a manner. This cognitive dissonance is concerning, and perhaps reflects the pressures of modern medicine forcing doctors to behave in this way despite medicolegal misgivings.

Modern medicine thrives on rapid, efficient communication, driven in part by the ever-increasing numbers of patients, increasing complexity of patient data and the multidisciplinary nature of medicine. Every member of a team feels they need to be in multiple places simultaneously and needs the ability to exchange information rapidly for the efficient day-to-day running of the hospital. In fact, 90% of physicians feel that they cannot provide the best possible clinical care without using instant messaging. Thus, there may be a compelling patient safety argument for the use of instant messengers when one considers that 95% of respondents feel that it is 'safer for patients' if everyone on the team uses an instant messenger. Clearly then, a solution and suitable platform for modern communication is needed. Certainly, 85% of interns feel that they should be provided with an Health Service Executive-approved instant messaging solution.

Security and data protection is likely to be the driving concern for HSE administrators. Should a member of the clinical team group send patient identifiable information, it is technically obtainable from all the phones of the members in that group. A lost phone is thus a potential data security breach, even if the individual in question has never sent information themselves. Worryingly, we found that 30% of interns had lost their phone within the last year and 5% within the last week.

We argue that a pragmatic balance should be sought. The standard that

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messaging apps should be compared with should be the alternative: discussions on corridors, paper notes, faceless bleeps and bleary eyed phone calls. Most modern messaging software such as WhatsApp uses end-to-end encryption. In effect not even the parent company can access any sent data, and is about as secure a method of transmission as could be hoped for. Free software solutions take this even further (e,g, Signal, Secure chat) and allow additional app password protection, automated destruction of messages and more advanced security protocols. Unfortunately, health services tend to lag behind the rest of society in their uptake of technology, and recent media attention has highlighted some of the avoidable disasters that come with relying on internal mechanisms to keep pace with society—for instance, the rapid spread of the 'Wannacry' computer virus across the National Health Service networks, allowed by failure of local trusts to update their operating systems from versions no longer supported by Microsoft, or the HSE's failure to update radiology reporting software with a patch that was issued many months prior.[4 5]

Given that free solutions exist that are likely to be just as secure as any proprietary software the HSE could licence, we would call for serious consideration of the value of instant messaging within healthcare and realistic guidance to support staff in best practice. We would advocate a pragmatic, cost-aware approach to providing software solutions to healthcare staff who are trying to increase their productivity, and to support staff who are trying to use technology to take the best possible care of their patients.

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