## INSTANT MESSAGING IN THE NHS

Healthcare provider responses to the NHS consumer messaging & unsanctioned data sharing crisis

<table>
<thead>
<tr>
<th>Name</th>
<th>Email Address</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Smith</td>
<td><a href="mailto:john.smith@nhs.net">john.smith@nhs.net</a></td>
<td>Hi, I'm John. We need to set up a new messaging app.</td>
</tr>
<tr>
<td>Paula Allen</td>
<td><a href="mailto:paula.allen@nhs.net">paula.allen@nhs.net</a></td>
<td>Hi, I'm Paula. Let's discuss how we can improve our messaging system.</td>
</tr>
<tr>
<td>Amy Adams</td>
<td><a href="mailto:amy.adams@nhs.net">amy.adams@nhs.net</a></td>
<td>Hi, I'm Amy. I'm concerned about the unsanctioned data sharing.</td>
</tr>
<tr>
<td>Peter Park</td>
<td><a href="mailto:peter.park@nhs.net">peter.park@nhs.net</a></td>
<td>Hi, I'm Peter. I've noticed a lot of our data is being shared internally.</td>
</tr>
<tr>
<td>Kevin Harris</td>
<td><a href="mailto:kevin.harris@nhs.net">kevin.harris@nhs.net</a></td>
<td>Hi, I'm Kevin. I think we should consider using a new messaging platform.</td>
</tr>
<tr>
<td>Adam Jones</td>
<td><a href="mailto:adam.jones@nhs.net">adam.jones@nhs.net</a></td>
<td>Hi, I'm Adam. I've been using WhatsApp to coordinate shifts.</td>
</tr>
<tr>
<td>Marison Jacobs</td>
<td><a href="mailto:marison.jacobs@nhs.net">marison.jacobs@nhs.net</a></td>
<td>Hi, I'm Marison. I'm worried about the security of our data.</td>
</tr>
<tr>
<td>Richard Harris</td>
<td><a href="mailto:richard.harris@nhs.net">richard.harris@nhs.net</a></td>
<td>Hello, I'm Richard. I think we should invest in a new messaging app.</td>
</tr>
</tbody>
</table>
DISCLAIMER: This addendum has been prepared and issued by CommonTime for information purposes only. The data included has been gathered by Highland Marketing. Opinions quoted represent those of CommonTime at the time of publication. Copyright 2018 CommonTime Limited.
Foreword

In March 2018, CommonTime released research that indicated 43% of NHS staff were relying on consumer messaging apps due to a lack of or inadequate Trust provided alternatives.

As regulation such as GDPR and the single patient opt out policy is introduced; it places greater responsibility on Trusts to ensure data is processed securely. We wanted to find out how the NHS has been responding and what is being done to address the issue.

There are two key factors at play here that are vital to balance. The first is the dire need expressed by staff for better systems of communication that reduce friction in their roles. The second is the policy requirement. Trusts must find a way to introduce policies that adequately protect sensitive patient information in their role as data processors without causing even more staff to look at communicating outside of approved, established systems.

Surprisingly, despite the introduction of more stringent regulation, nearly 60% of Trusts do not have any instant messaging policy in place. Even for those that do, there is significant confusion around how policy should be presented. While some provide a dedicated policy, others include it as part of a wider IM&T policy, and others simply take the step of banning instant messaging entirely.

This must change. If data is to be securely and reliably processed, there needs to be a greater standardisation and more Trusts must start addressing both data security and staff needs.

- Ian Knight, CommonTime CEO

Commentary

“As is usual, NHS staff have adopted technology, likely in the belief that they are doing the right thing to support patient care, in an increasingly pressurised environment. It is incumbent on digital leaders to embed in our evolving culture the need to protect patient confidentiality, deliver these conversations into the patient record, and support staff to have these interactions with the support of their organisations.

There is a gap to be filled by a robust piece of academic work that describes precisely what this technology can deliver in terms of safety and efficiency, in order to lever the resources that need to be invested.”

David Juby
Head of IT and Security
CommonTime

“When considering the usage of WhatsApp and other consumer messaging apps within a GDPR context, a Health Service (Data Controller) must consider if they are able to provide a copy of data if requested by a patient and that they able to erase personal data when requested.”

Dr Alexander Graham
Founding Partner
AdebGraham

“This research confirms my anecdotal suspicions that many clinical end-users are using consumer-orientated instant messaging applications for clinical work and patient data transmission.”

Quoted in Instant Messaging in the NHS 2018
In Freedom of Information requests to 151 Acute NHS Trusts, CommonTime has sought to understand what healthcare providers are doing to discourage staff from using consumer messaging apps and what alternatives are being offered.

Evidence presented in the March 2018 report “Instant Messaging in the NHS” suggested that consumer messaging apps are vital to the delivery of quality and timely patient care - despite the dangers to data security and patient confidentiality.

The report, based on a survey of 823 NHS staff, found that 43% regularly use consumer messaging apps for work purposes and 30% believe patient care would directly suffer if they were not able to use IM. However, the report also highlighted the dangers of such practice - citing examples of staff both accidentally and maliciously breaching data security policy.

Since publication, NHS England has issued draft guidance on how instant messaging should and should not be used in a clinical setting. The guidance acknowledges that IM can support the delivery of care but also reminds staff of their legal obligations to protect confidential information.

Specifically, among other advice, the guidance states that NHS staff should; only use consumer messaging tools if their organisation does not provide an alternative, minimise the amount of patient identifiable data shared, delete messaging notes once they have been copied to a formal patient record and follow the policies that have been outlined at an organisational level.

Whilst this document does go some way towards addressing data security concerns, it does not replace the need for individual NHS Trusts to both create policies tailored to the needs of their staff, and provide suitable alternatives.

Trust Policies and Approved Alternatives
It is clear that NHS England guidance should not be used alone as a solution to this crisis. Trusts still have a responsibility to formulate robust policy and provide approved alternatives to consumer messaging applications.

To find out how Trusts are fulfilling these responsibilities, CommonTime submitted Freedom of Information requests to 151 Acute NHS Trusts. Within these requests, our team asked: whether the Trust had a strategy...
or plan in place to discourage the use of consumer messaging apps, and what approved alternatives are being provided to staff.

**Breakdown & Analysis of FoI Responses**

Out of 151 Acute Trusts in England, 90% (136) responded to the FoI request. Scottish, Welsh and Northern Irish equivalent organisations have been excluded from this research. The following analysis is based on the 136 responses received.

Most notably, 58% of Trusts do not have any policy or strategy in place that discourages the use of consumer instant messaging applications, compared to 42% that do. Extrapolating the sample of this research reveals that this is equivalent to 88 Acute Trusts of the 151 in England. Further, a total of 56% do not provide any Trust approved instant messaging apps to staff.

The average number of apps provided by Trusts that offer IT approved solutions is just 1, which equates to an average 0.5 across all Trusts. The highest number of consumer IM alternatives offered by a Trust is 3 and the lowest is 0.

Of those that do provide Trust approved IM applications to staff, 5 listed WhatsApp, while 1 Trust listed iMessage. This means that a total of 4% of all Acute NHS Trusts within England have made it their policy to rely on consumer messaging tools to transmit and share information between staff.

A total of 14 different WhatsApp and iMessage alternatives were mentioned, suggesting a diverse and competitive pool for Trusts to choose from. However, it is worth noting that of these, only 4 have been developed specifically to cater for the needs of healthcare professionals. This suggests the vast majority of Trusts with an IM solution in place could still benefit from healthcare staff oriented features.

Overall, it appears that Trusts could be considered less than active in engaging with either policy-led or technology-led solutions. Only 38% of Trusts have either a policy in place governing the use of instant messaging or provide alternatives to consumer IM apps. However, only 24% provide both a policy and IT approved alternative, compared to 38% which offer neither.

**Implications and Conclusions**

Since both the introduction of the General Data Protection Regulation (GDPR) and single patient opt-out policies, greater responsibilities have been placed on organisations, including Acute Trusts, to adequately protect and secure data. This is particularly important for sensitive data, which includes information on an individual’s health.

Under GDPR legislation, it is clearly the responsibility of the organisation to ensure compliance, not individual staff members. This can be achieved through training, policy, procedures and investment in relevant technology.

Because of this, it would not be unreasonable to suggest that this research indicates that 58% of Acute Trusts could be at risk of breaching GDPR due to staff use of consumer messaging apps to share sensitive information.
This risk is exemplified due to Trusts having little to no authority over consumer apps data processes such as the storage and control over information sent via these apps.

As previous research by CommonTime has indicated, 43% of NHS staff use at least one consumer messaging app for work purposes. Sharing of sensitive information across consumer messaging apps directly contravenes Principles 6 and 7 of GDPR legislation which states:

“[Data should be] processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures. The controller shall be responsible for, and be able to demonstrate compliance with, paragraph 1 (‘accountability’).”

While data shared across the most popular consumer messaging apps may be considered secure due to the end-to-end encryption employed, it also increases the risk of unlawful processing, accidental loss and accidental sharing of data. However, the core issue is that Acute Trusts without either a policy or approved alternatives in place cannot adequately demonstrate compliance with the security principle or that steps have been taken towards accountability.

**Understanding Staff Preferences**

CommonTime’s March 2018 research into NHS staff usage of consumer messaging apps highlighted how vital they are. 32% of staff stated that patient care would directly suffer if they did not have access to IM. In addition 29% believe that IM is vital to improving care. However, the study also highlighted the difference in satisfaction between Trust provided and consumer oriented solutions. 77% of staff reported satisfaction with consumer messaging applications, compared with the 49% that reported satisfaction with Trust approved alternatives; a marked difference of 28%.

This difference in satisfaction could partially be explained in that 22% of Trusts are using an approved solution like Skype for Business in place of a dedicated Instant messaging solution. Whilst Skype does support instant messaging its lack of integration in to EPR systems and reactive nature could well be fuelling a lack of satisfaction over other more bespoke solutions.

The apparent low uptake of IM solutions designed for healthcare is a result of a number of variables most prominent of which can be seen to be a concern of data governance. By focusing on this subject and not the needs of end users, many Trusts may unwittingly be approving solutions which are ineffective as IM solutions but alleviate fears of data breaches.

---

“When considering the usage of WhatsApp and other consumer messaging apps within a GDPR context, a health service (Data Controller) must consider if they are able to provide a copy of data if requested by a patient and that they are able to erase personal data when requested.”

- David Juby, Head of IT Security at CommonTime

“The Obvious ‘gap’ in using a proprietary IM app is the IG concern, but also the inability to integrate with other clinical systems / EPR. Personally, I would like to see such an app developed in partnership with the NHS, preferably on an open source model, to allow standardisation and wider NHS sharing”

- Dr Martin Wilson, Trust Clinical Lead for IT at The Walton Centre Foundation Trust - Quoted in Instant Messaging in the NHS 2018

---

Figure 2: % of Trusts with policy and IM alternatives compared to those with one or without

<table>
<thead>
<tr>
<th>Policy in place</th>
<th>38%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR Provide alternatives</td>
<td></td>
</tr>
<tr>
<td>Policy in place AND Provide alternatives</td>
<td>26%</td>
</tr>
<tr>
<td>NO Policy in place DON'T Provide alternatives</td>
<td>38%</td>
</tr>
</tbody>
</table>
As commentators have noted, despite the number of staff using consumer messaging tools, one of most significant barriers Trusts face with adoption is the limited features available in tools provided by healthcare technology vendors. Martin Wilson, Trust Clinical Lead for IT at The Walton Centre Foundation Trust describes this, “The obvious gap in using a proprietary IM app is the IG concern, but also the inability to integrate with other clinical systems / EPR.”

Faced with a choice between consumer messaging apps and those designed for the enterprise market, it is little surprise that so many NHS staff are using those they are familiar with in their personal lives. To improve the adoption and satisfaction of Trust approved alternatives, it is important that more healthcare oriented solutions are implemented and that these applications incentivise staff to use them over consumer oriented apps.

### The Importance of Policy

As can be seen from the results of the FoI responses, there is currently uncertainty surrounding both the adoption of instant messaging technology and its use.

In recent months the draft guidance on Instant Messaging has been removed, this has undoubtedly added to this confusion. Indeed, many Trusts appear unclear over where and how Trust policy on instant messaging should be presented. While some Trusts had a dedicated policy, others included it with broader IM&T or social media policy.

This situation can be seen to be unacceptable, Trusts require guidance on how, where and when to adopt new technology and practices to ensure that new methods of operating comply with all current legislation.

Without proper policies in place to effectively govern the rising use of Instant Messaging Trusts could be at risk of contravening existing laws and legislations.

Indeed, a number of Trusts have simply put in place a policy of banning all instant messaging communication which, while a simple solution, ignores the clear need expressed by NHS staff.

The question then, however, will be who will create the necessary guidance required and will developers of consumer messaging apps adapt their platforms to comply with the unique needs of the NHS.
About CommonTime

Based in Derby, CommonTime has helped organisations deploy mobile communication technology for over 20 years. We have worked with a number of public sector organisations to deliver transformational messaging solutions in complex working environments.

Clients use our secure communication tools every day to make informed decisions in response to critical events. Our systems improve efficiency and deliver vital intelligence to end users, while minimising administrative tasks.

Web: www.commontime.com | Email: sales@commontime.com | Telephone: 01332 368500

This addendum is an update to the March 12, 2018 report published by CommonTime - Instant Messaging in the NHS: An exploration of the relationship between consumer messaging applications and modern healthcare delivery.