

## PageOne Paging - supporting NHS London EPRR Critical Alerting

Resilient telecommunications are key to meeting the statutory requirements of the Civil Contingencies Act 2004 (CCA 2004) and the NHS Act 2006.

In Jan 2019 NHS England prepared a guidance paper on the role of resilient telecoms in EPRR that reinforced the need for organisations to maintain a layered approach to the communication mix to ensure the NHS is able to maintain key functions and patient safety during a major incident or significant service disruption.

The report highlighted the risks and vulnerability of relying on public GSM mobile networks that may suffer service degradation and overload during major incident events.

Roshan Abdool-Raheem, Acting EPRR Manager (NENC London) explains why paging forms the core of the pan-London NHS Emergency Preparedness, Resilience and Response communications and alerting scheme.

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# NHS London EPRR Scheme

## Background

Paging has been used as the communication route for major incident notification for the NHS in London since 2005. It has been the only resilient form of contact in a major incident.

It was agreed by all NHS CEO's in London, following the 2005 London bombings, that this was the way to alert trusts of major incidents.

In addition to using pagers for major incident declarations, it is also used for notification of business continuity, critical incidents and exercising. NHS England and NHS Improvement (London) use pagers to run communication exercises with NHS partners. It has, therefore, become an integral part of the incident management process in London and united responsibilities as Category 1 and 2 responders under the Civil Contingencies Act (CCA) 2004.

More recent incidents which took place in 2017 reinforced the need to have resilient communications. This was further underlined during the WannaCry cyber-attack.

In 2017 NHS England wrote to all NHS providers and commissioners in London requesting the establishment of a unique trust call-sign to ensure that pagers could be used to contact the Director on-call for each trust. A copy of this letter can be obtained via your NHS England and NHS Improvement (London) EPRR contacts.

## Rationale for the use of pagers

Pagers demonstrated how effective and resilient they could be as seen during July 7th, 2005 bombings in London. The paging network was the only reliable, and most importantly, uninterrupted service that day.

Whilst other services were either overloaded or disabled for various reasons the network continued to deliver messages throughout. It is still the network of choice for many national Government departments and blue-light services who require critical broadcast alerting.

The essence of the 7/7 report is unchanged and similar instances of GSM mobile network disruption have been apparent during the recent major terrorist events in London, including Westminster and London Bridge attacks. The sheer volume of public/consumer traffic can overload the public GSM mobile networks. Hence why emergency services use private radio/paging networks for critical communications and paging continues to play an integral role in incident/emergency communication plans and processes.

For the purposes of Emergency Planning, Resilience and Response (EPRR) in London we need to be assured that we can alert a trust at a moment's notice using a designated call sign for that trust. Pagers offers us, and the many trusts that use it, an effective alerting system by way of paging, SMS and email.

### Current Capabilities

The resilience of the service is underpinned through multiple means of initiating a message or call out including via web, a 24/7 manned bureau service, sending a text message or email to initiate a call out, plus smartphone apps and a mobile URL. It also supports connections to a wide range of third-party software, switchboard and monitoring systems.

The PageOne service supports multiple networks and device types providing further multi-channel resilience, including:

- pagers
- triple-resilient 2-way pagers
- mobile phone (SMS)
- landline
- smartphone app
- email
- instant messaging

The main EPRR groups are managed centrally with Trusts managing their own local on-call arrangements such that incident alerts can be broadcast to key personnel with one single message.

### Paging Functionality

Specific functionality that trusts should be aware of when considering a paging service include:

- **Government Approved Status** – It is important to consider Government Approved companies that are vetted by Crown Commercial Services and that can adhere to a level of service that is agreed on the Network Services Framework Agreement RM3808 (Lot 7).

- **Data Processing** – A system that can process and send out messages using not one but two UK data centres. This means in the unfortunate event that one data centre should malfunction, messages could still be sent out via the other centre, adding a layer of resilience to their service.
- **Data Protection** – A requirement that the service is ISO 27001 accredited. All data processes should be carried out securely within the UK in order to adhere to UK Data Protection Laws, meaning messages are securely protected.
- **Resilience** – There is a requirement that the chosen messaging system's platform has multiple ways of sending a message without relying upon any one network. Furthermore, the messaging service should not rely solely on the internet for access, meaning in cases such as the recent cyber attack, the messaging system would still be able to send out messages, so that no one mode of communication is ever solely relied upon.
- **Service** – The service will need to cover a wide-area with their own national paging network covering the UK. The network, should be capable of supplying sent, delivered and read receipts for wide-area paging, and do so in real-time.

Based on the advantages and functionality NHS England and NHS Improvement have chosen to use PageOne Communications as they meet the requirements and fulfil the necessary criteria highlighted above.

Roshan Abdool - Raheem (DipHEP, CBCI)  
*EPRR Manager, NHS England and NHS Improvement (London)*  
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