Should all NHS premises provide free access to wi-fi?

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Re: Should all NHS premises provide free access to wi-fi?

Should this question be framed, not just in terms of patients enjoying NHS Wi-Fi hotspots, but in laying the foundation for hospital-wide wireless networks, which would support all Information and Communication Technology (ICT) connectivity across the NHS?

In ongoing research, looking into barriers and facilitators to the adoption of new technology in NHS hospitals, one unexpected theme has emerged: That cables are trouble. They are easily pulled out, which may go unnoticed, and even plugging them back in may be complicated by not actually knowing where they go. In operating theatres they represent a trip hazard, and on the wards, and in A&E cabling may not line up with where the machines need to be plugged in. NHS staff still rely on beepers and pagers (a technology from the 50s). Is it not time to bring wireless technology into the 21st century?

To realise the full potential of a smart NHS, it will need to be connected, and one solution could be to implement a secure Wireless Local Area Network (WLAN). The term Wi-Fi actually applies to the Institute of Electrical and Electronics Engineers’ (IEEE) 802.11 standard. A hospital wide WLAN, as well as connecting all parts of the hospital in an instant, and linking up to the rest of the NHS, could afford all patients (not only those with 4/5G contracts), access to the internet, facilitating communications and information, as in public libraries.

The vision of a future smart hospital as part of a smart NHS depends on the infrastructure of connectivity being in place. If this vision is to be taken seriously, issues of WLAN security and privacy, must be tackled now, to develop central policies that can be applied across all the NHS.

In an age when radio waves pervade our lives, decrying the potential benefits that wireless technology could bring to organisations such as NHS hospitals, does not seem very constructive. Is the argument that we should not promote wireless technologies, as they may be unsafe, to be put forward as a reason not to consider them? Given the low power output of this technology in comparison to mobile phones, perhaps it is wise to follow guidelines that encourage solutions that are evidence-based, as in the case of the recent ruling on homeopathy (BMJ 2015;351:h4797).

Digital solutions, are now being hailed as the last great hope of a failing healthcare model (BMJ 2015;351:h3726), are we in danger of overlooking how to best support this. It may not be a smooth process, but if the NHS is to embrace the digital era, these issues must be considered from the outset. To develop unified protocols so that
software developers and technology manufactures know what they must work towards. If WLANs are to be established in hospitals, medical devices may have to be designed to operate in a radio wave rich environment. In fact, they should probably have that technology incorporated in to them.

A strategy for an NHS wireless network, on which to build a connected healthcare model, must address some of the issues raised in this article, and in "Should all NHS premises provide free access to Wi-Fi?" (2015;351:h4098) now. If not, in five years we may find that, the technology is there, but that the infrastructure is five years behind.

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