University Hospitals Bristol NHS Foundation Trust

POLICY ON THE USE OF MOBILE COMMUNICATION EQUIPMENT IN PATIENT AREAS

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Authors: John Wigmore, Trust Telecoms Manager
Mandy Gemmell, MEMO

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Policy on Use of Mobile Communication Equipment in Patient Areas

1. EXECUTIVE SUMMARY

This policy aims to manage the growing use of personal communication devices by patients, visitors and staff while ensuring patients and staff are not put at risk. It replaces the previous version of the policy and relaxes many of the restrictions that were in that policy, and reflects the latest Department of Health Guidance issued on 6th January 2009.

This policy reflects the guidance on allowing patients the widest possible use of mobile phones in hospitals where such use does not represent a threat to:

- Patients own safety, or that of others
- The operation of electrically sensitive medical devices in critical care situations
- The level of privacy and dignity that must be the hallmarks of all NHS care

The policy also takes into account legal considerations regarding:

- Data protection
- Patient privacy and dignity
- Patient confidentiality
- Safeguarding children and vulnerable adults
- Nuisance
- Health & Safety risks

The policy further recognizes that the use of mobile phones with a camera facility can constitute a considerable risk. These risks can be identified as:

- Possible breach of medical confidentiality
- Possible intrusion into patients private life
- Possible contravention of Data Protection Act 1998 and breach of patient confidentiality
- Possible risk to safety and welfare of children in contravention of The Children Act 2004
- Cause of nuisance to staff other patients.

2. DEFINITIONS

Mobile communication equipment can be grouped according to their potential to cause EMI; the policy is related to the risk of interference of these different types of communication device:

Risk of interference	Type of communication system
High	Analogue emergency service radios
	Private business radios (PBRs) and PMR446, e.g. porters' and maintenance staff radios (two-way radios).
Medium/Low	Mobile phones TETRA (Terrestrial Trunked Radio System) Laptop computers, palmtops and gaming devices fitted with GPRS (General Packet Radio System) and/or 3G HIPERLAN (High Performance Radio Local Area Networks)
Low	Cordless telephones (including DECT, Digital European Cordless Technology), and computer radio network systems **except** HIPERLAN and GPRS e.g. RLAN (Radio Local Area Networks) systems and Bluetooth®

2a. RATIONALE

Some restrictions are necessary to:

1. Minimise the risk of breach of privacy/confidentiality
2. Address the nuisance/distraction effect to patients and/or staff.
3. Minimise the risk of breaching the Data Protection Act
4. Minimise the risk of interference with critical medical equipment

These restrictions relate directly to ensuring trust compliance with the Care Quality Commissions essential standards & outcomes :

- **Outcome 4: Care and welfare of people who use services**
  People should get safe and appropriate care that meets their needs and supports their rights.

- **Outcome 11: Safety, availability and suitability of equipment**

People should be safe from harm from unsafe or unsuitable equipment.

Further background to the evidence and issues is at Appendix 1.

3. POLICY STATEMENTS

3a. High Risk Devices

Emergency Services Radio Handsets
These handsets are the most likely to cause EMI because of their high power transmitters and lower operating frequencies. However, any likelihood of EMI must be balanced against benefits of these handsets in emergency situations when lives may be at risk.
In the event of any disturbance of equipment function or equipment failure occurring in the vicinity of radio handset use, the possibility of EMI must always be considered and MEMO consulted.

Emergency services personnel carrying these handsets must be aware of the risk of EMI and should not use these devices inside the hospital for routine communication. Any use within the Trust should only be made after consideration that the benefits outweigh the significant risk of EMI. In such instances, emergency services personnel using high-risk radio handsets should move well away from high dependency patient areas whenever it is practical to do so.

Security Radio Handsets [and including radios used by porters and maintenance staff]
These are the only devices with a high risk of EMI, regularly used by hospital staff. Their use is necessitated to reduce health and safety risks to staff.

The use of radio handsets by trust staff should be with the knowledge that it is possible for these handsets to cause interference with medical devices. In the event of any disturbance of equipment function or equipment failure in close proximity to these handsets this must be recorded as a clinical incident and both devices investigated by MEMO

3b. Medium Risk Devices

Mobile Phones

In the event of any disturbance of equipment function occurring in the vicinity of mobile phone use, the possibility of EMI must always be considered and MEMO consulted.

The ‘use’ of mobile phones within this policy is deemed to include the use of that device for the purpose of sending or receiving voice calls, SMS (text) messaging, e-mails and all other data transfer.

This includes mobile phones, smartphones, iPads and tablet portable computers.

For the purpose of this policy all areas within the Trust will fall within the following 3 categories:

Category 1 – Non Clinical areas/low risk patient areas (e.g. ward day rooms, clinic waiting areas, corridors, reception areas), where mobile phones can be used by staff, patients and visitors alike.
Category 2 – Clinical Patient areas (e.g. general wards and departments) where mobile phones can be used by staff, patients and visitors, but may be subject to local restrictions if their use is deemed to be affecting patient care, dignity or confidentiality.
Category 3 – Safety Critical Patient areas (e.g. Intensive Care/Coronary Care Units, Operating Theatres etc) where the use of mobile phones by patients and visitors are prohibited, but may be used by clinical staff with extreme caution particularly if within 1m of sensitive medical devices associated with life support. Patients and visitors mobile phones must be switched off in these areas.

Camera Phones
The use of cameras on mobile phones is strictly prohibited in all categories in order to preserve patient confidentiality and human rights.

Further guidance for staff

- The use of mobile phones in Safety Critical Patient Areas (Category 3) should be restricted to matters relating to clinical management or Trust business, and must always be used with extreme caution and not within 1m of life support medical devices.
- Managers responsible for Safety Critical Patient areas should monitor compliance with these requirements.
- Staff personal mobile phones should be switched off when on duty in Clinical Patient Areas (Category 2) and Safety Critical Patient Areas (Category 3). Exceptions to this are at the discretion of the clinical manager e.g there may be exceptional circumstances that will require a member of staff to have access to their phone at all times.
- Integral cameras/ document management functions within any form of mobile communication should never be used for clinical purposes.
- It is the responsibility of all staff working in clinical areas to ensure compliance by patients, visitors and staff within this policy.
- Persistent disregard of this policy by Trust staff will be considered as a disciplinary matter.
- It is an offence under the Road Traffic Act to use a handheld mobile phone whilst driving. Using a handheld mobile phone whilst driving on Trust business is not permitted. Any member of staff found contravening this guidance is likely to face disciplinary action.
- Staff should advise patients who are leaving the ward to use their phone, or to smoke, that mobiles phone should NOT be used within 1m of active infusion pumps and monitors.

Notices
Mobile phone information notices should be standard across the Trust.
All hospital entrances should have a summary of the policy clearly displayed.
Entrances to 'safety critical zones' (e.g. operating theatres; intensive care and high dependency units; and A & E), where there is a higher risk from interference, should be clearly indicated with standard notices. These will state that all mobile phones should be switched off before entering the area, unless their use within the area is essential for Clinical Management, as described in this policy.

Laptop Computers/Gaming Devices
Laptop computers or gaming devices may, or may not, be fitted with radio data cards that have the potential to cause EMI. They may therefore be used freely in the 'designated' mobile phone areas described above. Should patients wish to use such devices at their bedside then the devices should be checked, by MEMO, for radio data cards.

3c. Low Risk Devices

Devices classified in the low risk category do not constitute a significant hazard to medical equipment and can be safely used without restriction.

3d. General Policy Points

Clinical Staff should be aware of the risks entailed when medical devices are used with ambulatory patients who are outside their usual clinical area without a staff escort. They should notify the patient/carer of the risks and ensure that they are vigilant when moving around public areas to avoid proximity with mobile communication devices.

Any incident where a medical device is suspected to have suffered EMI should be considered as a clinical incident. A report should be sent to MEMO, who will investigate it, and forward it to the MHRA if necessary.

When evaluating mobile communication devices, advice should always be sought from the Telecoms Department for mobile phones, and from MEMO, the Medical Equipment Group or Procurement for all other devices.

4. IMPACT ASSESSMENT

An impact assessment has been conducted on this policy and concluded that there are no high risks relating to the implementation of the policy which would negatively impact on minority groups.

Two low –medium risks have been identified which are described below and the mitigating action identified:

Risk	Mitigating Action
That patients and visitors with a visual impairment or whose first language is not English, may not be able to read the signs relating to the use of mobile phones	That the signs are all produced in the new format identified in the BRI Signage group which meets all such requirements as far as is reasonable
That patients whose first language is not English may in certain circumstances need to use a mobile phone to contact relatives etc.	• That all staff are aware of the Translating and Interpreting services they can access for patients • That in certain urgent circumstances staff support patients in the safe use of their mobile phone

5. IMPLEMENTATION

Communication of the Policy

- On approval of this policy the Chief Operating Officer will formally communicate it to all Emergency Services, who will be required to ensure that their staff are aware of the policy.
- Divisional and Senior Managers will ensure that all Trust staff are aware of the policy and of their responsibility to monitor its implementation.
- The Trust Telecommunications Department will ensure an item goes into Newsbeat and VOICES.
- The updated policy will be placed on the Document Management System.

Implementation

- Trust Managers in charge of personnel using radio handsets should ensure that staff are aware of the above policy, monitor compliance and plan for a safer replacement programme for handsets. The risk should be minimised by the planned replacement with safer alternatives, such pagers, cordless telephones or mobile. Advice regarding these devices should be sought from the Trust Telecoms Department.
- It is the responsibility of all senior managers overseeing the use of external contractors, to inform them of the requirements of the above policy, should their staff be using radio handsets on site.
- It is the responsibility of the Director of Estates and Facilities to ensure that the signage is changed in collaboration with the Medical Equipment Group.

Audit and Assurance

The Trust Telecoms Department will ensure that it monitors compliance with this policy and seeks assurance of its implementation.

An implementation timetable framework is at appendix two.

6. References

- Mobile Communication Systems, MHRA Guidance, August 2004. Medicines and Healthcare products Regulating Agency

- SN 2001(06) - Update on Electromagnetic Compatibility of Medical Devices with Mobile Communications: TETRA (Terrestrial Trunked Radio System) and Outside media broadcasts from hospital premises. Medical Devices Agency
- DB 1999(02) Emergency service radios and mobile data terminals: compatibility problems with medical devices. Medical Devices Agency
- DB 9702 Electromagnetic Compatibility of Medical Devices with Mobile Communications. March 1997 Medical Devices Agency
- DoH Best Practice Guidance ‘Using mobile phones in NHS hospitals’. January 2009

Appendix 1

Background

Electromagnetic Interference – General Principles

Mobile phones transmit and receive signals using electromagnetic waves created by the movement of electrical charge in antennas. Any length of wire in a separate electronic circuit or in an integrated radio chip exposed to such electromagnetic waves, can itself act as an antenna. This can give rise to electric currents that may interfere with the normal operation of the circuit. Hence, it is an inherent property of radio waves, such as those transmitted by mobile phones, that they can cause electromagnetic interference (EMI). The chance of EMI occurring increases with the power of the transmission and decrease with the distance from the antenna.

All medical electrical equipment is prone to EMI. Newer devices may have been 'hardened' to minimise unwanted interference by shortening internal wires, or by enclosing the circuitry in a metal case or shield. These precautions do not entirely prevent problems, particularly if phones are used in close proximity to the device.

Malfunction and unexpected behaviour may occur if the medical device interprets any aberrant electronic signals as actual data or as coded computer instructions. This may lead to improper self-adjustment, alarm failure or device shutdown.

All mobile phones emit radiofrequency waves in standby mode as well as when in use. Their power increases when an incoming call or other communication from the base station is received. At this point, fluctuating signals are produced as rapid two-way communication continues, whether the call is answered or not. This means that to eliminate the production of electromagnetic waves by the phone, it must be switched off completely.

Electromagnetic Interference – Equipment Specific Risks

Monitors – these may be particularly at risk, as they measure very small electrical signals, and the wiring between patient and machine can act as an antenna. EMI is manifest as interference, and occasionally shutdown.

Infusion pumps – EMI may affect the rate of delivery or alarm settings.

Ventilators – significant EMI may occur between ventilators and mobile phones, resulting in ventilator shut down, alteration of ventilator settings or malfunction of monitor and alarm settings.

Pacemakers – Mobile phones may affect both permanent and temporary pacemakers. Inappropriate triggering or sensing (leading to no paced output) may occur.

Risk Perspective

Mobile phone related EMI is a potential problem when mobile communication devices are brought into hospitals by patients, visitors and staff in an uncontrolled manner.

EMI can be difficult to predict, though studies show that EMI is unlikely to occur when mobile phones are greater than 2m from medical devices.

It is recognised that although mobile phone related EMI is a real entity, its occurrence is extremely rare. In 2003, the MHRA (Medicines and Healthcare products Regulatory Agency, formerly the MDA) had received only 17 cases of suspected EMI related to mobile phones over the previous few years (Dr A Smith, MDA, personal communication). In each of these cases, mobile phone EMI was suspected but not proven, due to the difficulty in reproducing the incident. No patient harm occurred in any of the cases reported. The MHRA have had no reported cases in the last 12 months.

Relaxation in the use of mobile phones in aircraft excluding take-off and landing supports the possibility that the potential risk of EMI is now lower than first thought.

Further risks to consider are:

The risks to patient safety if clinical staff are disturbed by calls, distracting them from that patient's care and treatment.

The risk of theft of a phone containing clinical images or documentation

The risk of breaches of confidentiality if phones with cameras are used.

The risk of inadvertent or deliberate uploading of information to social networks

The risk to safety of drivers on trust business and using phones.

The image of the trust i.e. professionalism, as more and more clinical staff take calls in clinical areas.

The risk that any form of mobile communication can be irreparably damaged,(whether or not it is switched on) by some equipment within the Trust . E.g. MRI Scanners.

Appendix Two

Action	**Facilitator**	**Target Date**
Formal Communication to Emergency Services	Chief Operating Officer	
System in place to alert external contractors	Senior managers responsible for external contracts	
Cascade information to all staff	Divisional Managers	
Agree standard signage	Director of Estates and Facilities	
Agree wording for summary to be displayed in each hospital entrance	Director of Estates and Facilities	
Identify Safety Critical Zones & number of signs required	Divisional Managers	
Identify Designated Areas for use & identify number of signs required	Divisional Managers	
Consider if there is a need for a Patient Information Leaflet	Involving People Committee	
Monitoring and assurance plan for compliance with policy	Trust Telecoms Department Medical Equipment Group	
Article in Newsbeat/Voices	Trust Telecoms Manager	