Winnipeg Regional Office régional de la santé de Winnipeg Caring for Health À l'écoute de notre santé	REGIONAL  Applicable to all WRHA governed sites and facilities (including hospitals and personal care homes), and all funded hospitals and personal care homes. All other funded entities are excluded unless set out within a particular Service Purchase Agreement.		Level:
POLICY	Policy Name: Staff Use of Cell Phones and Other Wireless Communication Devices – Interference with Medical Equipment	Policy Number: 10.20.042	Page 1 of 5
	Approval Signature:  Original signed by A. Wilgosh	Section:  GOVERNANCE & GENERAL ADMINISTRATION	
	Date: February 2011	Supercedes: # 10.20.040 Februar	y 2004

### 1.0 **PURPOSE**:

- 1.1 To enhance patient safety by managing staff use of cellular telephones, two-way radios and other wireless communication devices that can interfere with the proper operation of certain medical equipment.
- 1.2 To balance the obligation of the Winnipeg Regional Health Authority to ensure appropriate safety standards are met and to realize the benefits that accrue from use of wireless communication devices in healthcare.

### 2.0 **DEFINITIONS**:

- 2.1 <u>Antennas</u> cellular and other radiofrequency antennas including transmission antennas for cell phone services, cellular phone signal booster or repeater antennas, transmission antennas for emergency radios.
- 2.2 <u>Electromagnetic Interference (EMI)</u> the degradation of the performance of a piece of equipment, transmission channel, or system caused by an electromagnetic phenomenon.
- 2.3 <u>Interference</u> –the ability of a Wireless Communication Device to temporarily or permanently disrupt the proper and safe operation of medical equipment.
- 2.4 Public All persons not employed or affiliated with WRHA that are present in a WRHA facility, including patients, family members and visitors.

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2.5 Restricted Areas – Heavily instrumented areas where the use of Wireless Communication Devices is restricted and are identified below:

**Operating Rooms** 

Adult, Pediatric and Neonatal Intensive Care Units Pre and Post Anaesthesia Care Units

Resuscitation areas in the Emergency Department

Angiography Suites (Cardiac, Vascular, Neuro)

EEG Labs and areas were EEG studies are performed

Other areas as assessed on a case by case basis at each WRHA facility

- 2.6 <u>Staff</u> All persons employed by the WRHA facilities, or WRHA funded facilities, as well as members of the medical staff, volunteers, board members, students and others associated through contracts.
- 2.7 <u>Turn Off</u> to place a Wireless Communication Device into a mode where it is prevented from transmitting. Some devices such as cellular telephones, transmit when placed into "Stand-by" mode and must be powered off to be "Turn[ed] Off".
- 2.8 <u>Wireless Communication Devices</u> those devices which intentionally transmit information through the air. Two categories of wireless communication devices are defined:
  - 2.8.1 <u>Personal Wireless Communication Devices</u> devices that are designed for day to day personal communication. Examples of personal wireless communication devices include: cellular telephones, smartphones (Blackberry, Palm, iPhone, etc.) and two-way pagers.
  - 2.8.2 <u>Special Application Wireless Communication Devices</u> devices that are designed for special applications. Examples include: two-way radios, wireless web enabled laptops or tablets, cordless telephones, Family Radio Service (FRS), wireless bar code readers and radiofreguency identification devices (RFID).
- 2.9 <u>Wireless Network</u> an internal hospital/facility operated IEEE 802.11a, b,or g (or future equivalent) network including access points. The Wireless Network is an extension of the regular Ethernet network used for regular business functions, and as such, falls under the appropriate network use policies and procedures.

### 3.0 **POLICY:**

- 3.1 This policy applies to all Personal and Special Application Wireless Communication Devices and Wireless Networks within WRHA acute and non acute care facilities, regardless of who owns the devices or networks.
- 3.2 Staff Use of Personal Wireless Communication Devices

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- 3.2.1 Staff may use their Personal Wireless Communication Devices throughout all WRHA facilities except in Restricted Areas where some limitations apply.
- 3.2.2 In Restricted Areas, Staff may use Personal Wireless Communication Devices but should maintain as much separation distance as possible between the Personal Wireless Communication Device and nearby medical equipment. Published recommendations suggest a 1 meter (3 feet) separation distance.
- 3.2.3 Appropriate usage of Personal Wireless Communication Devices in accordance with other WRHA policies that deal specifically with (but not limited to) privacy, misuse of company resources, respectful workplace, intellectual property protection, information and data security, and confidentiality; shall be followed by staff at all times.
- 3.2.4 The vibration or 'quiet' feature of the phone shall be utilized by all persons using their Wireless Communication Devices in patient care areas or waiting areas.
- 3.3 Staff Use of Special Application Wireless Communication Devices
  - 3.3.1 Where there is a requirement to use a Special Application Wireless Communication Device, WRHA Clinical Engineering, in consultation with Manitoba eHealth and WRHA Facilities Management and other appropriate management, as required, may authorize its use after an appropriate risk analysis.
  - 3.3.2 Two-way radios shall only be used by appropriately trained facility staff and emergency service personnel such as Winnipeg Fire and Paramedic personnel and Winnipeg Police Service personnel. General contractors or third-parties working at WRHA facilities need to obtain authorization from Facility Management at each site before using two-way radios. A guideline document for two-way radios use can be obtained from HSC Clinical Engineering: http://www.hsc.mb.ca/placecard21.htm
  - 3.3.3 Appropriate usage of Special Application Wireless Communication Devices in accordance with other WRHA policies that deal specifically with (but not limited to) privacy, misuse of company resources, respectful workplace, intellectual property protection, information and data security, and confidentiality; shall be followed by staff at all times.

# 3.4 Signage

3.4.1 Appropriate signs shall be posted at the entrances to restricted areas.

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- 3.4.2 Normal hospital/facility processes will be used to mount/install policy related signs.
- 3.4.3 WRHA Clinical Engineering in consultation with WRHA Communications shall establish the minimum required wording and graphics for signage related to all Wireless Communication Devices. Facilities may adapt signs to fit their local signing conventions as long as the minimum requirements are met.
- 3.5 All Wireless Communication Devices able to take photographs or videotapes shall be used for this purpose in accordance with WRHA policies that deal specifically with (but not limited to) privacy, misuse of company resources, respectful workplace, intellectual property protection, information and data security, and confidentiality.
- 3.6 A brief informative booklet containing information about this policy, including recommended practices for Staff and Public regarding the use of Wireless Communication Devices was created by WRHA Clinical Engineering and shall be available in all patient care areas. A copy of the booklet can be obtained through Regional Printing Services: <a href="http://home.wrha.mb.ca/corp/logistics/printing.php">http://home.wrha.mb.ca/corp/logistics/printing.php</a>
- 3.7 Wireless Networks and Antennas
  - 3.7.1 WRHA Clinical Engineering, in consultation with Manitoba eHealth and WRHA Facilities Management, as required, shall assess the location of all radiofrequency emitting components of Wireless Networks.
  - 3.7.2 If there is a necessity to install an Antenna in any area of a WRHA facility (indoor or outdoor), WRHA Clinical Engineering shall be consulted regarding the physical location of the radiofrequency emitting components of the system.
- 3.8 If WRHA Clinical Engineering becomes aware of a piece of medical equipment whose function has a reasonable probability of being adversely affected by Wireless Communication Devices, WRHA Clinical Engineering reserves the right to tag the device/s accordingly. The tag will clearly indicate a minimum separation distance that shall be maintained between the device and any Wireless Communication Device.
- 3.9 Spectrum Management
  - 3.9.1 The wireless spectrum shall be actively managed through a collaborative practice between WRHA Clinical Engineering, WRHA Facility Management and Manitoba eHealth.
  - 3.9.2 Spectrum management activities may include creating and maintaining

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a database or list of radiofrequency sources in the WRHA containing information on the manufacturer, model, operating frequency, radiated output power, transmission protocol or technology, area/s of operation, maximum number of units per area of all radiofrequency sources, and information about any risk assessments conducted.

#### 4.0 **PROCEDURE**

4.1 If interference between a Wireless Communication Device and a piece of medical equipment occurs or is suspected, the Wireless Communication Device should be Turned Off immediately or removed from the area. Involved staff member/s shall complete a WRHA Occurrence Report and notify the site's Clinical Engineering staff.

## 5.0 **REFERENCES**

- 5.1 Portable Electronic Devices and Personal Computers Policy
- 5.2 Computer Internet Usage (# 70.20.010)
- 5.3 ISO/TR 21730: 2007 Technical Report Health Informatics. Use of mobile wireless communication and computing technology in healthcare facilities Recommendations for electromagnetic compatibility with medical devices.
- 5.4 AAMI TIR18: 2010 Guidance of Electromagnetic Compatibility of Healthcare Devices in Healthcare Facilities
- 5.5 WRHA Policy #10.40.280 Audio, Video, and Photographic Recordings as found on INSITE at <a href="http://home.wrha.mb.ca/corp/policy/policy.php">http://home.wrha.mb.ca/corp/policy/policy.php</a> or on the WRHA webpage <a href="http://www.wrha.mb.ca/about/policy/governance.php">http://www.wrha.mb.ca/about/policy/governance.php</a>

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