The Scarborough Hospital
Policy & Procedure Manual

Corporate Administration- Use of Wireless Communication Devices

Policy

The Scarborough Hospital (TSH) is dedicated to maintaining a safe patient care environment and acknowledges the importance of staying connected via the use of wireless technologies. This policy is based upon published test results, which defines constraints on the use of wireless devices so that they do not interfere with the operation of medical equipment.

Privacy must be considered by all users of cell phones to ensure confidentiality is protected. No photographs or video may be taken on TSH premises without appropriate consent and permission. This applies to all staff, patients, and visitors using wireless devices with this capability.

All restricted areas for wireless use will be identified by signage and staff in those areas must monitor and enforce this policy.

Definitions

**Wireless devices:** Devices that can transmit and receive information with other devices without the need of a wire connection. In the context of this policy, it is assumed that the communication between wireless devices is by means of radio frequency (RF). Examples of wireless devices are described below:

- **Cellular phone:** Devices that allow communication between two individuals for either personal or business purposes. Modern cellular phones are digital which require less power than original analog cell phones.

- **Personal Digital Assistant (PDA):** A pocket sized computer that is used to keep track of daily appointments, telephone directories, things to do and other notes. It can run programs such as spreadsheets, word processing, dictation and others. These devices do not transmit RF frequencies. Transmission between PDAs is done by Infra Red (IR) means, which do not interfere with medical equipment.

- **Wireless PDAs:** Like the PDA described above, however this device has the capability of receiving and sending voice communication (cell phone), as well as digital information.
like e-mail messages. Transmission is done through RF. Popular brand names for these devices are BlackBerry and Treo.

- **Two-Way Radios**: Devices, similar to a small portable radio, that allow people to talk to each other by selecting a “channel”. There is no need to dial a number, like a cellular phone. They are used for communication at short distances (less than 2 Km). Transmission of RF signals is at a lower power than GPRS devices.

- **General Radio Mobile Service** (GPRS licensed walkie talkies): High power walkie talkies that need a government license to be used. These devices are generally used by authorized personnel such as Plant Maintenance, Security, Emergency Services, and Police. These devices transmit RF signals when the “talk” button is depressed.

**Procedure**

1. **Restrictions on Radio Frequency Transmitting (Wireless) Devices**
   a. **Patients, Families and Visitors**
      - Use of radio frequency transmitting (wireless) devices such as Blackberries, Cellular phones, Tablets and PDAs are allowed in all areas of the hospital except in restricted areas as identified below:

   **Birchmount Campus**

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<thead>
<tr>
<th>Floor</th>
<th>Department</th>
<th>Comments</th>
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<tbody>
<tr>
<td>2nd</td>
<td>Emergency</td>
<td>Except in waiting areas</td>
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<tr>
<td>2nd</td>
<td>Intensive Care Unit</td>
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<tr>
<td>2nd</td>
<td>Post Anaesthetic Care Unit/Operating Rooms &amp; Interior Corridor</td>
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<tr>
<td>3D</td>
<td>Critical Care Unit</td>
<td>Due to Telemetry antenna distribution</td>
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<tr>
<td>4E</td>
<td>C-Section Rooms, Neonatal Intensive Care Unit &amp; Non Stress Test</td>
<td>Except corridors</td>
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   **General Campus**

<table>
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<tr>
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<tbody>
<tr>
<td>Ground</td>
<td>Emergency</td>
<td>Except in waiting areas</td>
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<tr>
<td>1st</td>
<td>Pacemaker Clinic</td>
<td>Except in waiting areas</td>
</tr>
<tr>
<td>2nd</td>
<td>C-Section Rooms, Neonatal Intensive Care Unit &amp; Non Stress Test</td>
<td>Except in waiting areas &amp; corridors</td>
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<tr>
<td>CP2</td>
<td>Dialysis Unit</td>
<td>Except in waiting areas</td>
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<tr>
<td>3rd</td>
<td>Intensive Care Unit</td>
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<td>3rd</td>
<td>Post Anaesthetic Care</td>
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This material has been prepared for use at The Scarborough Hospital (TSH). This is a CONTROLLED document for internal use only. Any documents in printed form may not reflect the current electronic version and should be checked against the document (title above or policy number below) on the hospital intranet prior to use.
2. **Hospital Staff and Physicians**
   a. Use of radio-frequency transmitting (wireless) devices such as: BlackBerries, Cellular phones, Tablets and PDAs are allowed in all areas of the hospital, but users must maintain a distance of at least 1 metre **(approximately 3 feet)** from medical devices when operating the wireless device, or while it’s powered on.
   b. **All wireless devices as identified above must be powered off when the distance is less than 1 meter from the medical device.**
   c. Cellular phone use by staff and physicians are for **hospital business purposes only.**
   d. Users are expected to conduct themselves in a professional and business-like manner and respect others within the area(s) where the device is being used.
   e. It is also expected that cellular phones be in silent/quiet mode when in any meetings.

3. **Receive Only Pagers**
   a. Receive only pagers are wireless devices which receive text messages, but have no capability of sending messages, for example, in house and long range pagers.
   b. All users such as patients, visitors, staff and physicians are permitted to use this type of device throughout the hospital with no restrictions.

4. **General Radio Mobile Services (GPRS licensed walkie-talkies)**
   a. The GPRS walkie-talkie shall only be used by authorized TSH Patient and Support services personnel or Emergency personnel, such as Police, Fire Department and EMS personnel to carry out their daily duties.
   b. Walkie-talkies should only be in Receive Mode unless transmission is required.
   c. During transmission, users of these devices must ensure that they maintain a distance of greater than **3 metres (approximately 9 feet)** from all medical devices.

5. **Reporting of Medical Equipment Malfunction**
   a. The following procedure is to be followed if a medical equipment malfunctions (e.g. erratic operation, distorted or irregular displays) due to radio-frequency interference from wireless devices.
b. Check and ensure that there are no wireless devices active in the area(s)
c. If wireless devices found active, turn off and remove from the affected medical
d. equipment
e. Report to Biomedical Engineering Department immediately:
   General Campus ext. 6434 or
   Grace Campus ext. 5250
f. Complete a HIRS incident form by identifying the following:
   • Type and make/model of wireless device e.g. Cellular phone, Blackberry, etc.
   • Location of the affected medical equipment
   • Type and make /model of the affected medical equipment

References

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Electromedical Devices - Health Canada’s Electromagnetic Compatibility Research.

Shaw CI, Kacmarek RM, Hamptom RL, Riggi V, El Masry A, Cooper JB, Jurfdod WE: Cellular
phone interference with the operation of mechanical ventilators. Crit Care Med 2004 Vol. 32,
No. 4

Tan KS, Hinberg H: Effects of a Wireless Local area Network (LAN) System, a Telemetry
System, and Electrosurgical Devices on Medical Devices in a Hospital Environment. Biomedical
Instrumentation & Technology 2000;34:115-118.