

RFID and Privacy

Guidance for Health-Care Providers

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Not Expected



What Privacy is Not

Privacy \neq Security



What is Privacy?

Informational Privacy: Data Protection

- Freedom of choice; personal control; informational self-determination;
- Control over the collection, use and disclosure of any recorded information about an identifiable individual;
- Privacy principles embodied in “Fair Information Practices.”



Personal Health Information Protection Act (PHIPA)

- Applies to organizations and individuals involved in the delivery of health care services in both the public and private sectors;
- The only health sector privacy legislation in Canada based on consent: implied consent within the “circle of care,” otherwise, express consent;
- The only health sector privacy legislation that was declared to be substantially similar to the federal *PIPEDA* legislation, in 2005;
- The only legislation in Canada with a mandatory breach notification requirement.



Why Privacy in RFID is Pivotal

- **Challenges when applying RFID technology in health care:**
 - RFID systems are a key part of an overall information system, so a **holistic systems approach** to privacy is warranted;
 - **RFID tags contain unique identifiers.** The ability to uniquely identify items has privacy implications when those items can be associated with identifiable individuals;
 - RFID tag data **can be read remotely**, without line-of-sight, without the knowledge or consent of the individual bearer. This has privacy implications for informed consent;
 - RFID data systems can also **capture time and location data**, upon which item histories and profiles may be constructed, making accountability for data use critical. When such systems are applied to identifiable individuals, it may invoke thoughts of surveillance.



Why We Partnered with HP

- Approached by Hewlett Packard (Canada) through our joint work with EPCglobal Canada;
- Continuing interest in RFID technology and trends – sifting fact from fiction;
- Availability, interest and demand for accessible health care solutions;
- Opportunity to advance privacy protection in the developing area of RFID.



Challenges/Risks of Using RFID Technology in Health Care

- 1. Tagging Things**
- 2. Tagging Things Associated with People**
- 3. Tagging People**



Tagging Things

RFID technologies have proven to be ideal for identifying and locating things because they increase the reading accuracy and visibility of tagged items far beyond bar codes and other labels;

This can result in greater efficiency for automating inventory processes, finding misplaced items, and generally keeping better track of things as they move through their life-cycles;

Some RFID health care deployment scenarios that involve the tagging of things include:

- Bulk pharmaceuticals;
- Inventory and assets (trolleys, wheel chairs, medical supplies);
- Medical equipment and instruments (infusion pumps);
- Electronic IT devices (computers, printers, PDAs);
- Surgical parts (prosthetics, sponges);
- Books, documents, dossiers and files;
- Waste and bio-hazard materials.



Tagging Things Associated with People

RFID technology can involve tagging items that may be linked to identifiable individuals and to personal information, usually on a more prolonged basis – ranging from one week in the case of tagged garments, to several years in the case of patient dossiers.

Some examples of RFID deployment scenarios that involve tagging *things associated with people* include:

- Readers, tablets, mobile and other IT devices assigned to staff;
- Access cards assigned to staff or visitors;
- “Smart” cabinets
- Equipment, garments, or spaces (rooms) assigned to patients;
- Blood samples and other patient specimens;
- Patient files and dossiers; and
- Individual prescription vials.



Tagging People

RFID use can also involve the intentional tagging and identification of individuals. The distinction can be subtle since, technically speaking, it is always the tag that is identified in any RFID system.

When we talk about tagging people, we are focusing on the primary purpose of the RFID deployment in question, as well as the relative strength and permanence of the linkage of the tag to the individual and their personal information.

Examples of RFID used (or intended to be used) to identify and track individuals in health care contexts include:

- Health care employee identification cards;
- Patient health care identification cards;
- Ankle and wrist identification bracelets (patients, babies, Alzheimer's patients);
- Implantable RFID chips and other biosensors.



Infant Protection System

Lakeridge reassures new parents in wake of Sudbury kidnapping

By Jillian Follert

newsdurhamregion.com

November 06, 2007

DURHAM - A week after a day-old baby girl was abducted from a Sudbury hospital sparking a province wide Amber Alert, officials at Lakeridge Health are reminding parents that the local hospital network has high-tech measures in place to protect infants in its care.



Privacy Impact Assessment (RFID - PIA)

- Companion document to RFID Guidance paper, PIA processes;
- Offers practical advice on identifying RFID privacy and security risks; minimizing such risks through sound planning, design and technology choices.



Applying RFID to Health Care



What You Need to Do: *Privacy by Design*

- **Build privacy and security in at the outset:**
Incorporate Fair Information Practices into the design and operation of all RFID information systems, and the policies that govern their operation.

Old World: Zero-sum mentality

Future: Positive-sum paradigm

Don't get stuck in the past



How to Contact Us

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