



# Canadian Pharmaceutical Bar Coding Project

## Designing a National Strategy for Healthcare



I. Sheppard, BSc (Pharm); P. Leonard, APR, FCPRS; S. Hyland, BScPhm, MHSc

### The Project

#### The Medication Flow Chain

A medication flows through many stages as it travels through the healthcare system, from a pharmaceutical manufacturer to the patient for dose administration.

The public, but also many healthcare workers, are not aware of the number and complexity of these stages.

At several stages of the flow, problems can occur, some of which can significantly impact patient safety.

#### Concerns with Current System

Problems can occur at any step, largely because several stages of the current system are designed around non-automated (human) identification methods and tracking and documentation systems.

There are two system considerations at each stage of the Medication Chain:

- Patient Medication Safety Assurance, and
- Supply Chain Efficiency and Accuracy

Both patient safety and supply chain considerations must be improved by any new medication identification system.

#### The Bottom Line ....

Currently, exterior packaging of most medication in Canada includes a bar code. However, the addition of bar codes to inner labels such as ampoules, vials, blister packs, is very limited.

Some hospitals have begun internal bar coding processes, generating their own labels and bar codes, but for a truly system-wide impact to take effect there needs to be an industry standard agreed upon and implemented.



In an effort to increase patient safety, members of the healthcare industry are collaborating to implement standardized barcodes on all aspects of pharmaceutical labelling.

Headed jointly by the Institute for Safe Medication Practices Canada (ISMP Canada) and the Canadian Patient Safety Institute (CPSI), the initiative is guided by a national Implementation Committee. A technical statement concerning a national standard for automated pharmaceutical product identification has been developed with assistance from a 34-member Technical Task Force (TTF), representing six identified healthcare sectors.

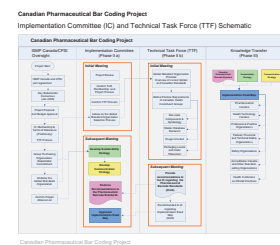
In April 2009, after broad consultation, ISMP Canada and CPSI jointly endorsed the adoption of the GS1 global standard for automated identification (e.g., bar coding) of pharmaceutical products in Canada, around which a national pharmaceutical identification strategy could be developed. The TTF includes GS1 Canada.

The multiphase project has now finalized technical requirements for Canadian pharmaceuticals in the following areas: bar code data components and symbologies, a common product database, medications to be included in the categories to be bar coded, packaging levels and bar code placement and, finally, dates for national compliance.

The resultant document entitled, "Joint Technical Statement on Canadian Pharmaceutical Automated Identification and Product Database Requirements" was released in February 2010.

Our vision for this project calls for widespread utilization of automated identification technology to add another layer of safety to our evolving medication-use systems.

#### Phase II: Process



#### Phase II: Output (November 2009)

Joint Technical Statement on Canadian Pharmaceutical Automated Identification



#### Collaborating Health Sectors:

- Pharmaceutical Manufacturers
- Retail Pharmacies
- Institutional Pharmacies
- Professional Practice Organizations
- Healthcare Solution Providers
- Supply Chain and Public Purchasing Organizations



### Next Project Steps:

#### Phase III: Dissemination and Stakeholder Engagement

- To identify and contact stakeholders in all Canadian health sectors.
- To assure they are aware of the Joint Technical Statement on Automated Identification, and to seek their support.
- To affect knowledge transfer to all healthcare Practitioners in each sector, and to the public.
- To continue and extend the current national collaborative environment to promote practice evolution using bar coding.
- To develop a sustainability strategy to assure the long-term National adoption of the Joint Technical Statement requirements.

#### Phase IV: Implementation Progress

- Pharmaceutical Manufacturer Uptake
- Healthcare Solution Provider Technology Uptake
- Professional Practice and Safety Organizations' Support
- Governmental and Health Quality Council Support
- Public Purchasing Organizations' Contracting Support
- Bar code and label placement on pharmaceuticals

The following organizations are members of the national Implementation Advisory Committee for this project:

- Canada Health Infoway
- Canada's Research-Based Pharmaceutical Companies
- Canadian Association for Pharmacy Distribution Management
- Canadian Association of Chain Drug Stores
- Canadian Generic Pharmaceutical Association
- Canadian Patient Safety Institute
- Canadian Society of Hospital Pharmacists
- Group Purchasing Organization Alliance (currently includes Approvisionnement-Montréal, HealthPRO, and Medbuy Corporation)
- GS1 Canada
- Institute for Safe Medication Practices Canada
- Public Health Agency of Canada

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