



# The Canadian Pharmaceutical Bar Coding Project

January 25, 2010

In an effort to increase patient safety, members of the healthcare industry are collaborating to implement standardized bar codes 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 and is being 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 multiphase project has, with input from GS1 Canada, developed automated identification technical requirements for Canadian pharmaceuticals. A joint technical document outlines bar code components and symbologies, a common Canadian pharmaceutical product database, drugs to be included in the Standard, packaging levels and bar code placement on packages.

The document is entitled "[Joint Technical Statement on Canadian Pharmaceutical Automated Identification and Product Data Requirements](#)", and will be released in February 2010.

**Our vision for [this project](#) calls for widespread utilization of automated identification technology to add another layer of patient safety to our medication-use systems.**



## ***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.

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

### ***Concerns with the Current System***

Problems can occur at each stage of the chain, largely because several stages are currently 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
- Supply Chain Efficiency and Accuracy

### ***The Patient Safety 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 and blister packs is very limited and lacks standardization.

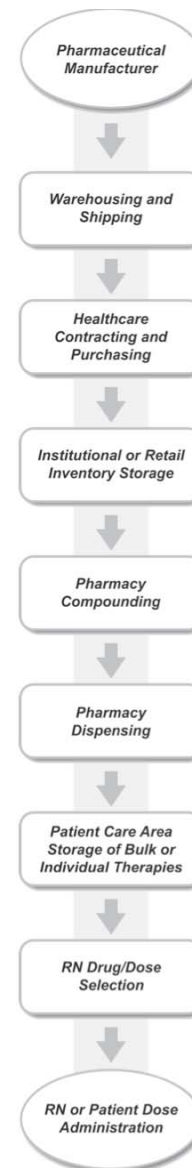
Some hospitals have begun internal bar coding processes, generating their own labels and bar codes, but for a truly system-wide impact to take effect, there needs to be an industry standard agreed upon and implemented.

## **The Project Phases**

The Project is envisaged to have four phases, and we have completed Phase II: the development of the ***“Joint Technical Statement on Pharmaceutical Automated Identification and Database Requirements”*** (or, the Joint Technical Statement).

The current phase, Phase III, sees the development of a ***“Dissemination and Stakeholder Engagement Strategy”***. In this phase, the Project objectives and Joint Technical Statement are being widely communicated to identified strategic stakeholders in an effort to:

- Assure awareness of stakeholders of the national standard and seek their implementation support through joint activities.
- Create a nation-wide environment that encourages implementation across all healthcare sectors
- Develop a healthcare sustainability strategy that supports implementation
- Promote professional practice evolution using Automated Identification of pharmaceuticals and patient doses.



Phase IV will maintain national implementation support, while measuring the uptake of the Joint Technical Statement principles and target deliverables. In addition, to support practice uptake, the Project will:

- Outline Preferred Practices for automated identification Placement on pharmaceutical product labelling
- Complete Hospital and Retail End-user Environmental Scans
- Assess End-user Implementation Needs
- Support Identified End-user Practice and Automation Needs
- Define Best Practice Sites

## How Can You Help?

This national Project needs the support of organizations from all healthcare sectors, as well as individual practitioners who understand the need for innovative patient safety practices.

### **If you are a Pharmaceutical Manufacturer, or a Healthcare Solution Provider to healthcare practitioners ...**

- Become a Strategic Partner. Consider actions in support of this Project and the ongoing review and maintenance.
- Comply with the Joint Technical Statement on Canadian Pharmaceutical Automated Identification and Product Database Requirements.
- Contact ISMP Canada or CPSI for discussions of joint actions.

### **If you are aligned with a Healthcare Professional Practice or Safety Organization, or if you are associated with Regional, Provincial or Federal Risk Management processes ...**

- Contact ISMP Canada or CPSI, and discuss this Project and its objectives.
- Consider a presentation from our Project Leaders, and discuss how we can work in concert with your organization to enhance practice implementation of the standards.

### **And, most importantly, if you are a Healthcare Practitioner ...**

- Discuss this national collaborative with as many colleagues as you can.
- Define ways in which you and your colleagues can, collectively, support and encourage organizations that also support this Project.
- Contact your discipline's Professional Organization, or other practice entities, and encourage their endorsement of this Project.

**More information about this Project can be found on the  
ISMP Canada Project web page:**

**<http://www.ismp-canada.org/barcoding/>**

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*AstraZeneca Canada Inc*



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**National Implementation Committee:**

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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-Montreal, HealthPRO and Medbuy Corporation)  
GS1 Canada  
Institute for Safe Medication Practices Canada  
Public Health Agency of Canada





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## Technical Task Force and Project Planning Group:

**Global AIDC Standards & Public Health Info Systems:**  
Canada Health Infoway, GS1 Canada



**Health Information Technology Providers:**

Baxa Corporation, Cardinal Health, Cerner Corporation, Eclipsys, GE Healthcare IT, McKesson Canada, Meditech



**Health Regulators & Professional Organizations:**

Accreditation Canada, Health Quality Council of Alberta, Canadian Society of Hospital Pharmacists, Public Health Agency of Canada



**Institutional Pharmacy Practice Clinical Users:**

Brantford Health Care System, Fraser Health Authority, B.C., London Health Sciences Centre, University Health Network (Toronto)



**Pharmaceutical Manufacturers:**

Baxter Corporation, BIOTECCanada, Pfizer, Merck (Canada), Pharmaceutical Partners of Canada Inc., Sandoz Canada Inc.



**Retail Pharmacy Practice Clinical Users:**

London Drugs Ltd. (BC), Rexall (Katz Group), Shoppers Drug Mart



**Supply Chain & Group Purchasing Organizations:**

Canadian Pharmaceutical Distribution Network: (Corresponding), GPO: Approvisionnement-Montreal, GPO: HealthPRO, GPO: Medbuy Corporation, Provincial Health Services: Ministry of Health, Ontario: Supplies, Provincial Health Services: Ministry of Health, Ontario, Pharmacy, Provincial Health Services: Alberta Health Services: Contracting and Pharmacy Services



**Project Planning Group:**

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