

Smart Regulation: Does Accelerating Access to New Drugs Improve the Drug Approval Process?

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Introduction

The regulatory activities of Health Canada are intended to safeguard the health of Canadians by ensuring that new drug products and medical devices meet the highest standards of safety, efficacy and quality. Some industry advocates and policy makers deem that our present regulatory system is inefficient, that it delays market access for useful food and drug products and that it thwarts research by making investment costs prohibitive.

Health care advocates would be well advised to examine proposed regulatory changes that adopt lower standards harmonized for international competitive advantage and that introduce food and drug products into the market before independent scientific assessment has been completed.

Smart Regulation

In *Smart Regulation: Designing environmental policy*, Australian's Gunningham & Grabosky position regulation "to include much more flexible, imaginative, and innovative forms of social control which seek to harness not just governments but also business and third parties."¹ In late March 2005 the federal government declared a major restructuring of Canada's regulatory policy, affecting everything from the automotive industry to the economic development of First Nations communities.²

If legislated, this strategy will streamline and speed up approval for new drugs, foods, biotechnology products, veterinary products and pesticides and will harmonize standards, especially between Canada and the United States. But has the Smart Regulation strategy been adequately scrutinized by the Canadian public or is it merely a culmination of a public relations exercise designed to legitimize a major economic initiative?

Regulation and Public Health

The determination of regulatory policy, the reach of regulatory activity, and the scientific and ethical competencies of regulators are central to the debate about the nature of a just society and the relative importance of public health issues.

Regulatory processes and systems risk being obscured when adapted to external factors, contingency, and rapidly emerging scientific and policy changes.

Background

2000

- Report by the Science Advisory Board indicated that new standards of access to information at all stages of the drug review process are necessary to enhance transparency and public confidence.

2002

- Commitment from the Prime Minister to establish a strong and responsive public health system that can "address emerging risks" and "adapt to modern technology" was made in the Throne Speech.³

2003

- A commitment to a smart regulation strategy followed in the 2003 speech to ensure faster access to safe drugs for Canadians.⁴
- In response, Health Canada initiated the Therapeutic Access Strategy and announced a new objective to operate as a timely, transparent, innovative and sustainable regulator.⁵
- Health Canada holds policy forum on "Improving Canada's Regulatory Process for Therapeutic Products."⁶

2005

- Government introduces Smart Regulation Strategy.
- Standing Committee on Health examines Bill C-28 which, if passed, will amend the Food and Drugs Act to allow interim marketing authorization of some food products and exempt food products containing pesticides at levels below some "maximum residue limits."⁷
- Scientific evidence supporting this amendment to the Food and Drugs Act remains uncertain; public consultation negligible; transparency veiled.

Is Health Canada enforcing regulations that ensure safe therapies that work?
or
Are they reinforcing a policy of being Open for Business and Trade Agreements?

Drug Approval Process

- Before drugs go to market, the sponsor must demonstrate safety, efficacy and quality of a new drug submission to obtain governmental regulatory approval. They must submit the drug to an extensive review process. Figure 1 outlines the scientific and review stages of the biologic life cycle.
- Ethnographic research included following the activities of regulatory approval and negotiation among scientists, clinicians, manufacturers, industry sponsors and government.
- Therapeutic product evaluation is conducted by expert government scientists and clinicians (Figure 2). The 2003 strategy for improving the Regulatory process prioritized innovation and provided a framework where risk can be managed and voluntary standards are adopted. In smart regulation, "business or commercial or non-commercial third parties" exerting controlling interests should become "surrogate or quasi-regulators, complementing or replacing government regulation in certain circumstances."⁸

Innovation or Commodification?

"Getting drugs to the market faster is neither effective nor efficient when those same drugs later have to be withdrawn because of their harmful side-effects."¹⁶

- Between 1963-2004, 41 approved products were withdrawn from the Canadian market for safety reasons.
- The rate increased since 1993; 16 of the 41 were withdrawn since 1993.
- Spending on drugs has doubled since 1996 and 2003.⁷
- Between 1990 – 2003, the Patented Medicine Prices Review Board appraised 1147 newly patented drugs. 5.9% were breakthrough drugs.
- Between 2000 – 2004, 3.4% of all drugs approved were breakthrough.⁸

Figure 1: Biologic Life Cycle

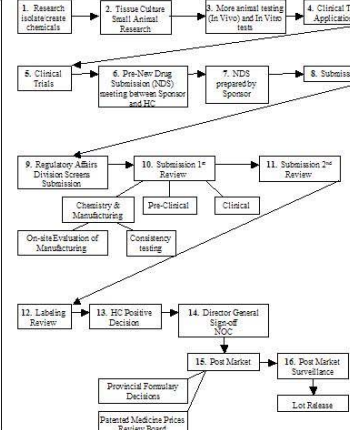


Figure 2: Stages and Types of Approval

Stage	Description
Pre-New Drug Submission (NDS)	Industry meets with government regulators
NDS	Regulatory Affairs Division screens all new submissions. When acceptable, scientific and clinical reviewers evaluate data. Regulator requests clarification ("Clarifax") from Sponsor to expand on, add precision or re-analyze information in submission.
Pre-approval	Several regulatory options exist to withdraw submissions containing insufficient data to prove safety and efficacy: <ul style="list-style-type: none"> Notice of Deficiency (NOD) - significant omission Notice of Noncompliance (NON) - deficiency in Food and Drugs Act and Regulation Not Satisfactory/Notice (NSN) for Clinical Trial Applications Notice of Compliance with Conditions (NOC/c) Notice of Compliance (NOC)
Post-approval	Manufacturers must report; health professionals under no obligation to report
Post-marketing surveillance	Marketed Health Products Directorate announced April 2002. Creation of the MHPD is part of the re-alignment efforts by the HPFB toward a strengthened and consistent risk management approach

Smart Regulation Claims Disputed

- Canadian policy must be in sync with U.S. policy (deep integration)**
 - The FDA hardly sets acceptable standards for licensing and review,⁹ getting drugs to the market faster is neither effective nor efficient if they must be later withdrawn.⁶
- Risk assessment needs to be governed by instrumental cost-benefit analysis**
 - Cost-benefit analysis cannot determine policy; equal attention must be given to other methods, e.g. standard of proof in good science, the precautionary approach...
- Optimism about the ability of the private sector to cooperate effectively in the regulatory process**
 - Industry lobbies and withholds information (e.g. Cox-2), where it cannot capture the regulatory process.
- Smart Regulation does not mean deregulation**
 - www.deregulation.gov.bc.ca

Recommendations

- Review clinical trial research guidelines to revise and reinforce efficacy criteria.
- Create committee to explore application of rigorous and pragmatic population specific criteria in clinical trial design.
- Intensify critical appraisal criteria of clinical trial design and research bias, and exercise existing regulatory options (NOD, NON, NSN, NOC/c, NOC) during evaluation.
- Limit the extent to which pharmaceutical companies are involved in design and analysis of clinical trial research.
- Generate and make widely available unbiased best evidence to practitioners.

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