

# Health Information Standards in New Zealand

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## Abstract

*Interoperability in the health system depends to a large degree on health information standards. The governance of these standards has undergone some changes in the past year, with the Health Information Standards Organisation subcommittee being disestablished and a new governance body proposed. The processes for developing standards in health information have undergone significant review. This paper describes the role of health information standards, governance arrangements and standards development processes.*

## 1. Introduction

We count on standards every day: just imagine a life without them. We would be unable to communicate effectively about time or distance, or anything else without agreed ways of describing things. Standard units of time (hours, minutes, and seconds), and standard units of distance (metres, centimetres, millimetres) have allowed us to communicate effectively, efficiently and safely.

## 2. So what are standards, why do we need them and how do they work?

Any standard is a collective work. Put simply, they are an agreed and repeatable way of describing something. They help make life simpler and increase the reliability and effectiveness of the many goods and services we use. And in the context of health, they are fundamental to making things clearer, safer and more efficient.

In order for something to be accepted as a standard it must add value; it must make more sense to use it than not. To get to that point, a community of practice must agree on the details of a standard and also agree how to use it. For example, electrical standards mean you can buy an electrical appliance from anywhere within New Zealand; plug it into the mains, and have confidence that it will work and work safely. Any changes in these standards would require electrical appliance manufacturers, power suppliers and electricians to work together and agree on the changes for the system to work safely.

## 3. What role do standards play in health?

There are a number of standards within the health sector. We count on standards of practice and approvals to keep New Zealanders safe through a safe health system. For example, we expect that approved drugs have been tested and proven to be safe and effective.

Whilst systems to ensure that the practice of healthcare is safe and effective have been in place for some time, standards around the information used in healthcare are relatively recent. They have come into being as a result of changing technologies and changes in the way healthcare is delivered. They are designed specifically to support the increasing need to safely and securely exchange an increasing variety of information detailing patient treatment and care needs between various healthcare providers.

Successful information exchange requires not only the existence of a physical technical connection between systems, but also that the meaning of the information being exchanged is not lost or degraded. In other words, semantic interoperability is an absolute requirement of a modern health system and one which can only be accomplished with the universal adoption of appropriate standards.

## 4. Foundation Principles for Standards

The International Organisation for Standardisation (ISO) states that ISO standards are developed according to three principles:

- **Consensus:** the views of all interests are taken into account: manufacturers, vendors and users, consumer groups, testing laboratories, governments, engineering professions and research organisations.
- **Industry-wide:** global solutions to satisfy industries and customers worldwide.
- **Voluntary:** international standardisation is market-driven and therefore based on voluntary involvement of all interests in the market-place.

Standards New Zealand follows the ISO principles and their model of standards development.

In the context of health, consideration needs to be given to the following:

- the development process is inclusive and all affected parties are given fair opportunity to provide input into the standard's development
- the process is transparent with the selection criteria for solicited input being clear and public. A formal process is followed for the input given, and the effect of all input is clearly laid out and public
- the development of the standard is necessary. Compliance with standards usually involves change costs. These must be justified by benefits
- the standard developed is fit for purpose. Before final approval, a standard must be demonstratively implementable
- the standard is safe for use in health.

Some standards may be approved on the basis of clinical evidence and/or patient safety requirements. An example of this is the identification elements on hospital wrist bands in the UK. In this case clinical research evidence, rather than consensus criteria was used.

## 5. Governance of Health Information Standards: a potted history

Prior to 2003, all information standards, including health information standards, were developed through Standards New Zealand, the main standards development body in New Zealand.

In 2003, the Health Information Standards Organisation (HISO) was set up as a Ministerial Committee to lead the development and implementation of health information standards in New Zealand, with the aim of improving health outcomes and safety through a coordinated, consistent approach. It was established by the Minister of Health in response to recommendations in the WAVE (Working to Add Value through E-information) report which looked at the information infrastructure needed to achieve better integration of health services.

In 2005, the Health Information Strategy Action Committee (HISAC) was formed as a Ministerial Committee to provide to the health and disability sector, governance and oversight of, and leadership for the implementation of the Health Information Strategy for New Zealand (HIS-NZ). Standards development was a vital part of this strategy, and in response, HISO was re-formed as a subcommittee of HISAC, and its focus shifted towards the 12 Actions Zones underlying the strategy.

## 6. Governance today

In late 2008, HISAC was reformed as the Health Information Strategy Advisory Committee and responsibility for the activities of HISO moved into the Information Directorate of the Ministry of Health. As a consequence HISO was renamed the Health Information Standards Office and the HISO subcommittee was disestablished, and a new overarching governing body for health information standards (the Health Information Standards Governance Group) in New Zealand was proposed. Its role is to provide direction on the standards to be developed via HISO, advise on, and recommend to the Ministry, the way forward in relation to these standards, their development, validation, implementation, approval and on-going maintenance.

## 6.1. HISO

The Health Information Standards Office is the operational element of standards development. The Office works with projects which require standards development, on an advisory basis, and will assist the proposed Health Information Standards Governance Group by:

- providing secretariat services
- identifying relevant international standards for adoption or adaptation for use in New Zealand
- preparing proposals for required upgrades to existing health information standards and for the development of new health information standards
- facilitating and supporting the development of sector-wide standards for the Group's validation and approval
- publishing approved standards
- advising the Group about issues of standards compliance.

## 6.2. Proposed Health Information Standards Governance Group<sup>1</sup>

The make up of the proposed governance body will comprise groups from across the healthcare environment. The Group is to have representative from each of the following stakeholders, with the Ministry's Health System Interoperability and Standards Manager providing the Chair:

- The Medical Council
- The Nursing Council
- Chief Medical Officers Forum
- DHB CIO Forum
- Accident Compensation Corporation
- Primary Care Information Management Group
- Health Informatics New Zealand Executive
- NZ Health IT Cluster
- Consumer representative

## 7. How we work

The development of standards must be an ally for progress rather than a hindrance. As such, whilst the development processes must preserve the principles of balanced input, independence and openness, they must also be as responsive and nimble as possible. This guiding principle, together with early engagement and collaborative working between HISO and standards sponsors, is at the heart of the recent review of standards development processes. The aim is to achieve responsiveness and nimbleness of process through different ways of working, making the most of people's time and available technologies.

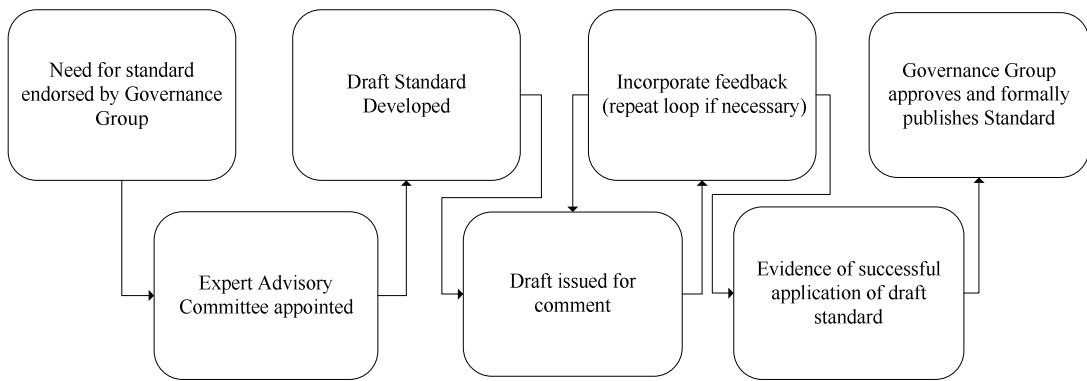
While the initial development of a standard can, and should, occur because a need has been identified by a particular project, it should be recognised that, once developed, standards require regular and in some cases scheduled maintenance to remain fit for purpose. This maintenance responsibility must reside with someone who is positioned to evaluate the standard and initiate change when necessary.

## 8. Work Programme

Details regarding the state of standards approved, in progress, and proposed are included in the accompanying presentation.

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<sup>1</sup> Governance arrangements will be finalised once decisions arising from the Ministerial Review Group report '*Meeting the Challenge*' are made. The Report is available at <http://www.beehive.govt.nz/release/ministerial+review+group+report+released> [last accessed: 26 August 2009]



**Figure 1 - High level standards development process**