

# The primary health care information environment in New Zealand

**Steve Creed**

*Outcomes Performance Systems, Health and Disability Systems Strategy Directorate  
Ministry of Health, Wellington, New Zealand*

## Abstract

*This paper describes the approach taken to identifying the current information environment in primary health care and further describes a development approach to improving the information environment to help achieve the goals of the Primary Health Care Strategy.*

## 1. Introduction

Through a process of international literature review (see Appendix 1) and sector consultation (refer to the “The current information environment in New Zealand” section of this document), the Ministry of Health led Key Directions project team responsible for the development of “Primary Health Care Strategy: Key Directions for the Information Environment” [1] has found that the primary health care information environment in New Zealand is not fit for its purpose.

The “health care information environment” is the collective information capability – people, processes, and technologies – used by all people engaged in the health care system to make decisions and to act effectively to support the health and wellbeing of themselves, others, and communities.

Broadly speaking, the finding was that the current health environment must be changed as it is currently a patchwork of fragmented systems designed to support episodic events that make it difficult to co-ordinate patient care and to dependably identify and subsequently deliver appropriate care to individuals and populations.

## 2. Key Directions

The brief for the Primary Health Care Strategy was:

Primary health care services will focus on better health for a population, and actively work to reduce health inequalities between different groups. (Minister of Health 2001). [2]

To achieve this, the Primary Health Care Strategy supports a changing health system, one better suited to disease and injury prevention and supporting peoples’ wellbeing. The Primary Health Care Strategy as summarised in *Primary Health Care Strategy: Key Directions for the Information Environment* seeks to [3]:

- Increase access to primary health care services.
- Integrate a population health approach into how we plan and deliver care.
- Enable health education and prevention.
- Co-ordinate care across service areas and teams.
- Enable collaborative responses to the health needs of the community and people.

The *Primary Health Care Strategy: Key Directions for the Information Environment* sets out the following regarding an evolving primary health care system:

An evolving primary health care system requires a responsive and connected information environment that enables people to take informed action to improve health and wellbeing. Primary health care participants include individuals, whanau, families, communities, health providers, Primary Health Organisations (PHOs), District Health Boards (DHBs), non-government organisations (NGOs) and government agencies. The information environment should also facilitate the co-ordination of activities and collaboration between participants.

Primary health care participants need to know what works well for populations and individuals and what does not. We need to share our experiences with others who are responsible for the health of similar populations, and we need a way to see people in their cultural, social and physical contexts in order to better tailor their health care.

### **3. The Current Information Environment in New Zealand**

The sector consultation for this investigation was conducted in two phases. In November and December 2006, workshops and discussions involving a broad range of primary health care participants (note a) explored what an information environment needed in order to achieve the goals of the Primary Health Care Strategy. A policy consultation document was developed and discussed in workshops during May 2007.

In late 2006, the New Zealand Ministry of Health (MoH) also commissioned Synergia Ltd to survey the primary health care sector seeking examples of innovative use of information. From the forty-three responses, eight initiatives were identified for their potential to illuminate the five capabilities identified above as components of the future shape of primary health. The survey was expected to enable a better understanding of existing primary health information capability and, in turn, inform a more coherent developmental approach for the sector as a whole.

The findings from the workshops led to the development of five key capabilities needed for a good information environment. Pockets of excellence can be demonstrated for each of the five key areas, but these examples are scattered throughout the country. Sector consultation suggests that there is currently a lack of capability across the primary health care sector to provide required interventions dependably and equitably to all populations. The specific areas of weakness include:

1. Information systems continue to support and encourage disconnected episodic care delivered by individual practitioners as do the methods by which the MoH monitors care delivery.
2. It is difficult to determine how investment in health services is impacting on disease burden in New Zealand and whether that investment is in the areas of greatest potential gain.
3. Information systems continue to be developed in silos resulting in inefficiency and difficulty in co-ordinating and integrating care. The fragmentation of the systems also means that decision-makers at all levels are engaging in discussion and planning from different sets of data.
4. Funding models and approaches are blunt reflections of population health need rather than methods that bring into consideration the specific population risks, disease burden and care requirements.
5. There is insufficient information for good national, regional, district and local decision-making on how delivery should be configured and funded to achieve the greatest health gain for specific populations.
6. Health system performance is limited to a narrow view of the technical efficiency of the implementation and operation of the Primary Health Care Strategy with little information on allocative efficiency.
7. Population health capability – the ability to see patterns across a population, relate the patterns to the individuals and to do so over time.– is fragmented and limited to some PHOs, which have been early developers/adopters of key aspects of required information systems.
8. Risk of exacerbating health disparities through disproportionately low investment in information systems supporting health care as smaller PHOs have limited resources to spread between the accountability and health care information requirements. Accountability requirements, which are fundamental to financial viability, will have first call on investment focus.
9. Providers are not supported by the information environment to target interventions and track outcomes for at risk populations.

10. It is not transparent to providers or the wider health sector when the highly cost effective interventions are not being made dependably.

These weaknesses result in:

- Reinforcement of episodic and disjointed care rather than the enablement of effective co-ordination of care because health care providers cannot electronically share information and patient information is not reliably available across care settings.
- Reduction of quality and safety of care because of limited access to fundamental patient information when an individual presents in a setting other than their regular general practice (eg, after-hours service or a helpline).
- Potential to misguide investment in primary health care services at the national, regional and local levels due to incorrect or inadequate information about population health needs.
- Hindering of performance improvement and collaboration by clinicians because of the inability to do comparative analysis and profile patterns of risk and disease across populations at local, regional and national levels.
- Perpetuation of inefficiencies and the potential for errors from re-entering individuals' health information in different care settings, and making decisions without key information.

#### **4. The New Information Environment**

The *Primary Health Care Strategy: Key Directions for the Information Environment* sets out the following regarding the new information environment:

The Key Directions project seeks to describe an information environment that is:

- organised around the needs of people
- flexible enough to meet local preferences
- dependable and maintains high-quality standards
- empowering for all its users.

These four qualities are encapsulated in the Key Direction project's five capabilities:

1. Support for self-care by individuals, whanau, families and communities.
2. Identifying and responding to population health needs.
3. Supporting tailored care.
4. Enabling the co-ordination of care and integration of services.
5. Improving performance and evidence-based decisions.

The document goes on to highlight that the heart of the information environment lies in supporting self-care of health.

Self-care of health is about individuals, whanau, family, community and health providers achieving their potential, making decisions, maximising their choices and being part of the consultative process in relation to their health and wellbeing. It is also about health professionals and carers understanding the person in relation to the person's context and the populations to which he or she belongs.

Importantly, self-care moves the health professional's role from one of director towards that of facilitator.

## 5. What Will be Different if the Key Directions Capabilities are Met?

If the Key Directions five capabilities are met, then a range of benefits will result.

Individuals will be able to:

- Electronically access elements of their own health records.
- Determine their progress in health treatment plans or self-care goals.
- Have access to more information to make decisions.
- Develop skills to meet personal health goals.
- Benefit from a reduced need to repeat tests or information for different providers.
- Benefit from critical information being available in an emergency to aid the delivery of appropriate and effective care.

Communities/families/whanau/iwi will be able to:

- Find out more about the health of their groups.
- Determine possible solutions.
- Collaborate more effectively and achieve better wellbeing.
- Encourage a focus on the wellbeing of whanau, families and communities.
- Increase preventive care opportunities for different community groups.

Health professionals/practices/researchers will be able to:

- Find best practice evidence to support clinical interventions more easily.
- Evaluate and monitor the performance of health services.
- Improve the quality of services through better supported clinical governance.
- Determine more insightful research questions for future health gains.
- Reduce the duplication of effort by enabling data to be captured once and then securely and appropriately assessed where and when it is needed.
- Reduce costs in time and resources for data collection and submissions.

Government agencies/NGOs/community-based services will be able to:

- Better identify population needs.
- Collaborate more effectively to remove barriers in achieving best care.
- Assess more effectively whether what they do is making a difference to health outcomes.
- Share their experiences with others more effectively.
- Reduce administrative waste and duplication of effort in the system.
- Improve accuracy and efficiency of payments.
- Improve the capability to manage and monitor contractual agreements.
- Improve prioritisation of resources

## 6. Privacy and Security

The privacy and security of health information in the health and disability sector is vital. Most health information is collected in a situation of confidence and trust, often in the context of a health professional/patient relationship. Maintaining this confidence and trust is critical. Much health information is also highly sensitive and could include details about an individual's body, lifestyle, emotions, behaviours and practices, which are particularly intimate, or which may, if improperly disclosed, be misused.

A health provider, or other providers treating an individual, may require health information long after the information has ceased to be needed for the original episode of care and treatment and it is therefore important to establish protocols regarding how this information may be used.

Those who share information in the health and disability sector need to be able to do so in a trustworthy and secure environment.

## 7. Conclusion

Through a process of literature review and iterative sector consultation involving over 100 organisations, the Key Directions project team has identified the shortcomings of the current primary health care information environment and has described a development path for investment in the information environment. The author recommends that the interested reader access the *Primary Health Care Strategy: Key Directions for the Information Environment* document available on the Ministry of Health's website (note b).

## 8. References

- [1] Ministry of Health. Primary Health Care Strategy: Key Directions for the Information Environment. Wellington: Ministry of Health; 2007
- [2] Minister of Health. The Primary Health Care Strategy. Wellington: Ministry of Health; 2007.
- [3] Ministry of Health. Primary Health Care Strategy: Key Directions for the Information Environment. Wellington: Ministry of Health; 2007 (page 1)

## Notes

[a] Defined in *Primary Health Care Strategy: Key Directions for the Information Environment* as individuals, whanau, families, communities, health providers, Primary Health Organisations (PHOs), District Health Boards (DHBs), non-government organisations (NGOs) and government agencies.

[b] <http://www.moh.govt.nz/moh.nsf/indexmh/phcs-key-directions-information-environment>

## 9. Appendix 1: Literature Reviewed for the Key Directions project

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