

Executive Summary - HCN Business Case

Purpose of this Document

The Business Case and its Executive Summary have been developed at the behest of the Australian Health Ministers' Conference to justify the establishment of and investment in the Australian Health Communication Network (HCN).

Why is the HCN Relevant and Important?

The need for accessible, timely, accurate and comparable information to improve and manage the health system grows more urgent as increasing pressures fall on the healthcare system to deliver more care, of a higher quality, more equitably and with progressively fewer dollars.

Improving the management of health information is one of the most critical issues facing the health care sector. The current health information systems cannot transport the relevant information to its point of use in an acceptable time frame. Proposed major structural changes to enable increases in the efficiency and effectiveness of the health system (e.g. casemix based management and funding, funder / provider splits etc.) require relevant and timely information to enable the implementation and management of these changes.

There is also a need to make clinical information more readily available to care providers at the point of care delivery. This imperative arises from the increasing complexity of medical practice, the trends to shorten the stay of patients in hospital and the increasing need to provide continuity of care across health segments.

In 1991 the then NSW Minister for Health, Mr Peter Collins said the '... Health System is operating in the dark' and little has changed since he made the remark.

In response to these issues, the Australian Health Minister's Conference in September 1991 requested that a strategy be developed to improve information management within the health sector and to identify the best way to use modern technology to achieve that improvement.

This led to the development of the HCN concept and to the formation of a project team to articulate and refine the concept and to prepare a business case to justify its development.

The essence of the HCN concept is that an HCN Agency be established, with the overall brief of coordinating the use of telecommunications used for information transfer within the Australian health

sector. In doing this the HCN Agency will enable the vision outlined in the following section, and for a relatively small investment provide very considerable benefits for all recipients of health care services.

The Health Communication Network Vision

The Australian Health Communications Network (HCN) is an innovative approach to the use of modern information and communications technology to achieve two major objectives. These are:

1. Improvement in the quality of patient care delivered by the Australian Health System through the provision, at the point of care, of comprehensive patient centred information.
2. Improvement in the efficiency and effectiveness of the Australian Health Care System through the provision of timely, accurate and comparable management and clinical information to those who need it.

To achieve these objectives a communications network must be established which is dedicated to the service of the Health Sector by providing the distribution vehicle for authorised, private and secure information in the form of voice, data and images.

The business case that argues that this vision is best achieved by using proven commercial communication technologies to obtain major cost reductions in the processing of the simple transactions that take place in the health system (e.g. Specialist referrals, discharge letters, Medicare claims processing etc.). These savings can then fund the development of innovative point of care information exchange which will produce the major quality of care improvements over time.

One can imagine that in 3-4 years time the care provider can via the HCN have available:

- The patient's relevant clinical history.
- The letters written by the patient's specialists on clinical progress.
- The patient's current medication profile.
- The results from the tests ordered last week on the patient.
- Access to clinical databases, literature and world experts on the patient's conditions.

In addition services provided from the network will include:

- The capacity to refer the patient to a specialist and attach relevant results.
- The ability to book the patient into the local outpatient department for review.

- The ability to create electronic prescriptions so when the patient goes to the pharmacist the tablets are ready and waiting.

In the background the network will provide services to facilitate the operation of the health system (via Electronic Data Interchange etc.) and information for use by the management of the system in the form of access to a range of information that will be provided by various third party providers and the State and Commonwealth governments. This information exchange will assist health service planning, hospital performance assessment and resource allocation processes.

A key aspect of the HCN, once implemented, will be to provide information and communication services to hospitals that can be integrated into the local point of care systems existing within those hospitals. This will mean that a HCN information services will be available, not only to the practitioners in their offices, but also to clinicians working in Australia's hospitals. As the infrastructure develops within the health delivery system to support this type of communication, the linkage of the care for the patient from the hospital to the community will be greatly enhanced.

In the longer term the network can be envisaged as providing information services directly to patients (e.g. dial up information on medications and disease, health advice etc.) and to enable such things as remote medical consultation and remote health care treatment using videoconferencing, telemedicine and other evolving technologies.

As can be seen from the vision outlined above, The Australian Health Communication Network will provide the framework within which these joint objectives of improved patient care and better management of the health system can be achieved in the current and projected economic environment.

Restructure and redesign of the health system is required to meet the complex challenges identified above. The key to this restructure lies in both operational support systems within health service delivery units, but even more in ensuring that the national information resources of the health system are effectively delivered to those who need them in the most complex and expensive areas of care delivery.

Is the HCN Economically Justifiable?

In analysing the economic justification of the HCN there are two aspects that should be considered; the economics of the entity that will be established to develop and manage the HCN; and the economic benefits to be derived by the health system and the Australian public as a whole from implementing the HCN.

The entity required to implement the HCN and to manage its ongoing development does not need to be large in the first instance (10-15 staff for the initial development phase and reporting on the outcome of pilots) and at full implementation will probably not grow to more than 40 staff. Although requiring some seed funding from the Commonwealth for 2-3 years, it will be able to become self funding though raising charges for specific services provided to network users. Over time, with appropriate charge rates being set, it is probable that the initial seed funding could be returned to the Commonwealth. This self funding scenario is achievable from cost savings arising from the reduction in administrative costs by the use of electronic interchange (EDI) as outlined above.

More broadly, the potential benefits derived from implementing the HCN are very large indeed. In patient terms there is the prospect of enhancing both the quality of the care they receive and the efficiency with which it is delivered.

In financial terms, savings of many millions of dollars a year will result from moving some of the major paper-based claim systems (as operated by the private health funds and the government) onto the network. Transaction costs, and there are many millions of them, will fall from dollars to cents,

These savings, enabled by the HCN, will be ongoing and, on best estimates, can amount to billions of dollars over the next decade. For example, the electronic processing of all Medicare and PBS claims on the HCN could translate into savings in the order of \$1.0 billion per year. (See sections 4.0 and 5.0 for further details).

With the HCN therefore financially justifiable, and with the prospective savings being so large, it becomes almost mandatory to proceed, given that these savings can be made while also enabling a substantial improvement in the quality of care. The potential value of creating exportable services and technology products for Australia is an additional benefit which also should not be ignored.

In summary, the business case concludes that the HCN practical and feasible. It is economically justifiable and there is a high likelihood of there being very substantial initial and strategic benefits for the whole community. In addition, as the HCN uses currently available technologies, its implementation carries very low technical risk as well as low organisational risk.

What are the Risks and Problems Associated with the HCN

The Project Team and Steering Committee have considered the barriers that may exist to the implementing the HCN. Our analysis indicates that there are no significant technical issues which will impede implementation. The areas where there is potential difficulty are largely related to issues of acceptance and viability, privacy, security and access to the HCN. Our analysis and expert advice

indicates that the privacy, security and access issues are manageable and will not in themselves impede successful implementation.

The issues relating to acceptance and viability of the HCN will largely depend on the organisational structure and business model of the entity chosen to implement the HCN and its ability to balance the:

- vested interests of the diverse set of stakeholders in the health system;
- commercial interest of the private sector with the government responsibility to provide efficient, effective and equitable health care.

Section 6 of the business case addresses these issues in detail and section 7 recommends approaches for issues management.

As part of the relationship management process, considerable consultation has occurred between the project team and key stakeholders. Consultation has included numerous presentations, meetings and workshops with a wide range of people (GPs, clinicians, hospital executives, regulators) and professional organisations within the health system. In addition reference panels were formed to reassess initial conclusions and to participate in the project. To encourage consultation and provide a mechanism for disseminating information, a public relations strategy was also developed and has been effectively implemented.

Recommended Next Steps

On the basis of the work done in developing the business case and the consultation held Australia wide the Commonwealth/States Working Party recommends the following next steps:

1. The business case, as presented, be accepted and endorsed as the basis of a national health information management strategy.
2. The proposed extension of the pilot studies be approved and endorsed.
3. Funding to be made available for twelve months to formally establish the HCN. The requirement for this activity is \$3.0M (excluding funds for additional pilot projects).
4. Financial support of \$12.0M be provided over a period of three years after the establishment of the HCN to underwrite the evolving viability of the HCN.

5. The Joint Commonwealth/States Working Party be directed to determine the State/Federal contribution of funds.
6. The Joint Commonwealth/States Working Party be directed to establish and commission the operation of the HCN in accordance with the Business Case and an implementation schedule to be developed on the basis of the Business Plan.
7. In order to assist in the attainment of a critical mass of the HCN, Health Ministers commit health and related agencies to use the HCN for exchange of appropriate information.
8. Health Ministers be given progress updates on the project on a six monthly basis.

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