



New Zealand Nurses Organisation

Submission to the Digital Development Group, Ministry of Economic Development on the

Draft Digital Strategy 2.0

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Inquiries to: Marilyn Head
New Zealand Nurses Organisation
PO Box 2128, Wellington
Phone: 04 499 9533
DDI: 04 494 6372
Email: marilynhead@nzno.org.nz

EXECUTIVE SUMMARY

1. The New Zealand Nurses Organisation (NZNO) welcomes the opportunity to contribute to the draft Digital Strategy 2.0, developed by the Ministry of Economic Development.
2. NZNO is a Te Tiriti o Waitangi based organisation. It is the leading professional body and nursing union in Aotearoa New Zealand, representing over 41 000 nurses, midwives, kaimahi hauora, students, health care assistants and other health professionals. Te Runanga o Aotearoa NZNO comprises Māori membership and is the arm through which our Treaty based partnership is articulated.
3. NZNO has consulted its staff and members for this submission.
4. NZNO is interested in the Digital Strategy for a number of reasons, but primarily because of the impact that information and communications technologies (ICT) has on members' work and its, as yet, unrealised potential to deliver better, innovative and more cost-effective health services.
5. NZNO strongly supports a robust, government-driven coordinated strategy to align the simultaneous delivery of the key components of essential ICT infrastructure: equitable access to good connectivity, good training and education to support the confident use of ICT; and good data.
6. NZNO believes progress towards a sound national infrastructure foreshadowed by the first draft and final Digital Strategy (2005) has been inconsistent and patchy. While good progress has been made in some areas – digital broadcasting, for instance - lack of leadership and commitment has been evident in others. Despite the Health Information Strategy and the work of the Health Standards Information Organisation, ICT in the health sector remains fragmented and uncoordinated and does not support either efficient or safe clinical practice.
7. Disparities in access to ICT services will increasingly exacerbate other disparities, including access to health services unless serious attention is given to resourcing national ICT infrastructure and capability.
8. NZNO strongly supports the Draft Digital Strategy 2.0 and makes the following specific suggestions:

- that priority be given to investment in publicly funded regional highspeed broadband as well as urban fibre loops; and
- that the Ministry of Health ensure there is a one ICT solution to standardize data collection and manipulation throughout the health sector.

ON CONNECTION

9. Equitable access to a robust ICT infrastructure in our geographically diverse and relatively sparsely populated country requires public rather than commercial investment. There are still regions of New Zealand, like the East Coast, Northland and the West coast where ordinary telecommunication services are expensive and unreliable. The Digital Strategy should be aimed at using ICT to reduce rather than exacerbate regional, social and economic divides by ensuring that high-speed connectivity is extended to the regions.
10. NZNO strongly supports high-speed broadband urban fibre loops and believes the connection goal of 1GBps is appropriate and sufficient to enable interconnection and greater collaboration between hospitals, medical centres and primary health care centres. However, while such connectivity will allow urban and large organisations to work faster and more efficiently, the greatest potential and benefit in the health sector lies in network connection to rural areas where there is the greatest disparity between services available in cities and those in the country. To use a clinical analogy, urban loops are the 'vital organs' of the ICT body, but it is only when the flow of information is taken to the extremities that the 'body' is fully operational.
11. Recruitment and retention of clinical staff in rural areas is always difficult and burnout and professional isolation are significant causal factors. A further consideration is the difficulty in meeting the recertification requirements for an Annual Practising Certificate introduced by the Health Practitioners Competence Assurance Act (2003). Rapid advances in medicine and clinical practice require continual professional development, peer review and training. ICT can provide a simple solution, given an adequate connection speed. Similarly it can be used to deliver more health services, such as tele-surgery and remote in-home

- monitoring, quickly and efficiently. Moreover there is an *expectation* that the latest services should be instantly available, regardless of location: consumers are more informed and aware than ever before.
12. Good regional and rural connection speeds are also needed to deliver a number of Ministry of Health's initiatives such as the Primary Health Care and the Well Child framework. Though 71% of New Zealand's population live in the main urban areas, over a million people live in rural and remote areas and in or near small regional centres (Statistics NZ, 2001). Moreover Aotearoa's economy is largely dependent on rural production and regional activities such as agriculture, forestry and tourism. Investment in highspeed rural broadband will therefore have a *greater* economic impact.
 13. Accordingly, NZNO recommends that publicly funded highspeed broadband infrastructure to the regions should be a connection priority, since urban connectivity demands are likely to be met through normal commercial activity.
 14. NZNO notes that wireless connection is an attractive option for some regions and would like to congratulate the Ministry of Economic Development on their foresight in reserving spectrum for this purpose.
 15. Health is a driving force of many key international e-research and technology projects, such as the Physiome Project led by Professor Peter Hunter, director of the Bioengineering Research Institute at Auckland University; and scientific research has driven much innovation in the health sector – magnetic resonance imaging, for instance, arose from a radio astronomy technique. However, most 'state of the art' research facilities are beyond the capacity of any one country to fund. International collaboration, with access to data through advance research networks, is how modern research science works. Facilitating e-research and upgrading Aotearoa's international connections are essential for researchers to be able to contribute to and participate in global research.

ON CONFIDENCE

16. NZNO agrees that developing digital literacy and confidence in the workplace is a priority and that there is a need for skilled ICT practitioners and for training both

- managers and the workforce. Some DHBs have introduced electronic incident reporting, for instance without due attention to the training or time needed to master it, and without trialling to consider whether the system was 'nurse-friendly'. Subsequently up to a 50% *decrease* in reporting was noted in some areas, which is a very negative result since without accurate data, efforts to analyse incidents and introduce better clinical practice may be wasted, or even unsafe. Nurses *want* to work as efficiently as possible, but their primary focus is on the patient care, not computer systems. Unsafe practices such as several nurses using the same login occur when the system does not suit the workflow and becomes an extra burden rather than a timesaver. Similarly even the best system will fail when inadequate time and preparation is given to training.
17. Nursing encompasses a huge range of activities and is practised in diverse settings. The nursing workforce, at least one third of which are overseas trained or born, is highly mobile. Nurses moving between different practise areas, District Health Boards (DHB), and employers encounter different IT systems as every DHB, Responsible Authority, Medical Institute and primary health care agency has its own, often exclusive and proliferating, IT system.
 18. There are no comprehensive standardised systems for collecting data, even for seminal events, which is wasteful, time-consuming and unsafe. The longer it continues the more difficult and expensive it is for both large and small organisations to dismantle systems which are inherently incompatible.
 19. The Health and Disability Commissioner (HDC) has pointed out several times the risk to public safety when patient information between different health providers is not fully integrated. A most notable case concerned James Whakaruruhau, where the Commissioner for Children stated that "there was poor communication between practitioners. Information was not passed on or was incomplete" (Hon Roger McClay, 2000).
 20. Another was a case fraught with communication issues between an Emergency Department and Primary Care where the HDC stated "Handing care between primary and secondary care is a crucial step in ensuring safe/quality care. It is also a vulnerable step which if not carefully managed is an area that can cause misunderstandings and sub-standard care." (HDC, 2007).

21. As recently as this month, it was made clear at an Emergency Department Services Workshop with the Ministry of Health, that the sector is demanding a fully integrated IT system is imperative to improve patient outcomes.
22. Clearly the Ministry must urgently ensure a coherent ICT system across the health sector, but particularly across the 21 DHBs. Any system that is put in place must be robust, reliable, trialled and appropriate to all providers. There must be ability for providers to communicate directly with each other and share information.
23. Serious consideration is also needed to address issues of confidentiality, security, human rights, cultural safety and monitoring of this complex system. Some of these issues are discussed more fully in NZNO's submission to DHBNZ on *Seeking A System Capable Of Delivering An Ideal Interface Between The Public Requiring Urgent Health Care And The Health System*, (NZNO, 2007).
24. A fully integrated system also means ensuring access to the right equipment. Currently there is a lack of physical ICT resources, particularly in the primary health care sector, which undermines government health and disability strategies. District nurses, for instance, do not have hand-held computers for point of contact records giving rise to duplication and/or incomplete digital records.
25. An integrated system would also facilitate roll out of proven innovations and greater collaboration within regions and nationally. The mental health teleconferencing facility in Queenstown, for instance, operates very successfully, but there is limited access to it. A similar facility at Invercargill hospital would allow doctors working in isolation in the region to collaborate with consultant medical staff.
26. Teleconferencing facilities are essential if collaboration is to extend beyond email exchange. Collaboration with Medical Schools and Educational and Research Institutes is as important as collaboration with healthcare providers.

ON COLLABORATION

27. NZNO welcomes the priority given to collaboration with Māori and to helping communities build capability and share knowledge. Both elements will be useful in supporting the Primary Health Care strategy (2001) which emphasises multi-disciplinary approaches to services and decision-making and supports the development of services by Māori and Pacific providers to address inequalities in health in these communities.
28. The Raranga Tupuake Māori Health Workforce Development Plan, directed towards the incorporation of Māori traditional healers as part of Te Whare Tapa Wha model, is one such project, but services such as these need to be supported by and integrated with the rest of the health sector if they are really to address inequalities of health.
29. NZNO notes with concern, therefore, significant disparities in the health and disability workforce where those working in the largely privatised Aged Care sector and with Māori communities have inferior and varying pay and conditions which can be reflected in the quality of care afforded. Such disparities are unacceptable and it is imperative that ICT capability is developed at the community level.
30. Similarly, the thousands of voluntary family and whanau carers who provide information, advice, and support networks to various health and disability groups throughout Aotearoa, many of which are represented by the NZ Carers, need access to ICT training, tools and support to enable their networks to function effectively.

CONCLUSION

31. In conclusion NZNO welcomes and supports the draft Digital Strategy 2.0 and trusts that it will be properly resourced.
32. NZNO recommends that you:
 - **note** our support for urban fibre loop connections of 1GBps;
 - **agree** that investment in publicly funded regional highspeed broadband is necessary;
 - **note** our support for aggregating public sector demand in health and education;

- **note** currently 21 different IT structures in DHBs is significantly hindering collection of data and roll out of innovative health initiatives;
- **note** the lack of physical ICT resources in the primary health care;
- **note** electronic systems in the health sector, for patient records for example, need to be developed as part of the workflow, not as an “add-on”;
- **note** the need for ICT training in the health sector; note the need for development of IT systems which are user-friendly
- **Note** our support for collaboration with Maori and communities and facilitating digital literacy at ‘grassroots’ level.

Marilyn Head

NZ Nurses Organisation

PO Box 2128, Wellington

Phone: 04 499 9533

DDI: 04 494 6372

Email: marilynhead@nzno.org.nz

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