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<http://www.productivity.govt.nz/make-a-submission>

Tēnā koe

### **Technological change and the future of work**

The New Zealand Nurses Organisation *Tōpūtanga Tapuhi Kaitiaki o Aotearoa* (NZNO) welcomes the opportunity to provide feedback on the Productivity Commission's April Issues paper on technological change and the future of work. We have consulted with NZNO Colleges and Sections and received feedback from the College of Critical Care Nurses.

NZNO notes the significant impact informatics and technology has on the provision of healthcare and it is an area that will continue to grow at pace. The focus of the Productivity Commission's April issues paper, however, is on the commercial and business sectors and omits any reference to the health sector or its workforce. The nursing workforce is the largest health professional group in New Zealand, comprised of over 58,000 nurses.<sup>1</sup> The potential of technology to improve access to health services, reduce inequalities in health outcomes and address Māori health disparities is significant.<sup>2</sup> Gains in overall population wellbeing in turn benefits the productivity of New Zealanders.

Nurses use technology every day in the course of their work across all practice areas, in community, rural and hospital settings. Some examples of technologies used by nurses are tele-nursing, electronic prescriptions, intravenous infusion pumps, electronic monitoring systems, telemetry, digital blood glucose monitoring, insulin pumps, point-of-care diagnostics, and databases to support

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<sup>1</sup> New Zealand's nursing workforce the largest it's ever been [Media release].

<https://www.health.govt.nz/news-media/media-releases/new-zealands-nursing-workforce-largest-its-ever-been>

<sup>2</sup> Honey, M., Carr, R., Irvine, D., & Westbrooke, L. (2010). Harnessing technology to benefit nursing. *Nursing New Zealand*, 16(10), 24-5.

evidence-based practice. Emerging technologies that will further change the practice of nursing are genetics and genomics, less invasive and more accurate tools for diagnostics and treatment, 3-D printing, robotics, biometrics, electronic health care records, and computerised decision support tools.<sup>3</sup>

Intensive care settings are constantly upgrading and expanding the use of technology and requires nurses to stay abreast of advances in technological equipment. It is important to note that technology cannot replace the bedside vigilance provided by nurses, nor does it have the capability to respond to patient changes in condition. Like nurses in other clinical settings, critical care nurses will move and progress with technology rather than be replaced by technology.

The nursing workforce is an aging workforce and New Zealand faces a projected short-fall of 15,000 nurses by 2035.<sup>4</sup> Nurses continued involvement in the workforce as they age will require flexibility in how and when they work. While many nurses readily adapt to the use of new technology, new and emerging technologies arising in the health sector place increasing demands on nurses to upskill in areas they may not be familiar with. Investment in training as nurses adapt to new technological changes will be necessary. Providers of undergraduate nursing curricula will need to proactively create the educational models necessary to ensure their graduates are competent in this area.

The use of health related technologies is critical to improved health population outcomes, quality health care and health equity. However, nurses must be positioned as front-line decision makers involved in the design, development, purchase, implementation, and evaluation of information technology that supports nursing decisions and care delivery. We hope our feedback will contribute to the Commission's understanding of technological change and its impact on the nursing workforce in New Zealand.

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<sup>3</sup> Huston, C. (2013). The impact of emerging technology on nursing care: Warp speed ahead. *Online Journal of Issues in Nursing*, 18(2), 1. doi:10.3912/OJIN.Vol18No02Man01

<sup>4</sup> Nana, G., Stokes, F., Molano, W., & Dixon, H. (June 2013), *New Zealand Nurses: Workforce planning 2010-2035*. BERL: Wellington.

Nāku noa, nā



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### **About NZNO**

NZNO is the leading professional nursing association and union for nurses in Aotearoa New Zealand. NZNO represents over 52,000 nurses, midwives, students, kaimahi hauora and health workers on professional and employment related matters. NZNO is affiliated to the International Council of Nurses and the New Zealand Council of Trade Unions.

NZNO promotes and advocates for professional excellence in nursing by providing leadership, research and education to inspire and progress the profession of nursing. NZNO represents members on employment and industrial matters and negotiates collective employment agreements. NZNO embraces te Tiriti o Waitangi and contributes to the improvement of the health status and outcomes of all peoples of Aotearoa New Zealand through influencing health, employment and social policy development enabling quality nursing care provision. NZNO's vision is *Freed to care, Proud to nurse.*