

# Perception of health technologies' benefits increases with longer use

New research into nurses' use of, access to and understanding of digital health technologies shows some improvements have been made in the past three years but that more work needs to be done.

Canadian Health Infoway, CNA and the Canadian Nursing Informatics Association (CNIA) released the results of the 2017 National Survey of Canadian Nurses: Use of Digital Health Technology in Practice in mid-May. The survey builds on a similar one conducted by CNA and Infoway in 2014 and tracks progress made.

Between Jan. 6 and March 19, more than 2,050 Canadian nurses voluntarily completed the confidential online survey. Of those, about 1,340 work in direct patient care. Environics Research statistically weighted the results to match the 2015 Canadian Institute for Health Information regulated nursing workforce data.

"It is encouraging to see that since 2014, Canadian nurses are reporting that the longer they are using digital health technologies in their practice, the more they are realizing the benefits," said Susan Sepa, group director, clinical and change leadership, at Infoway.

Overall, more survey respondents in direct care reported they are providing better or much better quality of patient care since electronic record keeping was implemented (56%, up from 46% in 2014). Analyzing the survey results, Environics Research stated that nurses using electronic systems only are more likely to report they provide improved patient care (64%) than those using a combination of electronic and paper systems (54%). Those who have used electronic systems for less than a year are less likely to think the quality of care they provide is better or much better since the implementation.

Similarly, more respondents reported their productivity has increased or greatly increased since implementation (50%, up from 38% in 2014). Those using electronic systems only are more likely to report an increase in productivity (55%) than those using a combination of systems (47%). "Again, nurses who are new to the use of electronic systems (<1 year) are more likely to think their practice productivity has gotten worse since the implementation of electronic systems," the report stated. "This again suggests that there is a learning curve which may have a short term perceived negative impact on care before the full benefits are seen by nurses."

While CNA president Barb Shellian welcomed the news about those benefits, she has concerns that the 2017

survey continued to show that nurses in direct patient care report they are not being consulted about technologies before they are implemented.

In total, 42 per cent of direct care nurses reported being consulted a little, quite a lot or a great deal, a figure that remains unchanged from 2014. However, 44 per cent reported not being consulted at all in 2017 — an improvement from 58 per cent who reported this in 2014. Environics broke down these results to show that respondents in supervisory roles were more likely than direct care nurses in non-supervisory roles to report being consulted in the overall design and implementation process, as well as being able to provide input into the use of systems.

"To improve patient care further, [CNA] will continue to push for greater nursing input in the design and roll-out of digital health systems as a standard practice for coordinated team-based care," Shellian said.

One of the barriers to the success of digital health technologies is the continued use of a combination of paper and electronic tools reported by a majority of respondents, said CNIA president Peggy White.

While slightly more respondents use electronic systems (23%, up from 20% in 2014), about the same majority (55%, down from 56%) use a combination of tools. Environics reports that nurses in community-based care settings are more likely to use electronic systems only (34%), compared to those practising in hospitals.

"Multiple logins continue to be an area of concern," White said. While 22 per cent of respondents who use electronic record keeping have a single login to access systems, 52 per cent need two logins, 29 per cent need three and 11 per cent need four or more. "We [at CNIA] know that having to log in to multiple systems to access information for patient care is frustrating for nurses and adds time to their workload," she said.

"Together with our partners, the CNA and the CNIA, we're in the process of planning workshops to bring together nurses and nurse leaders from across Canada and across care settings to discuss the survey findings," Sepa told *Canadian Nurse*. "Once we have a good sense for what Canada's nurses think, we will be in a better, more informed position to consider policy implications and identify priorities."

The report is available at [cna-aiic.ca/DigitalHealth](http://cna-aiic.ca/DigitalHealth). ■

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