

Reflections on research

Role of oncology nurses in integrated knowledge translation

by Ghadah Abdullah and Dawn Stacey

Oncology nurses are expected to deliver patient care using the best available evidence and to engage in a continuous cycle of finding and applying evidence into practice (CANO, 2013). To support nurses to use evidence in practice, several organizations have developed evidence-based resources: for example, CANO's *National Chemotherapy Administration Standards* and the Oncology Nursing Society's (2013) *Putting Evidence into Practice* cards for evidence-based symptom management. However, barriers to using evidence-based resources or guidelines in clinical practice occur at the level of the practitioner, the organization, and the resources (Legare & Zhang, 2013). Common nurse barriers are negative beliefs, attitudes and values of evidence-based practice and inadequate knowledge, skills and confidence to use these resources. Organizational barriers include lack of authority or cooperation to change patient care, lack of access to individuals with expertise in implementation, and lack of clear mandate to use research in practice. Finally, evidence-based resources are not necessarily designed using formats sensitive to how nurses think and what nurses do.

To overcome identified barriers and support the implementation of evidence into practice, researchers are encouraged

to use integrated knowledge translation (iKT) or an engaged scholarship model (Bowen & Graham, 2013). iKT is a collaborative and participatory approach to conducting research in which researchers and knowledge users (e.g., oncology nurses) collaborate in the research process (CIHR, 2012). Knowledge users include, but are not limited to practitioners, policy makers, educators, decision makers, health care administrators, and community leaders. At a minimum, iKT requires that knowledge users are involved in shaping the research question, interpreting the study findings, and moving the research into practice (CIHR, 2012). But knowledge users may also be involved with making decisions about the research methodology, helping with data collection and/or tool development, and conducting widespread dissemination and/or application of the findings. Engaging knowledge users in meaningful ways from the start of research studies is more likely to produce findings that are relevant to and adopted by knowledge users (CIHR, 2013a; Jagosh et al., 2012).

An example of iKT approach is the Pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) project that was funded by a CIHR Knowledge to Action grant (Stacey et al., 2012). The overall aim of the project is to build an effective and sustainable approach for implementing evidence-informed protocols for nurses to use

when providing remote symptom management to patients undergoing cancer treatment. The research proposal was developed by researchers (Stacey, Bakker, Sabo, Harrison, Howell, & Kuziemsky) collaborating with knowledge users including practitioners (Chapman, Ballantyne, Cumming), health care administrators (Green, Syme), educators (Whynot, Skutlowski) and a manager (MacKenzie). The study is taking place within three oncology programs in three Canadian provinces. At each study site, a local team was established with researchers and knowledge users to guide the operationalization of the study including collecting the data, interpreting findings, and implementing interventions to overcome identified barriers.

The theoretical framework guiding this implementation study is the Knowledge to Action Framework (Graham et al., 2006). At the core of the framework is Knowledge Creation, a funnel leading to more tailored knowledge that is based on individual studies, then synthesized with systematic reviews and finally transferred into KT tools (Figure 1). For the COSTaRS study, KT tools are the 13 remote support symptom protocols that were each developed based on several available symptom specific clinical practice guidelines including the ONS *Putting Evidence into Practice* (Stacey et al., 2013). The approach used on the COSTaRS study hails directly from the outer Action Cycle of the framework. It started with the recognition of a problem by the knowledge users (e.g., patients with cancer experience potentially life-threatening symptoms and often these symptoms occur at home), followed by identification, review, and selection of knowledge relevant to the problem (e.g., symptom protocols). Based on this framework, focus groups and surveys with nurses were conducted to determine what was necessary to adapt the protocols to the local context and identify barriers to them being used in clinical practice (Stacey et al., 2013). Subsequently, the protocols were adapted and interventions were tailored to overcome known barriers. As one example to address

About the authors

Ghadah Abdullah, RN (Saudi Arabia), PhD Candidate, School of Nursing, Faculty of Health Sciences, University of Ottawa, Nursing Best Practice Research Centre, Ottawa, ON

Email: gabdu031@uottawa.ca

Dawn Stacey, RN, PhD, CON(C), Associate Professor, School of Nursing, Faculty of Health Sciences, University of Ottawa; Scientist, Ottawa Hospital Research Institute, Ottawa, ON

Email: dstacey@uottawa.ca

nurses' inadequate knowledge and skills, 40-minute workshops were provided on how to use the symptom protocols (including role play exercises). The remaining elements of the Action Cycle include monitoring knowledge use, evaluating outcomes, and considering strategies for sustained knowledge. In the COSTaRS project, knowledge users are collecting data on use of the COSTaRS protocols and identifying strategies necessary to facilitate their sustained use (e.g., bolster education sessions, integration into the electronic health record, use in follow-up calls post-treatment). Knowledge users have had a chance to present the results at national conferences (CANO conference in 2013, Oncology Nursing Society conference in 2014) and co-author publications with the researchers (Stacey et al., 2013; Stacey et al., 2014). The researchers have benefitted from having input from this wide range of knowledge users.

In summary, oncology nurses have the opportunity to participate actively in shaping their patients' quality of care by participating not only in applying research,

but also by partnering to establish and/or implement evidence-based interventions suitable to their practice. Steps that researchers and knowledge users can use to create and sustain partnerships that take an iKT approach are outlined by Parry and colleagues (2006). ❏

References

Bowen, S., & Graham, I.D. (2013). Integrated knowledge translation. In S. Straus, J. Tetroe & I.D. Graham (Eds.), *Knowledge translation in health care: Moving from evidence to practice* (pp. 14-23). Oxford: Blackwell Publishing.

Canadian Association of Nurses in Oncology (2013). *National Chemotherapy Administration Standards*. Retrieved from http://www.cano-acio.ca/national_chemotherapy_Administration_standards

Canadian Institutes of Health Research (2012). *Guide to knowledge translation planning at CIHR: Integrated and end-of-grant approaches*. Retrieved from <http://www.cihr-irsc.gc.ca/e/45321.html#a3>

Canadian Institutes of Health Research (2013a). Evaluation of CIHR's Knowledge Translation Funding Program: Evaluation report 2013. Retrieved from http://www.cihr-irsc.gc.ca/e/documents/kt_evaluation_report-en.pdf

Canadian Institutes of Health Research (2013b). More about knowledge translation at CIHR. Retrieved from <http://www.cihr-irsc.gc.ca/e/39033.html>

Graham, I.D., Logan, J., Harrison, M.B., Straus, S.E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*, 26, 13-24.

Jagosh, J., Macaulay, A.C., Pluye, P., Salsberg, J., Bush, P.L., Henderson, J., & Greenhalgh, T. (2012). Uncovering the benefits of participatory research: implications of a realist review for health research and practice. *Milbank Q*, 90(2), 311-346.

Legare, F., & Zhang, P. (2013). Barriers and facilitators: Strategies for identification and measurement (pp. 121-136). In S. Straus, J. Tetroe & I.D. Graham (Eds.), *Knowledge translation in health care: Moving from evidence to practice*. Oxford: Blackwell Publishing.

Oncology Nursing Society (2013). *Putting evidence into practice: Improving oncology patient outcomes*. Retrieved from <https://www.ons.org/products/putting-evidence-practice-improving-oncology-patient-outcomes>

Parry, D., Salsberg, J., Ann C., & Macaulay, A.C. (2006). *Guide to researcher and knowledge-user collaboration in health research*. Retrieved from <http://www.cihr-irsc.gc.ca/e/44954.html>

Stacey, D., Bakker, D., Ballantyne, B., Chapman, K., Cumming, J., Green, E., ... Whynot, A. (2012). Managing symptoms during cancer treatments: Evaluating the implementation of evidence-informed remote support protocols. *Implement Sci*, 7, 110.

Stacey, D., Macartney, G., Carley M., Harrison, M.B., for the Pan-Canadian Oncology Symptom Triage and Remote Support Group (COSTaRS) (2013). Development and evaluation of evidence-informed clinical nursing protocols for remote assessment, triage and support of cancer treatment-induced symptoms. *Nursing Research and Practice*, 2013, 1-11.

Stacey, D., Carley, M., Kohli, J., Skrutkowski, M., Avery, J., Bazile, A.M., ... Budz, D. (2014). Remote symptom support training programs for oncology nurses in Canada: An environmental scan. *Canadian Oncology Nursing Journal*, 24(2), 78-82.

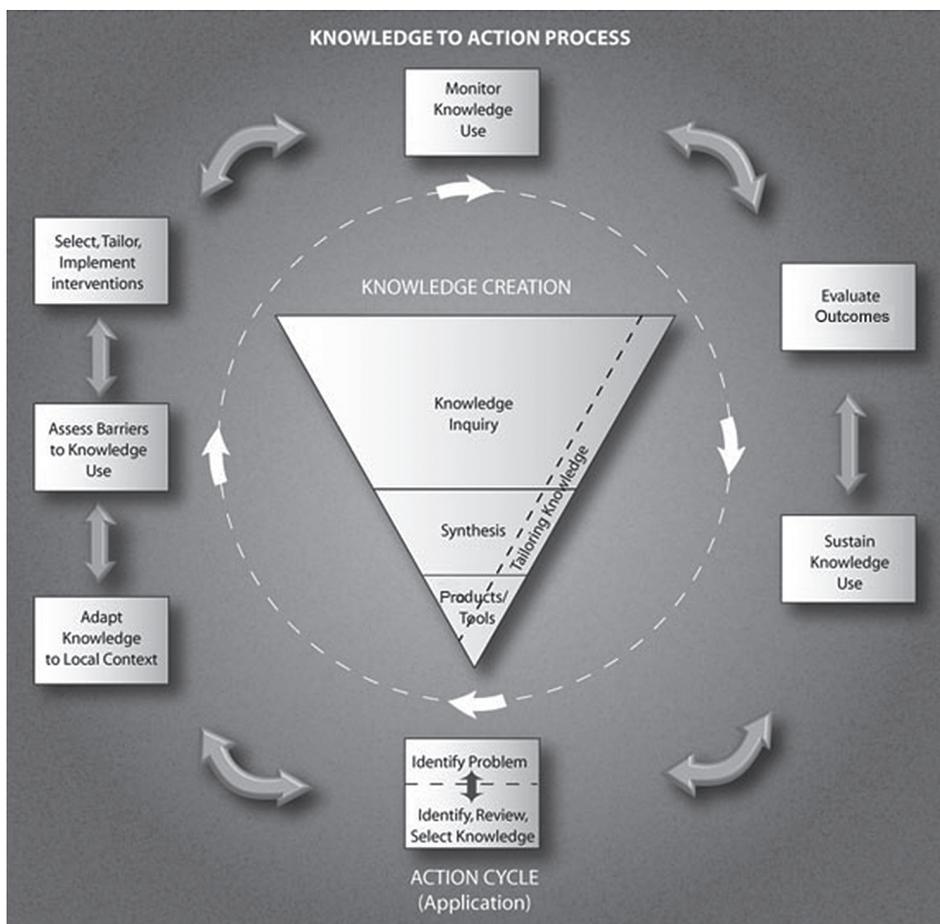


Figure 1: Knowledge-to-Action Framework (CIHR, 2013b)