The Temel Paper on Palliative Care: When Scientific Rigor Is Not Enough

JEANNINE M. BRANT, PhD, APRN, AOCN®, and ELIZABETH L. CIEMINS, PhD, MPH, MA

From Billings Clinic, Billings, Montana

Authors' disclosures of potential conflict of interest are found at the end of this article.

Correspondence to Elizabeth Ciemins, PhD, MPH, MA, Center for Clinical Translational Research, Billings Clinic, 2800 Tenth Ave, Billings, MT 59107. E-mail: eciemins@billingsclinic.org

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On August 19, 2010, *The New England Journal of Medicine (NEJM)* released the Temel et al. early palliative care study (Temel et al., 2010). The news spread like wildfire across the United States. Headlines such as, "Earlier Palliative Care Extends Life," were promptly featured in *The New York Times, The Wall Street Journal, USA Today, The Boston Globe,* and the *Associated Press*. The study findings triggered hope among palliative care advocates, as services for palliative care are drastically underutilized across the country despite 50% of US hospitals having palliative care programs (Center to Advance Palliative Care [CAPC], 2010). The CAPC even developed a tip sheet to aid advocates in the dissemination of Temel and colleagues' findings and bring attention to the benefits of palliative care (CAPC, 2010).

During the months following the study's release, critics questioned potential error with the research results, and several letters to the editor were published in the December 2, 2010, issue of *The New England Journal of Medicine*. Temel and colleagues eloquently addressed the questions, pointing out the scientific rigor employed in the study such as randomization, similarity between groups for stage of disease and all characteristics, and the issue of clinical significance (Temel et al., 2010). To note, the study was powered at 80% for 120 patients and the sample

size was 151. Regardless, critics continue to refute study results, diluting the potential impact on practice settings.

Complexity Science

While palliative care advocates claim victory over this landmark study, it is a reminder that scientific rigor and data are not always enough to change clinical practice. Traditional science is based on linear thinking that knowledge will change practice, but gaps exist when translating research into practice. The implementation of new practice patterns within organizations does not always progress as expected, in a linear fashion, due to the complex nature of health-care organizations. Fortunately, research scientists are beginning to use novel, circular methods informed by complexity science to translate research into practice (Lindberg, Nash, & Lindberg, 2008). Complexity science is the study of complex systems that acknowledges chaos, emergent phenomena, disequilibrium, and unpredictable outcomes. It recognizes organizations and includes health-care systems as complex adaptive systems, rather than machines. The science focuses on identifying and examining existing relationships as well as creating new ones to foster change behavior and impact clinical outcomes and overall quality of care (Plexus Institute, 2011).

Table 1. Positive Deviance and Palliative Care

Positive deviance steps	Application to palliative care
Define the problem and identify desired outcomes	• Are there a lack of palliative care consults in the organization? Are patients dying in the hospital without receiving palliative care? • Are there too few palliative consults from a specialty area such as oncology? • Are referrals occurring late in the stage of disease (i.e., close to death)? • Are patients suffering? Not receiving holistic care? • Desired outcomes should be measurable according to the problem.
Determine the positive deviants	• Which providers or health-care professionals provide the most palliative care referrals in the organization? • Which providers, nurses, staff are successfully advocating for patients and their families? • Which patients and families have successfully requested a palliative care consultation? • Is there a unit or department within the organization that is successful in the provision of palliative care? • Who are the successful symptom managers in the organization? • Do palliative care leaders in the community exist?
Discover processes that work, strategies and behaviors of the positive deviants	• Which processes allow the positive deviants to promote/advance palliative care? • Use of palliative care order sets? • Communication strategies with providers, patients, families? • Patient care rounding? • Share study data with providers?
Design activities that contribute to desired outcomes	• Facilitate peer-to-peer sharing of successful strategies through discovery and action dialogues, improvisation, huddles, informal conversations, etc. • Use the tip sheet developed by CAPC to disseminate findings of the Temel study and other landmark palliative care research. • Design quality improvement (QI) studies that provide data about the organization's palliative care services—compare data to national standards. • Present study findings and palliative care stories at physician and nursing grand rounds; identify other places to share stories, e.g., regular department meetings, nursing huddles, employee boards, patient boards. • Offer community programs that feature positive outcomes of early palliative care.
Discern results and program success	• Publically display QI study results. • Publish a book of palliative care stories; use social media and other modes to share stories, e.g., Youtube, Facebook, NPR Story Corps, etc. • Meet regularly with palliative care advocates to maintain practice change. • Continue to invite everyone and anyone who is interested to participate in initiative.

Note. CAP = Center to Advance Palliative Care. Adapted from Sternin (2003).

Positive Deviance

Positive deviance is one process within the complexity science toolkit that has the potential to translate palliative care research into practice. This behavioral change approach was initially used over 20 years ago in developing countries to address problems such as malnutrition, and has been used more recently to decrease infections caused by methcillin-resistant *Staphylococcus aureus* (Lindberg & Clancy, 2010) and other seemingly intractable health-care challenges. The strategy focuses on making the invisible visible by identifying positive deviants, that is, individuals or groups who, in their everyday practice, employ different approaches to problems that result in positive outcomes (Clancy, 2010). Once successful practices are identified, activities can be designed for widespread organizational engagement.

Billings Clinic is one organization using positive deviance to expand inpatient and outpatient palliative care services throughout the organization. Table 1 includes the five-step positive deviance process, with examples of application to palliative care (Sternin, 2003). The strategies will be unique to each individual health-care organization and dependent upon the identified positive deviants and successful practices.

Applications for the Advanced Practitioner in Oncology

The advanced practitioner (AP) plays an integral role in the palliative care of patients with cancer. Often, the advanced practitioner sees patients during ambulatory follow-up visits and for supportive care on both and inpatient and outpatient basis, and may be the health-care team member who introduces palliative care to the patient and family. The advanced practitioner, therefore, is a role model and change agent for palliative care efforts across the organization. Serving on the palliative care team as a pain and symptom management expert, making referrals to the palliative care team on an ongoing basis, and providing education about palliative care are all within the AP's scope of care. Most importantly, the AP can connect patients with palliative care resources in order to assist them in making decisions about health-care choices regarding end-of-life issues.

In summary, traditional science that examines cause and effect relationships and contributes to the development of new knowledge is critical in unraveling research questions about a variety of phenomena. But when it comes to translating these findings into practice, clinicians should be reminded of the complex patterns and relationships that exist within health-care settings, and consider using novel tools such as positive deviance to promote organizational change.

DISCLOSURES

The authors have no conflicts of interest to disclose.

REFERENCES

Center to Advance Palliative Care. (2010). Tip sheet: responding to The New England Journal of Medicine early palliative care study. Retrieved from http://www.capc.org/tools-for-palliative-care-programs/marketing/media-tip-sheet.pdf

Clancy, T. R. (2010). Diamonds in the rough: Positive deviance and complexity. *Journal of Nursing Administration, 40*(2), 53–56. doi:10.1097/NNA.0b013e3181cb97d9

Lindberg, C., & Clancy, T. R. (2010). Positive deviance: An elegant solution to a complex problem. *Journal of Nursing Administration, 40*(4), 150–153. doi:10.1097/NNA.0b013e3181d40e39

Lindberg, C., Nash, S., & Lindberg, C. (2008). *On the Edge: Nursing in the Age of Complexity*. Bordentown, NJ: PlexusPress.

Plexus Institute. (2011). The Plexus story. Retrieved from www.plexusinstitute.org/?page=story

Sternin, J. (2003). Practice positive deviance for extraordinary social and organizational change. In D. Ulrich (Ed.), *The Change Champion's Fieldguide*. Palm Beach Gardens, FL: Best Practice Publications.

Temel, J. S., Greer, J. A., Muzikansky, A., Gallagher, E. R., Admane, S., Jackson, V. A.,...Lynch, T. J. (2010). Early palliative care for patients with metastatic non–small-cell lung cancer. *The New England Journal of Medicine, 363*(8), 733–742. doi:10.1056/NEJMoa1000678