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Implementation Science as a Leadership and Doctor of Nursing Practice Competency

abstract

Leaders must distinguish between diffusion as a change strategy, education as a stimulus for change, and implementation strategies associated with implementation science. This article provides an operational definition for implementation science, the distinguishing characteristics in leading transformational change, and the degrees of implementation. [*J Contin Educ Nurs.* 2019;50(11):491-492.]

In a recent conversation with a colleague who interviewed individuals for a leadership position, she noted that each candidate described their leadership style as transformational. When asked to give an example of a transformation they had led—and its impact at the organizational level—few could cite a substantive transformational change at an organizational level. My colleague lamented that many see themselves as transformative leaders, but few actually are. Is the ability to actually move an organization in the direction of a desired change—given its culture, people with diverse backgrounds and educational levels, and other complexities—

far more rare than commonplace? Yet, health care organizations need to respond to change more than ever, making implementation science—the science of change—a requisite competency.

Dr. Dean Fixsen (2019), articulated three developmental levels on the journey to implementation science. The first level, letting it happen (change) aligns with the diffusion theory of change popularized by Everett Rogers who studied how innovations (change) spread through an organization, simplified here by describing change as a domino effect. Fixsen described the second level as helping it (change) happen, equated with dissemination science. Professional development educators know the power of education in advancing change, such that when groups are armed with education on a topic, an added stimulus to change occurs. Yet, education—as essential as it is as a stimulus for change—does not always equate to behavioral modification, individually or collectively. This leads to the third level of change mastery and implementation science. Implementation science is necessary because it is the science of making nonoptional things happen. Leaders must guide organizational change, ensuring compliance and uniformity of actions, safeguard-

ing the quality and safety of patients, and managing resources.

IMPLEMENTATION SCIENCE DEFINED

Bauer, Damschroder, Hagendorn, Smith, and Kilbourne (2015) offered a useful and concise definition of implementation science. They defined implementation science as “the scientific study of methods to promote the systematic uptake of research findings and other EBPs [evidence-based practices] into routine practice, and, hence, it improves the quality and effectiveness of health services” (p. 1). In the definition are salient key points—namely, that leaders should use evidence and research when available to drive change. A second point is that the leader/change agent should make the client group (those affected by the expected change) keenly aware of what is at stake with regard to quality and effectiveness. The third point is that there is a science to implementation. The science comprises methods to drive the systematic uptake of research and evidence-based practices in practice settings, one of the outcomes now associated with the Doctor of Nursing Practice degree and an expectation of leaders in all clinical settings.

Implementation science drives nonoptional change, standardizes high-risk and high-stakes clinical interventions, and advances innovations within an organization. The science itself addresses the knowledge gap that exists between interventions that research has shown to be effective and its translation into practice in varying clinical settings. Increasingly, inter-

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vention researchers must build into their studies a science-based implementation strategy, as well as philanthropic organizations, to ensure that their efforts reach the point of intended impact (Easterling & Metz, 2016).

DEGREES OF IMPLEMENTATION

A highly recommended resource for professional development educators is the work of Fixsen, Naoom, Blase, Friedman, and Wallace (2005), which provided a useful synthesis of implementation science research. Their summary reflects that implementation takes place with differing levels of engagement, similarly to the letting it change, helping it change, and making it happen levels mentioned earlier. Paper implementation—often required by regulators—refers to changes that result from the adoption of policies and procedures, where a needed paper trail documents change. Organizational leaders should be competent in preparing policies, procedures, algorithms, and protocols to give direction and insight into practice.

Process implementation advances paper implementation. Educators play a pivotal role as leaders who provide training as the backdrop for specifying the rationale for change, the expectations linked to innovations, and simulation or competency expectations to ensure that the client system affected by the change is able to perform, without the guarantee that they will perform or change their practice. Process implementation eliminates the variable relating to knowing what to do, as it has been measured and evaluated.

The third level of implementation is where the change is actually implemented and takes hold in the organization, known as performance implementation. This is where the consolidated framework for implementation research model developed by Damschroder et al. (2009) is a useful reference for educators and leaders. This model depicts the variables at play during the implementation of innovations with supportive evidence being generated by implementation scientists. Implementation is influenced by (a) intervention characteristics, which vary in factors such as adaptability, advantage, and complexity; (b) the outer settings, with factors such as patient experience and expectations, incentives, and pressure from peer organizations; (c) the inner setting, with its unique structural characteristics and networks; (d) the characteristics of the individuals involved, such as their knowledge and identification with the organization; and (e) the process of implementation, such as how it was planned, executed, and other factors. When taken completely, it immediately becomes clear that multiple and often confounding variables are required for effective change management, offering a partial explanation for the often dismally slow uptake of innovations in health care settings. As the Doctor of Nursing Practice enters the workforce in expanding roles, it should be with the ability to discern and lead innovations and change, from paper to practice.

SUMMARY

The professional development educator, whether in the practice or academic setting, who is teach-

ing implementation science content should move beyond the comfort zone of the process implementation described above. Yes, education at the process level is key to the implementation of innovations—it can incentivize and motivate learners to take heed of answering the “what” and “why” of change needed. However, widespread change that takes hold organization-wide is the skill and competency set needed by leaders. Novice leaders may not possess awareness of all the variables to consider in driving change that must happen. Offering leaders training in the models and resources presented in this article is a starting point for advancing their competence in implementation science.

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