From the Frontier: Translating Research to Practice

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Abstract

The purpose of this invited article is to describe the process of translating research into public health practice. An example is provided, showing how questions arose in the practice setting, a researcher was identified to help answer the questions, and findings from the research were applied in the practice setting. In this example, Dr. Lea LaFave (Community Health Institute/JSI in New Hampshire) worked with Dr. Danielle Varda (Assistant Professor at the University of Colorado/ Denver, School of Public Affairs) to use social network analysis to better understand a network of coalitions focused on underage substance abuse. The social network analysis revealed that networks varied significantly in the number and depth of collaborations (from none to fully integrated) within each network. The larger implications of these findings suggest that the way people conceptualize complex systems varies tremendously, and that this has fundamental importance for understanding how to improve such systems.

Editor's Note: Beginning with this issue of Frontiers, *Dr. Paul Erwin, co-PI with the National Coordinating Center for PHSSR, will be providing a brief narrative describing the process and outcomes in translating research to public health practice. This column, which will be a regular feature in* Frontiers, *will attempt to highlight the process by which pairs of academicians/researchers and public health practitioners identify a practice-focused research question, conduct and analyze the research, and apply the findings in the practice setting. The column will also include examples of practitioners directly adopting and translating research findings from the broader field of PHSSR.*

How can a public health practitioner better understand complex systems and apply that knowledge to improve organizational relationships and service delivery? That was the question confronting Dr. Lea LaFave, who was charged with helping to build a network of coalitions in New Hampshire (NH) to address underage substance abuse, including binge drinking. The NH Department of Health and Human Services, Bureau of Drug and Alcohol Services had received SAMSHA support to establish 10 regional networks of organizations which could contribute to this work, and Dr. LaFave, of the Community Health Institute/JSI in NH, and a public health nurse by training, took the lead in tracking the network development. Fundamentally, she wanted to draw a "map" of the relationships that were developing in order to demonstrate that the networks actually existed.

To achieve this goal, Dr. LaFave involved Dr. Danielle Varda – an Assistant Professor at the University of Colorado/ Denver, School of Public Affairs - with whom she had worked previously in the Multi-State Learning Collaborative. Dr. LaFave had used an instrument developed by Dr. Varda and colleagues to assess informal networks to reduce childhood obesity. The instrument – PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships) – is a free web-based tool (www.partnertool.net) which includes validated surveys, quality improvement templates, and analytical capabilities allowing for social network analysis (SNA). Dr. LaFave believed that understanding the complex systems within and across the 10 NH regional networks might be just the challenge that the instrument was best designed to address.

With a goal to improve NH's capacity to apply SNA data to quality improvement, Drs. Varda and LaFave teamed up to explore the complex relationships within the 10 NH regional networks. The PARTNER survey was administered to 489 organizations across the 10 regional networks; 150 completed surveys were returned, for a response rate of 31%. The SNA revealed that networks varied significantly in the number and depth of collaborations (from none to fully integrated) within each network. The larger implications of these findings suggest that the way people conceptualize complex systems varies tremendously, and that this has fundamental importance for understanding how to improve such systems. The regional network coordinators were able to use the SNA results to work with community leaders to develop community-driven strategic plans for substance prevention. A second survey is underway, and the results will

provide information about network development over the past year of strategic planning, and direction for future network development.

One compelling caveat from this academic-practitioner partnership is how the translation of research to practice benefits both the practitioner and researcher. The benefits to the practitioner – including those described above – relate to the use of evidence-based decision making; one benefit to the researcher is that the feedback loop results in better research because it pushes the researcher to develop new approaches to analyzing, interpreting, and presenting data that are of better use to the practitioner. What do Drs. LaFave and Varda say about what it takes to create and sustain such partnerships to translate research to practice? Besides the obvious – being open to listening and learning – *a willingness to take risks*. For their next steps, the partners are examining the connectivity *across* the 10 regional networks, further informing systems development at multiple levels.

Readers can learn more by viewing the five minute video of Drs. LaFave and Varda presenting at the 20102 Keeneland Conference here.

A pdf version of that and accompanying presentations is also available here.

And finally, to get the most direct insights into this academic-practitioner partnership, readers may contact the partners directly by e-mail (Lea Ayers LaFave, PhD, RN llafave@jsi.com; Danielle Varda, PhD danielle.varda@ucdenver.edu).

If you have, or know of, a research translation story that is appropriate for this column please contact Paul Erwin at perwin@utk.edu