June 2013

From the Frontier: Translating Research to Practice … QI as the Hinge Point

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Recommended Citation

Erwin PC. From the Frontier: Translating Research to Practice … QI as the Hinge Point. Front Public Health Serv Syst Res 2013; 2(4). DOI: 10.13023/FPHSSR.0204.03

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ABSTRACT

This article is number three in the series From the Frontier: Translating Research to Practice. The narrative describes the work of a practice-academic network in Minnesota which explored the degree to which having a culture of quality at the local health department level influenced the capacity to implement a new statewide initiative. The network conducted a mixed-methods study of grantees funded to develop and implement local policy, systems, and environmental change strategies to promote nutrition, increase activity, and reduce tobacco use and exposure. The results of their study indicated that grantees with higher performance levels in Quality Improvement (QI) were much more likely to exceed expectations in local initiatives compared to grantees with lower levels of “QI maturity”. The study results are being used at the local level to advocate for authority to bolster QI and at the state level to establish baseline capacity of new grantees in order to customize technical assistance. This provides further evidence that systems-level research is possible in such practice-academic networks, and that findings from such research are immediately translatable.

Keywords
translation, practice-based research, quality improvement, evidence-based decision making
How do we learn about the capacity of LHDs to “ramp up” to do the next big thing, and is that capacity at all connected to the LHDs’ QI culture? These are questions of systems and structures which confronted public health practitioners and academicians in Minnesota in the context of implementing their Statewide Health Improvement Program (SHIP). The Minnesota SHIP, initially funded in 2009-2011 by a statewide investment of $47 million ($3.89 per person), provided grants to county and tribal governments to promote nutrition, increase activity, and reduce tobacco use and exposure. Grantees integrated local assessments with a menu of evidence-based, policy, systems and environmental (PSE) change strategies to produce actionable plans for addressing the SHIP goals.

The Minnesota Public Health Research to Action Network (RAN) -- a partnership of practitioners (local and state-level) and academicians organized in 2009 “to stimulate public health systems and services research across Minnesota” -- saw this comprehensive statewide, population health initiative as a prime opportunity. The RAN is the Minnesota brand for the Public Health–Practice Based Research Network funded through the Robert Wood Johnson Foundation (http://www.health.state.mn.us/ran/).

Renee Frauendienst, Public Health Division Director and Community Health Services Administrator of Stearns County Human Services, was particularly interested in examining the roll-out of SHIP across the state with an eye to exploring factors in the public health system that may have impacted the LHD’s ability to develop and implement local SHIP-focused programs. Does a LHDs’ structure or the authority of the LHD Director matter? Kim Gearin, RAN Co-Director, Minnesota Department of Health (MDH), wondered whether there were identifiable capacities of LHDs, regardless of structure or local authority, that support implementation of a large-scale population-health initiative. With contributions to the discussion from others in RAN – most notably Beth Gyllstrom, Senior Research Scientist, MDH, and Bill Riley, then Associate Dean at the University of Minnesota School of Public Health – the focus on Quality Improvement (QI) as the hinge point in these questions about systems, structures, and capacities became evident: does integrating QI and having a “culture of quality” allow LHDs to be more effective in meeting SHIP goals?

To answer this and related questions, the RAN conducted a study of 38 local SHIP grantees which represented the broad array of LHDs across the state with regard to size, structure, geography, and levels of performance. Performance on the the initial round of SHIP grants had already been measured by an evaluation team comprised of MDH staff. For their SHIP evaluation, grantees were categorized as either exceeding expectations or meeting/approaching expectations. The RAN then used an index of organizational QI maturity that had been initially developed by Brenda Joly (University of Southern Maine) and colleagues, and further refined with locally-informed actionable perspectives, to produce a QI maturity score on 10 measures of performance. The work also drew from Bill Riley’s extensive scholarly work in QI, adding to the study’s rigor. These 10 QI performance measures are incorporated within the Local Public Health Planning and Performance
Measurement Reporting System (PPMRS), to which all LHDs in Minnesota must report on an annual basis. The study also included qualitative key informant interviews with 15 grantees within its overall mixed-methods study design.

The results of this study showed that “Among the highest performing SHIP grantees (those that exceeded expectations), almost half (48%) scored high on their organizational QI maturity. By comparison, among grantees that either met or approached expectations, only 5% scored high on QI maturity. SHIP grantees with higher QI maturity were four times as likely to exceed grantee expectations.” (Study of Local Factors that Helped or Hindered Implementation of SHIP 1.0, available at http://www.health.state.mn.us/ran/). The study also indicated that “vocal, visible executive-level leadership paved the way” while the absence of such leadership slowed progress in implementation. Grantees that exceeded expectations appeared to differ from those meeting/approaching expectations in key domains of organizational culture (local leaders already “on-board” made a difference); workforce and human resources (fewer limitations in hiring); governance and decision-making (streamlined authority to make decisions); and systems boundaries (cross-jurisdictional sharing).

How does Renee Frauendienst (and other LHD Directors) use these findings at the local level, especially when her original interest was in the authority of the LHD Director? It provides an opening to discuss with local policy makers the authority of the LHD Director vis-à-vis developing, sustaining, and even requiring a certain “culture of quality”. At the state-level, Kim Gearin and Beth Gyllstrom can use these findings to influence the latest call for SHIP proposals to include QI measures to assess baseline capacity of the grantees in order to customize technical assistance. And the full RAN? “We want to elevate the idea that, regardless of the content area, we can do research on the system for the purpose of improving systems capacity to impact population health”.

The Minnesota RAN members have provided presentations at each of the last two Keeneland Conference closing sessions: see http://www.publichealthsystems.org/uploads/docs/NCC_PPT_ClosingSession.pdf (Frauendienst and Gearin, 2012) and http://www.publichealthsystems.org/kc-13-closing-session.aspx (Gyllstrom and Riley, 2013).

Readers may also contact these individuals directly to learn more:
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