Evaluating Use of Custom Survey Reports by Local Health Departments

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Abstract
This report demonstrates how providing survey feedback, like comparative reports, to survey respondents can result in improvement activities. For each of the past three years (2010-2013), the North Carolina Institute for Public Health (NCIPH) has invited local health departments (LHDs) from 40 states to participate in a preparedness capacities survey. In addition, NCIPH fielded a six-question evaluation survey to a subset of LHDs (n=70) to determine how LHDs use these reports. LHDs that reported using their custom reports compared their preparedness capacities to other LHDs, conducted strategic planning (e.g., benchmarking, setting preparedness goals), planned staff trainings, and disseminated the report both internally and to external preparedness partners. Through evaluation of custom report use, we have found that survey feedback is a valuable part of a participatory research approach that promotes and encourages discussion, motivates improvement, and provides opportunities to identify potential solutions relevant to both researchers and LHDs.

Keywords
translational research, quality improvement, organizational development, preparedness, public health services and systems research, phssr

Cover Page Footnote
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The negative effects of conventional research, which limits interaction with participants, and the consequences for future efforts have prompted a shift towards more participatory-based research approaches. Though often underutilized, survey feedback, such as comparative reports, can garner good will among survey respondents and, in some cases, spur improvement activities.

For each of the past three years (2010-2012), the North Carolina Institute of Public Health (NCIPH) has invited 332 local health departments (LHDs) from 40 states to participate in the *Local Health Department Preparedness Capacities Survey* (PCAS), which has undergone extensive validity and reliability testing. With consistent LHD participation, this survey has maintained an overall 3-year response rate of 75%. As part of the project’s commitment to share research results with respondents, NCIPH created and distributed to each responding LHD in each year custom reports regarding their survey response. Over the three years of data collection, more than 700 custom reports (cumulative over 3 years) have been distributed to participating LHDs. The custom reports are designed to help LHDs identify opportunities to enhance their public health preparedness and response capacities through public health agency accreditation, performance measurement, and quality improvement.

To understand whether and how LHDs use the custom reports, NCIPH conducted a brief evaluation survey of LHDs that were “early responders” to the 2012 PCAS and had also responded in 2010 and 2011 (n=70). Results from the usage survey demonstrate that most LHDs use the custom PCAS reports to identify and prioritize areas for improvement. LHDs also shared their report both internally within the LHD and externally with a variety of partner organizations. The results capture how research findings are used by respondents, enable LHDs to learn from a comparison to other LHDs, and allow for informed restructuring of the custom reports to better suit the applied needs of LHDs.

**METHODS**

Survey feedback, in this case, the PCAS custom reports, represents the “systematic feedback of survey data to groups with the intent of stimulating discussion of problem areas, generating potentials solutions, and stimulating motivation for change.” The PCAS custom report offers a snapshot of an LHD’s current preparedness capacities as well as providing details relative to a 1) national and 2) statistically-matched comparison group. Statistical matching was based on population size, agency expenditures per capita, breadth of services, rural/urban designation, and poverty rate.

LHDs were selected as potential respondents based on participation in the previous survey waves of the PCAS and early response (within 6 weeks) to the 2012 survey. The sample selection was non-random: only participants that had completed the PCAS for all three survey years were invited to participate in the usage survey. These respondents were included in the sample as they were highly likely to respond to the brief evaluation survey in the time available for data collection. The online survey was distributed to 70 eligible LHDs with a survey period between January 28 and February 8, 2013. In total, 39 LHDs completed the evaluation survey, resulting in a response rate of 56%.
the assumption that responding LHDs who did not report their county in the usage survey did so at random, the stratified response rate was 60% for North Carolina LHDs and 38% for other states.

Because the research team wanted to explore how LHDs were using the custom-reports and had no prior information on usage, the brief evaluation survey was comprised of primarily open-ended items. Questions were generated by NCIPH staff and designed to yield a short summary of basic usage. Items were designed to explore the extent to which LHDs used PCAS custom reports, which employees reviewed the reports, how the reports were used (including use of peer group comparisons), and to what extent the report was shared with other departments or preparedness partners (See Appendix A for examples of survey items). Given the exploratory nature of the brief evaluation survey, validity and reliability testing of items was not considered appropriate.

For open-ended survey questions, yes/no responses were abstracted from the free responses where possible and summarized by question. A simple content analysis was conducted on the open-ended responses to summarize specific use of reports or report-sharing to partners. For survey questions that included a specific use for the report or specified a partner organization that the report was shared with, that use or partner was abstracted and combined into larger categories (e.g., “Emergency management” and “local EM” are both coded as emergency management partnerships). Category assignment was done based on a priori keywords, and ambiguous entries were categorized by group consensus.

**RESULTS**

Figure 1 presents respondent use of custom reports in three ways. First, of those LHDs that responded to the usage survey, 54% had used their custom reports. These LHDs reported using their custom reports to compare their capacities to other LHDs, conduct strategic planning (e.g., benchmarking, setting preparedness goals), plan staff trainings, and disseminate to Boards of Health and other partners. Twenty-three percent of LHDs described using the reports as a quality improvement tool and aide to their agency’s accreditation process. To close the feedback loop, usage survey results were shared with LHDs through a short summary and URL in their 2012 custom reports.
Second, each custom report also included mean comparisons of the LHD to a national comparison group of agencies and to a statistically matched peer group similar to the agency. Among respondents that reported using the custom reports, nearly one-third (31%) reported using the matched peer group information to compare their capacities to LHDs most similar to themselves. As one respondent noted, “[the report] helps to measure what other counties are struggling with or doing really well. We use this as a benchmark to measure our preparedness program and resources.”

Third, report sharing with preparedness partners was found to be a common practice. Forty-one of respondents shared their reports with partners, primarily Emergency Management (EM) and first responders (56%). LHDs also circulated their custom reports among other partners, including hospital EM, local law enforcement, health departments from neighboring jurisdictions, and attendees of Strategic National Stockpile meetings. However, only 31% of the LHDs that shared reports, shared results with staff and team members in their own agency (e.g., the Preparedness and Response Internal Epidemiology Team).

**Implications**

While the generalizability of this survey is limited by the initial survey sample, response rate and sample size, our findings offer insights into the importance of survey feedback to LHDs. We have found that survey feedback through custom reports is a valuable part of a participatory research approach that promotes and encourages discussion, motivates improvement, and provides opportunities to identify potential solutions relevant to both researchers and LHDs. Though
originally intended to promote and foster positive rapport with survey respondents, unintended effects of providing results and findings, via PCAS custom reports, include supporting collaboration and quality improvement opportunities and promoting preparedness efforts among LHDs. Future research should further examine the extent to which research participants use custom reports and dissemination of custom reports facilitates research participation.

**SUMMARY BOX:**

**What is Already Known about This Topic?** Though often underutilized, survey feedback can help encourage participation in research studies, as well as encourage LHD quality improvement efforts.

**What is Added by this Report?** Though originally intended to promote and foster positive rapport with survey respondents, unintended effects of distributing PCAS custom reports include supporting collaboration and promoting preparedness improvement efforts among LHDs.

**What are the Implications for Public Health Practice, Policy, and Research?** Survey feedback is a valuable part of a participatory research strategy that promotes and encourages discussion, motivation, and opportunities to identify potential solutions to relevant issues for both researchers and LHDs.

**REFERENCES**


Appendix A: Custom Report Usage Survey Items

1. In your agency, who reviewed the 2010 and/or 2011 customized P-CAS report(s)? Please be specific, e.g., health director or administrator, preparedness coordinator, etc. and select all that apply

2. Has your agency used the P-CAS report(s)? If so, how? If not, why not? Explain briefly (2-3 sentences)

3. Has your agency used the matched peer group information in the P-CAS report(s)? If so, how? If not, why not? Explain briefly (2-3 sentences)

4. To what extent has your agency shared your report or information from the report with other departments and/or preparedness partners? Explain briefly (2-3 sentences)