

The National Public Health Leadership Institute: Evaluation of a Team-Based Approach to Developing Collaborative Public Health Leaders

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Recent public health literature contains calls for collaborative public health interventions and for leaders capable of guiding them. The National Public Health Leadership Institute aims to develop collaborative leaders and to strengthen networks of leaders who share knowledge and jointly address public health problems. Evaluation results show that completing the institute training increases collaborative leadership and builds knowledge-sharing and problem-solving networks. These practices and networks strengthen interorganizational relationships, coalitions, services, programs, and policies. Intensive team- and project-based learning are key to the program's impact. (*Am J Public Health*. 2005;95:641–644. doi: 10.2105/AJPH.2004.047993)

Many authorities assert that public health improvements will require the sustained actions of coalitions and partnerships^{1–4} and frequently call for leaders with the vision and skills to foster them.^{2,3,5–8} The National Public Health Leadership Institute (PHLI) seeks to develop collaborative leaders who convene or participate in partnerships,^{9–13} and to strengthen national networks of leaders who trust one another, share knowledge, and work together to improve public health.^{14–26}

The Centers for Disease Control and Prevention (CDC) founded PHLI in 1991 and re-

mains its sponsor. For its first 9 years, PHLI was offered in California and annually enrolled 50 to 60 individual leaders (or “scholars”).^{27,28} In 2000, the CDC selected a new partnership to offer PHLI: the University of North Carolina at Chapel Hill (UNC) School of Public Health, the UNC Kenan-Flagler Business School, and the nonprofit Center for Creative Leadership, Greensboro, NC.

PHLI now enrolls multiorganizational teams of 2 to 4 senior leaders, and requires intensive teamwork-based learning projects.^{29–31} (The program has begun to accept several individual scholars each year in addition to teams, to accommodate the preference of some learners; but at the time of this study all learners came in teams.) Learning methods for the 12-month program include leadership style assessments, personal feedback and coaching, assigned readings, interactive lectures/discussions, case studies, regular conference calls with experts, and a team project.³² A week-long retreat includes seminars and simulations in leadership, teamwork, systems thinking, negotiation, communication, and succession planning.³³ Recent evaluation questions included (1) what are the effects of PHLI on scholars' leadership understanding, perspectives, and practices; and (2) what have the team leadership projects achieved during the program and after graduation?

METHODS

A telephone interview was completed³⁴ with 1 member of each team (n=25) from the first 2 cohorts 12 to 18 months after graduation to ascertain activities and accomplishments, lessons learned, whether scholars had applied those lessons to other situations, changes in scholars' joint problem-solving activities,¹⁵ and the number and identity of other leaders that they talk with about their challenges. Interview transcripts and project final reports were analyzed using content analysis methods.³⁴ For a third cohort, only project final reports were examined.

RESULTS

Individual Outcomes

Many scholars said their PHLI experience helped them understand that activities are

often best carried out by partnerships instead of single agencies (Figure 1), and described a shift in their perspective away from the individual leader to shared roles among many leaders in the whole system of organizations concerned. Scholars attributed to PHLI their ability to engage in new leadership practices, including coaching and teaching others, managing conflicts, negotiating win-win partnerships, and securing funding through collaboration. Most interviewees (92%) said that, not counting their team project, they had taken on more or different kinds of leadership roles since PHLI, such as serving on state or national boards or running new programs.

Network Outcomes

Most interviewees (96%) said their PHLI experience had increased both the number of leaders they talk with about challenges and how often they talk with them. Of these, 88% said that they still talk with team members, 46% still talk with other class members, and 33% still talk with other people met through PHLI, such as CDC staff. Scholars reported that collaborations within and outside of the project team had led to more relationships that possess the network characteristics of trust, information transfer, and joint problem solving.¹⁵ Many scholars turned their project work into an area of expertise that they share with regional or national working groups.

Team Project Outcomes

Teams addressed issues such as workforce development, improving access to care, reducing disparities, and improving data. Of all the respondents in the 3 UNC cohorts (Table 1), 81% completed a needs assessment or other research, several strengthened an existing coalition (9%) or developed a new one (19%), and others developed new policies and procedures for collaboration within (14%) or among (30%) organizations. Still others planned (21%) or implemented (16%) a new program or service, obtained increased resources (staff, funding, space, materials) (42%), or developed new communication tools (33%). Several teams started leadership development institutes.

Project work was almost always sustained; 50% of respondents had put more than 5

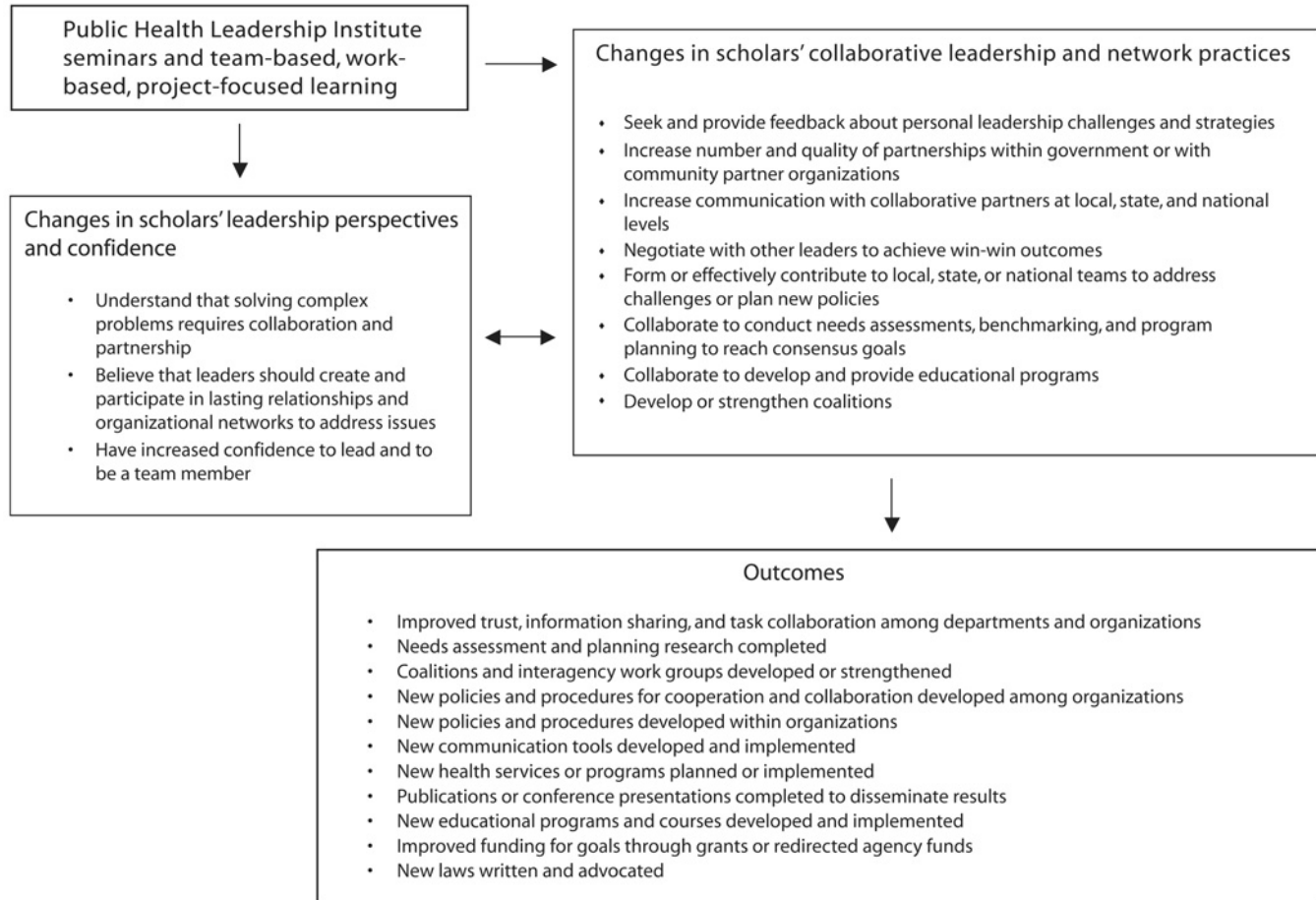


FIGURE 1—National Public Health Leadership Institute evaluation findings: changes in leadership perspectives and practices and their outcomes.

person-days of work time into the project beyond the scholar year, 17% put in 3 to 5 days, and 29% put in 2 or fewer days (data not shown). A portfolio of learning projects is available online.³⁵

DISCUSSION

Our evaluation supports the proposition that networks and collaborative leaders can be developed through education, and that groups thus created can improve services and programs. Many scholars reported that they more fully understood leadership as a collaborative activity, and had widened their collaboration and networking activities. Enrolling teams and using an intensive work-based learning project contributed strongly to learn-

ing and outcomes reported, and is consistent with global trends in leadership and management development.^{29–31,36–40} Limitations include having interviewed only 1 member per team, and having only interview data on team outcomes as opposed to more robust and concrete evidence.

Collaborative leadership development contributes to the social capital^{25,41} of the public health community, defined as the resources available to leaders and organizations through professional and interorganizational networks.²⁵ Social capital should be considered an important aspect of the public health infrastructure, alongside financial capital, human capital (well-trained staff), organizations, and information systems.⁴² The relationship between strength-

ening leadership and improving the social capital of the public health community should be the focus of more theory development, interventions, and evaluation^{43,44} in the near future. ■

About the Authors

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TABLE 1—Major Team Leadership Project Outcomes for Scholars: 43 Teams from First 3 Cohorts (2000–2003)

Outcomes	n (%) ^a	Examples
Work or advisory group formed, with stakeholders included	17 (40)	<ul style="list-style-type: none"> Developed task force with members from state board of health and 2 city/county boards Assembled local county officials, health department leaders, hospital emergency management, and fire and police department leaders for joint planning on emergency services delivery
Needs assessment or research completed	35 (81)	<ul style="list-style-type: none"> Conducted multiple county surveys assessing health care access and determinants Documented statewide nursing shortage via survey as background for advocating policies
New coalition developed	8 (19)	<ul style="list-style-type: none"> Developed coalition of county/city health departments and medical/university organizations to implement educational program Formed 2-city comprehensive health and social services coalition
Existing coalition strengthened	4 (9)	<ul style="list-style-type: none"> Strengthened county collaboration around treating hypertension
New policies/procedures for cooperation and collaboration developed among organizations	13 (30)	<ul style="list-style-type: none"> Partnered statewide Injury Prevention Unit with Trauma Program to provide more comprehensive emergency medical services Partnered territorial health department with university to establish regional leadership training institute
New policies/procedures developed within organization	6 (14)	<ul style="list-style-type: none"> Established the Australian Rural Health Research Collaboration to consolidate department research Developed consolidated contract process that streamlines state funding of local health departments Started state “internships” for county and city department managers to improve mutual understanding Tailored national public health competencies for health department administrators to the state’s needs
New communication tools developed	14 (33)	<ul style="list-style-type: none"> Developed statewide videoconferencing system to improve communication among partners Developed video, wall chart, and brochures on zoonotic diseases to educate professionals and public
New health program or service planned	9 (21)	<ul style="list-style-type: none"> Developed plan to prevent drowning and falls among the elderly Completed an asthma prevention and management plan for metropolitan area
New health program or service implemented	7 (16)	<ul style="list-style-type: none"> Developed new dental clinic for underserved patients in a state with severe dental professional shortages Chartered nonprofit 501(c)(3) organization to receive funding for efforts to improve access to care
Publication or presentation on completed project	11 (26)	<ul style="list-style-type: none"> Researched and developed report on scope and severity of state’s nursing shortage Presented project work at state or national public health conferences
New educational or workforce training program developed	15 (35)	<ul style="list-style-type: none"> Planned and implemented national or regional public health leadership institutes serving Ireland, Puerto Rico, Nevada, and Utah Trained nurses on how to provide standard diabetes care follow-up
New resources (human, financial) obtained	18 (42)	<ul style="list-style-type: none"> Received more than \$450 000 in grant funding to develop and implement dental clinic for the underserved Received 3-year health research infrastructure grant to improve workforce training Added staff positions to prevention services
New law written and advocated	2 (5)	<ul style="list-style-type: none"> Wrote and submitted new bills to state legislature to improve automobile safety Wrote bill to restructure state’s public health system

^aMany teams achieved several outcomes. Thus, total of all outcomes does not total 100%.

Contributors

K. Umble conceptualized and led the evaluation planning, data collection, and analysis, and wrote and edited much of the brief. D. Steffen helped conceptualize the evaluation, design the instruments, and analyze and interpret the data, and also commented on drafts. J. Porter offered conceptual help in study design and data interpretation. D. Miller, K. Hummer-McLaughlin, and A. Lowman helped with instrument design, data collection, and data analysis and interpretation, and also offered comments on drafts. S. Zelt helped develop the literature review and the interpretative framework for the study, and helped with decisions about which data to present.

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Human Participant Protection

This research was approved by the Public Health Institutional Review Board, Office of Research Ethics, University of North Carolina at Chapel Hill.

References

- Institute of Medicine. *Improving Health in the Community: A Role for Performance Monitoring*. Washington, DC: National Academy Press; 1997.
- Institute of Medicine. *The Future of the Public's Health in the 21st Century*. Washington, DC: National Academy Press; 2002.
- Lasker R, Weiss ES. Broadening participation in community problem solving: a multidisciplinary model to support collaborative practice and research. *J Urban Health*. 2003;80:14–47.
- Lasker RD, Committee on Medicine and Public Health. *Medicine and Public Health: The Power of Collaboration*. New York, NY: New York Academy of Medicine; 1997.
- Leadership Development National Excellence Collaborative. *Collaborative Leadership and Health: A*

- Review of the Literature*. Seattle, Wash: Turning Point Initiative; November 2001. Available at: http://www.turningpointprogram.org/Pages/devlead_lit_review.pdf. Accessed December 20, 2004.
6. Institute of Medicine. *Health Communities: New Partnerships for the Future of Public Health*. Washington, DC: National Academy Press; 1996.
 7. Wright K, Rowitz L, Merkle A, et al. Competency development in public health leadership. *Am J Public Health*. 2000;90:1202–1207.
 8. National Association of County and City Health Officials. *Turning Point: Collaborating for a New Century in Public Health*. Washington, DC: NACCHO. Available at: <http://www.naccho.org/GENERAL3.cfm>. Accessed December 20, 2004.
 9. Chrislip DD, Larson CE. *Collaborative Leadership: How Citizens and Civic Leaders Can Make a Difference*. San Francisco, Calif: Jossey-Bass; 1994.
 10. Markus GB. *Building Leadership: Findings from a Longitudinal Evaluation of the Kellogg National Fellowship Program*. Battle Creek, Mich: W.K. Kellogg Foundation; 2001.
 11. Alexander JA, Comfort ME, Weiner BJ, Bogue R. Leadership in collaborative community health partnerships. *Nonprofit Manag Leadersh*. 2001;12(2):159–175.
 12. Weiner BJ, Alexander JA. The challenges of governing public–private community health partnerships. *Health Care Manage Rev*. 1998;23(2):39–55.
 13. Weiner BJ, Alexander JA, Zuckerman HS. Strategies for effective management participation in community health partnerships. *Health Care Manage Rev*. 2000;25(3):48–66.
 14. Uzzi B. The sources and consequences of embeddedness for the economic performance of organizations: the network effect. *Am Sociol Rev*. 1996;61:674–698.
 15. Uzzi B. Social structure and competition in inter-firm networks: the paradox of embeddedness. *Adm Sci Q*. 1997;42:35–67.
 16. Uzzi B. Embeddedness in the making of financial capital: how social relations and networks benefit firms seeking financing. *Am Sociol Rev*. 1999;64:481–505.
 17. Uzzi B, Gillespie JJ. Knowledge spillover in corporate financing networks: embeddedness and the firm's debt performance. *Strateg Manag J*. 2002;23:595–618.
 18. Uzzi B, Lancaster R. Relational embeddedness and learning: the case of bank loan managers and their clients. *Manag Sci*. 2003;49(4):383–399.
 19. Abrams LC, Cross R, Lesser E, Levin DZ. Nurturing interpersonal trust in knowledge-sharing networks. *Acad Manag Exec*. 2003;17(4):65–77.
 20. Wenger E. *Communities of Practice: Learning, Meaning, and Identity*. Cambridge, Mass: Cambridge University Press; 1998.
 21. Wenger E. *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, Mass: Harvard Business School Press; 2002.
 22. Davenport TH, Prusak L. *Working Knowledge: How Organizations Manage What They Know*. Boston, Mass: Harvard Business School Press; 1998.
 23. Brown JS, Duguid P. Organizational learning and communities of practice: toward a unified view of working, learning, and innovation. *Organ Sci*. 1991;2:40–57.
 24. Ford EW, Wells R, Bailey B. Sustainable network advantages: a game theoretic approach to community-based health care coalitions. *Health Care Manage Rev*. 2004;29(2):159–169.
 25. Baker WE. *Achieving Success Through Social Capital: Tapping Hidden Resources in Your Personal and Business Networks*. San Francisco, Calif: Jossey-Bass; 2000.
 26. Rodan S, Galunic C. More than network structure: how knowledge heterogeneity influences managerial performance and innovativeness. *Strateg Manag J*. 2004;6:541–563.
 27. Scutchfield FD, Spain C, Pointer DD, Hafey JM. The Public Health Leadership Institute: leadership training for state and local health officers. *J Public Health Policy*. 1993;16:304–323.
 28. Woltring C, Constantine W, Schwarte L. Does leadership training make a difference? the CDC/UC Public Health Leadership Institute: 1991–1999. *J Public Health Manag Pract*. 2003;9:103–122.
 29. Marquardt MJ. *Action Learning in Action: Transforming Problems and People for World-Class Organizational Learning*. Palo Alto, Calif: Davies-Black; 1999.
 30. Yorks L, O'Neil J, Marsick VJ, eds. *Action Learning: Successful Strategies for Individual, Team, and Organizational Development. Advances in Developing Human Resources*. San Francisco, Calif: Berrett-Koehler; 1999.
 31. Raelin JA. *Work-Based Learning: The New Frontier of Management Development*. Upper Saddle River, NJ: Prentice Hall; 1999.
 32. McCauley CD, Moxley RS, Van Velsor E, eds. *The Center for Creative Leadership Handbook of Leadership Development*. San Francisco, Calif: Jossey-Bass; 1998.
 33. McDonald-Mann DG. Skills-based training. In: McCauley CD, Moxley RS, Van Velsor E, eds. *The Center for Creative Leadership Handbook of Leadership Development*. San Francisco, Calif: Jossey-Bass; 1998:106–126.
 34. Patton MQ. *Qualitative Evaluation and Research Methods*. 3rd ed. San Francisco, Calif: Sage Publications; 2001.
 35. National Public Health Leadership Institute. Portfolio of learning projects. Available at: <http://www.phli.org/learningproject/index.htm>. Accessed December 20, 2004.
 36. Drath W. Approaching the future of leadership development. In: McCauley CD, Moxley RS, Van Velsor E, eds. *The Center for Creative Leadership Handbook of Leadership Development*. San Francisco, Calif: Jossey-Bass; 1998:403–432.
 37. Paauwe J, Williams R. Seven key issues for management development. *J Manag Dev*. 2001;29(2):90–106.
 38. Mintzberg H. Third-generation management development. *Train Dev*. 2004;58(3):28–39.
 39. Porter J, Johnson J, Upshaw VM, Orton S, Deal KM, Umble K. The Management Academy for Public Health: a new paradigm for public health management development. *J Public Health Manag Pract*. 2002;8:66–78.
 40. Setliff R, Porter JE, Malison M, Frederick S, Balderson TR. Strengthening the public health workforce: three CDC programs that prepare managers and leaders for the challenges of the 21st century. *J Public Health Manag Pract*. 2003;9:91–102.
 41. Coleman JS. *Foundations of Social Theory*. Cambridge, Mass: Harvard University Press; 1990.
 42. Turnock BJ. *Public Health: What It Is and How It Works*. 2nd ed. Gaithersburg, Md: Aspen; 2001.
 43. Peterson DM. The potential of social capital measures in the evaluation of comprehensive community-based health initiatives. *Am J Eval*. 2002;23:55–64.
 44. Groom P. Distributed leadership as a unit of analysis. *Leadership Q*. 2002;13:423–451.