

Partnership: A Fundamental Component of Dissemination and Implementation Research

David A. Chambers, D.Phil.
Susan T. Azrin, Ph.D.

This column describes the essential role of partnerships in the conduct of dissemination and implementation (D&I) research. This research field, which develops knowledge to support the integration of health information and evidence-based practices, has thrived in recent years through research initiatives by federal agencies, states, foundations, and other funders. The authors describe three ongoing studies anchored in research partnerships to improve the implementation of effective practices within various service systems. Inherent in the challenge of introducing evidence-based practices in clinical and community settings is the participation of a wide range of stakeholders who may influence D&I efforts. Opportunities to enhance partnerships in D&I research are described, specifically in light of recent initiatives led by the National Institutes of Health. Partnerships remain a crucial component of successful D&I research. The future of the field depends on the ability to utilize partnerships to conduct more rigorous and robust research. (*Psychiatric Services* 64: 509–511, 2013; doi: 10.1176/appi.ps.201300032)

The authors are affiliated with the Division of Services and Intervention Research, National Institute of Mental Health, 6001 Executive Blvd., Room 7144, Bethesda, MD 20892-9631 (e-mail: dechamber@mail.nih.gov). Lisa B. Dixon, M.D., M.P.H., and Brian Hepburn, M.D., are editors of this column.

As the field of dissemination and implementation (D&I) research continues to develop (1), we are encouraged by the embrace of partnership by researchers, practitioners, policy makers, and other key stakeholders as a central tenet of many D&I studies. Translation from research to practice was once seen as a hand-off from one world to another. More recently, many researchers and practitioners have advanced the concept of a true blending of the worlds of research, policy, and practice. The coexistence of evidence-based practice and practice-based evidence (2), and indeed the original formulation of evidence-based practice as the judicious use of research evidence in combination with expert opinion and patient preferences (3), furthers the centrality of research-practice partnerships in D&I research. This formulation of partnerships is also consistent with the notion of “team science” (4), in which expertise from multiple backgrounds is required to solve complex problems, and with the notion of practice-based evidence (5), in which local data are gathered to answer questions of relevance to stakeholders.

We see this in a number of studies funded by the National Institute of Mental Health (NIMH), where partnership can serve as a model strategy for implementing effective practice or as a research approach—and in the third example below, partnership is both of these things simultaneously. As the D&I research field has advanced from examining barriers and facilitators to investigating the uptake

of effective interventions and conducting comparative studies of theoretically derived D&I strategies, partnerships have been instrumental components of systematic approaches to implementation and in the conduct of the studies themselves.

Three examples of partnered D&I projects

In this section, we present three examples of partnered D&I studies, which range from testing existing models of partnership to developing and testing new partnership approaches and conducting partnered D&I research. These examples of ongoing work exemplify the shift in D&I research from a top-down, linear view of the spread of information and interventions to a complex, dynamic cycle of interaction among researchers, practitioners, and policy makers.

Patricia Chamberlain of the Oregon Social Learning Center and an interdisciplinary team are studying the implementation of multidimensional treatment foster care (MTFC) across counties in California and Ohio (6). MTFC is an evidence-based intervention to decrease problem behavior and increase developmentally appropriate and prosocial behavior among children and adolescents in need of out-of-home placement. Chamberlain and colleagues are testing community development teams, an organizational development-based partnership model pioneered by the California Institute of Mental Health, as a strategy for implementing MTFC. The investigators are conducting an ongoing randomized trial of MTFC implementation,

examining whether community development teams increase the number of counties that successfully adopt, implement, and sustain MTFC programs compared with counties that are using standard implementation methods. An explicit purpose of the implementation model used by the teams is building positive relationships, collaborations, and partnerships among consumers, system and political leaders, agencies, and practitioners that have an impact on the MTFC implementation process. Well-specified mechanisms, such as multicounty team meetings and peer-to-peer exchange, target specific processes—culture, climate, and attitudes—to support MTFC implementation (6).

In another example, Sheryl Kataoka of the University of California, Los Angeles (UCLA), the Los Angeles Unified School District, and researchers at UCLA have collaborated in the development of a school-based intervention for youths who are symptomatic after exposure to a traumatic event. Cognitive-behavioral intervention for trauma in schools (CBITS), which has been shown to be effective in a randomized trial, is delivered to groups of youths on school campuses. Although it has been implemented in more than a dozen sites across the country, CBITS has not been broadly implemented or sustained in schools (7).

Kataoka and colleagues are pilot-testing the impact of learning collaboratives as an implementation strategy to increase the spread and sustainability of CBITS. Learning collaboratives, such as the Institute for Healthcare Improvement's Breakthrough Series, are a frequently used implementation practice within broader health care systems. The study by Kataoka and colleagues (7) tests the benefit of convening multidisciplinary teams of administrators, supervisors, and clinicians from various organizations and engaging them in shared learning and problem solving to address school-specific organizational barriers to CBITS implementation, particularly organizational factors associated with implementation effectiveness.

Finally, Kenneth Wells of UCLA and RAND, Loretta Jones of Healthy African American Families, Inc., and a team of researchers and Los Angeles

community members are studying whether a community partnership approach to implementing collaborative care for depression leads to better uptake of evidence-based models of care (8). The study team and research process employ the community-partnered participatory research (CPPR) model (9), which is used when a community identifies a health problem as a high priority and partners with academic researchers, each sharing resources and expertise to address the health problem. The resulting project, Community Partners in Care (CPIC), builds on prior work showing the benefit of collaborative care for underserved populations with depression. CPIC tests a community engagement and network development intervention to promote adoption of collaborative care in underserved Los Angeles communities. Community stakeholders have contributed ideas and guidance to all aspects of the research design, including selection of the targeted sample and key outcomes (notably the inclusion of functioning and employment) and recruitment practices.

Opportunities to enhance partnership

Although these three examples represent early successes in the involvement of partners, we see several opportunities to further enhance partnership in D&I research.

Creating a multipurpose data infrastructure

Too often, we categorize data collection as being relevant either for research or practice. As researchers, we frequently use batteries of instruments, implicitly valuing data saturation, which enables explanation of all potential associations and variations. In practice, we look for a parsimonious set of information that can be obtained without undue burden to patient or provider and that will directly inform decision making in order to enhance service quality and improve patient outcomes. For partnered D&I research to advance, we must find a way to create a single data infrastructure that is useful both for research and for understanding the quality of clinical and community practice. This integration of data is more feasible to achieve

given the tremendous improvements in the infrastructure of health information technology—including advances in electronic health records—and in the proliferation of mobile devices with extensive computing power. Real-time data collection on how individuals and organizations are functioning is not a pipe dream but rather the culmination of decades of technological advancement. Partnerships that promote synergy of research and practice information will have tremendous benefit in improving D&I research.

Prioritizing development of evidence-based systems

Most D&I studies focus on the uptake of an individual intervention. Although this focus is helpful for disentangling scientific complexity, it may fall short of answering key questions for practitioners and consumers. How do we develop suites of evidence-based tools that can match individual patients' diverse and often complex needs? Research-practice partnerships could very helpfully move us toward an evidence-based system of care, ensuring that the best interventions are nested together to provide solutions for the full range of problems for which clients seek help. As we move beyond stacks of separate manuals for single problems to modularized and adaptive interventions (10), partnerships can ensure greater efficiency and effectiveness in implementation and delivery of mental health services.

Creating long-term studies with data and local partners

The standard research grant of three to five years may be too short to assess long-term outcomes, which are often the outcomes of primary importance and thereby critical to informing decision making. For D&I research, this means an overemphasis on initial adoption decisions and early implementation and a shortage of information on sustainability. To remedy this situation, research-practice partnerships can work together to harness available data and local resources, such as administrative data and data from electronic health records and survey platforms, to make longer-term observation feasible beyond the scope of a limited project period.

These activities can ensure that studies of sustainability and ongoing adaptation of innovations are sufficiently robust and rigorous.

Capturing benefits of local innovations

Practitioners are continually innovating to meet the needs of their clients. We rarely harness opportunities to study these innovations, to capture the lessons learned, and to extend positive findings across broader care systems. Research-practice partnerships can enable collaborations around practice-based innovations, which benefit from their embeddedness within care systems, where feasibility and utility are requisite characteristics of any novel approach. This approach could demonstrably advance the merging of evidence-based practice and practice-based evidence and follow the original tenet of evidence-based medicine as the integration of all available knowledge in concert with contextual characteristics and local preferences.

Moving forward on D&I research at NIH

Now more than ever, we see continued opportunities for growth in the capacity and complexity of the field of D&I research. The National Institutes of Health (NIH) recently reissued the standing program announcements (11–13), emphasizing the centrality of research-practice partnerships at the heart of the field. As the announcement states, “D&I research will include significant and ongoing collaboration with stakeholders from multiple public health and/or clinical practice settings as well as consumers of services and their families/social networks” (10). Furthermore, review criteria for the announcements encourage clear demonstration of stakeholder involvement within the project team. These explicit statements reflect the importance of partnership as a criterion for high-quality D&I research.

In addition, since 2011, the Training Institute on Dissemination and Implementation Research in Health, which is sponsored by NIH and the U.S. Department of Veterans Affairs, has offered a week-long curriculum for approximately 30 investigators annually to develop expertise in D&I

research. Part of the application to participate in the institute asks investigators to specify existing networks and partnerships for future collaboration in research. The curriculum has multiple sessions (14) describing the importance of community partnerships to dissemination and implementation.

Through these and other mechanisms, we strive to create science-practice partnerships that conduct more rigorous and relevant research (15), ensure that research efforts do not end with publication, and increase the likelihood that benefits from research are sustained over time. D&I research is limited if it relies on individuals working in isolation; success in the field requires partnership as part of an “evidence integration triangle” (16).

Although we have seen promise and progress in the development of partnerships to conduct D&I research, we are still limited by the omnipresent divide between research, practice, and policy. Although D&I partnerships can help overcome the challenges of moving from a study to full-scale implementation, we see ultimate success in a new metaphor: a learning mental health care system, where research, practice, and policy coexist toward the ultimate gain of continuous improvement of outcomes for people who seek care, practitioners who offer it, and systems that organize it.

Acknowledgments and disclosures

The authors report no competing interests.

References

1. Glasgow RE, Vinson C, Chambers D, et al: National Institutes of Health approaches to dissemination and implementation science: current and future directions. *American Journal of Public Health* 102:1274–1281, 2012
2. Green LW: Making research relevant: if it is an evidence-based practice, where's the practice-based evidence? *Family Practice* 25(suppl 1):i20–i24, 2008
3. Sackett DL, Rosenberg WMC, Gray JA, et al: Evidence based medicine: what it is and what it isn't. *BMJ (Clinical Research Ed.)* 312:71–72, 1996
4. Stokols D, Hall KL, Taylor BK, et al: The science of team science: overview of the field and introduction to the supplement. *American Journal of Preventive Medicine* 35(suppl):S77–S89, 2008

5. Fox NJ: Practice-based evidence: towards collaborative and transgressive research. *Sociology* 37:81–102, 2003
6. Saldana L, Chamberlain P: Supporting implementation: the role of community development teams to build infrastructure. *American Journal of Community Psychology* 50:334–346, 2012
7. Project Information: Implementation Strategy for Delivering a School-Based Mental Health Program. Project no 5R21MH082712-02. Bethesda, Md, National Institutes of Health, Research Portfolio Online Reporting Tools. Available at projectreporter.nih.gov/project_info_description.cfm?aid=7932003&icde=15596278&ddparam=&ddvalue=&ddsub=&cr=6&csb=default&cs=ASC. Accessed Jan 10, 2013
8. Project Information: Community Partners in Care. Project no 5R01MH078853-05. Bethesda, Md, National Institutes of Health, Research Portfolio Online Reporting Tools. Available at projectreporter.nih.gov/project_info_description.cfm?aid=8081820&icde=15596177&ddparam=&ddvalue=&ddsub=&cr=1&csb=default&cs=ASC. Accessed Jan 10, 2013.
9. Jones L, Wells K: Strategies for academic and clinician engagement in community-participatory partnered research. *JAMA* 297:407–410, 2007
10. Chorpita BF, Bernstein AD, Daleiden EL: Empirically guided coordination of multiple evidence-based treatments: an illustration of relevance mapping in children's mental health services. *Journal of Consulting and Clinical Psychology* 79:470–480, 2011
11. Dissemination and Implementation Research in Health (R01). Funding Opportunity Announcement PAR-13-055. Bethesda, Md, National Institutes of Health, 2013. Available at grants.nih.gov/grants/guide/pa-files/PAR-13-055.html. Accessed Jan 10, 2013
12. Dissemination and Implementation Research in Health (R03). Funding Opportunity Announcement PAR-13-056. Bethesda, Md, National Institutes of Health, 2013. Available at grants.nih.gov/grants/guide/pa-files/PAR-13-056.html. Accessed Jan 10, 2013
13. Dissemination and Implementation Research in Health (R21). Funding Opportunity Announcement PAR-13-054. Bethesda, Md, National Institutes of Health, 2013. Available at grants.nih.gov/grants/guide/pa-files/PAR-13-054.html. Accessed Jan 10, 2013
14. Meissner HI, Glasgow RE, Vinson CA, et al: The US Training Institute for Dissemination and Implementation Research in Health. *Implementation Science*, 2013; doi 10.1186/1748-5908-8-12
15. Glasgow RE, Chambers D: Developing robust, sustainable, implementation systems using rigorous, rapid and relevant science. *Clinical and Translational Science* 5:48–55, 2012
16. Glasgow RE, Green LW, Taylor MV, et al: An evidence integration triangle for aligning science with policy and practice. *American Journal of Preventive Medicine* 42:646–654, 2012