Advancing the Science of Community-Level Interventions

Edison J. Trickett, PhD, Sarah Beehler, MA, Charles Deutsch, ScD, Lawrence W. Green, DrPH, Penelope Hawe, PhD, MPH, Kenneth McLeroy, PhD, Robin Lin Miller, PhD, Bruce D. Rapkin, PhD, Jean J. Schensul, PhD, Amy J. Schulz, PhD, and Joseph E. Trimble, PhD

Community interventions are complex social processes that need to move beyond single interventions and outcomes at individual levels of short-term change. A scientific paradigm is emerging that supports collaborative, multilevel, culturally situated community interventions aimed at creating sustainable community-level impact. This paradigm is rooted in a deep history of ecological and collaborative thinking across public health, psychology, anthropology, and other fields of social science. The new paradigm makes a number of primary assertions that affect conceptualization of health issues, intervention design, and intervention evaluation. To elaborate the paradigm and advance the science of community intervention, we offer suggestions for promoting a scientific agenda, developing collaborations among professionals and communities, and examining the culture of science. (Am J Public Health. 2011;101:1410–1419. doi:10.2105/AJPH.2010.300113)

Each year millions of dollars are spent on community interventions intended—if not always strategically designed, effectively implemented, or adequately funded—to improve health equity across socioeconomically and socioculturally diverse communities. Much has been accomplished through such projects, producing evidence-based programs that provide ways to improve such important outcomes as unsafe sexual behavior,1,5 HIV/AIDS prevention in adolescents,3 access to screening and treatment of underserved populations,8 reductions in smoking,9 and improvements in dietary practices.6 Subsequent work synthesizing evidence across research and evaluations has generated more evidence about community interventions. As this evidence and experience have accumulated, so too have calls to further emphasize the creation of community interventions that reflect the complex, multicausal nature of health inequalities7–9 and to work in partnership with communities and their representatives.10–15 These goals reflect research-based and community-based concerns about the ecological validity of community interventions (i.e., the extent to which research conditions approximate in vivo conditions) and the critical role of local knowledge, hopes, and involvement in the community intervention process.

In October 2009, a conference held in Chicago, Illinois, convened a wide range of researchers, community representatives, policymakers, journal editors, and funders to take stock of current movements and issues in community intervention research. The conference goals were to (1) elaborate tensions in the science of community intervention in terms of conceptual frameworks, implementation, and evaluation of their effects; (2) surface conceptual frameworks and key concepts, such as collaboration, related to achieving sustainable community-level impact; and (3) develop ideas for how to promote alternative ways of thinking about community interventions that are responsive to concerns raised in the extant scholarly literature and by community members. Emphasis was also placed on how to create sustainable community-level interventions with community-level impact designed to eliminate health inequalities.

An interdisciplinary planning committee worked over the course of a year to develop the 2-day conference, which was designed to promote discussions of key issues among participants in small-group sessions, as well as more traditional plenary and breakout sessions (conference materials available at http://www.phrnet.ca/en/index.aspx?sortcode=2.0.4.5.5). Conference participants were selected to reflect the broad scope of those engaged in and affected by community intervention processes. Thus, the participant group was interdisciplinary and multisectoral, including researchers from public health, anthropology, sociology, economics, and community psychology, as well as community members, funders, and journal editors.

We briefly describe developments that emerged from the conference and that make up the contours of a scientific paradigm supporting community intervention. This collaborative, multilevel, culturally situated paradigm is intended to create sustainable community-level impact. Together, these elements constitute an ecological perspective on community intervention.8,10–23

EMERGENCE OF THE COMMUNITY INTERVENTION PARADIGM

The Chicago conference built on the long history of ecological and collaborative thought across public health, psychology, anthropology, and other fields of social science in an attempt to advance an integrative ecological paradigm for community intervention research. This paradigm does not construct community interventions in terms of development and implementation of specific programs; instead, community interventions are seen as parts of larger complex systems of processes and events. The intended result of this paradigm shift is the recognition that interventions and multiple intervention programs influence contexts as well as individuals; thus, they can create or obstruct community supports and resources that promote community health while increasing or decreasing community capacity for future problem solving and development.

Underlying this shift are several more specific issues that have emerged in the community intervention literature: (1) questions about the external validity of knowledge produced under highly controlled conditions when it is generalized to socioculturally diverse communities;12,13,25–27, (2) the distance between knowledge development and knowledge use;28–30, (3) the weak or inconsistent results yielded by many...
community-level randomized controlled trials, an overreliance on individual-level or single-issue interventions that fail to address the community and organizational conditions in which people live, grow, work, and play, concerns about program sustainability, intervention impacts, and the state of community infrastructure after externally funded community interventions, and the ethical challenges involved in research with whole communities and varied cultural groups.

These issues are not isolated and independent from each other. Rather, they reflect the long-standing scientific paradigm that gives priority to individual-level theorizing and intervention, conceptualizes intervention as the importation and implementation of a specific evidence-based technology, and emphasizes singular interventions rather than beneficial combinations of interventions into more comprehensive, incremental, adaptable, and emergent initiatives for change over time and across individual projects, groups, and contexts.

Nearly 80 years ago, Dewey presaged this movement toward ecologically based, multilevel, collaborative approaches to health when he said, "I should venture to assert that the most pervasive fallacy of philosophic thinking goes back to neglect of context." The ecological, collaborative perspective on health is thus grounded in respect for the history, culture, preferences, and resources of local communities, with special recognition of the histories of less advantaged communities in relation to science. Further, this perspective appreciates how the cultures of both science and local communities affect community intervention priorities, processes, and outcomes.

The contours of a coherent, integrative perspective on community interventions have emerged from the work of researchers across multiple disciplines, international declarations, and national panels in public health over a considerable period of time. An ecological approach to health promotion has deep roots in 19th century public health and early 20th century urban sociology. However, several recent conceptual, methodological, and policy advances suggest that the time is ripe for efforts to integrate these developments into a science of community intervention geared toward sustainable community-level impact.

With respect to conceptual advances, the specification of multilevel ecological frameworks has drawn attention not only to how multiple levels of context and individual behavior are interdependent, but also to how communities themselves can be conceptualized in terms of history, norms, settings, resources, and networks. Systems theory approaches have emphasized the interdependence of various aspects of community life and have introduced concepts such as feedback loops, oscillation, boundary critique, and equalizability. Community-based participatory research has provided key insights into how the communities most negatively affected by health disparities can contribute their knowledge to attempts to understand and address multiple levels of influence (e.g., individual, contextual, policy) on health.

With respect to research design, alternatives to randomized controlled trials and alternative ways of viewing randomized controlled trials that provide a more context-sensitive perspective have been outlined. Statistical advances in multilevel modeling and cluster analysis, social network analysis, geographical information systems, and mixed-methods designs are now available to document both community-level contributions to behavior and the multiple effects of community interventions. The conceptual and scientific tools for enacting a community intervention perspective aimed at sustainable community impact are increasingly in place, but an integrative framework is necessary for action.

In addition, policy initiatives have strengthened opportunities to advance the science and practice of community interventions in the United States. These interventions include the renewed participatory approaches to community planning and research stimulated by the legislative acts of John F. Kennedy's New Frontier initiatives and Lyndon Johnson's Great Society programs of the 1960s. In the past decade, research using these participatory approaches—including a growing emphasis on the translation of research to practice—has been funded by the applied research grant programs of the National Institutes of Health, the Centers for Disease Control and Prevention, the Agency for Healthcare Research and Quality, and other federal agencies and foundations. At the same time, program funding tied to the application of evidence-based practices has complicated these innovative community-level efforts.

**PRIMARY ASSERTIONS OF THE PARADIGM**

The current intervention literature, new funding initiatives, and new policies have all raised the issues mentioned so far. In response, primary assertions of a paradigm for advancing a science of community intervention emerged at the Chicago conference. Each of these assertions has implications for how health issues are framed, how interventions are designed, and how the impact of interventions is measured. Each assertion needs further theorizing, exemplars, and research.

**Goals of Community Interventions**

The goals of community interventions that address health disparities are to strengthen the health and welfare of communities and to enhance existing local community capacity to promote future community health and welfare. This first assertion necessitates recontextualizing from individual-level processes and outcomes to community-level outcomes, while recognizing that health outcomes per se are ultimately measured by surveillance metrics taken on individuals. It also carries multiple implications for the conceptualization, conduct, and evaluation of community interventions. Conceptually, it frames health matters as embedded in a community ecology that includes local conditions, community history, relations among subgroups in the community, relations between community groups and groups external to the community (including relationships with community intervention researchers), local resources, networks and their social capital, and effects of macroecosystem policies on community life. Knowledge of the community allows any intervention that is designed to address an identified community issue to become an opportunity to draw on and develop local resources or capacity. The emphasis on evaluating community impact underscores the importance of structural and policy factors affecting community life and helps frame the intervention goals within a social justice perspective.

The community impact goal treats community capacity as a central organizing concept.
Capacities are resources that can be drawn upon and developed as a function of the processes and goals of collaborative research and interventions. Capacities may include social participation, interorganizational networks, skills, knowledge, leadership, and social settings. A focus on capacity shifts attention from an exclusive focus on needs and deficits to the search for community strengths and resources on which to build. Capacity development is also expected to allow lessons learned by the community to be transferred to the solution of other local problems. The assessment of various dimensions of capacity (e.g., leadership, critical analysis, evaluation) within particular contexts, the extent to which they are transferable to new issues that arise within communities, the influence of economic or social inequalities on the development and maintenance of community capacity, and the interface between local capacity and dynamic relationships with broader systems all require further examination.

**Community Interventions Are Complex Interactions**

Building community capacity promotes the development of frameworks that focus on the complexities of community life and the relationship of the intervention process to those complexities. The second assertion, then, is that community interventions are best conceptualized as complex interactions between the structure, processes, and goals of the intervention and the community system or systems affected by it. Such a shift reverses the relationship between interventions and communities found in approaches that export interventions to communities. For example, interventions starting with technologies or programs treat knowledge of the host community as secondary to the development of the intervention, whereas community interventions that are conceptualized as system events (i.e., as complex interactions between the structure, processes, and goals of the intervention and those of the community itself) emerge from and are defined by knowledge of the community.

Moreover, although technology-centered approaches are likely to view the relationship of the intervention team to the community as instrumentally important to carrying out the intervention, the ecological/systems perspective recognizes this relationship as part of the ecology itself that affects the nature of intervention development, implementation, and evaluation. Ecological and systemic thinking, then, not only considers the community as a multilevel, multistakeholder, and multicultural context but also considers how structural and interpersonal relationships between the intervention and relevant community components affect the development and success of the intervention.

**A conceptualization of communities as systems or as ecological niches consisting of settings and processes, and of the intervention as an event in a system,** provides direction for assessing community dynamics and potential effects of a given intervention process. Emphasis on dynamic processes suggests the value of moving from a “best practices” orientation to a “best processes” orientation, in which evidence accumulates around the development of effective intervention processes rather than around importing specific, fixed intervention protocols. Explicit in this shift is the recognition that a best process perspective views intervention settings as dynamic, interactive contributors to how the intervention unfolds. In addition, a best process perspective provides a guide to anticipatory planning processes for developing models of how specific intervention effects may ripple through various intervention settings.

Finally, an ecological/systems framework draws attention to the manner in which community interventions may inadvertently enhance or disrupt existing community dynamics. Communities are complex entities, including special-interest groups, hierarchies of power, multiple diverse racial and ethnic groups, intragroup diversity, and generational differences. External agents or researchers need to develop knowledge of how their decisions about partners and programs may affect existing racial or class divisions and hierarchies of power in a community.

**Collaborative Interventions Are Essential**

The relationships between intervention teams and communities are always part of the ecology of community intervention, and variations in the nature, intensity, scope, and authenticity of these relationships affect intervention processes and outcomes. The third assertion of the new paradigm is that the creation of empowering collaborative processes whereby community members play key roles as members of the intervention team throughout the intervention is essential for achieving long-term, sustainable community impact. Such engagement is a key to capacity building through the development of leadership, critical thinking skills, and other dimensions of community capacity. More specifically, engaging community members throughout the intervention process provides opportunities for researchers to learn about community history and current issues and to identify social relationships within and among subgroups in the community. This engagement can play a critical role in identifying possibilities for interventions that build on and enhance community capacity.

Emphasis on the importance of the relationship between community researchers and communities has a long history across multiple disciplines, but community-based participatory research approaches have refined thinking about the role of the relationship between researchers and communities with regard to various aspects of the community intervention process. Issues of decision-making power or influence over the intervention process directly relate to the goals of community resource and capacity development, highlighting the importance of attending to how collaboration reflects an empowerment goal. Such a goal draws explicit attention to structures and processes that contribute to hierarchies underlying inequitable health outcomes, and it brings together diverse individuals and organizations in an equitable environment to address inequalities underlying health disparities.

**Culture Pervades All Aspects of Community Interventions**

The fourth assertion is that culture pervades all aspects of community interventions. A “culturally situated” perspective thus places any specific intervention in both a historical context and a current cultural context, highlighting the importance of situating the intervention in community culture. Culture is not seen as something to which interventions are tailored; rather, culture is a fundamental set of defining qualities of community life out of which interventions flow. The definition of culture recommended by Geertz provides a path for that flow: “the frames of meaning within which
people live and form their convictions, their
selves, and their solidarities . . . an ordering force of
human affairs." Culture is reflected in in-
dividual values, attitudes, beliefs, languages, and
responding behaviors that are often idiosyn-
cratic across groups, emerging as adaptations to
particular ecological contexts. Culture is further
reflected in social norms in community settings,
the ideological commitments of these communities,
and the hopes communities have for their
future. Culture is always changing, and there is
considerable variability within any cultural
group; moreover, culture is inseparable in the
community intervention process, affecting the
nature of collaboration, the meaning of con-
structs, the equivalence of measurements, and
the salience of intervention goals.

One example of the salience of the culture of
communities involves an appreciation of cul-
tural history and its implications for current
community intervention. In Native American communities, for example, cultural histories
and historical traumas have resulted in a wide-
spread emphasis on reconstituting traditional
culture.189 The lasting impact of the shameful,
scandalous Tuskegee syphilis experiment20222 illustrates how African American historical
experiences of powerlessness and abuse reinforce
the links between hierarchical relations of power and vulnerability. Reverberations from these and
other experiences continue within historically
oppressed communities, as do mistrust and an-
tagonsim resulting from other causes, which need
to be understood. Community interventions are
located within and affected by these historical
relations of inequality. Issues constellated by
these factors include the development of trust,
the selection of intervention goals, issues of
measurement, and the meanings of key concepts.

The centrality of cultural understanding in
community interventions highlights the impor-
tance of investigator immersion in the daily life
of the ethnic or cultural group(s) of interest, to
learn about their deep cultural lifeways and
thoughtways. Such a perspective reinforces the
assertion that interventions are collabora-
tions.226 Research ventures that do not establish
and work through community partnerships are
likely to fail at multiple stages. This orientation
requires researchers to conduct research in
accordance with the ethical principles of the host
community, in addition to professional and
personal ethical principles, and to be transparent
about research objectives, uses, and funding.45123324 Indeed, the ethical conduct of re-
search begins with the principle that one's in-
vestigations and explorations are guided by an
authentic respect for the unique cultures of
communities.125526

The emerging ecological/systems paradigm of
research thus (1) focuses on the goal of
increasing community capacity through inter-
ventions directed at specific community issues
identified through community-engaged pro-
cesses; (2) adopts an ecological and systemic
perspective that assesses the influence of mul-
tiple levels of community ecology on the issue
at hand and on community resources and capac-
ities, research partners, community ten-
sions, and the relationship between the inter-
vention team and the community; (3) focuses
on the empowering role of community collabor-
ation throughout the community interven-
tion process; and (4) emphasizes the permeat-
ing role of culture and cultural history as both
a resource for and an influence on the
community-intervention process.

FUTURE DIRECTIONS

These 4 assertions aim to move the science of
community intervention toward a focus on
maximizing and measuring the capacity de-
velopment, impact, and sustainability of com-
plex interventions co-constructed with complex
communities. This perspective and the scien-
tific issues underlying its development provide
the contours—but not necessarily the details—
of what it will take to further the science of
community intervention. We propose 3 areas of
future directions relevant to advancing this
overall agenda: promoting a scientific agenda,
developing professional interdisciplinary col-
aborations and intersectoral collaborations,
and examining the culture of science as a
structural influence on advancing the science of
community intervention.

Promoting a Scientific Agenda

We nominate 3 areas for promotion of a
scientific agenda: developing theory on the
basis of practice as well as previous theory;
elaborating key constructs to develop appro-
priate and useful metrics; and developing new
research designs as well as strengthening
existing designs.

Theory/framework development. Several
promising frameworks need further articula-
tion with respect to community intervention,
including systems theory,63,69,89,127–129 eco-
ological and multilevel intervention theory,6,89,
233,320 and community-based participatory re-
search.142,143,321 Cutting across these is the con-
cept of culture46,142,143 and the effects that more
macro-level forces, such as state and national
policies and ideologies, have on relevant aspects
of community life. Conceptual work describing
the implications of these perspectives is needed
to clarify such concepts as feedback loops in
systems theory, collaboration in community-
based participatory research, and multilevel
models of interacting community factors influ-
encing health inequities. In addition, there is
a need for comparative theorizing about how
diversity in community culture and context may
affect community resources; the salience, rele-
vance, and nature of community interactions
among organizations and subgroups; and the
ability to engage in concerted action.

Such conceptual efforts should be extended
by developing in-depth case studies to describe
real-time, real-place contextual and interven-
tion processes occurring across multiple, dis-
verse communities. Case study methodology
has the advantage of drawing from multiple
sources of information, employing a wide range
of methods, and integrating data across multi-
ple levels of analysis.133–138 Specifying how local
culture and context affect intervention goals,
processes, and outcomes may provide additional
theoretical information on the role of context in
community intervention more generally.

Key construct elaboration. The shift from
intervention-centered to context-centered
frameworks for community intervention
heightens the importance of elaborating key
constructs related to community impact. Al-
though many concepts are relevant, such as
sustainability, we highlight community capacity
and community-level outcomes. Community
capacity is a construct relevant to both in-
tervention feasibility and intervention out-
come. Goodman et al.98 have made efforts to
define and operationalize community capacity,
nominating such concepts as leadership, sense of
community, resources, social and interorganiza-
tional networks, and community history as di-
mensons of community capacity. The com-
unity intervention task is to clarify the meanings of
these concepts in diverse community contexts, assess their relevance to intervention goals, and develop ways to measure change in them. It is relevant to ask both who or what has capacity and what that capacity is capacity for. These questions should be asked with the understanding that both the goals of and the opportunities for community capacity building shift according to intervention content and process.

Likewise, community-level outcomes can take various forms depending on intervention goals, resources, and time frames. Some methods, such as network analysis, have been extended to capture relational interdependence resulting from community interventions. Additional ways of measuring community-level change have been described, including the aggregation of setting-level changes in norms through diffusion of intervention effects, as with smoke-free environments; the creation of social settings for networking and building social capital, as with self-help groups; assessing organizational changes and interorganizational networks, as with community health coalitions; and changes in public policy, as with school lunch programs. Further elaboration of the multiple ways that capacity can be defined and measured is needed, particularly with respect to their use in diverse sociocultural communities.

Developing and strengthening research designs. The emphasis on community, culture, and collaboration in the framework we propose challenges research designs that give priority to control and internal validity, measure linear effects and singular outcomes, and privilege quantitative knowledge over qualitative knowledge. Two complementary movements are consistent with ecological and systems perspectives. The first involves expanding the range of designs available for gathering reliable and valid information about the value of community interventions. For example, several aspects of the system, ecological, and culturally situated perspectives highlighted in the assertions we listed previously suggest the power of emergent research designs informed by structures for providing ongoing feedback about issues related to intervention planning, implementation, and evaluation.

Rappin and Trickett have proposed a series of comprehensive, dynamic trial designs that compensate for several drawbacks to randomized controlled trials, including the loss of significant information as the trial proceeds, assessment of unintended consequences as well as intended ones, and the difficulty that randomized controlled trials pose for investigating diversity because of issues of statistical power and limited resources. Randomized encouragement designs, quantitative assessment designs, and observational studies have also been described as practical, ethical alternatives to randomized controlled trials that allow for strong causal inference.

The second approach involves efforts to retain randomized controlled trials in appropriate contexts and reframe how they may be conceptualized and conducted. Hawe et al. have argued that misinterpretation and misapplication of the randomized controlled trial leads critics to abandon the design prematurely. They suggest that interventions have been overcontrolled in randomized controlled trials because investigators have mistakenly believed that this is a requirement of the randomized controlled trial design, and they propose a model for standardizing interventions in cluster randomized trials (e.g., whole community or school) that allows interventions to adapt to context and culture while retaining the merits of comparability to a comparison group. This adaptability allows variation across sites without threatening the integrity or fidelity of an intervention. This design is being used in the United Kingdom in large-scale trials of community development-based urban renewal using mixed-methods evaluation approaches. Both the development of new designs and the reframing of existing ones presume the importance of multiple methods and the benefits of gathering data from multiple perspectives.

Developing Collaborations

To promote this scientific agenda, scholars must have ongoing conversations about the formation of interdisciplinary learning communities nationally and internationally to study, theorize about, conduct, and evaluate community interventions conceptualized as dynamic, complex exchanges between interventions and communities. These collaborations may be primarily among academics, such as the International Collaboration on Complex Interventions, the International Collaboration on Participatory Health Research, and the conferences on dissemination and translation research held by the National Institutes of Health and the Agency for Healthcare Research and Quality.

Alternatively, community groups and organizations may collaborate with university-based researchers committed to using university-community partnerships to further community-level impact. Examples of such collaborations include the National Community Committee, made up of community representatives who guide the work of the Centers for Disease Control and Prevention's Prevention Research Centers, and the Urban Research Center Program, which allowed academic-community grantees and the federal government to interact with community members in conducting participatory research. These collective efforts provide a laboratory for learning about multiple community intervention issues in contrasting sociocultural communities, enhancing efforts to network across disciplines, cultural divides, and the boundaries between academia and the lay community. They also can address methodological preferences, assess how partnerships work as systems, and help build a consensus regarding which areas of convergence can be used to promote the use of community intervention as a community development process.

Examining the Culture of Science

In viewing science through a cultural lens, we hope to draw attention to the norms, practices, taboos, and widely shared (though also contested) influences that shape how community intervention is originated and carried out. At the heart of the culture of science is the notion of what constitutes good science, a contested area of scholarship reflected in many of the community intervention issues on which this essay is built. Discussions about what constitutes good science are occurring in the decision-making processes of 3 salient influences on the conduct of community interventions: universities, funders, and publishers.

The culture of science is reflected in university structures and policies governing faculty tenure criteria, institutional review board guidelines, student training, and thesis/dissertation committee membership that are too frequently unsupportive of collaborative, community-based research or community-engaged
To promote this kind of dialogue, the Chicago conference invited select journal editors of health-related journals that published community-intervention research to participate in the conference and discuss possible areas of discourse related to the conference goals.

CONCLUSIONS

We developed this essay specifically for the American Journal of Public Health and its readers. The Chicago conference from which this essay emerged represented an effort of the Centers for Disease Control and Prevention to encourage discussion and debate around these scientifically and socially important and politically charged issues. Additional input and co-sponsorship came from a recently established collaboration among researchers, funders, policymakers, practitioners, and researchers in Canada seeking to address many of the same issues raised at the Chicago conference, including new funding streams, partnerships to support collaborative inquiry, and peer review guidelines. The commitment of these organizations and groups to extending the community impact of community intervention by interrogating the science involved represents the adventurous and responsible risk taking that is needed to advance the science of community intervention.

The conference itself was designed to take stock of accumulated experience with community intervention research and the ways in which it has unfolded over time. A long-emerging paradigm is taking shape, but continued movement beyond paradigms that focus on individual-level change is needed to build knowledge of communities and how community interventions can contribute to sustainable community-level impact. The long history of intellectual criticism within public health and other disciplines that address health issues and health inequalities through community-level efforts and broader policy efforts provides the solid foundation on which we stand in offering this framework for addressing community-level change in the service of reducing health inequities.

Our work builds on recent efforts by the National Institutes of Health, the Centers for Disease Control and Prevention, the Agency for Healthcare Research and Quality, and multiple foundations to expand community intervention beyond research paradigms that have served biomedical science well. However, community intervention involves work with community members who make meaning of what we do and act on the basis of those interpretations, who fit our efforts into culturally varied worldviews, whose communities have coped often with significant challenges over long periods of time, and whose wisdom and experience can add immeasurably to increases in the sophistication and appropriateness of research goals, research design, instrumentation, interpretation, and community-level impact.

Community interventions are complex social processes with properties that constitute more than the sum of their parts. A critical need exists to develop new ways of building evidence that reflect the complex social systems involved when conducting community interventions. This development involves challenging some of the basic assumptions of current mainstream scientific paradigms and building on a set of assumptions that fits with the nature of these emergent questions. We have provided an outline of what we consider to be the next steps required to advance community intervention science in the service of building community capacity to improve health outcomes and move toward the elimination of health inequities. We fully recognize the role of more macro-level influences on community health and well-being, as well as the importance of community assessment of such influences. Our emphasis, however, is on the ways in which community interventions can serve as resources for improving local capacity to respond to immediate health issues and for longer-range community development.

About the Authors

Edison J. Trickett and Sarah Heelner are with the Department of Psychology, University of Illinois at Chicago. Charles Deutsch is with the Department of Society, Human Development, and Health, Harvard School of Public Health, Boston, MA. Lawrence W. Green is with the Department of Epidemiology and Biostatistics, School of Medicine, and the Center on Social Disparities in Health, Helen Diller Family Comprehensive Cancer Center, University of California, San Francisco. Penelope Hawe is with the Population Health Intervention Research Centre, University of Calgary, Alberta, Canada. Kenneth McLeroy is with the Department of Social and Behavioral Health and the Center for Community Health Development, School of...
Rural Public Health, Texas A&M University, College Station. Robin Lin Miller is with the Department of Psychology, Michigan State University, East Lansing. Bruce D. Rapkin is with the Department of Epidemiology and Population Health, and the Marigold and Stanley M. Katz Comprehensive Cancer Prevention and Control Research Program, Albert Einstein College of Medicine, Bronx, NY. Jean J. Schensul is with the Institute for Community Research, Hartford, CT. Amy J. Schulz is with the Department of Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor. Joseph E. Trimbles is with the Department of Psychology, Western Washington University, Bellingham.

Correspondence should be sent to Edison J. Trickett, Professor, Community and Prevention Research, Department of Psychology (MC 285), University of Illinois at Chicago, 1007 W Harrison St, Chicago, IL 60607 (e-mail: trickett@uic.edu). Reprints can be ordered at http://www.ajph.org by clicking the “Reprints/Prints” link.

This article was accepted December 17, 2010.

Contributors
Each author was a member of the collaborative conference planning committee described in the article. The article is a synthesis of the committee’s planning meetings and of the individual author presentations at the conference. EJ. Trickett and S. Beetler led the writing of the article. C. Deutsh, L. W. Green, P. Hinke, K. McLeroy, R. L. Miller, B. D. Rapkin, J. J. Schensul, A. J. Schulz, and J. E. Trimble participated in revising the article.

Acknowledgments
The Population Health Intervention Research Centre at the University of Calgary and the Canadian Institutes of Health Research provided catalytic funding for the original conference. Penelope Hawe holds a Health Scientist Award from the Alberta Heritage Foundation for Medical Research.

The authors would like to thank Eduardo Simoes and Barbara Gray at the Centers for Disease Control and Prevention for their support of this work.

Human Participant Protection
Institutional review board approval was not needed because no human research participants were involved.

References


