Foundations and government agencies in the United States have invested hundreds of millions of dollars to promote collaboration around health issues (Butterfoss, Goodman, and Wandersman 1996). In response to these initiatives, as well as to grassroots efforts, thousands of alliances, coalitions, consortia, and other health partnerships have been formed (Bazzoli, Stein, Alexander, et al. 1997; Bruce and McKane 2000; Fawcett, Lewis, Paine-Andrews, et al. 1997; Israel, Schulz, Parker, et al. 1998; Kreuter, Lezin, and Young 2000; Lasker and Committee on Medicine and Public Health 1997; Mitchell and Shortell 2000; Zuckerman, Kaluzny, and Ricketts 1995). These partnerships differ in form, in the particular goals they are trying to achieve, and in whom they bring together. Yet, they all share a common impetus: an appreciation that, in today's environment, most objectives related to health cannot be achieved by any single person, organization, or sector working alone (Gray 1989; Lasker et al. 1997; Mattesich and Monsey 1992; Richardson and Allegrante 2000; Zuckerman, Kaluzny, and Ricketts 1995).

The perceived need for collaboration reflects powerful forces shaping the American health system. People and organizations involved
in health are becoming increasingly interdependent as the health system undergoes rapid economic and technological change and becomes more specialized and competitive (Gray 1989; Zuckerman, Kaluzny, and Ricketts 1995). Each year, health professionals and organizations are expected to do more with less, and, with the growing interest in health outcomes, many of them are being held accountable for results that are beyond their direct control (Alter and Hage 1993; Lasker et al. 1997). Communities around the country are facing challenging health problems with complex socioeconomic and environmental components, many of which have not responded to top-down or single-solution programs (Aspen Institute 1997; Butterfoss, Goodman, and Wandersman 1996; McGinnis and Foege 1993; Richardson and Allegrante 2000). With responsibility for addressing health problems devolving from federal to state levels, and from states to localities, communities are seeking to involve the parties closest to problems in the design and implementation of solutions (Center for the Study of Social Policy 1998; Potapchuk, Crocker, and Schechter 1999; Richardson and Allegrante 2000).

In such an environment, there is great potential in partnerships that enable different people and organizations to support each other by leveraging, combining, and capitalizing on their complementary strengths and capabilities (Alter and Hage 1993; Zuckerman, Kaluzny, and Ricketts 1995). Indeed, because of this potential, public and private funding agencies have increasingly begun to require collaboration as a condition of support (Wandersman, Goodman, and Butterfoss 1997). Recent examples of this requirement for collaboration include the federal Community Access Program, which is funding community-based partnerships to improve access to health care for vulnerable populations, and the Turning Point initiative, sponsored by the W.K. Kellogg Foundation and the Robert Wood Johnson Foundation, which is funding partnerships to strengthen and transform public health systems in 21 states and 41 communities around the country.

Along with this interest and activity, however, health partnerships are also generating a good deal of frustration. Because collaboration requires relationships, procedures, and structures that are quite different from the ways many people and organizations have worked in the past, building effective partnerships is time consuming, resource intensive, and very difficult (Cheadle, Beery, Wagner, et al. 1997; Fawcett et al. 1997; Kreuter, Lezin, and Young 2000; Mitchell and Shortell 2000; Wandersman, Goodman, and Butterfoss 1997). Moreover, partnerships
have the potential to be destructive, particularly for weaker partners (Mayo 1997). Considering these challenges, it is not surprising that many health partnerships fail to thrive (Cheadle et al. 1997; Wandersman, Goodman, and Butterfoss 1997). Estimates suggest that up to half of the partnerships that form do not survive their first year; of those that do, many falter in the development of plans or the implementation of interventions (Kreuter and Lezin 1998; Kreuter, Lezin, and Young 2000). There is also a concern that a substantial proportion of “forced” collaborations—those required by funders—may be partnerships only on paper (Lewin Group 2000). Many of the partners may have little influence or involvement in what these partnerships do. Finally, it has been difficult to document the effectiveness of health partnerships in achieving health and health system goals. Funders and partners assume that collaboration will be more effective than efforts planned and carried out by a single organization or sector, yet there is little evidence that collaboration has improved health status or health systems in communities (Fawcett et al. 1997; Kreuter, Lezin, and Young 2000; Roussos and Fawcett 2000; Wandersman, Goodman, and Butterfoss 1997).

Difficulties realizing and documenting the potential benefits of collaboration have raised two serious policy issues (Kreuter and Lezin 1998; Kreuter, Lezin, and Young 2000; Wandersman, Goodman, and Butterfoss 1997):

- Is the current investment in collaboration warranted? Is collaboration better than efforts by single agents in improving the capacity of communities to achieve health and health system goals?
- How can the return on the investment in collaboration be maximized? What do funders, leaders, and coordinators of partnerships need to know and do to realize the full advantage of collaboration?

To examine whether and how collaboration achieves health and health system goals, researchers and evaluators have increasingly focused their attention on the functioning of partnerships. The basic premise of their work is that achieving health and health system goals—such as reducing tobacco use, increasing immunization rates, improving access to care, and strengthening the influence of underrepresented community groups—depends on how well partnerships function (Butterfoss, Goodman, and Wandersman 1996; Fawcett et al., 1997; Roussos and Fawcett, 2000; Taylor-Powell, Rossing, and Geran 1998).
Within this premise, investigators have used a variety of approaches to conceptualize the functioning of health partnerships. Wandersman, Goodman, and Butterfoss (1997) have focused on inputs and throughputs to understand how partnerships process resources into products. In conducting formative evaluation, they have looked at the actions carried out in various phases of a partnership—formation, implementation, maintenance (Butterfoss, Goodman, and Wandersman 1996; Goodman and Wandersman 1994). The approaches of Fawcett and colleagues (1997), Francisco, Paine, and Fawcett (1993), and Taylor-Powell, Rossing, and Geran (1998) have emphasized the importance of process and outcome measures to guide coalition development and empowerment evaluation. Mitchell and Shortell (2000) have examined how governance and management align partnership strategy and capabilities with environmental forces. Provan and Milward (2001) have used network analysis techniques to understand how collaborating agencies integrate and coordinate their activities.

Those efforts have shed considerable light on various aspects of partnership functioning, such as partner participation, partner relationships, staff support, sufficiency and flows of resources, leadership, management, communication, governance, partnership structure, and the external environment. In addition, they have identified different types of outcomes related to the effectiveness of health partnerships: satisfaction of stakeholders; quality of partnership plans; sustainability of the partnership; changes in community programs, policies, and practices; improvements in the utilization, responsiveness, and costs of health services; and improvements in population health indicators.

Lacking in their work, however, is an explication of the pathway through which partnership functioning influences partnership effectiveness. The frameworks developed thus far do not identify the mechanism that enables partnerships to accomplish more than individuals and organizations on their own can. The work does not explain what happens in a successful collaborative process that gives partnerships an advantage over single agents in planning and carrying out interventions that improve service delivery and health.

To address the challenging policy issues noted above, there is a need to conceptualize and measure the proximal outcome of partnership functioning that captures the mechanism that makes collaboration especially effective. Researchers need a way to measure such an outcome to determine how collaboration works, and to test the underlying assumption
about the advantage of collaboration. Partnerships need to be able to document how well they are achieving such an outcome to determine if their early efforts are on the right track. To strengthen the ability of partnerships to realize the full potential of collaboration, funders and participants in partnerships need to know what influences the ability of partnerships to achieve this outcome.

In this paper, we build on the literature related to collaboration to identify synergy as the proximal outcome of partnership functioning that gives collaboration its unique advantage. Then, drawing on the extensive literature on partnerships and the input of a multidisciplinary panel convened by the New York Academy of Medicine, we present a framework for operationalizing and assessing partnership synergy and for identifying its likely determinants. We conclude by discussing how this practical framework can support funders, leaders and coordinators of partnerships, policy makers, and researchers in addressing the challenging policy issues related to collaboration.

Synergy: The Unique Advantage of Collaboration

The substantial interest and investment in collaboration is based on the assumption that collaboration enhances the capacity of people and organizations to achieve health and health system goals. How do we think this happens?

Gray (1989) defined collaboration as “a process through which parties who see different aspects of a problem can explore constructively their differences and search for solutions that go beyond their own limited vision of what is possible.” Others have described collaboration as a process that enables independent individuals and organizations to combine their human and material resources so they can accomplish objectives they are unable to bring about alone (Kanter 1994; Lasker et al. 1997; Mayo 1997; Wandersman, Goodman, and Butterfoss 1997; Zuckerman, Kaluzny, and Ricketts 1995).

The power to combine the perspectives, resources, and skills of a group of people and organizations has been called synergy (Fried and Rundall 1994; Lasker et al. 1997; Mayo 1997; Richardson and Allegrante 2000; Taylor-Powell, Rossing, and Geran 1998). We hypothesize that this distinguishing feature of collaboration is the key mechanism through
which partnerships gain an advantage over single agents in addressing health and health system issues. This is illustrated in figure 1, which identifies synergy as the proximal outcome of partnership functioning that, in turn, influences the effectiveness of partnerships.

The synergy that partners seek to achieve through collaboration is more than a mere exchange of resources. By combining the individual perspectives, resources, and skills of the partners, the group creates something new and valuable together—a whole that is greater than the sum of its individual parts (Shannon 1998; Taylor-Powell, Rossing, and Geran 1998). The concept of synergy is applicable to all of the forms of collaboration subsumed under our broad definition of partnership. Synergy is manifested in the thinking and actions that result from collaboration, and also in the relationship of partnerships to the broader community.

Much has been written about the capacity of collaboration to generate new and better ways of thinking about health issues. This capacity, which is reflected in partnership goals and plans, derives from the strengths that emerge when many “heads” or “voices” are brought together, particularly when the people involved contribute different kinds of knowledge and perspectives (Israel et al. 1998; Richardson and Allegrante 2000; Silka 1999). Creativity is one expression of the improved thinking that can result from collaboration. Working together, through a process that encourages the exploration of differences, people involved in partnerships have the potential to break new ground, challenge accepted wisdom, and discover innovative solutions to problems (Fried and Rundall 1994; Gray 1989; Mattesich and Monsey 1992; Richardson and Allegrante 2000; Silka 1999). Collaboration can also foster comprehensive thinking. By themselves, partners frequently see only part of a problem. As a group, however, they can construct a more holistic view—one that enhances the quality of solutions by identifying where multiple issues intersect and by promoting broader analyses of problems and opportunities (Gray 1989;
Jewiss and Hasazi, 1999; Kreuter, Lezin, and Young 2000; Mattesich and Monsey 1992). Thinking can become more practical through collaboration as well. Partnerships that bring academics and health professionals together with the people most affected by health problems have the potential to produce more grounded, locally responsive theories and strategies that link science to local experiences and resources (Chaskin and Garg 1997; Israel et al. 1998; Potapchuk, Crocker, and Schechter 1999; Richardson and Allegrante 2000). Finally, collaborative thinking has been described as transformative. Some people and organizations change when they are exposed to partners with different assumptions and methods of working (Mayo 1997). At the system level, collaborations that bring together diverse people, organizations, and sectors can change the way communities conceptualize and solve problems (Center for the Study of Social Policy 1998; Potapchuk, Crocker, and Schechter 1999).

The synergy of collaboration is also manifested in partnership actions. These actions can be strengthened by bringing together similar partners who share particular views or provide the same type of services. Examples include advocacy coalitions, which can increase the “critical mass” behind an effort; and health care alliances, which can pool their resources to reduce duplication of services, achieve economies of scale, and increase their partners’ competitive advantage (Wandersman, Goodman, and Butterfoss 1997; Zuckerman, Kaluzny, and Ricketts 1995). The capacity of partnerships to respond to problems may be even greater, however, when they bring together diverse partners. These types of partnerships have the potential not only to think comprehensively but also to act comprehensively, by carrying out multipronged interventions that coordinate a variety of reinforcing services, strategies, programs, sectors, and systems (Center for the Study of Social Policy 1998; Gray 1989; Jewiss and Hasazi 1999; Lasker et al. 1997).

The potential for comprehensive action is one of the most valued aspects of partnership synergy. As Richardson and Allegrante (2000) noted, “We need partnerships because most of the problems we will face in the 21st century will require multisectoral, multidisciplinary, and multicomponent efforts.” The value of such interventions in achieving health promotion objectives is well appreciated. Improving community health is a complex goal, requiring interventions that address a spectrum of risk factors at multiple levels (Goodman and Wandersman 1994; Lasker et al. 1997; Mitchell and Shortell 2000). Comprehensive interventions
have also been undertaken to enhance the capacity of communities to achieve clinical objectives. Partnerships that have linked medical care to wraparound, outreach, and social services and to population-based strategies, such as education campaigns and screening programs, have reported improvements in access to care, the quality of care, and the delivery of health services (Lasker et al. 1997; Lasker, Abramson, and Freedman 1998; Lasker, Weiss, and Miller 2000).

Another manifestation of synergy is in the relationship of partnerships to the broader community. The collaborative process provides a mechanism for engaging community members in efforts to identify and address health problems—both directly as partners and indirectly through outreach activities mediated by partners. As described above, the incorporation of the perspectives, resources, and skills of a broad array of community stakeholders, including residents directly affected by health problems, can strengthen the thinking and actions of partnerships. Equally valuable is the way such involvement can focus the attention of partnerships on problems that are important to people in the community, help partnerships communicate and document how their actions are addressing these priorities, and strengthen the capacity of partnerships to obtain the support of individuals, agencies, and institutions in the community that have the power to block their plans or move them forward (Butterfoss, Goodman, and Wandersman 1993; Center for the Study of Social Policy 1998; Taylor-Powell, Rossing, and Geran 1998; Together We Can 1998).

Clearly, the synergy created by collaboration can be very powerful. The raw materials for synergy are the people and organizations that come together in a partnership. Collaborations with diverse participants, whose heterogeneous traits, abilities, and attitudes bring complementary strengths to the table, may have the greatest potential for improving community health (Mays, Halverson, and Kaluzny 1998). To create synergy from such diversity, partnerships need a process that makes good use of different perspectives, resources, and skills so the group, as a whole, can develop better ways of thinking about problems and addressing them. This is one of the greatest challenges of collaboration, because diversity can lead to tension and conflict (Fried and Rundall 1994; Kreuter, Lezin, and Young 2000; Wandersman, Goodman, and Butterfoss 1997). Diversity also places great demands on the leadership, coordination, and management skills of a partnership (Mitchell and Shortell 2000).
Considering the difficulties involved, it is likely that many partnerships do not achieve high levels of synergy. Currently, however, it is not possible to determine the extent to which synergy is achieved since no one has yet developed a way to measure synergy. Because such a measure does not exist, “evaluations tend to focus on individual components of a collaborative effort. . . . These fragmented or episodic evaluations may miss the effects of the interactions among people, perspectives and programs that denote the true value of collaboration” (Taylor-Powell, Rossing, and Geran 1998).

Framework for Assessing Partnership Synergy

The discussion above suggests that synergy is the proximal outcome of partnership functioning that makes collaboration especially effective. We hypothesize that the extent to which partnerships achieve synergy is determined by the level of partnership functioning. Additionally, we hypothesize that the level of partnership synergy determines how much of an advantage partnerships have over single agents in planning and carrying out interventions to improve health service delivery and health. Below, we first operationalize partnership synergy and then identify aspects of partnership functioning that are likely to have a substantial impact on partnership synergy.

Operationalization of Partnership Synergy

The literature referenced in the previous section suggests that partnership synergy can be assessed in concrete, practical ways. We define a partnership’s level of synergy as the extent to which the perspectives, resources, and skills of its participating individuals and organizations contribute to and strengthen the work of the group. The synergy that a partnership achieves is reflected in the way partners think about the partnership’s goals, plans, and evaluation; the types of actions the partnership carries out; and the relationship the partnership develops with the broader community (see table 1).

As operationalized here, partnership synergy is a product of the group interaction. The particular advantages achieved by partnerships with
TABLE 1
Operationalization of Partnership Synergy

<table>
<thead>
<tr>
<th>Extent to which the involvement/contributions of different partners improves the ability of the partnership to:</th>
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<tbody>
<tr>
<td>• Think about its work in creative, holistic, and practical ways</td>
</tr>
<tr>
<td>• Develop realistic goals that are widely understood and supported</td>
</tr>
<tr>
<td>• Plan and carry out comprehensive interventions that connect multiple programs, services, and sectors</td>
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<tr>
<td>• Understand and document the impact of its actions</td>
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<tr>
<td>• Incorporate the perspectives and priorities of community stakeholders, including the target population</td>
</tr>
<tr>
<td>• Communicate how its actions will address community problems</td>
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<tr>
<td>• Obtain community support</td>
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</table>

High levels of synergy are likely to enhance dimensions of partnership effectiveness that have been identified by other investigators (Butterfoss, Goodman, and Wandersman 1996; Provan and Milward 2001; Roussos and Fawcett 2000; Wandersman, Goodman, and Butterfoss 1997). For example, the incorporation of the perspectives and priorities of community members can improve the capacity of partnerships to identify, address, and reconcile the needs of different kinds of stakeholders, thereby promoting stakeholder satisfaction. The ability of a partnership to identify and focus on problems that matter to the community, to communicate how its actions will deal with community problems, to document its accomplishments, and to obtain broad-based community support can strengthen the sustainability of the partnership, thus giving it sufficient time for its interventions to have an effect on long-term outcomes. The innovative, holistic, and grounded thinking of synergistic partnerships is likely to be reflected in the development of high-quality plans that have a significant potential for success. Partnerships that are capable of implementing comprehensive multicomponent interventions are likely to achieve substantial changes in community programs, policies, and practices, and thus have a meaningful impact on the delivery of community health services and population health.

Determinants of Partnership Synergy

In addition to operationalizing partnership synergy, our framework identifies elements of partnership functioning that are likely to influence
### Table 2
Determinants of Partnership Synergy

<table>
<thead>
<tr>
<th>Resources</th>
<th>• Money</th>
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<tbody>
<tr>
<td></td>
<td>• Space, equipment, goods</td>
</tr>
<tr>
<td></td>
<td>• Skills and expertise</td>
</tr>
<tr>
<td></td>
<td>• Information</td>
</tr>
<tr>
<td></td>
<td>• Connections to people, organizations, groups</td>
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<tr>
<td></td>
<td>• Endorsements</td>
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<tr>
<td></td>
<td>• Convening power</td>
</tr>
<tr>
<td>Partner characteristics</td>
<td>• Heterogeneity</td>
</tr>
<tr>
<td></td>
<td>• Level of involvement</td>
</tr>
<tr>
<td>Relationships among partners</td>
<td>• Trust</td>
</tr>
<tr>
<td></td>
<td>• Respect</td>
</tr>
<tr>
<td></td>
<td>• Conflict</td>
</tr>
<tr>
<td></td>
<td>• Power differentials</td>
</tr>
<tr>
<td>Partnership characteristics</td>
<td>• Leadership</td>
</tr>
<tr>
<td></td>
<td>• Administration and management</td>
</tr>
<tr>
<td></td>
<td>• Governance</td>
</tr>
<tr>
<td></td>
<td>• Efficiency</td>
</tr>
<tr>
<td>External environment</td>
<td>• Community characteristics</td>
</tr>
<tr>
<td></td>
<td>• Public and organizational policies</td>
</tr>
</tbody>
</table>

the ability of partnerships to achieve high levels of synergy. Below, we describe factors related to resources, partner characteristics, partner relationships, partnership characteristics, and the environment in which partnerships function (see table 2). This discussion is based on a review of the extensive literature on partnerships from the unique perspective of partnership synergy.

**Resources.** Financial and in-kind resources are the basic building blocks of synergy. It is by combining these resources in various ways that partners create something new and valuable that transcends what they can accomplish alone. Partnership resources have been discussed extensively in the literature (Alter and Hage 1993; Goodman, Speers, McLeroy, et al. 1998; Gray 1989; Israel et al. 1998; Lasker et al. 1997; Mitchell and Shortell 2000; Taylor-Powell, Rossing, and Geran 1998). Sufficiency in the types of resources mentioned below is likely to be important for realizing high levels of partnership synergy.

Many partnerships emphasize the importance of **money** as well as **space, equipment, and goods**, such as computers, medications, food, and books.
Beyond these basic resources, partnerships need a broad array of skills and expertise to engage partners, support the collaboration process, and carry out and coordinate the multiple components of their interventions. Examples of such skills include community organizing, outreach, leadership, communications, information technology, management, evaluation, clinical care, public health practice, cultural competency, public policy, and training. Information, which forms the basis for joint problem solving, is also an essential resource for achieving synergy. The types of information that partnerships need go beyond statistical data to include the perspectives, values, and ideas of different stakeholders and community groups, as well as information about the community’s assets, political environment, and history. Indeed, one of the great strengths of collaboration is its ability to bring together different types of information, such as scientific data from various disciplines and the perceptions of diverse community groups.

Less tangible resources are also critical for many partnerships. These include connections to particular people, organizations, and groups—such as target populations, political decision makers, government agencies, private sector funders, and other partnerships in the community; endorsements that give the partnership legitimacy and credibility with various stakeholders; and convening power, which is the influence and ability to bring people together for meetings and other activities.

**Partner Characteristics.** Partners are the source of most partnership resources. They provide partnerships with many resources directly. In addition, they use their resources—e.g., skills, connections, and credibility—to obtain external funding and in-kind support. To achieve high levels of synergy, partnerships must be able to recruit and retain partners who can provide needed resources. The voluntary nature of partner participation can make such recruitment and retention particularly challenging.

The literature on partnership functioning suggests that it is important to assess the heterogeneity and level of involvement of partners (Alter and Hage 1993; Kreuter, Lezin, and Young 2000; McKinney, Morrissey, and Kaluzny 1993; Mitchell and Shortell 2000). These characteristics are likely to influence the extent of partnership synergy as well, but in a complex way. Health partnerships vary considerably in the number and type of their partners and in the roles that partners play. The critical issue for partnerships seeking to achieve high levels of synergy is not the size or diversity of the partnership, per se, but whether the mix of partners
and the way they participate are optimal for defining and achieving the partnership’s goals. Synergistic partnerships need to be able to identify and actively engage partners with a sufficient range of perspectives, resources, and skills to give the group a full picture of the problem, to stimulate new, locally responsive ways of thinking about solutions, and to implement comprehensive actions.

One of the factors that appears to influence partners’ decisions about participating actively in a partnership is their perception of the relative benefits and drawbacks involved (Alter and Hage 1993; Chinman, Anderson, Imm, et al. 1996; Goodman et al. 1998; Wandersman, Florin, and Meier 1987). Partners who are more active in partnerships perceive that they gain significantly more benefits than partners who are less active (Prestby, Wandersman, Florin, et al. 1990), and these benefits relate as much to their own mission and economic viability as to the partners’ joint goals. The types of benefits partners seek through collaboration include an enhanced ability to address an issue that is important to them; the acquisition of additional funds, new competencies, and useful knowledge to support their own activities; increased exposure to and appreciation by other groups in the community; a strengthened capacity to meet performance goals and the needs of their clients or constituency; increased utilization of their services and expertise; an enhanced ability to affect public policy; the development of new, valuable relationships; and an opportunity to make a meaningful contribution to the community (Alter and Hage 1993; Bardach 1996; Butterfoss, Goodman, and Wandersman 1996; Chinman et al. 1996; Lasker et al. 1997; Shortell and Kaluzny 1994).

Minimizing the drawbacks arising from a partner’s participation in the partnership may be just as effective as providing additional benefits (Chinman et al. 1996). Drawbacks that concern partners include the diversion of time and resources from their other priorities and obligations; reduced independence in making decisions about their own activities; a loss of competitive advantage in obtaining funding or providing services; insufficient influence in the partnership’s activities; conflict between their own work and the partnership’s work; negative exposure due to association with other partners or the partnership; frustration and aggravation with the collaborative process; and insufficient credit for their contributions to the partnership (Alter and Hage 1993; Bardach 1996; Butterfoss, Goodman, and Wandersman 1996; Israel et al. 1998; Kegler, Steckler, McLeroy, et al. 1998; Weiss 1987).
In addition to benefits and drawbacks, the level of involvement of organizational partners may depend on the authority that organizations grant to their representatives. Individuals who represent organizations in partnerships have multiple and competing demands placed on them. Thus, it is often difficult for these individuals to devote the necessary time and energy to the work of the collaboration (Israel et al. 1998). These representatives may be more effectively involved if they have the authority to commit their organization’s resources or staff to the partnership, and if their organization gives them adequate time and resources to fulfill their obligation to the partnership (Kanter 1994; Selin and Myers 1995; Waddock and Banister 1991).

Relationships among Partners. To achieve high levels of synergy, partnerships need to build strong working relationships among the partners. It is only possible for the group to think in new ways if partners are able to talk to each other and are influenced by what they hear. To carry out comprehensive interventions, partners need to be willing to coordinate their activities.

Building relationships is probably the most daunting and time-consuming challenge partnerships face (Chang 1994; Kreuter, Lezin, and Young 2000; Lasker et al. 1997; Together We Can 1998). Problems are common in diverse partnerships, in which partners come from different professional, racial, and ethnic cultures; have little experience working together; are skeptical of each others’ motivations; and are not accustomed to sharing resources or power. Yet problems also arise in more homogeneous partnerships, particularly among partners who provide similar services and compete with each other.

Several aspects of partner relationships are likely to influence the extent to which partnerships achieve high levels of synergy. Trust has been highlighted frequently as a prerequisite for successful collaborative relationships (Goodman et al. 1998; Himmelman 1996; Kreuter, Young, and Lezin 1998; Taylor-Powell, Rossing, and Geran 1998; Waddock 1988). To work closely together, the people and organizations involved in a partnership need to be confident that other partners will follow through on their responsibilities and obligations and will not take advantage of them. Respect among partners is also likely to be critical (Kanter 1994; Mattesich and Monsey 1992; Taylor-Powell, Rossing, and Geran 1998). It is difficult to imagine how a partnership can achieve synergy unless its partners appreciate the value of the others’ contributions and perspectives.
Conflict and power differentials have also been emphasized in discussions of partner interactions (Alter and Hage 1993; Forrest 1992; Kegler et al. 1998; Mitchell and Shortell 2000; Waddock and Bannister 1991; Weiner and Alexander 1998). Conflict can foster synergy if differences of opinion sharpen partners’ discussions on issues and stimulate new ideas and approaches. But if conflict is not managed well, the same differences of opinion can lead to strained relations among partners. Power differentials among partners also have the potential to seriously undermine synergy since they limit “who participates, whose opinions are considered valid, and who has influence over decisions made” (Israel et al. 1998).

Partnership Characteristics. In addition to the factors discussed above, certain attributes of the partnership as a whole are likely to have a strong influence on the level of partnership synergy. The leadership, administration and management, governance, and efficiency of partnerships are especially relevant in this regard, since these factors affect the ability of partnerships to actively engage an optimal mix of partners, create an environment that fosters good working relationships among partners, and combine the perspectives, resources, and skills of different partners. Below, we focus on particular aspects of leadership, administration and management, governance, and efficiency that are likely to affect the extent to which partnerships achieve synergy.

One of the key challenges of collaboration is that the type of leadership needed to achieve synergy is not the type of leadership most sectors and professions are producing. Traditional leaders frequently have a narrow range of expertise, speak a language that can be understood only by their peers, are used to being in control, and relate to the people with whom they work as followers or subordinates rather than partners. Partnerships, by contrast, need boundary-spanning leaders who understand and appreciate partners’ different perspectives, can bridge their diverse cultures, and are comfortable sharing ideas, resources, and power (Alter and Hage 1993; Lasker et al. 1997; McKinney, Morrissey, and Kaluzny 1993). Moreover, many partnerships involve a number of people in the provision of leadership, in both formal and informal capacities (Chrislip and Larson 1994).

Much has been written about the behavior and skills of leaders in partnerships (Chrislip and Larson 1994; Gray 1989; Himmelman 1996; Katz and Kahn 1978; Kegler et al. 1998; Kreuter, Lezin, and Young 2000; Lasker et al. 1997; Mitchell and Shortell 2000). Looking at this literature from the perspective of partnership synergy highlights the importance
of many of these behaviors and skills and illuminates them further. For example, to inspire and motivate partners to achieve high levels of synergy, a partnership’s leaders should be able to articulate what the partners can accomplish together, and how their joint work will benefit not only the community but also each of them individually. The successful facilitation of synergistic partner interactions is likely to require more than providing all partners with an opportunity to speak. Leaders of such partnerships need strong relationship skills to foster respect, trust, inclusiveness, and openness among partners; create an environment in which differences of opinion can be voiced; and successfully manage conflict among partners. To maximize partnership synergy, leaders may also need new kinds of competencies—such as the ability to help partners develop a common jargon-free language that allows them to communicate meaningfully with one another, the capacity to relate and synthesize partners’ different ideas, the ability to stimulate partners to be creative and look at things differently, and the capacity to identify effective ways to combine the partners’ diverse resources.

The administration and management of a partnership is the “glue” that makes it possible for multiple, independent people and organizations to work together. Unlike bureaucratic forms of management, which are often rigid and structured to control what people do, partnerships that seek high levels of synergy require approaches that are more flexible and supportive.

Of the many administrative and management functions that have been discussed in the literature (Chaskin and Garg 1997; Israel et al. 1998; Lasker et al. 1997; Mitchell and Shortell 2000; Selin and Myers 1995; Together We Can 1998; Waddock and Bannister 1991; Wandersman, Goodman, and Butterfoss 1997), several are likely to be important determinants of partnership synergy. For example, extensive outreach, orientation, and logistical supports are needed to enable a broad range of community residents and organizations to participate meaningfully in the partnership’s work, which is a prerequisite for achieving high levels of partnership synergy. Effective communication strategies and mechanisms to coordinate partners’ activities are needed to facilitate synergistic thinking and action. Analysis and documentation capacities may also be critical, to provide partners with materials that synthesize their ideas and help them make timely decisions, and also to evaluate the functioning and progress of the partnership. These functions may be more than
Partners can be expected to do on a voluntary basis. Consequently, the ability of partnerships to pay full-time administrative staff may also be a determinant of partnership synergy.

_Governance_ is key to partnership functioning (Butterfoss, Goodman, and Wandersman 1993; Center for the Study of Social Policy 1998; Chaskin and Garg 1997; Flower 1994; Flower and Norris 1994; Hageman, Zuckerman, Weiner, et al. 1998; Kramer 1999; Mitchell and Shortell 2000; Potapchuk, Crocker, and Schechter 1999; Taylor-Powell, Rossing, and Geran 1998; Weiner and Alexander 1998), and it is likely to have a profound effect on a partnership’s synergy level. Through procedures that determine who is involved in partnership decision making and how partnerships make decisions and do their work, governance influences the extent to which partners’ perspectives, resources, and skills can be combined. The formalization of these procedures sustains the way a partnership works beyond the tenure of any particular leader or staff person.

Forms of governance vary, both across partnerships and over time in particular partnerships, and it is likely that various types of decision-making models and degrees of formalization can promote partnership synergy, depending on the circumstances. The extent to which a partnership’s form of governance fosters synergy may be reflected in its partners’ comfort level with the decision-making process, the degree to which its partners support partnership decisions, and the timeliness of the partnership’s decisions.

The last partnership-level characteristic we consider is _efficiency_. A partnership’s efficiency connotes how well it optimizes the involvement of its partners. To maximize synergy and keep its partners engaged, a partnership needs to be efficient. In other words, in addition to ensuring that the thinking and actions of the group benefit from the contributions of different partners, the collaboration process must also make the best use of what each partner has to offer.

Several aspects of efficiency are likely to influence the ability of partnerships to achieve high levels of synergy. One is the extent to which the roles and responsibilities of partners match their particular interests and skills (Jewiss and Hasazi 1999; Winer and Ray 1994). Others are the extent to which the partnership makes good use of its partners’ financial resources, in-kind resources, and time (Huxham 1996; Jewiss and Hasazi 1999).
External Environment. The ability of a partnership to achieve high levels of synergy is likely to be influenced not only by the internal factors discussed above but also by factors in the external environment, which are beyond the ability of any partnership to control. One such factor is how conducive the community is to the work of the partnership (Goodman et al. 1998; Israel et al. 1998; Jewiss and Hasazi 1999; Kreuter, Young, and Lezin 1998; Mattesich and Monsey 1992; Roussos and Fawcett 2000; Taylor-Powell, Rossing, and Geran 1998). Recruiting and retaining partners—and building relationships among them—may be considerably more difficult in communities in which there is little history of cooperation and trust, significant competition for resources or clients, resistance of key people and organizations to the goals and activities of the partnership, problems bringing partners together due to crime or lack of transportation, or numerous partnerships involving many of the same partners.

Going beyond geographical issues, many partnerships experience public and organizational policy barriers, which may make it more difficult for them to achieve high levels of synergy. Financing barriers include the short-term nature of most external funding, categorical program requirements, and inadequate funding for administration and management support (Finance Project 1998; Gardner 1994; Mitchell and Shortell 2000; Newachek, Halfon, Brindis, et al. 1998; Orland and Foley 1996). Other barriers include current community benefit requirements, performance standards, and promotion and tenure policies, which create disincentives for key people and organizations to participate in partnerships (Cortes 1998; Friedman, 1997; Gamm and Benson 1998; Karlin and Sullivan 1999; Lasker 1999; Lasker, Weiss, and Miller 2000; Melaville 1997).

Applications of the Synergy Framework

The framework we have developed conceptualizes synergy—the proximal outcome of partnership functioning that makes collaboration especially effective—in a concrete and measurable way. It also identifies factors that are likely to have a substantial impact on the ability of partnerships to achieve high levels of synergy. Applications of this practical framework can help funders, leaders and coordinators of partnerships, policy makers, and researchers address critical policy issues related to collaboration.
Issue 1: Is Collaboration Better Than Efforts by Single Agents in Improving the Capacity of Communities to Achieve Health and Health System Goals?

The framework we have developed can help the broad array of people and organizations that fund and participate in health partnerships determine if their investment in collaboration is warranted. Much of this investment is based on the reasonable, but as yet undocumented, assumption that collaboration is more effective than efforts carried out by single agents. A number of reasons have been proposed to explain why it has been so difficult to document the impact of partnerships in improving health (Kreuter, Lezin, and Young 2000; Roussos and Fawcett 2000). A fundamental barrier that has not been emphasized, however, has been the inability to assess the mechanism that gives collaboration its unique advantage. Our framework provides a basis for measuring such a mechanism—partnership synergy. Extensive cognitive testing of instruments based on our framework suggests that partnership synergy and its determinants can be translated into questions that are meaningful and uniformly interpreted by the diverse kinds of people who participate in health partnerships. Such instruments will make it possible—for the first time—to measure the extent to which partnerships achieve synergy, to distinguish partnerships that achieve high levels of synergy from those that do not, and to test directly the underlying assumption about the advantage of collaboration.

Issue 2: What Can Be Done to Realize the Full Advantage of Collaboration?

The framework we have developed is useful not only in determining whether and how collaboration works, but also in helping funders and participants in health partnerships maximize the return on their investment by realizing the full advantage of collaboration. The partnership literature is replete with calls for research, evaluation, technical assistance, and training along these lines, including additional conceptualization and new methodological tools (Backer 1999; Butterfoss, Goodman, and Wandersman 1996; Fawcett et al. 1997; Francisco, Paine, and Fawcett 1993; Mitchell and Shortell 2000; Roussos and Fawcett 2000; Taylor-Powell, Rossing, and Geran 1998; Wandersman,
Goodman, and Butterfoss 1997; Zuckerman, Kaluzny, and Ricketts 1995). Of the specific needs cited in this literature, our framework can contribute to three: a better understanding of partnership functioning; the development of proximal measures that predict partnership effectiveness; and improved approaches to partnership management. Because partnership synergy is central to all types of collaboration—not only those focusing on health—the following applications of the framework are pertinent to a broad range of collaborative enterprises.

**Identifying Factors That Contribute to Achieving the Collaborative Advantage**

To determine what funders and participants in collaborations can do to maximize synergy, better information is needed about the factors that influence the ability of partnerships to achieve it. Our framework supports such investigations by providing a basis for measuring not only partnership synergy but also a broad range of potential predictive factors. The framework is currently being used in a study of partnerships throughout the country aimed at identifying the factors that have the greatest impact on the extent to which partnerships achieve synergy. The results of this study will facilitate the development of more effective training and technical assistance programs for partnerships.

**Supporting the Proximal Evaluation of Partnerships**

Another practical use of the framework is in the assessment of proximal outcomes for partnerships. Partnership synergy is particularly meaningful in this regard, because it is a proximal outcome of the collaboration process that is likely to make partnerships especially effective in achieving their ultimate goals. Diagnostic tools based on our framework can help leaders and coordinators of partnerships determine if their collaborative efforts are on the right track. Moreover, such tools can give them a way to document this important, but otherwise invisible, accomplishment to partners, funders, and the community.

The assessment of partnership synergy can also be useful to funders. It can provide them with a way to identify partnerships within the initiatives they are funding that are likely to benefit from additional
time or investment. It can help them ascertain whether the partners in “forced partnerships” are actually collaborating. In addition, it can document a particularly valuable outcome of inclusiveness and diversity in partnerships.

**Strengthening the Management of Partnerships**

Finally, our framework can be used to strengthen the management of partnerships. A number of special challenges are involved in partnership management (Mitchell and Shortell 2000; Zuckerman, Kaluzny, and Ricketts 1995). Yet, although a critical task of partnership management is to enhance the capacity of partnerships to achieve high levels of synergy, thus far no one has looked at management from the perspective of synergy. Our framework can support the people responsible for managing partnerships in realizing this unique advantage of collaboration. Our operationalization of partnership synergy clarifies concretely what the collaboration process needs to accomplish for a partnership to reach its full potential. That operationalization, as well as the determinants of partnership synergy, can stimulate constructive thinking about what steps a partnership can take to make that happen, such as matching the partners’ roles and responsibilities with their particular interests and skills; identifying and ensuring the sufficiency of various types of resources; paying attention to the benefits partners seek from collaboration, as well as the drawbacks the partnership can alleviate; and searching for leaders and coordinators of partnerships who have special kinds of skills. Going beyond what partnerships can do on their own, the framework can facilitate the development of diagnostic tools that can help the people who manage partnerships determine the extent to which their partnership is achieving synergy and identify its particular strengths and weaknesses. The framework can also support the development of training programs to give the people responsible for managing partnerships the competencies they need to be effective in promoting partnership synergy.

**ENDNOTE**

1. In this paper, we use the term “partnership” to encompass all of the types of collaboration that bring people and organizations together to improve health, health care, and the functioning of the health system (see Mitchell and Shortell 2000).
References


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