Achieving Synergy With Collaborative Problem Solving: The Value of System Analysis

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Introduction

Beginning with Annie E. Casey Foundation’s (AECF) New Futures initiative (AECF, 1995), foundations throughout the U.S. have been experimenting since the late 1980s with initiatives designed to foster collaborative problem solving.1 These initiatives have been characterized in multiple ways – systems-change initiatives, community change initiatives, comprehensive community initiatives, etc. – but they generally promote the form of collaboration that Paul Mattessich and Barbara Monsey defined in their seminal publication, Collaboration: What Makes it Work:

Collaboration is a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to: a definition of mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards. (1992, p. 7)

Key Points

- Collaborative problem solving has a long and important tradition in philanthropy. While there are notable success stories, it is clear that large-scale impact does not occur by simply bringing various stakeholders together around a common agenda and then offering them funding for planning and implementation.
- One of the most critical ingredients is a high-leverage strategy, which in turn requires a coherent understanding of the system that surrounds the problem.
- Reclaiming Futures, a national initiative aimed at promoting juvenile-justice reform at the local level, explicitly promotes system-level problem-solving by offering a conceptual framework that each site uses to identify gaps in how court-involved youth are served by different agencies.
- This article evaluates six North Carolina sites that have adopted the Reclaiming Futures model. These sites can point to improvements in screening court-adjudicated youth for substance issues and in moving affected youth into assessment and treatment. These changes, at least in part, are the result of agencies that now share a common view of the larger system that affects young people with substance-abuse issues.

1 In addition to Casey, the following foundations experimented with initiatives to promote collaborative problem solving and systems change during the 1990s: W. K. Kellogg, Robert Wood Johnson, McKnight, William and Flora Hewlett, Ford, Rockefeller, Cleveland, Colorado Trust, Sierra Health, and the California Wellness Foundation. Some of these foundations have de-emphasized this strategy in recent years, but others beyond this list have joined the ranks, including The California Endowment and the Kansas Health Foundation.
Large-scale impact requires that the group move beyond trying to improve the delivery and reach of existing services, and instead acknowledge that the community’s mix of services and programs will need to change in a fundamental way.

impact can be greater than the sum of what can be accomplished when those organizations work on their own. John Kania and Mark Kramer (2011) concisely restate this argument when setting the stage for their collective-impact model: “Large-scale social change comes from better cross-sector coordination rather than from the isolated intervention of individual organizations” (p. 38).

At minimum, working collaboratively can pay off with improved service coordination. Under this paradigm, agencies that work with the same clients come together in joint meetings to get to know one another and learn about one another’s programming. The goal is to improve coordination and referrals, which in turn will make it easier for clients to receive the full set of services they need (Bruner, 1991; Nageswaran, Ip, Golden, O’Shea, & Easterling, 2012).

This form of collaboration is important for improving the experience of clients within a system, but it is unlikely to generate huge impacts on the overall health and well-being of the community. Large-scale impact requires that the group move beyond trying to improve the delivery and reach of existing services, and instead acknowledge that the community’s mix of services and programs will need to change in a fundamental way.

Most collaborative endeavors sponsored by foundations strive for these larger “systems change” outcomes. In a systems-change initiative, organizations working on different aspects of the same underlying issue (e.g., homelessness, youth violence, access to health care) come together to improve the community’s collective approach to the issue. They carry out analyses to identify duplication in services, gaps in programming, and even areas where they might be working at cross purposes. With this knowledge, the partnering organizations make improvements to their programs and services and look for ways to deliver “missing” services and programs (Melaville & Blank, 1991).

If the group is particularly expansive and innovative in its thinking, it might achieve a breakthrough solution that goes well beyond filling in gaps or refining programs. Indeed, the foundations that have invested in collaborative problem-solving initiatives have typically been motivated by this possibility of fostering bold solutions that address the major causes of the target problem, rather than incremental enhancements to the current system.

This article addresses the question of how a collaborative group can achieve large-scale impact through fundamental redesign of community systems. We begin with a brief review of the literature on collaborative problem solving and identify the factors that researchers and practitioners have proposed as critical to successful collaboration. Studies and guidebooks generally emphasize the process through which the participating members work together (e.g., consistent communication, building trust, working toward consensus solutions), the structure of the collaborative (e.g., for-

2 In a typical comprehensive community initiative, the collaborating partners are governmental, nonprofit, faith-based, or informal organizations that carry out programs and services in a particular community or region. Systems-change collaboration can also be carried out on a larger scale, in which case the partnering organizations will often be operating in different regions of a country or in different parts of the world. Collaboration for systems change can also occur among funders who operate in the same region (e.g., Appalachian Regional Funders) or who are working to create complementary impact on a shared issue (e.g., the Climate and Land Use Alliance).
mal versus informal organization, importance of a backbone organization), the resources available, and the leadership that allows the group to move forward with its action plan.

We don’t dispute that all these factors are crucial to successful collaboration, but by themselves they are insufficient to yield large-scale impact. The most effective collaboratives are those that develop and execute game-changing strategies. Synergistic, communitywide impact requires a smarter, more comprehensive way of doing business – on the part of the collaborative as well as each participating organization. They need to operate on the fundamental factors that drive the problem they came together to solve. When done well, a system analysis will identify those factors, show how they interact with one another, and point to opportunities for high-leverage intervention.

The concept of system analysis is presented in more depth below. We also discuss the challenges that collaboratives face in trying to understand the system they are working within. To provide guidance on how to carry out a useful system analysis, we describe the experience of six coalitions in North Carolina that are working to reduce substance abuse and recidivism among young people involved in the juvenile-justice system. These groups are participating in Reclaiming Futures, a national initiative launched by the Robert Wood Johnson Foundation (RWJF) in 2000. This example illustrates not only what system analysis looks like in practice, but also demonstrates how a funder, a program office, or a consulting group can provide useful guidance.

What Do We Know About Collaborative Problem Solving?
Roz Lasker and Elisa Weiss (2003) make the case that by its very nature, collaboration among diverse actors can produce a smarter, more comprehensive strategy:

When a collaborative process combines the complementary knowledge of different kinds of people – such as professionals in various fields, service providers, people who use services, and residents who are directly affected by health problems – the group as a whole can overcome these individual limitations and improve the information and thinking that undergird community problem solving. (p. 25)

Numerous studies support this hypothesis (e.g., Conner & Easterling, 2009; Hawkins et al., 2009; Kania & Kramer, 2011; Hanleybrown, Kania & Kramer, 2012). However, an even larger body of work suggests that synergistic impact is more the exception than the norm (Kreuter & Lezin, 1998; Hallfors, Cho, Livert, & Kadushin, 2002; Brown & Fiester, 2007; Trent & Chavis, 2009; Kubisch, Auspos, Brown, & Dewar, 2010; FSG, 2011). Collaboration is complex, intense work that deliberately brings forth differences in opinion among actors who have their own distinct personalities, organizational mandates, and turf to protect (AECF, 1995; White & Wehlage, 1995; Foster-Fishman & Long, 2009; Meehan, Hebbeler, Cherner, & Peterson, 2009; Silver & Weitzman, 2009; Walker, Gibbons, Navarro, 2009). Many collaborative efforts fail to overcome these challenges and thus produce little lasting benefit to the community.

Myriad books and articles have been published over the past two decades with the intent of improving collaborative problem-solving efforts (e.g., Bruner, 1991; Melaville & Blank, 1991; Mattessich & Monsey, 1992; Butterfoss, Goodman, & Wandersman, 1993; Cohen, Baer, & Satterwhite, 1994; Kegler, Steckler, McLeroy, & Malek, 1998; Kreuter, Lezin, & Young, 2000; Lasker & Weiss, 2003; Alexander et al., 2003; Easterling, Gallagher, & Lodwick, 2003; Wandersman, Goodman, & Butterfoss, 2005; Trent & Chavis, 2009; Kubisch, et al., 2010; Raynor, 2011; Castelloe, Watson, & Allen, 2011). These authors have emphasized a wide range of factors that influence the success of a collaborative effort:

- The manner in which the collaborative is brought together.
- The types of relationships that members have with one another.
- The process through which the group defines the work it will do together.
- The clarity of the mission and strategy.
- The organizational structure of the collaborative.
• The type of leadership that exists among the group.
• The level of resources available.
• The role of the funder.

Mattessich and Monsey’s 1992 publication has been particularly influential. Based on a review of 18 empirical studies, the authors identified 19 conditions that increase the prospects of success. (See Table 1.)

Kania and Kramer’s collective-impact model builds on this earlier analysis and identifies five conditions as key to achieving large-scale change through collaborative problem solving:

1. Common agenda. All participants must have a shared vision for change, including a common understanding of the problem and a joint approach to solving it through agreed-upon actions.

2. Mutually reinforcing activities. Participant activities must be differentiated while still being coordinated through a mutually reinforcing plan of action.

3. Continuous communication. Consistent and open communication is needed across the many players to build trust, assure mutual objectives, and create common motivation.

4. Backbone support organization. Creating and managing collective impact requires a separate organization with staff and a specific set of skills to serve as the backbone for the entire initiative and to coordinate the participating organizations and agencies.

5. Shared measurement. Collecting data and measuring results consistently across all participants ensures that efforts remain aligned and that participants hold one another accountable.

The collective-impact model offers a concise portrait of what an effective collaborative group looks like in practice, but the model leaves open the question of how the group comes up with the right strategy – a strategy that is smart enough and powerful enough to yield collective impact. It is all too easy for the members of a collaborative group to gravitate toward incremental solutions (i.e., tweaks to the array of existing programs and services in a community). The Strive example that Kania and Kramer (2011) use to illustrate collective impact is impressive because the collaborative group developed and implemented a game-changing strategy to overhaul the system of public education in Cincinnati.

Highly successful collaboratives – the ones that generate synergistic, communitywide impacts – do more than align the activities of members. They also find smarter, more comprehensive ways of addressing the issues that are at the root of whatever problem they are working to solve, whether it is homelessness, a struggling economy, under-performing public schools, an epidemic of methamphetamine abuse, or lack of access to health care among the uninsured (Gray, 1989; Mattessich & Monsey, 1992; Lasker, Weiss, & Miller, 2001).

System Change and Systems Thinking
Finding a strategy capable of large-scale impact (i.e., “moving the needle”) is a daunting challenge, particularly when the collaborative is seeking progress on a complex issue driven by economic or social trends at a national or global level (Kadushin, Lindholm, Ryan, Brodsky, & Saxe, 2005). Pennie Foster-Fishman and her colleagues make the case that large-scale impact requires a fundamental change to the system surrounding that problem. They define a system as “the set of actors, activities, and settings that are directly or indirectly perceived to have influence in or be affected by a given problem situation” (Foster-Fishman, Nowell, & Yang, 2007, p. 198).

From a system-change perspective, the major task facing the collaborative is to positively affect critical leverage points within the relevant systems. Identifying these leverage points requires a sound
system analysis. A system analysis identifies the factors that influence the problem within the local context, including the effects of programs and services already in place within the community. To get to a high-impact strategy, the group looks for major causal factors that are not adequately addressed by existing programs and services. Once these leverage points are identified, the group is in a position to map out what it wants to accomplish with its strategy, or in other words, to create its “theory of change.” Generating such a solution requires that the group engage in the sort of systems thinking that Peter Senge (1990) articulated in *The Fifth Discipline.*  

Research shows that when a group understands the system surrounding its issue, it is more likely to achieve large-scale impact. For example, Jeffrey Alexander and his colleagues (2003) found that coalitions in the Community Care Network Demonstration Program were more likely to succeed with their health-improvement work if they had a more complete “systems orientation” (e.g., focused on population health and broader determinants, created linkages between multiple facets of the community system). Likewise, Mark Wolfson and his colleagues (2012) showed that campus-community coalitions were more successful in reducing alcohol-related injuries among college students if the strategy was guided by a system-level analysis of drinking behavior, accessibility, policies, and norms.

### Getting to Systems Thinking

If we accept the idea that a strong system analysis is crucial to developing a powerful collective strategy, then the practical question is how to promote this form of analysis, thinking, and planning. Lasker and Weiss (2003) argue that drawing

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5 In the terminology of Ron Heifetz and Marty Linsky (2002), the group’s approach to problem solving needs to be “adaptive” rather than “technical.”
Although most communities have at least some treatment services available, the practical reality is that many of the court-involved youth who most need these services do not get into the right treatment or, if they do, often fail to complete the program. In most communities, the juvenile-justice and treatment systems are fragmented, disorganized, and ill-suited to the needs and circumstances of many young offenders and their families. Together a diverse group of stakeholders is critical. They point to four distinct ways in which diversity allows the group to think smarter and bigger:

- Participants obtain more accurate information about the nature of the problem.
- They are better able to understand the local context (e.g., history, politics, assets, values).
- They are able to break new ground by challenging “accepted wisdom” and getting to the root causes of problems.
- They are better able to see the big picture.

In other words, with diversity in perspective, the group is better able to see the overall context within which the problem arises, develop a high-leverage strategy that directly addresses the fundamental causes, and take full advantage of whatever supports and assets might contribute to a solution.

Having a diverse group from throughout the community may help in gaining a fuller view of the problem, but it raises a separate set of challenges:

As a collaborative group brings in more diverse perspectives, it becomes more difficult to achieve the alignment necessary to develop a collective strategy, especially a coherent collective strategy. Having a skilled facilitator can help (Conner & Easterling, 2009), but by their very nature community collaboratives struggle with the task of moving forward with a clear, focused system-change strategy.

A system analysis is arguably one of the most important pieces of work that a collaborative needs to carry out, but it is also one of the most challenging. A good analysis requires accurate, current, locally relevant data; the capacity to analyze and interpret those data; and an ability to integrate those analyses with theoretical and practical expertise to generate a useful picture of the system. It is inherently difficult for any collaborative to find the data that allow for a full understanding of the problem they are seeking to solve and an accurate assessment of how well current programs and services are alleviating the problem. Even if all the key data points are available, most collaborative groups struggle with the task of translating data into a useful theory of change that points to strategic leverage points.

Working from a common conceptual framework can help collaborating actors to understand the system in which they are working and to decide where to focus their efforts. In the remainder of this article, we illustrate how such a framework has been beneficial to collaborative groups that are seeking to redesign the system that serves court-involved youth with substance-abuse or mental health issues.

The Problem of Substance Abuse Among Juvenile Offenders

Drug-abuse violations accounted for 12 percent of all juvenile arrests in 2008, and many other youth who end up in the juvenile-justice system have underlying substance-abuse issues. Although most communities have at least some treatment services available, the practical reality is that many of the court-involved youth who most need these services do not get into the right treatment or, if they do, often fail to complete the program.
In most communities, the juvenile-justice and treatment systems are fragmented, disorganized, and ill-suited to the needs and circumstances of many young offenders and their families.

- The juvenile-justice system and mental health and substance-abuse treatment system deal with the same youth, but court counselors and treatment providers often don’t have good lines of communication or methods for coordinating their activities.
- There is often poor coordination and communication among actors within each of these two systems. Information that the court counselor learns about the youth’s problems or experience with treatment may not make it to the judge who sees the youth back in court periodically.
- On the treatment side, providers may compete with one another for clients rather than work together to determine which services are most appropriate for the youth.
- Court services, law enforcement, and mental health treatment are not the only systems intersecting with these youth. Some are deeply involved with social services and child-protective services, which are even less integrated with juvenile justice than is mental health treatment.
- Beyond these public and private agencies, most communities have a variety of nonprofit and faith-based organizations that provide mentoring, arts and recreation programming, and other offerings that could be valuable to court-involved youth. Many of these organizations are disconnected from the formal systems (justice, treatment, education, social services).

When a system is dysfunctional in these sorts of ways, the community will inevitably have high rates of long-term substance abuse and recidivism. On the bright side, these flaws in the system can generally be remedied, leading to significant payoffs for young people, their families, neighborhoods, and government.

The ‘Reclaiming Futures’ Approach to Systems Change

The Reclaiming Futures (RF) model was developed by the Robert Wood Johnson Foundation (RWJF) as a means of “reinventing the way that substance abuse intervention and treatment services were conceptualized and delivered in juvenile courts” throughout the United States (Nissen & Merrigan, 2011a, p. S3). Under the RF model, a locally based, multisector team comes together to improve the services, programs, policies, and practices that come into play when a young person interacts with the juvenile-justice system. The RF model requires these coalitions (referred to as “change teams”) to have representation from specific sectors, including judges, court services (court counselors, probation officers), mental health and treatment providers, social service agencies, and youth-serving nonprofit organizations. The change team meets regularly and serves as the architect, implementer, and champion for shifts in policy and practice that will have significant impact.

Under the RF model, the local change team takes the lead in revamping the existing system so that court-involved youth with mental health and substance-abuse issues are more quickly and accurately identified and then connected with appropriate services and resources. The change team begins its work with a planning process where the team (1) develops a shared understanding of how young people are and are not served by the current system, (2) assesses the nature and structure of the system, and (3) identifies the most powerful “levers for change” (Nissen & Merrigan, 2011b).

As of December 2012, 37 communities in 18 states have formally engaged with the RF initiative. Beginning in 2000, RWJF funded a demonstration phase of the initiative that included 10 urban and rural communities in Alaska, California, Illinois, Kentucky, Michigan, New Hampshire, Ohio, Oregon, South Dakota, and Washington. In 2008, RWJF was joined by two federal funders – the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) – in extending Reclaiming Futures to a second national cohort. At the same time, the Kate B. Reynolds Charitable Trust (KBR) funded six communities in North Carolina. A state office to support RF work in North Caro-
lina was established in 2011 at the North Carolina Division of Juvenile Justice. The authors of this article have been directly involved in the North Carolina RF initiative as the evaluator (Easterling and Arnold), funder (Smart), and the director of the state office (Jones).

Conceptualizing an Ideal System
Sites funded under RF are supported by the National Program Office (NPO) at Portland State University. The NPO provides a variety of resources and services, including instructional materials, webinars, on-site coaching, and regular cross-site meetings. During the early years of the initiative, the NPO did not have a clear view of exactly how the change teams should go about deciding on their system-change strategy. Different teams adopted their own distinct planning processes and carried out different types of system analysis. Those approaches were discussed and compared at national gatherings. During one of those meetings, the national evaluator Jeff Butts sketched out a conceptual model that became the starting point for a deliberative process that ultimately produced the RF six-stage model shown in Figure 1. This model, which took shape about five years after the start of the initiative, now provides the framework for system analysis and planning as new sites begin their work (Nissen & Merrigan, 2011a).

The RF model in Figure 1 paints a picture of how the system should operate when a young person with substance issues is arrested and enters the system.
juvenile-justice system (Butts & Roman, 2007; Nissen & Merrigan, 2011a). In an ideal system, a court-involved youth passes through the following sequence of steps:

1. Initial screening. All youth who enter the juvenile-justice system are asked a short series of questions that help determine any need for more extensive assessment. The screening tool should be evidence based, particularly with regard to the ability of the tool to identify all youth who potentially have substance abuse and mental health issues (i.e., high level of sensitivity).

2. Initial assessment. Any youth with a positive result on the initial screening receives an in-depth assessment to detect substance-abuse problems and related conditions that may compromise his or her ability to lead a healthy and productive life. As with screening, the tool for assessment should be shown through evidence to be valid and reliable.

3. Service coordination. If the assessment shows a significant substance-abuse problem, a service plan needs to be developed that should take into account the young person’s needs, assets, and goals as well as the interests and contributions of the family. In addition, the plan needs to be coordinated with services and care management that are provided through other agencies working with the client and family (e.g., social services, schools).

4. Initiation. For the treatment plan to be of any benefit, the young person (and other family members, if appropriate) needs to initiate the prescribed treatment, ideally within 14 days of the assessment.

5. Engagement. Attending multiple sessions early in the treatment process increases the prospect that the young person will seriously engage with the work and benefit from it.

6. Transition. After successfully engaging with the treatment process, the goal is to ensure that the young person completes the specified course of treatment. At this point, the “services and formal structures gradually recede from [his or her] life with a corresponding strengthening of carefully constructed post-treatment and community-based positive recovery network supports, opportunities, and connections,” such as school re-engagement, job training, leadership development, mentoring, sports, and the arts (Nissen & Merrigan, 2011a, p. S6).

For a young person to transition through the six steps, a variety of actors (e.g., law enforcement, court counselors, judges, treatment providers, managed-care organizations, social services, schools, mentoring organizations) need to coordinate their efforts. Thus, while the model is in one sense a rather straightforward sequence of procedural steps, it also allows for a more nuanced assessment of how well a complex system is serving the needs of court-involved youth.

Using the Six-Stage Model to Develop Strategy for Systems Change

In this section we look specifically at the role that the six-stage model has played in strategy development and performance assessment among the six communities in North Carolina that have been carrying out Reclaiming Futures since 2008.⁶

The six North Carolina sites have each relied heavily on the six-stage model to guide their decision on where to intervene within their local systems. To some extent, the model has pointed the six change teams toward the same strategic issues. But we are also seeing marked differences in strategy as a function of the specific gaps that have become evident in each community.

⁶ The six funded communities are Cumberland County (Fayetteville is the major city); Forsyth County (Winston-Salem is the major city); Guilford County (Greensboro and High Point are the major cities); Rowan County (Salisbury is the major town); Orange and Chatham counties (including Chapel Hill and a number of smaller communities); and a largely rural region in the northwestern Piedmont region of the state (Iredell, Surry, and Yadkin counties).
Beyond the first two steps in the model, the six change teams have pursued largely idiosyncratic strategies for system change. All sites have looked for ways to expand and strengthen the treatment services available to young people with substance-abuse issues, but different sites have emphasized different treatment models.

The most obvious commonality across the six sites is that each one began its systems-change work by focusing on the first step — screening. All communities had critical flaws in their screening process, especially concerning the goal of screening all youth who enter the justice system. The six-stage model allowed the change teams to recognize that youth were slipping through the cracks and stimulated new procedures that clarified who would be responsible for screening youth who came into the system through various entry points. Procedures were also enacted to ensure that a positive screening result would lead to an assessment. Another key reform involved standardizing the tool used for screening. Prior to RF, court counselors and others who came in contact with court-involved youth used a variety of screening protocols. After recognizing the importance of an evidence-based tool, all six sites adopted the Global Assessment of Individualized Needs – Short Screener (GAIN-SS). Court counselors in the six sites showed little to no resistance to the new tool.

After focusing on the screening step, all six sites determined that it was also important to create a more efficient transition from screening to assessment. Whereas the sites arrived at the same general solution in the case of screening, they differed in terms of what needed to happen to improve assessment. Communities with a single mental health treatment provider could rely on a more straightforward procedure than could communities with multiple providers. One site created a position within court services to conduct the assessment; the others continue to rely on treatment providers for this step. In addition, the sites have varied considerably on whether a new assessment tool was needed. Some change teams encouraged local providers to adopt one version or another of the GAIN assessment tool, while other teams either did not see the need to change the tool or else saw considerable costs in moving to the GAIN.9

Beyond the first two steps in the model, the six change teams have pursued largely idiosyncratic strategies for system change. All sites have looked for ways to expand and strengthen the treatment services available to young people with substance-abuse issues, but different sites have emphasized different treatment models. Sites have also varied in how they have sought to strengthen programming that goes beyond treatment. Some have focused heavily on strengthening their community’s mentoring programs and tailoring mentoring to the needs of offenders. Others have focused on arts and recreation programming or adding a juvenile drug court.

The Value of the Six-Stage Model
Using the six-stage model, these change teams were able to develop their strategies more efficiently than did the original 10 RF communities. With those first 10 sites, the local change teams went through their own distinctive strategic-planning process unaided by a big-picture view of what the system should look like. This made it difficult, at least at the beginning, for the members of the change team, each steeped in their own perspective, to develop a single, clear system-change strategy (Nissen & Merrigan, 2011b). With access to the six-stage model, the

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9 Chestnut Health Systems has developed a family of GAIN (Global Appraisal of Individual Needs) tools for assessing the needs and resources of clients in mental health treatment, along with the GAIN-SS screening tool referenced above.
RF change teams in the six North Carolina sites could start out with a common understanding of how court-involved youth fall through the cracks during screening, assessment, and treatment. This, in turn, made it easier to conduct a strategic analysis of the strengths and weaknesses of their own system, which in turn allowed the different actors on the change team to agree on where to focus their efforts.10

While the change teams in the six RF communities have developed distinctive strategies for system change, each strategy is grounded in the six-stage model. The model helped the teams analyze their existing systems, identify strengths and weaknesses, and set priorities for improving processes and services. Based on this analysis, the change teams have implemented strategies that have materially improved screening and assessment, and have brought important new services and community-based supports.

**Using the Six-Stage Model to Strengthen Measurement and Evaluation**

The six-stage RF model has proven useful not only in developing system-change strategies to improve services for court-involved youth, but also in measuring the system’s effectiveness in reaching and serving those youth. The bottom half of Figure 1 shows a series of performance metrics that provide a quantitative assessment of how well the system is functioning at each of the six steps (Butts, 2010). These indicators are calculated by answering the following questions:

1. Of all the youth who enter the justice system, how many are screened with an appropriate screening tool?

2. Of the youth who show evidence of substance-abuse or mental health issues on the screening tool, how many receive a full assessment in a timely manner?

3. Of the youth who are assessed as having a significant substance-abuse or mental health issue, how many receive an appropriate care plan in a timely manner?

4. Of the youth with a care plan, how many actually initiate treatment within 14 days?

5. Of the youth who initiate treatment, how many successfully engage with the program (defined as three visits within 30 days)?

6. Of the youth who initiate treatment, how many actually complete the planned steps?

7. Of the youth who complete their treatment plan, how many transition to other community-based programs that can assist with recovery?

A well-functioning system will have values close to 100 percent for all seven of these indicators. Where there are “cracks” in the system, the corresponding percentage will be well below 100 percent. The smaller the percentage, the more important it is for the change team to focus its strategy on the corresponding crack in the system. Once the team puts its strategy into place, the indicators can be monitored to determine how much improvement has occurred at different points in the system.

Within the North Carolina Reclaiming Futures initiative, each change team has worked to measure the percentage of youth who successfully transition through each of six stages. While the change teams recognize the value of knowing these percentages, they have struggled to find practical ways to compile the data necessary to do the calculations.

Across the six North Carolina sites, the greatest challenge is that the different steps are associated with different data systems. (See Table 2.) Because RF work crosses multiple systems, the measure-
ment process must work with different data systems. Agencies legitimately express concern over client confidentiality and adhering to their own rules and regulations. This makes it difficult to link data from different systems to gain a comprehensive picture of any given client’s progress. Aggregate reports generated by each system are much less informative.

Approximately two years into the North Carolina initiative, the RF change team in Rowan County developed its own data system to track court-involved youth through each of the six stages. One member of the change team stays in close contact with the various court counselors, treatment providers, and representatives from other programs who interact with court-involved youth. She compiles data indicating if and when the client is screened, assessed, enters treatment, and completes the treatment plan. Summary statistics are monitored each month and used by the change team to evaluate progress and identify where new services or coordination are needed. The other RF sites attempted to establish similar tracking systems, but were less successful in finding ways to coordinate the collection of data from the many actors who interact with court-involved youth.

Because of the practical challenges to tracking individual clients, the change teams have been interested in a comprehensive, state-level data system that would combine data elements from the state’s NC-JOIN, NC-TOPPS, and NC-ALLIES data systems. Representatives of the state agencies that manage those data systems have been sensitive to this request, but have been unable to overcome the financial, technical, political, and confidentiality issues that stand in the way of a truly integrated system.

In the meantime, the state RF office has developed a relatively simple data-tracking system that combines screening, assessment, treatment, and outcome data on a client-specific basis. This system relies on an Excel spreadsheet managed by the local project director. When a young person enters the juvenile-justice system, a data record is created. The court counselor furnishes data showing the results of the screening and the date of referral for assessment (if warranted). When the client interacts with an additional agency (for assessment, substance-abuse treatment, counseling, mentoring, etc.), a representative of that agency is responsible for transmitting data that describe the services provided and when. Treatment providers also are responsible for transmitting baseline and

### TABLE 2 Data Systems

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<th>North Carolina Data Systems With Information on Court-Involved Youth</th>
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<td><strong>NC-JOIN</strong> (the North Carolina Juvenile Online Information Network) is used to track youth as they move through the juvenile-justice system. NC-JOIN is a web-based system that allows court counselors and detention and youth development center staff to track the progress and placement of youth being served by various programs and facilities. This data system contains demographic information, the nature of the criminal complaint, results from screening, and partial information on referrals and the services accessed by the youth.</td>
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<td><strong>NC-TOPPS</strong> (NC Treatment Outcomes and Program Performance System) manages data related to mental health and substance-abuse treatment. The system is maintained by the North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services. Treatment providers use the Web-based system to input information on treatment plans, services provided, and progress toward goals. Data are entered for all clients whose services are covered by Medicaid.</td>
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<td><strong>NC-ALLIES</strong> (A Local Link to Improve Effective Services) contains client data for a variety of community-based programs designed to reduce juvenile crime and serve juvenile offenders, including restitution, family counseling, and experiential skill building. Specifically, all programs funded by the local Juvenile Crime Prevention Council must track their clients, showing their participation in activities and at least limited data on individual outcomes.</td>
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follow-up assessments of the client’s needs, goals, and progress.

This data-tracking system was introduced in summer 2012 and was adopted by the six North Carolina sites initially funded by the Kate B. Reynolds Charitable Trust (KBR). The system was refined and enhanced in December 2012 in anticipation of adding six new RF sites across the state, two of which are funded by KBR and four of which are funded by the Duke Endowment. Both funders have instructed the newly funded groups that they need to use the data-tracking form to monitor all court-involved youth.

The standardized system for tracking court-involved youth represents a significant step forward for the initiative in North Carolina. An important next step is to create effective feedback loops and learning processes that allow the change teams to put these data to good use with regard to system analysis, strategic thinking, and future planning. In addition, the change teams have expressed a strong interest in learning how to use these data when communicating needs and accomplishments to stakeholders at the local and state level.

Impacts on Youth and Families
As the RF change teams have gone about their work of improving systems and evaluating progress, they have remained focused on the ultimate goal of improving the lives of young people, as evidenced by reductions in substance use, lower rates of re-offending, increased likelihood of staying in school, better management of mental health issues, less family conflict, and successful transition into adulthood. Creating a client-oriented data-tracking system is a crucial first step in being able to evaluate whether the systems-change work stimulated by Reclaiming Futures is in fact paying off in these tangible, intrinsically meaningful ways.

Prior to the initiative, the NC-JOIN data system could be used to track recidivism and progress toward goals among youth involved in the juvenile-justice system. However, it was not possible to assess the degree to which these youth were receiving treatment and other appropriate services. With the new data-tracking system, we will be in a position to evaluate whether these young people are being better served as a result of Reclaiming Futures. By linking these data with NC-JOIN, we will also be able to assess whether the system change also leads to lower recidivism.

Summary and Implications for Funders
Collaborative problem solving and collective-impact initiatives are specifically designed to tackle “wicked” problems that stem from many factors and that defy straightforward, technical solutions. These problems are generally not new or unknown to community leaders. Indeed, most communities will already have multiple agencies and programs in place to address the problem, or at least specific aspects of the problem. The net result is a complex landscape of assorted actors and programs, some of which are complementary but many of which are disconnected from one another, or even in competition.

The first step to fixing a system is seeing this landscape clearly. For most of the actors who become involved in collaborative problem solving, systems-change work requires a different way of seeing and thinking. Conceptual frameworks such as the six-stage model provide a means of charting and navigating what is invariably complex territory.

Foundations can add considerable value to collaborative problem solving by bringing in resources and expertise to aid with system analysis. They can compile and distill the research that exists on key topics. They can work with state and federal agencies to make community-level data more readily available and more easily accessible to local organizations and coalitions. Funders can also contract with process and content experts who can lead the collaborative group in carrying out a system analysis that is both rigorous and appropriate to the local context – without overwhelming the group with complicated statistical models and technical jargon. And as demonstrated by the analysis presented above, funders can add value by offering up conceptual frameworks that assist the group in analyzing the problem and visualizing what the system should look like.
In addition to the Reclaiming Futures example described in this article, the Study to Prevent Alcohol-Related Consequences (SPARC) conducted by Wolfson and colleagues (2012) provides valuable guidance on how to move coalitions through system analysis and toward high-leverage strategies. The SPARC intervention includes highly formulated instructions on how to form a broad-based coalition, analyze the campus and community environments, select evidence-based strategies, and mobilize resources for implementation. Consultants with expertise in community organizing and alcohol-abuse prevention provide workshops and ongoing consultation to the coalitions. Coalitions in the SPARC study that took full advantage of these resources were able to achieve statistically significant reductions in problem drinking and alcohol-related consequences. To encourage broad-scale replication of this approach, the SPARC study team developed a guidebook which provides details on forming an effective coalition, conducting a comprehensive assessment of campus and community environments, and translating that assessment into a locally relevant, policy-oriented strategy to reduce problem drinking (Martin et al., 2012).

The SPARC example illustrates a crucial, overarching point when it comes to supporting collaborative problem solving. While collaborative groups obviously need funding (both for planning and for implementation of strategies), foundations can contribute in a variety of other ways that may prove even more crucial in the long run, especially in guiding the development of smart system-change strategy. Responsibility for designing system-change strategies legitimately falls to local actors, but foundations can contribute to their work by providing conceptual models and other resources that lead to big-picture thinking and high-leverage strategy.

References


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