Reducing Disparities in Diabetes: The Alliance Model for Health Care Improvements

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Individuals in specific racial and ethnic groups experience the greatest prevalence and widest disparity in outcome for both type 1 and type 2 diabetes.[1] The negative long-term consequences of the disease for these individuals are also higher and can be severe, including amputation, kidney disease, cardiovascular disease, and blindness.[2] Better access to and higher quality of health care leads to improved diabetes control and fewer negative outcomes for people at risk of and diagnosed with the condition, especially, in low-income communities.[2,3]

Particular systems problems associated with poor results for those with diabetes include failure to adequately identify high-risk people, failure to follow recommended clinical treatment guidelines, lack of adequate provider education, inadequacy of patient self-management education, and minimal coordination of care.[4] Each of these has been linked to inadequate information systems, insurance and payment options, deployment of clinical personnel, and application of evidence-based strategies for change and similar other deficiencies.[5]

It is widely agreed that to achieve sustainable change that reduces disparities, new and improved health care policies and systems are needed.[6]

Achieving such change within and across health care facilities and communities requires participation by key stakeholders in the problem.[7] This view posits that solutions are complex (including adaptation of evidence-based strategies to new locales) and require engagement of diverse perspectives (including those of the people who experience the day-to-day burden of the health problem). Recent evidence has shown that collaborative community-wide approaches to enhancing health care delivery can generate far-reaching policy and system changes and improvements in health status.[8]

To support evidence-based means to reduce inequity in health status, the Alliance to Reduce Disparities in Diabetes was launched by the Merck Company Foundation in 2009. The foundation is providing up to $2 million over 5 years (2009–2013) to each of the five Alliance sites. The five communities have been implementing processes of change for 2.5 years. The Research Triangle Institute is evaluating progress in the Alliance projects. Outcomes related to diabetes control will be documented by endpoint, and policy and practice factors contributing to success are being tracked.

The Alliance effort is based on several assumptions: that more is known than has been applied regarding how to improve health care, that collaboration of stakeholders is key to success, that communities face many similar challenges and generic approaches can be modified to fit unique situations, and that reduction in disparities requires targeted and emphatic strategies directed toward the groups most at risk.

Alliance Principles and Strategies

At the core of learning and change in the Alliance effort are five collaborative projects led by organizations experienced in health care delivery and community engagement in Camden, N.J., Chicago, Ill., Dallas, Tex., Memphis, Tenn., and the Wind

River Reservation in Wyoming. The community component of the Alliance, in addition to spearheading action and mobilization for change in the targeted low-income neighborhoods, comprises both a collegial support system and a work group for mutual sharing of ideas and expertise designed to move work forward. A description of the Alliance's national efforts can be found online at www.alliancefordiabetes.org.

Each of the five Alliance communities is implementing a three-element strategy. The first element entails processes of institutionalizing patient self-management education in targeted health facilities. This element recognizes that empowered patients are those who have the skills and confidence to carry out day-to-day clinical recommendations and the related management tasks needed to bring their diabetes into control or to significantly reduce their risk for developing the condition. Patient education classes are made available beyond the normal clinic hours to accommodate patient work schedules, and classes are held in locations other than the clinic sites for ease of access and flexibility. Community events and community leaders are also utilized to emphasize the importance of diabetes education and to increase awareness of this health resource.

The second element comprises processes of institutionalizing state-of-the-art provider education. This element recognizes the central role in diabetes care of effective health provider communication and counseling combined with health professionals' ability to interact optimally with people from different cultures. The training includes workshops designed specifically for health care providers (with the provision of continuing medical education [CME] credits), the development of manuals to increase knowledge of subgroup differences within ethnic groups (e.g., various American Indian tribes), education related to stages of change and motivational interviewing techniques, as well as training to encourage shared decision-making between patients and providers.

The third element entails processes to modify existing service-delivery policies and procedures or initiate new ones to support provision of high-quality clinical care, enhanced clinician-patient communication, and empowering self-management education. The supportive policies and practices sought are those that have been shown to relate to improvements in diabetes outcomes: identification of people at risk, coordination of care, information exchange, clinical organization of services, and deployment of personnel.[9,10]

Fundamental to widespread, sustainable change is the involvement of a diverse community of stakeholders who work together to determine the best way to adapt each element and the proven approaches comprising it to the needs and particular features of their community. Key constituencies in the community are represented, from residents with diabetes to community organizations, health care facilities, insurers, and local governments. Each element of the Alliance effort has been shown in carefully evaluated studies to enhance care delivery and health outcomes.[8] Each, however, must be modified to fit the new situation, population, and location.

Changes pursued by the Alliance communities relate to individual health care organizations and systems, as well as organizations and systems across the community.

Adapting the Evidence Base

Although the three-element strategy is similar in all five communities, the communities themselves are unique on many dimensions. This individuality is reflected, in part, in the way each community approaches change and the particular resources each brings to implementation of its strategy. For example:

- The Camden Citywide Diabetes Collaborative in Camden, N.J. uses its alignment with the city's three major health systems to create new information systems that combine data and more accurately depict shared problems and joint solutions. Through the collaboration and financial support of local stakeholders, a citywide Health Information Exchange is now in place to allow local health care providers to view laboratory and radiology results and discharge summaries for patients wherever they reside in the city. The collaborative, with the support of the New Jersey Chamber of Commerce and the New Jersey Hospital Association, is working to pass legislation to create an urban accountable care organization pilot program.
- Improving Diabetes Care and Outcomes on the South Side of Chicago, in Illinois, draws on the long history of social and political activism on the south side of Chicago to mobilize allies. Quality improvement teams led by a clinic champion and with the support of senior management have been established at each participating clinic to identify and implement practice changes that will improve the quality of patient care and sustain the clinic redesign over time.
- The Diabetes Equity Project in Dallas, Tex., works with community partners to access and organize more than 2,000 physician volunteers, each of whom provides pro bono services to low-income patients. This extensive network of physicians, known as Project Access Dallas (PAD), has been the primary source for identifying and referring low-income and at-risk patients to expanded community-based services. In addition, PAD is attracting new clinicians by marketing a physician CME component of the project.
- The Diabetes for Life project in Memphis, Tenn., takes advantage of combining efforts of public and private organizations to reach a wide network of providers and patients through its faith-based organizations and health ministries. Outreach to identify patients in need of diabetes self-management education and enhanced health care has been accomplished by training volunteer church representatives to find high-risk individuals within their

congregations and refer them to services in collaborating clinics.
- Reducing Diabetes Disparities in American Indian Communities, a program at the Wind River Reservation in Wyoming, builds on shared cultural bonds across tribes and experience working in a large, sparsely populated geographical area. Increased coordination and improved quality of services have become formalized goals of collaboration between two tribal organizations through integration of resources and expertise and establishment of new clinical support services.

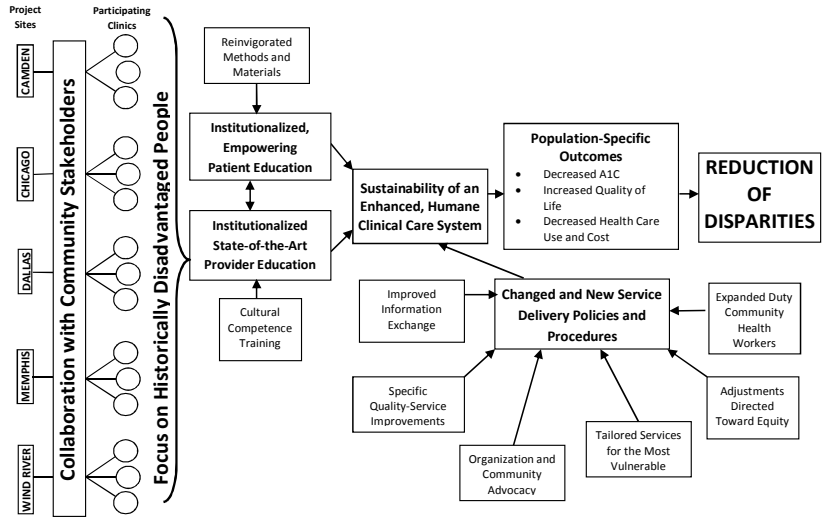

Figure 1. Alliance Model process, elements, and intended outcomes of work in communities to reduce disparities in diabetes.

Alliance Model of Process and Outcomes

A major consideration in the Alliance effort is how its three-pronged strategy to enhance health status and reduce disparities results in improvements for people in the target neighborhoods (i.e., those who have been traditionally overlooked or underserved).

As depicted in Figure 1, the initiating organizations in each site work collaboratively with stakeholders to shape evidence-based approaches to the particular features and needs of the disadvantaged community. Each sets up working partnerships with clinics (and other forms of service delivery) in the community that serve as the nexus of change efforts. Patient self-management education is reinvigorated by community-relevant methods and materials. Provider education is enriched by cultural competence training according to the local patient population (e.g., African American, Latino/Hispanic, or American Indian). Service delivery policies and procedures are sought through targeted quality improvement activities and demonstration projects. Adjustments are made as needed to ensure equity. (For example, in Dallas, participating physicians are given descriptive data when diabetes outcomes for their Latino/Hispanic patients differ from the general population.)

Allies for change are recruited through community organization and advocacy. Improved information exchange and more effective deployment of personnel are central features. In the case of the Alliance, this occurs, for example, through expanded use of community health workers reaching people at home and in community settings.

The aim is creation of a sustainable, enhanced, humane, clinical care delivery system. Achieving such a system yields population-specific outcomes. People with diabetes in the targeted vulnerable neighborhoods should realize a decrease in markers of disease such as A1C levels and increases in health-related quality of life, and their provider organizations will realize a decrease in the use and cost of health care services. Because efforts are targeted at and tailored for those in groups most at risk, these efforts will reduce the disparities usually seen in diabetes outcomes.

Challenges and Lessons in Applying the Model

Early successes in the five Alliance communities have been evident and have built on community resources and opportunities. However, individuals with key roles in moving these efforts forward, including more than 60 project team members, physician participants, clinic staff, diabetes educators, health system leaders, and community collaborators, have identified challenges that must be

Table 1. Categories of Common Challenges Across Sites in Applying the Alliance Model

Collaborative Relationships	Health System Resistance	Redefining Usual Ways of Working
Time and cost of initial relationship building	Economic pressures within the health system	Shifting attention from programs to policies
Skepticism among stakeholders about added burden of participatory approaches	Embedded organizational procedures	Working across large geographical areas
Buy-in from health care providers and facilities	Unlimited potential and limited budgets	Redefining sustainability

overcome in applying the evidence-based strategies. Table 1 presents some of the challenges experienced across sites.

In all projects, the time and cost of building the multiple stakeholder relationships and foundation needed to achieve the envisioned changes were initially underestimated. Even when strong relationships were in place, introducing the new activities and goals required nurturing participating groups and individuals. Participation can be time-consuming, and the fear of added burdens of time and energy had to be considered as a legitimate concern requiring direct attention and counterargument. Stresses within the health care system often created resistance and spilled over into the effort to implement change. An additional barrier was the embedded organizational practices in collaborating provider organizations, many growing out of funding realities and reimbursement plans in the participating facilities.

Moving forward generally required redefining usual ways of working. In some communities, working across a large geographical area was a challenge related not only to staff time and energy, but also to finding consistent and efficient means to implement plans for change.

A shared dilemma was shifting the interest of community stakeholders from program delivery to policy. Especially in low-income neighborhoods, visible programs and services are the most valued evidence of success. In these areas, ideas related to policy and systems change are less familiar. Moving to a conception of change that focuses on the policies and systems (the initial results of which are often unseen) that determine the quantity, quality, and longevity of programs and services is a difficult shift for many to make.

"Sustainability" (a corollary of shifting interests from program to policy) often required redefinition in all five communities. To achieve lasting and effective change, the focus across projects needed to be sustaining results of their work, as opposed to their staff positions or even their particular organization. Making this perceptual shift was challenging but necessary to ensure that all stakeholders shared system and policy change as a goal and could recognize success when their efforts resulted in institutionalization of service improvements.

Along with challenges, experienced leaders in the five communities identified important lessons learned during the initial phase of work (Table 2).

When working in communities in which resources are scarce, stress levels are high, and disappointment is a daily occurrence, change is especially difficult and heavily dependent on trusting relationships. When champions emerged, giving them support and encouragement increased the momentum of change. Beginning where relationships were already established gave Alliance projects a head start and is a proven approach to successful change.[11] Site leaders found that obstacles to moving forward could be somewhat ameliorated by involving key people early in the planning process to understand where allies were ready to help and where barriers to progress might lie. Serious listening and learning from stakeholders was noted as crucial not only to maintaining an inclusive and participatory process, but also to improving the change strategy and enhancing the potential for achieving the desired results. Although, as noted above, participatory approaches are time-consuming, they have been shown to engender more support of and value in the proposed change.[12]

Several leaders reported that the need to document key decisions along the way was an important lesson learned. In complex projects involving many participants, this effort to document and circulate decisions served not only as a communication tool, but also provided markers of progress.

Alliance leaders have found that being ready to work around delays and having alternative strategies are crucial to progress. In addition, they found that they have to be willing to postpone introduction of major changes until the needed relationships, new and old, are firmly in support of the change goals. Even when the ultimate goal is a good one, progress is incremental according to the level of stakeholder support.

In the view of project leaders, attending to these lessons helps to mobilize the energy and expertise needed to lower or remove barriers to change. Following them can speed the process and enable other communities to learn from the Alliance experience.

Table 2. Shared Lessons in Applying the Alliance Model

- Begin where relationships are already established.
- Involve key people early in planning.
- Identify champions, and give them lots of support.
- Learn from each other (seriously listen and consider).
- Document important decisions, and share the documentation.
- Anticipate delays, and have Plan B ready.
- Postpone the big changes until relationships are firm.
- Recognize that major changes are often an accumulation of small changes.

Conclusions and Implications for Practice

Closing the disparity gap in diabetes is no easy task. Many influential organizations and agencies are making excellent efforts to change the dismal picture and alarming consequences of inequity in diabetes care and outcomes.[13] The Alliance to Reduce Disparities in Diabetes is part of this overall campaign to achieve fairness in health care services, access, and quality.

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