

Conference Report



First Conference on Disparities and Quality of Care March 9 – 10, 2005



Robert Wood Johnson Foundation

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Background and Purpose of this Paper

On March 9 and 10, 2005, the Robert Wood Johnson Foundation (RWJF) convened a conference to discuss the interrelated issues of racial and ethnic disparities in health care and the more general quality of health care services. The purpose of the conference was to explore the many ways in which improvements in health care quality and the reduction of disparities in health care are inextricably linked. RWJF staff sought to organize discussions that would emphasize this framework, develop ways to address both issues in an integrated fashion and inform the Foundation about actions it should take in the future.

The backdrop to this meeting was that the field of quality improvement as it relates to health care and its organization, has become organized around key themes over the past few decades, especially as outlined in the Institute of Medicine's (IOM) report *Crossing the Quality Chasm: A New Health System for the 21st Century*, which called for health care that is "safe, effective, patient-centered, timely, efficient and equitable." Many organizations, government entities, health plans and providers have devoted research and resources to working around these themes, but few have incorporated the reduction of racial and ethnic disparities in treatment as a focus in their work.

In March 2002, the IOM published a report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, which documented the extent to which patients from specific racial and ethnic backgrounds receive lower quality health care. Some of this report's key recommendations touched on themes familiar to the quality improvement field, such as the recommendation for better data collection—including data on race and ethnicity—incorporating measures of disparities in performance measurement systems and using evidence-based guidelines to promote the consistency and equity of health care.

RWJF organized the conference to provide a forum where leading experts representing both general health care quality and the issue of racial and ethnic disparities could discuss questions of relevance to both fields. The purpose of the conference was to stimulate thinking and movement on key issues in health care quality and disparities—such as measurement, achieving patient-centered care and communicating about the issues in ways that engage multiple audiences.

Setting the Stage

During the opening session, Dr. Risa Lavizzo-Mourey, President and CEO of RWJF, spoke about the goals of the conference and the intersections between quality improvement and disparities. Harvey Fineberg, President of the IOM, continued this theme, using the constructs



outlined in two landmark IOM reports, about quality and disparities, respectively: *Crossing the Quality Chasm* and *Unequal Treatment*. Fineberg led a panel discussion with:

- Carolyn Clancy of the Agency for Health Care Research and Quality (AHRQ). AHRQ produces and releases simultaneous annual reports on health care quality and disparities.
- Arnold Milstein of the Pacific Business Group on Health, who works with many private companies on health care quality and was one of the founders of The Leapfrog Group, an organization dedicated to motivating private companies (known as “purchasers” in health care parlance) to demand better health care quality.
- David Williams of the University of Michigan, one of the foremost researchers and thinkers on the issue of racial and ethnic disparities in health and health care—especially on the historical and social contexts that shape how the issues are perceived.

The speakers in the opening session outlined the many ways our efforts to improve health care quality intersect with our efforts to eliminate care disparities. Although many quality experts believe that general quality improvement efforts (i.e., those not targeted to close the gaps with any particular racial or ethnic group) suffice to close the racial and ethnic gaps in care, disparities experts like Williams believe that extra efforts will be needed to truly make health care systems more equitable for all patients.

Four Key Themes

The presentations and discussions of the meeting identified four areas where work on disparities and quality intersect—areas that are ripe for further exploration, clarification and action.

First, those who seek improvements in quality and reductions in disparities must become better at **making the case for action**. We need a broader understanding of the nature and implications of the current inequities in the health care delivery system, and we need a set of images and stories that makes these implications clear.

Second, the connection between reducing ethnic and racial disparities and improving health care quality should be thought of as providing health care that is, as the IOM has stated, “patient-centered...respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions.”¹ Many of the elements used to address health care disparities: cultural competence, language and translation services, provider-patient trust, care coordination and increased patient skills in navigating the health care system, in fact, are ways to **increase the patient-centeredness of care**.

Third, the health care delivery system must improve its ability to **measure the impact of its efforts** to improve quality and reduce disparities. We need to better define the relevant measures of quality and equity, and we must have data systems—and the technological infrastructure to support these systems—that accurately record and report the race and ethnicity of patients.

¹ The Institute of Medicine, Committee on Quality of Health Care in America. *Crossing the Quality Chasm: a New Health System for the 21st Century*. National Academy Press, 2001, p. 6



Finally, we must learn how to make **changes to the health care system** that will result in improvement. Experience with quality improvement work has shown that some initial success may come quickly, but lasting, major reform comes from understanding and altering the nature of systems. Changes that alter the nature of systems will most likely have the most significant impact on issues of equity and disparities; health care stakeholders must both commit and work together to make change at that level.

Making the Case for Action

Research continues to quantify the extent of racial and ethnic disparities as well as failures to deliver optimal quality health care. Research affects how the stories of quality improvement and disparities are told, but most of the studies have not suggested clear pathways for change. Research and demonstration efforts to evaluate what works to improve quality and reduce disparities are greatly needed, with accompanying communications strategies that capture these efforts in powerful, simple and compelling ways.

Current Knowledge

The Research Base

Discussion at the RWJF conference focused on how the issues of quality improvement in health care and disparities have been defined in the past by major research studies and how they will be defined in the future. The research backdrop for the conference mainly consisted of the IOM's *Crossing the Quality Chasm* and *Unequal Treatment* reports, the annual National Healthcare Quality and Disparities Reports published (most recently in January 2006) by AHRQ and a vast body of health services research that documents overall variations in the quality of health care as well as racial and ethnic disparities in certain settings and for certain conditions.

Two researchers at the conference presented findings from recent studies, at the time still under embargoed peer review at journals.² Ashish K. Jha of the Harvard School of Public Health looked at trends in racial disparities in major health care procedures from 1992 to 2001. Using Medicare Part A data on how often nine major procedures are performed on Caucasians and on African Americans, Jha showed that the gap between races widened over the time of his study for five of the procedures, narrowed for one and showed no statistically significant change for the others. Jha concluded that, after many years of research and study into the issue of disparities and some targeted national initiatives, not much has changed, and new efforts are needed to close the differences in care.

Steven Asch of the Department of Veteran's Affairs (VA) Greater Los Angeles Healthcare System, the RAND Corporation and the University of California at Los Angeles, evaluated how often certain expected outpatient services had been provided to users of the VA system in Los Angeles. Asch and his colleagues found that all racial and ethnic groups (Caucasians, African Americans, Latinos and others) received recommended care less than 60 percent of the time, with that figure holding true across the continuum of preventive, acute and chronic care. His

² Dr. Jha's study was published in the August 19, 2005 issue of The New England Journal of Medicine. Dr. Asch's study was published in the March 16, 2006 issue of The New England Journal of Medicine.



analysis indicated that those who used the health system more received more recommended services and that access to care may vary by race and income level. Overall, however, the research showed that disparities between groups pale before the disparities between current and desired performance, signaling a need for broadly-based quality improvement work. Discussion during this session also focused on the possibility that racial and ethnic disparities are more pronounced with respect to inpatient procedures (which is what the Jha/Epstein study looked at) than they are with respect to outpatient health care services.

Involvement of Health Care Purchasers

Many of the conference sessions aimed to bring different perspectives to bear on a common topic of discussion, by seeking experts who represent the consumers, purchasers and providers of health care. The panel on making the business case for quality improvement and disparities focused on the potential of motivating purchasers on quality and disparities. Why? Health care purchasers could—and some do already—play a key role in communicating the importance of addressing disparities and quality issues, yet are forced to respond to more pressing concerns with rising health care costs. Therefore, asking purchasers to leverage their resources to demand better quality health care would be easier if purchasers were given a sound business argument for undertaking these activities. Discussion at the conference centered on the activities of the National Business Group on Health (NBGH) and of Verizon, a member of the NBGH.

Payers are rightly concerned about disparities, said Helen Darling, the NBGH President, as employers in the United States pay an average per-employee cost of \$7,000 for health care; because of racial and ethnic disparities, not all of these employees are getting the same benefits from this expenditure. Audrietta Izlar, a senior benefits manager at Verizon, talked about her efforts to actively leverage Verizon's role as a purchaser of health coverage for over 200,000 employees to reduce disparities in care. Izlar spoke about evaluating health plans for their actions on this issue (stressing the need for provider education on disparities), educating employees—especially those in target minority populations—and working with the NBGH to create and publicize tools to be used by other purchasers to replicate Verizon's actions.

Active Concerns and Needs

The conference outlined several issues as context: 1) AHRQ's findings that "disparities related to race, ethnicity and socioeconomic status pervade the American health care system;³" 2) researchers' confirmation of the existence of disparities within a health care system that delivers low levels of quality overall; and 3) providers, plans and purchasers beginning to act to address disparities. Given this backdrop, conference participants identified a number of concerns and needs.

- Strategic public reporting of this issue will grab the public's attention, in the same way that the finding of the IOM, in its report *To Err is Human*, that health care errors kill up to 98,000 persons per year has galvanized a focus on reducing error rates. The issue of disparities currently has no such riveting focus, and we must create one. Conference participants agreed that "no organization wants to be branded as 'promoting unequal treatment,'" but agreed that

³ AHRQ, 2004 *National Healthcare Disparities Report*, p. 1



health care stakeholders need to be motivated to take up the issue of disparities. One such idea came from Arnold Milstein in the opening session, who posited the idea for the creation of an “equity defect rate” as a more powerful way to measure the quality of health care being delivered to diverse patient populations. Carolyn Clancy of ARHQ also asked the question, in the opening session, about “what level of measurement is needed” in order to galvanize action on quality and disparities. The national reports on disparities and quality released by AHRQ each year struggle with this question.

- More purchasers need to become engaged in the effort to reduce disparities: how can this best be accomplished? In spite of the NBGH’s leadership, few national business groups are actively working on this issue. With strikes and other labor actions resulting from efforts to change health coverage, organized labor’s ability to highlight disparities is compromised. And purchasers will likely be unwilling to pay more for services that may help reduce disparities (e.g., enhancements to data systems) in the absence of evidence that they will be effective.
- To strengthen its message, the health system still needs to prove that reducing disparities increases health status. Some such research is taking place; more needs to be done.
- Addressing the issue of racial and ethnic disparities in one’s own local context, like quality improvement efforts, begins with the organization’s leadership. Leaders need to believe in the importance of working on both disparities and quality, to provide their organizations with the infrastructure (especially reliable data) needed to do this work and to communicate the message of the value and importance of this work to their staffs. At the conference, Gail Warden, president emeritus of the Henry Ford Health System, described Henry Ford’s commitment to “each patient first” as a way of anchoring system-wide attention to quality and diversity.

Promoting Patient-Centeredness

One conference participant described the combined endeavor to improve quality and reduce disparities as “very much, at its core, patient-centered care done the right way.” Research is being done on effective ways to increase the cultural competence of providers and improve levels of trust between providers and patients. The health care system needs to improve its ability to integrate these skills into an overall approach to care, to involve patients better in their own care and to reduce resistance to change.

Current Knowledge

Over the past few years, researchers have documented racial and ethnic disparities in patients’ perceptions of their interactions with their health care providers. At the conference, Lisa A. Cooper and Neil R. Powe, both of the Johns Hopkins University School of Medicine and Bloomberg School of Public Health, reported on their research findings:



- Patterns of trust in components of our health care system differ by race.⁴
- Race-concordant visits are longer and characterized by more patient positive affect.⁵
- Demographics, source of care and patient-physician communication explain most, but not all, racial and ethnic differences in patient perceptions of primary-care provider cultural competence.⁶
- Patient-physician communication during medical visits differs among African-American versus White patients.⁷

Dealing with findings such as these through increased cultural competence is widely supported, although the research does not yet confirm its effectiveness. Conference presentations on cultural competence touched on strategies to reduce language barriers, policy levers that can be used to support cultural competence and the impact of targeted efforts to improve care of chronic illness. Cindy Brach, a senior policy researcher at AHRQ, and her colleagues have identified strategies used by health plans to provide language assistance to improve care: collecting data on members' languages, recruiting and identifying bilingual staff and physicians, organizing and financing interpreter services and educating members and physicians.⁸ Nicole Lurie of RAND Corporation described the Culturally and Linguistically Appropriate Services (CLAS) standards, issued by the HHS Office of Minority Health, as a tool to drive action on cultural competence. Dr. Joseph Betancourt presented a case study of his work at Massachusetts General Hospital to implement a culturally competent diabetes disease management program. The program includes a diabetes patient registry stratified by race and ethnicity, physician training on cultural competence skills and evidence-based practice in diabetes, a case management approach built on a non-adherence risk assessment tool and ongoing feedback to providers on their performance by race and ethnicity. In his discussion, Dr. Betancourt highlighted the critical importance of organizational and governmental support for this work. Improved diabetes outcomes as a result of this program have not yet been documented.

Active Concerns and Needs

While consistently emphasizing the power of developing a truly patient-centered approach as the best way to reduce disparities and improve quality, conference participants expressed wide-ranging reservations. For instance, many were skeptical about the ability of the current health care delivery system to incorporate cultural competence into its essence:

- The formal definition of cultural competence, given at the conference by Cindy Brach, is of a set of behaviors and policies that “come together as a system.” Most conference participants find, however, that cultural competence-related activities are not well integrated into the organizations in which they occur. Like quality improvement in many organizations, cultural competence is treated as an isolated function. When cultural competence becomes a separate

⁴ Boulware, L.E., et. al., “Race and Trust in the Health Care System,” *Public Health Reports.*, 2003;118:358-365.

⁵ Cooper, L.A., et. al., “Patient-Centered Communication, Ratings of Care, and Concordance of Patient and Physician Race,” *Ann Intern Med.* 2003;139:907-915.

⁶ Johnson, R.L., et. al., “Racial and Ethnic Differences in Patient Perceptions of Bias and Cultural Competence in Health Care,” *J Gen Intern Med.* 2004;19:101-110.

⁷ Johnson, RL, Roter, D, Powe, NR, Cooper, LA. “Patient Race/Ethnicity and Quality of Patient-Physician Communication During Medical Visits,” *Am J Public Health.* 2004;94:2084-2090.

⁸ Brach, C., Fraser, I and Paez, K., “Crossing the Language Chasm,” *Health Affairs.* 2005;24:424-434.



project, done for the benefit of some subset of the patient population, it may increase inequity rather than reduce it.

- We need to do more to increase patients' mastery of their medical care. Patients who are more involved with their care tend to have better outcomes, but this behavior requires patients to have a sense of competency in dealing with the health care delivery system, and the required skills (in talking to their physicians, in self-management and in navigation of the system) are not easy to build. Patients need to learn through experience that active involvement in their own care will have positive results. We need to become better at measuring the patient role in care as a first step to strengthening that role. Current tools or models for strengthening patient involvement include a "patient activation measure" developed by Judith Hibbard and colleagues at the University of Oregon and patient/family advisory councils in use at the Dana-Farber Cancer Institute.
- Resistance to the cultivation of cultural competence and patient involvement does exist and must be addressed. This resistance has three sources: 1) a lack of evidence that improvements in cultural competency will, in fact, reduce disparities; 2) the cost of programs to increase cultural competence and patient trust as well as patient's involvement in care and uncertainty as to who will pay these costs; 3) the current complexity of methods used to improve patient-centeredness; and (4) the "social norms" of health care, where patients are not accustomed to being at the center of care and are more used to deferring to the physician or other providers.

Measuring the Impact

One of the strongest and clearest messages from the quality improvement efforts of the last two decades is that "you can't improve what you can't measure." The effort in health care to measure disparities and quantify the impact of equity improvement efforts is, in the words of one conference participant, "like six-year-olds playing soccer"— independent activities taking place all over the health care field. The need to systematize this work is acute.

Current Knowledge

Presentations at the conference highlighted three potential sources of data about racial and ethnic disparities: the Dartmouth Health Care Atlas, the use of geocoding and surname analysis as proxies for data on race and ethnicity and the Consumer Assessment of Health Plans Survey (CAHPS) instrument.

Dartmouth's analysis of variation in the health services provided in the United States shows that variation by race exists in each of three main categories: effective care (where there is no tradeoff between the risk and benefit of the care), preference sensitive care (where patients' preferences and values should determine whether the care is received) and supply sensitive services (where utilization rates are associated with the local supply of resources, with no evidence of impact on outcome). Amitabh Chandra of Dartmouth presented an analysis that showed little disparity in effective care but found that African Americans receive less preference-sensitive care (hip replacements, in this case) and higher levels of supply-sensitive



care— i.e., “expensive care that doesn’t do much good.” Chandra added, however, that the Dartmouth analysis relies on data with inherent weaknesses: it comes from Medicare, so there is a lack of data on patients under age 65, the ethnic classifications are from a Social Security database populated in the 1950s and the data have a time lag of 18 months. Finally, Chandra expressed dissatisfaction with existing measures of quality, noting that these are, however, improving.

Because of the lack of accessible race and ethnicity data, the question has arisen about the possibility of using geocoding—the inference of individual characteristics such as race or socio-economic status based on census unit data—and surname analysis as proxies. Market research firms have combined these methods to great effect, said Kevin Fiscella of the University of Rochester, but their usefulness in health care is more limited. The sensitivity of geocoding can range from 10 percent to 60 percent depending on how segregated the community under study is. Surname analysis offers fairly high positive predictive values for Latinos and Asians, although certain groups (e.g., Filipino Americans) confound the mechanism. Some HMOs have used these methods to assess their patient populations, but the advantages of the methods’ being easy, cheap and adjustable must be weighed against their potential for misclassification (especially overestimates of Caucasians) and variation by region. Fiscella’s finding is that they probably provide “good enough” information on population-level outcomes but cannot be used for assessment of care of individuals.

Leo Morales of UCLA and RAND reported on the use by 28 health plans participating in California’s S-CHIP program of the CAHPS survey to assess the effectiveness of their interpreter services. Taking a composite of patients who needed and received interpreter services, the study assessed satisfaction with the rest of the care received, finding that those who did need and receive interpreter services were more highly satisfied with their care overall. There was, however, great variation among plans in whether an interpreter was provided, with the best plan providing such services only 55 percent of the time. The careful development and wide use of the CAHPS instrument makes it a good tool; at the moment it is the “best and only” source of information on patient-centeredness, Morales said. To use the instrument more fully to assess disparities, more work needs to be done on creating specific constructs to measure equity (CAHPS developers have established a “cultural competency” work group), on assuring equivalence across racial and ethnic groups and especially on the ability of plans to identify members of difference racial and ethnic groups, as health plans do not have data on the race or ethnicity of their members.

Active Concerns and Needs

The health care system is in one sense making progress: the growing quality improvement field in health care has established a recognition of the value of measurement and what David Nerenz of the Henry Ford Health System calls a “data culture.” Still, the system is a long way from consistently being able to get and use the data it needs.

- Data on patient or health plan member race and ethnicity are not collected, nor is there even agreement on the appropriate racial and ethnic categories to be used.



- For hospitals, the Center for Medicare and Medicaid Services' (CMS) public release of hospital quality data and Joint Commission data reporting requirements are crowding-out any other data improvement initiatives.
- We need to become more creative about using existing systems and levers to make data for reducing disparities more available. One conference participant proposed including the planned CAHPS "cultural competence" module in the survey's core question set. Others recommended mining the quality measures developed under the auspices of the National Quality Forum for possible applicability to race and ethnicity and the addition of race and ethnicity check-off boxes to standard health care forms.
- We need to recognize the risk of creating or sending a message that it is more expensive to provide health care services to someone of a particular racial or ethnic group.
- Work on improving the collection of data on race and ethnicity must be coupled with action in the legal community to define "safe harbors" around the use of these data.
- Innovations in information technology hold promise for smoothing out variations in quality as they provide an information base by which to measure and address variations in care, and they hold even greater promise for reducing disparities.

Designing Changes to the System

The development of a body of research on effective interventions that reduce racial and ethnic disparities is just beginning. The methodologies being used to design and test these changes come from the quality domain, which has developed its own body of knowledge about how best to make changes that are effective and enduring.

Current Knowledge

Conference participant Ashwini Sehgal, director of the Center for Reducing Health Disparities at Case Western Reserve University, has evaluated the impact on disparities of a CMS-mandated clinical improvement effort for end-stage renal disease (ESRD) care. The improvement initiative, which was not specifically focused on disparities, involved mandatory reporting on ESRD-specific clinical indicators, feedback to providers on their performance and provider education and supervision by 18 national ESRD networks. Sehgal and his colleagues looked at ten years (1993 – 2002) of data and found that resulting improvements in prescription of the appropriate dialysis dose also served to narrow the performance gap between women and men and between whites and blacks. Work on assuring adequate hemoglobin status among patients has also been successful, but the gap in performance between whites and blacks has stayed constant at 2 percent to 6 percent. Sehgal concluded that such general clinical quality improvement efforts do have the potential to reduce disparities but that efforts targeted at disparity reduction are also needed.



A clinical improvement effort with just such a disparities-reduction target is now beginning, under the auspices of George Washington University Medical Center. Bruce Siegel, a research professor at George Washington, presented the plans for the study, which aims to improve hospital-based cardiovascular care for African Americans and Latinos. The plans include methods based in the quality-improvement world, such as the learning collaborative model, rapid improvement cycles and, ultimately, a focus on spreading the successful changes through and among the participating organizations.

The quality field also is pushing to improve its understanding of how best to drive improvement in health care. Pursuing Perfection, a national program of RWJF, whose national program office is the Institute for Healthcare Improvement (IHI), is a multi-year national effort to demonstrate that near-perfect, leading-edge performance in health care is, in fact, possible.

Andrea Kabcenell, the program's deputy director, described the effort as one that seeks to move health care organizations from being "solid improvers" to the level of perfection. The IHI and participant organizations are learning how important the iterative nature of improvement is. Initial improvement efforts may bring an organization to 80 percent of its goal, but several more rounds are needed to reach the final 20 percent. Theoretically, what enables an organization to reach the final 20 percent is a combination of serious senior leadership commitment, an organizational infrastructure that supports and sustains improvement and goals set at the level of perfection and an understanding that systems must be redesigned to attain these goals. Kabcenell hypothesized that many or most of the changes that will address disparities in care lie in that final 20 percent; a system view and a perfection focus may be necessary to reach them.

Active Concerns and Needs

- Conference participants identified many ways in which the current nature of the health care delivery system contributes to disparities in care:
 - The system is fragmented, and this fragmentation has a proportionally larger impact on minorities.
 - The system is complex, causing many patients to "fall through the cracks."
 - The nature of complex processes is such that small disparities in any one step can compound to have a large impact.
 - The nature of systems is such that disparities can exist even when individual providers are well-intentioned.
- Hospitals may be the best setting to begin these provider-focused disparity reduction efforts, as they have the strongest quality improvement traditions and infrastructures, but for lasting impact, work is required across the continuum of care.
- Physicians still can be resistant to clinical practice guidelines, and we must address this if such guidelines are to be the basis of disparity-reduction initiatives (as is the case in the planned cardiovascular care project). Possible strategies for reducing this resistance include sharing comparative provider performance data.



- System leaders have to become personally active in these efforts. The Pursuing Perfection Initiative requires a full FTE of senior leadership devoted to the work. Trustees must pay serious attention as well—one participant described the required emphasis as the equivalent of what trustees now give to financial matters.
- Work at the system level will require senior leaders, especially CEOs, to collaborate across organizations, and collaboration may well be a skill that many CEOs will need to learn.

Summary: The Core Messages from Each Key Theme

RWJF convened this conference to explore the intersection of quality and disparities but also to begin to mold from this discussion a framework for action—a set of activities that the Foundation should support.

The presentations at the conference and the discussions that followed raised—as this paper reports—questions and concerns about the priorities to be set and the potential implications of these priorities. Overall, however, the four key themes of the discussion led to four related areas where well-planned activity could lead to real advances in the health care delivery system’s ability to improve health quality by, and while, reducing racial and ethnic disparities.

First, we need methods to highlight the importance of the domain of equity for leaders of all segments of the health care system: trustees, clinicians, administrators, regulators and payers. We need to continue to work on developing good measures of quality across the health care system and especially need measures of equity and “equity defects.” These measures are a necessary foundation to the critical task of telling the story of the risk to all Americans of the continuation of the current levels of disparities in the health system.

We need to build consensus that ultimately, the goal is a health care system that delivers the right care to the right person from the right provider at the right time. With this as the goal, we need to create skills in both patients and providers that make it more likely that this type of care will occur, especially in situations where the patient’s race or culture may be a factor in the type of care he or she is getting.

The collection of accurate racial and ethnicity data is essential. We must acknowledge this fact and remove the reluctance that comes from a fear that such data could be misused. One conference participant referred to a pending publication about how stratification of performance information by race and ethnicity can have a powerful impact. If additional such research is needed, it should be supported. Then, we need to build the methodology for gathering this data and making it accessible to those who will work on making improvements.

Finally, systems of care must accept the challenge to improve. Improving quality and reducing disparities will not be the result of individual activity but rather of system change. We are building our understanding of what is required to make profound and lasting improvements in health care delivery, but much of this learning has taken place as health care has addressed the



domains of safety or effectiveness or efficiency. We must bring these systems-improvement skills to the domain of equity as well.

