

Evidence into Policy and Practice? Measuring the Progress of U.S. and U.K. Policies to Tackle Disparities and Inequalities in U.S. and U.K. Health and Health Care

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Health policy in both the United States and the United Kingdom has recently shifted toward a much greater concern with disparities and inequalities in health and health care. As evidence for these disparities and inequalities mounts, the different approaches in each country present specific challenges for policy and practice. These differences are most apparent in the mechanisms by which the progress of such policies is measured. This article compares the United States' and United Kingdom's strategies to gauge the challenges for policymakers in order to inform policy and practice. A cross-national comparison of selected measurement mechanisms identifies lessons for policy and practice in both countries.

Key Words: Measurement, policy, inequalities, United States, Great Britain.

POLICIES TO TACKLE DISPARITIES AND INEQUALITIES in health and health care have recently become a marked feature of many health systems in postindustrial countries (Graham 2004a; Macintyre 2003a; Saltman 1997). The context and content of such policies vary markedly across these systems, reflecting the differing political ideologies and historical, social, and political legacies in each country. Despite these differences (Marchand, Wikler, and Landesman

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1998), many of the issues of translating evidence into policy and practice in this area are similar. A cross-national comparison of strategies can, therefore, provide valuable lessons in future policy development and learning (Alcock 2004; Kunitz and Pesis-Katz 2005).

The accumulation of evidence regarding their extent and sources may indeed have helped lead to the policy shift toward tackling disparities and inequalities in health and health care in the United States and the United Kingdom (Exworthy et al. 2003; Mackenbach and Stronks 2002; MOH 2001; Smedley, Stith, and Nelson 2002). However, rather than simply acknowledging the problems (i.e., collating descriptions and explanations of the causes of disparities and inequalities), the emphasis has now shifted to their remediation.

In shifting the emphasis from evidence to policy and practice, implementation issues arise, concerning the measurement of progress. Although policymakers and practitioners are finally recognizing disparities and inequalities as priorities, they still need to demonstrate the progress of their policies in order to sustain their momentum and to promote accountability. A cross-national comparison is thus both timely and valuable. This article explores the mechanisms measuring the impact of policies addressing health disparities and inequalities. We use examples from the United States and the United Kingdom to show the challenges of combining research evidence with political and organizational will to create feasible policies and effective practices. Since neither country can claim to have “solved” the issue, they both offer lessons for policy and practice.

In the second section of this article we present evidence concerning the nature and cause of disparities and inequalities in health and health care. Then we look at the difficulty of measuring disparities and inequalities, examining mechanisms in the United States and the United Kingdom as illustrations. Next we consider the implications of such mechanisms for future policy and practice. Finally, we offer some conclusions about the measurement of progress in both countries in tackling disparities and inequalities.

Defining Disparities and Inequalities

Structural differences in health status (morbidity and mortality) and health care (access, provision, and use) have been acknowledged for more

than a hundred years (Klein 1996; Syme 1998), and research evidence has been accumulating for much of the time since then (e.g., Black 1980; Marchand, Wikler, and Landesman 1998; Marmot and Wilkinson 1999). As absolute inequalities between social groups have narrowed, relative inequalities in mortality have remained marked “with socio-economic differences in the risk of premature death evident across societies and over time” (Graham 2004a, 103).

Both disparities and inequalities can be defined in many ways (Moy, Dayton, and Clancy 2005), some of which disagree with one another (Graham 2004b; LeGrand 1982; Mechanic 2005; Powell and Exworthy 2003). Here we define inequalities in health as the “systematic disparities in health [status] (or in the major social determinants of health) between groups with different levels of underlying social advantage/disadvantage,” including wealth, power, or prestige (Braveman and Gruskin 2003, 4).

Because health is the “outcome of causal processes which originate in the social structure” (Graham 2004a, 107), it is often assumed that “the main determinants of health [such as lifestyle factors, social networks, and working conditions] act as layers of influence, one over another” (Acheson 1998, 5). The unequal distribution of these determinants stratifies health outcomes according to each person’s social position.

By contrast, disparities in health care have been defined as the “differences in the quality of health-care that are not due to access-related factors or clinical needs, preferences and appropriateness of intervention” (Smedley, Stith, and Nelson 2002, 3–4).

According to this definition, health care disparities are generated by the interaction of clinicians’ interpretations of patients’ needs and the interventions they prescribe. This interpretation of need is shaped by evidence or data of morbidity, and interventions are often based on stereotypes and socioeconomic influences. Social determinants influence people’s health status before they even enter the health care system. To that extent, these issues relating to health inequalities also relate to health care disparities. The relative contribution of health care to ameliorating health inequalities varies according to the particular health care system. For example, the lack of access to health care is a major disparity in any system and is largely shaped by socioeconomic factors. Even if they have (adequate and continuous) insurance, many patients have difficulty navigating the health care system. Furthermore, the interaction between clinician and patient is often influenced by racism and cultural bias

(Betancourt, Green, and Carillo 2002), as well as other social and cultural stereotypes. Table 1 gives examples of disparities in health status and health care in the United States and the United Kingdom.

Although the definitions of both inequalities and disparities capture the systematic differences, disparities are interpreted differently by U.S. and U.K. policymakers. Whereas the United States tends to use the term *disparities*, the United Kingdom commonly uses the term *inequalities*. The United States often concentrates on health care issues (especially access and insurance coverage) and race/ethnicity, reflecting two critical dimensions of U.S. society: the number of persons without health insurance (45 million in 2003) (Lillie-Blanton and Hoffman 2005) and the significance of racial politics. In the United Kingdom, the term *inequality* (usually referring to differences in socioeconomic status) has been “officially sanctioned” since the Labour government of Tony Blair was elected in 1997. Previously, under the Conservative administrations of Margaret Thatcher and John Major, the term and the issues were ignored or euphemistically called “variations” (Exworthy, Blane, and Marmot 2003). Recently, however, U.K. policy has tried to influence the wider/social determinants of health and has focused mainly on disparities in socioeconomic status and geography (Exworthy, Blane, and Marmot 2003). In short, the United States has tended to focus on disparities in access and race/ethnicity, and the United Kingdom has been more concerned with developing a population-based approach (with populations largely stratified by socioeconomic status), although the two countries still have much in common. Because of this, and despite the differences in terminology and emphasis, in this article we use the term *disparities* to refer to both disparities in health care and inequalities of health status (unless there is a specific instance referring to inequalities of health and health care).

Despite their long history, disparity issues have only recently been “rediscovered” by U.S. and U.K. politicians and policymakers. This re-discovery has various explanations (Exworthy and Washington forthcoming). First, the election of center-left governments in the mid- and late 1990s gave power to people who were and are sympathetic to tackling disparities. Second, the evolution of quality improvement is beginning to address not simply aggregate improvements in health care but also the “distribution of health-care benefits” (Lurie, Jung, and Lavizzo-Mourey 2005). A similar argument can be made for the population’s health. Third, research evidence continues to reveal the causes and

TABLE 1
Examples of Disparities and Inequalities in Health and Health Care

	United States	United Kingdom
Health Status	<ul style="list-style-type: none"> • Life expectancy for an African American male is 66 years, compared with 74 years for a white male (1996).^a • The 2002 U.S. infant mortality rate is 7.0 per 1000 live births, but this varies between 5.8 for whites and 14.3 for black populations.^b • In a “U.S. national sample, there is an inverse social gradient in the three measures of health: self-reported physical health, waist-hip ratio and psychological well-being.”^c 	<ul style="list-style-type: none"> • Gap in life expectancy (at birth) for men between richest 10% of areas and the poorest 10% is 6 years (77.4 versus 71.4 years). For women, the gap is 3 years (81.2 versus 78.0 years).^d • The gap in infant mortality rates between routine and manual groups and the whole population widened from 13% (1997–1999) to 16% (2000–2002).^e Though the infant mortality rate in 2000 was 5.6 per 1,000 live births, the rate for social class V was twice that for social class I.^f
Health Care	<ul style="list-style-type: none"> • Whites are 78% more likely than African Americans to receive revascularization (1993).^g • Black patients have lower rates of cardiac catheterization than white patients, regardless of whether their attending physician was white or black.^h • Though 14.5% of the U.S. population lacked health insurance (in 2003), the figure for Latinos was 33%.ⁱ 	<ul style="list-style-type: none"> • There are 50% more primary care physicians (GPs) in some southern England districts than in northern England districts.^j • “More deprived individuals (in terms of income, education and employment . . .) have lower than expected use of health services.”^k

Sources: ^aSmedley, Stith, and Nelson 2002, 43.

^bKochanek and Smith 2004, Table A, 3.

^cMarmor 1998, 432 and 434.

^dBajekal 2005, 21.

^eHM Treasury 2005.

^fU.K. Department of Health 2002a.

^gAyanian et al. 1993.

^hChen et al. 2001.

ⁱU.S. Bureau of the Census 2003.

^jU.K. Department of Health 2001b, para. 13.10, 107.

^kSutton et al. 2002, 89.

manifestations of disparities in health status and health care, including interventions. Finally, governments and other agencies have been found to be ill equipped to deal with intractable social problems (such as disparities) (Richards 2001). The combination of these reasons in each country has made the issue ripe for policy intervention and is on the policy agenda of both countries (Exworthy, Berney, and Powell 2002; Kingdon 1995). The synthesis of evidence about the “problem” and the political will to address it now need to be accompanied by effective policies and practices (Graham 2004a).

Translating Evidence into Policy and Practice Measuring Progress

This article is not about measurement strategies per se (see, for example, Mackenbach and Gunning-Schepers 1997); rather, it is a comparison of U.S. and U.K. mechanisms for measuring and monitoring strategies to tackle disparities as a way of gauging the shift from evidence to policy and practice.

The rise of evidence-based policymaking and the significance of measurement mechanisms form part of an international movement that has gained momentum over the past decade (Davies, Nutley, and Smith 2000; Ham, Hunter, and Robinson 1995; Walshe and Rundall 2001). This shift has been characterized by the U.K. government’s phrase “what counts is what works” (Exworthy and Berney 2000). Measurement is important because it is crucial to ensuring that the initial policy momentum is sustained over time and that the policy’s ownership by the stakeholders and their accountability to the public, government, or third parties are secured (Moy, Dayton, and Clancy 2005). Measurement mechanisms can also help planning, coalition building, and advocacy (Policy Link 2002).

Similar mechanisms for linking evidence and policymaking in the United States and the United Kingdom include research and development programs (e.g., the Agency for Health Research and Quality [AHRQ] in the United States and the National Health Service’s [NHS] Service Delivery and Organisation [SDO] research program in the United Kingdom), performance targets and indicators (including the Health Plan Employer Data and Information Set [HEDIS] in the United States and the NHS performance assessment framework in the United Kingdom) (Hunter and Marks 2005; Smith 2002), and inspectorates (such as the Joint Commission on Accreditation of Healthcare

Organizations [JCAHO] in the United States and the Healthcare Commission in the United Kingdom) (Power 1999; Walshe 2003).

Measuring policies to tackle disparities pose seven additional challenges for policymakers and practitioners. First, they have often been hampered by weak evidence (Lillie-Blanton and Hoffman 2005; Syme 1998). Policymakers may have wanted to intervene but did not know how. Macintyre (2003a) explained, based on her experience in the U.K. Acheson Inquiry:

Whereas there were lots of data documenting health inequalities, and lots of research attempting to explain health inequalities, there was relatively little information about the effectiveness of interventions. . . . What evidence that there was about effectiveness tended to be clearer for downstream, individually focused, interventions than for more upstream, population or community level, interventions. (2003a, 23)

Thus, despite the mounting volume of evidence for health disparities, there is surprisingly little high-quality evidence for the effectiveness of policy interventions to address them. Wanless observed this point: “What is striking is that there has been much written often covering similar ground . . . but rigorous implementation of identified solutions has often been sadly lacking” (2004, 3). Macintyre (2003b) cited several reasons for the paucity of evidence, including disputes over “polarities” relating to causation (e.g., life course versus social class), few routine data that can monitor changes in health disparities over time, poorly specified policy objectives (mainly defined in aggregate terms rather than disparity), and a propensity for research to focus on description rather than intervention and, invariably, on process rather than outcome (Millward, Kelly, and Nutbeam 2003).

Even when intervention studies do address disparities, they have had many limitations: few have studied the determinants of health status; many are insufficiently detailed; few have been culturally tailored to the racial/ethnic minority (or other) groups; many have used small samples or have not used control groups; few have focused on environmental and social factors; and few have used models addressing barriers to changing individual behaviors (Cooper, Hill, and Powe 2002, 481; Trivedi et al. 2005). In addition, Syme (1998) argued that some explanations of disparities offer interventions that would be difficult to implement: “Detailed discussions of a possible theory seem fruitless when they do

not lead to a remedy” (1998, 496). Consequently, Hunter (2003) contended that these shortcomings might distract from the political and ideological implications of policies to address disparities. In sum, much of the research to date has emphasized description, with relatively little attention to theories and models of causation. Even for those few interventions that have been designed and tested, this has been done in ways that produce poor quality or unconvincing evidence of effect. Thus we have little information to devise and implement policies (Exworthy and Powell 2000; Oliver and Exworthy 2003).

A second challenge for policymakers and practitioners is that disparities in health and health care are complex, multifaceted phenomena characterized by multiple definitions, multiple potential causes, and various points of intervention (Trivedi et al. 2005). “Downstream” interventions addressing health care may be intuitively easier to devise, but their relative contribution to tackling disparities in health status is uncertain, reflecting the view that health care is not the primary driver of people’s health (McKweon 1979). Indeed, health care plays a relatively minor role in explaining health disparities, perhaps only 10 percent to 15 percent of the variation in health outcomes among different groups (Adler et al. 1993; McGinnis, Williams-Russo, and Knickman 2002). This makes problematic the design, implementation, and monitoring of disparity policies: “Because a person’s health is the cumulative product of effects and experiences across a life course, tracking the impact of a particular intervention on health using individual health status may not be timely or possible” (Policy Link 2002, 32).

While it is true that interventions in health care disparities are less diffuse and sometimes easier to measure than are those directed at health disparities per se, like poverty, there is not a single element to measure (Spicker 2004, 432) and no intervention that could remotely be considered a “magic bullet.”

Third, there is an uncertain relationship between health outcomes and any policies addressing the social determinants of health (the relationship may, of course, be clearer for interventions aimed at health care disparities). The attribution of observed impacts to a policy intervention often is not possible, which does not help determine the balance between or within broad programs and policies. Adopting the determinants of health model to tackle health disparities, for example, reveals little about the balance among education programs, income support mechanisms, and health care (Syme 1998).

Fourth, the causal pathway between policy and outcome may be apparent only in the long term, if at all. The outcomes of early-years interventions such as Head Start (in the United States) or Sure Start (in the United Kingdom) may not be evident for years or even decades (NESS 2004; Ripple and Zigler 2003). Programs operate in a dynamic social and political context that complicates tracking their progress (Graham 2004a). Thus, the period in which the policy interventions are expected to deliver results and over what time periods these effects should be measured often are not clear. Marmot (2005, 3) suggested that “changes will take time,” using as an example the lead time between “change in exposure and change in disease rates,” with cancer being longer than heart disease. Policies also must have a lead time to be devised and implemented.

Fifth, some policies designed to tackle disparities may inadvertently make the problem worse. These unintended consequences may not be immediately apparent (Graham 2004a). Policies have unexpected effects on different population groups, for example, the differential impact of raising the cost of smoking (Graham 1996) and the level of “health literacy” among higher socioeconomic groups (enabling better communication with physicians) (Dixon et al. 2003). But this knowledge has not necessarily led to monitoring new or existing programs for such health disparity effects (Exworthy et al. 2003). Such health inequality impact assessments were a “crucial recommendation” of the United Kingdom’s Acheson Inquiry (Acheson 1998).

Sixth, what to measure and what data should be collected sometimes are not apparent. Data on the impact of policies have been predominantly quantitative, imparting a technical bias that overlooks contextual factors (Alcock 2004; Spicker 2004). Measurement strategies frequently overlook qualitative data, such as accounts of a policy’s impact on individuals. The progress in reducing disparities (especially in health status) “can not be translated into narrow quantifiable targets” (Alcock 2004, 220), so policy analyses need to include mixed methods, such as quantitative and qualitative, time-series and longitudinal, and processes and outcomes (Graham 2004a, 118).

Finally, although monitoring and measurement mechanisms are often connected with organizational accountability, they rarely are in the case of disparities. Accountability is complicated by the multiple agencies and individuals delivering services or by the social determinants of health (Lurie, Jung, and Lavizzo-Mourey 2005). Health care organizations are

similarly complicated, though probably less than public health agencies are. Agencies often are accountable to higher bodies (e.g., government), but they also must be locally responsive, since tackling disparities lies beyond the capability of any single organization or individual (Hunter and Marks 2005). In such cases, measurement systems may add to the burden of work (Alcock 2004). Moreover, in the face of multiple priorities, the action of tackling disparities is often divided up, leading to redundancies. This lack of accountability was illustrated by a U.K. health care manager who claimed that “individuals would not lose their job if they failed to tackle health inequalities” (Exworthy, Berney, and Powell 2002, 89). Policymakers therefore must proceed with incomplete and contested evidence.

Four questions may help translate evidence into policies affecting health and health care disparities (adapted from Clancy 2002). First, how many disparities are amenable to policy intervention? If policymakers and practitioners use a model with wider determinants of health, they may be able to influence only a few disparities in health (albeit a larger proportion in health care) (Lillie-Blanton and Hoffman 2005; McGinnis, Williams-Russo, and Knickman 2002; Syme 1998). Equally, even large-scale, well-formulated policies may be insufficient to affect the wider countervailing forces, such as income inequality, that might be creating the disparities in the first place. As such, these interventions may be blunt instruments in the practitioners’ tool kit. Moreover, it often is unclear at which level interventions are most appropriate: national, regional, or local. Second, how can evidence of the “problem” be linked to policy solutions? Evidence does not always “speak for itself”; rather, areas of academic consensus need to be disseminated in timely and appropriate formats. This is a wider issue for health services research (Dash, Gowman, and Traynor 2003) but presents specific questions regarding disparities. Third, which local factors ameliorate or increase disparities? Although some causes operate at a macro or structural level, there is growing evidence that local contextual factors help mediate societal forces and policy interventions (Williams 2003). Such “agency” factors might include the quality of health care providers, the degree of social capital, and the strength of interagency partnerships. Definitive evidence concerning the ways in which contextual factors interact with interventions remains sparse. Fourth, how and when should locally relevant data be collected? Monitoring the progress of policies requires timely data, but such data often are difficult to collect when organizations are geared

to other purposes, like cost control. This is especially pertinent to identifying minority populations and their perceived lack of trust (Bierman et al. 2002; Hassett 2005). Cross-national comparisons illustrate how this issue might be addressed.

Cross-National Comparisons

To illustrate the implications of measurement mechanisms, we next present cross-national comparisons of a few measurement strategies monitoring how well the evidence has been translated into policy and practice. Although many of the challenges facing both countries are similar, the policy responses have been different.

United States. The measurement strategies in the United States include the indicators of the Healthy People 2010 policy and report cards (or scorecards).

Healthy People 2010 (HP-2010) is a federal health policy addressing disparities and is a successor to Healthy People 2000. Although the policy is concerned with overall health improvement (“to increase quality and years of healthy life”), it also aims “to eliminate health disparities among specific segments of the population.”

The HP-2010 policy contains “leading health indicators” covering ten social determinants: physical activity, obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury/violence, environmental quality, immunization, and access to health care. These relate to twenty-eight “focus areas” pertaining mainly to clinical services such as those for cancer, kidney disease, and HIV. This federal policy is one of several; others include those developed by the Centers for Disease Control (CDC) (Aberle-Grasse 2003) and the National Institutes of Health (NIH) (2002).

HP-2010 has a “tracking” program that sets targets and assesses the progress toward its objectives: “A single national target that is applicable to all select populations has been set for each measurable, population-based objective.” The measures have been divided into objectives that (1) address health service and protection, (2) are influenced by short-term policy decisions, and (3) are unlikely to achieve an equal health outcome in the next decade (irrespective of investment levels) (U.S. DHHS 2001).

The Steps to a Healthier Nation policy (April 2003) refers to health care disparities with an emphasis on physical fitness, prevention, nutrition, and health lifestyles (U.S. DHHS 2003). It is similar to an earlier

U.K. strategy, Health of the Nation, 1992, which neglected structural factors. In a document regarding the Steps policy, the CDC (2003) recommended five “essential components” to prevent heart disease and stroke, one of which refers to evaluating impacts: “Monitoring the burden, measuring progress, and communicating urgency.”

An increasingly common way of measuring the progress of health policies is the report or scorecard. Notwithstanding their limitations in changing practice (Marshall et al. 2003), Trivedi and colleagues argued that report cards “provide transparent public information and a clear incentive for improved performance” (2005, 389), and they have recently been applied to disparities (Davies, Washington, and Bindman 2002; Nerenz et al. 2002). Although examples can be found at all levels (Hassett 2005; Moy, Dayton, and Clancy 2005; Mukamel et al. 2004; Nerenz 2005; Trivedi et al. 2005), those used here illustrate the opportunities and dilemmas of national, state, local, and health plans.

First, in 1999, Congress had the federal Agency for Health Research and Quality (AHRQ) draw up what became the National Healthcare Disparities Report (NHDR), which addresses low-income groups, minority populations, women, children, the elderly, and those with special health needs (AHRQ 2002, 2003). The preliminary measure set for NHDR was published in 2002 (see Table 2). AHRQ recognized that until the data became available, it would not be able to examine disparities in some of its quality measures.

The draft NHDR was published in June 2003 and the final version in December 2003 (AHRQ 2003). The purpose of the report was to raise awareness of racial, ethnic, socioeconomic, and geographic disparities in health care and thereby to guide health policymakers in designing strategies to eliminate them (Swift 2002). The final 2003 report claimed that “to date, no report has provided such extensive cross-group comparisons that could provide a national roadmap to inform local efforts to reduce disparities.” The final report contained six main findings:

Americans have exceptional quality of health-care; but some socioeconomic, racial, ethnic, and geographic differences exist. . . . Some “priority populations” do as well or better than the general population in some aspects of health-care. . . . Opportunities to provide preventive care are frequently missed. . . . Management of chronic diseases presents unique challenges. . . . There is still a lot to learn. . . . Greater improvement is possible.

TABLE 2
National Healthcare Disparities Report, Preliminary Measure Set

Measure	Indicators
Access to Care	<ul style="list-style-type: none"> ● Access to health care system. ● Structural barriers within the system. ● Ability of provider to address patient's needs. ● Information.
Utilization of Services	<ul style="list-style-type: none"> ● Includes doctor's office, hospital outpatient department, hospital emergency departments, hospitalization, home health services, hospice, and prescription medications.
Cost of Services	<ul style="list-style-type: none"> ● Cost of services. ● Inpatient expenditures. ● End-of-life expenditures.
Quality	<ul style="list-style-type: none"> ● Effectiveness of care. ● Safety. ● Timeliness. ● Patient-centeredness of care. ● Resource consumption.

Source: AHRQ 2002.

These findings were controversial (Geiger 2004) because the final report had been changed in four essential ways from the draft (U.S. House of Representatives 2004). First, the definition of *disparities* was omitted, and the term was used only twice instead of thirty times. Second, the draft report claimed that disparities were “national problems that affect health care at all points in the process, at all sites of care, and for all medical conditions.” The final report, however, “did not describe health-care disparities as a national problem. In fact, the HHS report emphasized that in some ways racial and ethnic minorities are in better health than the general population” (U.S. House of Representatives 2004, 1). Third, the final report omitted the discussion of the social costs of disparities and instead highlighted “successful” examples of initiatives. Fourth, the types of disparities cited in the final report were “milder examples,” such as cholesterol screening, than those in the draft report. For Waxman and colleagues, these changes raise questions about the “manipulation of science” (2004; see also U.S. House of Representatives 2004).

The second NHDR noted the addition of a “second critical goal,” namely, “tracking the progress of the Nation’s progress towards the elimination of health-care disparities” (AHRQ 2004, 1). This report also focused on gaps in information. For example, “Statistically reliable estimates were not possible for . . . about a third of quality of care among Asians” (AHRQ 2004, 5).

Oversampling minority populations and data from the growing number of health plans will supply the needed information in the future, according to the report. It also contends that improvements are “possible,” noting that “reducing disparities is a gradual process” and that they are “particularly slow to change.” Nonetheless, the report acknowledges the scale of this challenge: “To reduce disparities, groups with poorer quality of care or access to care need to experience more rapid improvement in care than other groups and this is rarely observed” (AHRQ 2004, 4).

The second example of measurement mechanisms is the “state report card” (Trivedi et al. 2005). States have often been innovators of health policy, including disparity policies (McDonough et al. 2004; Trenholm and Jung 2000). Moreover, “federal and state policies are often inextricably linked and . . . many of the federal policy levers . . . are also relevant at the state level” (Lurie, Jung, and Lavizzo-Mourey 2005, 355). Trivedi and colleagues analyzed health policies for all fifty states in terms of capacity, infrastructure, and activity relating to health care disparities. Four assessment criteria were used: insurance coverage (of low-income, nonelderly populations), a “diversity ratio” (of minority physicians compared with white physicians), the presence of a state office of minority health, and the reporting of state mortality data by race/ethnicity. They found that in regard to insurance coverage, eleven states had minimal differences between minorities and whites, and thirteen had differences between 50 percent and 100 percent (Lurie, Jung, and Lavizzo-Mourey 2005, 390). For the diversity ratio, eighteen states would need to increase the number of minority physicians by “a factor of 4.5–11.5 to reach proportional representation comparable to white physicians” (392). Thirty-four states had an office of minority health, although their budgets varied significantly. Nearly half the states’ data collection systems used three or fewer racial/ethnic categories. Also, Nerenz revealed that “requirements exist in twenty-two states for hospitals to collect data on race/ethnicity” (2005, 410). Even here, a patient’s race/ethnicity may be assigned by a health worker, not by the patient himself or herself (Moy, Dayton, and Clancy 2005). Despite recognizing the wide variations of state

TABLE 3
Indicators and Definitions of San Francisco Public Health Report Card

Indicator	Definition
Teenage Births	Number of live births per 1,000 females aged 15 to 17.
Prenatal Care Starting in the First Trimester	Percentage of mothers starting prenatal care in first trimester.
Early and Adequate Prenatal Care	Percentage of mothers with early and adequate prenatal care.
Low Birth Weight	Percentage of live births weighing under 2,500 gms (5 lbs, 8 oz).
Very Low Birth Weight	Percentage of live births weighing under 1,500 gms (3 lbs, 5 oz).
Infant Deaths	Number of deaths 0 to 1 year per 1,000 live births.

Source: San Francisco Department of Public Health 2002.

“performance,” the state report card is limited. For example, the state’s decentralization to the counties undermines the state’s use as the unit of analysis, and the focus on health programs neglects the contribution of other social programs such as public income assistance.

The third example is the local health report card of maternal and infant health, which often addresses public health issues. The first public health report card was published by the San Francisco Department of Public Health in May 2002. Three racial/ethnic groups—Asian, white, and Latina—accounted for 91 percent of all live births in the city in 2000. The report card adopted six indicators relating to the city’s progress in meeting HP-2010 objectives (see Table 3).

Each indicator was graded as the percentage by which it had achieved the Healthy People 2000 objective. In addition, a positive or negative symbol denoted whether progress was “within” or “off” the target for HP-2010, as the example of low birth weight shows (see Table 4).

The report card justified the inclusion of each indicator through a graphical presentation of the HP-2000 and HP-2010 objectives and San Francisco’s 2000 rate. Each indicator also gave local comparisons of the rates of “all races” and “African Americans.” Even though they accounted for only 9 percent of births locally, “African Americans have traditionally had poorer health outcomes compared to the overall population.”

TABLE 4
San Francisco Report Card: Low Birth Weight

Indicator: Category	All Races	African Americans
Healthy People 2000 Objective	5.0%	9.0%
Healthy People 2010 Objective	5.0%	5.0%
San Francisco Rate, 2000	6.4%	12.4%
San Francisco Grade ^a	C-	D-

Note: ^aGrades are linked to the percentage of the 2000 target achieved (A = 90–100%, B = 80–89%; C = 70–79%; D = 60–69%; F = less than 60%).

Source: San Francisco Department of Public Health 2002.

The results highlighted the enormous challenge facing San Francisco's policymakers and practitioners in reducing disparities between African Americans and "all races" as well as between the local rate and national policy objectives.

The final example of report cards concerns health plans, which are increasingly focusing on disparities among people with the same health insurance coverage. (Of course, this example does not address those without health insurance.) Nerenz and colleagues reported on a study ascertaining whether health plans' data on their members' race and ethnicity could be used "to create a report card on the quality of care delivered to different racial and ethnic groups" (2002, vii). Although none of the eight plans routinely collected racial/ethnic data, they did have ways of obtaining this information, including self-report items in surveys, medical records, software recognizing surnames, and geocoding. The authors anticipated problems linking the data to measurement processes and integrating locally derived data into external software programs. When local data could be integrated with Health Plan Employer Data and Information Set (HEDIS), evidence of disparities was revealed: "In 52 percent of the possible comparisons within individual plans, there were disparities across groups of 5 percentage points or more on specific HEDIS measures." These report cards may encourage the initiatives by those insurance companies that have begun to monitor disparities in their members' health care (Hassett 2005). For example, "AETNA says it plans to use the data to better understand differences in how white and minority patients get medical care and to develop prevention, education and treatment programs to narrow the gap" (Winslow 2003, A.10).

Despite the greater use of report cards at all levels, they need to be modified to address specific measurement issues relating to disparities. For example, information systems must have accurate data for all social categories receiving health care. Performance targets also must differentiate among these social categories, including “information about the demographic profile of the populations” served and adequate sample sizes in each social category (Moy, Dayton, and Clancy 2005).

United Kingdom. The U.K. measurement mechanisms we examined are the national health inequality targets, local indicators, publicly available performance data, and health inequalities impact assessments. (The U.K. policies cited here refer primarily to England, given the different political and administrative arrangements and priorities elsewhere in the United Kingdom; see Greer 2004.)

Although the Conservative administrations in the early and mid-1990s did not pay much attention to national policies for reducing health disparities, this changed when upon its election in 1997, the new Labour government declared that tackling health disparities was a priority. However, a lack of policy coordination (Alcock 2004) meant that “the formulation of objectives and targets [related to health disparities] was virtually neglected by the Labour government until ‘national inequality targets’ were set during the 2001 general election campaign” (Sassi 2005, 89). The Life Expectancy target stated that “starting with health authorities, by 2010, to reduce by at least 10 percent the gap between the fifth of areas with the lowest life expectancy at birth and the population as a whole,” and the Infant Mortality target stated that “starting with children under one year, by 2010, to reduce by at least 10 percent the gap between manual groups and the population as a whole” (U.K. Dept. of Health 2000, 2002a, 2002b).

The targets focus on health disparities (cf. aggregate health improvement) and, to some extent, the determinants of health disparities (Graham 2004a). The policy interventions to meet these targets also address some social determinants of health and aspects of health care (U.K. Dept. of Health 2001a, 2003). However, it is difficult to ascertain which policies may contribute to or detract from objectives and how their impact might be evaluated. In descriptions of its overall policy, the U.K. government has identified various health care policies that it believes can contribute to meeting these national targets (U.K. Dept. of Health 2001a, 2001b, 2003; see Table 5).

TABLE 5
Health Care Interventions Supporting U.K. Health Inequality Targets

Target	Interventions
Life Expectancy	<ul style="list-style-type: none"> ● Reduce smoking in manual groups. ● Strengthen primary care in disadvantaged/underserved areas to ensure improvement in prevention, early detection, and treatment of disease. ● Reduce excess winter deaths by offering flu immunizations and contributing to fuel poverty strategy.
Infant Mortality	<ul style="list-style-type: none"> ● Reduce teenage pregnancies. ● Improve maternity services to secure early booking of and attendance at antenatal education. ● Reduce smoking and improve nutrition in pregnancy. ● Increase breast feeding initiation and duration. ● Provide early development support.

Source: Nutbeam 2002.

Various measurement mechanisms monitor these targets; some pre-date the targets but support the overall strategy. Here we look at four of them. First, the U.K. Department of Health published twelve “headline” indicators that support the national targets and cover various social determinants, five of which pertain mostly to health care interventions (U.K. Dept. of Health 2003; see Table 6). But few indicators are specifically related to disparity in terms of comparison among social groups (such as low socioeconomic status or lowest income quintile). Instead, the indicators compare “performance at the national level and performance in geographical areas with poorer health” (U.K. Dept. of Health 2003, 50). These headline indicators have been monitored by the Scientific Reference Group on Health Inequalities, whose report, published in August 2005, “summarises developments against the main indicators and provides a baseline against which to measure current and future action” (U.K. Dept. of Health 2005, 6). It also considers progress against the U.K. Department of Health’s inequality targets and other government commitments. Table 6 shows that of the twelve headline indicators published in 2003, three had shown “significant” improvements, another three showed “slight” changes, and the remaining six showed no change (U.K. Dept. of Health 2005, 8).

TABLE 6
U.K. Indicators Addressing Health Inequality and Progress

Aspect	Indicator	Progress
Access to Primary Care	Number of primary care professionals per 100,000 population.	"No significant narrowing of the gap in the number of GPs."
Accidents	Road accident casualties in disadvantaged communities.	"No significant narrowing of the gap in such casualties."
Child Poverty	Proportion of children living in low-income households.	"Significant reduction in the proportion of children living in low income . . . since 1998/99."
Diet	Proportion of people consuming 5 or more portions of fruit and vegetables per day in the lowest quintile of household income distribution.	"No significant narrowing of the gap."
Education	Proportion of those aged 16 who get qualifications equivalent to 5 GCSEs [educational qualification for 16-year-olds] at grades A to C.	"Some signs of the narrowing of the gap between pupils eligible for free school meals and all pupils."
Homelessness	Number of homeless families with children living in temporary accommodation.	"Significant increase in the number of families living in temporary accommodation" though a reduction living in bed-and-breakfast accommodation.

(Continued)

TABLE 6—Continued

Aspect	Indicator	Progress
Housing	Proportion of households living in nondecent housing.	"Significant narrowing of the gap between vulnerable households and all households."
Flu Immunization	Percentage uptake of flu vaccinations by older people (aged 65+).	"Slight narrowing of the gap in the uptake of these vaccinations."
Physical Education/Sport	Percentage of schoolchildren who spend a minimum of 2 hours each week on high-quality physical education and school sports within and beyond the curriculum.	"Lower participation rates in schools with a high proportion of free school meal pupils."
Smoking Prevalence—Manual Groups in Pregnancy	Prevalence of smoking among people in manual social groups and among pregnant women.	"No significant narrowing of the gap in smoking prevalence between manual groups and other groups."
Teenage Conceptions	Rate of under-18 conceptions.	"Teenage conception rates in the most deprived top tier of local authorities fell faster than in other areas."
Mortality from the Major Killer Diseases	Age-standardized death rates per 100,000 population for the major killer diseases (cancer, circulatory diseases), ages under 75 (for the 20% of areas with the highest rates compared with the national average).	"Some signs of the narrowing of the inequalities in cancer death rates and a narrowing of inequalities in heart disease rates in absolute terms."

U.K. Department of Health 2005, 8; 2003.

Second, local indicators of health disparities were developed to support local action and contribute to the national targets “by highlighting information relevant to addressing the targets and assisting local areas with monitoring progress towards reducing health inequalities” (Fitzpatrick and Jacobson 2003, 2). The local indicators, published in 2003, were derived mainly from existing data.

Organizations can choose which indicators to use and monitor according to locally agreed priorities, but the fact that the indicators are not obligatory may make it difficult to ensure accountability and enable comparison among areas. The local “basket” of indicators contains seventy indicators measuring health status, outcome, social determinants of health, access to services, and process measures, which may be too many to be manageable (Carter, Klein, and Day 1992). In addition, the indicators include multiple dimensions of equity, such as geographic areas, gender, age, socioeconomic status, disability, and ethnicity. The indicators were selected if the data are routinely published at the local level, if the data are updated more frequently than at three-year intervals, if the indicator is robust enough to detect changes over time, and if the indicator can be interpreted. If they are not routinely published, routinely collected local data may still allow the indicator to be calculated (Fitzpatrick and Jacobson 2003, 4). Inevitably, some gaps remain, including reliable measures of health-related behavior, data relating to social capital, measures of risk factors for obesity and high blood pressure, and, significantly, “indicators representing some dimensions of inequality” (Fitzpatrick and Jacobson 2003, 5).

Third, partly to counter the criticism of previous performance systems, the Healthcare Commission (the independent health care inspection agency in England and Wales) reviewed the health care providers and their progress toward national standards. One review examined the progress toward meeting the standards of the government’s national service framework for coronary heart disease, a ten-year program published in 2000 and designed to reduce levels of heart disease (Healthcare Commission 2005a). This review was a “midterm” report that noted progress but also regional “variations” in care and argued that more work was needed to bring resources to those most in need due to socioeconomic deprivation, smoking, or obesity. The report concluded that “premature deaths have fallen but more people die in deprived areas, which often have more people at risk because of lifestyle factors such as smoking, poor diet and lack of exercise” (Healthcare Commission 2005b, 1). Finally, health

inequalities impact assessments, or equity audits, are appraisals of the impact of policies or interventions on health disparities (Eastern Region 2002; U.K. Dept. of Health n.d.). Such assessments were recommended by the Acheson Inquiry (1998) but have not been applied extensively, especially on a national level (Douglas and Scott-Samuel 2001; Macintyre 2003b). These assessments tend to suffer from looking backward rather than shaping the design of policies at the outset. Despite improvements in methodology and the dissemination of examples of equity audits, there remains a danger that “equity” as an organizing and evaluative principle will be surpassed by efficiency or clinical- and cost-effectiveness.

Implementation Challenges and Guiding Principles for Measuring Progress

Translating evidence into policy and practice is not a straightforward process, as these measurement mechanisms demonstrate. Because most of these mechanisms were introduced only in the last few years, it is too soon to assess fully their contribution to this translation process (GAO 2003). Moreover, most are fledging efforts not widely used in either the United States’ or the United Kingdom’s health system. Cross-national comparisons can, however, show the difficulty of translating evidence of health and health care disparities into policy and practice. These difficulties are data availability and quality, sustainability of policy programs, and incentives to reinforce institutional and individual actions. They can be understood as “guiding principles” to help assess existing mechanisms and shape their future development. Based on an analysis of the measurement mechanisms, these principles are sustainability, accountability, attribution, availability, coverage, reliability, equity, social determinants, and timing (see Table 7).

Not all principles may be followed, as some may conflict with others; for example, appropriate timing to inform policy development may conflict with data availability. Others may reinforce one another; for example, the clear attribution of a policy’s impacts may enhance accountability. Nonetheless, these principles should help policymakers and practitioners create and manage measurement mechanisms to tackle disparities. Using these examples, we next discuss the implementation of policies with reference to these principles.

First, locally relevant data and (research) evidence concerning disparities in health and health care often are not available. This was

TABLE 7
Principles to Consider When Designing and Managing Measurement Mechanisms

Principle	Interpretation and Application
1. Acceptability/ Sustainability	A small number of indicators should be manageable and understood by policymakers and practitioners.
2. Accountability	Individuals or organizations should be held responsible for implementing relevant policies.
3. Attribution	Indicator changes should be attributed to policy interventions.
4. Availability	Data should be locally and/or nationally available.
5. Coverage	All stages of the life course and health care system should be measured.
6. Detection/ Reliability	Indicators should be able to detect change in disparities and inequalities (over specified time periods).
7. Equity Dimension	Data should report a distribution across social groups rather than in the aggregate.
8. Wider Determinants	Measures should address health and/or health care, but neither set of measures should be medically dominated.
9. Timing	Data should be collected at regular intervals to inform policy.

Sources: Adapted from Exworthy et al. 2003; Jacobson 2005; MOH 2001.

true of all measurement mechanisms and especially in both the United States' National Healthcare Disparities Report (NHDR) and the United Kingdom's national indicators, which either lacked data or offered poor-quality data. In both countries, suitable denominators are still contested and the lack of adequate population or service data is also problematic. For example, the difficulty of defining data categories and measurement standards has complicated the measurement of progress in tackling racial/ethnic disparities in the United States (Lurie, Jung, and Lavizzo-Mourey 2005). Qualitative data and outcome data would strengthen the range of evidence available to policymakers, but neither is widely available. Although improved data alone will not rectify disparities, "expanded and more accurate data can pinpoint where the gaps are and provide the baseline for measuring change and improvement" (*Health Affairs* 2005b, 353).

The U.K. government may argue that “what counts is what works,” but it is far from clear whose views “count” and how to measure whether a policy “works.” Clearly, such debates are linked to the dominant political ideologies in each country, and the lack of consensus partly explains why there is so little agreement about which interventions to implement (Lillie-Blanton and Hoffman 2005; Mechanic 2005). The United Kingdom has instituted several initiatives, some of which have been evaluated. To date, most of these studies have been process oriented and descriptive (Macintyre 2003a; Millward, Kelly, and Nutbeam 2003). Evidence of effective interventions that are neither dysfunctional nor mediated by contextual variables is rare, but a better understanding of the interaction among context, policy process, and (health and health care) disparities should improve the design of interventions and identify lessons to be learned. Many countries have instituted policies (such as some initiatives to improve access to health care, smoking cessation, and health promotion) that have inadvertently worsened the disparities (Hill et al. 2005; Mackenbach 2003). Policies in both countries need to balance socioeconomic, cultural, and political factors. Plausible explanations and/or values might substitute for rigorous evidence; hence we need to ascertain “how best to make sensible decisions in the absence of both consensus about what ought to be done and evidence about how best to set about achieving whatever policy aim” (Klein 2003, 55).

The second challenge concerns the ways that measurement mechanisms can support the overall policy. The recent flurry of policy activity related to disparities in the United States and the United Kingdom signals that the issue of disparities has reached the policy agenda at various levels. But we cannot assume that this activity will generate the desired outcomes. Both countries may well fail to muster and sustain sufficient political will before the policy objectives are reached. The United States’ report cards, for example, may help sustain the direction and momentum of the policy interventions, but they cannot always ensure attribution or promote accountability. If they do, they may help translate the evidence into policy and practice (Atwood, Colditz, and Kawachi 1997; Exworthy, Berney, and Powell 2002). A great hurdle for all measurement mechanisms is fostering the ownership of policies, as many practitioners (especially in the United States) are not convinced of the need to address disparities (Altman and Lillie-Blanton 2003; Kaiser Family Foundation 2002).

The role of report cards or indicators at different levels is uncertain. For example, how does the state report card compare with the local report card? How can local targets contribute to national targets? Coordinating such mechanisms in a decentralized health system such as that in the United States would be unlikely; even in the United Kingdom, this has proved difficult. Also, many practitioners initially welcomed the introduction of national targets in the United Kingdom, but it is unclear how well they have enabled subsequent local policies to tackle health disparities. National indicators in the United States and the United Kingdom may have as much symbolic value as practical value for local policy development. In addition, the use of multiple indicators can confuse rather than enlighten efforts to measure “progress” (Carter, Klein, and Day 1992), although they do contribute to “coverage” and “wider determinants” principles.

If local agencies cannot assemble sufficient (financial, organizational, or human) resources, sustaining the direction and momentum of policy will be further complicated. Despite stated policy objectives, organizations usually have more immediate pressures like financial viability (Hunter and Marks 2005), and disparities are often perceived as longer-term issues, beyond the tenure of any (appointed or elected) one individual. This perception undermines the “accountability” principle and conflicts with the “timing” and “attribution” principles.

Even if data are available to policymakers or practitioners, many agencies are wary of disclosing performance information. Especially in the U.S. health care market, organizations often do not wish to “reveal” the presence of disparities of access, provision, or outcomes, for fear of “looking bad.” In the United Kingdom, poor performance (though not in reference to disparities) can lead to government or regulatory intervention. This lack of accountability may change in both countries if or when accreditation and regulatory agencies recognize efforts to tackle disparities. Some organizations are reluctant also to share data and/or work with other agencies. Many are concerned about data confidentiality (especially in the light of the U.S. Health Insurance Portability and Accountability Act [HIPAA] regulations; Hassett 2005), and/or those in the United States are afraid that collecting data about patients’ race/ethnicity may be deemed unlawful (Krieger 2004; Torassa 2003). In the United Kingdom, despite the emphasis on interagency collaboration, performance indicators do not always reinforce such partnerships (Alcock 2004).

Third, measurement mechanisms provide the data by which incentives (to reward progress or penalize the lack of it) are implemented. The cross-national comparison shows that the incentives associated with policies to tackle disparities need to be better attuned to their objectives in order to meet the “sustainability” and “accountability” principles. In both countries, responsibility for tackling disparities is divided among several agencies (Exworthy, Berney, and Powell 2002). Accordingly, each agency’s contribution to the policy’s goals is difficult to determine. As a result, the incentives for taking action (or not doing so) generally are weak or insufficient to generate meaningful responses (Hunter and Marks 2005). The cost of data collection, the price of poor performance, and the weak link with regulatory mechanisms are further deterrents to acting or to monitoring policies’ progress. But the cost of not reducing disparities might exacerbate already poor states of health in vulnerable populations and stimulate further rises in health care expenditures (*Health Affairs* 2005a). Measures should be used to inform and support the development of effective policies and practices. Some providers in the United States compete to market themselves as meeting the health needs of minority patients; others have introduced systems to prepare for possible regulatory or accreditation requirements (Exworthy and Washington forthcoming). In the United Kingdom, although local practitioners do respond to central government policy, many of them work within a local public health tradition that has recently been undermined by continual reorganization. Few individuals have, however, been “rewarded”—such as with career promotion—for their actions in addressing disparities; rather, their performance is judged mainly by financial and service-related data. In reviewing U.K. policies, Derek Wanless argued against explicit sanctions, including “hangable” performance targets in favor of a rounded approach to incentives (quoted in *Health Service Journal*: December 4, 2004) This rounded approach might include better timing of data collection, appropriate measurement mechanisms, and a better linkage to incentives.

Conclusions

Most health systems around the world are facing the challenges of tackling disparities in health status and health care. There are positive signs in the United States and the United Kingdom that despite its many

deficiencies, evidence is beginning to be translated into policy and practice. These signs include the introduction of measurement mechanisms, some of which we described here. The actual policy challenges and the demands made on measurement mechanisms are only beginning to be revealed.

To develop “long-range, coherent and coordinated strategies” with appropriate resources (Lavizzo-Mourey et al. 2005, 314), current policies need to be integrated into routine planning and practice, supported by effective incentives. This will require organizational development and structural change (Alcock 2004) to align information systems and incentives, for example, that are appropriate to both health and health care disparities. In the face of competing priorities and often skepticism, better locally relevant data on disparities will help keep the issue on the policy agenda and stimulate further action. Policies targeting disparities can also foster a wider notion of health policy and not one solely focused on health care. Although the impact of these policies will be “mediated by more far-reaching policies” in employment, social security, and education, for example (Graham 2004a, 115), addressing the social determinants of health through, say, community-based approaches may in turn lead to policies tackling health care disparities.

Central to all these efforts is the measurement of progress. Policymakers, practitioners, and researchers must address the dilemmas and challenges of design and implementation of such mechanisms. The principles of measurement will guide such work. In both the United States and the United Kingdom, keeping track of progress in tackling these seemingly intractable problems is essential to assessing the extent to which evidence has been translated into policy and practice. Both countries, however, still have a long way to go.

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