



Emergency & Outpatient Entrance

**Ruth T. Perot, MAT
and
Russell J. Davis, DPA, MAPT**

HEALTH INFORMATION TECHNOLOGY: A TOOL FOR HEALTH EQUITY AND SYSTEM TRANSFORMATION

In these unprecedented times of promise and peril, there is now a once-in-a-lifetime opportunity to transform health and health care in the United States.

Responding to the nation's economic crisis, President Barack Obama has exercised bold leadership in advancing the *American Recovery and Reinvestment Act* (ARRA),

which was approved by the U.S. Congress and signed into law in February 2009. ARRA makes significant resources available for health care support, redirection and retooling. As important, comprehensive health care reform appears to have gained a prominent place on the nation's decisionmaking agenda for the first time in 15 years—providing a unique opportunity to repair our broken “sick-care system.”

What is less apparent is a commitment on the part of key stakeholders at federal, state and local levels to seize on this momentum to reach the goal that has eluded the nation for decades, if not centuries—the attainment of health equity for communities of color. This article, therefore, poses and seeks to answer a question that requires urgent attention: How can these potentially transformative developments result in the elimination of health disparities experienced among people of color and other underserved populations?

Health Disparities Persist

Since 1985, the issue of racial and ethnic health disparities has edged to the center stage of public policy. Secretary Margaret M. Heckler, who led the Department of Health and Human Services (DHHS) at that time, spurred this movement with the *Report of the Secretary's Task Force on Black and Minority Health*.¹ The study gave currency to the concept of “excess deaths” and documented “a continuing disparity in the burden of death and illness experienced by Blacks and other minority Americans as compared with our nation's population as a whole.”²

The Heckler report also helped to set in motion a series of related developments. A nearly immediate outcome was the establishment of the Office of Minority Health in DHHS.³ The publication by the Office of Management and Budget of *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity* occurred in 1997, and highlighted the importance of consistent race/ethnicity data categorization in data collection and reporting. In 2000, the Healthy People Initiative identified the elimination of health disparities as an overarching national goal to be attained by 2010—a goal endorsed by thousands of organizations and individuals.⁴

By most accounts, the report issued by the Institute of Medicine (IOM) in 2002—*Unequal Treatment/Confronting Racial and Ethnic Disparities in Health Care*—represents a landmark contribution to heightened interest in health gaps. The key finding of

Unequal Treatment, for which Dr. Brian Smedley, who currently directs the Health Policy Institute of the Joint Center for Political and Economic Studies, served as lead editor, reverberates today.

The majority of studies...find that racial and ethnic disparities remain even after adjustment for socioeconomic differences and other healthcare access-related factors.⁵

Another significant contribution to a continuing emphasis on health gaps is the *National Healthcare Disparities Report* (NHDR), published annually as of 2003 by the Agency for Healthcare Research and Quality (AHRQ). Each study, prepared in response to a Congressional mandate, as was the IOM report, monitors the nation's progress toward eliminating disparities in health care. In its 2008 report, AHRQ reached this sobering conclusion: “In 2005, the NHDR reported on the biggest gaps that existed in health care quality in America for African Americans, Asians, AI/ ANs (American Indians/Alaska Natives), Hispanics, and poor populations. Some of the biggest gaps reported in 2005 remain the largest gaps in this year's NHDR.”⁶

An overwhelming consensus with respect to research on racial and ethnic health disparities—their existence and the need to eliminate them—has led some stakeholders to conclude that it is time for a paradigm shift. In an editorial written for *The New England Journal of Medicine*, one researcher described the challenge in this manner:

During the past decade, hundreds of articles have been published documenting the existence of racial and ethnic disparities in health and health care—a data deluge that has led many observers to suggest that it is time to stop documenting disparities and turn our efforts to *doing* something about them (our emphasis).⁷

Tools to Promote Health Quality and Eliminate Health Inequities

A memorandum produced by Prevention Institute and the Joint Center's Health Policy Institute in January 2009 underscores the critical importance disease prevention and health promotion can play in reducing and ultimately eliminating health inequities. In *Reducing Inequities in Health and Safety through Prevention*, the authors indicate that approximately 96 percent of the two trillion dollars spent on health in the U.S. are expended on medical services—treatment after the onset of diseases and injuries.⁸

It follows then that quality improvement and prevention efforts directed to people of color, whose mortality and morbidity rates are disproportionately high, will result in higher cost savings for the public and private sectors. The Prevention Institute estimates, for example, an annual savings of over \$1.6 billion with only a five percent change in incidence (in the total population) in illnesses and behaviors that include heart disease, type II diabetes, childhood asthma and HIV—all conditions that impact people of color disproportionately.⁹

1 U.S. Department of Health and Human Services, Report of the Secretary's Task Force on Black & Minority Health, Report of the Secretary's Task Force on Black and Minority Health (August 1985).

2 Secretary's forward and charge to the task force, *ibid.*, page 21.

3 The Office of Minority Health of the U.S. Department of Health and Human Services was established in 1986. Today, there are several offices in HHS components and approximately 40 state minority health entities that focus on issues affecting American Indians and Alaska Natives, African Americans, Asian Americans, Hispanics/Latinos, Native Hawaiians and other Pacific Islanders.

4 The Healthy People (HP) initiative is a strategic management tool for the achievement of the nation's prevention agenda. It had its origins in a 1979 publication prepared during the tenure of U.S. Surgeon General Julius B. Richmond. For a detailed discussion of HP 2010, see: Summit Health Institute for Research and Education, Inc., *Racial, Ethnic and Primary Language Health Data Collection and Reporting: An Assessment of Federal Policies, Practices and Perceptions* (October 2001).

5 Institute of Medicine, *Unequal Treatment/Confronting Racial and Ethnic Disparities in Health Care*. National Academy Press (March 2002), page 4.

6 Agency for Healthcare Research and Quality, *2008 National Healthcare Disparities Report*, U.S. Department of Health and Human Services (February 2009), page 7.

7 N. Lurie, Health disparities – less talk, more action, *New England Journal of Medicine* (August 18, 2005), p. 727.

8 Prevention Institute and Health Policy Institute/Joint Center for Political and Economic Studies. *Reducing Inequities in Health and Safety through Prevention*. January 23, 2009, page 2.

9 Prevention Institute and The California Endowment, *Reducing Health Care Costs through Prevention* (Working Document), August 2007, page 3.

Introducing Health Information Technology as a Health Quality/Equity Tool

The magnitude of the \$787 billion economic stimulus package funded by the ARRA may have obscured certain provisions that offer promising tools for prevention in vulnerable communities. These provisions are presented as the *Health Information Technology for Economic and Clinical Health (HITECH) Act* and call for the allocation of as much as \$36 billion to create a nationwide health information technology network, inclusive of incentives to assist health care providers in adopting electronic health records.

Health information technology (HIT), as described in a 2007 report for the Health Policy Institute by the authors of this article, is defined as: the use of electronic technology (computers and computer programs) to store, protect, retrieve and transfer health-related clinical, administrative

and other information electronically within and among health care settings, including in-patient and out-patient.¹⁰ Electronic health records (EHRs) provide a repository of information regarding the health status of a patient/consumer in digital form. A fully operational electronic health record system is one that collects a patient/health consumer's information in a computer system, displays test results, allows providers to enter medical orders and prescriptions and helps doctors make treatment decisions.¹¹ A companion HIT component is the patient health record (PHR), which is under the control of patients/consumers, may be in paper or increasingly, in electronic form, and may include health information entered directly by the person and/or by others (with permission), automatically from measurement devices, or by importing from outside sources.¹²

In the referenced report, Perot and Davis

describe a variety of benefits of HIT and EHRs. The latter include: improved personal monitoring, knowledge and empowerment of patients; improved patient-provider relationships; increased patient safety, including a decrease in medical errors; improved quality and more efficient delivery of care; and the prospect of cost savings (e.g., as the result of decreased malpractice costs). Clearly these benefits can contribute to improved prevention and health care quality in all communities. As noted, these benefits may also result in the closing of health gaps among diverse populations. To achieve this potential, however, every effort must be made to ensure that providers and consumers in vulnerable communities participate fully as beneficiaries of ARRA resources—informational, technical and financial.

Adoption Barriers in Communities of Color

The digital divide remains a barrier to full participation of communities of color in HIT that must be recognized and addressed. At the same time, gaps are narrowing at an accelerating rate and that offers prospects for greater responsiveness to HIT in these communities than would have been envisioned a few years ago. For example, according to a report of the Pew Internet and American Life Project, the number of African American households with an Internet connection in 2007 experienced twice the rate of growth from 2005 to 2007 (14 to 40 percent), compared to total U.S. households.¹³

Yet, there are warning signs. Researchers from the National Center for Health Statistics published findings in May 2009 from a national two-year study that examined 500 million visits to primary care physicians. They reported in the *Journal of Health Care for the Poor and Underserved* that



President Obama has made a promise to the nation that every American will have the benefit of an EHR by 2014.

10 Perot, R.T. and Davis, R.J. *Facilitating Minority Stakeholder Participation in Health Information Technology*. Joint Center for Political and Economic Studies and Summit Health Institute for Research and Education, Inc., September 2007, page 3.

11 Takvorian, S. A Reporter's Toolkit: *Health Information Technology*. Alliance for Health Reform. Page 15 (http://www.allhealth.org/publications/health_information_technology/health_information_).

12 Demetriades, James E., Kolodner, Robert M., Christopherson, Gary A., Editors. *Person-Centered Health Records/Toward HealthePeople*. Health Informatics Series. Springer Science+Business Media, Inc. 2005, p. 17. S. Rosenbaum *et al. Reducing Racial and Ethnic Health Disparities: A Summary of State Disparities and Statistical Results*. George Washington University (September 2003).

uninsured and underinsured Hispanic and African American patients are more likely than insured white patients to be treated by doctors who do not use EHRs.¹⁴ This outcome is troubling. Clearly, if HIT adoption offers quality improvement and prevention benefits but these benefits are not available to populations already experiencing health disparities, the gaps among racial and ethnic groups can only worsen.

ARRA HITECH Provisions Impacting EHR Adoption

Although there are several provisions of the HITECH Act that warrant discussion, we have chosen to focus on the incentive systems proposed through which adoption of EHR systems by health providers is encouraged. These are monetary incentives described in the ARRA, which essentially provide a sliding scale of payments to health professionals and health care organizations (e.g., hospitals), with early adopters receiving larger sums. Eligible providers in a health professional shortage area can receive incentive payments that are increased by 10 percent. The reverse side of the coin, the “stick” that accompanies the incentives, is the prospect of reduced Medicare payments for those health professionals who have not become “meaningful users” of EHRs by 2015.

Although there are other factors determining eligibility, such as the required use of a “certified EHR,” an important eligibility criterion is the demonstration by health professionals seeking to qualify for incentives that they have achieved “meaningful use” of an EHR. Defining the term is the province of the Secretary of the Department of Health and Human Services, acting through the Office of the National Coordinator for Health Information Technology (ONC), which is currently seeking broad stakeholder input and discussion. A decision regarding this definition is imminent.¹⁵

The majority of studies . . . find that racial and ethnic disparities remain even after adjustment for socioeconomic differences and other healthcare access-related factors.

Organizing to Identify and Communicate HIT Challenges and Opportunities

In June 2008, Summit Health Institute for Research and Education, Inc. (SHIRE) joined forces with five initial partners to launch the National Health IT Collaborative for the Underserved (NHIT). These organizations were: Apptis, Inc., Association of Clinicians for the Underserved, HIMSS Foundation’s Institute for e-Health Policy, eHealth Initiative and eHealth Initiative Foundation and the Office of Minority Health, HHS. Additional organizations are being approached to serve in a leadership capacity.

NHIT was established as a public/private/community partnership with the goal of leveraging advances in health information technology (HIT) to expand health care access, improve quality, promote consumer self-management and reduce and ultimately eliminate health disparities experienced by communities of color and other underserved populations.

Working through four groups that focus on related topics, over 100 NHIT volunteers are assessing current efforts and recommending innovative projects in four areas: education and outreach; policy; workforce development

and training; and finance and sustainability. Plans for congressional briefings and stakeholder consultations are underway to help ensure that decisions made will promote health equity and not exacerbate health gaps. NHIT actively seeks the involvement of additional organizations and individuals in supporting these efforts.

Further, NHIT recommendations have been submitted to decisionmakers addressing health reform. The organization views HIT as an essential element of a reformed medical intervention system, as well as an indispensable requirement for a robust, well-financed health promotion/disease prevention infrastructure. This infrastructure is essential for a shift from “sick care” to wellness. Key components include:

1. Expanded **broadband access** in rural and other underserved communities;
2. **Medical homes** for all U.S. residents that are HIT-equipped and linked;
3. **Incentives**, including grants, revised reimbursement and coding policies, etc. to promote adoption of HIT by health providers in underserved communities;
4. Community networks of **neighborhood health coaches/navigators** equipped with HIT and assigned to help underserved consumers access health care and adopt personal wellness strategies;

13 Crockett, Roger O. and Ante, Spence E., “Equal Opportunity Speedway,” *Business Week*, May 21, 2007.

14 Hing, E. et alia. Are there patient disparities when electronic health records are adopted? *Journal of Health Care for the Poor and Underserved*. May 2009.

15 Health Information Technology/American Recovery and Reinvestment Act (Recovery Act) Implementation Plan. Office of the National Coordinator for Health Information Technology. http://www.hhs.gov/recover/reports/plans/onc_hit.pdf.

5. **HIT workforce development and training** to advance health reform and economic stimulus initiatives;
6. **Culturally and linguistically appropriate social marketing, education and outreach programs** that inform providers and consumers in underserved communities of HIT benefits and uses with respect to expanded access, quality improvement and consumer health management;
7. Support for pilot projects that demonstrate **creative uses of innovative and/or existing information technology** that can be effective in underserved communities;
8. **National HIT adoption goals** that are tailored to and inclusive of diverse socio-economic, racial/ethnic and other population groups; and
9. **White House-level leadership** for HIT, personal wellness/physical fitness and community engagement in health care reform.

HIT and Elected Officials

There are myriad signs nationwide that HIT is about to become a fact of life. Decisionmakers at all governmental levels can play an increasingly critical role in the process of policy development, innovation and implementation. For example, the ONC's

ARRA Implementation Plan, issued in May 2009 presents multiple opportunities for the solicitation and provision of stakeholder inputs and comments from the general public.

What is needed is nothing less than the government-funded outreach effort that accompanied the implementation of Medicare Part D, in recognition of the potentially harmful impact for vulnerable seniors who might not be informed. It will be essential to engage community-based and professional organizations that are capable of reaching health providers, health organizations and consumers through culturally- and linguistically-appropriate strategies. To date, such resources have not been made available through the HITECH Act or other components of ARRA, and advocacy for this purpose may be required.

Elected and appointed officials can also play important roles at state, county and local levels with respect to ARRA funds, particularly those earmarked for HIT. They can identify ways to include language in proposed legislation and regulations that allows for the specific targeting of communities of color and other underserved populations and the providers and organizations that serve them. They can also ensure that minority HIT vendors have access to the opportunities that the HITECH Act provides.

Likewise, legislators and their appointees can insist upon the protection of community-based providers who are trapped on the wrong side of the digital divide. Grants, tax incentives and other forms of financial support must be made available if the promise of HIT is to be realized.

Conclusion

President Obama has made a promise to the nation that every American will have the benefit of an EHR by 2014. To achieve that goal, advocates must ensure that HIT is an "equal opportunity technology" that will support meaningful health reform, and will close, not widen health gaps between populations of color and the rest of the nation.

Despite the challenges, we believe that the widespread adoption of HIT, along with appropriate privacy and confidentiality safeguards, will improve the quality of care, promote prevention, reduce long-term costs and contribute to the elimination of health disparities among U.S. residents. It is clear, however, that these goals cannot be achieved if a large portion of the population is uninformed and uninvolved.

We urge all stakeholders to work to ensure that for the most vulnerable among us, and for all U.S. residents, the health chasm is finally closed.

Ruth T. Perot, MAT is Executive Director/CEO of Summit Health Institute for Research and Education, Inc. (SHIRE) and Managing Director of the Program Management Office (PMO) of the National Health IT Collaborative for the Underserved (NHIT).

Russell J. Davis, DPA, MAPT is President of SHIRE and Managing Director of the PMO.

