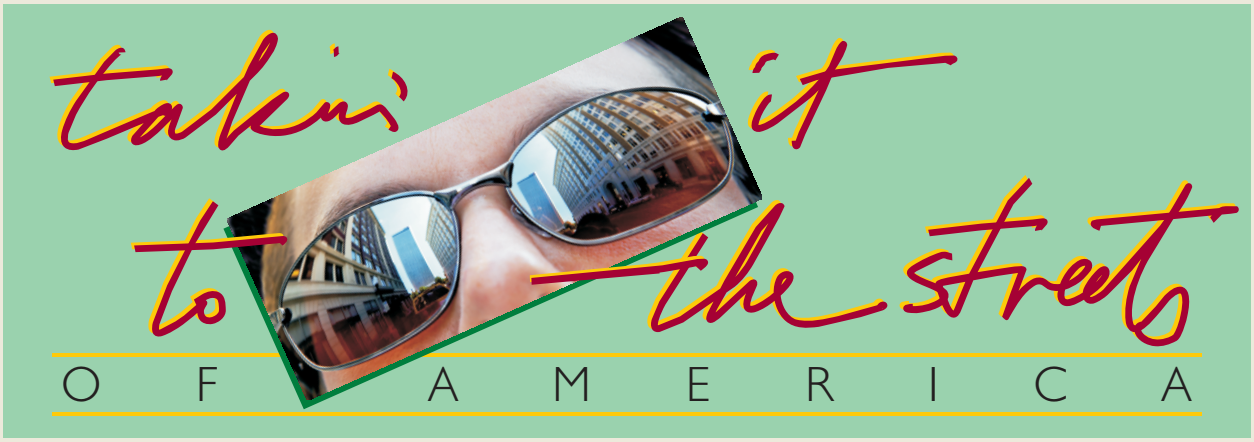
• A SPECIAL REPORT •



Health Equity and Building High Performance Health Systems for the Underserved and Vulnerable in the Era of Health Reform

GOING "ALL IN" FOR THE HEALTH OF UNDERSERVED COMMUNITIES

GERARD CLANCY, M.D., PRESIDENT, UNIVERSITY OF OKLAHOMA – TULSA

JULY 2010

FORWARD

Four Decades of Takin' it to the Streets

In 1976, I was in 9th grade and working as a dishwasher at a Howard Johnson's restaurant. That summer, the Doobie Brothers released a new album *Takin' it to the Streets*. The first time I heard the title song while washing those dishes, I thought, "I must get that album." The next day, I rode my bike to the bank, cashed my check from work, went to the record store and bought the album. It has been a favorite ever since.

Ten years later, in the summer of 1986, I was a third year medical student on my first clinical clerkship on the burn unit. I distinctly remember the burn unit nurses turning up the stereo during the scrub down sessions for the burn patients so that their screams of pain would not be as easily heard by the other patients. One of my patients was a Doobie Brothers fan, and he always chose the *Takin' it to the Streets* album during his scrub sessions.

In 1996, I was an Assistant Professor of Psychiatry and part of a team that provided outreach psychiatric care to the homeless mentally ill. During days when traffic and parking were problematic, we rode our bicycles to visit our patients. *Takin' it to the Streets* was our team's theme song.

In 2006, I was Dean of the University of Oklahoma School of Community Medicine,located in a community struggling with a 14 year difference in life expectancy between the poor and the affluent. As we developed a broad set of clinical outreach services for the underserved, the lyrics of

You don't know me but I'm your brother
I was raised here in this living hell
You don't know my kind in your world
Fairly soon the time will tell
You...telling me the things you're gonna do for me
I ain't blind and I don't like what I think I see

Takin' it to the streets
Takin' it to the streets
Takin' it to the streets

Take this message to my brother
You will find him...everywhere
Wherever people live together
Tied in poverty's despair
Are you...telling me the things you're gonna do for me
I ain't blind and I don't like what I think I see

Takin' it to the streets
Takin' it to the streets
Takin' it to the streets
Takin' it to the streets

music and lyrics by Michael McDonald

Our acknowledgment to the Doobie Brothers for the original concept of our title design and to Michael McDonald for writing the lyrics that inspired us to expand on that concept.

Takin' it to the Streets began to take on a deeper meaning with themes of poverty, despair, doubt and mistrust on the streets.

By 2016, recently passed health reform legislation will be significantly implemented. A clear goal within health reform is to try to take health care to the streets to reach those who currently are not well served. Will those streets still echo poverty, despair and mistrust? Or will we have made progress on true health equity? This report argues for new medical education and health care delivery models to create high performance health systems for the underserved, using health reform as the lever for change.

Gerard Clancy, M.D.

EXECUTIVE SUMMARY

The "Takin' it to the Streets" Report

We know that the U.S. spends more on health care that any other developed country and that our health outcomes are in the bottom third of these developed countries. This low value proposition burdens our ability to economically compete on a global scale.

Alongside the financial argument for health care system reform is the social justice argument for changes in U.S. health care. The 47,000,000 Americans without health care coverage are at much higher risk of early death from inadequate obstetrical care, lack of immunizations, stroke, heart disease, late diagnosis of cancers and much more. Those without health care coverage often wait for care, hoping their problem goes away. Oftentimes, the problem only escalates and care is initiated at the emergency room and hospital levels – clearly the most expensive access points – with great potential for fragmentation of care if follow-up services are necessary.

Adding to our cost, quality and ethical concerns regarding U.S. health care is the looming physician shortage. The Association of American Medical Colleges (AAMC) has raised concerns that although the shortfall in physicians will affect everyone, the impact will be most severe on vulnerable and underserved populations. These groups include the approximately 20 percent of Americans – or 64 million people – who live in rural or inner-city locations.

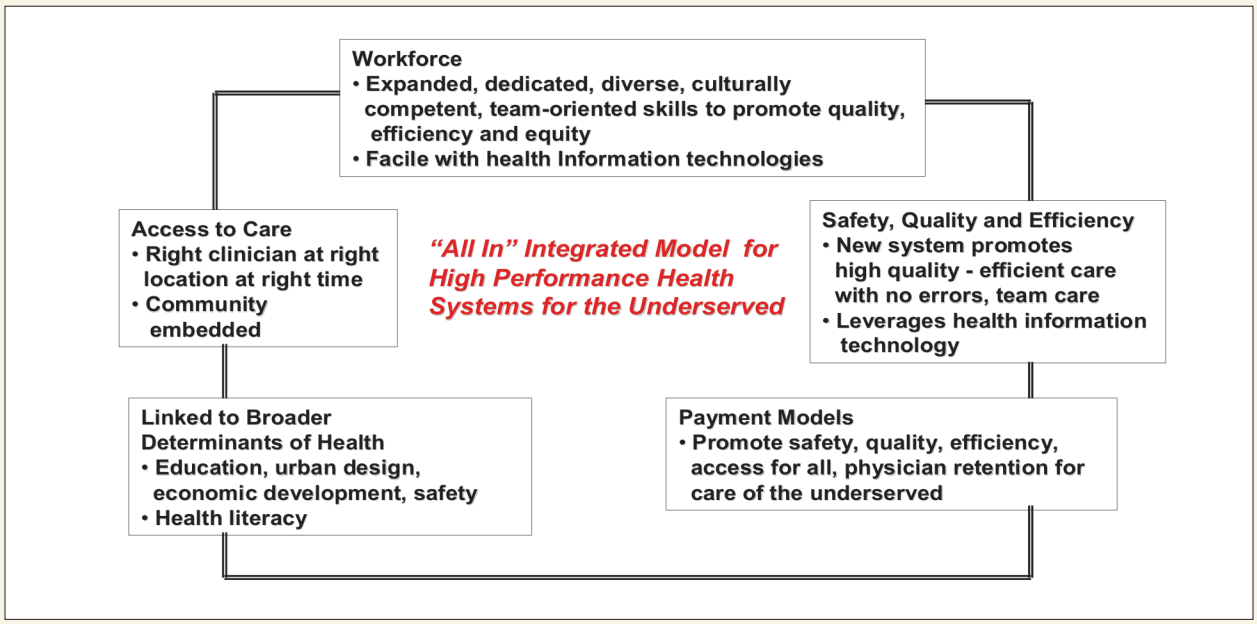
In March, 2010, Congress passed major federal health reform legislation that attempts to expand health care coverage for the uninsured, create fairness within health insurance coverage, expand health professions training and increase the safety, quality and efficiency of health care provided. Although less known, the new legislation also establishes the Center for Medicare and Medicaid Innovation, intended to allow for creativity and flexibility in both health care design and payment with a desired result of pilot projects for high performance health systems.

Within the Health Resources and Services Administration current strategic plan is the goal to "partner with diverse communities to create, develop and disseminate innovative community based health equity solutions, with a particular focus on populations with the greatest health disparities."

Combining these initiatives within the Center for Medicare and Medicaid Innovation and the Health Resources and Services Administration provides opportunities to ***"Take Innovation to the Streets"*** and achieve high performance health systems for underserved and vulnerable populations.

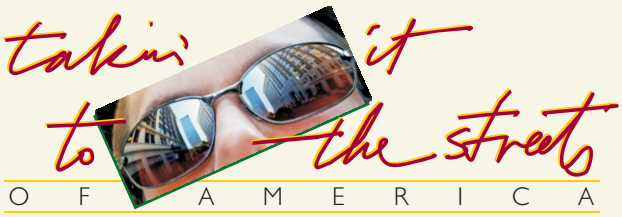
This report offers seven recommendations for creating high-performance health systems specifically to meet the needs of vulnerable and underserved populations. These recommendations include:

1. ***Creation of an initiative within the Center for Medicare and Medicaid Innovation*** that specifically targets communities with significant health disparities.
2. ***Creation of a collaborative of medical schools and underserved communities*** for joint design, learning and replication of successful health improvement and efficiency initiatives for the underserved and vulnerable.
3. ***Taking an "All In" integrated approach within these pilot projects*** that combines access, quality, workforce and payment modification to create high-performance health systems for these underserved and vulnerable populations.
4. ***The combining of funding opportunities from across multiple federal agencies*** to support the workforce, access to care, quality and efficiency initiatives within these pilot projects.
5. ***Seeking assistance from thought leaders*** in the design and payment innovations within these pilot projects.
6. ***Seeking assistance from thought leaders*** in the design of outcomes measures for these pilot projects.
7. ***Gaining support from national leaders*** in further advancing the concept of designing and funding pilots for high-performance health systems for the underserved.



Combining the intentions of the Center for Medicare and Medicaid Innovation, the Health Resources Administration and other programs provides the potential to vastly improve access to care, end health disparities, address the broader determinants of health and educate a new health care workforce with the skills to actually improve the health of underserved communities. To do so would require model community pilot projects that integrate quality, efficiency, access, preventive and workforce efforts alongside innovations in payment.

In recent conversations with White House staffers regarding health care needs in America, several have commented on the desire of President Obama to hear from "real people" on these important issues. This report was written in that spirit – attempting to make heard the voices of real clinicians caring for real people at greatest risk at a time of great opportunity.



CONTENTS

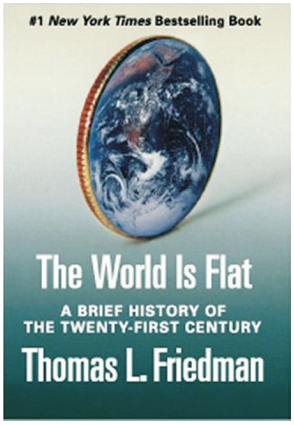
SECTION I

Flattening Tulsa (and maybe New Orleans, Miami, south central Los Angeles, Detroit, south side Chicago)

Health Equity: What do we mean by "Flattening Tulsa" and flattening the others?

A level playing field is a given in any type of serious competition. For many here in the U.S. and around the world, the playing field of "life" is not level – particularly if one is born into poverty. When born into poverty, the ability to compete for a long and meaningful life can be significantly hindered by poor early childhood environments, poor access to health services and poor educational opportunities.

With regard to health and life expectancy, this is not a new phenomenon. During the sinking of the H.M.S. *Titanic*, passengers' economic status played a part in who was allowed on lifeboats and therefore who lived and died. Johns Hopkins School of Public Health health disparities expert Thomas LaVeist discovered a list of female survivors categorized by their travel class. The ship's lifeboats had space for 53 percent of everyone aboard. A first-class ticket practically guaranteed space on a lifeboat, while only half of third-class female passengers survived.



Thomas Friedman's best selling book *The World Is Flat* highlights how new attitudes regarding capitalism, internet connectivity and the immediate transfer of information globally are leveling the playing field for China, India and the former Soviet Union to be able to compete with the U.S. in the new global marketplace. He refers to the leveling of the playing field as a "flattening" of parts of the world. Despite the economic gains within these countries, he also highlights the fact that large segments of the population within these countries are being left behind during the flattening process – due in part to abject poverty, poor education and poor health.

Entire countries are being left behind in this "flattening" process due to poor health. Africa, for example, has little chance to compete on a global scale with diseases such as HIV and malaria affecting so many. Diarrheal illnesses from poor sanitation and non-potable water continue to be the primary cause of death in India and Bangladesh. Frustrating to many health care workers is the fact that HIV, malaria and infectious diarrheal diseases are preventable in a well-organized health care system.

Microsoft founder Bill Gates recognized the importance of not leaving the poor of these countries behind and has significantly invested in health initiatives focusing on malaria and HIV in Africa. "These three billion poor in the world are caught in a trap and may never get into the virtuous cycle of more education, more health, more capitalism, more rule of law, more wealth," said Gates.

Although nothing of the scale of Africa, parts of the U.S. geographically and racially are not yet "flat" due to severe poverty and poor health status. Nearly one million deaths in the U.S. could have been avoided in the 1990s if death rates for African Americans were the same as those for whites.

Increasingly, the U.S. middle class is being pulled apart into the haves and have-nots. Tulsa is no exception. The region features geographic areas of excellent health and others with very poor health status. Not surprising is the fact that health, wealth and poverty and poor health are intimately linked. What is not apparent is the degree of poor health in parts of Tulsa and how it is affecting the economic potential of this region.

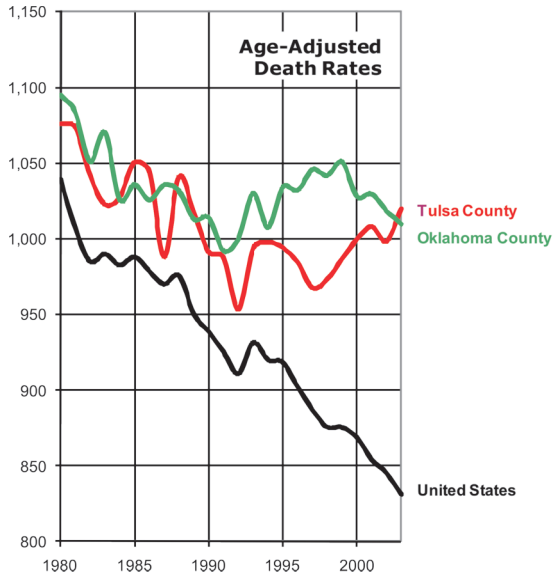
Oftentimes, simplistic solutions are put forward to solve health and education equity issues. One of the solutions to these complex problems is simple reliance on free trade producing economic growth and improved human wellbeing, i.e. market fundamentalism. In fact, this has repeatedly failed in actually improving health equity. More sophisticated solutions meet with great frustration. In *Whatever It Takes*, Paul Tough describes early childhood pioneer Geoffrey Canada's work in creating programs for at-risk children in Harlem. Early in his efforts, he noted how well-meaning but limited programs created a "lottery" approach whereby a small number of children and families received outstanding services but a vastly greater number of children and families received no assistance at all. Only after Canada developed a long-term, all inclusive program did he begin to see the results he had hoped for in Harlem.

Parts of Tulsa (and other regions) are not flat due to poor health status

Age-adjusted death rate is the single best number to measure the health of a population. A low age-related death rate signifies that within each age group, people are living to their fullest. Over the past 25 years, the age-related death rate in the U.S. has fallen steadily. ***In contrast, Oklahoma has had the least improvement in the entire country in the age-adjusted death rate (premature death) since 1990.***

Tulsa County's age-adjusted death rate mirrors the rest of Oklahoma – even Oklahoma County, which has a state-sponsored medical center. A careful analysis of Tulsa area zip codes highlights that midtown and south Tulsa neighborhoods have exceedingly healthy citizens, with age-related death rates far better than the national average. By contrast, zip codes in east, west and north Tulsa have age-related death rates far worse than the U.S. averages.

Specific neighborhood health status ratings are so poor that their numbers dominate and bring down Tulsa's average age-related death rate to its low



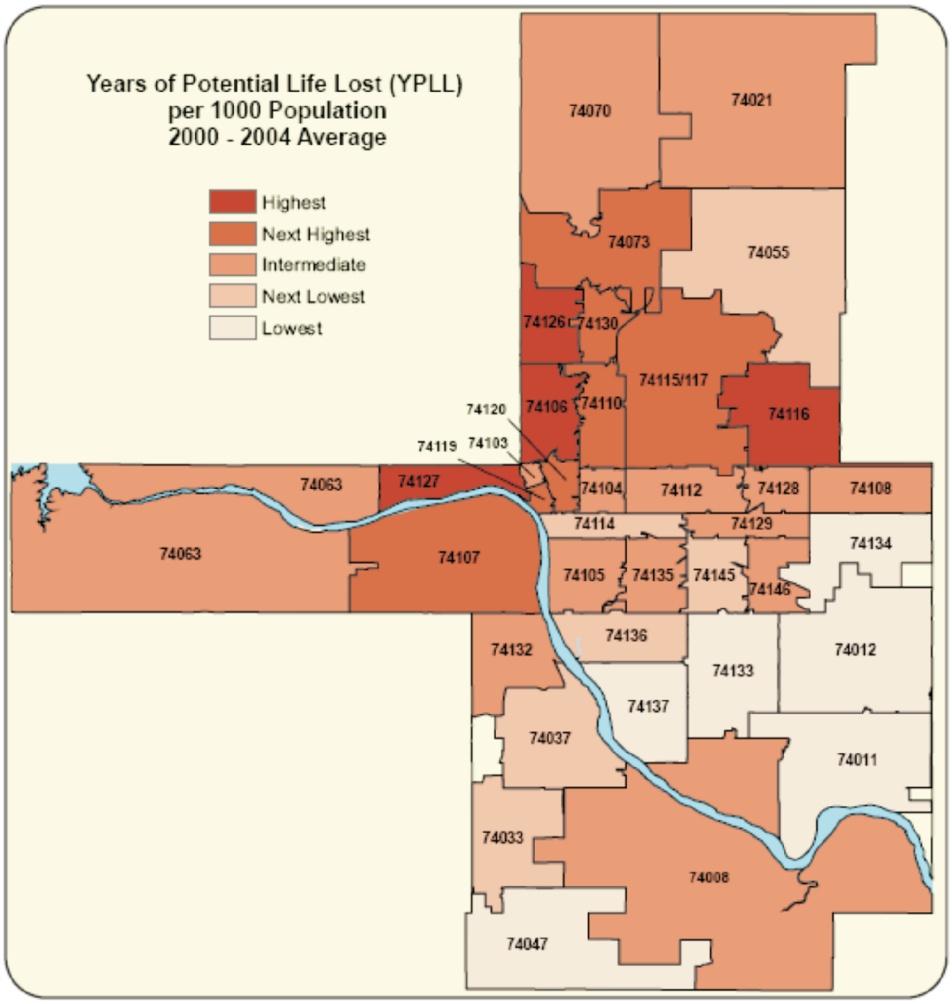
point. The correlations with these areas of poor are-related death include:

- High poverty, high crime
- Poor access to primary care and specialty care
- High rates of heart disease, stroke and cancer
- Low performing schools

Other areas of concern in these Tulsa neighborhoods include far worse than average premature birth rates, infant birth weights, infant mortality, stroke and cancer rates.

Following Friedman's theme that parts of the world are flat (where there is a level economic playing field) and other parts that are not flat (where poor health status is a major contributor), the same can be said of the Tulsa region. Midtown and South Tulsa are "flat" – connected with the rest of the world, healthy, well educated and economically thriving. North, east and west Tulsa regions are "not flat" – with overall poor health status, struggling education programs in need of improvement, deficits in information technology infrastructure and few opportunities for economic growth.

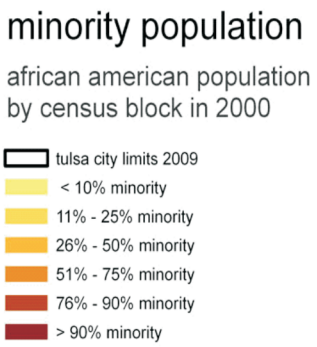
Following Friedman's analogy, Tulsa's overall regional economy will struggle unless the playing field is leveled for the entire region. Health care delivery, early childhood development and quality education are primary areas for the investment needed to bring this about.



Case Example:

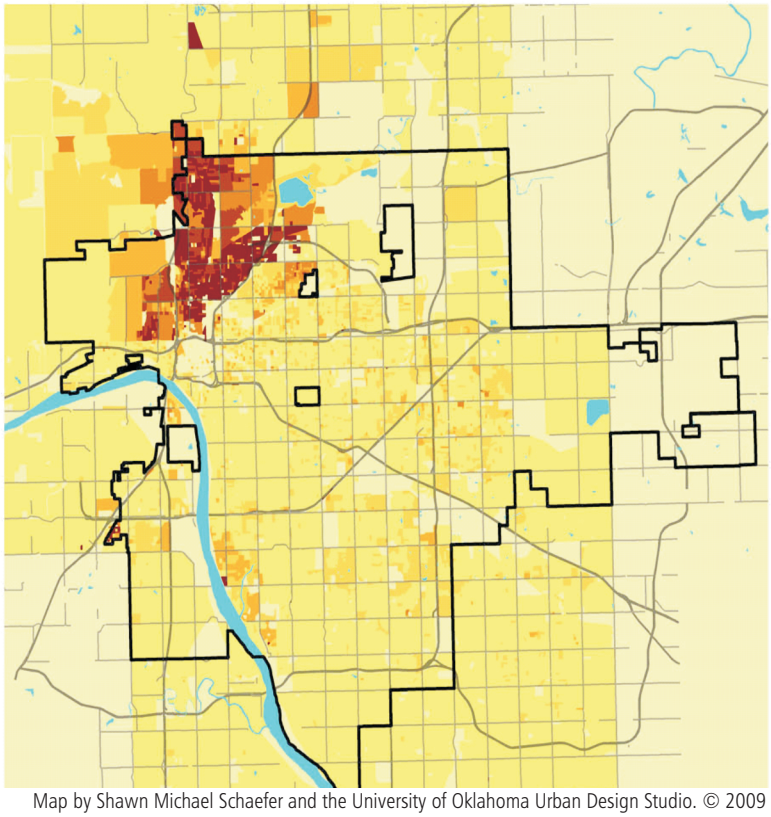
This zip code analysis of Tulsa County shows a 14 year difference in life expectancy between north and south Tulsa.

Shorter life expectancy is depicted by darker shaded zip codes.



Case Example Tulsa:

Tulsa's 14 year difference in life expectancy is directly related to race, poverty and access to health care. The zip codes with shorter life expectancy are predominantly African Americans with incomes below the regional average. Although north ,east and west comprise 40 percent of the region's population, they have ready access to only four percent of the region's physicians and virtually no ready access to specialists.



Map by Shawn Michael Schaefer and the University of Oklahoma Urban Design Studio. © 2009

SECTION II

Building Towards Health Reform for the Past 25 Years: Emphasis on a new professionalism in medicine, more diverse medical student body and faculty, community-based clinical services and the broader determinants of health

The need for health reform did not occur overnight. For the past 25 years, the U.S. health care system has been creeping towards disaster. In 2010, we can identify four basic areas that need immediate attention. These reasons for health reform can be broken down into ***"Four Cs"***:

1. ***Cost*** – The U.S. spends almost 17 percent of its Gross Domestic Product on health care. This is five percentage points higher than the second closest developed country (Switzerland).
2. ***Clinical Quality*** – Although the U.S. spends more than any developed country on health care, the health outcomes of the U.S. are in the bottom third of developed countries.
3. ***Clinicians*** – The general population of the U.S. has grown steadily, the Baby Boomer generation is requiring additional health care and Americans are living longer (except in Oklahoma), yet medical schools have not significantly increased the number of physician graduates. In Oklahoma, 41 percent of physicians are 55 or older.
4. ***Coverage*** – With 47,000,000 citizens without health care coverage, the weight of providing care to these individuals in a haphazard fashion has become too great.

Reversing the ***Four Cs*** of health reform requires action that actually extends health care to all, to provide efficient, high-quality care and develop the right health care workforce. This work involves:

- Attention to medical professionalism and altruism
- Workforce expansion, diversity and cultural competence
- Attention to efficient, high-quality care
- Expansion of community-based clinical services
- Attention to the broader determinants of health

Growing Dissatisfaction with American Medicine (and Medical Professionalism)

Even before entering medical school, applicants "talk the talk" of serving the underserved. Students within the medical education pipeline commonly "pledge to serve" on numerous occasions, including:

- As part of the personal statement within their application to medical school
- As part of their interview in applying to medical school
- As part of the "White Coat" ceremony at the beginning of medical school
- As part of their personal statement during the residency application process
- As part of their interview process for residency positions
- At the end of the medical graduation ceremony, when a new version of the Hippocratic Oath is read:

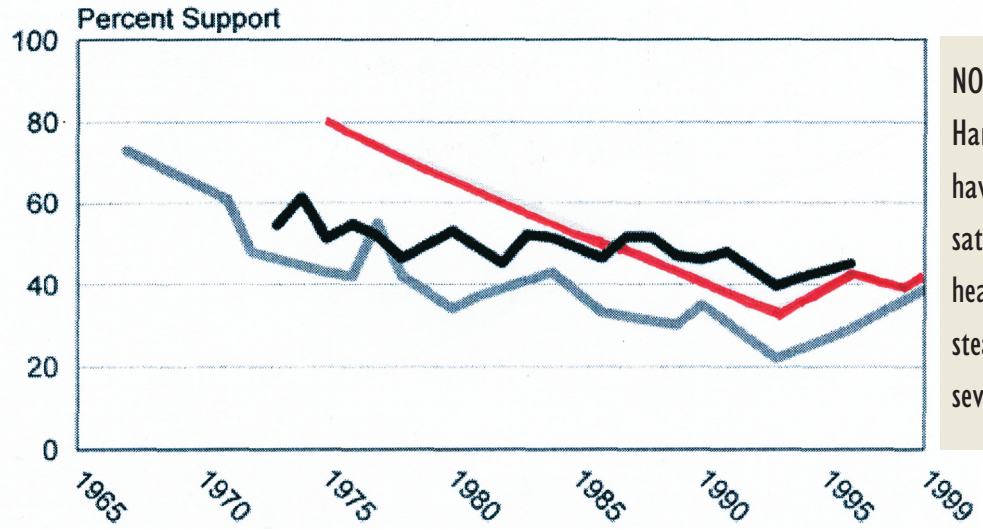
> ***"I will not permit considerations of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, sexual orientation, social standing or any other factor to intervene between my duty and my patient."***
>
> *Declaration of Geneva,* World Medical Association

However, these pledges for service to all do not appear to be making it to the streets of America. In *Snobbery – The American Version*, Northwestern University Professor Joseph Epstein writes:

> *"We no longer revere physicians, at least in the way we once did. This is owing in part to their interest in money-making. The loss of prestige in physicians can be traced in significant part to their gain in earning power. Empty babble about the special doctor-patient relationship continues, but they have come to be like everyone else in business for themselves with the added mark against them that their money mongering could result in their actually doing harm by refusing poorer patients or making decisions on profit rather than health."*

Percent of Americans highly satisfied with U.S. healthcare

NORC, Gallup and Harris polls



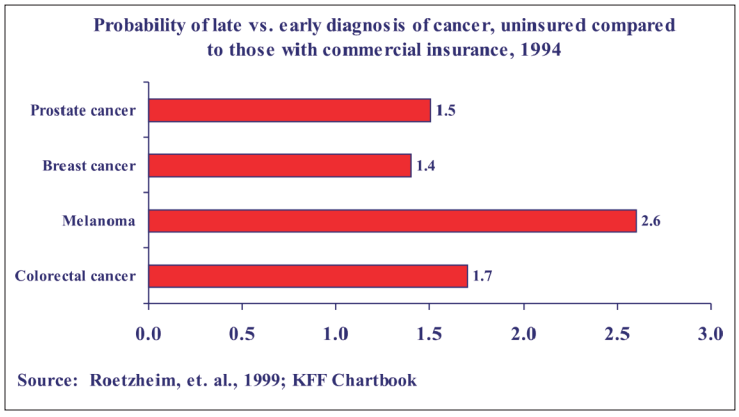
NORC, Gallup and Harris polls, which have measured satisfaction with U.S. health care, show steady declines over several decades.

As shown above, various polls rating satisfaction with U.S. health care also show steady declines over several decades.

Might some of this dissatisfaction stem from American medicine's general apathy toward the underserved?

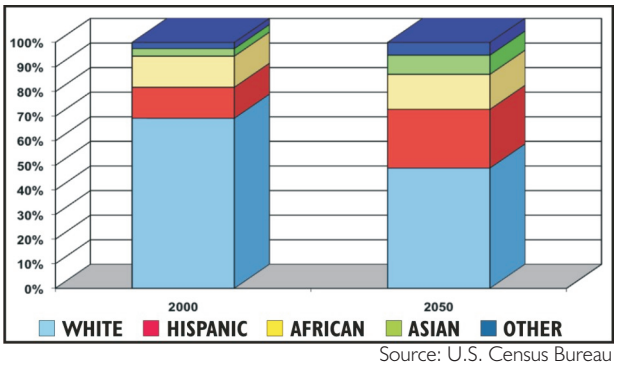
Quietly, a group of patients suffer disproportionately.

Over the past 15 years, populations and outcomes research has begun to show that the uninsured, the poor and minority populations suffer much worse health outcomes. For example, those without health care coverage are more likely to be diagnosed late with a new cancer compared to those with health care coverage.



Cultural Competence and Diversity Within the Health Workforce

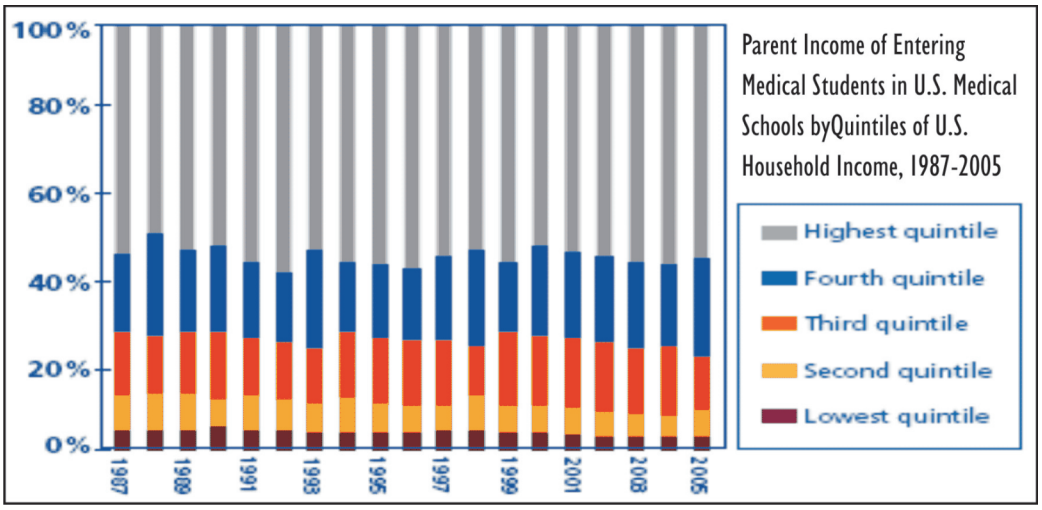
By 2050, Caucasians will be a minority (less than 50 percent) of the US population. Under-represented minorities (URM) in the general population, as a group, will comprise 54 percent of the US population by 2050:



Source: U.S. Census Bureau

The underserved are poor, and many are minorities. To address health disparities, there is need for an expanded, more culturally competent and diverse health care workforce and delivery system.

Despite these shifts in demographics, URM medical students have remained stable at 10 to 15 percent of overall medical school class size. It is well



Parent Income of Entering Medical Students in U.S. Medical Schools byQuintiles of U.S. Household Income, 1987-2005

According to the AAMC matriculating student questionnaire, more than 50% of medical students come from families in the top quintile of family income.

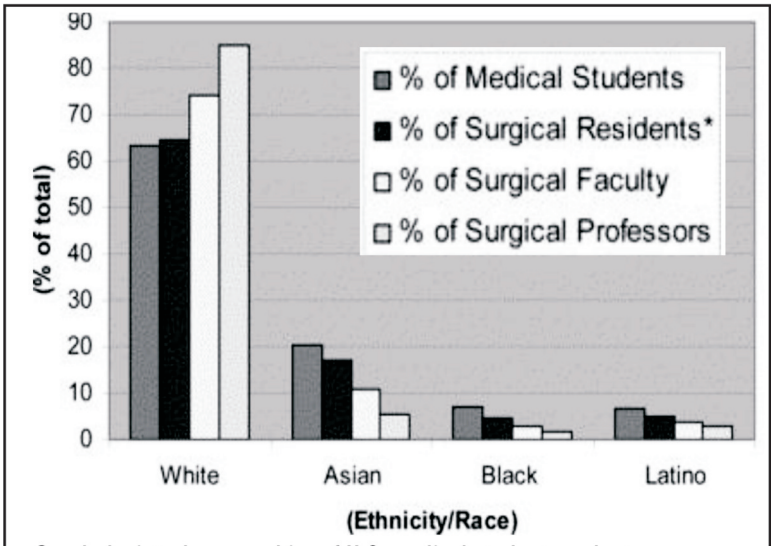
documented that students from underserved areas who receive Ivy League educations through affirmative action programs are much more likely to return to underserved neighborhoods for employment post graduation (*Shape of the River,* Bok and Bowen). Similar results have been seen in medical schools with 50 percent of URM graduates planning to care for underserved populations in comparison to less than 20 percent of white graduates planning to care for underserved populations. A diverse medical student body is helpful beyond populating underserved neighborhoods with physicians. With a diverse student body, white students feel better prepared to care for all patients. This benefit is most apparent when URM class size is 10 percent or greater. (*Saha et al., 2008, Carrasquillo et al., 2008*).

Building a diverse medical school student body has advantages, as does building a curriculum and clinical experiences that enhance cultural competency skills. "Cultural competence is not a panacea that will single-handedly improve health outcomes and eliminate disparities, but a necessary set of skills for physicians who wish to deliver high-quality care to all patients." (*Betancourt 2004*).

The graphs on this page demonstrate that medical schools have a long way to go in building this diverse medical student body and medical school faculty across the U.S. medical education system. For the most part, entering medical students are an affluent group, and medical school faculty are overwhelmingly Caucasian.

Efficient and High Quality Health Care

As previously discussed, U.S. health care costs too much and delivers too little quality. With passage of the Accountable Care Act (ACA), bringing another 32,000,000 previously uninsured Americans into a new U.S. health care system already under-supplied in physicians could cripple access to care to the right point of service with the right clinician. Physicians will need to acquire new skills to be able to provide high quality and efficient care to all.



Graph depicts demographics of U.S. medical student graduates, surgical residents and surgical faculty+ (2006). Most current data available were from 2004. Includes surgical subspecialties.

Source: Saha et al., 2008; Carasquillo et al., 2008

Practicing physicians as well as physicians in training will need to learn:

Safe and high quality patient care – The 2010 report *UNMET NEEDS: Teaching Physicians to Provide Safe Patient Care*, *Report of the Lucian Leape Institute Roundtable on Reforming Medical Education,* highlights that the underlying cause of most adverse health care events is poorly-designed systems – not negligent individual performance. This requires that physicians be educated in the science of safety and develop the interpersonal skills needed to work effectively with co-workers and patients. The report goes on to comment that the typical medical school does not accomplish this. In *Safe Patients, Smart Hospitals*, Peter Provonost and Eric Vohr describe the dramatic improvements in patient safety at Johns Hopkins and the University of Michigan when checklists for procedures, protocols, safety rounds and a culture of safety are implemented when caring for the most complex of patients. Johns Hopkins was successful at including medical student and resident physician education in these safety initiatives.

Team care – With a physician shortage looming, it will be necessary for health care to transition to interdisciplinary teams instead of focusing solely on physician autonomy. Within primary care, the Patient-Centered Medical Home team of physicians, nurses, social workers and pharmacists has proven effective in improving patient outcomes, patient satisfaction and physician satisfaction while extending the capacity of each physician. Programs of Assertive Community Treatment (PACT) teams provide interdisciplinary outreach care to individuals with the most severe forms of mental illness. PACT teams have been successful at reducing hospitalizations, jail time and overall costs while improving patient symptom severity, functional skill and satisfaction.

Health information technology – With the implementation of electronic health records across the U.S., medical record accuracy has improved with reductions in typographical-related errors as well as pharmacy contraindications. These applications of health information technology merely scratch the surface of what can be accomplished. The next phase includes health information exchange and health information supported care coordination. In a pilot program at the University of Oklahoma, e-based health care consultations between primary care and specialist physicians reduced the need for patient – specialist face to face visits by 52 percent.

Integration of public health – The importance of addressing both the individual needs of patients and the broader needs of populations as strategies to improve the health of entire communities will require traditional medicine and public health to become more integrated. Ruis and Golden articulate this quite well: "The next generation of physicians should be trained to integrate basic, clinical and the population health sciences and to naturally incorporate the principles of prevention and population-based approaches in their professional activities. We believe the time is right for new models of education in medicine and public health. We emphasize the plural: a single model may not fully address all of our needs. Efforts to create MD / MPH programs at medical schools should be applauded and encouraged."

A New Medical Professionalism

Concerns regarding American medicine's apathy towards the underserved began to be discussed openly beginning in 2000. In 2005, the American Board of Internal Medicine took a bold step in expanding the definition of professionalism in medicine through the publication of *Medical Professionalism in the New Millennium, Physician Charter, 2005.* In this call to action, the ABIM Foundation stated that physicians must reaffirm their active dedication to the principles of professionalism including:

- Personal commitment to the welfare of their patients
- Maintain competence, honesty, confidentiality and appropriate relations

- Just distribution of finite resources
- Trust by avoiding conflict of interests
- **Advance scientific knowledge, quality of care and access to care**
- **Collective efforts to improve the health care system for the welfare of society**

What was unique about the Charter was its highlighting of the needs of patients beyond those who were simply in the physicians' offices. The need for addressing the broader needs of society, access to care and efficient use of finite resources were "called out" as important duties of physicians. Much like Geoffrey Canada's all-inclusive approach in developing programs for children's educational wellbeing as a counter to the "lottery of educational services" seen previously, an all-inclusive philosophy was now being promoted concerning patient care, access and utilization of resources.

Teaching Environment Matters

In September, 2005, *Academic Medicine*'s editor, Michael Whitcomb, wrote passionately of the importance of the teaching environment in influencing physician career choice. Speaking of the UCLA / Charles Drew medical school in south central Los Angeles, Whitcomb writes:

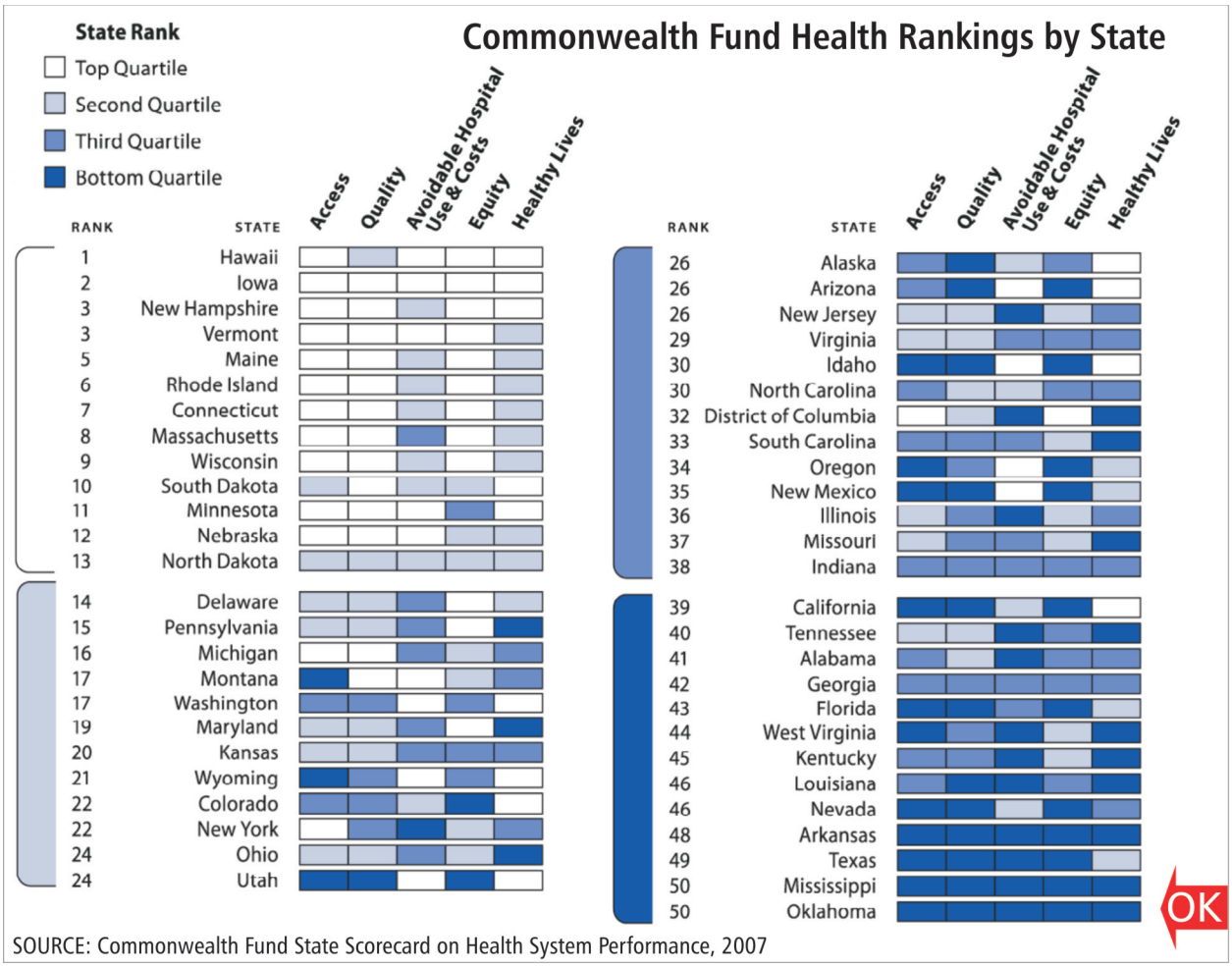
"Ko and colleagues show that the clinical experiences provided by the UCLA/Drew program have had an effect on students' decisions about practicing in underserved communities. This observation is similar to those from reports (such as those published in last month's issue) that document the impact that rural tracks have on the decisions of students to practice in rural communities. Taken together, they suggest that it may be possible to increase the number of students choosing careers as generalists by providing educational experiences specifically designed to attract students to those careers."

Some will argue that the favorable results achieved by the UCLA/Drew program and by rural tracks simply reflect the fact that students inclined to particular career paths preferentially select educational programs that provide experiences aligned with their career interests. In other words, the favorable outcomes of the programs are simply the result of pre-selection bias. And for some students, this may be the case. But so what? The key finding of the study by Ko and colleagues is that among the UCLA students who were initially inclined to practice in underserved communities, the nature of the clinical education they experienced appears to have influenced the career goals they held at graduation. Specifically, those UCLA students who experienced clinical rotations in the inner-city environment provided by the Drew program were much more likely to maintain their inclination to practice in an underserved community than were the UCLA students enrolled in the traditional clerkships.

In *The Economics of Health Equity*, McIntyre and Mooney highlight the need to tie physicians closely to efforts to improve health equity: *"Physicians are a vital resource in improving health equity. Health system administrators need to reduce the cultural distance between professionals and patients by hiring physicians who belong to disadvantaged groups. These physicians need to move beyond advocacy for individual patients and diseases and become 'champions for equity'."*

Stronger Safety Net of Community-based Services for the Underserved to Promote Health Equity

One might ask, where would physicians willing to be "champions of equity" be most effective in their clinical practice efforts? The current healthcare safety net is comprised of state-sponsored hospitals, teaching hospitals, medical school clinics, non-profit social service and medical clinics and Federally Qualified Health Centers (FQHCs). During the Bush administration, significant expansion of FQHCs occurred. Within the Obama administration, efforts continue to strengthen the FQHC network. FQHCs continue to struggle with physician recruitment and retention. As can be seen in the following graphs, states with very poor health status rankings (including health equity) continue to also rank low in FQHCs utilization and FQHCs per capita.



SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2007

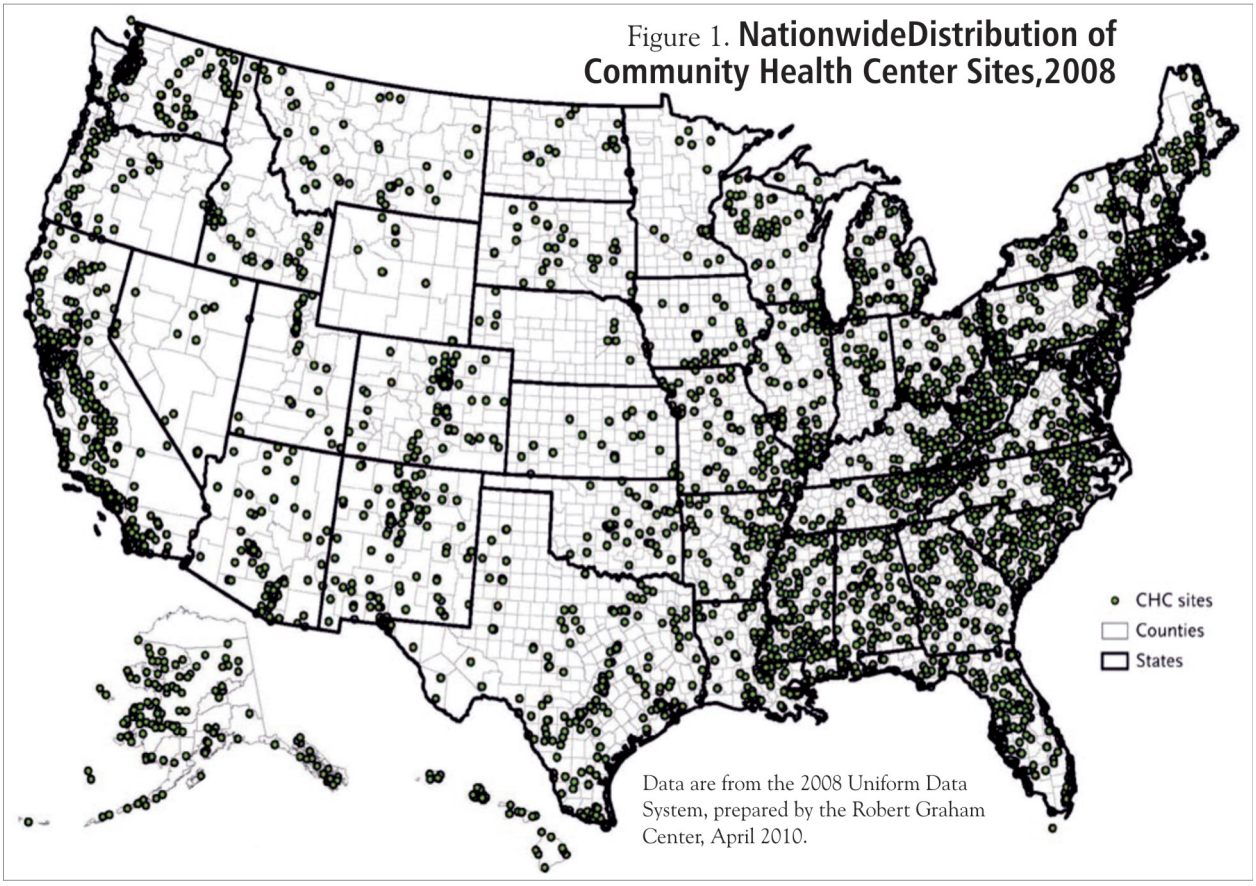
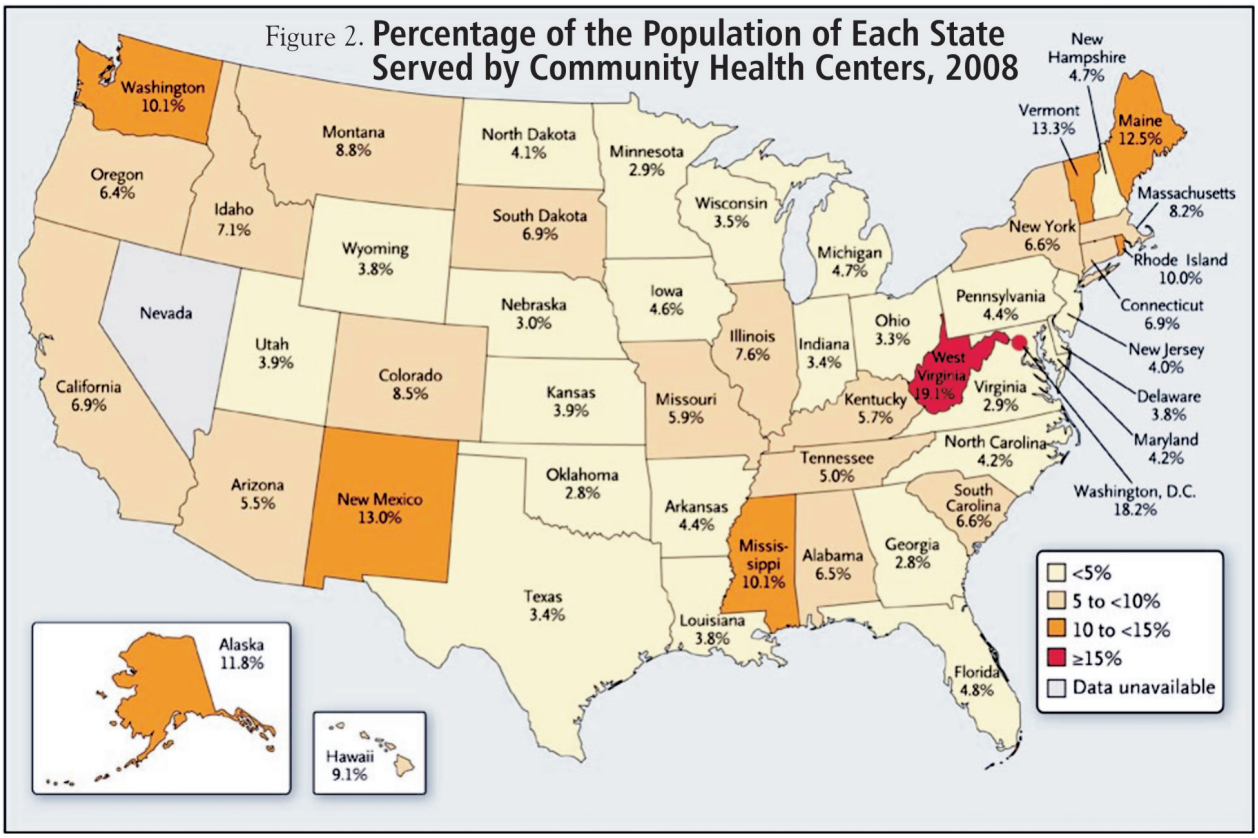


Figure 1. **NationwideDistribution of Community Health Center Sites,2008**

Data are from the 2008 Uniform Data System, prepared by the Robert Graham Center, April 2010.



Data on total numbers of community health center patients in each state are from the National Association of Community Health Centers, which based the numbers on the 2008 Uniform Data System, Bureau of Primary Health Care, Health Resources and Services Administration, Department of Health and Human Services; data on the population in each state are from the U.S. Census Bureau.

Four states with the lowest health rankings also are among those states with the lowest utilization of FQHCs (Louisiana, Arkansas, Texas and Oklahoma).

If FQHCs are to continue to be the backbone of extending primary care to the underserved – including the newly insured 32,000,000 within the new federal health reform legislation – a prioritization of funding for regions with the worst health rankings, the greatest difficulties with access to care and the greatest difficulties with physician retention would seem to offer the greatest opportunities for significant change and improvement. In addition, opportunities exist for medical schools embedded in these underserved areas to partner with existing FQHCs to improve access to care and improve physician retention for these struggling regions.

Broader view of the determinants of health

To improve health – rather than simply health care – most agree that we must take a broader view. For many, this approach looks at preventive health and early health interventions. Although attention to these is warranted, two recent publications point towards the need for even earlier involvement and interventions to improve health. In both cases, medicine as a profession has an important role, but not THE sole role in making improvements in health. Here, medicine will need to work with early childhood education, public education, social work and even law enforcement to advance health.

- In the Adverse Childhood Experiences Study (ACES), Felitti and Anda studied more than 17,000 adults. They were able to correlate that the greater the number of adverse childhood experiences (abuse, neglect and chaotic childhood environments) the greater the risk of significant medical morbidity as an adult.
- In *Wrong Place, Wrong Time*, John Rich chronicles his work with young adult black males in inner-cities. He relates their high rates of violence with traumatic childhoods and a learned culture on the inner-city streets of pre-emptive violent actions as protection of oneself and family.

SECTION III

Growing Concerns for the Underserved with ACA

In February, 2009, 13 months before the Patient Protection and Accountable Care Act (ACA) became law, the Commonwealth Fund released its report, *The Path to a High Performance U.S. Health System*. The report clearly articulated the concerns that the U.S. health system costs too much and delivers too little quality and urged a dramatic overhaul. Within the overhaul would be an overarching goal to create a high-performance U.S. health system. Recommended components for this new high-performance U.S. health system included:

- An integrated approach of payment and services
- Mandatory health care coverage
- A national insurance exchange
- Expanded health care coverage with public and private options
- Focused competition on outcomes and value
- Enhancement of primary care
- Enhancement of coordination of care
- Expanded health information technologies
- Creation of a center for Comparative Effectiveness Research
- Promotion of disease prevention

These recommendations were used as building blocks to craft the ACA.

As the momentum for health reform began building, U.S. academic leaders became increasingly concerned about the underserved in the new age of health reform. The Association of American Medical Colleges released the following position paper in November, 2009:

The United States is expected to face a shortage of 124,000–159,000 physicians by 2025. Potential reforms such as universal health care coverage will add to overall demand for doctors and increase the projected shortfall by 25 percent. An acute physician shortage will have a profound impact on health care access, quality, and costs, especially for Americans who are already underserved. The optimal number of physicians needed to care for the growing and aging U.S. population is a complex calculus of interrelated supply and demand variables. Ultimately, the solution lies in addressing projected physician shortages, increasing efficiency, making better use of all health care professionals, and developing new models of care.

The Physician Shortage: A Crisis Looms if Things Remain the Same

- ***Health care access, quality, and costs will be affected by an acute U.S. physician shortage.*** Americans will be forced to wait longer and travel farther for appointments; they will turn more frequently to emergency rooms, resulting in higher costs; and quality of care may suffer because individuals may delay treatment.
- ***There is mounting evidence that a physician workforce shortage exists in both primary care as well as in a number of specialties.*** While the number of U.S. graduates selecting a family medicine career has fallen 27 percent between 2002 and 2007,the number of general surgeons in the United States has decreased by nearly 26 percent since 1981, and a recent Institute of Medicine study revealed that emergency rooms are overburdened and experiencing shortages of on-call specialists. In addition, specialties that primarily serve the elderly – such as cardiology, oncology, and geriatrics – have projected significant shortages in the coming decade.
- ***The shortfall in physicians will affect everyone, but the impact will be most severe on vulnerable and underserved populations.*** These groups include the approximately 20 percent of Americans—or 64 million people—who live in rural or inner-city locations designated as health professional shortage areas.
- ***The problem will grow worse as the U.S. population increases and ages.*** The U.S. Census Bureau projects that the population will grow by more than 50 million (to 350 million) between 2006 and 2025. This alone will likely lead to a considerable increase in the demand for

physician services. Moreover, an aging population is projected to drive demand up and supply down: As the Baby Boomers age, they are more likely to develop complex and multiple conditions requiring more extensive medical care. At the same time, more than one in three physicians is currently over 55 and likely to retire within the next two decades.

Because it can take up to 14 years to educate and train a new doctor, the AAMC believes the U.S. must act now to avoid this shortage. Specifically, the AAMC and its members support:

- Increasing medical school enrollment by 30 percent by 2015, as recommended by the AAMC in 2006
- Lifting caps on the number of residency positions financed by Medicare, as proposed in the "Resident Physician Shortage Reduction Act of 2009" (S 973/HR 2251)

Doubling the number of National Health Service Corps awards to help more physicians practice in underserved areas

- Implementing a comprehensive reform strategy that includes increased use of nurse practitioners, physician assistants, and other health professionals
- Introducing new care models, such as the "medical home," that provide continuous and coordinated care and make better use of all health care professionals, thereby enhancing efficiency, increasing patient satisfaction, and improving health outcomes

SECTION IV

Health Reform Rolls Out

Bigger changes buried in the bill than most realized . . .

On March 23, 2010, President Obama signed into law the Patient Protection and Accountable Care Act (ACA). As discussed previously, the reasons for this bill were the Four C's of Health Reform:

1. **Cost** – health care costs in the U.S. are much higher than other developed countries.
2. **Coverage** – with 47,000,000 uninsured, there are far too many Americans without health care coverage.
3. **Clinicians** – as the U.S. population expands and the Baby Boomer generation requires ever-increasing health services, a dramatic physician shortage looms.
4. **Care Quality and Efficiency** – although the U.S. spends more per capita on health care than any other developed country, the health outcomes of the U.S. health care system are in the bottom third of developed countries

There are four basis areas for reform within the ACA:

1. Insurance Reform
2. Health Care Coverage Expansion
3. Expanded Health Workforce Initiatives
4. Quality and Efficiency of Care Initiatives

Insurance Reform

Most aspects will be phased in and include:

- No longer lifetime dollar limits on health care coverage
- No denial of coverage for pre-existing conditions
- No cancellation of policies because someone develops an illness

Extending Healthcare Insurance Coverage

By 2014, plans are underway to cover many Americans currently without health care coverage:

- Expanding eligibility for Medicaid
- Allowing children to be on parents' plans up to the age of 26
- Mandating those in certain income categories to purchase health care coverage
- Fees to employers if the government subsidizes their workers' coverage
- Subsidies to lower income individuals to purchase health care coverage
- Creation of insurance exchanges that allow individuals to be included with larger groups in purchasing private – non-profit insurance plans
- Health insurance expansion will cover an estimated 32,000,000 of the 47,000,000 currently uninsured in the U.S. Roughly 16,000,000 will be covered through health insurance exchanges and 16,000,000 through Medicaid expansion

Health Workforce Expansion

New funding will be available for:

- Training for primary care, physician assistants, nurse practitioners
- Creation of Teaching Health Centers within federally qualified health centers in the areas of family medicine, internal medicine, pediatrics, geriatrics, psychiatry, dentistry and pediatric dentistry
- Loan Payback programs – An expansion of the National Health Service Corps loan payback program highlights primary care. A feature of the program allows physicians receiving loan payback to split time – 50 percent patient care to the underserved and 50 percent towards medical and resident teaching.
- Patient-Centered Medical Home teams – Funding will become available to expand training in the Patient-Centered Medical home team model.
- Public Health – Funding will be available to promote Public Health training of medical students with a focus on epidemiology, disaster and emergency response and team-based patient care.

Center for Medicare and Medicaid Services (CMS) Innovation –

Within CMS, this new center would allow communities and organizations to create their own programs that improve the quality and efficiency of care and lower the cost.

Programs include:

- Health care Innovation Zones – intended to promote teaching hospital and teaching physician group clinical service innovation partnerships that include medical student and resident training in these innovations (i.e., health systems engineers).
- Bundling of Care – Programs for 10 conditions for bundling of all care three days prior to the primary interventions and for 30 days post intervention will begin by 2013.
- Accountable Care Organizations (ACO) – Shared governance organizations, accountable for the quality, cost and overall care of Medicare patients assigned to a particular ACO.

Hospital Reimbursement – There will be a phased-in reduction in the usual annual increases in payments for hospital based care. There will be a phased-in dramatic reduction in "DSH" – payments to hospitals. Hospitals will see penalties for readmission of myocardial infarction, congestive heart failure and pneumonia patients as well as for hospital acquired infections.

Physician Reimbursement – From 2011 – 2014, physician quality of care reporting and quality of care reimbursement will be implemented. "Meaningful use" of health information technologies will require use of electronic health records, health information exchange and reporting of quality of care data. Initially, physicians will receive enhanced payment for "meaningful use." Beginning in 2015, physicians will receive lower reimbursement for non-participation in quality initiatives and "meaningful use."

Compliance – Non-Profit Hospital Reporting – Non-profit hospitals will be required to justify their non-profit status as well as their attention to community need by:

- Performing and publishing a Community Health Needs Assessment and Implementation Strategy every three years
- Publishing and promoting a financial assistance policy for patients unable to pay their hospital bills
- Publishing and promoting their emergency care policies; limiting charges to uninsured patients to the same levels as insured patients

Fraud, Waste, Abuse – There will be increased funding for fraud detection ($150,000,000 for 2011), new powers for OIG, closer monitoring for kickback, promotion of whistle blowers and reporting of clinicians to the National Practitioners Data Bank.

Sunshine Act – Requires physicians to report all relationships and payments from industry (pharmaceutical, biological, device and IT).

Research – Cures Acceleration Network – Will move promising research for treatments for high need diseases (e.g. Parkinson's Disease) through the approval process much faster. There will be creation of new institutes and centers such as:

- ***National Center for Minority Health and Health Disparities***, within the National Institutes of Health.
- ***Patient-Centered Outcomes Research*** – Supports esearch. Will increase to $150,000,000 by 2012.
- ***National Centers of Excellence for Depression*** – emphasis on translational research through collaboration with mental health centers and patient advocacy groups.

Insurers are mandated to pay usual costs of care for patients involved in clinical trials.

Strategies for paying for health reform include:

- **Decreased Payments** – The legislation cuts about $455 billion over ten years from projected payment increases to hospitals, insurance companies and others under Medicare and other government health programs.
- **Increased Taxes** – Revenue increases over ten years include: $210 billion from increasing the Medicare payroll tax; $107 billion from fees on insurance companies, drug makers and medical device manufacturers; $32 billion from the excise tax on high-value insurance plans; and $2.7 billion from a tax on indoor tanning services.

Ongoing ARRA (Stimulus) Programs were geared to work alongside the above ACA programs and include:

- **Health Information Exchange** – OU School of Community Medicine as lead in $12 million Beacon Grant Award – one of 15 communities selected across the U.S.
- **FQHC Expansion** – Continued ramp-up in capital and operations support of FQHCs with peak funding in 2011.
- **Regional Extension Centers** – Quality of Care, Health Information Technology training.

Federal agencies (*Health and Human Services, Center for Medicare and Medicaid Services, Health Resources and Services Administration, Agency for Healthcare Research and Quality*) are rolling out their policies and procedures for the Accountable Care Act – providing a clearer picture on the changes health care providers and medical schools must make to survive in the health reform era.

This report discusses the implications of the Accountable Care Act on the Tulsa health care landscape.

Federal "Accountable Care Act" Implications

- **Altered Reimbursement** – The Accountable Care Act increases payment to primary care physicians by 10 percent. Specialist care, procedures and hospital services will be reimbursed at relatively lower rates than previously. For example, cardiologist reimbursement has already dropped by an average of $40,000 per year per physician.
- **Lower Reimbursement** – Several factors will place great pressure to reduce Medicare and Medicaid rates to a level far below the average current cost of providing that care. Those pressures include covering the cost of expanded coverage within Medicaid and insurance exchanges, the growing Medicare deficit and lower federal revenues due to the recession.
- **Quality of Care Reporting and Pay for Performance** – Health care providers will be reimbursed based on their quality of care reports. In addition, there will be much greater attention to detection of patient care and billing fraud, waste and abuse.
- **Health Innovation Zones** – There exists an opportunity to bind several federal health services and workforce programs together under a coordinated effort in the newly developing Health Innovations Zones within the CMS Innovation Center.

Survival Tactics

Although the major coverage initiatives of the Accountable Care Act do not begin until 2014, many patient care and payment health reforms within the legislation begin almost immediately. Health care providers and medical schools must respond now by increasing their sophistication in cost control, quality of care and health information technologies, exchange and reporting.

- **Increase Volume** – With lower reimbursement rates and very high demand for services, providers will need to increase their patient visit volume.
- **Lower Core Costs / Visit** – With reimbursements per visit lower than current costs per visit, providers must lower their core costs per visit (possibly through LEAN strategies).
- **Team-based Efficient Care** – New models of care must be developed and expanded, including broader use of physician assistants, nurse practitioners and team-based care.
- **Health Information Technology Sophistication** – To receive higher reimbursements, providers must build the infrastructure for health information technologies, electronic health records meeting meaningful use standards (EHRs) that are connected for health information exchange and provide quality data reporting, health information exchange and standardized quality reporting.
- **Quality of Care Improvements and Pay for Performance** – Initially, higher reimbursements will be provided for electronic health record utilization and quality of care reporting. In coming years, reimbursements will change with penalties for non-use of electronic health records and non-reporting of quality data. Also, higher reimbursements will be in place for high quality outcomes (pay for performance).
- **Centers of Excellence** – Some providers, such as major academic health centers, will survive by providing super- specialized care and high-end intensive care.
- **Hospital / Physician System Integration** – Although physicians account for roughly 20 percent of direct health care costs, their decisions determine as much as 80 percent of health care spending. Bundling of payments has already begun with Medicare episodes of care for orthopedic and cardiac procedures. Here, hospitals, physicians and ancillary inpatient and outpatient follow-up services are reimbursed as one bundled payment. Those health care entities that can bring together hospitals and physicians will be able to successfully control costs and quality of care in these bundled type reimbursement programs.

SECTION V

Early Responses to the Health Reform Movement

Seeing the Future

Federal health reform legislation has the potential to create change in American health care on the scale of the implementation of Medicare 50 years ago. Here are some glimpses of how the health care system may respond:

- **ER Gridlock and Lessons from Massachusetts** – Mandatory health care coverage in Massachusetts set into motion a string of unforeseen events. There has been a dramatic increase in demand for primary care services from the newly insured. Although Massachusetts has the highest number of physicians per capita, many of the newly uninsured have not been able to access a primary care physician and have turned to emergency rooms, leading to emergency room gridlock.
- **Concierge Care** – As the pressure to conform to the new health reform policies and practices increases, some primary care physicians across the country are opting out of the traditional primary care roles of staffing busy group practice clinics and inpatient wards. Instead, they are choosing the concierge model of care – charging a "subscription fee" for a small and limited panel of patients who receive much more personalized care. For example, one internist in Tulsa charges a $3000 annual fee to his closed panel of 450 patients – providing him a base salary of $1,350,000 before he bills his patient's health insurance. He asked almost 1600 of his former patients to find new primary care physicians.
- **Dropping Medicare** – Prior to the passage of health reform, several health systems were hailed as being able to increase the quality and lower the cost of care. Unfortunately, with existing Medicare payment models, some physician groups and health systems, including some that have been highlighted as model health systems, have dropped Medicare patients. In many of these model health systems, physicians are salaried and work in teams, which have become known more broadly as accountable care organizations, or ACOs. These systems would prefer to receive a bundled payment for an episode of illness, rather than the Medicare practice of reimbursing for individual procedures. As it is now under Medicare, a less-is-more model means these groups can't make up their true costs on volume.
- **Increased Tension Among Physicians and Medical Schools on What is the "Right Thing To Do"** – In the June, 2010, *Annals of Internal Medicine, The Social Mission of Medical Education: Ranking the Schools*, author Fitzhugh Mullan concluded there was substantial variation in the success of individual medical schools in recruiting and educating students to address the social mission of medical education. That is defined as graduating physicians who practice primary care and work in underserved areas and recruiting and graduating young physicians who are underrepresented minorities. A diverse, equitably distributed physician workforce with a strong primary care base is essential to achieve quality health care that is accessible and affordable, regardless of the nature of future health reform.

Beyond the results and conclusions, this paper has stimulated a great deal of discussion regarding "medical professionalism" and the future role of U.S. medical schools. Similarly, *"Concierge Primary Care,"* as described above, has called in to question the role of individual physicians in caring for patients and the broader community. In a July 6th *Tulsa World* interview, medical ethicist Robert Thompson commented:

> *"… from the viewpoint of the people cut from the practice, those people are excluded, which is totally contrary to the traditional ethical profession of a physician."*

SECTION VI

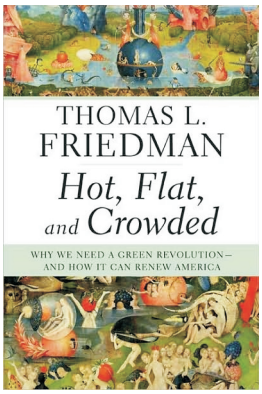
Innovation for the Underserved in the Era of Health Reform

A Unique Moment In Time

The passage of the ACA in March, 2010, created a unique moment in time. This new law has the potential to serve as the lightning bolt for necessary change to improve equity, quality and efficiency of health care in the U.S. Health care in this country costs too much, producing only marginal performance in health care outcomes. As baby boomers age, there will be increased demand for health services. There is significant concern that the looming physician shortage will lead to newly insured underserved patients still not being able to access care. With 75 percent of U.S. citizens living in urban areas and the trend towards urbanization increasing, strategies must be in place to target the special circumstances of the underserved in urban areas.

Yet, a significant number of underserved in rural settings also need targeted efforts. With the advent of high-tech/high cost diagnostic and treatment interventions, rural populations must be afforded access to these life saving technologies that are for the most part centered in urban areas. It is time to tie quality and efficient urban and rural health care initiatives together through new models of health organization relationships, health care delivery models, health information technologies and use of physician extenders.

Some states and communities with greater health disparities than others are poised for significant changes if provided the resources. These regions should be afforded opportunities within the implementation of ACA to develop high performance health systems for the underserved. Without acting on these opportunities, regions with significant health disparities, disorganized health systems for the underserved and shortages in clinicians could find their emergency rooms in a state similar to Thomas Friedman's most recent book, *Flat, Hot and Crowded.*



From my perspective, the ACA appears to fail to link all the various aspects of the bill at the community level. How do we integrate efforts to improve the efficiency and quality of care provided, train new health care providers in this new science, expand FQHCs, expand medical schools, improve access and leverage health information technologies at the community level where the education and care will be provided? If these worthwhile strategies are not integrated at the community level, a great opportunity for a multiplier effect will be lost. And what about communities that currently have extremely poor health statistics and significant disparities? Again, an opportunity exists for these communities to "catch up" if the multiple mandates of the ACA are integrated into an improved health care system within these communities.

Seeing the Future in December, 2009

With the hope of national health reform legislation on the horizon, several health-related organizations met for the first time for a Summit on Urban Health on December 8th and 9th, 2009, in Tulsa, Oklahoma, with three goals in mind:

1. To share clinical service, research and medical education success stories in improving the health of underserved populations in urban areas.
2. To share common areas of frustration and struggles for these academic institutions as they provide medical education, research and clinical programs to urban underserved populations.

3. To begin working together regarding service, medical education, research innovations and policy development for underserved urban populations as national health reform is implemented.

Who Was Invited and Why

The following institutions were invited and represented:

- University of California at Los Angeles representing south central Los Angeles.
- Charles Drew University representing south central Los Angeles
- Tulane University representing New Orleans
- Florida International University representing Miami
- University of Oklahoma representing Tulsa
- University of Tulsa representing Tulsa (invited)
- Wayne State University representing Detroit
- University of Chicago representing south-side Chicago
- RAND Corporation
- Association of Academic Health Centers
- The De Beaumont Foundation
- The Josiah Macy, Jr. Foundation (invited)
- The George Kaiser Family Foundation

Each of the communities represented currently struggles with health disparities, extremely poor health status among their urban populations, dysfunctional health care delivery systems and inadequate public funding to meet the needs of their target populations. Each also has a dedicated medical school embedded in these communities 'fighting the good fight' to improve health.

For example:

- For many years, Louisiana and New Orleans have ranked among the lowest in the U.S. in health status, health system performance and health spending. Hurricane Katrina dealt a significant blow to the New Orleans indigent health care delivery system and its lead health facility, Charity Hospital.
- South central Los Angeles has the country's largest urban underserved population without an organized health care delivery system. This in a setting where California has the largest state deficit in absolute dollars in the U.S.
- Michigan and Detroit have arguably been hit hardest in the U.S. in terms of lost jobs and available public funding for health care to the underserved following the worst economic downturn since the Great Depression of the 1930s.
- Florida and Miami continue to gain significant population, particularly older populations, without enough physicians to provide care to the general population, much less the urban underserved.
- Oklahoma ranks 49th in the U.S. in health status and health system performance. In addition, Oklahoma ranks last in the U.S. in physicians per capita. In Tulsa, there is a 14 year difference in life expectancy between north and south Tulsa communities. Oklahoma's state budget deficit is the largest in the U.S. in terms of percentage.
- Southside Chicago comprises one of the nation's largest underserved urban populations. With the advent of the University of Chicago's Urban Health Initiative, an organized health delivery system for this population is emerging that can serve as a model for other communities.

Additional interest in this work was voiced from the following organizations:

- The De Beaumont Foundation has supported the overlap of traditional medical education with public health education as a key strategy in improving the health of communities and at-risk populations.
- The George Kaiser Family Foundation has provided support to create the University of Oklahoma School of Community Medicine with its goal of creating a medical education program and clinical service network that improves the health of entire communities.

- The Association of Academic Health Centers has provided important leadership in the area of inter-professional education and team-based care as important strategies for the extension of health care in the face of a national shortage of physicians.
- The Josiah Macy, Jr. Foundation is a national leader in supporting innovations in medical education and has interest in medical schools playing leadership roles in implementing health reform.
- RAND Corporation provides expertise in applied science and operations research. RAND has played a key role in highlighting the need for more efficient health care delivery systems that provide high quality care to all. As Federal health reform is implemented, RAND has the opportunity to provide independent evaluation of pilot projects.

Eight Conclusions Were Reached

Over the two-day meeting, participants arrived at the following conclusions:

1. **Common Problems** – Although each medical school had the sense that they were working in isolation and their individual community problems were unique, it quickly became apparent that there were many common problems among these communities:
   - Significant health disparities
   - A shortage of physicians willing to serve underserved populations
   - Fragmented and poorly coordinated health delivery systems
   - Hospital focus and public funding of health care to the urban underserved rooted in out-dated models of care, e.g. promoting episode- based health care and high–end tertiary health care reimbursement
   - Medical education accreditation standards and accreditation site visits that are out of step with health reform initiatives and the health needs of urban underserved populations
2. **Common Solutions** – Along with common problems among the communities, participants also discovered commonalities relating to solutions:
   - Community-based participatory health planning and oversight
   - Community-based participatory research as a strategy to continue improving health in these communities
   - Greater attention to the broader roots of health and poor health, including preventive initiatives, public health, systems-based quality of care initiatives, diet, exercise, urban design, crime and family integrity
   - Greater coordination of care across the spectrum of clinical services, beginning with community outreach clinical services and Federally Qualified Health Centers and extending all the way to tertiary hospital-based care
   - Development of a health workforce dedicated to serving the underserved
   - Willingness to promote new models of care including team-based care, the patient-centered medical home team care, use of physician extenders, and health information technologies that extend care, reduce duplication and improve the quality of care offered
3. **Urban Health as a Medical Discipline** – Urban Health is emerging as a specific discipline within the field of medicine that needs further refinement. It is clear that to become successful in improving health in urban underserved populations, those working in the field of urban health require broader expertise in the determinants of urban health including poverty, safety, food, nutrition and urban design and exercise.
4. **"Public" Accountable Care Organizations** – ACA's payment reform has stimulated great interest across the country in Accountable Care Organizations (ACO) – an integrated collection of primary care physicians, hospitals, specialists and other health professionals that accept joint responsibility for the quality and cost of care provided to their patients. Successful accountable care organizations such as Geisinger (Pennsylvania), Cleveland Clinic and Baylor Health Systems – which primarily serve commercially insured populations – have received much media attention for their success in improving both quality of care and cost of care measures.

At the writing of this report, there are few "public" accountable care organizations serving underserved urban populations.

Denver Health has emerged as a model "public" accountable care organization, able to deliver an extraordinary amount of care to a high volume of underserved across the Denver region in an efficient and high quality manner. As good as Denver Health is, replication of the Denver Health model has been difficult. In addition, Denver Health is not Colorado's primary academic and teaching program.

The University of Chicago's Urban Health Initiative has succeeded in bringing together a network of outreach services, community health centers, community hospitals and regional and tertiary hospitals. This network of patient care services is beginning to work as an integrated unit serving a large underserved urban population as well as providing teaching sites for medical students and resident physicians.

In December of 2009, the Summit on Urban Health concluded that with health reform on the horizon, an opportunity exists to educate future physicians, nurses, physician assistants, pharmacists and social workers who are willing to provide care to urban populations in a model of efficient and high quality of care. This can be accomplished if academic institutions can model Denver Health and Chicago's Urban Health Initiative as their primary clinical and teaching environments.

5. **Synergy** – It became clear during the summit that by working together, these "like minded" institutions could provide a wealth of resources to create efficient, high quality care to urban underserved populations. They include:

   - Medical schools providing expertise in clinical services and medical education
   - RAND Corporation providing expertise in evaluation, population health outcomes and policy development
   - Association of Academic Health Centers providing expertise in interprofessional education, policy development and communication to academic health centers across the U.S.
   - Foundations providing seed funding for innovation and demonstration initiatives

6. **A Uniting Goal** – As the summit sessions progressed, there was unanimous support for this group to work to "design model community-focused health systems for the 21st century that serve all within those communities and remain financially viable." These model health systems would then provide the ideal teaching environment for future physicians, physician assistants, nurses, nurse practitioners, social workers and pharmacists.

7. **Demonstration Project Criteria** – It was proposed to advocate at the national level for ***Six Community Demonstration Project Medical Schools*** to realize the above "Uniting Goal." These community demonstration projects would:

   - Target urban underserved populations.
   - Name medical schools embedded in these urban areas as the host for these projects.
   - Demonstrate great need for health care and medical education redesign in their communities, including poor health status, physician maldistribution, inadequate hospital services for the underserved and inadequate public funding to create a public accountable care organization.
   - Leverage all of the health system and medical education initiatives within federal health reform legislation as a collective for these communities, e.g., health information technologies, patient centered medical homes, school-based clinics, comparative effectiveness research, accountable care organization development and medical education expansion.
   - Create "public" accountable care organizations (PACO) that model the most successful accountable care organizations that have focused on the commercially / employer based insured populations.
   - Use community participatory processes for the planning and implementation of these initiatives.
   - PACO learning network – whereby each Urban Health Innovation Zone serves a teaching role to the others, allowing best practices in particular areas to be replicated.

8. **Innovations within the *Six Demonstration Project Medical Schools*** could include:

- **Combining All Federal Health Reform Innovations for These Struggling Communities** – Tying together the various health reform initiatives within health reform legislation to serve these communities with great need. This would allow policy makers to observe the "multiplier effect" of bringing these innovations together in communities with the greatest of need. This is in contrast to a competitive process for federal funding of the various innovations within the Federal Health Reform legislation, which would scatter the initiatives across the U.S., including communities with less dramatic needs. For example, Massachusetts received the largest fraction of ARRA / HRSA funds for FQHC expansion. Massachusetts has the greatest number of physicians per capita, a strong network of FQHCs and Massachusetts's health status ranks among the best in the nation.
- **Admitting the Right Students to Medical School** – Within these designated medical schools, new medical school admissions focus would require entering medical students to demonstrate a strong track record of service to the underserved. In exchange for a future commitment to this group, the medical students would receive scholarships for medical school tuition. As the U.S. is already short on specialists willing to work with underserved populations, these scholarships programs would need to go beyond the traditional programs in place (National Health Service, FQHCs) that focus primarily on primary care and rural locations.
- **Medical Student and Residency Curriculum Designed for the Needs of the Emerging U.S. Health Care System** – Within the **Six Demonstration Project Medical Schools**, medical students and resident physicians would be trained within an expanded curriculum that includes greater attention to the emerging core competencies of urban health, including team-based (multidisciplinary) care, public health traditions, preventive care, systems engineering, health information technologies and poverty.
- **Seeking Accreditation Flexibility** – At the central administration and policy levels, the Liaison Committee on Medical Education (LCME – medical student program accreditation) and the Accreditation Council on Graduate Medical Education (ACGME – resident physician accreditation) have created flexibility within the accreditation standards that theoretically allow medical schools to create education programs preparing graduates for health care in the post-health reform passage era. Unfortunately, this stated flexibility does not translate well to the very important accreditation site visits. For these at-risk communities and medical schools to be successful in improving the health of the urban underserved, there must be a partnership among the ***Six Demonstration Project Medical Schools***, the LCME, ACGME, and the Federal Health Reform leaders so that the medical education programs are fully accredited and the needs of underserved urban populations are addressed.
- **Inclusive Approach to Urban Health** – In moving forward, it is clear that the ***Six Demonstration Project Medical Schools*** cannot do this work alone or in isolation. They must partner with other key organizations in their communities – particularly the established Federally Qualified Health Centers, school-based clinics, city/county/regional health deparments and willing hospital systems. Governance standards have created barriers to medical schools, hospital and Federally Qualified Health Centers creating partnerships.
- **Team-based Care Models** – In the face of significant physician shortages, there will be greater reliance on physician assistants, nurse practitioners, pharmacists, nurses and social workers to assist in the extension of

care. The patient-centered medical home model has shown to be an effective model to organize these health care providers in a team orientation. Patient-centered medical home teams have lowered the cost of care, improved the quality of care and improved patient and clinician satisfaction.

- **Build Strong Health Information Technology Infrastructure** – Use of electronic health records and secure health information exchanges reduces medical errors, duplication of tests, workforce costs and can increase the reach and productivity of physicians using team-based care. Many underserved urban community clinical providers do not have the resources to develop state-of-the-art health information systems to take advantage of these important benefits.
- **"Public" Accountable Health Organizations** – The desired health care delivery system within the ***Six Demonstration Project Medical Schools*** brings together outreach clinics, Federally Qualified Health Centers, school-based clinics, medical school primary care and specialty clinics, public health programs and hospital services in a "public" accountable care organization (PACO) model.
- **Comparative Effectiveness Research** – It will take several years for the various aspects of health reform to be implemented across the U.S. This may require drastic changes in some areas of health care delivery as well as funding programs. The proposed ***Six Demonstration Project Medical Schools*** that propose to focus all of the federal health reform innovations – including medical education programs, team based care, a network of community based clinical programs under a public accountable care organization model and a strong health information infrastructure – on at-risk urban underserved populations have an opportunity to serve as comprehensive pilot programs for the rest of the country if sound evaluation infrastructure is put into place.

In December 2009, Next Steps from the Summit Included:

1. **Meet Again** – The Inaugural Summit on Urban Health was quickly deemed a success. Participants noted that that they had learned a great deal from each other and that there were advantages in continuing to meet and organize as a group. Initial plans called for Florida International University to host the next Summit in September, 2010.
2. **Advocate** – With health reform moving forward, now is the time to advocate for six community demonstration projects that comprehensively combine the various aspects of health reform initiatives as described above.
3. **Further Define Urban Health as a Medical Discipline** – There is currently broad use of the term "Urban Health." There is a need to refine the definitions of competencies necessary to improve health in urban settings as well as to develop a certification process for expertise in urban health.
4. **Encourage Additional Assistance**
   - ***RAND Corporation*** – for evaluation and outcomes measurement development
   - ***De Beaumont Foundation*** – for interface of medical and public health education
   - ***Josiah Macy, Jr. Foundation*** – for innovations in medical education
   - ***Association of Academic Health Centers*** – for inter-professional education, policy development and national communication strategies

SECTION VII

Opportunities for "Takin' Innovation to the Streets"

The Center for Medicare and Medicaid Innovation (CMI) and the Health Resources and Services Administration Strategic Plan

Opportunities exist within the ACA for the depth of innovation described above within the newly-created Center for Medicare and Medicaid Innovation (CMI) and a subset program within this center – the Health Innovation Zones. The CMI is currently in development, but it is known that one billion dollars will be invested in the CMI in 2011, and as much as $10 billion between 2011 and 2018. Following are recommendations from MEDPAC on the development of the CMI and demonstration and pilot projects:

From *Aligning Incentives in Medicare,* June 23, 2010 statement of Glenn M. Hackbarth, J.D., Chairman, Medicare Payment Advisory Commission (MEDPAC), before the Committee on Energy and Commerce Subcommittee on Health, U.S. House of Representatives, speaking on research and demonstration projects within Medicare and Medicaid:

"The Medicare program has used research and demonstrations for decades to test the conceptual and operational feasibility of new payment policies and health care service delivery models. Over the last several years, the Commission and other observers have noted a growing disconnect between Medicare's urgent need to implement payment and service delivery innovations and the program's limited ability to research, test, and evaluate demonstrations that provide the information policymakers need to implement effective policy changes program wide. The Commission most recently expressed its concerns about the pace of Medicare's demonstrations in a mandated report to the Congress on improving Medicare chronic care demonstration programs. Its analysis of four recent Medicare demonstrations suggested several larger issues with the structure and funding of research and development in Medicare, including very low levels of funding for research, demonstrations, and evaluations relative to the overall size of the program; constraints on CMS's ability to redeploy research and demonstration funding as the program's needs change; and the existence of time-consuming and resource-intensive administrative requirements in the executive branch demonstration review process. Commissioners also have raised concerns about the level of Medicare resources allocated for health services research activities, such as funding and staffing for intramural and extramural research projects and to revamp the agency's data infrastructure to provide policymakers with timely access to program and demonstration data.

In March, the Congress authorized the creation of a Center for Medicare and Medicaid Innovation (CMI) within CMS with the intention of improving CMS's research and demonstration programs. The CMI is charged with testing innovative payment and service delivery models and can operate without many of the constraints currently imposed on CMS's research programs. For example, the law waives the requirement to demonstrate budget neutrality when a model is in initial testing phases and exempts Paperwork Reduction Act review. The law also provides for $10 billion in annual appropriations for activities initiated in 2011 to 2019.

As this new approach to innovation is being implemented, there are several lingering issues that will need to be monitored. First, there will be an inherent tension between the speed of innovation and the quality of the evidence used to evaluate the new methods. In other words, obtaining the type of evidence that might be produced in an academic model of program evaluation may not be attainable in a dynamic, forward-looking innovation process. Second, CMS will need sufficient administrative resources to effectively operationalize new payment methods, since the agency will likely be overseeing multiple models of new payment methods while continuing to maintain the current fee-for-service payment system for those providers who do not volunteer to participate in the CMI activities."

From this transcript, it is clear that MEDPAC was recommending to U.S. health care policy leadership that the newly created CMI:

- Focus attention on demonstration projects that increase both the quality and efficiency of health care.
- Proceed at a faster pace regarding health care delivery and payment innovations.
- Allow progression of these demonstration projects with fewer regulatory constraints.
- Allow multiple models of payment and health care delivery innovations.

The CMI will be responsible for developing at least 18 reform models specified in the new law, including patient-centered medical homes; promotion of care coordination through salary-based payment; community-based health teams to support small-practice medical homes; use of health information technology to coordinate care for the chronically ill; and salary-based payment for physicians.

As the operational details of the CMI are considered, health policy leaders at the Commonwealth Fund have provided sage advice. In the June 8, 2010, *Health Affairs* paper, *Innovation Will Be Central to Health Reform's Success*, Stuart Guterman, Karen Davis, Kristof Stremikis, and Heather Drake lay out a series of recommendations for the CMI.

The authors' recommendations include that the CMI:

- Adopt a nimble "innovation with evidence development" approach in which new programs are implemented and continued, as long as they demonstrate improvement in quality and value and achieve desired outcomes. This would represent a significant shift from the current process for developing, testing and evaluating new programs, which is often lengthy and cumbersome.
- Include among its pilots an array of health care payment models with the foremost goal being that payments are tied to high-quality, efficient care that is patient-centered.
- Include private sector payers and public health insurance programs including Medicare and Medicaid in pilot initiatives – the broader the initiative, the greater the impact.
- Be open to payment reform approaches led by states or private sector entities, taking into account geographic differences in health care and the environments in which care is provided.
- Ensure transparency by developing explicit criteria for selecting new programs and their participants and putting in place a mechanism to inform policymakers and interested parties about ongoing and planned projects.
- Guarantee there are systems in place to continuously monitor and identify pilots' successes and failures.
- Be a partner in the success of pilots, rather than a "hands-off" evaluator, providing regular feedback and technical assistance to pilot participants when needed.
- Share information and findings with the new Independent Payment Advisory Board – expected to be up and running in 2014 and tasked with reducing Medicare spending growth – to assure that its recommendations to control spending are based on the best available information about ongoing and promising initiatives.

A related report from The Commonwealth Fund Commission on a High Performance Health System was also released June 8, 2010. *Developing Innovative Payment Approaches: The Path To High Performance* describes several payment innovations that the CMI should introduce to reward more integrated care and achieve better quality and greater value, such as medical homes, accountable care organizations and bundled payments. Equally important to the success of theses strategies, the report says, will be the scope of the reforms. The authors say that pilots should not be limited to Medicare but should include Medicaid, other public programs and private payers. This would magnify the effect of incentives across different payers, reduce administrative burdens and address unwarranted variation among different payers.

Table of Payment and Service Pilots Proposed within Center for Medicare and Medicaid Innovation

- Patient-Centered Medical Home team-based care for primary care and chronic, acute disease groups using comprehensive, case rate or salary-based payment.
- Promotion of innovative care delivery models with providers such as risk-based comprehensive payment or salary-based payment
- Use of geriatric assessments and comprehensive care plans to coordinate care
- Promotion of care coordination through salary-based payment
- Support for care coordination for chronically ill through the use of health information technology
- Varied payment to physicians ordering diagnostic imaging services based on appropriate criteria of the order
- Use of medication therapy management services
- Establishment of community-based health teams to support small-practice medical homes
- Support for individuals in making health care decisions through the use of patient decision-support tools
- States allowed to test and evaluate care for dual eligibility (both Medicare and Medicaid)
- States allowed to test and evaluate all-payer payment reform
- Alignment of nationally recognized, evidence-based guidelines of cancer care with payment incentives
- Improved post-acute care through continuing care hospitals
- Funding of home health providers offering chronic care management
- Development of a collaborative of high-quality, low-cost health care institutions to develop, disseminate and implement best practices and provide assistance to other institutions
- Use of electronic monitoring to facilitate inpatient care of hospitalized individuals at their local hospitals
- Promotion of efficiency and timely access to outpatient services through models not requiring a physician or other health professional to make a referral
- Establishment of comprehensive payments to Healthcare Innovation Zones
- Use of tele-health services to treat certain conditions in medically underserved areas and facilities of the Indian Health Service
- Treatment of individuals with chronic conditions and a history of prior-year hospitalization through interventions under the Medicare Coordinated Care Demonstration Project

SOURCE: Health Affairs — Stuart Guterman[1]*, Karen Davis[2], Kristof Stremikis[3] and Heather Drake[4]

These patient care and payment innovations provide opportunities for increased quality and efficiency of care – critically important outcomes if health reform is to be successful at curbing the escalating cost of U.S. health care.

Alongside the Center for Medicare and Medicaid Innovation, the Health Resources and Services Administration (HRSA) has published the agency's strategic plan outline that provides opportunities to add workforce, outreach and preventive services to the payment and clinical service delivery initiatives of the Center for Medicare and Medicaid Innovation.

A brief summary of the HRSA strategic plan outline:

HRSA Vision – *"Healthy Communities, Healthy People"*

HRSA Mission – ***To improve health and achieve health equity through access to quality services, a skilled workforce and innovative programs***

HRSA Goal I – *Improve Access to Quality Health Care and Services*

- Assure medical home for populations served
- Expand oral and behavioral health services and integrate into primary care settings
- Integrate primary care and public health
- Strengthen health systems to support the delivery of quality health services
- Increase outreach and enrollment into quality care
- Strengthen the financial soundness and viability of HRSA-funded organizations

HRSA Goal II – *Strengthen the Health Workforce*

- Assure the health workforce is trained to provide high quality, culturally and linguistically appropriate care.
- Increase the number of practicing health care providers to address shortages and develop ongoing strategies to monitor, forecast and meet long-term health workforce needs.
- Align the composition and distribution of health care providers to best meet the needs of individuals, families and communities
- Assure diverse workforce.
- Support the development of interdisciplinary health teams to improve the efficiency and effectiveness of care.

HRSA Goal III – *Build Healthy Communities*

- Lead and collaborate with others to help communities strengthen resources that improve health for populations
- Link people to services and support from other sectors that contribute to good health and wellbeing
- Strengthen the focus on illness prevention and health promotion across populations and communities

HRSA Goal IV – *Improve Health Equity*

- Reduce disparities in quality of care across populations and communities
- Monitor, identify and advance evidence-based and promising practices to achieve health equity
- Leverage our programs and policies to further integrate services and address the social determinants of health
- ***And most encouraging: partner with diverse communities to create, develop and disseminate innovative community based health equity solutions, with particular focus on populations with the greatest health disparities***

So, there is much at hand.
Combining the intentions of the Center for Medicare and Medicaid Innovation and the Health Resources Administration provides the potential to vastly improve access to care, end health disparities, address the broader determinants of health and educate a new health care workforce that has the skills to actually improve the health of underserved communities. To do so would require model community demonstration projects that integrate quality, efficiency, access, preventive and workforce efforts alongside innovations in payment.

SECTION IX

Creating High Performance Health Systems for Underserved Populations using an "All In" Strategy

To summarize so far, we know:

- The U.S. spends more than any other developed country on health care, yet our health outcomes are in the bottom third of developed countries.
- A significant physician shortage is playing out right before our eyes.
- With the soon-to-be insured from ACA, access to physicians in the current model will become even more difficult – particularly for the underserved.
- There are significant health disparities in urban and rural settings across the U.S. Many of these underserved are minorities.
- A diverse health workforce aids in all clinicians gaining cultural competency.
- With the assistance of health information technologies and "systems engineering," there are great opportunities to improve quality and efficiency of care.
- Other aspects of health reform offer opportunities for improvements in access to care, preventive and public health initiatives and workforce expansion.
- Even before the passage of federal health reform, six medical schools have been jointly planning to incorporate access, quality, efficiency, prevention and workforce initiatives into a cohesive plan that – if successful – would improve the health of entire communities with significant health disparities.
- CMI offers opportunities to be creative in terms of health delivery models and payment. HRSA provides opportunities for prevention, outreach and workforce initiatives.

All In – In poker, the ***"all in"*** strategy involves betting all of your chips on a single hand and declaring, "I am going all in." Other players must respond by also going "all in" or folding. It's a risky move but often used when a player is losing ground and must catch up to stay in the game.

A similar analogy is playing out in communities across the U.S. Health disparities are so severe in some regions that at-risk communities cannot economically compete. As described previously, because of poor health they are not "flat" – and they are losing ground. A Teach For America student in Kansas City, after his first year of teaching in urban Kansas City, said it best: "On the surface, the public schools look like they are a mess, but the problem is much bigger than the school or the teachers. For these kids to have a chance, they need a good education, good health for their entire families and jobs that pay fair."

In the health arena, something bold is needed. Underserved communities need a chance to catch up, and they need an audacious goal – such as creating high performance health systems for the underserved that are as effective as those already praised as the model for the general population (e.g., Mayo and Geisinger). The federal health reform legislation offers this opportunity, and these communities need to go "all in," taking advantage of every feature this new legislation offers.

Recommendation One

The Center for Medicare and Medicaid Innovation should create an ***initiative for communities with significant health disparities*** and dysfunction within their health delivery systems. This would allow multiple components of federal health reform legislation to be combined in an effort to provide a multiplier effect and improve access, quality, efficiency, preventive and workforce outcomes.

In looking at the six communities and medical schools that met at the December, 2009 Summit on Urban Health, it was clear that the medical schools were seen as the most capable of bringing together the separate components of workforce development, clinical services and outcomes measurement necessary to realize a significant improvement in health for these underserved populations by combining forces. An additional observation was the realization that within each of these at-risk communities, these medical schools had areas of expertise and successful programs from which the other medical schools could immediately learn and hopefully replicate.

Recommendation Two

The six medical schools and six at-risk communities included in the December, 2009 Summit on Urban Health should ***create a formal collaborative*** (suggest a Health Equity and Innovation Network) with the goals of (a) learning from each other's successes; (b) quickly replicating those successes and (c) jointly developing a Center for Medicare and Medicaid Innovation pilot program that creates high performance health systems for underserved populations, thus promoting health equity.

Recommendation Three

Health equity and the creation of high performance health systems for the underserved cannot be achieved with a single focus such has been tried in the past. For example, expansion of access to care utilizing FQHCs alone has fallen short in major health system improvements because of insufficient attention to long term health workforce retention, efficiency of care, quality of care, linkages to specialty care and the broader determinants of health. Many components must unite, including developing the right workforce, improving access to the right level of care, improved quality, safety and efficiency of care, linkages to the broader determinants of health and appropriate payment programs to support these long-term and complex initiatives to improve health.

Within the above proposed pilot projects is the recommendation for an ***"All In" integrated approach to these pilot projects that addresses prevention, access, quality, workforce and payment modifications and creates* High Performance Health Systems *for the underserved.***

The model *"All In"* High Performance Health System for the underserved tightly integrates five components:

- ***Workforce Enhancement and Sophistication*** – provides expansion of primary care and specialty physicians, physician assistants and nurse practitioners dedicated to care of the underserved. These new-age clinicians would be culturally competent, from diverse backgrounds, team-oriented, altruistic and skilled in health information technologies and systems engineering. As Timothy Hoff emphasizes in *Practicing Under Pressure*, the skills required for physicians to be effective within the Patient-Centered Medical Home model, as well as other medical teams, are currently not covered in most medical education settings. Medical school and residency training programs must incorporate these organizational dynamics.
- ***Access to Care Expansion*** – brings about expansion of community-embedded clinics, including FQHCs linked to medical schools.
- ***Safety, Quality and Efficiency Improvements*** – would include evidence-based medicine checklists and protocols, care coordination, Patient-Centered Medical Home team-based care models and use of health information technologies to improve clinician efficiency and quality of care.
- ***Broader Determinants of Health Linkages*** – would link direct health care efforts to prevention, urban design, safety, economic development and education initiatives.
- ***Payment Innovations*** – would move well beyond fee-for-service and promote access, team care, care coordination, physician retention in health systems that serve the underserved, efficiency and quality outcomes.

Recommendation Four

Within the Public Health Services Act, the American Recovery and Reconstruction Act and the Accountable Care Act, there are opportunities within Health and Human Services, the Center

for Medicare and Medicaid Services, the Health Resources and Services Administration, the National Library of Medicine, the Agency for Health Research and Quality and others to rapidly fund these innovations using pilot project strategies. It is recommended that ***multiple federal health care programs are brought together to fund these pilot High Performance Health Systems for the underserved.***

All In for Health Workforce

In building an expanded health care workforce that is diverse, culturally competent, with skills to promote quality, equity and efficiency of care, the following approved federal programs could contribute to the pilot projects:

- Expansion of physician assistant and nurse practitioner training programs
- Expansion of primary care residency programs
- Expansion of select specialty training programs including pediatric subspecialties, general surgery, geriatrics and child psychiatry
- Expansion of public health training of public health officers and physicians with formal public health training
- Expansion of health science graduate school curricula that enhance safety, efficiency and systems engineering
- Expansion of medical school loan payback programs for service to the underserved and faculty training residents in FQHCs (Teaching Health Centers). Include within the loan pay back credit work in innovation areas that promote health system safety, quality, access, efficiency and equity
- Health career promotion through community colleges
- Tax benefits to clinicians providing care to the underserved

All In for Clinical Care Infrastructure

Federal programs that could assist in promoting access to safe, efficient and high quality care at the right level, at the right time for underserved populations include:

- Expansion of Federally Qualified Health Centers, school-based clinics, public housing clinics and nurse-managed health clinics
- Team-based care, including Patient-Centered Medical Home teams, Assertive Community Treatment teams and Palliative Care teams
- Nurse-managed health clinics allowing for cost effective follow-up care provided by nurses when physicians are not needed
- Support for health information technology expansion, including implementation of electronic health records, interoperability of health information systems, health information exchange, health information assisted care coordination and health information system supported quality reporting
- Web-based specialty care consultations, referrals and care coordination
- Facilitation of evidence-based medicine checklists and protocols to promote safety, efficiency and best possible outcomes

All In for New Reimbursement Models

Flexibility in payment for medical education and clinical services to incentivize safe, high-quality efficient care (MC, MD and commercial):

- Alignment of reimbursement plans and criteria within Medicare, Medicaid and major commercial insurers to reduce administrative overhead in complying with multiple sets of regulations
- Flexibility in Graduate Medical Education and Indirect Medical Education (Medicare and Medicaid) to allow medical schools to graduate physicians who meet their regional workforce needs
- Loan payback programs that reward both service and innovation that promotes increased quality, efficiency, safety and equity
- Tax deductions for clinicians providing significant care to the underserved – including physicians, resident physicians, physician assistants and nurse practitioners – working in public care settings such as medical schools and FQHCs
- Team Care Case Rates that allow interdisciplinary teams to be reimbursed for wrap-around medical, care coordination and case management services that improve safety, quality and efficiency of care. This would include a next generation of Patient-Centered Medical Homes that allow closer

integration of primary care with care coordination, moving beyond primary care focused teams and multiple payers using the same model. Monthly case rates for University of Iowa and University of Oklahoma PACT interdisciplinary teams providing outreach psychiatric and rehabilitative care to patients with the most severe forms of mental illness have proven effective. PACT programs have repeatedly proven to improve symptom severity and functional abilities, reduce hospital and jail time and reduce annual costs per patient by $14,000 to $20,000.

- Capitation of payment for primary care and case management services for Medicaid recipients at the University of Oklahoma resulted in a 30% lower utilization of area emergency rooms compared to other physician groups.
- FQHCs – Higher reimbursements for Medicare and Medicaid patients and block grants for care of the uninsured have allowed some FQHCs to expand their safety net primary care capacity.
- Payment Tied to Quality Reporting – It is well documented that simply providing comparative quality reports among clinical groups provides motivation for performance improvement.
- Payment Tied to Performance – Health reform legislation includes the intention to design payment programs that financially reward quality.
- Bundling of hospital, physician and follow-up care payment for complex procedures through the ACE pilots has resulted in high-quality care provided at lower costs to patients and Medicare.

All In for Linkages to the Broader Determinants of Health

In the past, the broader determinants of health have not received significant attention within mainstream medical education, patient care or reimbursement programs. Health reform legislation – as well as other recent major legislation – provides opportunities to link health improvement efforts to education and community revitalization efforts. Here, the U.S. Department of Health and Human Services has an opportunity to promote traditional prevention programs but also to link its programs with others aimed at the broader determinants of health within the Departments of Education, Housing and Urban Development and Justice.

- Traditional prevention programs – expansion of cancer screenings through colonoscopy and mammography outreach to at-risk populations
- High impact, low cost "major medical" illness prevention programs – identification of individuals at high risk for myocardial infarction and stroke, followed by provision of aspirin, anti-hypertensives and cholesterol-lowering statins to reduce mortality by 75%
- Non-traditional roles for physicians – As described by Rich, inner-city African American youth are at highest risk for mortality and morbidity by gunshot, stabbing and battery. Opportunities exist for prevention beyond traditional law enforcement, such as consultation programs in hospitals while these youth are recovering and clinics that transition teenagers out of Medicaid and into adult practice clinics.
- Promise Neighborhoods – The Federally funded Promise Neighborhoods Program is modeled after Geoffrey Canada's work in the Harlem Children's Zone with health care outreach to children and families as a vital component of ensuring academic success.
- Child Abuse Prevention – The Adverse Childhood Experiences Study (ACES) demonstrated the link between extreme adverse childhood environments with major medical illnesses in later life. Prevention and early intervention child abuse programs have the potential to significantly impact long-term health outcomes.
- Improving health through health information exchange and care coordination – The Beacon Communities ARRA grants are intended to demonstrate that health information exchange and care coordination programs among distinct clinical entities will result in improved health outcomes and efficiencies.

Recommendation Five

Designing and approving reimbursement innovations that provide incentives to improve health requires expertise beyond most medical schools. Assistance in such endeavors would require consultation from the thought leaders in this area. In addition, reports from MEDPAC suggest that the Center for Medicare and Medicaid Services be intimately involved in pilot projects. It is recommended that ***payment thought leaders such as the Commonwealth Fund, the***

Health Resources and Services Administration (HRSA) and the Center for Medicare and Medicaid Services (CMS) be involved in the design of these pilot projects, including the design of payment programs.

Recommendation Six

Similar to Recommendation 5, design of outcomes measurement for the demonstration of projects at this level of complexity would require guidance from experts. ***It is recommended that outcomes design and measurement experts such as RAND assist these pilot projects.*** Possible outcome measures might include:

- **Access** – e.g., utilization of FQHCs, open access success, emergency room utilization
- **System quality and efficiency** – e.g, rates of hospitalization, stroke, myocardial infarction, early stage colon and breast cancer detection (vs. late detection), first trimester obstetrical care, utilization of health information technologies to reduce specialist face-to-face consultations
- **Workforce** – percentage of graduates working in public settings such as FQHCs and universities
- **Innovation network adoption** – among the pilot projects and medical schools, rates of adoption and replication of successful initiatives for access, efficiency, quality, workforce and equity enhancements

Recommendation Seven

In going forward, pilot projects for high-performance health systems specifically targeted for underserved and vulnerable populations appears to be a new concept. If this concept has merit, assistance would be needed in building support as part of the Center for Medicare and Medicaid Innovation.

It is recommended that ***the leadership organizations such as the Commonwealth Fund, the Josiah Macy, Jr. Foundation, the Association of American Medical Colleges, RAND, the De Beaumont Foundation, the George Kaiser Family Foundation and the Association of Academic Health Centers be briefed on such concepts.***

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