Controlling Health Outcomes: From Health Disparities to Sustainable Healthy Communities
Presentation Overview

- Beyond Health Disparities
- Building Sustainable Communities
The disparities in health status between minorities and white Americans were not new when they were so well documented in the US Department of Health and Human Services’ 1985 *Report of the Secretary’s Task Force on Black & Minority Health.*
Health Care for the Newly Emancipated


In 1914, Booker T. Washington, founder of the Tuskegee Institute, addressed the issue by offering up some startling facts concerning excessive illnesses and deaths among blacks and the costs to the nation of this disease burden.

A century later, we find ourselves still wrestling with disparities in health outcomes for blacks and other minorities.
Closing the Gap

For most of the 20th century, the core idea was to close the outcomes gap – to reach equity, where health outcomes for racial and ethnic minorities would be quantitatively and qualitatively equivalent to those for whites.
21st Century Goal

The National Minority Quality Forum recognizes that aspiring to achieve minority health outcomes equivalent to those of whites misunderstands our future.

The aspiration that all populations can share in the 21st century is to take command of our future as it relates to the existential struggle to survive. The 21st century is about building sustainable healthy communities.
BUILDING SUSTAINABLE COMMUNITIES
Defining a Sustainable Healthy Community

The prime objective of a sustainable health community is to maintain high-quality, longer lives free of preventable disease, disability, injury, and premature death.

A sustainable community uses its resources to meet current needs while ensuring that adequate resources are available for future generations. It seeks a better quality of life for all its residents while maintaining an ecosystem that supports life by minimizing waste, preventing pollution, promoting efficiency, and developing local resources to revitalize the local economy.
Sustaining a Healthy Community

Decision-making in a sustainable community stems from a rich civic life and shared information among community members.

A sustainable community resembles a living system in which human, natural, and economic elements are interdependent and draw strength from one another.
Sustainability Is Not a Fixed Quantity

A sustainable community is not just one type of neighborhood, town, city, or region.

Activities that the environment can sustain and that citizens want and can afford may be quite different from community to community.

A sustainable community is continually adjusting to meet the social and economic needs of its residents while preserving the environment’s ability to support it.
Equilibrium

The core assumption of sustainable health is that objective reality can be managed to sustain human life for an indeterminate length of time.

Sustainable healthy communities work to manage conditions affecting human life. Within the equilibrium of these conditions, wellness is sustained and death becomes an anomaly.

In the 21st century, medicine will play a critical role in defining, establishing, and maintaining this equilibrium.
Medicine in the 21st Century

Medicine is on the front line in the struggle against disease, disability, and aging.

Without progress in medicine, community well-being will be confined to its present context, uncontrolled and unsustainable.
Investment in innovative therapies is fundamental infrastructure, essential to achieving sustainability.

The investments that we make today will benefit future generations, easing the burden of suffering and arbitrariness that has been our fate.
No Medical Deserts

The ability to distribute effective medical therapies readily across diverse populations will inform the health and well-being of sustainable communities.

We cannot have sustainable healthy communities where medical deserts exist.
Moving Toward Equilibrium

VISION
A society in which all people live long, healthy lives.

MISSION
Healthy People 2020 strives to:
• Identify nationwide health improvement priorities.
• Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.
• Provide measurable objectives and goals that are applicable at the national, State, and local levels.
• Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
• Identify critical research, evaluation, and data collection needs.

OVERARCHING GOALS
• Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
• Achieve health equity, eliminate disparities, and improve the health of all groups.
• Create social and physical environments that promote good health for all.
• Promote quality of life, healthy development, and healthy behaviors across all life stages.
The Language of Sustainability Is Commonplace
Business Support for Sustainability

GM supports organizations that enhance the quality of life in our communities around the world and foster an environment in which people want to live, work and prosper. Support to organizations in this focus area help expand economic opportunity and growth and define creative solutions to revitalize and sustain neighborhoods. Our long-term goal is to partner with organizations to increase the number of youth and adults who have the requisite skills for employment and decent jobs.

SOCIAL OUTCOMES
1. Increase in education levels and/or marketable technical or vocational skills
2. Increase the percentage of high school graduates
3. Increase # of neighborhoods that sustain growth and prosper

TARGET AUDIENCE
Poorest districts & neighborhoods within select global communities

NATIONAL PARTNERS
Visit Habitat for Humanity
Visit United Way
Banking System Investing in Sustainability

Building Sustainable Communities

Remarks by:
Elizabeth A. Duke
Member, Board of Governors of The Federal Reserve System
2012 National Interagency Community Reinvestment Conference
Seattle, Washington
Federal Reserves Finding Ways to Invest in Sustainability

Remarks by Elizabeth A. Duke, March 27, 2012:

HEALTHY COMMUNITIES

“In addition to housing and employment, residents need communities that support their health and well-being in a variety of ways. Community developers play a critical role in supporting healthy lifestyles by planning for sidewalks, parks, and other open spaces connecting housing and commercial areas in ways that also provide places for people to meet and children to play. Renovation and new construction plans increasingly adhere to standards that incorporate "green" materials and technologies not only because they lower utility costs, which is important, but also because they improve health results, such as asthma rates, among residents.

One of the most obvious ways to support healthy lifestyles in lower-income neighborhoods is by making healthy food accessible. In the face of increasing rates of obesity, low-income neighborhoods are notably underserved by grocery stores. This is beginning to change because of programs like The Pennsylvania Fresh Food Financing Initiative, which is supported by a partnership between The Reinvestment Fund, a nonprofit developer, and two community organizations, The Food Trust and the Greater Philadelphia Urban Affairs Coalition. This partnership stepped in to fill a financing need where infrastructure costs were not met by conventional financial institutions. Their original objective was to make fresh food available in low-income neighborhoods. But they have achieved much more. The grocery stores the partnership helped to establish create an anchor for other retail needs in the area. Moreover, the stores hire local workers and train them in both the required job skills and in the workplace etiquette necessary to succeed in any job. One of the original groceries financed under the program has also added in-store financial services and a health clinic. As this grocery operator discovered, access to healthcare is another critical need in many low-income communities.”
The NMQF Contribution
Founded in 1998, NMQF is a non-profit Washington, D.C.-based, health care research and education organization whose mission is to strengthen the ability of communities and policy-makers to eliminate the disproportionate burden of premature death and preventable illness in special populations through the use of evidence-based, data-driven initiatives.
The National Minority Quality Forum
Data Warehouse

The Forum has developed a comprehensive database comprised of over 2 billion patient records, which it uses to define disease prevalence, costs and outcomes for demographic subpopulations at the zip code level.
Big Data: Challenges and Solutions

**CHALLENGES**

- **Volume**: Rapidly changing data sets
- **Different data sets**: Expert analysis required
- **Outputs**: Not always actionable, understandable

**A SOLUTION**

- **MAKE IT VISUAL**

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NATIONAL Minority Quality Forum
NMQF develops **maps** to provide demographic intelligence about acute and chronic disorders at the zip code level – segmented by age, gender, race/ethnicity – to:

- Map any index disease by prevalence, cost, outcomes, comorbidities, socioeconomic status or other data type for any state, MSA, congressional and state legislative districts
- Define where the unmet needs exist
- Forecast trends using predictive analytics
- Produce customized reports to support educational, advocacy and policy efforts
Key Learnings

- Geography matters
- Predictable forces shape markets
- Consumption patterns can be shaped
- Resource management can be improved

[National Minority Quality Forum]
Sickle Disease In Medicare Fee for Service 2013
Sickle Disease in Medicare Fee for Service: The Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Benes</th>
<th>Percent Of Benes</th>
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<tr>
<td>Males</td>
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<td>Females</td>
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## Sickle Disease in Medicare Fee for Service: Consumption Groups

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<thead>
<tr>
<th>CLASS</th>
<th># Bene</th>
<th>% Bene</th>
<th>Total All Cause Cost</th>
<th>% Total All Cause Cost</th>
<th>Total Unique Inpatient Stays</th>
<th>Percent of all Unique Inpatient Stays</th>
<th>Inpatient Cost</th>
<th>Inpatient Cost as a Percent of Total Cost</th>
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<tbody>
<tr>
<td>Crisi Consumers</td>
<td>1,061</td>
<td>11%</td>
<td>$145,555,952</td>
<td>41%</td>
<td>9,062</td>
<td>32%</td>
<td>$92,230,867</td>
<td>45%</td>
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<td>Heavy Consumers</td>
<td>3,592</td>
<td>37%</td>
<td>$165,676,284</td>
<td>47%</td>
<td>15,420</td>
<td>54%</td>
<td>$95,729,006</td>
<td>46%</td>
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<td>26%</td>
<td>$34,594,342</td>
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<td>3,522</td>
<td>12%</td>
<td>$17,499,886</td>
<td>8%</td>
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<td>Light Consumers</td>
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<td>12%</td>
<td>$4,680,018</td>
<td>1%</td>
<td>308</td>
<td>1%</td>
<td>$768,799</td>
<td>0.4%</td>
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<tr>
<td>Low Consumers</td>
<td>1,431</td>
<td>15%</td>
<td>$1,096,890</td>
<td>0.3%</td>
<td>353</td>
<td>1%</td>
<td>$14,113</td>
<td>0.01%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>9,786</strong></td>
<td><strong>15%</strong></td>
<td><strong>$351,603,487</strong></td>
<td><strong>0.3%</strong></td>
<td><strong>28,665</strong></td>
<td><strong>1%</strong></td>
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### Sickle Disease in Medicare Fee for Service: Consumption Patterns

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<th>Total All Cause Cost</th>
<th>Per Patient Cost</th>
<th>Total Unique Inpatient Stays</th>
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<td>$206,242,671</td>
<td>$21,075</td>
</tr>
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Sickle Cell Cases by ZIP3, 2013
Sickle Disease in Medicare Fee for Service: Inpatient Geography

Sickle Cell Hospitalizations by ZIP3, 2013

Legend:
- NA
- 50 or Less
- 51 - 90
- 91 - 140
- 141 - 250
- 251 or More
Sickle Disease in Medicare Fee for Service: Cost Geography

Sickle Cell All-cause Cost by ZIP3, 2013
CLOSING THOUGHTS
Sickle Cell Trait and Diabetes

The hemoglobin A1C (A1C) test can be unreliable for diagnosing or monitoring diabetes and prediabetes in people with inherited hemoglobin variants, also called hemoglobinopathies. Hemoglobins S and E are prevalent variants in people of African, Mediterranean, or Southeast Asian descent. These variants interfere with some A1C tests—both laboratory and point-of-care tests. If A1C tests are at odds with blood glucose testing results, interference should be considered.
Sickle Cell Trait and Diabetes

African Americans have an increased risk of inheriting sickle cell trait, the condition in which people have both hemoglobin A (HbA), the usual form of hemoglobin, and hemoglobin S (HbS), a variant. African Americans are also at risk for having hemoglobin C (HbC), another variant. About one in 12 African Americans has sickle cell trait. About 13 percent of African Americans ages 20 years or older have diabetes. Therefore, many African Americans have both diabetes and sickle cell trait.
Sustainable Healthy Communities

Building a community of patients, providers, researchers, and advocates to ensure that people with sickle cell disease and its traits have high quality, long lives.
Beyond Health Disparities

We have moved beyond 20th century goals of indexing acute event rates to the majority.

We have reached the point in our evolution where we must stop accepting every roll of the dice as determinative of health outcomes.

We should aspire to regulate and manage health outcomes in our communities, but establishing the infrastructure to manage population health will require coordination and accountability that go far beyond the capacity of existing medical systems.