ADDRESSING THE DRIVERS OF HEALTH

Kate Sommerfeld
President, Social Determinants of Health
Life Expectancy GAPS

New Orleans
- 25 YEARS

Baltimore
- 15 YEARS
Chicago
- 15 YEARS

Las Vegas
- 14 YEARS

Washington DC
- 8-10 YEARS
Socioeconomic status and social factors exert larger influences on longevity.

“Social underfunding probably has more long-term implications than underinvestment in medical care.”

Gerard Anderson, Johns Hopkins
*New York Times, May 14, 2018*
“WHERE YOU LIVE SHOULD NOT DECIDE WHETHER YOU LIVE OR WHETHER YOU DIE.”

U2
Crumbs from Your Table
[1] Business Perspective
More people die of preventable diseases and complications in the U.S. than in any other developed nation.*

The United States spends more money per person on healthcare than any other nation with comparable incomes.

The United States has a significantly lower life expectancy than other countries that spend less on healthcare.

*Per 1000,000

Business PERSPECTIVE


Source: Source: Centers for Medicare & Medicaid Services, Office of the Actuary. Data released December 3, 2015. CMS completed a benchmark revision in 2003, introducing changes in methods, definitions and source data that are applied to the entire time series (back to 1980). For more information on this revision, see:
Out-of-pocket expenses for PREMIUMS AND DEDUCTIBLES ARE GROWING FASTER than overall inflation and earnings.
Individual PERSPECTIVE

ONE in four Americans say the cost of health care is the biggest concern facing their family.

Kaiser Family Foundation

ONE in three Americans report that they could not access care in the last year because of cost.

The Commonwealth Fund

Affordability is one of the most important challenges influencing American’s ability to access health care.
### Exhibit ES-1. Overall Ranking

<table>
<thead>
<tr>
<th>Country Rankings</th>
<th>OVERALL RANKING (2010)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AUS</td>
<td>CAN</td>
<td>GER</td>
<td>NETH</td>
<td>NZ</td>
<td>UK</td>
<td>US</td>
<td></td>
</tr>
<tr>
<td>1.00–2.33</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2.34–4.66</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4.67–7.00</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

#### Quality Care

| Effective Care | 2 | 7 | 6 | 3 | 5 | 1 | 4 |
| Safe Care      | 6 | 5 | 3 | 2 | 1 | 2 | 7 |
| Coordinated Care | 4 | 5 | 7 | 2 | 1 | 3 | 6 |
| Patient-Centered Care | 2 | 5 | 3 | 6 | 1 | 7 | 4 |

#### Access

| 6.5 | 5   | 3   | 1   | 4   | 2   | 6.5 |
| 6   | 3.5 | 3.5 | 2   | 5   | 1   | 7   |
| 6   | 7   | 2   | 1   | 3   | 4   | 5   |

#### Efficiency

| 2   | 6   | 5   | 3   | 4   | 1   | 7   |
| 4   | 5   | 3   | 1   | 6   | 5   | 2   |
| 1   | 2   | 3   | 3   | 4   | 5   | 6   |

#### Long, Healthy, Productive Lives

<table>
<thead>
<tr>
<th>Health Expenditures/Capita, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUS</td>
</tr>
<tr>
<td>$3,357</td>
</tr>
</tbody>
</table>

Note: *Estimates. Expenditures shown in US PPP (purchasing power parity).
Source: Calculated by The Commonwealth Fund based on 2007 International Health Policy Survey; 2008 International Health Policy Survey of Sicker Adults; 2009 International Health Policy Survey of Primary Care Physicians; Commonwealth Fund Commission on a High Performance Health System National Scorecard; and Organization for Economic Cooperation and Development, OECD Health Data, 2009 (Paris: OECD, Nov. 2009).
How did we get here?
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>Hospitals in Texas form Blue Cross health plan</td>
<td>5%</td>
</tr>
<tr>
<td>1939</td>
<td>California hospitals created Blue Shield</td>
<td>9.2%</td>
</tr>
<tr>
<td>1940</td>
<td>9% of Americans have some form of health insurance</td>
<td>12.5%</td>
</tr>
<tr>
<td>1945</td>
<td>National Health Insurance/Social Security Private insurance expands</td>
<td></td>
</tr>
<tr>
<td>1946</td>
<td>Hill Burton Private Insurance expands</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>50% of Americans have some form of health insurance</td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>66% of Americans have some form of health insurance</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>Medicare and Medicaid established Diagnosis Related Groups created Private insurance expands</td>
<td></td>
</tr>
<tr>
<td>1970s</td>
<td>HMOs created</td>
<td></td>
</tr>
<tr>
<td>1980s</td>
<td>Healthcare inflation outpaces national GDP</td>
<td>17.6%</td>
</tr>
<tr>
<td>1993</td>
<td>Clinton “Health Security Act” universal health care, employer model</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>Balanced Budget Act</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>• Reimbursement reductions for Medicare • SCHIP</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>Affordable Care Act</td>
<td>19.3%</td>
</tr>
<tr>
<td>2017</td>
<td>15 million healthcare employees</td>
<td>18.2%</td>
</tr>
<tr>
<td>2025</td>
<td>Repeal and Replace ACA Discussions</td>
<td>19.7%</td>
</tr>
<tr>
<td>2050</td>
<td>FUTURE PROJECTIONS AT 37%</td>
<td></td>
</tr>
</tbody>
</table>
The (Not-So-Rosy) Future of Hospitals

Driven by economics, the inpatient institutions we know are radically changing—becoming smaller, more digital, or disappearing completely. The result should be cheaper and better care.

HOSPITAL DRAMA

How these facilities at the center of the health-care system are evolving

Full-Service Fade
The number of community hospitals in the U.S. has been in a long-term decline, and hospital closures are expected to continue over the next decade.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>6,000</td>
</tr>
<tr>
<td>2010</td>
<td>5,200</td>
</tr>
<tr>
<td>2020</td>
<td>4,500</td>
</tr>
</tbody>
</table>

Source: American Hospital Association

Fewer Stays
Inpatient admissions to community hospitals have trended down over the past decade.

More Patients
But outpatient visits have climbed steadily.

<table>
<thead>
<tr>
<th>Year</th>
<th>Inpatient Admissions</th>
<th>Outpatient Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>70 million</td>
<td>500 million</td>
</tr>
<tr>
<td>2015</td>
<td>35 million</td>
<td>700 million</td>
</tr>
</tbody>
</table>

Source: American Hospital Association

The Cost Benefit
Average savings on these outpatient procedures compared with inpatient settings

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Total Savings</th>
<th>Patient Out-of-Pocket Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hysterectomy</td>
<td>$4,505</td>
<td>$403</td>
</tr>
<tr>
<td>Lumber/spine surgery</td>
<td>$8,479</td>
<td>$320</td>
</tr>
<tr>
<td>Gallbladder removal</td>
<td>$11,262</td>
<td>$924</td>
</tr>
<tr>
<td>Angioplasty</td>
<td>$17,530</td>
<td>$1,062</td>
</tr>
</tbody>
</table>

Note: 2010 data
Source: Blue Cross Blue Shield Association
“HEALTH CARE IS A TERMINAL ILLNESS FOR AMERICA’S GOVERNMENTS AND BUSINESSES. WE ARE IN BIG TROUBLE”
“The movement of more and more services outside of the four walls of a hospital has been a positive one. It has, all else being equal, lowered costs and improved outcomes. But as I said, even as this transformation is going on, we believe it needs to accelerate.”

Alex Azur
Speech to American Hospital Association
May 9, 2018
We ask people to fit in our world

Patient-centered Care
Value-based Care
Age-friendly Health Systems
Everyone is a PATIENT
TOGETHER,
TRANSFORMING HEALTH CARE FOR SENIORS
ProMedica and HCR ManorCare

TWO MISSION-DRIVEN ORGANIZATIONS,
ONE VISION

- NEARLY 70,000 EMPLOYEES
- 30 STATES
- HEADQUARTERED IN Toledo, Ohio
- 13 ACUTE FACILITIES
- $7 BILLION REVENUE
- 2,700 PHYSICIANS
- 450+ POST-ACUTE FACILITIES
- 600,000 LIVES COVERED

MARKET OPPORTUNITY

85+
Within 20 years, the 85+
POPULATION WILL DOUBLE.

OLDER ADULTS are expected to OUTNUMBER CHILDREN for the first time in U.S. history.

TOGETHER, WE WILL DELIVER...

- HIGH-QUALITY, PATIENT-CENTERED CARE
- A SEAMLESS AND COORDINATED EXPERIENCE
- CARE IN A SETTING THAT MEETS THE NEEDS OF THE PATIENT
- A NEW PERSPECTIVE THAT INCLUDES THE ROLE OF SOCIAL DETERMINANTS IN HEALTHY AGING
What Type of IMPACT?

ANCHOR STRATEGIES = ECONOMIC GROWTH

- Revenue
- Volumes
- Net Income
- Market Share
- Days Cash on Hand
- Building New Buildings
- Social Determinants
THOUGH HEALTH CARE IS ESSENTIAL TO HEALTH IT IS A RELATIVELY WEAK HEALTH DETERMINANT

McGinnis/Foege “Actual Cases of Death in the US”
JAMA November 1993
We ask people to fit in our world.

- Patient-centered Care
- Value-based Care
- Age-friendly Health Systems
Socioeconomic Factors

Physical Environment

Health Behaviors

Health Care

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)
Promedica’s Journey in Social Determinants of Health

The beginning of Promedica’s journey in social determinants of health.

Community Health Needs Assessment
Healthcare Reform
Promedica’s Mission, Vision & Values

Hunger as a Health Issue

Interventions

Food at Discharge
Parking 2,500 meals at discharge

Food Reclamation
1,600 pounds of food that have been purchased and returned

Market on the Green
Sold 437.18 pounds

Food Clinic
50,000 people served

Financial Coaching
343 individuals served, 27% increase in income

National Social Determinants of Health Institute

Catalytic Community Economic Investments
During this journey our community has joined us in investing in our region’s future. Some of those projects include:
- Renaissance Hotel
- Freemason Center Expansion
- Partnerships with the Arts
- Farmer’s Market
- Housing
- Midtown Expansion
- Downtown Business
- Promenade Development
- Arborian Michigan Angel Fund
- Defiance Industrial Park
- And more to come

Join Us and Our Sponsor Communities

Promedica's Journey Continues

Stronger Communities

23
ARE WE ASKING THE RIGHT QUESTIONS?

We do …
Ask about and encourage exercise
Ask about and encourage people to lose weight
Check vital signs
Check a child’s growth
Provide physical examinations
Provide education to patients
Criticize patients who fail to show up for appointments

But we don’t …
Ask about safety in neighborhoods
Ask about diet and ability to secure healthy food
Screen for mental health
Look for signs of toxic stress
Ask about insurance information
Ask if they can’t read
Ask if they have transportation
DOMAINS OF SDOH RISK

- Food Insecurity
- Training & Employment
- Behavioral Health
- Social Connection
- Financial Strain
- Housing Insecurity
- Transportation
- Utilities
- Intimate Partner Violence
- Childcare
- Education
Social Determinants of HEALTH SCREENING

- Food Insecurity Screens: 970,572
- SDOH Screens: 118,030
- Screening employees through EAP

55% HAD POSITIVE NEEDS IDENTIFIED

- 39% of those screened had needs in four domains or more
- 87% of those screened had a high motivation score

TOP NEEDS:
- Financial Strain
- Behavioral Health
- Food
A GROWING SENIOR POPULATION WITH INCREASING NEEDS

As the “baby boomers” age, every support system they rely upon is facing unprecedented expectations to meet their demands. Health care is no different. Their expectations create an opportunity to reshape every aspect of how they receive, respond and engage in health and wellness services. Because of this:

- **Within 20 years, the 85+ POPULATION WILL DOUBLE**
- **Older adults** are expected to **OUTNUMBER CHILDREN** for the first time in U.S. history.
- **80%** of seniors have **AT LEAST ONE CHRONIC DISEASE** and **50%** have at least two chronic diseases.
- **Number of people with DEMENTIA DOUBLES EVERY 20 YEARS.**
- **Average annual health spending for those with multiple chronic conditions and functional limitations is 28% HIGHER AMONG THE ELDERLY than non-elderly.**
- **At least 70%** of people 65+ will need **LONG-TERM CARE SERVICES** and support at some point in their lifetime.
- **1 in 7** seniors are threatened by hunger and 3.6 million live in poverty.
- Bankruptcy booms among older Americans: The rate of people **65 AND OLDER FILING FOR BANKRUPTCY IS THREE TIMES WHAT IT WAS IN 1991** due to vanishing pensions, soaring medical expenses and inadequate savings.
- Researchers have found that loneliness is just as lethal as smoking 15 cigarettes per day. **NEARLY HALF OF AMERICANS ARE LONELY** and it’s particularly prevalent among senior populations.
- **Deaths from chronic diseases** like Alzheimer’s, Hepatitis C and cancer are rising.

Too often seniors **HAVE TO CHOOSE** between food and medicine.

**POST HOSPITAL SYNDROME** Vulnerable state caused by the stress and disruption of hospitalization.
The rate of people 65 and over filing for bankruptcy is three times higher than it was in 1991!
Patients with LOW HEALTH LITERACY…

- Are more likely to visit an EMERGENCY ROOM
- Have more HOSPITAL STAYS
- Are less likely to follow TREATMENT PLANS
- Have higher MORTALITY RATES
PLACE MATTERS to Health

PLACEMAKING is a multi-faceted approach to the planning, design and management of public spaces. Capitalizes on a local community’s assets, inspiration, and potential, with the intention of creating public spaces that promote people’s health, happiness, and well being.

EBEID CENTER

- Food market – 1st Floor
- Teaching kitchen – 2nd Floor
- Call center – 3rd Floor
- Job training/career skills
- Financial literacy classes
- Parenting classes
- Nutrition counseling
- Diabetes education
- Block-by-block community empowerment/improvement
U.S. HEALTH CARE’S FORK IN THE ROAD

HEALTH CARE TODAY
- 18.2% GDP ($6t)
- $500-900B Waste
- 50% Prescriptions
- 1/3 Care Unnecessary
- #1 Cause of Bankruptcy
- Lack of Transparency
- 1/3 Skip Care

CLINICAL PATH
- 19.4% GDP (2027)
- High Tech/Advanced Care
- Clinical Treatment
- Expansion of Current Model
- Chronic Condition Focus
- Extensive End of Life Care

INTEGRATED PATH
- Health & Well-being Focus
- Social Determinants - Preventative
- Adverse Child Effects - Preventative
- Health Care at Home
- Care to Lowest Cost Setting
- Technology Assisted
- Increase Primary Care
A HEALTH & WELL-BEING MODEL

- Preferred Care Setting
- Personalized Care
- Lowest Cost Setting
- Participatory
- Predictive
- Primary Care Based
- Partnership Oriented
- Affordable
- Integrated

- Longstanding & Holistic
  - Social Determinants
  - Clinical
  - Mental Health
  - Prevention
  - Genomics
  - Social Interactions

- On Demand (24x7)
- Culturally Designed
- Technology & Data Driven
- Wearables

- Monitoring Devices
- Monitoring Remotely
- Telehealth Consultations
- Voice & Video Activated
- Predictive Analytics
- Artificial Intelligence
- Mobile Based
- Digital
- Alternative Therapies
- Longevity Inspired
THANK YOU!