Establishing the Benchmark
September 7, 2017

WELCOME
# September 7 Summit Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:15 - 11:25am</td>
<td>Welcome and Opening Remarks</td>
</tr>
<tr>
<td>11:25 – 11:55am</td>
<td>The Impact of Rising Health Care Costs and Options for Delaware</td>
</tr>
<tr>
<td>11:55am – 12:10pm</td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>12:10 - 12:30pm</td>
<td>Creating Value and Lowering Costs: Perspectives from a Delaware ACO</td>
</tr>
<tr>
<td>12:30 – 12:45pm</td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>12:45 – 1:05pm</td>
<td>Convening Stakeholders and Employers for Payment Reform: Massachusetts Experience</td>
</tr>
<tr>
<td>1:05 - 1:20pm</td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>1:20 - 1:40pm</td>
<td>Considering Economic Evaluation and Data-Driven Policy Analysis: A View from Vermont’s Approach</td>
</tr>
<tr>
<td>1:40 - 1:55pm</td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>1:55 - 2:00pm</td>
<td>Closing Remarks</td>
</tr>
</tbody>
</table>
Establishing the Benchmark

Moderator: **Tom Brown**, Co-Chair, DCHI Payment Model Monitoring Committee

Panelists:
- **Zeke Emanuel** - University of Pennsylvania, Department of Medical Ethics and Health Policy
- **Farzad Mostashari** – Aledade, Inc.
- **Audrey Shelto** – Blue Cross Blue Shield of Massachusetts Foundation
- **Christine Eibner** – RAND Corporation

Q&A and Discussion
The Impact of Rising Health Care Costs and Options for Delaware

Zeke Emanuel, M.D., Ph.D. – Chair, University of Pennsylvania Department of Medical Ethics and Health Policy
Looking Ahead: The Future of American Health Care

Ezekiel J. Emanuel, M.D., Ph.D.

*Some slides adapted from those developed by Amol Navathe – many thanks.*
US Health Care Spending (2016): $3.4 Trillion
# Rx for Cost Cutting

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP (nominal) in 2015</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$17.90 trillion</td>
<td>#1</td>
</tr>
<tr>
<td>CHINA</td>
<td>$10.86 trillion</td>
<td>#2</td>
</tr>
<tr>
<td>JAPAN</td>
<td>$4.12 trillion</td>
<td>#3</td>
</tr>
<tr>
<td>GERMANY</td>
<td>$3.35 trillion</td>
<td>#4</td>
</tr>
<tr>
<td>UK</td>
<td>$2.94 trillion</td>
<td>#5</td>
</tr>
<tr>
<td>FRANCE</td>
<td>$2.42 trillion</td>
<td>#6</td>
</tr>
<tr>
<td>INDIA</td>
<td>$2.07 trillion</td>
<td>#7</td>
</tr>
</tbody>
</table>
Life expectancy vs. health expenditure over time (1970-2014)

Health spending measures the consumption of health care goods and services, including personal health care (curative care, rehabilitative care, long-term care, ancillary services and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments. Shown is total health expenditure (financed by public and private sources).

Data source: Health expenditure from the OECD; Life expectancy from the World Bank. Licensed under CC-BY-SA by the author Max Roser. The data visualization is available at OurWorldInData.org and there you find more research and visualizations on this topic.
# Two Trends

<table>
<thead>
<tr>
<th>Measure</th>
<th>USA</th>
<th>FRANCE</th>
<th>GERMANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Cost per person (2015, PPP)</td>
<td>$9,451</td>
<td>$4,407</td>
<td>$5,267</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>79.3 (31st)</td>
<td>82.4 (9th)</td>
<td>81.0 (24th)</td>
</tr>
<tr>
<td>Infant Mortality (per 1,000 births)</td>
<td>5.80</td>
<td>3.30</td>
<td>3.20</td>
</tr>
<tr>
<td>Cancer 5 year survival</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast</td>
<td>88.6%</td>
<td>86.9%</td>
<td>85.3%</td>
</tr>
<tr>
<td>Colon</td>
<td>64.7%</td>
<td>59.8%</td>
<td>64.6%</td>
</tr>
<tr>
<td>Childhood Leukemia</td>
<td>87.7%</td>
<td>89.2%</td>
<td>91.8%</td>
</tr>
<tr>
<td>Years of life lost (per 100,000 inhabitants aged 0-69)</td>
<td>4,600</td>
<td>3,100</td>
<td>3,000</td>
</tr>
<tr>
<td>WHO Health System Ranking*</td>
<td>37</td>
<td>1</td>
<td>25</td>
</tr>
</tbody>
</table>

* Based on a composite score of health, health inequality, responsiveness-level, responsiveness distribution, and fair financing.
US Spending vs. Other Countries

International Healthcare Spending vs GDP in 2013

Affordability Index

Family Health Insurance Premiums as Percentage of Median Income (2001-2015)
Waste in Health Care

Sources of waste in US health care

- Unnecessary services
- Excessive administrative costs
- Inefficiently delivered services
- Too-high prices
- Fraud
- Missed prevention opportunities

Costs (USD billion)

Adapted from Vox and the Institute of Medicine
Unnecessary Services

PET/CT scans ordered during diagnosis and staging
Local stage breast cancer, 0-1 comorbidity
High volume oncology clinics, Puget Sound

Source: Scott Ramsey. How Should We Define Value in Cancer Care.
IOM Affordable Cancer Care Workshop. 8 Oct, 2012.
Inefficient Care

• Inefficient delivery of services costs the US $130 billion a year.

• Ex: prescribing 7 weeks of radiation therapy for breast cancer, when a 3-week regiment has been shown to produce the same results.
Pricing Failures

• Unreasonably high prices for medical items costs the U.S. at least $105 billion a year.

• Ex: Medicare pays $2,062 for cardiac imaging done in-hospital, compared to $626 done in-office.
Payment Model Framework

Category 1
Fee for Service – No Link to Quality & Value

Category 2
Fee for Service – Link to Quality & Value

Category 3
APMs Built on Fee-for-Service Architecture

Category 4
Population-Based Payment

A
Foundational Payments for Infrastructure & Operations

B
Pay for Reporting

C
Rewards for Performance

D
Rewards and Penalties for Performance

A
APMs with Upside Gainsharing

B
APMs with Upside Gainsharing/Downside Risk

A
Condition-Specific Population-Based Payment

B
Comprehensive Population-Based Payment
MACRA

**MIPS**
- Merit-based Incentive Payment System
- Current System: Three separate systems
- New System: One composite score and report

**APM**
- Alternate Payment Models
- Value-based payment models that incentivize providers on quality, outcomes, and cost containment

### Current System
- Meaningful Use EHR
  - Electronic health record
- Value-Based Modifiers
- PQRS
  - Physician Quality Reporting System

### New System
- Meaningful Use EHR
  - Electronic health record
- Resource Use
- Quality
- Clinical Practice Improvement

### APM
- ACOs
  - Accountable care organizations
- Bundles
  - Bundled payment models
- Medical Homes
## Paying for Episodes

<table>
<thead>
<tr>
<th>Traditional Fee-for-Service</th>
<th>Bundled Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment for each service regardless of quantity or quality</td>
<td>Payment for comprehensive, coordinated intervention</td>
</tr>
</tbody>
</table>

- Pre-Admission Services
- Part A Inpatient Services (Hospital)
- Part B Inpatient Services (MDs)
- Post-Acute Costs (Part A and Part B)
- Readmissions

---

**Penn University of Pennsylvania**
Pricing the Bundled Payment

Multiple Insurance Payments
1. Consultation - $200
2. Anesthesia - $1,259
3. Surgery - $3,500
4. Implants - $4,500
5. Physical therapy - $925
6. OR, Recovery Rm, Hospital - $16,000

Total Payments
$26,384

Bundled Payment
$24,000
Savings in Bundled Payment

Paying the Price up Front...
Revenue

Fee-for-Service

Bundle

Physicians
Post-Acute Care
Ancillaries
Hospital

...for a New Alignment Tool
Potential Profit

Price Discount
Hospital Savings
Physician Savings
PAC/Ancillary Savings
Net Gain

Net Gain

Penn University of Pennsylvania
Early Evidence Mostly Positive

Average savings per joint replacement episode

Bundles  FFS

-12%

# Quality

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Effect of Bundled Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td></td>
</tr>
<tr>
<td>Readmission/ER Use</td>
<td></td>
</tr>
<tr>
<td>Walking up and down 12 stairs</td>
<td>6%</td>
</tr>
<tr>
<td>Pain limiting activity</td>
<td>4%</td>
</tr>
<tr>
<td>Patient Satisfaction</td>
<td></td>
</tr>
</tbody>
</table>
ACO Results

Average 2015 Savings for ACOs by State

ACO Results

What will the future of American health care look like?
Future Trends of High-Value Care

1. The dominance of chronic conditions.

2. The deinstitutionalization of care.

3. Standardization and performance measurement / feedback.
Chronic Conditions

LEADING CAUSES OF DEATH IN THE US

Heart disease 31%
Cancer 30%
Lung disease 8%
Accidents 7%
Flu, pneumonia 3%
Diabetes 4%
Alzheimer’s 6%
Stroke 7%
Nephritis 2%
Suicide 2%
Flu, pneumonia 3%
Diabetes 4%
Alzheimer’s 6%
Stroke 7%
Nephritis 2%
Suicide 2%

Adapted from DHHS Publication No.201701232
Deinstitutionalized Care

Hospital Visits
• 34.9 million hospital admissions in 2014

Outpatient Visits
• ~1 billion outpatient visits in 2014
The 12 Practices

- Scheduling
- Registration & rooming
- Shared decision-making
- Performance measurement
- Standardization
- Care management
- Site of service
- De-institutionalization
- Behavioral health management
- Hospice & Palliative Care
- Community interventions
- Lifestyle interventions
Chronic Care Coordination
Chronic Care Coordination

“Let’s face it, chronic care management is not rocket science. It’s measuring lab values. It’s engaging your patients. It’s ensuring medication adherence...It’s supporting them in doing the right behaviors, and that requires time.”

~ Sachin Jain, M.D.
CEO, CareMore
Chronic Care Coordination

1. Identify high-risk patients
2. Embed care managers in primary care teams
3. Empower care managers to close care gaps
4. Use active outreach to contact patients and improve compliance/access in case of complications
5. Educate patients about their illness, adherence, and how to use the health system
Chronic Care Coordination

“Our number one complaint is that they [patients] hear from us too much. We are trying to streamline the calls and the appointment, so that you know that you’re getting these [high-risk] patients in early and often.”

~ Sachin Jain, M.D.
CEO, CareMore
Chronic Care Coordination

• At Geinsinger Health System, a coordinated care model resulted in estimated annual savings of 7%.

• Compared to FFS Medicare beneficiaries, CareMore members in 2015 saw:
  ▪ 20% fewer hospital admissions
  ▪ 2.3% fewer bed days
  ▪ 4% shorter length-of-stay
Phasing in the 12 Practices

• No single practice or health system has implemented all 12 practices.

• Instead, it is important to prioritize starting with a few key practices.
  ▪ Scheduling
  ▪ Chronic care management
  ▪ Performance management
  ▪ Site of service
PRESCRIPTION for THE FUTURE
THE TWELVE TRANSFORMATIONAL PRACTICES of HIGHLY EFFECTIVE MEDICAL ORGANIZATIONS

EZEKIEL J. EMANUEL

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www.med.upenn.edu/ethics-and-policy-online
Creating Value and Lowering Costs: Perspective from a Delaware ACO

Farzad Mostashari, M.D., ScM – CEO, Aledade, Inc.
Convening Stakeholders and Employers for Payment: Massachusetts Experience

Audrey Shelto, MMHS – President, Blue Cross Blue Shield of Massachusetts Foundation
Considering Economic Evaluation and Data Driven Analyses

A View from Vermont and Other States

Christine Eibner
Data analysis can inform state policymaking at many stages

- Deciding what policies to pursue
- Supporting implementation
- Evaluating outcomes
Data analysis can inform state policymaking at many stages

• Deciding what policies to pursue
• Supporting implementation
• Evaluating outcomes
Early implementation questions that can be addressed with data include:

• Has this policy been tried elsewhere? If so, what were the lessons learned?

• What is the range of possible effects for DE?

• Are there unique features of the DE population, economy, etc. that might affect outcomes?

• Are there possible unintended consequences?

• What are the key implementation decisions?
Previous RAND work informed state health care policy questions

- How can we bend the cost curve? (MA, 2009)
- Who currently pays for health care, how much do they pay, and is this equitable? (VT, 2014)
- How can we insure more people, and what will it cost? (OR, 2016)
Massachusetts: Bending Costs
Massachusetts Asked RAND to Evaluate the Effect of Various Cost Containment Options

– Project involved several steps
  • Selecting policy options to consider for analysis
  • Reviewing what is known from prior experience about effects of selected options on reductions in spending
  • Modeling the impact of options that showed promise and that had a sufficient evidence base

– We identified 75 options, collapsed into 21 generally areas, and modeled impacts for 10
Results: Predicted Change in Spending, 2010-2020

- Reform options
  - Star: -7.7% (savings target)

<table>
<thead>
<tr>
<th>Reform option</th>
<th>Percentage change in spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundled payment</td>
<td>-5.7%</td>
</tr>
<tr>
<td>Hospital rate regulation</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Pay AMCs at community rate</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Eliminate payment for preventable events</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Increase adoption of HIT</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Encourage use of NPs/PAs</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Promote growth of retail clinics</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Create medical homes</td>
<td>-0.9%</td>
</tr>
<tr>
<td>Use value-based insurance design</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Encourage disease management</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

Eibner et al., 2009, “Controlling Health Care Spending in Massachusetts: An Analysis of Options”
Vermont: Who Pays?
Vermont Asked RAND to Estimate Who Pays for Health Care in the State

- Estimate health spending for Vermont residents
- Determine the *economic incidence*: who is really paying, after accounting for taxes, wage effects, etc.
- Assess whether the system is equitable
  - Do those with higher incomes pay more?
  - Do those with the same income pay the same amount?
- Goal: develop a baseline for implementing Act 48
## Total Expenditure (Value of Health Benefits Received) in Vermont

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total payments by Vermont residents</td>
<td>$3,602</td>
<td>$4,666</td>
</tr>
<tr>
<td>Direct payments</td>
<td>$2,670</td>
<td>$3,592</td>
</tr>
<tr>
<td>Tax payments</td>
<td>$932</td>
<td>$1,073</td>
</tr>
<tr>
<td>Corporate income tax payments by</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vermont businesses</td>
<td>$55</td>
<td>$79</td>
</tr>
<tr>
<td>Vermont state tax payments by</td>
<td></td>
<td></td>
</tr>
<tr>
<td>out-of-state residents</td>
<td>$5</td>
<td>$6</td>
</tr>
<tr>
<td>Net federal government inflows</td>
<td>$1,412</td>
<td>$2,044</td>
</tr>
<tr>
<td>Retiree health incidence</td>
<td>$10</td>
<td>$15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$5,084</td>
<td>$6,810</td>
</tr>
</tbody>
</table>

Eibner et al., 2015, “The Incidence of Health Care Spending in Vermont”
All But Highest Income VT Residents Receive More Health Benefits than They Pay For

Eibner et al., 2015, “The Incidence of Health Care Spending in Vermont”
Oregon: Can We Insure More?
Oregon HB 3260 called for analysis of four policy options

<table>
<thead>
<tr>
<th>SINGLE PAYER</th>
<th>HEALTH CARE INGENUITY PLAN (HCIP)</th>
<th>PUBLIC OPTION</th>
<th>STATUS QUO</th>
</tr>
</thead>
<tbody>
<tr>
<td>universal coverage</td>
<td>universal coverage</td>
<td>add a state-administered option in the marketplace</td>
<td>continue with currently available options</td>
</tr>
<tr>
<td>low cost sharing</td>
<td>income-based cost sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>state-administered plan</td>
<td>competing private plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tax-financed</td>
<td>tax-financed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Analysis relied on both qualitative and quantitative methods

<table>
<thead>
<tr>
<th>Projections with simulation modeling</th>
<th>Reviews of existing studies</th>
<th>Interviews with state leadership</th>
</tr>
</thead>
</table>

Icons from the Noun Project: YuguDesign, Sagiev Farid, parkisun, Gregor Cresnar
All three policies had pros and cons (report included dollar amounts not shown)

<table>
<thead>
<tr>
<th></th>
<th>SINGLE PAYER</th>
<th>HCIP</th>
<th>PUBLIC OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENROLLMENT</strong></td>
<td>Large increase</td>
<td>Increase</td>
<td>Small increase</td>
</tr>
<tr>
<td><strong>FINANCIAL BARRIERS</strong></td>
<td>Much lower</td>
<td>Lower</td>
<td>Slightly lower</td>
</tr>
<tr>
<td><strong>SYSTEM COSTS</strong></td>
<td>Little change</td>
<td>Increase</td>
<td>Small decrease</td>
</tr>
<tr>
<td><strong>PROVIDER REIMBURSMENT</strong></td>
<td>Decrease</td>
<td>Increase</td>
<td>Slight decrease</td>
</tr>
<tr>
<td><strong>SERVICE AVAILABILITY</strong></td>
<td>Worsens</td>
<td>Improves</td>
<td>Little change</td>
</tr>
<tr>
<td><strong>STATE ECONOMY</strong></td>
<td>Little change</td>
<td>Increase GSP, employment</td>
<td>Little change</td>
</tr>
<tr>
<td><strong>FEASIBILITY</strong></td>
<td>Major hurdles*</td>
<td>Major hurdles</td>
<td>Feasible</td>
</tr>
</tbody>
</table>

White et al., 2017 “A Comprehensive Assessment of Four Options for Financing Health Care Delivery in Oregon” Slide 55
Did our analysis have any impact?

- Massachusetts Payment Reform Commission recommended a global payment approach, which the state adopted

- Vermont opted not to implement single payer, moved to all-payer approach

- Next steps in Oregon are unclear (study occurred before 2016 election)
Lessons Learned

• Data analysis can help policymakers
  – Identify promising options
  – Estimate possible effects for the state
  – Hone approaches
  – Discover unintended consequences

• Data driven considerations must be balanced with political considerations
Closing Remarks
Future Summits

Topic: **Provider/Hospital Leadership**
Host: Delaware Healthcare Association

Topic: **Legal/Regulatory Issues**
Host: To be Determined

Topic: **Governance/Authority**
Host: Delaware Center for Health Innovation

Topic: **Data Analytics (Total Cost of Care)**
Host: Delaware Health Information Network

**Dates, Time, Locations, Speakers to Come**
More Information

To learn more about the health care spending benchmark please visit: http://dhss.delaware.gov/dhcc/global.html

Send your comments about today’s summit or thoughts about the future health care spending benchmark summits to:

myhealthde@state.de.us

Accelerating Payment Reform