Healthcare in America

What Got Us Into This Mess?

How Can We Get Out of It?

Bob Matthews
INTRODUCTIONS

**MediSync**
- Provides all management to PriMED and other Southwest OH groups
- Large innovation budget to find ways to make medical groups more successful
- Innovations used by >175 groups around the nation

**PriMED Physicians**
- Greater Dayton, OH
  - 55 doctors; mostly PCPs
  - 14 locations
- Long committed to quality and total cost
- Pioneer in value models
- #1 in USA in hypertension, diabetes and asthma outcomes
GOOD:BAD IN US HEALTHCARE

We do “fix” a lot of health problems!

So...

How messed up can healthcare be?
EXHIBIT 3
Difference Between Actual And Expected Health Care Spending Per Capita And Actual And Expected Life Expectancy In Organization For Economic Cooperation And Development (OECD) Countries, 2005

Difference in actual and expected life expectancy (years)

4.0

3.0

Less-than-expected spending, more-than-expected life expectancy

Japan

More-than-expected spending, more-than-expected life expectancy

Spain

Italia

Sweden

New Zealand

Portugal

France

Switzerland

Korea

Iceland

Canada

Greece

Australia

Netherlands

Mexico

Germany

United Kingdom

Finland

United States

Czech Republic

Ireland

Austria

Belgium

Denmark

Poland

Slovak Republic

Norway

Hungary

Turkey

Difference in actual and expected health care spending per capita ($ PPP)

NOTES: Regression equation for expected health spending is $ = 0.1174x - 706.35 with R² = 0.79, where $ is health care spending per capita ($ purchasing power parity, or PPP) in 2005 and x is gross domestic product (GDP) per capita ($ PPP) in 2005. Regression equation for expected life expectancy is $ = 0.0020x - 72.503 with R² = 0.57, where $ is life expectancy in years in 2005 and x is GDP per capita ($ PPP) in 2005. For details, see Notes 15, 16, and 18 in text. For Australia, Hungary, Japan, and the Netherlands, health spending data for 2004 are used. For Canada and the United States, life expectancy data for 2004 are used. Country abbreviations are spelled out in Exhibit 2. Luxembourg (LX) is omitted from this analysis.
BREAKING DOWN THE CHALLENGE

Who pays for healthcare?

How are the funds collected, aggregated and distributed to providers?

Who delivers healthcare?
IN 2019 HEALTHCARE IS POLITICAL
PRIORITIES DIFFER BETWEEN PARTIES

Democrats
Healthcare is a strong positive
Everyone should have healthcare as a(n absolute) right

Republicans
• Not our (biggest) issue
• Healthcare is not government’s job
Comparing Psychoses Regarding Healthcare

Democratic Psychosis

Assumptions

• Big companies ripping off the system
  1. Insurance
  2. Pharma

• Reap enough savings from stopping abuse
Comparing Psychoses Regarding Healthcare

Democratic Psychosis

Republican Psychosis

Adam Smith solved every problem in the world.
Companies must improve products/services to gain or keep customers.

Companies must keep prices in line or lose business to others.

The competition of free markets spurs innovation, wealth and the best outcomes for individuals in a society.
REPUBLICAN ANALYSIS OF HEALTHCARE’S PROBLEMS

1. Government set the prices for Medicare/caid
2. Medicare and Medicaid gave “free” credit cards to enrollees
3. “They” go off and spend money wantonly because “they” have no skin in the game
4. Because “they” aren’t spending their own money, healthcare companies don’t have to compete based upon price / quality
5. Once everyone pays from his/her own pocket, the problem will be solved.
ECONOMICS 101

VALUE = \frac{QUALITY}{COST}
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PREMISE OF HEALTH INSURANCE

- **Family #1**
  - Two healthy 40s parents; 2 healthy teens
  - Family Income: $154,000/yr

- **Family #2**
  - 40s parents, 2 teens. Wife has BRAC1 gene mutation and gets breast cancer, one kid is Type 1 diabetic
  - Family Income: $44,000/yr
  - Breast cancer Tx: $100,000 - 300,000
  - Type 1 diabetes: $15,000/year with no hospitalizations
THE NUMBERS THAT MATTER MOST

- Total US health care costs in 2018: $3.6 Trillion
- Cost per man, woman and child: $10,850
- Cost of family health benefit:
  - Per Milliman: $28,000
  - Per National Bus Grp on Health: >$15,500
- Average household income in Ohio: $52,334
- Predicted spend in 2026: $6 Trillion
EMPLOYER VIEW

• We operate in international markets and the cost of healthcare is material
• Last 10+ years pushing health costs onto employees
  – Higher co-pays and (huge) deductibles
• We’re at the end of that road
  – $6,000 to 8,000 annual deductible is the limit
• Most future cost increases on employers
  – That is really scary
ORPHAN COST

• Government: “We can’t afford it”

• Businesses: “We can’t afford it”

• Individuals: “We can’t afford it”
THIS IS A COST PROBLEM

• Republican answer *a la* Paul Ryan
  – Put a spend limit on the government credit cards. Exceed the limit and we cut you off if you can't pay yourself if you have the $$$

• Employer answer: More value

• Voter answer: Is this going to hurt me?
THIS IS A COST PROBLEM

Who can fix our healthcare cost problem?

...And How?
BREAKING DOWN THE CHALLENGE

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MY PREJUDICE ABOUT HEALTH PLANS

- In 1990 some health insurers did improve quality and reduce costs
- In 2020 insurers no longer improve quality or reduce costs
- Health insurers are like Visa and Mastercard – financial intermediaries
  –Thus, little to do with creating value
WHO IS THE BEST FINANCIAL INTERMEDIARY?

Government (CMS)
- Medicare admin costs ~$135 pp/py
- Not looking to profit when making coverage decisions

For Profit Insurers
- Admin costs ~$700 pp/py
- Known to save money and keep it
- Claims to improve value – not true
BREAKING DOWN THE CHALLENGE

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CHANGE IN WHO DELIVERS HEALTHCARE

Era of Healthcare as Charity

Era of “Mom and Pops”

Era of Health System Roll-ups

Now Insurance Companies in Delivery Space

Beginning: Venture $ Towards Disruptive Models
HOW HEALTHCARE IS PAID...

• In US, by the *piece*
• CPT/DRG mania – *every* service has a code — CPT for doctors; DRG for hospitals
• Revenue: # codes billed X price per code
• Medicare & Medicaid prices fixed by government
• Commercial rates are negotiated
• If you don’t have insurance, pay sticker price
INTERESTING EFFECTS OF FEE SYSTEM

• Goal in all businesses: INCREASE REVENUES
  – Do more stuff or charge more per piece
  – Or both

• Costs not the delivery system’s problem
  – Someone else can worry about all that

• No quality or outcome metrics were expected
  – Few were calculated until recently
TRADITIONAL HEALTH SYSTEM ECONOMICS

- Most Profitable
- Central focus is the institution

Medical Groups
SNF/Nursing Home
Retirement
Orthopedic Centers
Surgery Centers/ASC
Cancer Centers
Home Health
Diagnostic Centers
Ancillary
TRADITIONAL HEALTH SYSTEM STRATEGY

1. Borrow Money from Bond Market at Favorable Rates
2. Build a New Tower or Facility
3. Fill the Tower with New Technologies
4. Encourage Utilization
5. Keep Profits
6. Pay Off Bonds

Process:
- Keep Profits
- Borrow Money from Bond Market at Favorable Rates
- Build a New Tower or Facility
- Fill the Tower with New Technologies
- Encourage Utilization
- Pay Off Bonds
THE MEGA-SYSTEM STRATEGY

We own:
• Primary Care
• Specialty Care
• Diagnostics and Imaging
• Home Health
• Plus, we own a bunch of hospitals
• And maybe more...

Now you need us and we can drive the deal we want!
CUSTOMER DILEMMA FROM PIECES

• Health systems are not systems
  – Healthcare is a supertanker powered by thousands of outboards...not all pointing in the same direction

• Purchaser’s dilemma
  – Imagine buying a car one piece at a time

• When you buy a car you expect Toyota or GM or Ford or Volvo to put together a package that works as a package
My market share is based upon how well I satisfy a smart consumer. We need to put together a competitive package.

My consumer cannot see most value except for service quality. We compete on word of mouth, not prices or quality.
SHIFT FROM VOLUME TO VALUE

• “Volume” or “fees” are the current model

• What if we paid healthcare based upon quality and or cost effectiveness?

• Most successful US model of healthcare is capitated
IF SYSTEMS WERE RESPONSIBLE FOR TOTAL HEALTHCARE COST/QUALITY

Let’s give an example...

Where would you focus?
## MEDICAL COSTS PER 100,000 COVERED LIVES

<table>
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<tr>
<th></th>
<th>Commercial</th>
<th></th>
<th>Medicare</th>
<th></th>
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<tbody>
<tr>
<td>Lives</td>
<td>73,000</td>
<td></td>
<td>27,000</td>
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<tr>
<td>Costs @</td>
<td>$400 pmpm</td>
<td></td>
<td>$800 pmpm</td>
<td></td>
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<tr>
<td>X12 mo/year</td>
<td></td>
<td></td>
<td>X 12 months/year</td>
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</tr>
<tr>
<td>Sub-total</td>
<td>$350,400,000</td>
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<td>$259,200,000</td>
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<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>$609,600,000</td>
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</tbody>
</table>
CAPITATION CHANGES THE GAME

Volume / Fees

• I want everyone in the hospital
  — Most revenue I can get

• Love expensive outpatient services too

Capitation

• Everyone in the hospital is burning through my revenue...let’s avoid all unnecessary hospitalizations
WHAT PRIMARY CARE DOCTORS DO

1. Acute care
2. Manage chronic diseases
3. Wellness, Risk Assessments & Prevention
NON-PROCEDURAL DOCTOR VISITS ~$100

What costs <$100 in the hospital?
WHERE DOES US HEALTH SPEND GO?

75%\(^1\) to 90%\(^2\)

Spent on chronic diseases and sequelae

\(^1\) The Commonwealth Fund

\(^2\) CMS
AVERAGE US OUTCOMES AREN’T GREAT

- Blood pressure control 48%
- Diabetes (all or none) control < 10%
- Heart Failure control 1.1%
- Asthma control 7%
- Etc.
WHAT DOCTORS DO*

1. Acute care
2. Wellness and Prevention
3. Manage Chronic Diseases

* Especially primary care
“TOP 12” CHRONIC DISEASES

HTN
Diabetes
Lipids
CAD and PVD
CKD
Heart Failure
COPD
Asthma
Depression
Anxiety
Osteoporosis
Arthritis
SO, WHAT’S THE PROBLEM
WITH CHRONIC OUTCOMES?
FIVE PHYSIOLOGICAL CAUSES OF HTN

• Vasoconstriction
• High Heart Rate
  – Increased beats per min
• Contractility
  – Force of each heart beat (the squeeze)
• Fluid
  – Excessive intravascular fluid (as opposed to extravascular fluid)
• Mixed Hemodynamic
  – Some combination of the above factors
COMORBID VARIABLES IN HTN THERAPY

Demographics: age (<or>60) / Race: African Gene/Black

- CAD/PVD
- Prior history of MI
- Prior history stroke/TIA
- Heart Failure
- Atrial Fibrillation/Flutter
- LVH
- History of Angioedema
- Angina
- Heart block/pacer

- CKD GFR<30
- CKD GFR>30
- Albuminuria/proteinuria
- DM/Pre-diabetes
- Obesity (BMI>30)
- Asthma
- History of Gout
- Renal artery stenosis
- Migraines

- Hyperaldosteronism
- Possible pregnancy
- BPH
- Hepatic failure
- Cirrhosis
- Hypercalcemia
- Hyperkalemia
- Hypokalemia
- Reynaud’s
RX OPTIONS FOR HTN

12 DRUG CLASSES

- Thiazide diuretics
- ACE/ARB
- CCB - Dihydropyridines
- CCB Non-Dihydropyridines
- β1 selective Blocker
- β1+β2 non-selective Blocker
- α1+β1+β2 Blocker - vasodilating
- Peripheral α Blockers
- Central α Agonist
- Aldosterone Antagonist
- Vasodilators
- Loop Diuretics
THE PROVIDER CHALLENGE

PERMUTATIONS IN THE MILLIONS

HTN
5 Major Physiologic Causes

28+ Medical Variables

12 Classes of HTN Drugs

52% Fail Rate

12 Chronic Conditions

Hypertension Example
“When the Cleveland Clinic was formed almost 100 years ago, the total amount of knowledge in health care doubled every 150 years. Now, it’s doubling every 73 days.

There are now 800,000 journal articles written every year... How is anybody going keep track of that and be able to use it without help from artificial intelligence, machine learning? So I think there’s a tremendous necessity and opportunity associated with digital health.”

Toby Cosgrove, MD
President & CEO
The Cleveland Clinic
Success rate in hypertension is 94% (#1 US)

First question of smart investors:

- “Why would health systems buy it?”
- Cuts down on hospital profits (i.e. fewer heart attacks, strokes, admissions, etc.)
- Costs more to do a good job than a bad job
- No additional revenue from better value
HOW TO REDUCE TOTAL COST OF CARE

• 30% of US health cost is waste
  – Doing stuff that doesn’t really help patients (but does pay doctors/hospitals)
Cost of Prescription Drug–Related Morbidity and Mortality
Jonathan H. Watanabe, PharmD, MS, PhD1, Terry McInnis, MD, MPH2, and Jan D. Hirsch, PhD1

Abstract

Background: Public attention and recent US Congressional activity has intensified focus on escalating medication prices. However, the actual cost of medication use extends beyond the up-front cost of purchasing medicines. It also encompasses the additional medical costs of morbidity and mortality resulting from nonoptimized medication regimens, including medication non-adherence.

Objectives: Applying the most current nationally
HOW TO REDUCE TOTAL COST OF CARE

• 30% of US health cost is waste
  – Doing stuff that doesn’t really help patients (but does pay doctors/hospitals)

• Cost of Poor Quality (COPQ)
  – AT LEAST half a trillion dollars (outpatient)
HOW TO LOWER COSTS IN HEALTHCARE?

1. Make provider organizations responsible for cost/quality
2. Measure all important metrics
3. Publish the analyses to the public
4. Pay determined by success / failure
5. Insurance companies paid based upon their role(s)
Q&A

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