Status quo results gallery
A Bigger Bite

Middle-class families’ spending on health care has increased 25% since 2007. Other basic needs, such as clothing and food, have decreased.

Percent change in middle-income households’ spending on basic needs (2007 to 2014)

- Health care: -18.8%
- Food at home: -13.4%
- Housing: -6.0%
- Total: -6.3%
- Transportation: -6.4%
- Total food: -7.6%
- Food away from home: -3.6%
- Clothing: -24.8%
A Decade Of Health Care Cost Growth Has Wiped Out Real Income Gains For An Average US Family

Although a median-income US family of four with employer-based health insurance saw its gross annual income increase from $76,000 in 1999 to $99,000 in 2009 (in current dollars), this gain was largely offset by increased spending to pay for health care. Monthly spending increases occurred in the family's health insurance premiums (from $490 to $4,115), out-of-pocket health spending (from $135 to $239), and taxes devoted to health care (from $345 to $440). After accounting for price increases in other goods and services, the family had $85 more in monthly income to devote to nonhealth spending in 2009 than in 1999. By contrast, had the rate of health care cost growth not exceeded general inflation, the family would have had $545 more per month instead of $85—a difference of nearly $5,400 per year. Even the $85 gain was artificial, because tax collections in 2009 were insufficient to cover actual increases in federal health spending. As a result, we argue, the burdens imposed on all payers by steadily rising health care spending can no longer be ignored.
Cumulative Increases in Family Premiums, Worker Contributions to Premiums, Inflation, and Workers' Earnings, 1999-2017

CATASTROPHIC MISALLOCATION OF RESOURCES

HEALTHCARE SPENDING DEVASTATES SOCIAL DETERMINANTS OF HEALTH (FY01–14, STATE OF MASSACHUSETTS)

↓ 50% Local Aid
↓ 31% Public Health
↓ 22% Mental Health
↓ 14% Infrastructure, Housing & Economic Development
↓ 13% Law & Public Safety
↓ 12% Education
↓ 11% Human Services

+37% Healthcare Spending
DEVASTATING IMPACT ON OUR KIDS

Boston Public School students are walking out—again—to protest the budget. The first walk-out in March drew more than 2,000 students.

High lead levels found in water at hundreds of schools.
Massachusetts Hospitals Stockpile $1.6 Billion in Cayman Islands and other Offshore Accounts; Nurses Call for Financial Transparency

A bill pending on Beacon Hill will allow the public to see how hospital executives are spending tax dollars

CANTON, Mass., May 30, 2019 /PRNewswire/ -- Hospital corporations across Massachusetts have placed at least $1.6 billion in the Cayman Islands and other well-known offshore tax havens, leading nurses and lawmakers to call for legislation requiring financial transparency from hospitals and the returning of excess profits and CEO pay to the public good.

"We can improve our health care system by shining a light on hospital finances, limiting excessive CEO pay and ensuring that the public has a stronger voice in shaping how our health care dollars are spent," said Karen Coughlin, a 35-year RN from Mansfield and Vice President of the Massachusetts Nurses Association.
**DESPITE HEALTHCARE BEING FUNDAMENTALLY LOCAL, THE MAJORITY OF EVERY $1 IS EXTRACTED FROM LOCAL COMMUNITIES**

<table>
<thead>
<tr>
<th>EXTRACTIVE OR NO-VALUE</th>
<th>OFTEN EXTRACTIVE</th>
<th>GENERALLY NOT EXTRACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fraud</td>
<td>• Carrier or provider org admin bloat and overhead</td>
<td>• Paying high-value care providers</td>
</tr>
<tr>
<td>• Misdiagnosis and inappropriate treatment</td>
<td>• Often national, unnecessary and/or wasteful (e.g., “wellness” programs)</td>
<td>• A treating physician often receives only $0.10-$0.15 on a given procedure</td>
</tr>
</tbody>
</table>
  - High-cost, commonly overrated areas: spine, stents, etc.
  - High-misdiagnosis areas: oncology, MSK, etc. (25–67%)
| • Abusive and arbitrarily high prices | | |
| Massive pricing failure: prices for similar quality often vary 2–10x. | | |

| ~$0.45 | ~$0.30 | ~$0.25 |

*Note: these are very, very high-level approximations for illustrative purposes. They’re based on multiple widely-recognized sources and generally accepted data.*
A STARK IMBALANCE WITH DRAMATIC REPERCUSSIONS

What Drives Outcomes?

10% Physical Environment
40% Social and Economic Factors
30% Health Behaviors
20% Clinical Care

Where Do We Spend Money?

Collateral Damage
Obesity
Wasted Spending

Chronic Disease
Unhealthy Workforce
Overtreatment

88% Medical Services
8% Other
4% Health Behaviors
Health care spending has grown much faster than the rest of the economy in recent decades.

Cumulative percent change in real average hourly wages, by education, 2007–2014

Note: Sample based on all workers age 18–64.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Economic Policy Institute
Cumulative increases in health costs, amounts paid by large employer insurance coverage, amounts paid for cost sharing and workers wages, 2006-2016

Source: Kaiser Family Foundation analysis of Truven Health Analytics MarketScan Commercial Claims and Encounters Database, 2006-2016; Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey (April to April) 2006-2016. • Get the data • PNG
Middle-class wages are stagnant—Middle-wage workers’ hourly wage is up 6% since 1979, low-wage workers’ wages are down 5%, while those with very high wages saw a 41% increase.

Cumulative change in real hourly wages of all workers, by wage percentile,* 1979–2013

* Low wage is 10th percentile, middle wage is 50th percentile, very high wage is 95th percentile.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Reproduced from Figure F in Why America’s Workers Need Faster Wage Growth—And What We Can Do About It

Economic Policy Institute
Employers are cutting health care for young workers, both college and high school graduates

Share of employed recent high school and college graduates with health insurance provided by their own employer, 1989–2012

Note: Coverage is defined as being included in an employer-provided plan where the employer paid for at least some of the coverage. Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling, and high school graduates age 17–20 who are not enrolled in further schooling. Shaded areas denote recessions.


Reproduced from Figure O in The Class of 2014: The Weak Economy Is Idling Too Many Young Graduates

Economic Policy Institute
LARGEST GENERATION IN HISTORY (MILLENNIALS) SLATED TO SPEND > HALF OF LIFETIME EARNINGS ON HEALTHCARE

VISIBLE PAYMENTS $0.6M

+ HIDDEN PAYMENTS $1.3M

GRAND TOTAL $1.9M

TOTAL LIFETIME EARNINGS $3.8M
Figure 2. Projected annual family health insurance premium costs and average household income in the United States.

- Household Income
- 50% of Household Income
- Family Health Insurance Premiums
- Family Premium + OOP Costs

OOP = out-of-pocket.
Figure 3: Cumulative Change in Price, Utilization and Spending, 2012-2016
Explosion in Spending

Hospital-price growth, which has outpaced overall inflation for decades, is a major driver of the increase in health spending.

Inflation since 1960

1,600%
1,200
800
400
0

1960 70 80 90 2000 10

Hospital-price growth

Economywide inflation*

Annual change in personal-health spending

16%
12
8
4
0

1970 '80 '90 '00 '10

Overall Hospital price contribution

*Gross domestic product deflator, a measure of inflation for domestically produced goods and services that is used by Centers for Medicare & Medicaid Services

Sources: Altarum (economywide inflation); Centers for Medicare and Medicaid Services
Cumulative Asset Growth of Top 6* Ranked Private Non-Profit Hospital Systems FY2011 - 2016

*Note: One provider organization in the top 7 was dropped due to lack of data. Rankings from US News and World Report. For FYs done mid-year and FY’s with missing data, amounts were linearly interpolated to Year Ending 12/31. These financials include all non-profit subsidiaries of parent health systems, including foundations and providers.

Source: Publicly filed form 990s
Hospital Charge to Cost Ratios
FY's 1996-1997 through 2011-2012

Source: IHSP calculations of Federal Hospital Cost Reports; FY 1996-1997 through 2011-2012
Top 10 Fails of All-Time

Meet The Biggest Price Failures Ever

We have seen a lot of procedures that are wildly overpriced. This is the short list of some of the worst ever price fails.

Cervical Spinal Fusion: $189,186 - $25,000
Knee Replacement: $136,000 - $15,499
Breast Reconstruction: $125,564 - $7,480
Hernia Repair: $101,139 - $5,290
Foot Fracture: $97,847 - $5,400
Cochlear Implant: $70,119 - $8,800
Prostate Surgery: $65,069 - $4,900
Flexible Colonoscopy: $54,611 - $1,193
MRI: $40,500 - $550
Comprehensive Metabolic Panel: $2,048 - $7

- 2300% increase in U.S. healthcare spending per capita between 1970-2009
(Source: Health Care Costs: A Primer, The Henry J. Kaiser Family Foundation)

Source: Bureau of Labor Statistics; NCHS; and Himmelstein/Woolhandler analysis of CPS
High FFS Primary Care Admin Cost Promotes Visit Volume vs. Time with Patient
PwC IDENTIFIED WASTE - $1.2 TRILLION

**Behavioral**
- Obesity $200
- Smoking $0.5 - $191
- Rx Non-Adherence $100
- Alcohol $2

**Clinical**
- Defensive Medicine $210
- Readmissions $25
- Poor Diabetes Management $22
- Medical Errors $17
- Unnecessary ER Visits $14
- Treatment Variations $10
- Hospital Acquired Infections $3
- Overprescribing Antibiotics $1

**Operational**
- Claims Processing $21 - $210
- Ineffective Use of IT $81 - $88
- Staffing Turnover $21
- Paper Rx $4

$303 - $493 Billion
$312 Billion
$126 - $315 Billion
Top Earning Non-Profit Healthcare Executives - 2017

- How much they made over a four year period -

$60 MILLION

- $59.1 M

$60 MILLION

$30 MILLION

- $29.6 M
- $27.3 M
- $27.8 M
- $27.8 M
- $29.8 M
- $15.3 M

Banner Health
Memorial Hermann
Ascension
Northwestern
Kaiser
Advocate

2017
2016
2015
2014
<table>
<thead>
<tr>
<th>HOSPITAL</th>
<th>JOB TITLE</th>
<th>SALARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner Health</td>
<td>President and CEO</td>
<td>$21,629,920</td>
</tr>
<tr>
<td>Memorial Hermann Health System</td>
<td>Special Advisor</td>
<td>$18,169,121</td>
</tr>
<tr>
<td>Ascension</td>
<td>President and CEO</td>
<td>$13,559,831</td>
</tr>
<tr>
<td>Kaiser Foundation</td>
<td>Chairman and CEO</td>
<td>$10,709,503</td>
</tr>
<tr>
<td>Northwestern Memorial HealthCare</td>
<td>(Former) Chairman</td>
<td>$10,557,321</td>
</tr>
<tr>
<td>Advocate HealthCare</td>
<td>President and CEO</td>
<td>$10,051,752</td>
</tr>
<tr>
<td>Dignity Health</td>
<td>CEO</td>
<td>$8,712,814</td>
</tr>
<tr>
<td>MedStar Georgetown Medical Center</td>
<td>Director</td>
<td>$7,675,042</td>
</tr>
<tr>
<td>Cleveland</td>
<td>Director, President, CEO</td>
<td>$7,662,783</td>
</tr>
<tr>
<td>New York and Presbyterian</td>
<td>President, CEO, Trustee</td>
<td>$7,255,558</td>
</tr>
</tbody>
</table>

Learn more at OpenTheBooks.com
Exhibit 2: Where does all the drug money go?
2016 gross profit breakdown of the pharma supply chain

- Manufacturers: $309 bn
- Rebates to payors: $114 bn
- Wholesalers: $17 bn
- PBMs: $23 bn
- Retail pharmacy: $61 bn
- Mail pharmacy: $11 bn
- Other/Inpatient retail: $23 bn

Source: Company data, QuintilesIMS, Pembroke Consulting, Goldman Sachs Global Investment Research.
Range of Net Promoter Scores (NPS) Across Industries

- Auto Dealers
- Streaming Media
- Computers & Tablets
- Supermarkets
- Investment Firms
- Software Firms
- TV & Appliances
- Insurance Carriers
- Hotels & Rooms
- Retailers
- Parcel Delivery Services
- Fast Food Chains
- Rental Cars & Transport
- Airlines
- Banks
- Wireless Carriers
- Credit Cards
- Health Plans
- Utilities
- TV & Internet service

Low NPS
Avg. NPS
High NPS
A new study estimates that medical error was the cause of 251,454 deaths in 2013, making it the third-most common cause of death in the U.S.

Sources: Centers for Disease Control and Prevention; BMJ Publishing group Ltd.
Why Innovate  Affordability
The Elephant in the room

Costs continue their upward climb...
...with employers still picking up much of the tab...

2001: $4,918
2009: $10,743
2019: $28,530

- Employer Cost
- Employee Payroll Contributions
- Employee Out of Pocket Expenses

IBM
The Cause? Mostly due to unregulated fee-for-service payments and an over reliance on rescue/specialty care. This is stark evidence that the U.S. health care industry has been failing us for years. "Commonly cited causes for the nation's poor performance are not to blame - it is the failure of the delivery system!!"

- "Unaccountable Care Organizations"

Source: Paul Grundy MD, head of worldwide healthcare, IBM

* Peter A. Muennig and Sherry A. Glled Health Affairs Oct. 7, 2010
Over-prescribing enabled by status quo health plans

Over-prescribing enabled by status quo health plans

National Overdose Deaths
Number of Deaths Involving Benzodiazepines

Source: National Center for Health Statistics, CDC Wonder
Hospital Pricing Comparison vs International
Hospital Admission Prices in 2017

Bypass Surgery

Surgical procedure that restores blood flow to the heart by diverting blood flow around a blocked blood vessel

- USA: $78.1K
- UK: $24.4K
- New Zealand: $37.8K
- Australia: $35.8K
- UAE: $33.1K
- Switzerland: $32.0K
- South Africa: $30.6K
- Holland: $11.7K
Hospital Admission Prices in 2017

Angioplasty

Surgical procedure that inserts a stent in a blocked blood vessel to improve blood flow

<table>
<thead>
<tr>
<th>Country</th>
<th>Price (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$32.2K</td>
</tr>
<tr>
<td>UK</td>
<td>$11.7K</td>
</tr>
<tr>
<td>New Zealand</td>
<td>$16.5K</td>
</tr>
<tr>
<td>Australia</td>
<td>$14.7K</td>
</tr>
<tr>
<td>UAE</td>
<td>$11.9K</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$7.4K</td>
</tr>
<tr>
<td>South Africa</td>
<td>$9.0K</td>
</tr>
<tr>
<td>Holland</td>
<td>$6.4K</td>
</tr>
</tbody>
</table>
Hospital Admission Prices in 2017

*Hip Replacement*

Surgical procedure that replaces the hip joint with a prosthetic implant

- USA: $32.5K
- UK: $12.2K
- New Zealand: $16.6K
- Australia: $20.9K
- UAE: $22.5K
- Switzerland: $15.6K
- South Africa: $10.5K
- Holland: $6.9K
Figure 3: International Comparisons of Median Health Care Prices

Hospital Admissions

<table>
<thead>
<tr>
<th>Hospital Admissions</th>
<th>Physician/Outpatient</th>
<th>Administered Drugs</th>
<th>Prescription Drugs</th>
</tr>
</thead>
</table>

Hospital Admission Prices in 2017

**Inpatient Appendectomy**
Surgical admission for removal of appendix

<table>
<thead>
<tr>
<th>Country</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$15.2K</td>
</tr>
<tr>
<td>UK</td>
<td>$5.1K</td>
</tr>
<tr>
<td>New Zealand</td>
<td>$6.7K</td>
</tr>
<tr>
<td>Australia</td>
<td>$4.2K</td>
</tr>
<tr>
<td>UAE</td>
<td>$4.2K</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$6.2K</td>
</tr>
<tr>
<td>South Africa</td>
<td>$3.2K</td>
</tr>
<tr>
<td>Holland</td>
<td>$6.0K</td>
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</tbody>
</table>
Figure 3: International Comparisons of Median Health Care Prices

Hospital Admissions

<table>
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<th>Prescription Drugs</th>
</tr>
</thead>
</table>

Hospital Admission Prices in 2017

*Knee Replacement*

Surgical procedure that replaces the knee joint with a prosthetic implant

- **USA**: $29.6K
- **UK**: $12.7K
- **New Zealand**: $17.6K
- **Australia**: $18.6K
- **UAE**: $20.9K
- **Switzerland**: $18.3K
- **South Africa**: $10.5K
- **Holland**: $7.5K
Figure 3: International Comparisons of Median Health Care Prices

Hospital Admission Prices in 2017

Normal Delivery
Childbirth via vaginal delivery

<table>
<thead>
<tr>
<th>Country</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$11.2K</td>
</tr>
<tr>
<td>UK</td>
<td>$9.0K</td>
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<td>Australia</td>
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<td>Switzerland</td>
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<tr>
<td>South Africa</td>
<td>$1.9K</td>
</tr>
<tr>
<td>Holland</td>
<td>$3.6K</td>
</tr>
</tbody>
</table>
Figure 3: International Comparisons of Median Health Care Prices

Hospital Admissions | Physician/Outpatient | Administered Drugs | Prescription Drugs
--- | --- | --- | ---

Hospital Admission Prices in 2017

*C-Section*
Childbirth via Caesarean section delivery

<table>
<thead>
<tr>
<th>Country</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$15.0K</td>
</tr>
<tr>
<td>UK</td>
<td>$7.1K</td>
</tr>
<tr>
<td>Australia</td>
<td>$8.4K</td>
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<td>UAE</td>
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</tr>
<tr>
<td>Switzerland</td>
<td>$7.5K</td>
</tr>
<tr>
<td>South Africa</td>
<td>$3.2K</td>
</tr>
<tr>
<td>Holland</td>
<td>$5.3K</td>
</tr>
</tbody>
</table>
2012 Scanning and Imaging: Angiogram

- Canada: $35
- Spain: $125
- Switzerland: $218
- South Africa: $235
- France: $264
- Chile: $378
- United States: $2,430

USA 25th Percentile: $914
Average Price
USA 95th Percentile: $173

($ USD)
2012 Scanning and Imaging: CT Scan, Head

![Bar chart showing the cost of CT scans in different countries, with the United States having the highest cost at $1,672.]
2012 Scanning and Imaging: CT Scan, Pelvis

- Argentina: $66
- Spain: $117
- Canada: $124
- Chile: $166
- United Kingdom: $175
- France: $183
- Netherlands: $257
- Switzerland: $328
- New Zealand: $349
- South Africa: $386
- United States: $1,565

USA 25th Percentile, Average Price, USA 95th Percentile

($ USD)
2012 Cost Per Hospital Day

- Argentina: $429
- Spain: $476
- South Africa: $665
- Netherlands: $731
- France: $853
- Chile: $954
- New Zealand: $979
- Australia: $1,472
- United States: $12,537

($ USD)
2012 Total Hospital and Physician Cost: Normal Delivery

- Argentina: $1,188
- South Africa: $2,035
- Spain: $2,265
- New Zealand: $2,386
- Netherlands: $2,669
- United Kingdom: $2,641
- Chile: $2,992
- France: $3,541
- Switzerland: $4,039
- Australia: $6,846
- United States: $16,653

Legend:
- USA 25th Percentile
- Average Price
- USA 95th Percentile
2012 Total Hospital and Physician Cost: Knee Replacement Surgery

- Argentina: $3,192
- Spain: $7,827
- United Kingdom: $7,833
- Switzerland: $11,954
- South Africa: $13,466
- New Zealand: $14,849
- Australia: $22,421
- United States: $52,451

$ USD

- USA 25th Percentile
- Average Price
- USA 95th Percentile
2012 Total Hospital and Physician Cost: Hip Replacement

- Argentina: $3,365
- Spain: $7,731
- Switzerland: $9,574
- France: $10,927
- Netherlands: $11,187
- United Kingdom: $11,889
- Chile: $13,409
- New Zealand: $14,390
- South Africa: $15,403
- Australia: $27,810
- United States: $87,987

($ USD)
2012 Total Hospital and Physician Cost: Bypass Surgery

- **Argentina**: $8,882
- **Chile**: $12,401
- **Netherlands**: $14,061
- **United Kingdom**: $14,117
- **Spain**: $17,437
- **Switzerland**: $17,729
- **France**: $22,844
- **New Zealand**: $26,432
- **South Africa**: $37,044
- **Australia**: $43,230
- **United States**: $150,515

($ USD)
2012 Total Hospital and Physician Cost: Angioplasty

- Argentina: $2,851
- Switzerland: $5,295
- Netherlands: $6,332
- New Zealand: $7,010
- France: $7,564
- Australia: $8,911
- Spain: $9,446
- South Africa: $13,475
- United Kingdom: $14,366
- United States: $61,649

USA 25th Percentile, Average Price, USA 95th Percentile
“You can always count on Americans to do the right thing — after they’ve tried everything else.”

Winston Churchill
Fed up yet? Proven blueprint to achieve Quadruple Aim

**HEALTH ROSSETTA FRAMEWORK**

Sourced from real-life successes of employers everywhere. Collectively, it sustainably reduces health care spending by 30% or more.

- **Transparent Pharmacy Benefits**: ~5% Potential Savings
- **Major Specialties & Outlier Patients**: 10–20%
- **Transparent Open Networks**: 10–20%
- **Value-Based Primary Care**: 5–10%
- **Independent, Active Plan Administration & Oversight**: 5–10%
- **High-Performance Plan Design, Docs. & Risk Management**: 5–10%

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**Health Rosetta Market Network**