A New Way to Define Value in Cancer Care

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Recent Projects

- Indication Specific Pricing
- Medicare Part B Payment Pilot
- Tracking of Recent Pricing Trends
- R&D Premiums
- Outcomes-based contracting vs value-based pricing
- Gilead Buy-Out

Express Scripts rolls out value-based pricing for cancer meds

Drugs will cost more in cancer types where they work best

Indication-Specific Pricing for Cancer Drugs

In 2015, spending on specialty drugs, a category dominated by drugs used to treat cancer, instead of 0.6% of total health care spending. This year, 8 new cancer drugs were approved by the U.S. Food and Drug Administration (FDA). The Medicare price, which includes patient co-payments, for these drugs ranged from $50,000 to $200,000 per month. These new products show a survival improvement of nearly 6 months and offer a new treatment option for patients with cancer.

As policy makers consider how to handle high priced drugs, an important question is how the price of the drug is not currently linked to its benefits. "Value," the benefit of a treatment with respect to cost, has become an increasingly important consideration. Following some recent reports in the press, we think the drug pricing debate could be addressed.

Figure 1: Excess Revenues Earned Through Premium Pricing Of Products In The US As A Percentage Of The Company's Global Research And Development Expenditures, 2015

CVS Indication-Based Pricing For Cancer Drugs May Roll Out Later In 2016

The Obama Administration’s Medicare Drug Experiment: The Patient and Doctor Perspective

Mr. Welch, I’d like to introduce into the record an article examining congressional comments regarding Medicare’s Part B pilot proposal.

HealthAffairs Blog

R&D Costs For Pharmaceutical Companies Do Not Explain Elevated US Drug Prices

Outcomes-Based Drug Contracts Do Not Move Us Closer to Value

Forbes / PHARMA & HEALTHCARE / #MEDICINE

The U.S. Government Should Buy Gilead For $156 Billion To Save Money On Hepatitis C

The Little Black Book of Billie

www.drugpricinglab.org
Recent Projects

- Gilead Buy-Out
- Copay assistance
- Louisiana budget allocator
- DPL Policy Tracker

Should The U.S. Government Buy A Drug Company To Save Money?

March 17, 2017, 3:40 PM ET
Heard on All Things Considered

Annals of Internal Medicine

Copay Assistance for Expensive Drugs: A Helping Hand That Raises Costs

A $475,000 price tag for a new cancer drug: crazy or meh?

FDA Approval of Tisagenlecleucel Promise and Complexities of a $475,000 Cancer Drug

The DPL Policy Tracker keeps tabs on federal policy proposals to address US drug pricing issues. To begin, select filter options for proposed solutions.

Filter by:

Filtering options:

- All Policy Categories
- All Sources

Potential Policy Solutions

- Implementation
- Importation
- Re-importation

Proposal

- Loosen restrictions on re-importation to allow individuals, hospitals, and other providers to purchase drugs in other countries that were either
- Manufactured in the U.S., or
- Manufactured in another country that meets or exceeds U.S. safety standards (to be assessed by the FDA) for drug manufacturing.

American Hospital Association

Kantor/Jen

www.drugpricinglab.org

Drug Pricing Lab
Memorial Sloan Kettering
Drug Pricing Lab Data Brief

President Trump’s reform of drug pricing: first look at hospitals impacted by proposed new rules to the 340B drug discount program

Sayeh Nikpay, Peter Bach, and Rena Conti

Table 1. Average Characteristics by 1% Uncompensated Care Threshold Status

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Not-Passing 1% Threshold</th>
<th>Passing 1% Threshold</th>
<th>Difference</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenue ($M)</td>
<td>1650</td>
<td>1330</td>
<td>-320.00</td>
<td>0.082</td>
</tr>
<tr>
<td>Net Operating Revenue ($M)</td>
<td>496</td>
<td>383</td>
<td>-113.00</td>
<td>0.024</td>
</tr>
<tr>
<td>Uncompensated Care Costs ($M)</td>
<td>3.68</td>
<td>2.00</td>
<td>1.68</td>
<td>0.001</td>
</tr>
<tr>
<td>Charity Care Costs ($M)</td>
<td>1.95</td>
<td>1.60</td>
<td>0.35</td>
<td>0.017</td>
</tr>
<tr>
<td>CMS Urban Designation</td>
<td>89.58%</td>
<td>75.27%</td>
<td>-14.31%</td>
<td>0.002</td>
</tr>
<tr>
<td>Located in an Expansion State</td>
<td>94.79%</td>
<td>58.92%</td>
<td>-35.87%</td>
<td>0.001</td>
</tr>
<tr>
<td>South</td>
<td>12.50%</td>
<td>46.86%</td>
<td>34.36%</td>
<td>0.001</td>
</tr>
<tr>
<td>Northeast</td>
<td>19.79%</td>
<td>16.05%</td>
<td>-3.74%</td>
<td>0.045</td>
</tr>
<tr>
<td>Midwest</td>
<td>19.79%</td>
<td>16.45%</td>
<td>-3.34%</td>
<td>0.003</td>
</tr>
<tr>
<td>West</td>
<td>47.92%</td>
<td>20.64%</td>
<td>-27.28%</td>
<td>0.001</td>
</tr>
<tr>
<td>Number of 340B Child Sites</td>
<td>11.92</td>
<td>14.85</td>
<td>2.93%</td>
<td>0.343</td>
</tr>
<tr>
<td>Number of 340B Contract Pharmacies</td>
<td>13.44</td>
<td>16.65</td>
<td>3.21%</td>
<td>0.158</td>
</tr>
</tbody>
</table>

Source: Fiscal Year 2016 Hospital Cost Reports matched to the 340B DISH hospital Provider List. Our sample included 1,109 general acute care 340B DISH hospitals. Operating revenue is total inpatient and outpatient patient revenue; net operating revenue is operating revenue less allowances for insurer discounts, uncompensated care cost is charity care plus bad debt; urban status is based on CMS designation. South, Northeast, Midwest, and West are census regions.

Figure 1. Percent of hospitals losing 340B status

www.drugpricinglab.org
Statement of the problem

• Pharma’s Central Dogma “You must pay this opportunity cost”:
  – Pay more than cost of production and distribution
  – Glean rewards down the road due to incentivized innovation

• What are these opportunity costs?
  – Unaffordable drugs
  – Collapsing insurance structures
  – Declining value for today’s goods
  – Diminished Access
Prices Matter

NEW CANCER DRUGS

PRICE

$100,000

$10,000

$1,000

$100

$10

$1


YEAR

APPROVALS

0 10 20 30 40
Value Declining

Prices of Gleevec vs. iPhone over time

- Price of iPhone/GHz with contract
- AWP of 1 week treatment of 400mg Gleevec

Cost ($) vs. Year (2005-2015)

- Gleevec costs decrease over time.
- iPhone costs increase over time.

DrugPricing Lab
Memorial Sloan Kettering
Value (benefits in relation to costs) declining

Figure 2: Price per life year gained versus approval date

The best fit line is: Price per life year gained = $54,100 + $8,500 \times \text{Approval year.}

Approval Year = 0 for 1995, 1 for 1996, etc. For purposes of display, we re-coded one value from $802,000 to $400,000.

Source: Authors
Cancer Drugs Provide Positive Value In Nine Countries, But The United States Lags In Health Gains Per Dollar Spent
BMJ Open  Cost-related non-adherence to prescribed medicines among older adults: a cross-sectional analysis of a survey in 11 developed countries

Steven G Morgan, Augustine Lee

### Table 3
National prevalence and adjusted odds of cost-related non-adherence among respondents to the 2014 Commonwealth Fund International Health Policy Survey of Older Adults

<table>
<thead>
<tr>
<th>Country</th>
<th>CRNA %</th>
<th>Unadjusted OR (95% CI)</th>
<th>Adjusted OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>6.8</td>
<td>2.37 (1.14 to 3.98)</td>
<td>2.17 (1.29 to 3.68)</td>
</tr>
<tr>
<td>Canada</td>
<td>8.3</td>
<td>2.92 (1.77 to 4.84)</td>
<td>2.76 (1.66 to 4.59)</td>
</tr>
<tr>
<td>France</td>
<td>1.6</td>
<td>0.54 (0.27 to 1.08)</td>
<td>0.47 (0.24 to 0.95)</td>
</tr>
<tr>
<td>Germany</td>
<td>3.7</td>
<td>1.22 (0.64 to 2.33)</td>
<td>1.00 (0.52 to 1.91)</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4.0</td>
<td>1.35 (0.72 to 2.53)</td>
<td>1.19 (0.63 to 2.24)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>4.8</td>
<td>1.62 (0.85 to 3.10)</td>
<td>1.69 (0.88 to 3.24)</td>
</tr>
<tr>
<td>Norway</td>
<td>2.4</td>
<td>0.80 (0.41 to 1.59)</td>
<td>0.66 (0.33 to 1.31)</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.4</td>
<td>0.78 (0.47 to 1.32)</td>
<td>0.80 (0.47 to 1.36)</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.9</td>
<td>0.97 (0.54 to 1.75)</td>
<td>0.86 (0.48 to 1.57)</td>
</tr>
<tr>
<td>UK</td>
<td>3.1</td>
<td>Reference</td>
<td>Reference</td>
</tr>
<tr>
<td><strong>USA</strong></td>
<td>16.8</td>
<td><strong>6.47 (3.89 to 10.78)</strong></td>
<td><strong>6.10 (3.64 to 10.20)</strong></td>
</tr>
</tbody>
</table>

Results reported in bold are significant at p=0.05.

Adjusted ORs based on sample-weighted logistic regression models that control for age group, sex, health status and household income. CRNA, cost-related non-adherence, sample-weighted prevalence.
Deductibles and coinsurance represent a larger share of out-of-pocket drug spending than a decade ago

% patients exposed to >1/3 of drug's actual cost:
2014: 37% of plans
2016: 63% of plans

Source: Kaiser Family Foundation analysis of Truven Health Analytics MarketScan Commercial Claims and Encounters Database, 2004-2014

Peterson-Kaiser Health System Tracker
@pfizer’s Ian Read: It’s not drug pricing that’s the problem, it’s drug affordability - that’s the problem. #politicohealth

6:19 AM - 3 May 2018

8 Retweets  16 Likes

Bob Doherty @BobDohertyACP · May 3

Replying to @PhRMA @pfizer

It’s not affordable because the prices are too high. @RxPricing

3 Retweets  10 Likes
Available solutions, easily co-opted

• Value-based pricing:
  – Drug prices should align with the benefits those drugs deliver
    o DrugAbacus; ICER; most OECD HTA
  – Coverage/cost-sharing then favorable

• Value-based contracting/Outcomes based contracting:
  – Drug prices are set by companies, but then post hoc rebates/discounts for underperformance
Value Based Pricing

• Explicitly/mathematically derives the price of a drug based on the drug’s features
• Concedes multiple failures of the market
• Makes the ‘prize for innovation’ clear
  – Big breakthroughs = big $$’s
• Makes patient costs low when prices appropriate (even if high)
  – Current system drug price primarily drives level of patient cost
Align reimbursement with Value
Value-based price approach

Value and Value-Based Price Benchmarks

Costs: PCSK9 inhibitors carry high price tags. Praluent has a wholesale acquisition cost of $14,600, while Repatha is priced at $14,100. For the purposes of ICER’s review, these costs were averaged for a WAC of $14,350.

Potential Budget Impact: In addition to their high cost, PCSK9 inhibitors have a potentially large eligible patient population.

The table at right provides value-based price benchmarks. The value-based price benchmark considers the price at which the drug would meet commonly accepted cost-effectiveness thresholds, as well as an analysis of the potential short-term budget impact. The value-based price benchmark represents the price needed to remain within accepted thresholds. Any price beyond the benchmark will likely create a need for extra mechanisms to manage affordability. Details of the assumptions and calculations that go into our value-based price benchmarks are available on ICER’s [website](#).

For PCSK9 inhibitors, the value-based price benchmark represents a reduction of 85% from the average wholesale acquisition price of the two agents.
Why I’m Not Worried About Drug Prices (How I Stopped Worrying And Learned To Love The $100,000 Drug)

Deciding on Therapy: New Tools Factor In Cost of Care

Value Frameworks Are Expanding For Drugs & Devices

Measuring the Value of Prescription Drugs

THE WALL STREET JOURNAL.
How Much Should Cancer Drugs Cost?
Memorial Sloan Kettering doctors create pricing calculator that weighs factors such as side effects, extra years of life

What’s a pricey cancer drug really worth? New value-based 'abacus' has some ideas

Value Pricing For Drugs: Whose Value, What Price?

Inculcating the Patient Voice in the Development of Value Models

Value Frameworks in Oncology: What are they and how will they be used?

Value Tools at ASCO 2016: Building a Framework for Prime Time

Feds should negotiate Medicare prices with drugmakers, seniors say

Defining value: has anyone asked the patient?

The real-world challenges they face give patients unique views on 'value'
What is the new outcomes based price?

- Refund for MI patients: who have a heart attack
- Current price = $14,100/year
- MI refund = $13,620/year (ICER benchmark = $2,177/year)
Where will outcomes pricing take us?

• Across all such efforts in Italy only 1% reduction in pharma spending
• At best this is a distraction, at worst it is trojan horse for other policy goals
  – Loosening off-label marketing restrictions
  – Undoing Medicaid best price
Thank you