The wisdom of being diplomatic when paying less than one’s fair share
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REMEMBER WHEN…

America depended on Great Britain?
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AND TODAY...
Europe and whole world depends on the US Navy securing the oceans for global trade.
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IT’S ONE THING NOT TO PAY ONE’S FAIR SHARE…
It’s another thing entirely to talk the one carrying most of the load… out of doing what benefits everyone.
The wisdom of being diplomatic when paying less than one’s fair share

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IT’S ONE THING NOT TO PAY ONE’S FAIR SHARE…
It’s another thing entirely to talk the one carrying most of the load… out of doing what benefits everyone.

IF CAN’T CARRY A FAIR SHARE, VOICE SUPPORT
If can’t say something supportive yet… let’s work on that.
Consider the consequences of being wrong...
Consider the consequences of being wrong...

UNDERVALUING ANYTHING RESULTS IN GETTING LESS OF IT

If markets don’t offer high enough incentives, investors won’t invest (even if academics say they should).
Consider the consequences of being wrong...

- **UNDERVALUING ANYTHING RESULTS IN GETTING LESS OF IT**
  
  If markets don’t offer high enough incentives, investors won’t invest (even if academics say they should).

- **TRADITIONAL CEA IS FLAWED AND UNDERVALUES MEDICINES**
  
  Ignores that drugs go generic, caregiver benefits, changes in future prevalence…
Focus on patients who start treatment when drug launches.
After 14 years, the drug's price will fall and stay low.
Traditional CEA
(and even then, often excludes productivity)

Generalized CEA
“The Value Flower”

- patient-centered health improvements
- productivity
- adherence
- dynamic net health system costs
- direct non-medical costs
- population growth
- incentivizing innovation
- equity
- option value
- value of hope
- risk reduction
- community spillover
- value of knowing
- scientific spillover
Three of the drugs selected for Medicare “negotiation” in 2026. Implication is that these are overpriced.

Trikafta selected by Colorado PDAB for state-level price controls simple because it costs a lot per patient.
So are they worth their prices?

Let’s start with ICER, which does “European-style” cost-effectiveness analyses (Traditional CEA) to calculate cost/QALY.
Traditional CEA

<table>
<thead>
<tr>
<th>Condition</th>
<th>Drug</th>
<th>ICER</th>
</tr>
</thead>
<tbody>
<tr>
<td>STROKE</td>
<td>rivaroxaban</td>
<td>$36.7k</td>
</tr>
<tr>
<td>DIABETES</td>
<td>sitagliptin</td>
<td>$40.9k</td>
</tr>
<tr>
<td>DIABETES</td>
<td>empagliflozin</td>
<td>$49.4k</td>
</tr>
<tr>
<td>CYSTIC FIBROSIS</td>
<td>trikafta</td>
<td>$1.04M</td>
</tr>
</tbody>
</table>

INCREMENTAL COST-EFFECTIVENESS RATIO (ICER)
But traditional CEA ignores that drugs go generic and future cohorts starting treatment, as well as many other values.

Let’s add some of that back in.
<table>
<thead>
<tr>
<th>Condition</th>
<th>Treatment</th>
<th>Traditional CEA</th>
<th>Generalized CEA (GCEA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>Rivaroxaban</td>
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<td>Trikafta</td>
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<td>-$27.8k</td>
</tr>
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**INCREMENTAL COST-EFFECTIVENESS RATIO (ICER)**
European style-math (NICE in UK, ICER in US) substantially miscalculates how worthwhile medicines are, giving the impression that they should be denied or price controlled.
Do drug companies charge more than the value they create for society?

SOME SAY YES.
Do drug companies charge more than the value they create for society?

SOME SAY YES.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Drug</th>
<th>GCEA</th>
<th>Share of Value to Innovator</th>
<th>Share of Value to Society</th>
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</thead>
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<tr>
<td>Stroke</td>
<td>rivaroxaban</td>
<td>94%</td>
<td>-40%</td>
<td>-20%</td>
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<tr>
<td>Diabetes</td>
<td>sitagliptin</td>
<td>93%</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>empagliflozin</td>
<td>93%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td>trikafta</td>
<td>68%</td>
<td>80%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Turns out...

NO.
If the drug industry is so rapacious and has all the pricing power, HOW COULD THE US BE GETTING SUCH A BARGAIN?

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<td>93%</td>
</tr>
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<td>93%</td>
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<tr>
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<td>32%</td>
<td>68%</td>
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ISPOR EU 2023
If the drug industry is so rapacious and has all the pricing power, how could the US be getting such a bargain?

### Generalized CEA (GCEA)

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Because payors negotiate...

**There’s been a market all along.**
How quickly prices will drop is a function of competition and how quickly payors agree to broaden access in exchange for lower prices.
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How long it will take to get to net savings is unclear, but it's inevitable.
Affordable Innovation requires:
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Market-based pricing
Affordable Innovation requires:

Market-based pricing with a Patent-intended period of exclusivity
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Market-based pricing with a Patent-intended period of exclusivity made affordable via proper Insurance, which means low out-of-pocket costs.
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SOLVE AFFORDABILITY BY LOWERING OOP COSTS
Europe does this pretty well... when it's covered, it's covered.
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**MPI…**

vital to affordable innovation

**H₂O…**

vital to life

**SOLVE AFFORDABILITY BY LOWERING OOP COSTS**

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**GET VALUE FOR SOCIETY BY ENSURING ALL DRUGS GO GENERIC**

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  How CEA can be better is NOT today’s question. The question is...
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**GIVEN THE FLAWS OF CURRENT CEA AND THE CONSEQUENCES FOR EVERYONE OF GETTING THIS WRONG,**
then might it make sense to not promote such CEA to the US as better than the US’s current market-based approach?