

## **Do Novel Value Measures Have a Place in European HTA?: A U.S. Health Economist Perspective**

ISPOR-EU panel presentation,  
Monday Nov 12, 2018, 3.45-4.45pm  
[Breakout Session #2 (IP6)]  
November 12, 2018 – Barcelona (Spain)

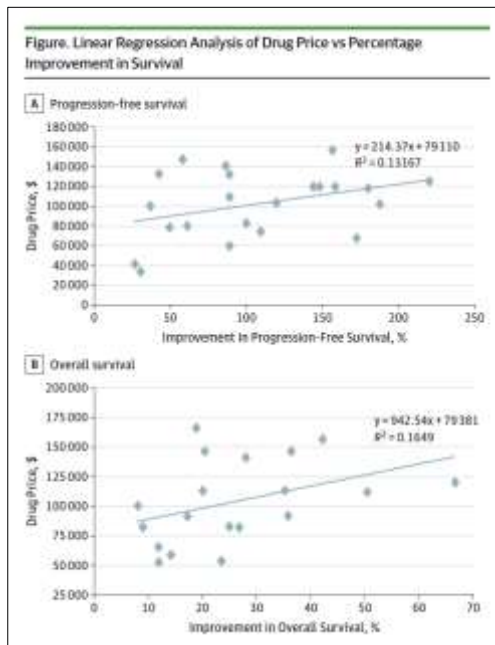
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### **Agenda**

- What is motivating the interest in value frameworks?
- Emergence of recent U.S. value assessment frameworks and formation of ISPOR Special Task Force
- Overview of U.S. value assessment frameworks
- Defining value in conventional cost-effectiveness analysis
- Augmented cost-effectiveness analysis (ACEA)
- Recommendation II of the ISPOR Special Task Force
- Translation to EU markets

## What motivated value frameworks in the U.S.?

- Industry productivity is flat despite growing investments.
- Cost per new molecular entity is rising.
- Health systems are struggling to deal with high prices.
- Manufacturers are receiving declining returns—on average.
- Development is moving toward more specialized and orphan drugs.
- Scientific advances are affecting opportunities : gene and cell therapies, cures, combination treatments.
- Rewards (i.e., prices) are not strongly correlated with health gains delivered.
- U.S. prices are rising relative to other countries.
- All of this has led to greater interest in “value frameworks” in the U.S.



- **Low correlation between oncology drug price and survival benefit.**



# Overall Objective of Special Task Force

The Special Task Force (STF) will produce a **scientific policy white paper** that reviews relevant perspectives and **appropriate approaches and methods** to support the construction and use of **high-quality health care value frameworks** that will enable more efficient health sector decision-making in the US.

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## ISPOR Initiative on US Value Assessment Frameworks STF Final Report. Feb. 2018



- A Health Economics Approach to US Value Assessment Frameworks—Introduction: An ISPOR Special Task Force Report [1]**  
*Peter J. Neumann, Richard J. Wilke, Louis P. Garrison Jr*
- An Overview of Value, Perspective, and Decision Context—A Health Economics Approach: An ISPOR Special Task Force Report [2]**  
*Louis P. Garrison Jr, Mark V. Pauly, Richard J. Wilke, Peter J. Neumann*
- Defining Elements of Value in Health Care—A Health Economics Approach: An ISPOR Special Task Force Report [3]**  
*Darius N. Lakdawalla, Jalpa A. Doshi, Louis P. Garrison Jr, Charles E. Phelps, Anirban Basu, Patricia M. Danzon*
- Objectives, Budgets, Thresholds, and Opportunity Costs—A Health Economics Approach: An ISPOR Special Task Force Report [4]**  
*Patricia M. Danzon, Michael F. Drummond, Adrian Towse, Mark V. Pauly*
- Approaches to Aggregation and Decision Making—A Health Economics Approach: An ISPOR Special Task Force Report [5]**  
*Charles E. Phelps, Darius N. Lakdawalla, Anirban Basu, Michael F. Drummond, Adrian Towse, Patricia M. Danzon*
- Review of Recent US Value Frameworks—A Health Economics Approach: An ISPOR Special Task Force Report [6]**  
*Richard J. Wilke, Peter J. Neumann, Louis P. Garrison Jr, Scott D. Ramsey*
- A Health Economics Approach to US Value Assessment Frameworks—Summary and Recommendations of the ISPOR Special Task Force Report [7]**  
*Louis P. Garrison Jr, Peter J. Neumann, Richard J. Wilke, Anirban Basu, Patricia M. Danzon, Jalpa A. Doshi, Michael F. Drummond, Darius N. Lakdawalla, Mark V. Pauly, Charles E. Phelps, Scott D. Ramsey, Adrian Towse, Milton C. Weinstein*

## What is (Economic) “Value”?

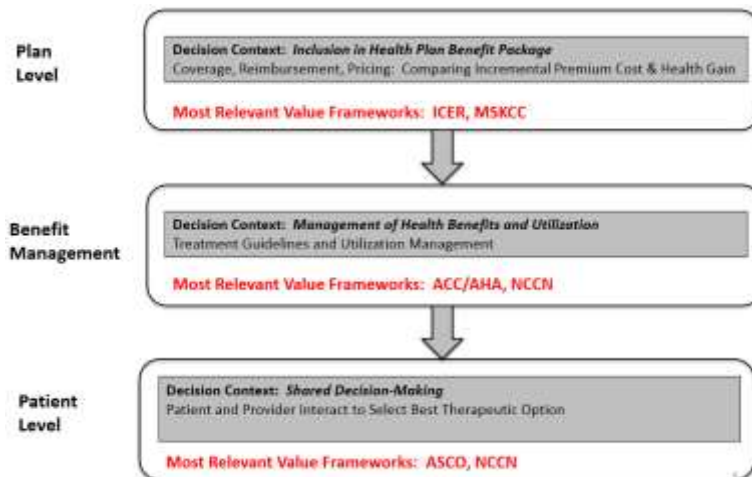
- From an economic perspective:
  - Value is what someone is (actually) willing to pay or forgo to obtain something (opportunity cost)
- **Implications:**
  - Value varies *across individuals, across indications* for the same medicine, and *dynamically over time*.
  - Value is *difficult to measure in health care* because of insurance
  - In principle, we would ask a plan member about their willingness to pay the *incremental insurance premium (or taxes)*. In practice, the amount is *too small to be estimated reliably*.

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## Frameworks Operate in Different Decision Contexts and Use Different Elements of Value

<i>Element:</i>	<b>ACA/AHA</b>	<b>ASCO</b>	<b>ICER</b>	<b>MSKCC</b>	<b>NCCN</b>
Clinical Benefit	✖	✖	✖	✖	✖
Toxicity/Safety	✖	✖	✖	✖	✖
Novelty				✖	
Rarity/Burden			✖	✖	
Affordability			✖		✖
Cost-Effectiveness	✖		✖		
<b>Decision Context:</b>	<i>Treatment guidelines and pathways</i>	<i>Clinical Shared Decision Making</i>	<i>Coverage and Reimbursement</i>	<i>Shared Decision Making and Pricing</i>	<i>Treatment Guidelines and Shared Decision Making</i>

# Decision Contexts and Value Frameworks



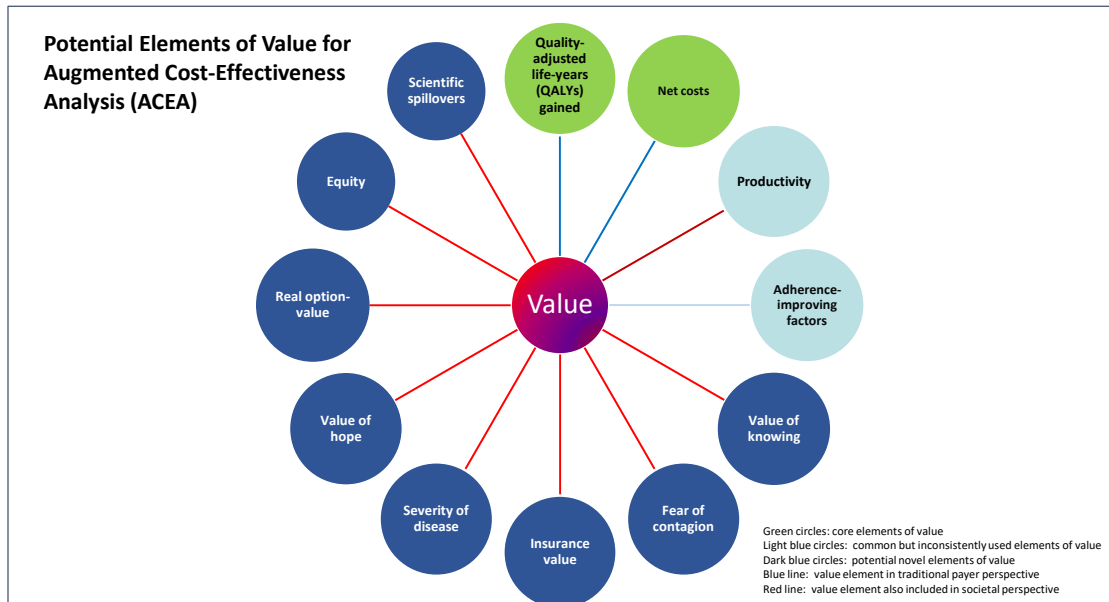
Source: STF Final Report, Section 2 (Garrison, Pauly, et al, Value Health, Feb. 2018)

## Second-Panel Volume: Impact Inventory (October 2016)



Figure 1. Impact Inventory Template

Issue	Type of Impact (Are categories worth factoring into your analysis? If so, how?)	Included in This Reference Case Analysis (Perspective?)		Notes on Sources of Evidence
		Health Care Service	societal	
<b>General Health Care Sector</b>				
Health	Health outcomes (effects)			
	Longevity effects	<input type="checkbox"/>	<input type="checkbox"/>	
	Health-related quality-of-life effects	<input type="checkbox"/>	<input type="checkbox"/>	
	Other health effects (eg, adverse events and secondary transmissions of other forms)	<input type="checkbox"/>	<input type="checkbox"/>	
	Medical costs			
Health Care System	Paid for by third party payers	<input type="checkbox"/>	<input type="checkbox"/>	
	Paid for by business not-of-profit	<input type="checkbox"/>	<input type="checkbox"/>	
	Patients related medical costs (consumers and patients)	<input type="checkbox"/>	<input type="checkbox"/>	
	Patients unrelated medical costs (providers and consumers)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>System of Health Care Sector</b>				
Health	Fixed (aka) costs	NA	<input type="checkbox"/>	
	Unpaid (consumer) firm costs	NA	<input type="checkbox"/>	
	Transportation costs	NA	<input type="checkbox"/>	
<b>Non-Health Care Sector (with examples of possible issues)</b>				
Productivity	Labour market (or input) loss	NA	<input type="checkbox"/>	
	Cost of unpaid lost productivity due to illness	NA	<input type="checkbox"/>	
	Cost of uncompensated household production <sup>a</sup>	NA	<input type="checkbox"/>	
Contamination	Further consumption (related to inputs)	NA	<input type="checkbox"/>	
Social Services	Cost of social services as part of intervention	NA	<input type="checkbox"/>	
Legal or Criminal Justice	Number of crimes related to intervention	NA	<input type="checkbox"/>	
	Cost of crimes related to intervention	NA	<input type="checkbox"/>	
Education	Impact of interventions on educational achievement of population	NA	<input type="checkbox"/>	
Insurance	Cost of health insurance as factor in intervention (eg, involving health status)	NA	<input type="checkbox"/>	
Environment	Predictions of future waste generated by intervention	NA	<input type="checkbox"/>	
Other (specify)	Other impacts	NA	<input type="checkbox"/>	



**Recommendation II: Base health plan coverage and reimbursement decisions on an evaluation of the incremental costs and benefits of healthcare technologies as is provided by cost-effectiveness analysis.**

- 1. Cost-per-QALY analyses have strengths and limitations.**
- 2. Frameworks that focus on coverage/reimbursement should consider cost per QALY, as a starting point.**
- 3. Consider elements not normally included in CEAs (e.g., severity of illness, equity, risk protection) but more research needed.**



Figure 1: Countries included in the study

CPQ countries	Non-CPQ countries
Australia	France
Canada	Germany
England*	Italy
Scotland*	Spain
Sweden	United States

\* The English and Scottish health systems have separate processes for determining reimbursement. Separate data and analysis for these systems is provided to the extent possible from sources, however, only report UK figures, which include England, Scotland, Wales, and Northern Ireland.

### Findings

- Patients in the five CPQ countries examined have less access to new cancer drugs than patients in the five non-CPQ countries.
- In the CPQ countries, fewer new cancer drugs are reimbursed; reimbursement decisions take longer, and new cancer drugs have historically been adopted more slowly and, in the long term, at lower rates.
- CPQ analyses are subject to many uncertainties and inconsistencies due to the nature of the variables used and their interpretation.
- Some data show lower rates of both cancer drug spending and cancer survival in countries using CPQ methodologies, particularly the U.K.
- CPQ countries do not necessarily spend less overall on cancer, but they may achieve less for patients.

## Budget Constraints and Thresholds: Effect of Adding Novel Elements

- It does change the threshold
  - League table approach
  - Cost allocated per QALY falls
- Which margin?
  - Annual vs. lifetime
  - Health vs. non-health
  - Generational: deficit financing



## Implications of U.S. Value Frameworks for EU Systems?

- *EU HTA assessment will remain a complex and highly variable endeavor across member states.*
  - *Clinical data are critical in all HTA processes.*
- Likely to strengthen support for cost-per-QALY approaches, in part by going beyond the QALY
- Will support importance of augmented CEA as a tool as part of a deliberative process.
- Will support current and growing interest in MCDA as part of deliberative process. Use QALY as key or “anchor” attribute.

**Thanks!**

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