Overview and Trends in Value-Based Payment: A Health Economics Perspective

May 22, 2018
ISPOR International Conference
Baltimore, Maryland, USA

Lou Garrison, PhD, Professor Emeritus
University of Washington

Introduction
Where we come from and where we move forward
Setting the Stage—Outside and Parallel Trends

• What is value?
• Growth of HTA and ISPOR
• Trends in PBRSAs
• Pricing challenges and value frameworks

What is “Value”? 

• From an economic perspective:
  • Value is what someone is (actually) willing to pay or forgo to obtain something (opportunity cost)

• Implications:
  • Varies across individuals, across indications for the same medicine, and dynamically over time (as more evidence becomes available and competitors emerge).
  • 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.
Defining Economic Value for Health Technology Assessment

What is “economic value”?

“Value” = what fully informed patients would be willing to pay (WTP) for a new medicine based on:

1) any cost-savings,
2) life years gained (LYs),
3) improvements in quality of life or morbidity

\[(2+3) \rightarrow \text{Quality-adjusted life years (QALYs)}\]
Cost-per-QALY gained = “cost-utility analysis”
PBRSA Taxonomy

Performance-based schemes between health care payers and manufacturers

Non-outcomes based schemes
- Population level
- Patient level
  - Market share
  - Price volume
  - Utilization caps
  - Manufacturer-funded treatment initiation

Health outcomes-based schemes
- Conditional coverage
- Performance-linked reimbursement (PLR)
  - Coverage with evidence development (CED)
  - Conditional treatment continuation (CTC)
    - [Ex: Alzheimer’s drugs in Italy]

Outcomes guarantee
- Only in research
  - [Ex: Cochlear implants in US (CMS)]
- Only with research
  - [Ex: Risperidone in France]
- Pattern or process of care
  - [Ex: Oncophotiks in US (restricted healthcare)]

Clinical Endpoint
- [Ex: Baricitinib in US]

Intermediate Endpoint
- [Ex: Simvastatin in US]

Source: Carlson et al., 2010
Key findings:

- Lots of interest and talk by manufacturers
- Substantial implementation barriers
  - Need better data systems
  - Costs of negotiation
- More interest in financially-based RSAs
- Shift incentives? ACOs and government subsidies?
Key U.S. Value Frameworks to date
Working Premise

“. . .it is critical to investigate these value frameworks because of the signals they send to innovators. Value-based approaches can encourage firms to produce more of what is being optimized in the frameworks, and discourage them from bringing to market products that do not produce good value. Ideally, that means society will benefit from medical products and healthcare technologies that efficiently improve the health and welfare of the population according to consistent and well-founded measures of value. Conversely, ill-conceived frameworks could produce long-lasting harms by encouraging innovators to develop treatments that fail to produce real value.” [emphasis added]

Source: STF Final Report [1], ViH, Feb. 2018
Decision Contexts and Value Frameworks

The Gospels

Resource allocation decisions: incremental cost per QALY gained
Recommendation I: Be explicit about decision context and perspective in value assessment frameworks.

1. No single value assessment framework captures everything.

2. For societal and health plan resource allocation decisions (coverage/ reimbursement), perspective should reflect those who pay for care (e.g., enrollees, employees, taxpayers).

3. Well-designed patient-level frameworks can help guide shared decision making for treatment choices.

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.


Source: Lakdawalla et al., STF Report, 2018.
How to aggregate elements of value?

1. **Monetization of elements in addition to cost per QALY**
   - Extended CEA—Risk protection and equity impact (used in global health)
   - Augmented CEA—ECEA+other factors
   - Net Monetary Benefit (NMB)—change in QALY x WTP threshold + Net cost

2. **Multi-criteria Decision Analysis (MCDA)**
   - Analytical Hierarchy Process (AHP)
   - Multi-attribute utility theory (MAUT)
   - Deliberative processes

Thanks!

Lgarrisn@uw.edu