WHAT IS VALUE?
- Beyond Cost Effectiveness

Dr Iñaki Gutierrez Ibarluzea, Vice-Chair HTAi & Knowledge Manager, Osteba, Basque Office for HTA, Ministry for Health, Basque Government
Things that have kept me awake at night

• What is value? Is it just cost?
• Can we value health, innovation and patient experience in the same way, using the same tools?
• Do all stakeholders view value in the same way?
• How do we currently assess value of treatment? Is this an ethical approach? Does it work in the interest of patients, or more in favour of the other players?
• How could/should we assess value of treatment now and in the future – in way a that is patient centred but takes an ethical, transparent and wider societal approach? Can this be achieved?
• What can we as patient advocates be doing to ensure that we are capturing the value of new treatments/services (from a patient perspective) – and how can this be fed into the decision-making process?
Health care systems ...

» “You have to start with the truth. The truth is the only way that we can get anywhere. Because any decision-making that is based upon lies or ignorance can't lead to a good conclusion.”

— Julian Assange

» “The idea of technology is very simple, it’s the idea of knowledge applied to a purpose. But in health care we draw on a lot of knowledge and we have many, many different purposes. And the question for us always in health care is, ‘are we using that knowledge in a way that truly advances health?”

— Harvey V Fineberg. IOM 2012
Outline

• Value and its measurement
• Why are we talking around value?
• HTA perspective of value
• Innovation and value
• HTA perspective of value
• Technologies and value
• Economics and value (Why so popular?)
• Other ways of defining value (MCDA, INTEGRATE-HTA)
• How to face the problem or the solution?
The evolution of evidence based health care. (Modified from Muir Gray JA)
Value economics

- value is how much a desired object or condition is worth relative to other objects or conditions. Economic values are expressed as "how much" of one desirable condition or commodity will, or would be *given up* in exchange for some other desired condition or commodity.
Value for health

- Economic imperative (sustainability)
- Ethical imperative (health as a right, UHC and quality of care)
- Best practice imperative (excellence)
- Social imperative (equity)
Why are we talking about values?

- Crisis?
- SEC. 2. The Congress hereby finds and declares that:

(a) As technology continues to change and expand rapidly, its applications are
   1. large and growing in scale; and
   2. increasingly extensive, pervasive, and critical in their impact, beneficial and adverse, on the natural and social environment.

(b) Therefore, it is essential that, to the fullest extent possible, the consequences of technological applications be anticipated, understood, and considered in determination of public policy on existing and emerging national problems.

- (Congress of USA. October 1972)
Accordingly, it is necessary for the Congress to:

1. equip itself with new and effective means for securing competent, unbiased information concerning the physical, biological, economic, social, and political effects of such applications; and

2. utilize this information, whenever appropriate, as one factor in the legislative assessment of matters pending before the Congress, particularly in those instances where the Federal Government may be called upon to consider support for, or management or regulation of, technological applications.
Are changes in place? ...

“So much is expected, by the public and by politicians. But resources are finite and choices have to be made about where and how to invest – and disinvest – to make the most out of the nation’s funding for health”  (NICE, 2006)
What is technology?

«the systematic application of scientific and other organized knowledge to practical tasks»

Daddy which was first...?
In real life...?
Efficiency.....it depends on
In real life...?

- Who drives the car
- How the roads are
- When we drive the car (timetable)
- How much money we have
- Infrastructure of energy suppliers
- Ethical issues (climate change,...)
- Legal issues
But...technology fascination

- By color
- By design
- By affordability
- Fashion
- Brand
- ..
Should we admit this for health care systems?

• We are doing
• We introduce over-sophisticated technologies
• Not required technologies
• Fashion technologies
• Not adapted to our problems

• And... we do not give room for some others that could solve our problems
What is HTA? The fourth guarantee

• Health technology assessment (HTA) is a multidisciplinary activity that systematically examines the safety, clinical efficacy and effectiveness, cost, cost-effectiveness, organisational implications, social consequences, legal and ethical considerations of the application of a health technology – usually a drug, medical device or clinical/surgical procedure
How it relates to other analysis

- Safety
- Performance (medical devices)
- Efficacy
- Sustainability

- Clinical effectiveness,
- Economic aspects
- ELSOI

- Acquisition
- Selection
- Certification
- Building capacities
- Use
How value is measured

• Single domains and overall non explicit and transparent decisions
• Cost-effectiveness paradigm
• Multi Criteria Decision Analysis (MCDA)
• INTEGRATE-HTA framework
• Others..
Value depends on the technology and where it will be implemented

“The drug itself has no side effects, but the number of health economists needed to prove its value may cause dizziness and nausea”
Why economics has become so popular when defining value?

» Cost–effectiveness analyses compare the costs and effectiveness of two or more health interventions – with effectiveness measured in the same units.

» When comparing interventions, the incremental cost–effectiveness ratio (ICER) – i.e. the difference in costs divided by the difference in health effects – is often used to express the result.
Actually...

» For cost–effectiveness analyses to contribute to sound resource allocation, estimates of both costs and effectiveness **must be situated firmly within the relevant context**, which includes the disease burden and budget of the setting in question.

» **Simple cost–effectiveness thresholds** – whether based on per-capita incomes or bench-mark interventions – **fail to evaluate and rank interventions within countries** and disregard budgetary constraints.

» more thorough assessment of policy-relevant alternatives, they contribute little to good decision-making and can actually mislead.

» Thresholds inflate prices in some highly budgeted areas... without considering real value...
Table 1. The goal and scope of HTA in European countries (Adapted from Paris and Belloni 2013)

<table>
<thead>
<tr>
<th>Country</th>
<th>Therapeutic relevance</th>
<th>Economic considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Safety, effectiveness, severity of disease, curative nature of product, interest in terms of public health</td>
<td><strong>Budget impact.</strong> New products with added therapeutic value will be subject to <strong>economic evaluation</strong> from Oct 2013</td>
</tr>
<tr>
<td>Germany</td>
<td>Yes, but the drug must not belong to one of the categories excluded from reimbursement by Federal Law</td>
<td><strong>Efficiency frontier method (Caro 2010)</strong></td>
</tr>
<tr>
<td>Italy</td>
<td>Clinical effectiveness, disease relevance</td>
<td><strong>No</strong></td>
</tr>
<tr>
<td>Belgium</td>
<td>Efficacy, disease relevance</td>
<td><strong>Cost-effectiveness for innovative products, budget impact</strong></td>
</tr>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td><strong>Reasonable price in relation to therapeutic value</strong></td>
</tr>
<tr>
<td>Netherlands</td>
<td>Added therapeutic value</td>
<td>Cost-effectiveness, budget impact</td>
</tr>
<tr>
<td>Spain</td>
<td>Therapeutic value</td>
<td><strong>Reasonable price in relation to therapeutic value, cost-effectiveness, budget impact</strong></td>
</tr>
<tr>
<td>Sweden</td>
<td>Yes</td>
<td><strong>Cost-effectiveness, need and solidarity, human values principles</strong></td>
</tr>
<tr>
<td>UK</td>
<td>NICE does not grade products according to therapeutic value</td>
<td><strong>Cost-effectiveness</strong></td>
</tr>
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</table>
Cost-effectiveness paradigm for technologies. Why it fails...

• Lack of measures of efficacy in most medical devices / diagnostics
  – No trials

• Lack of measurement of the complexity of technologies and their value framework
  – Costs (not all costs measured)
  – Benefits (surrogated outcomes)
MCDA (Multi Criteria Decision Analysis)

- Multicriteria decision analysis (MCDA) and stochastic multicriteria acceptability analysis (SMAA) are useful tools to assess the benefit-risk ratio.
- Preferences of the decision makers regarding the relative importance of these criteria.
- MCDA requires the weights of the criteria by the decision makers.
INTEGRATE-HTA framework

- INTEGRATE-HTA is an innovative, three-year FP7 project that ended in December 2015.
- aimed to develop concepts and methods that enable a patient-centred, comprehensive assessment of complex health technologies
- The INTEGRATE-HTA Model helps to assess complex technologies which take context, implementation issues, and patient characteristics into account
Value for whom and where...

Users
Community

Professionals

Managers
Users

» Demand solutions to their problems
» Health care systems as a solution
» Aim to solve their problems on time
» Passive
» Lack of adapted information
» They have their own value
Professionals’ values

• Uncertainty linked to information overload (Uncertainty BM)
• Enthusiasm when new technologies available (Enthusiasm BM)
• Hungry when imposed decisions or systematic negation
  Pressures from management (Frustration BM)
• Resistance to change (Comfort Based Medicine)
  – Need for learning
  – Risk management
• Inexperienced in shared decision making (PBM)
• Ignorance of the structure of decision making at the meso and macro levels
• Industry incentives (Incentives BM)
Health care providers

- Staff issues
- Clinician resistance
- Disruption issues
- Increased costs
- Delays
- Integration issues
- Training issues
- Missed targets
- Reduction in patient throughput

Clinician resistance
How to face the problem?

- Which is the question?
- Which is the problem to be addressed?
- Which is the technological solution proposed?
- Which is the value? Or values?
- Do we have sufficient money?
- Do we have skilled professionals?
- Do we have an organised system?
- Do our patients accept the solution?
- Is the society well informed and take part in the establishment and decisions?
- Did the technology address the problem in the context or the system, and to which pathology/condition pathway it aims to address?

The implementation of a technology: “is dependent of the capacity of a service provider to assume it...”

Conclusions or questions to bring back home...

- Stakeholders discussion crucial to share the different views of value
- Value based pricing at every stage of the life cycle of technologies and pathologies and considering the context
- Multi Criteria Dimension Analysis
  - Which criteria?
  - Who defines the weights?
- INTEGRAL analysis required
- How to establish it when some areas of oversized budget?
- How to promote innovation when some pathologies have a very constraint budget?
- How to make participation and decision sharing possible?
More...

Dr. Iñaki Gutiérrez-Ibarluzea

Osteba, Basque Office for HTA
Ministry for Health
Basque Government
Donostia-San Sebastian, 1
01010 – Vitoria-Gasteiz

osteba7-san@euskadi.eus
http://www.osakidetza.euskadi.eus/osteba
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