

#### 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

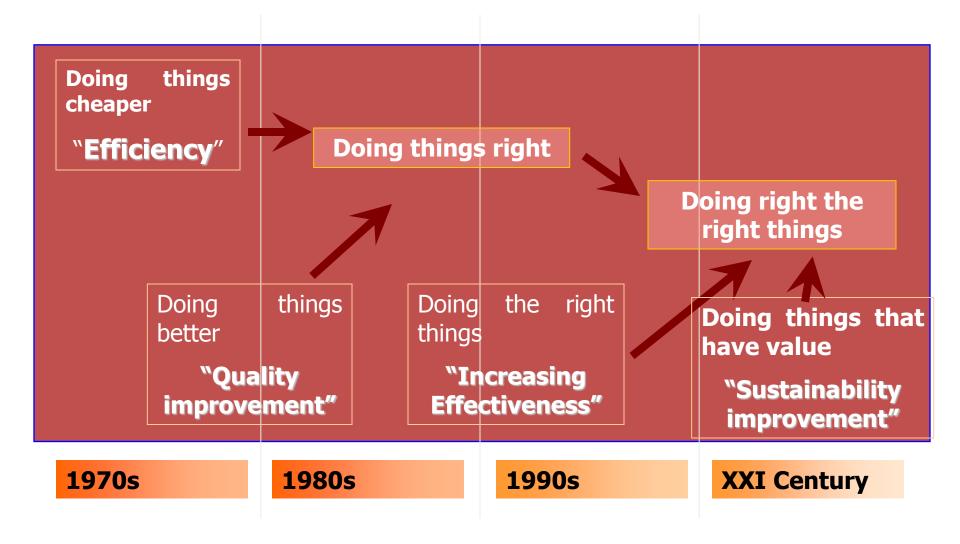
"The idea of technology is very simple, it's the idea of knowledge applied to a purpose. But in health care we draw on a lot of knowledge and we have many, many different purposes. And the question for us always in health care is, 'are we using that knowledge in a way that truly advances health?"

#### — 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)

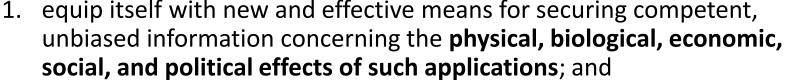


## Why are we talking about values?

- 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)

#### OTA. Office of Technology Assessment

Accordingly, it is necessary for the Congress to:



 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»



Galbraith, J. K. (1967).

The new industrial state.

Boston, MA: Houghton Mifflin.

# Daddy which was first...?



Offer driven

Demand driven



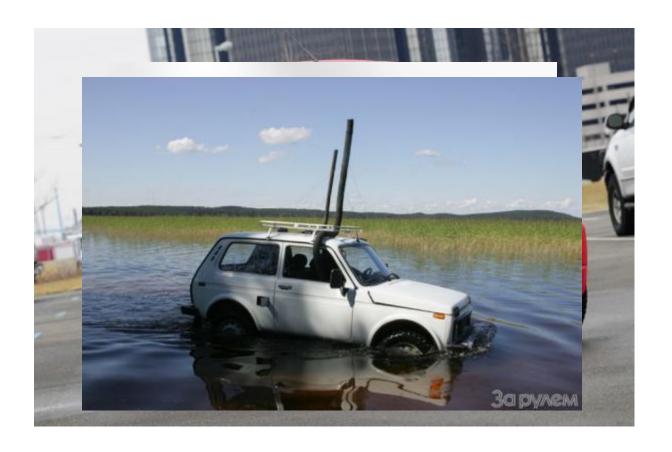


Efficacy

Efectiveness

# 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
- •



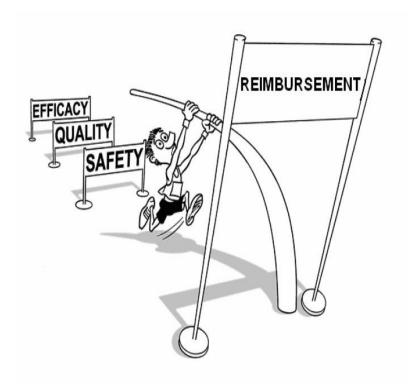
# Should we admit this for health care systems?

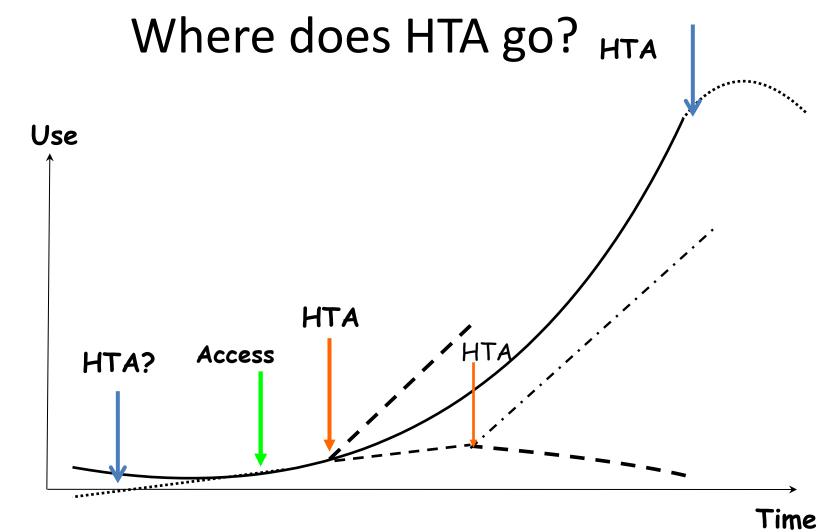
- We are doing
- We introduce oversophisticated technologies
- Not required technologies
- Fashion technologies
- Not adapted to our problems
- And... we do not give room for some others that could solve our problems



# 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

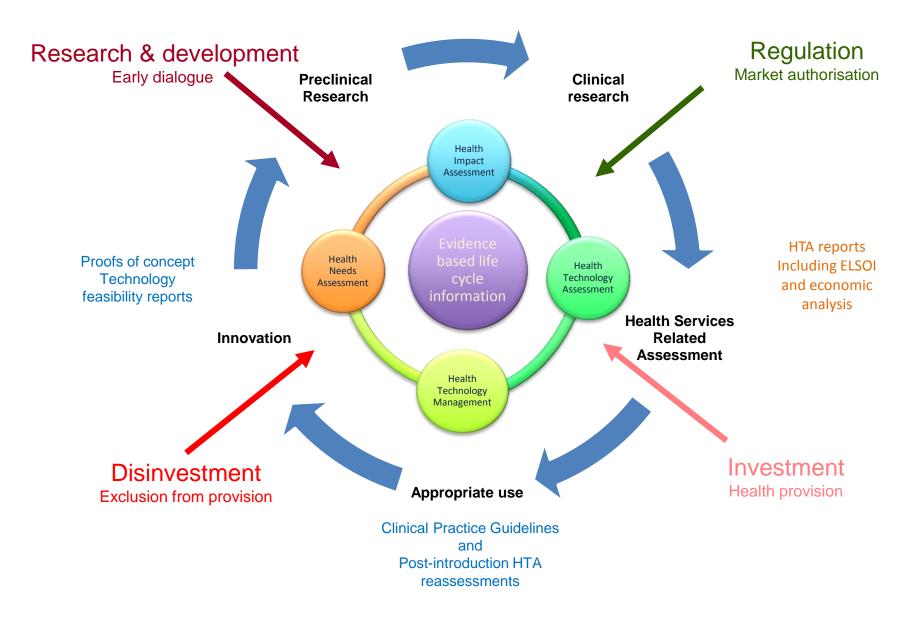




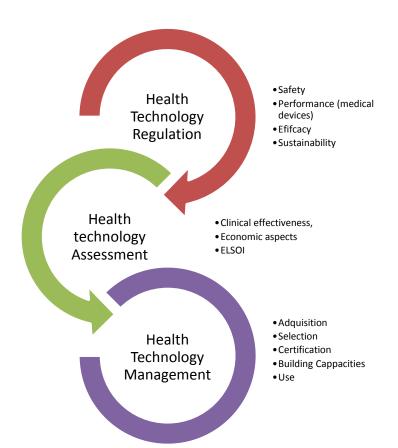
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Research and development	Experimental Technology	Innovative Technology	General Use	Obsolescence/ Replacement
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#### Clinical trials and other epidemiological designs



# How it relates to other analysis



## 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



# 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...

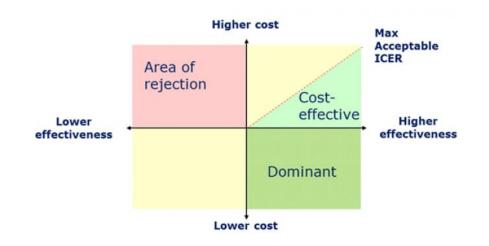
- » For cost-effectiveness analyses to contribute to sound resource allocation, estimates of both costs and effectiveness must be situated firmly within the relevant context, which includes the disease burden and budget of the setting in question.
- » Simple cost-effectiveness thresholds whether based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

	Therapeutic relevance	Economic considerations
France	Safety, effectiveness, severity of disease,	<b>Budget impact.</b> New products with added therapeutic
	curative nature of product, interest in	value will be subject to <b>economic evaluation</b> from Oct
	terms of public health	2013
Germany	Yes, but the drug must not belong to	Efficiency frontier method (Caro 2010)
	one of the categories excluded from	
	reimbursement by Federal Law	
Italy	Clinical effectiveness, disease relevance	No
Belgium	Efficacy, disease relevance	Cost-effectiveness for innovative products, budget
		impact
Denmark	Yes	Reasonable price in relation to therapeutic value
Netherlands	Added therapeutic value	Cost-effectiveness, budget impact
Spain	Therapeutic value	Reasonable price in relation to therapeutic value,
		cost-effectiveness, budget impact
Sweden	Yes	Cost-effectiveness, need and solidarity, human
		values principles
UK	NICE does not grade products according	Cost-effectiveness
19/04/2018	to therapeutic value	

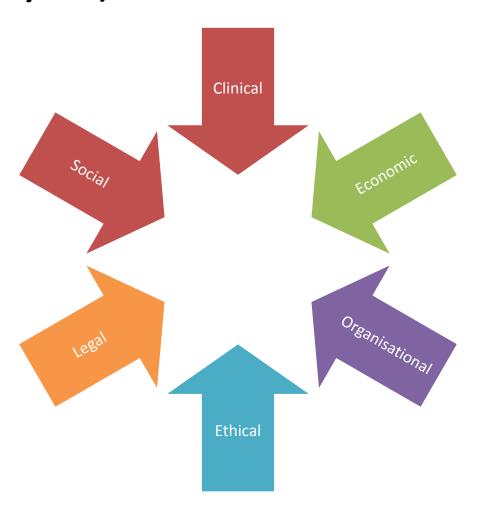
# Cost-effectiveness paradigm for technologies. Why it fails...

- 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

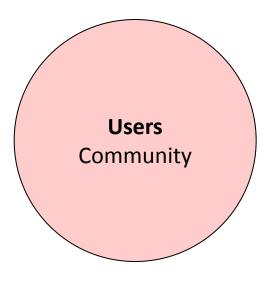


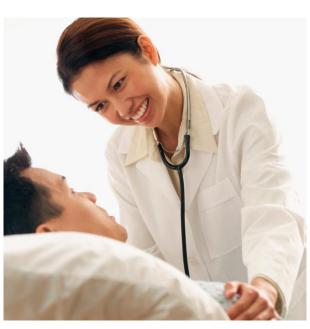
## INTEGRATE-HTA framework

- 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

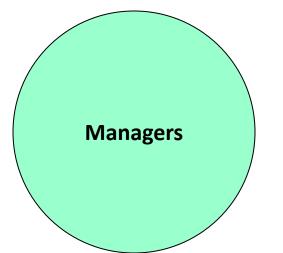


## Value for whom and where...









### Users

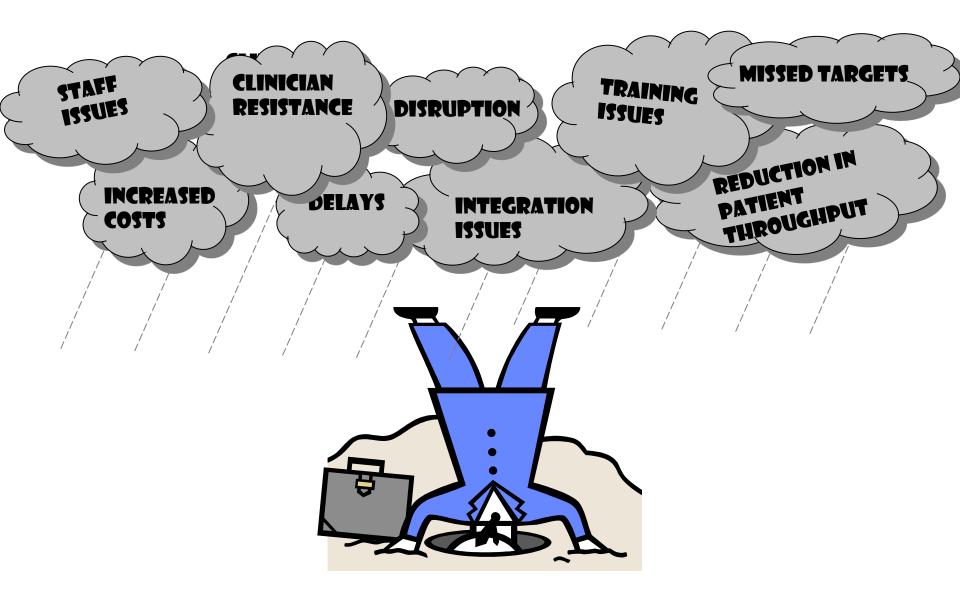
- » Demand solutions to their problems
- » Health care systems as a solution
- » Aim to solve their problems on time
- » Pasive
- » Lack of adapted information
- » They have their own value



### 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
- Inexperience 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



# How to face the problem?

- » Which is the question?
- » Which is the problem to be adressed?

- »The implementation of a technology: "is dependent of the capacity of a service provider
  - to assume it..."
    - o assume to...

      Ibargoyen et al, 2007.

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- » Lia the technology address the problem in the context or the system, and to which pathology/condition pathway it aims to address?

#### 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 https://www.facebook.com/pages/Osteba/365563420144977