

# 8. VALUE OF INNOVATION STRATEGIC CONFERENCE

Challenges of Health and Development in  
21st Century - Time for Ambition

**19 November 2019**

Ljubljana, Health Insurance Institute of Slovenia,  
Miklošičeva ulica 24, Jakopič Hall

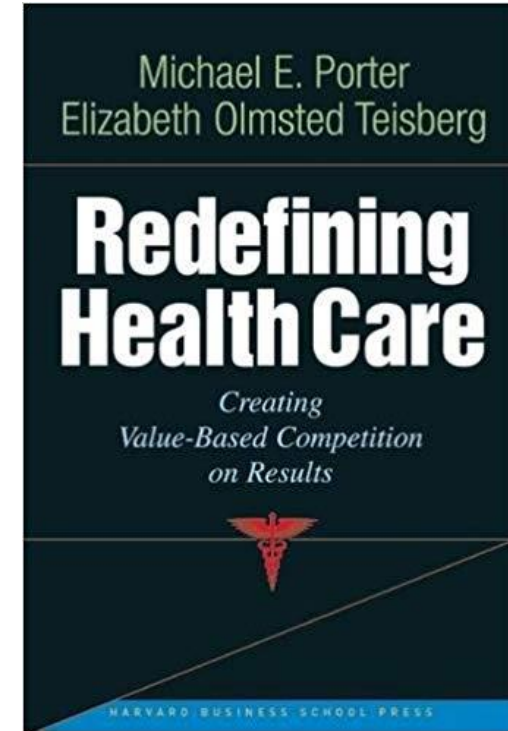
## VBHC: a common agenda between stakeholders

Francisco Nuno Rocha Gonçalves, PhD

# Agenda

- VBHC: a common agenda between providers, suppliers and other stakeholders
- Patient centricity: what do patients want?
- Outcomes and cost measurement
- PROMs, PREMs
- Impact on patients, physicians and the future of healthcare
- Take aways

# What is the goal of healthcare management?



$$\text{Value} = \frac{\text{Clinical Outcomes} \times \text{Patient Satisfaction (PROM; QoL;...)}}{\text{Cost}}$$

*“Achieving good patient health outcomes is the fundamental purpose of healthcare”*

Michael E. Porter, Harvard University

- *Can we redesign healthcare systems to meet “patient health outcomes”?*
- *Where do we start?*

# Roles for a collaborative agenda

## **Patients:**

- Define which outcomes matter to them
- Be available for testing and using new ideas/technologies
- To offer proposals for improvements

## **Providers:**

- Measure outcomes & costs
- Manage change and continuous improvement
- Nurture and share best-practices

## **Payers:**

- Instill new value-based contracting
- Use financial leverage to lead the change
- Use/benefit/promote benchmarking

## **Suppliers:**

- Come up with innovative care pathways
- Support RWE measurement
- Provide disease expertise

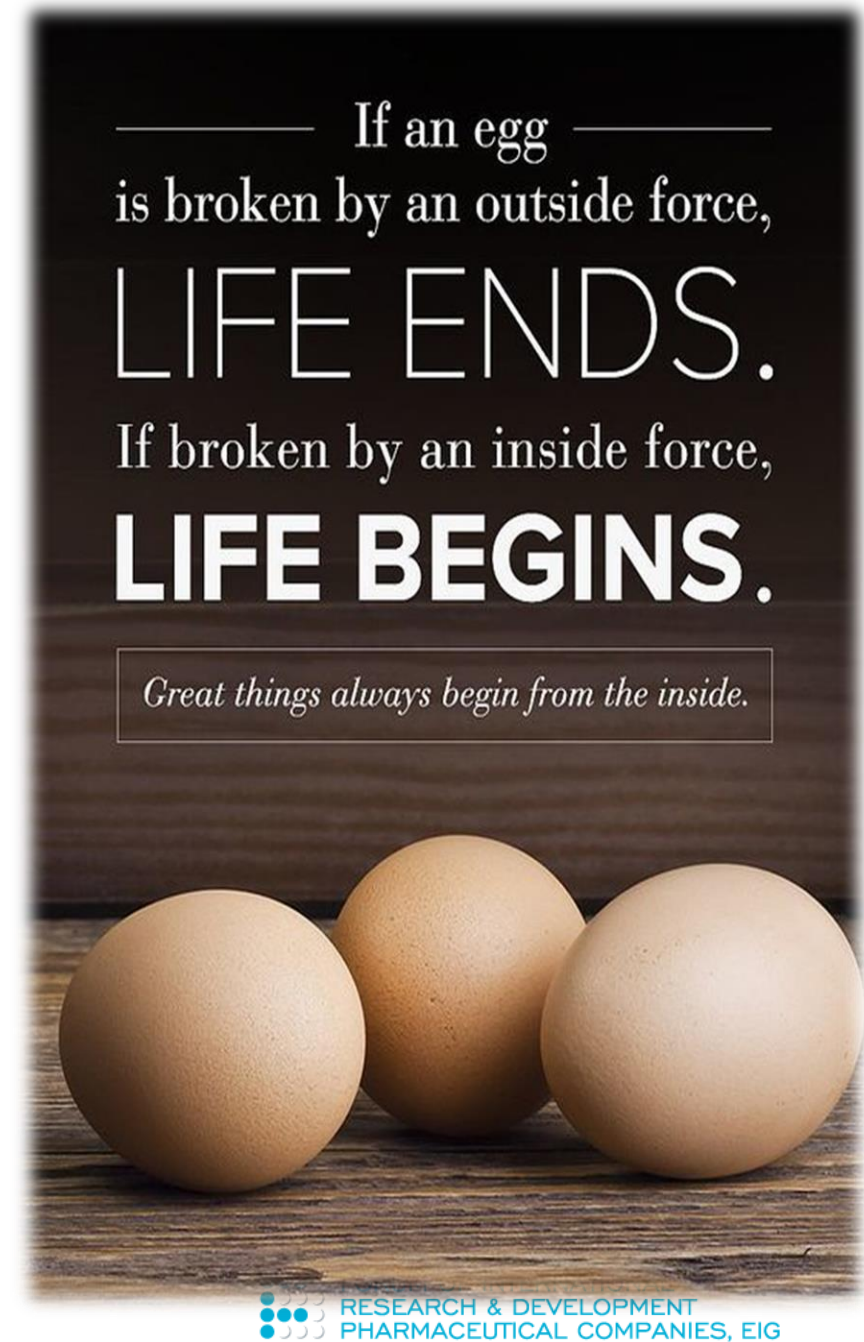
# Collaborative Opportunities in VBHC



- **Value Chain Integration**
- **Institutional growth**
- **Value based pricing**
- **Risk sharing agreements**
- **RWE – Outcomes research**
- **Digital technologies for patients (centricity)**
- **Technologies for providers (integration, control)**

# Patient expectations

- 'Safe, high quality treatment'
  - The best treatment outcomes with minimum variation
  - Rapid uptake of new technologies
  - More proactive services
  - Staff 'at their best'
- 'Waiting within reason'
  - for months, read days or weeks,
  - for weeks, read hours or days
  - for hours, read minutes
- 'An integrated, joined up system'
  - A borderless service, effective links and communication between different parts of the services
- 'Comfortable hotel services'
  - not 5 stars, neither a hostel
- 'A patient-centred service'
  - Not all patients are the same – not just income, gender or ethnicity, attitudes to health very different.
  - More choice – but over what, hotel services, doctors, speed of treatment, range of treatment?





# What do patients want to know?

## Survival

- What is the survival?
- When will my disease progress?
- How effective is the treatment?

## Patient pathways

- What is the prescribed treatment?
- How long will I wait for a decision? For a treatment?
- What is the typical pathway?



## PROM's (Qol...)

- What is the patient's quality of life?
- What are the side effects?
- How to improve symptom control?
- Is there a patient support group?
- What digital tools exist for patients?

## Social Variables

- What will be the implication for my family? For my job?
- Will there be costs?



# What are PROMs for?

They intend to improve clinicians' understanding of the disease(s) and treatment(s) effect(s) from the patients' perspective.

The screenshot shows the 'Gestão de Questionários' (Questionnaire Management) interface of the IPOPORTO system. The top navigation bar includes links for 'Início', 'Planeamento', 'Resultados', 'Gestão de Questionários' (highlighted), and 'Sair'. The main heading is 'Gestão de Questionários', followed by the instruction 'Escolha o Paciente e o Inquérito a consultar.' (Choose the patient and the survey to consult).

The interface features several filters and selection options:

- Diagnóstico:** A dropdown menu labeled 'Filtrar por Diagnóstico'.
- Protocolo:** A dropdown menu labeled 'Filtrar por Protocolo'.
- Data Início:** A date selection field with a calendar icon.
- Data Fim:** A date selection field with a calendar icon.
- Escolha o paciente:** A dropdown menu for selecting a patient.

Below these filters is a grid of 20 questionnaire options, each in a light blue box with a code and a description in parentheses:

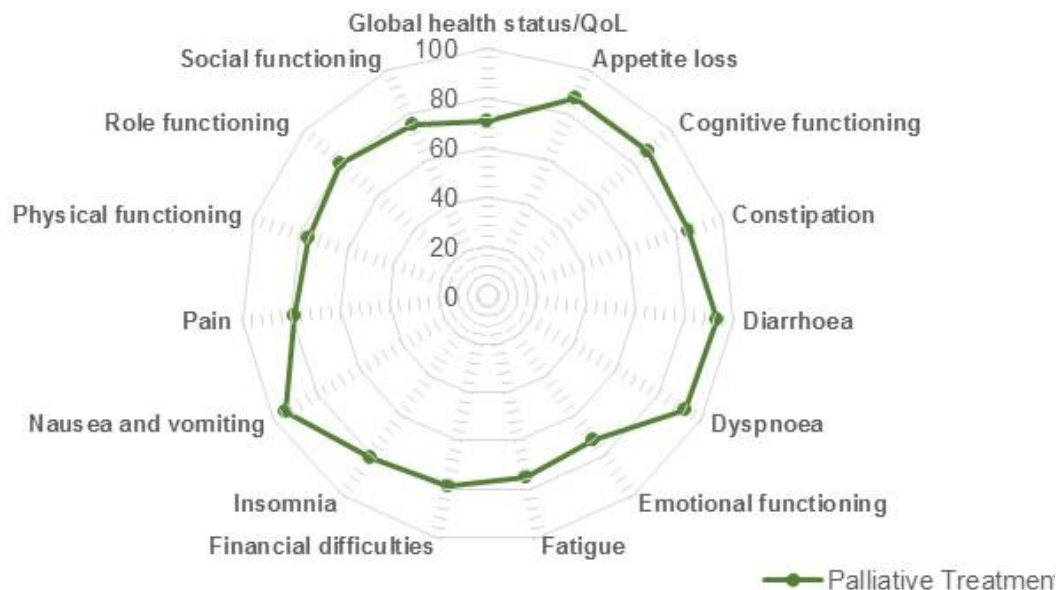
C30 (Genérico)	BN20 (Cancro do Cérebro)	BR23 (Cancro da Mama)	CR29 (Cancro Colo-Rectal)	CX24 (Cancro do Colo do
GINET21 (Tumores Neuroendócrinos)	H&N35 (Cancro de Cabeça e Pescoço)	INFO25 (Informações)	LC13 (Cancro do Pulmão)	MY20 (Mieloma Múlti
OES18 (Cancro do Esôfago)	OG25 (Cancro do Esôfago - Gástrico)	OV28 (Cancro do Ovário)	PR25 (Cancro da Próstata)	STO22 (Cancro Gástri
EQ-5D-3L (Genérico)	FACT-Hep (Cancro Hepatobiliar)	CQ9SF (Cataratas)		

A blue 'Consultar' button is located at the bottom of the grid.

# PROM's – HRQoL

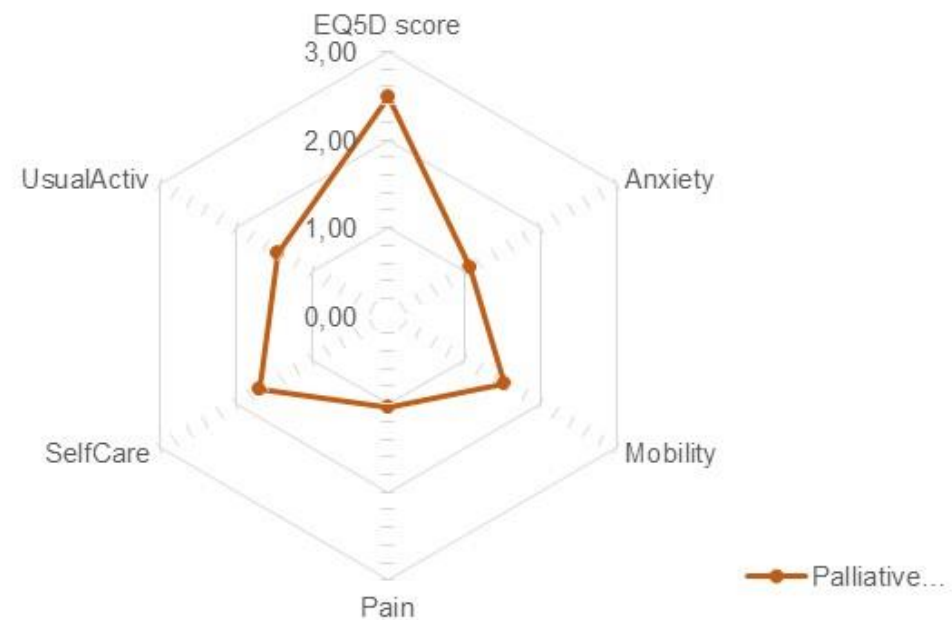
## The value of therapeutic innovation in patients with malignant melanoma

(a score of 3 represents the best performance)



## The value of therapeutic innovation in patients with basal cell carcinoma

(a score of 3 represents the best performance)



# Web-Based System for Self-Reporting Symptoms Helps Patients Live Longer

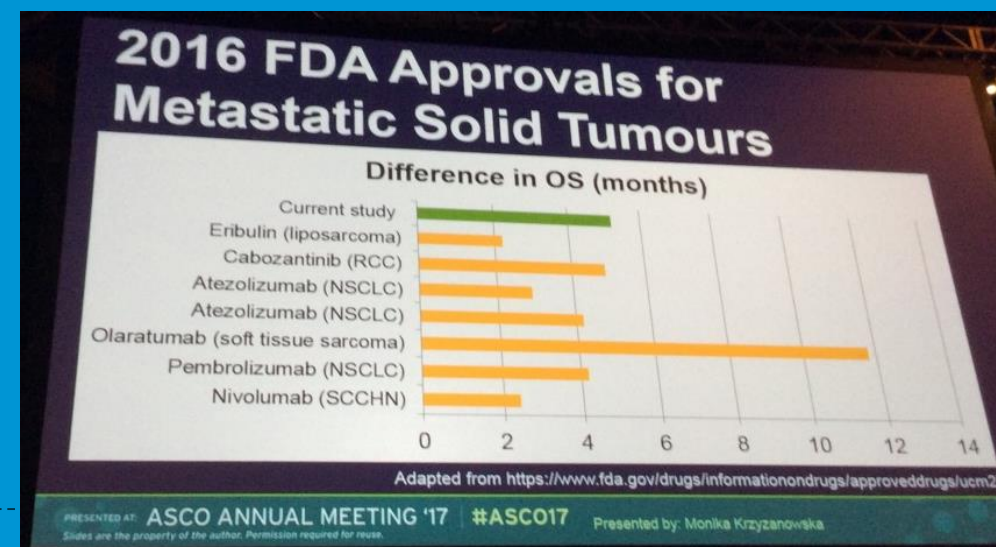
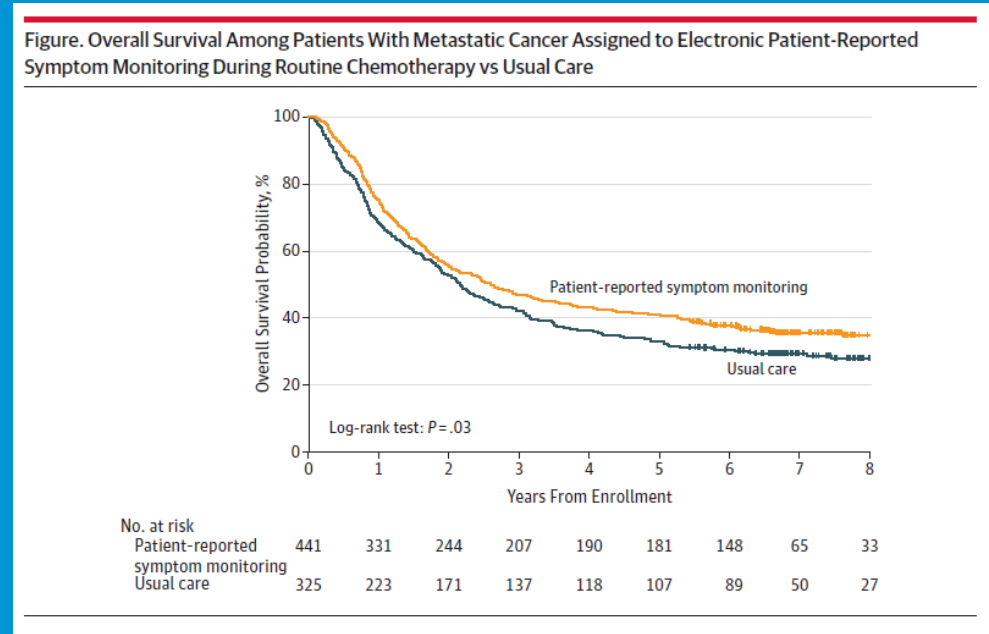
Study Supports Increased Use of Patient-Reported Outcomes in Oncology (ASCO 2017-Ethan M. Basch)

## Results:

Between September 2007 and January 2011, 766 patients were randomized, (...) Cancer types included genitourinary (32% of patients), gynecologic (23%), breast (19%), and lung cancer (26%). Survival results were assessed in June 2016 after a median follow up of 7 years and 517/766 (67%) In the multivariable model, results remained statistically significant with a hazard ratio of 0.832 ( $p = 0.04$ ; 95% CI; 0.696, 0.995).

## Conclusions:

Systematic symptom monitoring during outpatient chemotherapy using web-based patient-reported outcomes confers overall survival benefits.



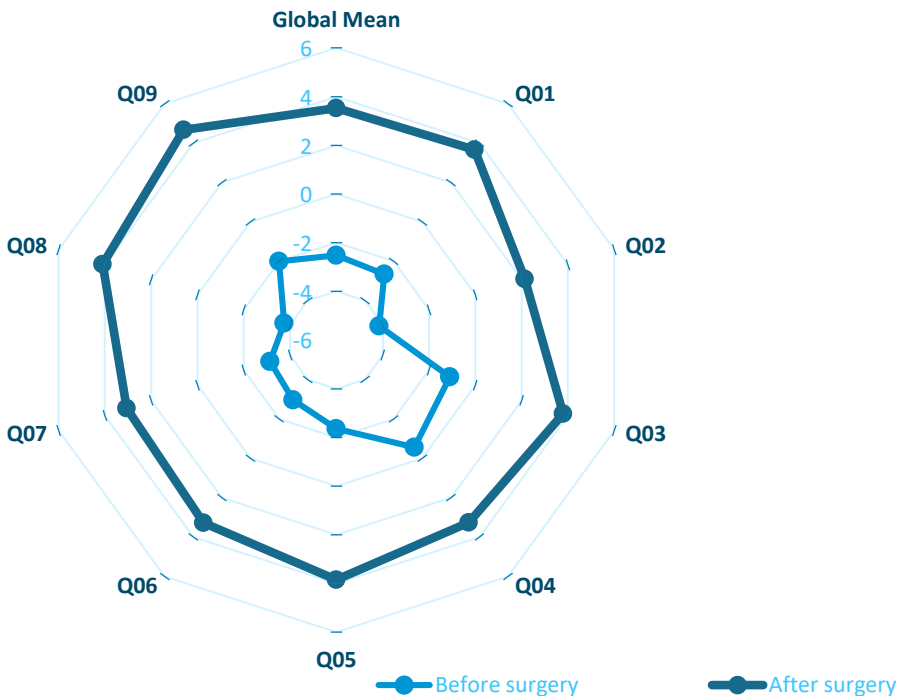
# PROM's and Personal Health Care Records

# PROM's – Eye Cataract Surgery

## Quality of life of cataracts patients - Catquest-9SF

N=280

(the high mean value represents the better performance)

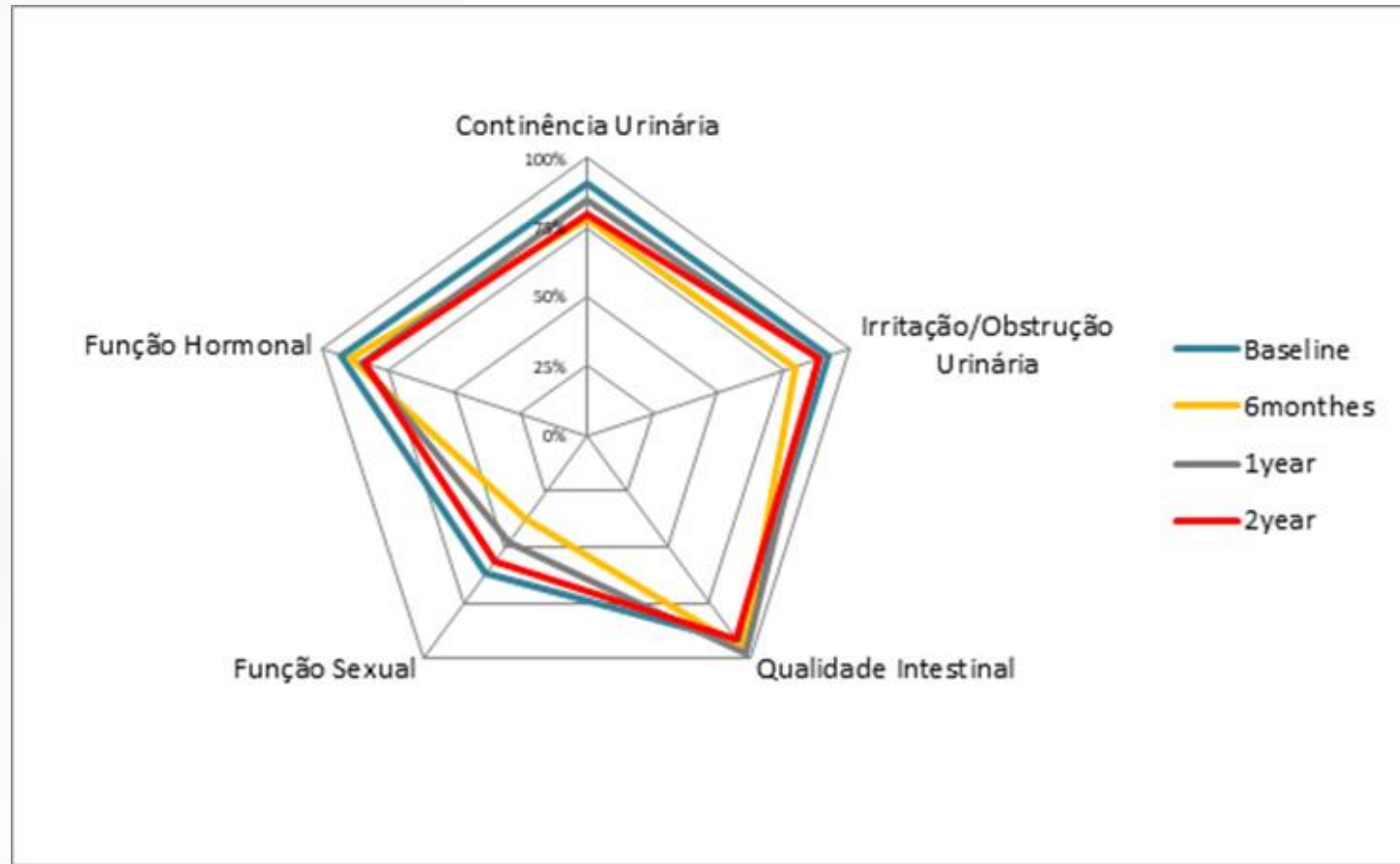


	Before surgery		After surgery	
	Mean	IC 95%	Mean	IC 95%
Q1	-2,650	(-2,7782; -2,5212)	3,659	(3,5068; 3,8118)
Q2	-4,146	(-4,2614; -4,0304)	2,141	(1,9872; 2,2948)
Q3	-1,102	(-1,3175; -0,8857)	3,795	(3,6406; 3,9485)
Q4	-0,559	(-0,8503; -0,2682)	3,254	(3,1005; 3,4069)
Q5	-2,356	(-2,4773; -2,2341)	3,845	(3,6721; 4,0188)
Q6	-2,964	(-3,0986; -2,8301)	3,277	(3,1161; 3,4373)
Q7	-3,136	(-3,2851; -2,986)	3,056	(2,9037; 3,209)
Q8	-3,738	(-3,8917; -3,5852)	4,096	(3,9078; 4,2846)
Q9	-1,997	(-2,1904; -1,8038)	4,671	(4,5167; 4,8246)
Global Mean	-2,514	(-2,6281; -2,4008)	3,527	(3,3821; 3,6715)

After performed a paired-sample T-test, and if we consider a 5% level of significance we concluded that surgery have effect on patient quality of life.

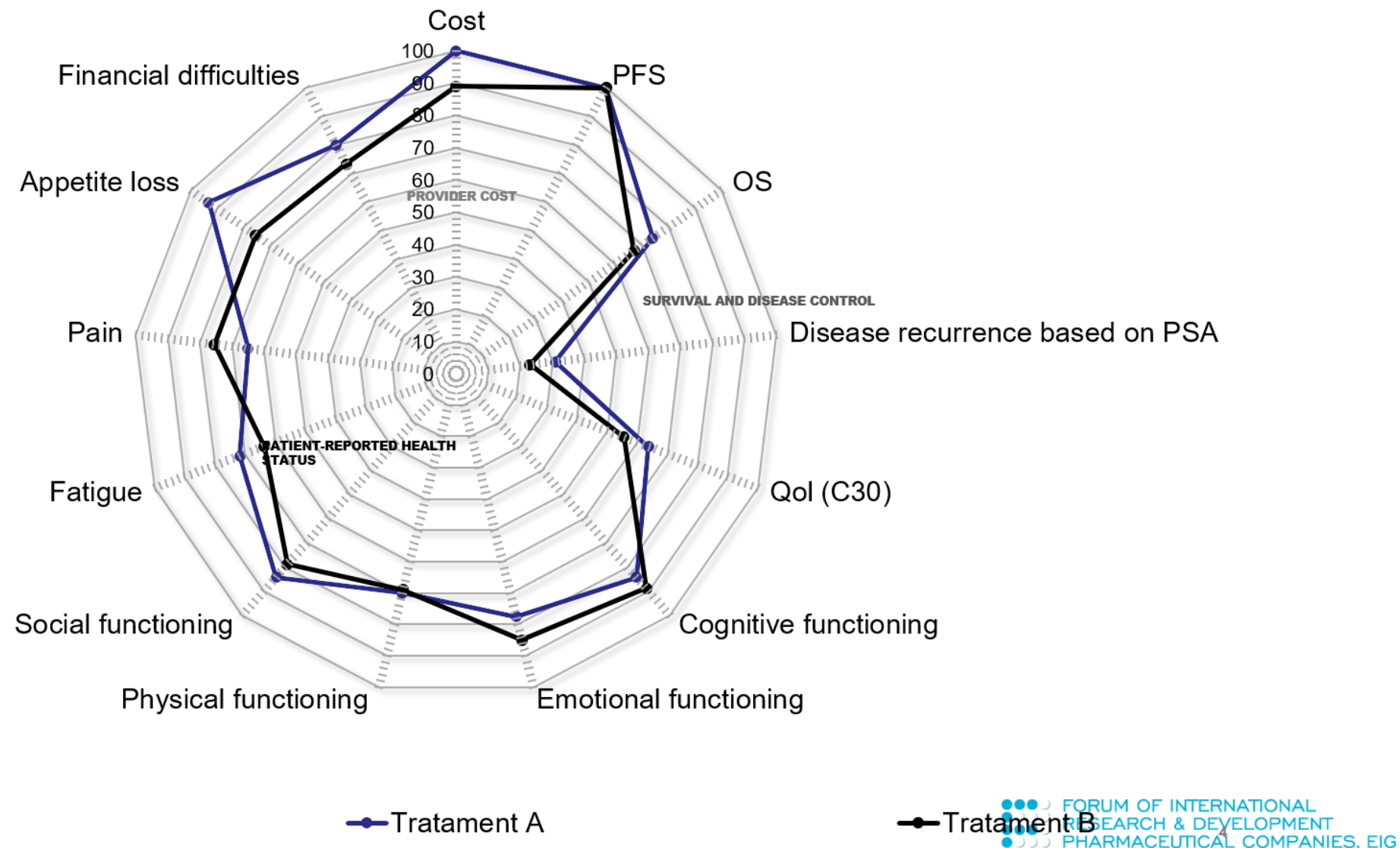
In all the dimensions surgery was effective (see the plot above).

# PROM's – Prostate Cancer Full Cycle of Care

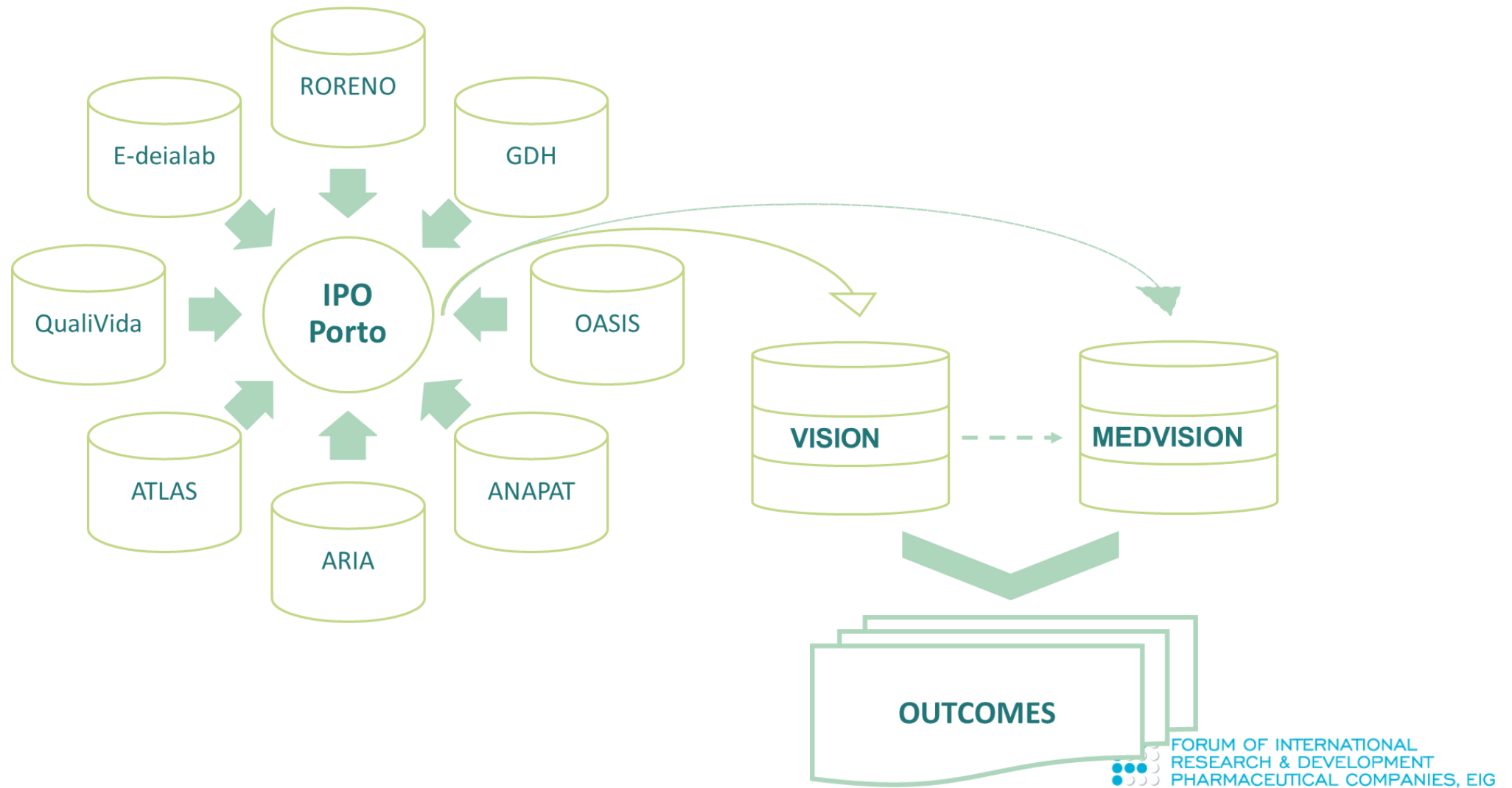




# What is the goal of healthcare management?



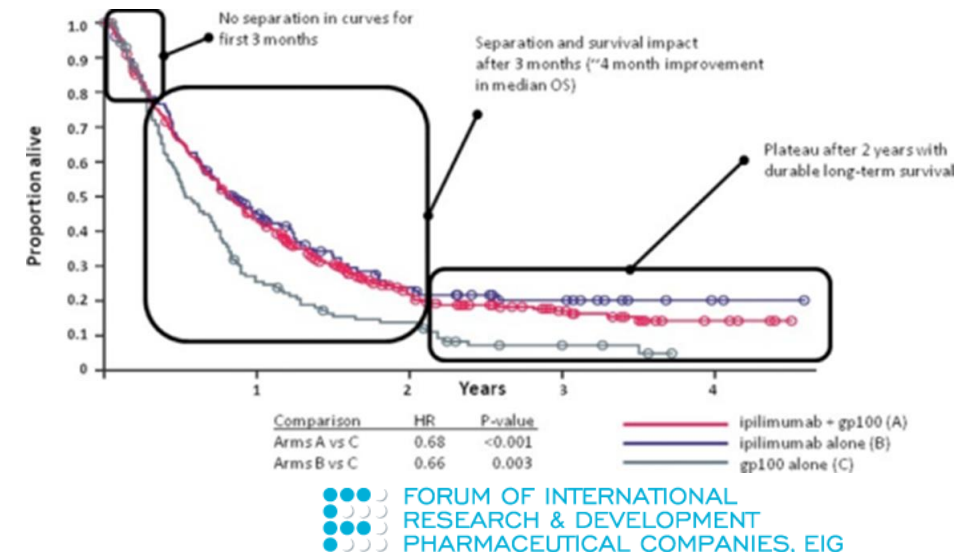
# Measurement Tools – the EHR and others



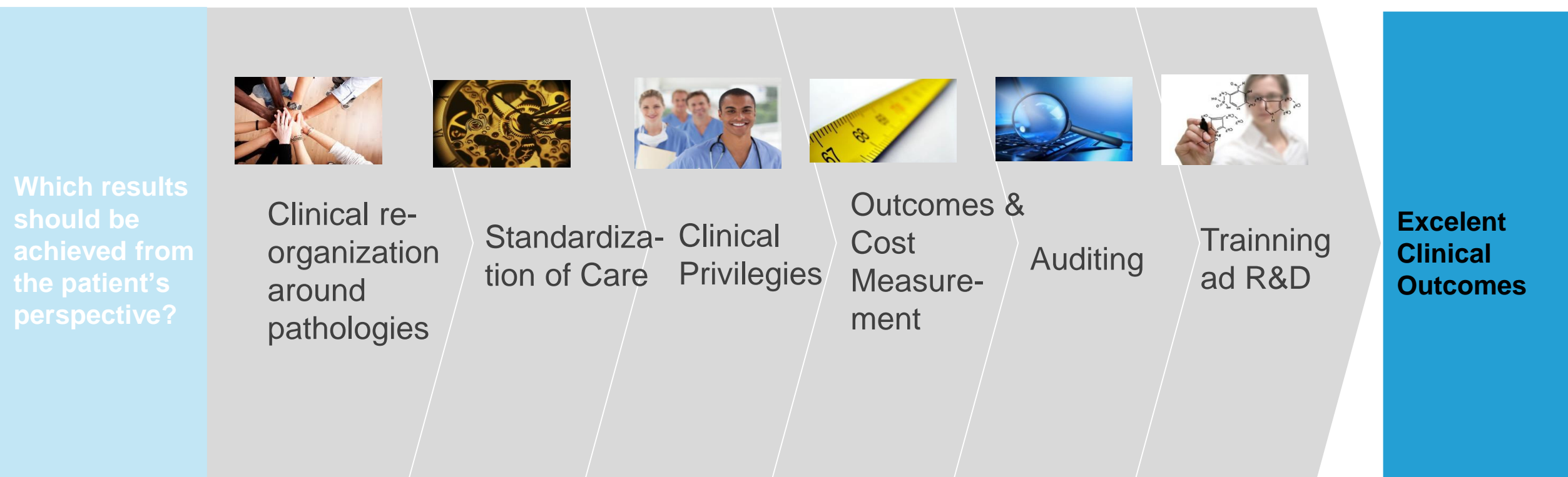


# Innovative value-based models

- Payers and providers engage in innovative relationship, value-based, models referred to as:
  - personalized reimbursement models;
  - risk sharing agreements (RSAs);
  - outcomes/performance based agreements;
  - managed entry agreements; etc.
- RSAs has gained importance in European countries and has denoted a substantial increase of agreements based on results and/or purely financial agreements.
- For all types of agreement, there are advantages in their adoption and challenges of implementation.



# The process of Clinical Transformation



- Focus on what matters to patients
- Fostering multi disciplinary teams to develop structured, integral and integrated clinical pathways, that are effective, safe, and efficient

# Our Choices and the Way Forward

The Lancet Commissions

## Key ideas for Future Sustainability:

- Focus on Efficiency (overall, system, hospital, process of care, etc)
- Prevention, earlier diagnostics and earlier intervention
- Focus on access/equitable care
- Focus on Quality
- Social determinants of disease
- Bio markers, effective indications and unmet needs

Imperial College  
London

THE LANCET

### Technologies for global health

Peter Howitt, Ana Darzi, Guang-Zhong Yang, Hutan Ashrafian, Rifat Atun, James Barlow, Alex Blakemore, Anthony M J Bull, Josip Cox, Lesong Corzeh, Graham S Cooke, Nathan Ford, Simon AJ Gregson, Karen Kerr, Dominic King, Myutan Kulendran, Robert A Malkin, Azem Majed, Stephen Matlin, Robert Merfield, Hugh A Penfold, Steven D Reid, Peter C Smith, Molly M Stevens, Michael R Templeton, Charles Vincent, Elizabeth Wilson

#### Executive summary

Availability of health technology is inversely related to health need. Although health-care systems in high-income countries make extensive use of technology, people in the world's poorest countries often lack the most fundamental drugs and devices. A concerted global effort to encourage the development and use of health technologies that can benefit the poorest people in the world is needed.

Technologies for global health refers to a broad category of interventions that reduce malnutrition, improve sanitation, and increase safety on roads, and they are distinct from health technologies specifically designed to prevent, diagnose, or treat illness, from the highly specific (eg, a vaccine for a particular disease) to the more widely applicable (eg, a blood pressure monitor). The contribution of technologies for health should be acknowledged, and they are considered here, although this report mainly focuses on the narrower category of health technologies.

Technology is often associated with complex devices such as surgical robots, but this report takes a broader view, including less tangible technologies such as clinical guidelines and electronic applications. As an increasingly widespread technology, the potential for mobile telephones to support health (m-Health) are discussed in detail.

For the greatest global health challenges—those targeted in the Millennium Development Goals (MDGs) and the rising burden of non-communicable disease—technology is already making a contribution to meeting global health needs. However, it could have a greater effect on health outcomes in low-income and middle-income countries, where the greatest burden of disease lies. Insufficient resources have been dedicated to the development of so-called frugal technology to meet the needs of the world's poorest people. Even when the necessary technology does exist, it is frequently inaccessible, either because it is too expensive or because of constraints related to distribution, energy supply, or human resources. Efforts should also be made to ensure that technology is acceptable to, and will be adopted by, users.

Decisions to introduce health technologies into resource-poor settings should be evidence based, with

careful consideration given to achievement of successful implementation and scale-up, requiring a focus not only on technology but also on associated process innovations that enable effective use. Introduction and use of technology in resource-poor settings raises several issues that need to be addressed. How can technology be ensured to improve rather than damage health? And how should technology be deployed in an equitable, but financially sustainable way? Additionally, greater focus on frugal technology offers truly global promise. Novel technologies are being created in low-income and middle-income countries that might help mitigate escalating health-care costs in high-income countries.

This report also sets out recommendations. Some of these recommendations are for specific organisations or health needs. Five are overarching. First, increased funding and support are needed to enable the development of more frugal technologies. Second, technology should be combined with other innovations to support effective adoption and implementation—technology should not be considered in isolation from the wider context or health system of a low-income or middle-income country.

Third, we need to think broadly and take a multi-disciplinary approach to development and introduction

#### Key messages

- Technology can improve global health, and includes not only pharmaceuticals, vaccines, and devices, but also advances such as better sanitation and agriculture.
- At present, technology for health focuses on the needs of the wealthy.
- More frugal technology, specifically designed for the world's poorest people, is needed.
- Such technology also has the potential to be a disruptive technology for health care in high-income countries.
- Technology alone is not enough—it needs to be combined with innovations in processes to have the greatest effect.
- Capacity to successfully create and use technology should be part of the post-2015 assessment of global development.



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See Editorial page 447  
See Online for a video interview with Peter Howitt

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# Our Choices and the Way Forward

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## Risk-sharing agreements, present and future

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### Abstract

Risk-sharing agreements between pharmaceutical companies and payers stand out as a recent practice, the use of which has been increasing in the case of innovative medicines, particularly in the field of oncology, which aims to ensure better budgetary control and a lower risk of spending on medicinal products without full evidence of clinical benefit.

In this article, the authors discuss the types of existing agreements, as well as those used in Portugal, their advantages, disadvantages and future challenges of implementation, as well as their potential role in access to therapeutic innovation, namely medicines for cancer treatment. For this purpose, a nonsystematic review of indexed and nonconventional literature was carried out.

There is a tendency for the risk-sharing agreements established between payers and pharmaceutical companies to include a component of monitoring the use of medicines and outcomes measurement, involving real life data collection. Portugal is no exception and, although most agreements are still financial in nature, there is already a strong desire for other agreements, in particular clinical outcomes based.

It is concluded that there is not yet a gold standard methodology in relation to the type of agreements to be practiced. Moreover, its opportunity cost, including the cost of implementation, remains to be scrutinised. However, regardless of the type of agreement, the advantages of adopting these agreements are well known, inevitably related with challenges of implementation. The need for an infrastructure to support information sharing is undisputed and urgent.

The future of therapeutic innovation and increased pressure on health budgets will require alternative, more flexible models, personalized reimbursement models that allow alignment of medicines prices with the value they deliver in treating the several diseases.

**Keywords:** *risk sharing, agreement, price per combination, price per indication, access*

## Key ideas for Future Sustainability:

- MEAs and financial RSA agreements
- VBP and RWE
- Focus on Outcomes
- More transparency (industry, politics, etc)
- Regulatory changes
- Economic discrimination of buyers
- Generics and biossimilars

# A cascade of incentive tools

## Value Based Relationships by:

- Contracts & Commercial agreements
- Strategic Alliances or M&A
- RSA/PRM either Financial or Performance based



Providers



Payers



Patients

## Value Based Relationships by:

- Bundles
- Capitation

Less from:

- Fee for service
- Historic budgets



# Summary

## **The potential of VBHC:**

- to improve the way we deliver healthcare
- to improve patient outcomes
- to support healthcare investment / sustainability
- can be combined with traditional HTA, management tools such as Lean Management, etc

## **Critical success factors:**

- Leadership and culture
- Systems Integration
- Business analytics
- Operational efficiency
- Risk and outcomes management contracts