Towards Value-based Healthcare

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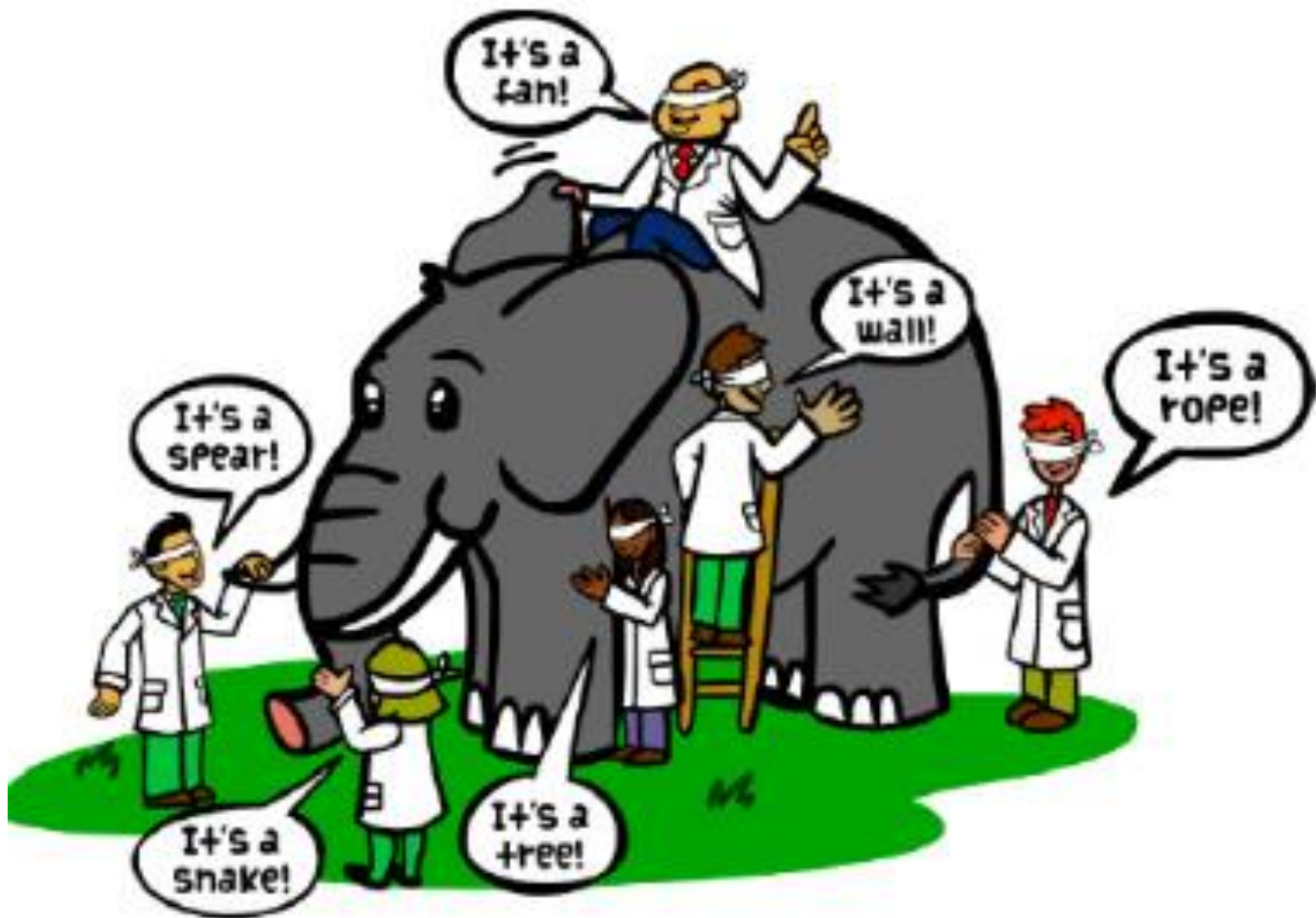
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Barcelona

What is Value in Health care?
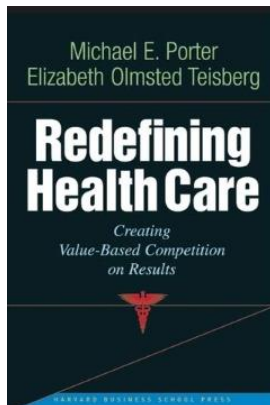
Central goal:

Value for the patient

Value-based Healthcare (VBHC)

$$\textbf{VALUE} = \frac{\textit{Outcomes that matter to patients}}{\textit{Cost of delivering the outcomes}}$$

M. Porter, E. Teisberg. Redefining Health Care. 2006

How to mesure Value?

How to implement VBHC?

Components of the Value-agenda

From M. Porter. The Strategy that will fix the Healthcare. Harvard Business Review. 2013

Improve health outcomes

It requires holistic perspective on system set-up

All stakeholders play a role

- ✓ Providers
- ✓ Patients
- ✓ Supplier
- ✓ Payers
- ✓ Regulators

Case Study Catalunya

Health Care System in Catalonia

Catalonia

- ✓ National Health System

- ✓ Universal coverage. Funded by Taxes

- ✓ Spending 9,1% of Catalan GDP

- ✓ Multi-provider system

- ✓ Payment system mainly

  - Primary Care Capita

  - Hospital Discharge + complexity

Organize care around a single medical condition

From M. Porter. The Strategy that will fix the Healthcare. Harvard Business Review. 2013
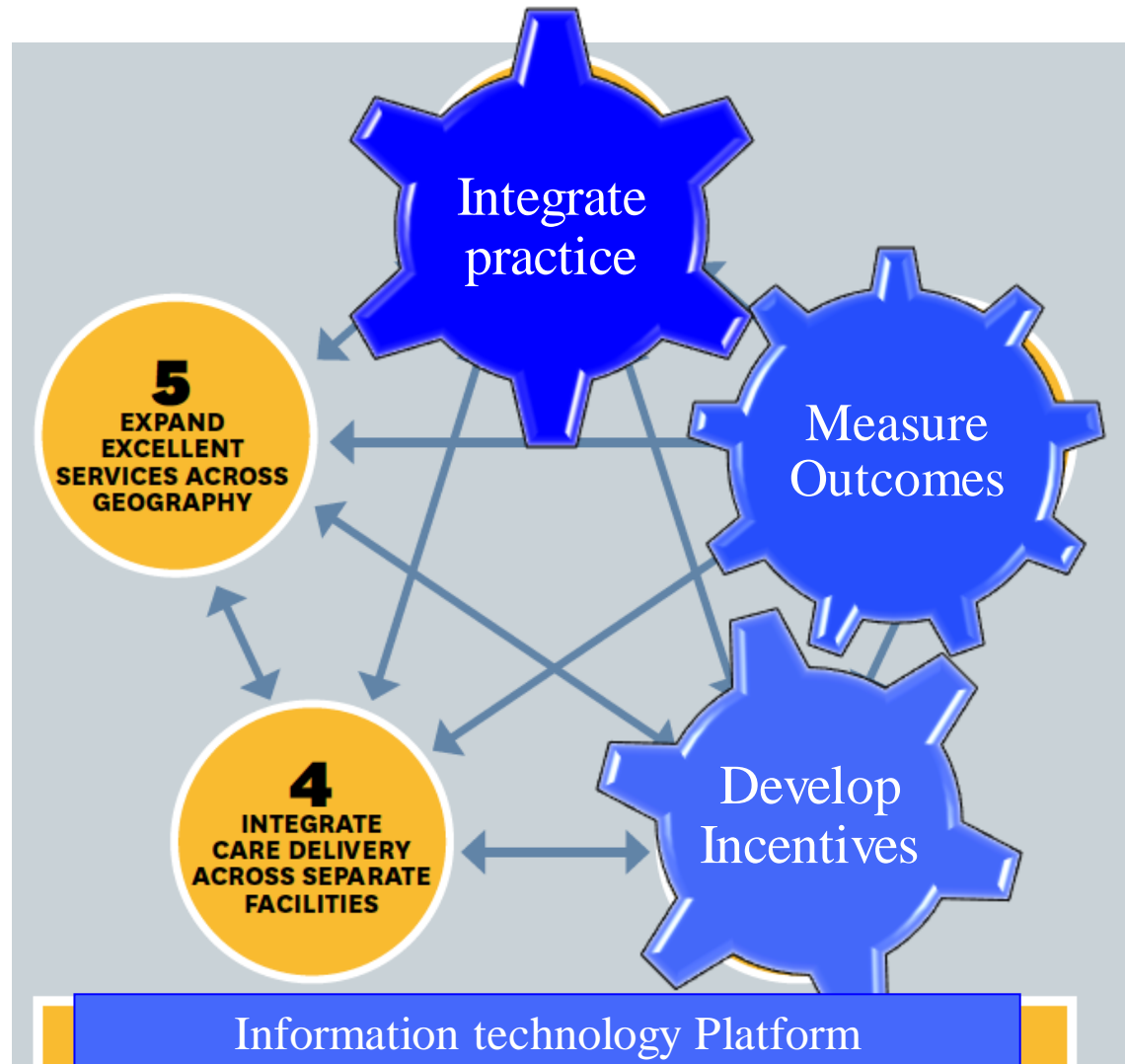
Provider
+
Patients

Welcome to
Vall
d'Hebron
Barcelona Hospital Campus

Provider:
The largest and most complex University Hospital

Vall d'Hebron Barcelona Hospital Campus | Vall d'Hebron Hospital | Vall d'Hebron Institut de Recerca | VHIO VALL D'HEBRON Institute of Oncology | Cemcat Centre d'Esclerosi Múltiple de Catalunya

- **9,000** professionals
- **450,000** reference population
- **1,100** beds
- **58,000** discharges/year
- **42,000** surgical Interventions/year

- **22** buildings
- **47** training specialities
- **531** residents
- **80** research groups
- **900** clinical trials

Key components of VBHC

Integrate Practices
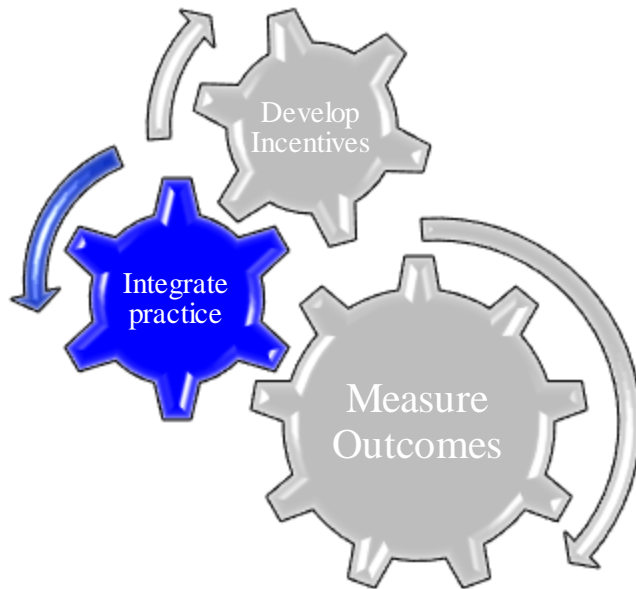
- ✓ Organize around medical conditions and target population

- ✓ Better coordinate, avoid silos and lack of accountability in organization

- ✓ Increase expertise of the care teams

Key components of VBHC

Measure Outcomes
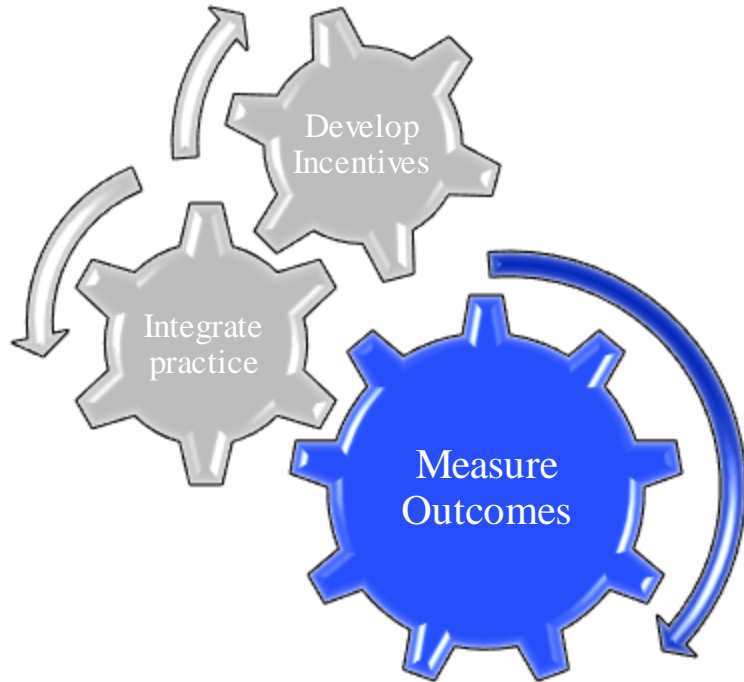
- ✓ Identify outcomes that matter to patients
- ✓ Make data trustworthy
- ✓ Track and share results
- ✓ Empower
- ✓ Learn and Identify best practices
- ✓ Improve

How to Choose the Outcomes?

Ask the patients

Ask the clinical team

Outcomes that matter to the patient

Survival and Disease control

Disutility of Care

Quality of Life

Patient Reported Outcomes (PROMs)

Patient Reported Experience (PREMs)

Engage patients
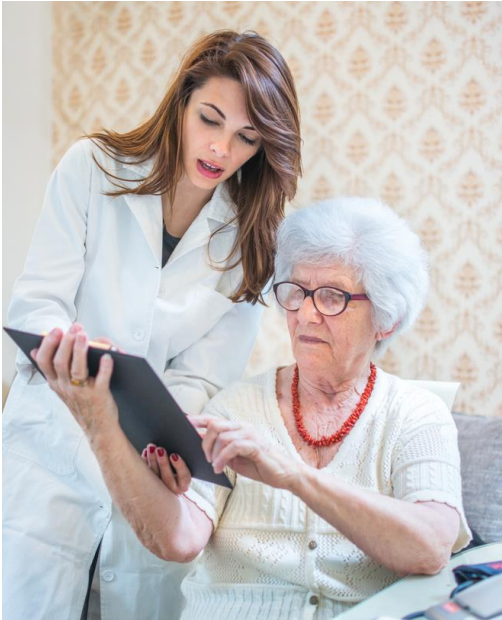
✓ Make it easy

• Length

• Collecting form

• Time

✓ **Make it relevant**

• Part of the care

• Recommended by the staff

• Use responses in real time to care for the patient

Choosing the measurement tool

International Consortium for Health Outcomes Measurement **(ICHOM): Validated questionnaries and Standarized set**
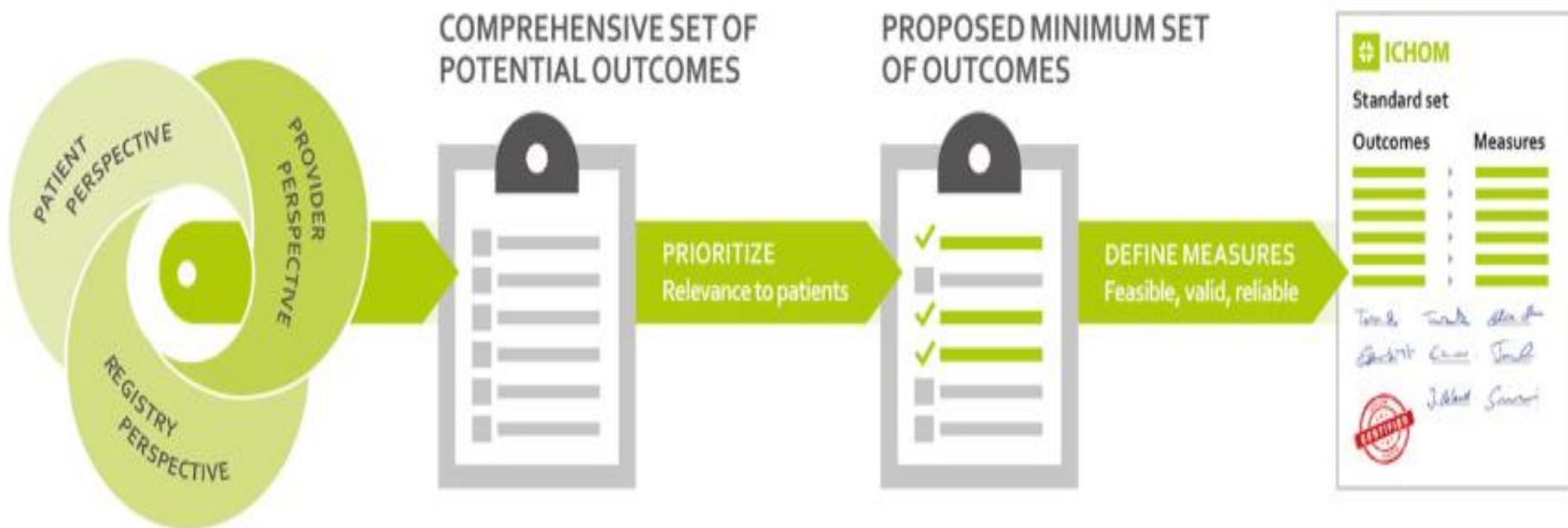
Engage clinicians

- ✓ Reduce administrative burden
- ✓ Make it easy to interpret
- ✓ Provide comparison
- ✓ Incorporate the EHR in real time

But his urinary function has improved to "good".

Quality of Life Score

Urinary Function

Actual — Expected

Erectile Function

21 — 20
16 — 16
14
10
4
0

0 3 6 9 12 15 18 21 24
Months Since Surgery

Good
Moderate
Poor

Bowel Function: N/A

Quality of Life: Current Score: 9 / 10

Example from: ICHOM. What matters most
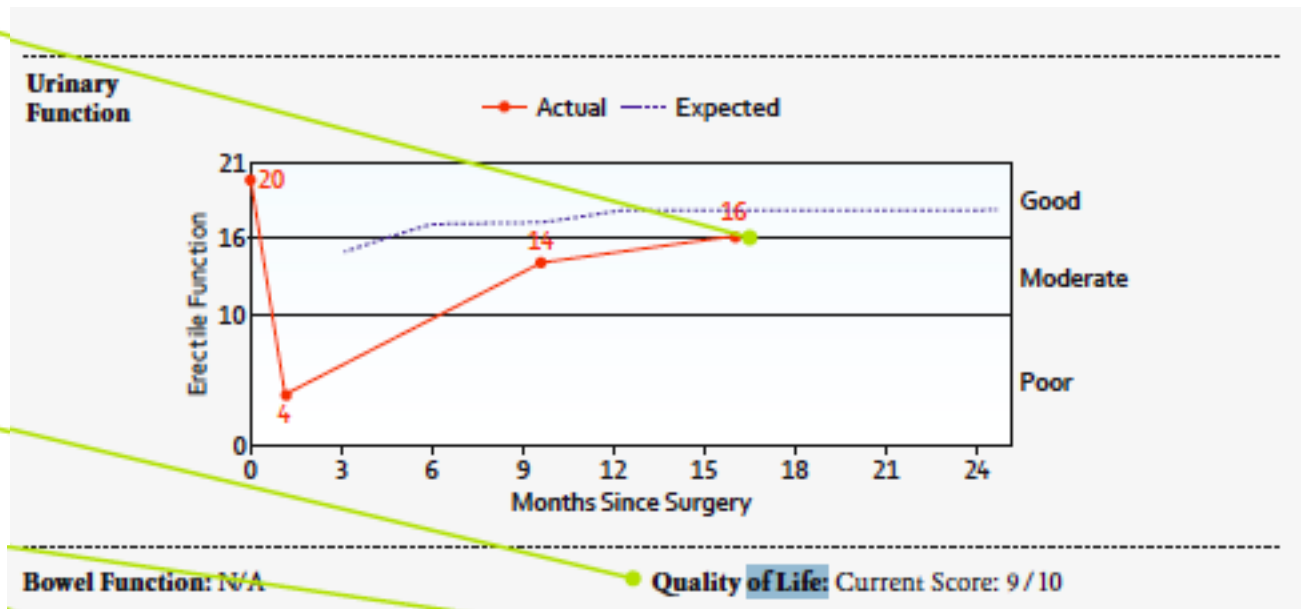
Engage the team

✓ Feedback to the team
- Ensure quality of data
- Risk-ajusted reports

✓ Compare and Benchmarking
✓ Act on data

Health status achieved

Process of recovery

Sustainability of health
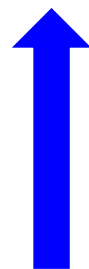
Disease Control
Quality of Life
Productivity

PATIENT VALUE
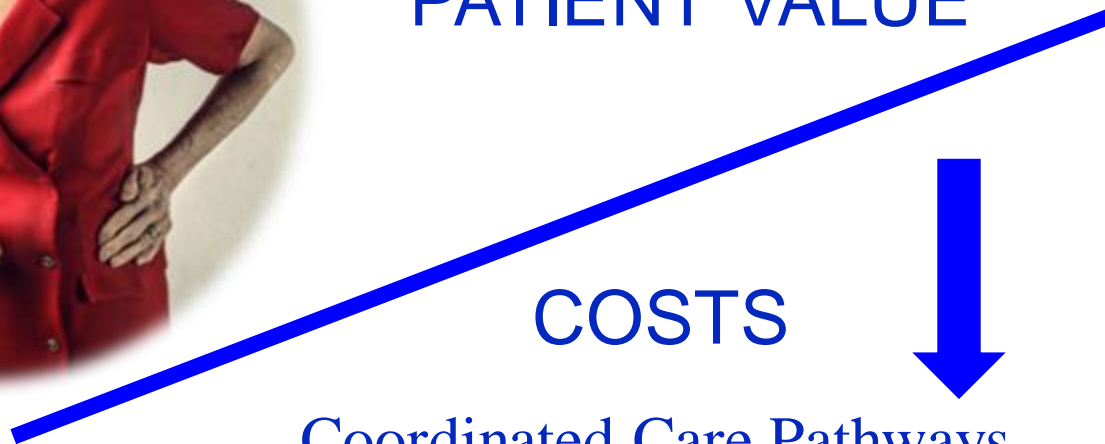
COSTS

Coordinated Care Pathways
Avoid complications and
non value activities
Increase innovation

- ✓ Supplier
- ✓ Payers
- ✓ Regulators

- **46** million primary care visits per year
- **760.000** hospital discharges per year
- **60** million electronic health record documents
- **100.000** convalescence discharges per year
- **2.7** million visits to emergency units
- **140** million electronic prescriptions per year

| **68** Hospitals | **369** Primary care teams | **49** Mental health centers | **72** Convalescence centers |

Risk-sharing arrangements

✓ Schemes of Payments per Results
  (**EPR:** *Esquema de Pagament basat en Resultats*)
✓ Efficacy, Safety
✓ Quality of life of patients

Comprehensive treatment, enhanced by digital technologies, of patients with Automated implantable cardioverter defibrillator (AICD) including cardiac re-synchronization for patients in the area of influence of the Hospital

Changing the procurement model

- Price-based procurement

- No collaboration Hospital-supplier

- In-office visits

- Payment for devices provided

- Value-based procurement

- Risk-sharing approach

- Remote monitoring

- New health-outcomes criteria included for payment system

Innovation in purchase:
Value- Based
Procurement

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Applying the VBHC framework to Hospital Agreement

STEPS TO VALUE-BASED HEALTHCARE

SELECT A **DISEASE OR CONDITION**	DEVELOP **PATIENT COHORTS BASED ON RISK AND PROTOCOLS**	DEFINE **OUTCOME MEASURES THAT ARE MEANINGFUL FOR PATIENTS**	DEFINE **TIMEFRAME REQUIRED TO ACHIEVE OPTIMAL OUTCOME**	QUANTIFY **BASELINE OUTCOMES AND COSTS FOR EACH PATIENT COHORT**	DETERMINE **PROSPECTIVE PERFORMANCE AND COST OBJECTIVES – THE VALUE PROPOSITION**	DEVELOP **BUSINESS MODEL**
1 ✔	2 ✔	3 ✔	4 ✔	5 ✔	6 ✔	7 ✔
CARDIAC ARRHYTHMIAS AND HEART FAILURE.	**PATIENTS IMPLANTED WITH ICDs AND CRTs.**	**CLINICAL OUTCOMES** (inappropriate shocks reduction, % AF detected), **FUNCTIONAL OUTCOMES** (in-office visits reduction) & **PATIENT REPORTED OUTCOMES** (RM adherence).	**AN ASSESSMENT WILL BE DONE ON A YEARLY BASIS, COMPARING THESE OUTCOMES AGAINST THE BASELINE DATA.** *(Baseline information was collected during one-year experience*	**COST ANALYSIS BASED ON PREVIOUS YEARS´ ACTIVITY.** Baseline info hospital collaboration agreement for proof of concept: • Remote Monitoring Center. • Outcomes analysis based on Pilot Experience	**EQUAL OR LESS COST WITH BETTER SERVICE AND ALIGNED OBJECTIVES.** Brand agnostic Remote Monitoring Service Center for device follow up for all ICD/CRT patient population. Unified information in one system for every device manufacturer.	**RISK SHARING BUSINESS MODEL CONSIDERING A FIX COST FOR INTEGRAL MANAGEMENT OF ALL PATIENTS TREATED.** **BUNDLE PAYMENT INCLUDING SERVICES AND SUPPLIES.** Same price during the life of the contract (4 years). If the hospital activity increases beyond than 10%, the contract will be expanded accordingly.

Joys and sorrows along the way

From the hospital:

- barriers from the Tender's department. "change? why?"
- Reducing the prices even more than last year?
- Fears regarding legal issues

From the industry:

- HARD resistance. Not willing to be involved in follow-up and complications of their devices

- HARD resistance to collaborate between different providers

- The whole industry fought against the Hospital tender

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Procuring entities

- Co-creation process requiring a Cultural Change.
- Top-down engagement
- Provider – Procurer interaction
- Multidimensional procurement Team
- Functional analysis of Needs
- Develop outcome-based service specifications : identification of key performance indicators (KPIs) for innovative service is difficult
- Evaluating impact requires a long term plan with assessment at different stages:
    - *Ex-ante (previous)*
    - *During deployment (pay on results)*
    - *Post (after implementation)*

- New schemes of payment

Innovation in purchase

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Companies

- In all cases the lead customer had an active interest in new solutions to solve immediate or long term problems
- From selling products to provide solutions
- Provider – Procurer interaction
- Build and coordinate a strong consortia is key
- New schemes of payment

Innovation in purchase

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AQuAS – Key Experience & Strengths –
Some PCP, PPI and Value-Based projects

Knowledge sharing

CSA
PIPPI
CSA
EURIPHI

CSA
PRO4VIP

PPI
STOP + 00

CSA
inspire
www.inspirecampus.eu

LIVE INCITE

PCP

IP
Stroke

PCP
STARS

PCP
nympha

PCP
DECIPHER PCP

PCP
Next generation
Sequencing

PPI
Thalea 2.0

IP
Intensive Care Unit

PCP
ECHORD

PCP
Thalea 4

+19
New PPI
(Catalan Ministry of
Health call)

Anti-SUPERBUGS

IP

PCP
magic

PPI
Cervical Cancer
Pharmacogenetics
markers

PPI
Sexually Transmitted
PPI Diseases (STDs)

3D
Implants

PPI

PPI
Ear Plug
Cleaning Device

Pedriatic Diabetes

RITMOCORE

PPI
Dyalisis treatment
PPI
TAVIs PPI
Digital pathology
Clinical Decision Suport
System

PPI
Rare
Disease

Blood Donor Track System
PPI
Adults diapers

PPI
Mental Health
Pharmacogenetics
markers

Needs Assessment & Open Technical Dialogue & Business Case Modelling	ITT definition - Legal	ITT Issued	Bids Assessment	Design & Prototyping	Evaluation

Definition	Execution

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20 anys

Observatori del Sistema de Salut de Catalunya

Data and
Transparence

| Inici | L'Observatori | Central de Resultats | Crisi i salut | Indicadors | Dades obertes | Contacte |

Central de Resultats

Dades generals	Satisfacció de les persones usuàries
Adequació	Efectivitat
Seguretat	Eficiència
Dades econòmiques	

[Transparency in public health decision-making].

[Article in Spanish]
García-Altés A[1], Argimon JM[2].

⊕ Author information

Abstract

Improving the quality and transparency of governmental healthcare decision-making has an impact on the health of the population through policies, organisational management and clinical practice. Moreover, the comparison between healthcare centres and the transparent feedback of results to professionals and to the wider public contribute directly to improved results. The "Results Centre" of the Catalan healthcare system measures and disseminates the results achieved by the different healthcare centres in order to facilitate a shared decision-making process, thereby enhancing the quality of healthcare provided to the population of Catalonia (Spain). This is a pioneering initiative in Spain and is aligned with the most advanced countries in terms of policies of transparency and accountability.
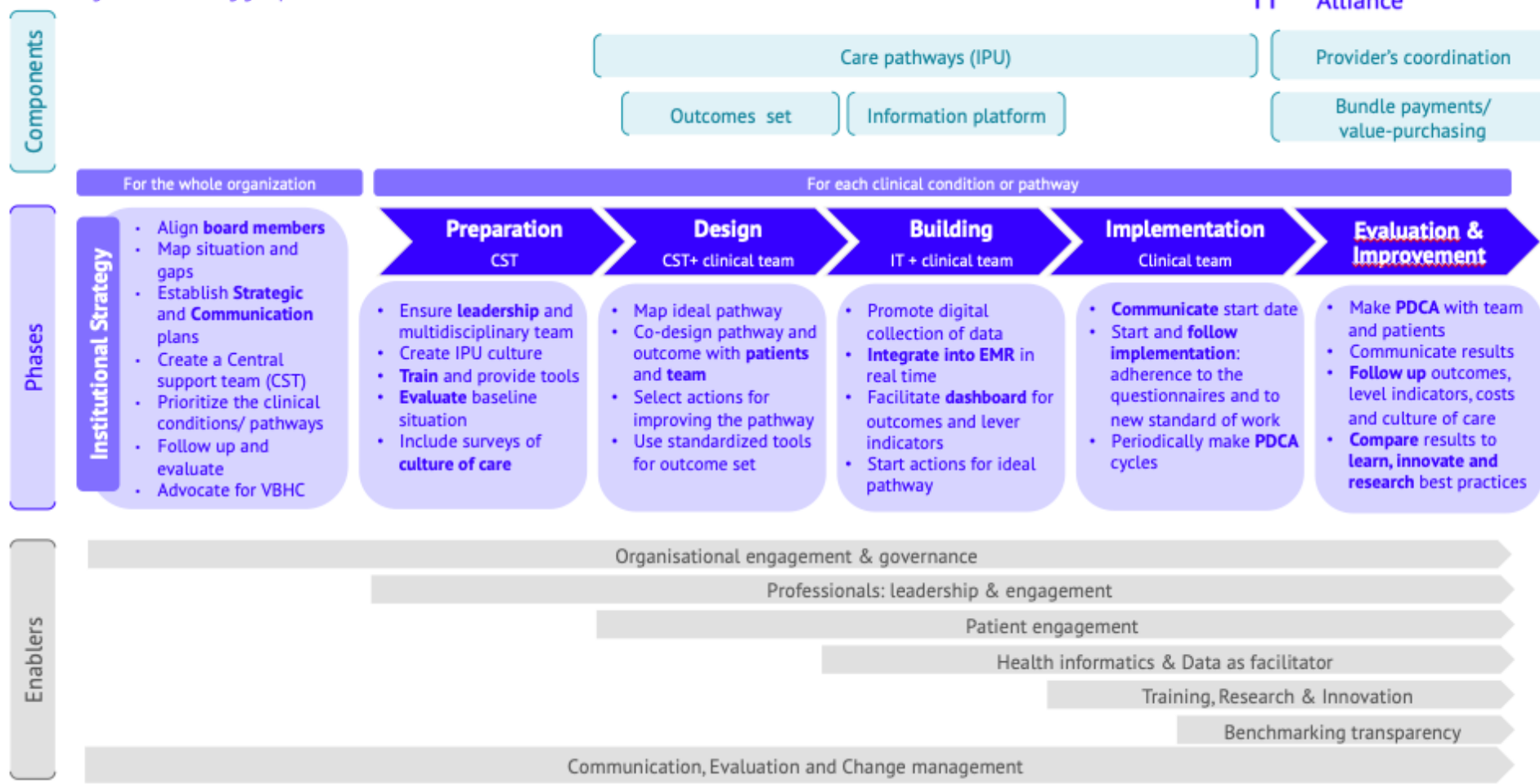
The European University Hospital Alliance (EUHA)

Benchmarking

Learning In ValuE (LIVE)

Blueprint for Implementing Value Driven Health Care in hospitals

Learning In ValuE working group

European University Hospital Alliance

Components

- Care pathways (IPU)
- Provider's coordination
- Outcomes set
- Information platform
- Bundle payments/ value-purchasing

Phases

For the whole organization

Institutional Strategy
- Align **board members**
- Map situation and gaps
- Establish **Strategic** and **Communication** plans
- Create a Central support team (CST)
- Prioritize the clinical conditions/ pathways
- Follow up and evaluate
- Advocate for VBHC

For each clinical condition or pathway

Preparation — CST	Design — CST+ clinical team	Building — IT + clinical team	Implementation — Clinical team	Evaluation & Improvement
• Ensure **leadership** and multidisciplinary team • Create IPU culture • **Train** and provide tools • **Evaluate** baseline situation • Include surveys of **culture of care**	• Map ideal pathway • Co-design pathway and outcome with **patients** and **team** • Select actions for improving the pathway • Use standardized tools for outcome set	• Promote digital collection of data • **Integrate into EMR** in real time • Facilitate **dashboard** for outcomes and lever indicators • Start actions for ideal pathway	• **Communicate** start date • Start and **follow implementation**: adherence to the questionnaires and to new standard of work • Periodically make **PDCA** cycles	• Make **PDCA** with team and patients • Communicate results • **Follow up** outcomes, level indicators, costs and culture of care • **Compare** results to learn, innovate and research best practices

Enablers

- Organisational engagement & governance
- Professionals: leadership & engagement
- Patient engagement
- Health informatics & Data as facilitator
- Training, Research & Innovation
- Benchmarking transparency
- Communication, Evaluation and Change management

erasmus+

Platform for Innovation of Procurement and Procurement of Innovation

If the patient wins, we all win!

Facilities staff

Caregivers

Patients

Health Educators

Pharmaceutical

Suppliers

Providers

Payers

Policymakers

Goverment

Thanks
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