Value Based Procurement -

Gateway to Better Health Outcomes

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Setting the Scene - Public Procurement in the EU

EUR
2.5 Trillion
(15% of GDP)

44.000
contract
authorities

198.000
contract
award
notices per
year

AVG: 51%
awarded
contracts
on lowest
price

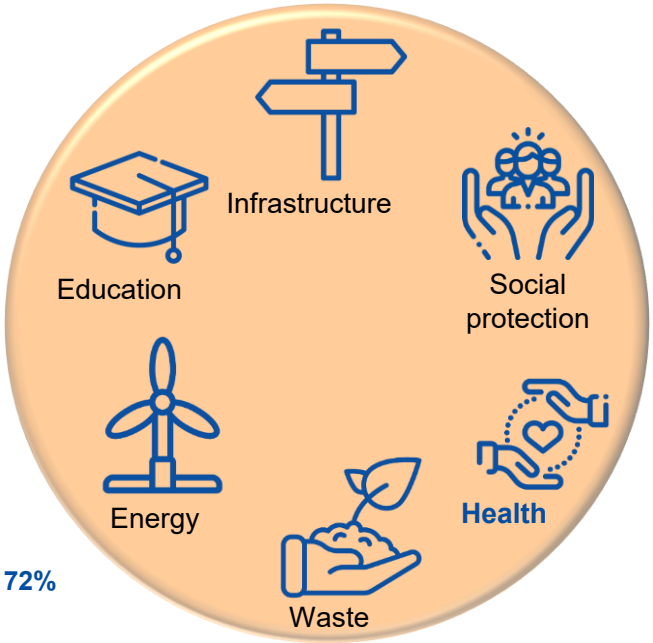
Medtech:
54-95%
awarded
contracts
on lowest
price

Finland 71%

Average
3.2
bidders
per tender

Medtech:
up to 98% of
above
threshold
procurements
used 'Open
procedure'

Finland 72%



Source: EC PPD Evaluation report, TED

European Commission

Setting the Scene - Healthcare faces major challenges

1. **Increased demand** for healthcare services (population growth, ageing population, chronic diseases)

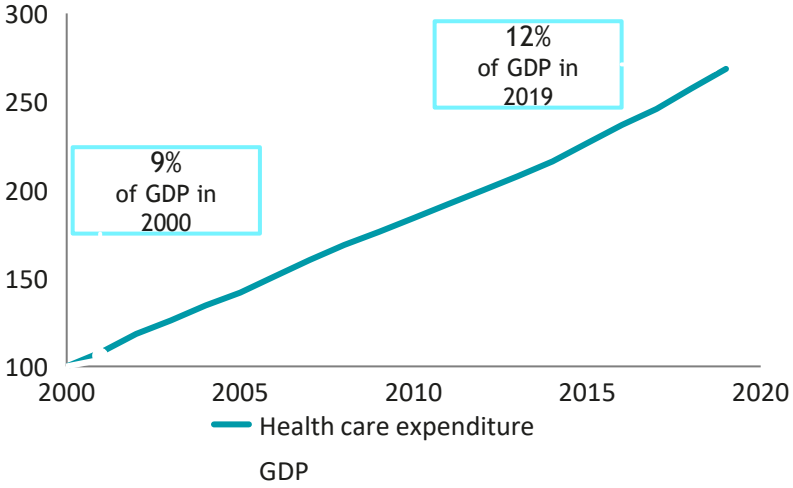
2. **Clinical staff shortages**, high workload, waiting lists

3. **Inequality** in healthcare access and differences in patient outcomes

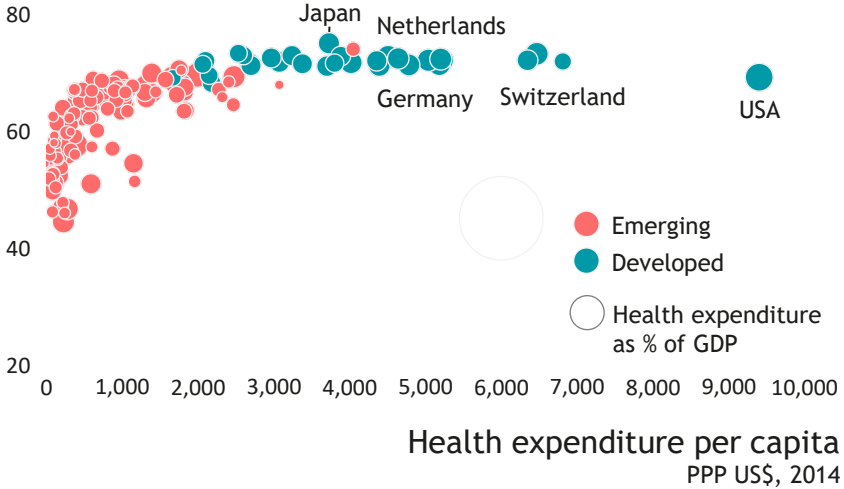
4. **Limited financial resources** to provide healthcare services

Healthcare costs are rising with diminishing returns in outcomes

HC costs across OECD[1]



Health-adjusted life expectancy[2]

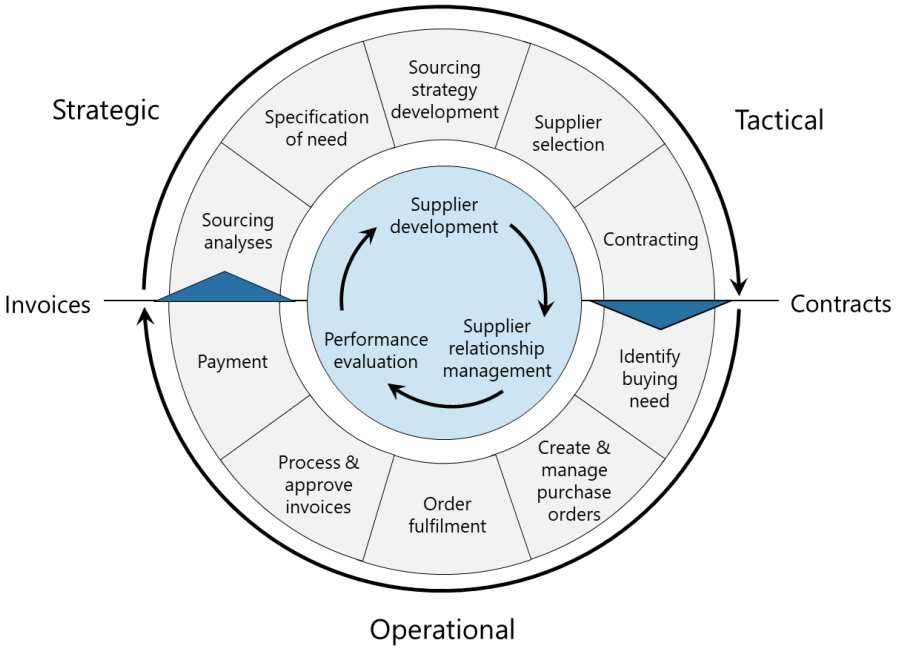


WHO and OECD estimate that 20-40% of healthcare spend is wasted

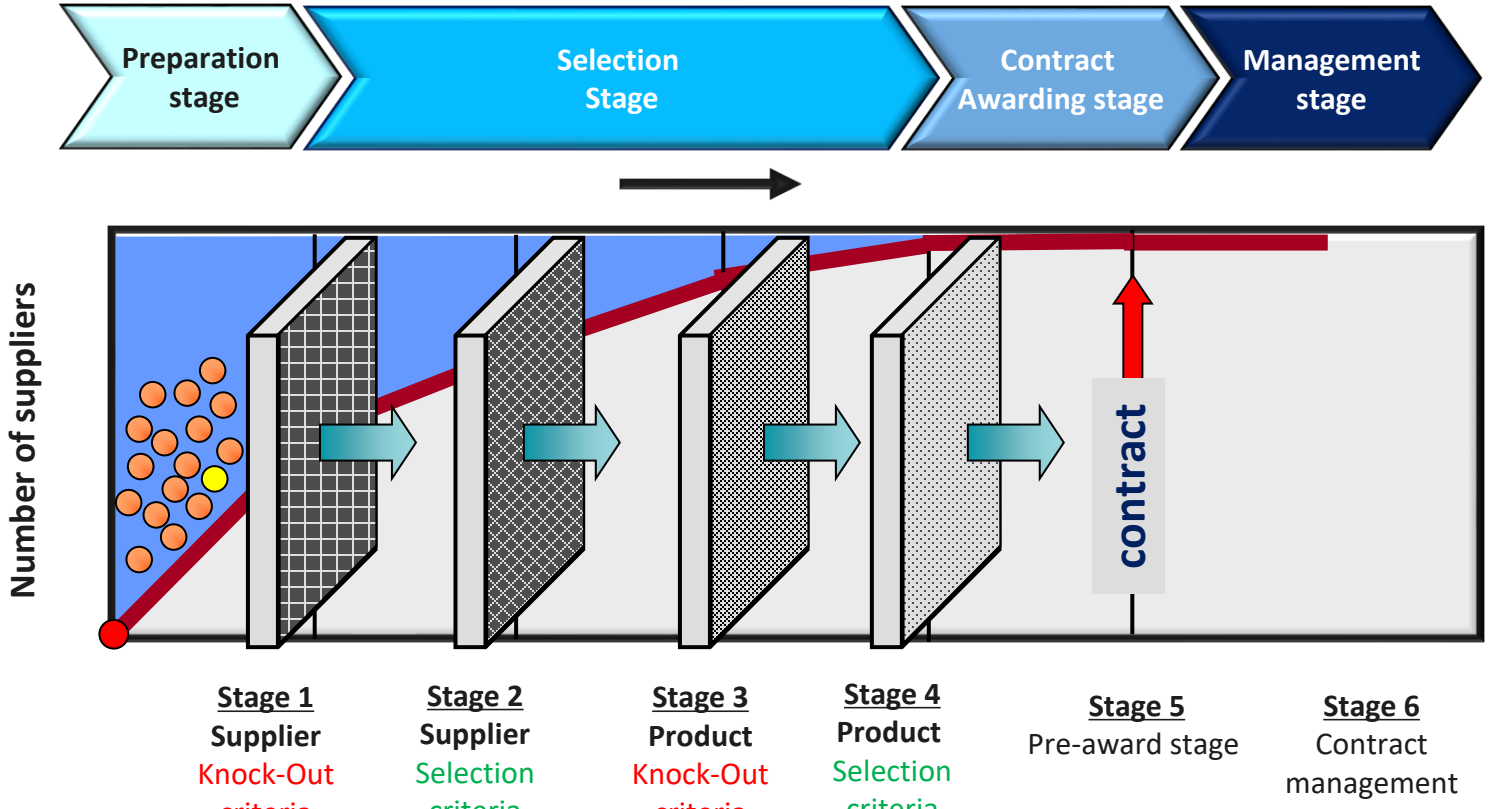
1. Based on 36 OECD countries providing data 2000-2019 2. Health-adjusted life expectancy: Estimates the number of years in full health an individual is expected to live at birth by subtracting the years of ill health (weighted according to severity) from overall life expectancy
Source: OECD Health expenditures and GDP, 2022; WHO, BCG analysis

Setting the Scene - What is Procurement ?

- **Buying stuff ….. to solve a need, a problem, an expiring contract …….**
- **Procurement** is about selecting ***what*** to buy, from ***whom*** at what ***price*** *and* *what to* ***use***
- **‘Selecting** the **one(s)** out of many available’



Procurement of medtech - Selecting the one(s) out of many



animated

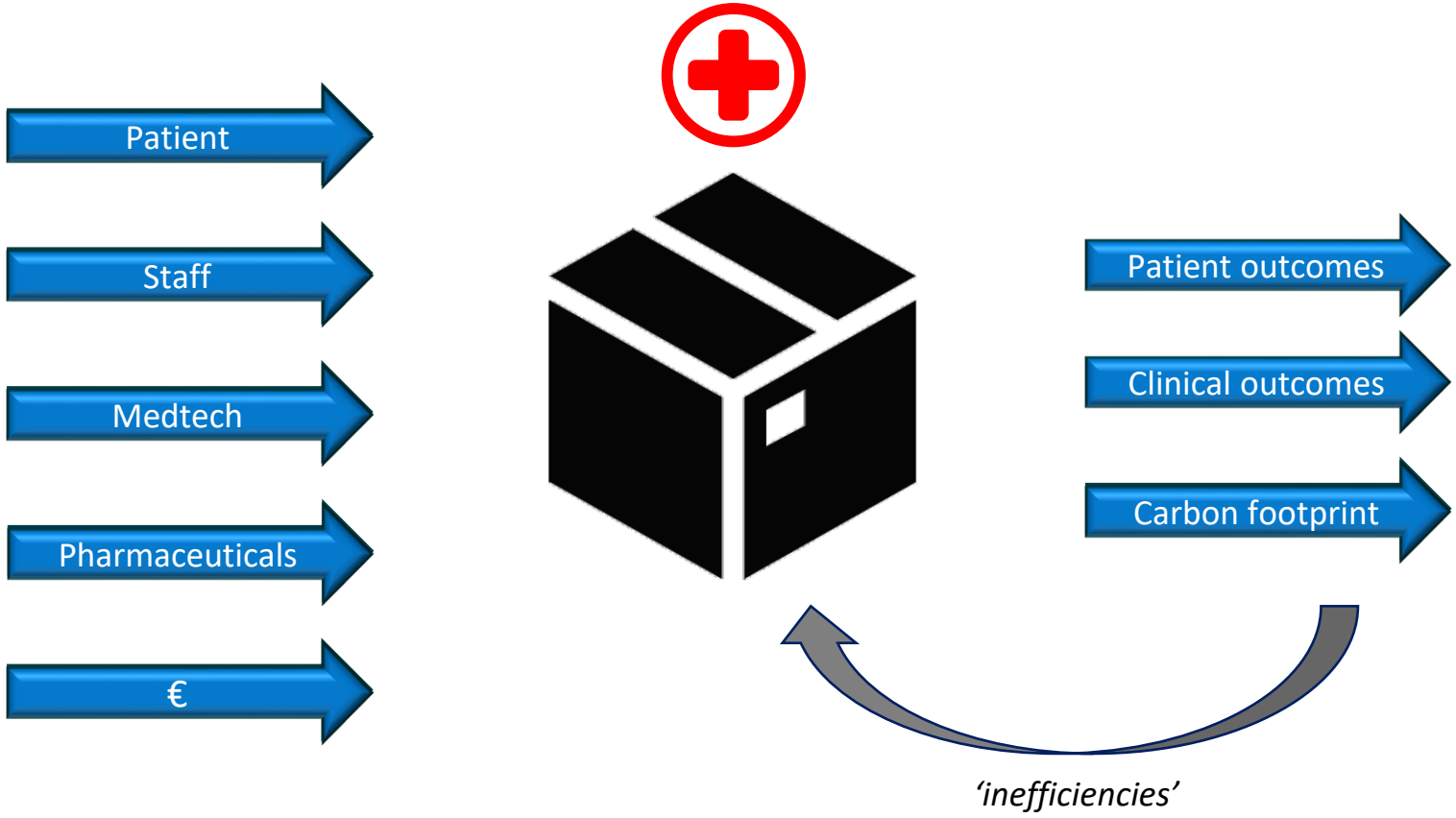
Procurement of medtech as it is today

A transactional process –

- **Price** (or Total Cost of Ownership) most frequently used contract award criterion
- Limited **interaction** with the supply market (e.g. market consultations)
- Limited adoption of **innovative** solutions (e.g. use of innovation procedures)
- Limited internal and external **collaboration**
- Limited alignment to **healthcare needs**, hospital objectives and care pathway issues

European Parliament resolution 9 September 2025 on public procurement (2024/2103(INI))

- contracting authorities **implement strategic procurement to a very limited extent** and the share of procedures **using award criteria other than price is very limited**
- public contracts continue to be **awarded primarily on the basis of a lowest price criterion**
- **six different procurement procedures** provide for flexibility, some of these are **rarely employed**
- insists that more contracts, especially for intellectual services, should be awarded based on the **best price-quality ratio**


Patient
Staff
Medtech
Pharmaceuticals
€
Patient outcomes
Clinical outcomes
Carbon footprint
'inefficiencies'

What Drives Healthcare- and Patient Outcomes ?

1. Patient

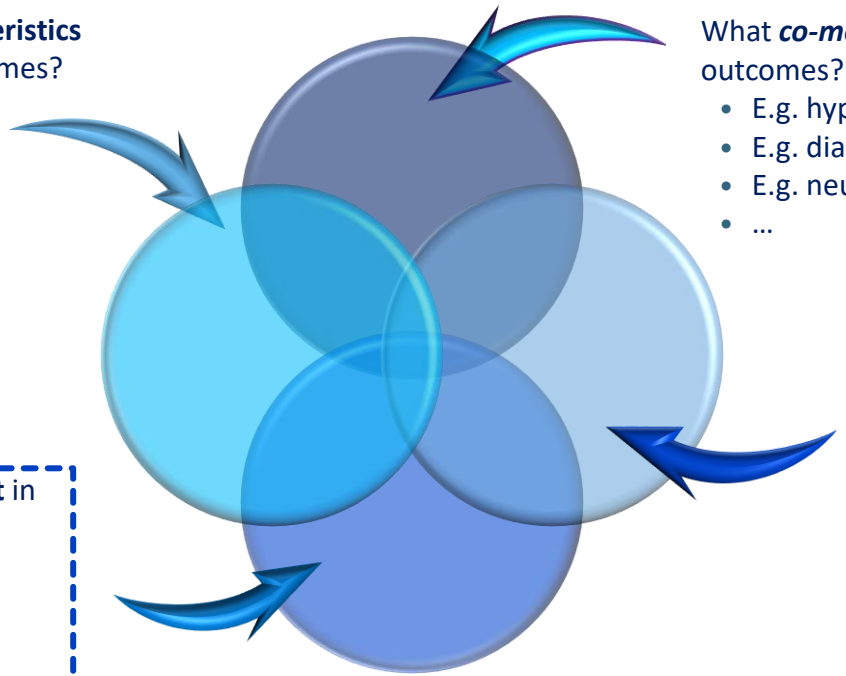
What **patient characteristics** might influence outcomes?

- Gender
- Age
- …

2. Co-morbidities

What ***co-morbidities*** might drive outcomes?

- E.g. hypertension
- E.g. diabetes
- E.g. neurological disorder
- …



3. HC system

What is the **provider context** in which care is delivered?

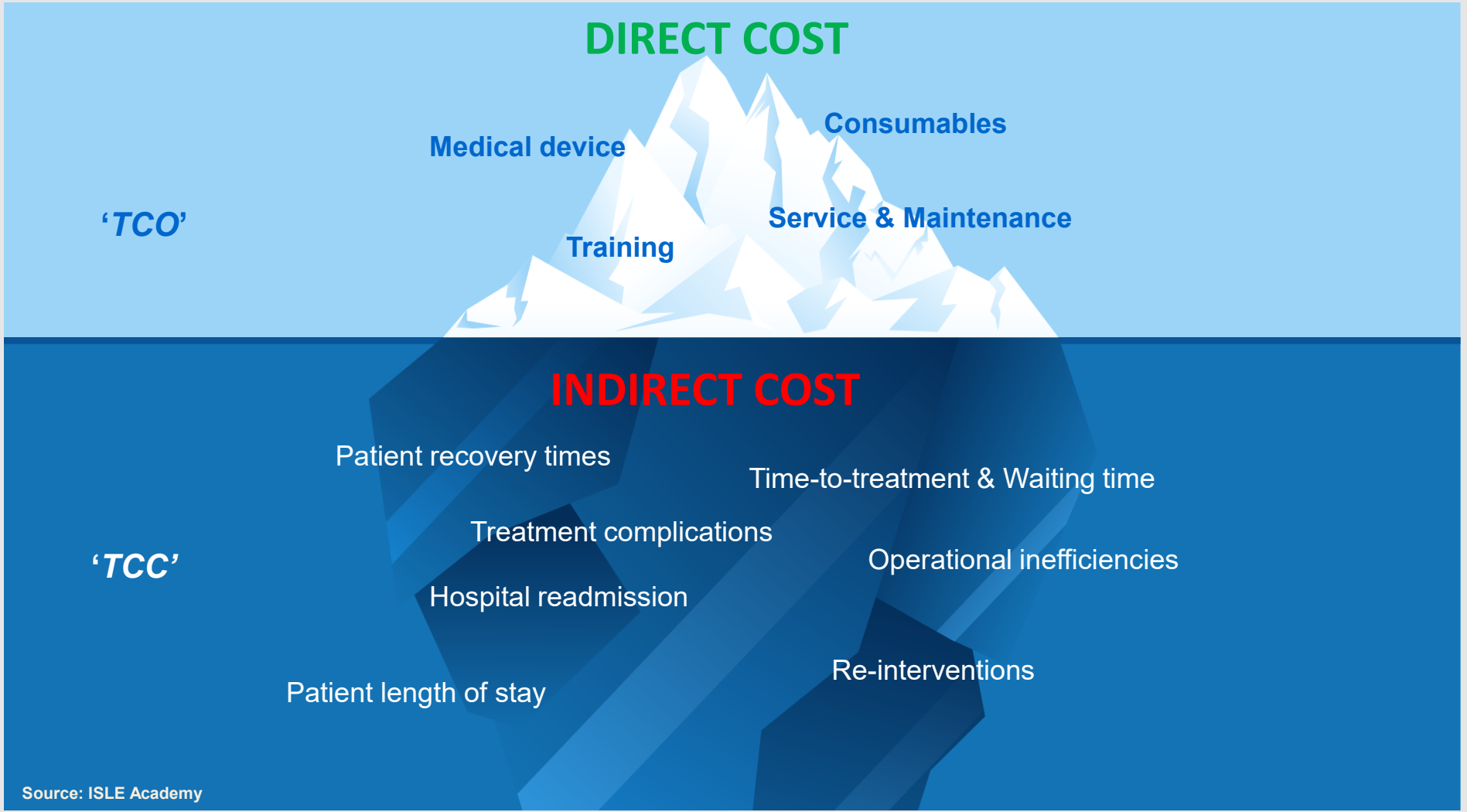
- Size of provider
- Focus of provider
- Care pathway structure
- **Infrastructure and facilities**
- …

4. Care practice

What care **practice** by physicians and nurses?

- Individual skills and experience
- Medical training
- **Medical technologies used**
- ….

Source: BCG


DIRECT COST
Medical device
Consumables
'TCO'
Service & Maintenance
Training
INDIRECT COST
Patient recovery times
Time-to-treatment & Waiting time
Treatment complications
'TCC'
Operational inefficiencies
Hospital readmission
Re-interventions
Patient length of stay
Source: ISLE Academy

Limitations of the traditional TCO-perspective

Better clinical outcomes?

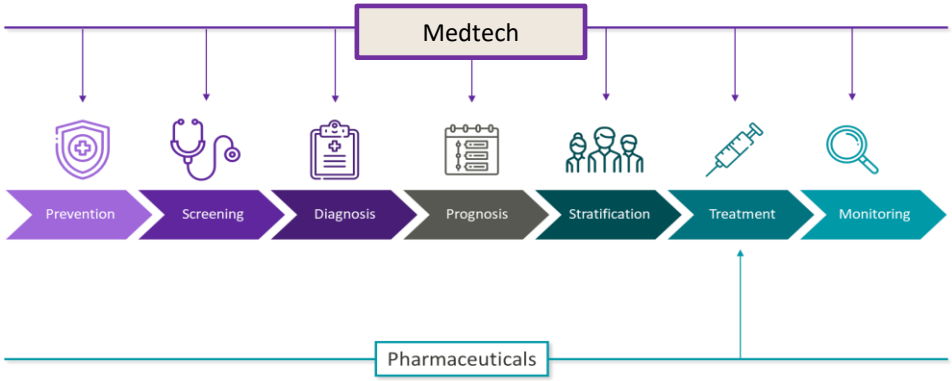
Increased efficiency?

Less readmissions or re-surgeries?

Reduced length of stay?

Linking Value-Based Health Care and Value-Based Procurement

VBHC -



VBP -

- Across each patient care pathway, *various medical technologies are used*
- VBP refers to the purchasing decisions to be made and the *impact these medical technologies have on the clinical/patient outcomes* (besides price/TCO and quality)

What is Value ? – Clinical & Patient Outcomes

Tier 1 Outcomes

- Patient **survival** rate
- Degree of **health** achieved

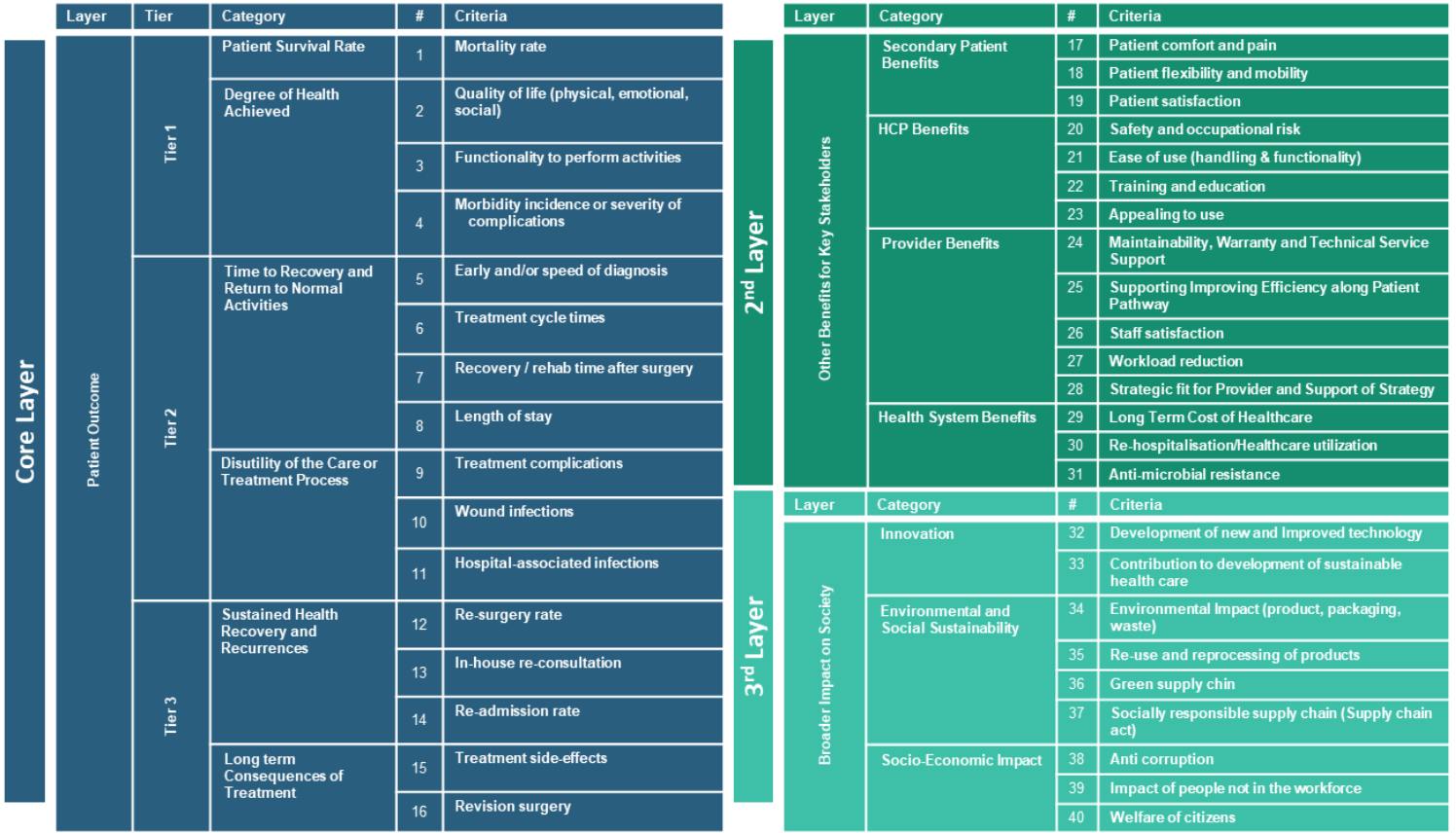
Tier 2 Outcomes

- Time to **recovery** and return to normal activities
- **Disutility** of the care or treatment process

Tier 3 Outcomes

- **Sustained** health/recovery and recurrences
- **Long-term** consequences of care

1. What outcomes to focus on? *The VBP 'Bingo Chart'*

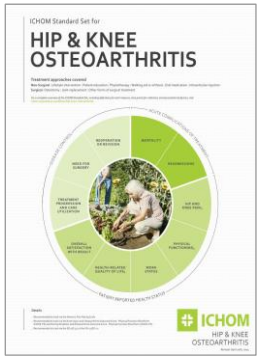


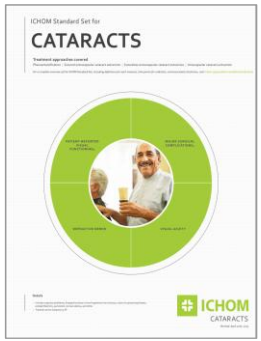
Layer	Tier	Category	#	Criteria
Core Layer	Patient Outcome	Tier 1		
		Patient Survival Rate	1	Mortality rate
		Degree of Health Achieved	2	Quality of life (physical, emotional, social)
			3	Functionality to perform activities
			4	Morbidity incidence or severity of complications
		Tier 2		
		Time to Recovery and Return to Normal Activities	5	Early and/or speed of diagnosis
			6	Treatment cycle times
			7	Recovery / rehab time after surgery
			8	Length of stay
		Disutility of the Care or Treatment Process	9	Treatment complications
			10	Wound infections
			11	Hospital-associated infections
		Tier 3		
		Sustained Health Recovery and Recurrences	12	Re-surgery rate
			13	In-house re-consultation
			14	Re-admission rate
		Long term Consequences of Treatment	15	Treatment side-effects
			16	Revision surgery

Layer	Category	#	Criteria
2nd Layer	Other Benefits for Key Stakeholders		
	Secondary Patient Benefits	17	Patient comfort and pain
		18	Patient flexibility and mobility
		19	Patient satisfaction
	HCP Benefits	20	Safety and occupational risk
		21	Ease of use (handling & functionality)
		22	Training and education
		23	Appealing to use
	Provider Benefits	24	Maintainability, Warranty and Technical Service Support
		25	Supporting Improving Efficiency along Patient Pathway
		26	Staff satisfaction
		27	Workload reduction
		28	Strategic fit for Provider and Support of Strategy
	Health System Benefits	29	Long Term Cost of Healthcare
		30	Re-hospitalisation/Healthcare utilization
		31	Anti-microbial resistance
3rd Layer	Broader Impact on Society		
	Innovation	32	Development of new and Improved technology
		33	Contribution to development of sustainable health care
	Environmental and Social Sustainability	34	Environmental Impact (product, packaging, waste)
		35	Re-use and reprocessing of products
		36	Green supply chin
		37	Socially responsible supply chain (Supply chain act)
	Socio-Economic Impact	38	Anti corruption
		39	Impact of people not in the workforce
		40	Welfare of citizens

Source: VBP Community of Practice

2. What Outcomes to Focus on? *ICHOM Patient-Centered Outcome Measures*





- *Visual acuity*
- *Knee functioning*
- Readmission
- Time to recovery
- Health-related QoL
- Overall satisfaction
- Reoperation

1. Hypothermia Management – France

Patient core temperature drops during anesthesia
(hypothermic patients < 36°C)

Adverse effects

- Wound infection x4
- Myocardial ischemia Cardiovascular+ cardiac disturbance morbidity x2 ↗ mortality
- Coagulopathy +33% transfusion need
- Delayed emergence from anaesthesia
- Shivering and thermal discomfort
- Increased mortality
- Prolonged / altered drug effect

Hospital Lyon (pilot site)

40%

Patients normothermic on arrival in the recovery room

Objective

IMPROVE PATIENT NORMOTHERMIA RATE

Comprehensive solution to keep **80%** of patients core temperature above 36°C along the peri/post operative process

Source: UniHA

Case #1 - Arras hospital results / Outcomes

Step 1 - Initial audit => baseline	
Normothermic patients rate	62%
Hypothermic patients rate	38%
incl. < 35°C	14%
96% of actively warmed patients	

Step 2 - 1st measure	
Normothermic patients rate	82%
Hypothermic patients rate	18%
incl. < 35°C	0%
99% of actively warmed patients	

« There are no longer hypothermic patients in recovery room »
« no more intubated / ventilated patients for hypothermia »
« Improved patient satisfaction survey in the outpatient setting »

Reducing hypothermia rate by 20pts has enabled (min est. impact):

- To increase the number of normothermic patient by 3.772/year
- To reduce incremental LOS related to surgical complications by 52%
- To avoid 28% of surgical site infections/year (all types)
- To avoid 17% of morbid cardiac complications/year

From 62% to 82% of normothermic patients rate

February 2024

Case #2 - Saint-Etienne hospital results / Outcomes

Step 1 - Initial audit => baseline	
Normothermic patients rate	57%
Hypothermic patients rate	43%
incl. < 35°C	11%
81% of actively warmed patients	

Step 2 - 1st measure	
Normothermic patients rate	75%
Hypothermic patients rate	25%
incl. < 35°C	12%
97% of actively warmed patients	

Reducing hypothermia rate by 18pts enabled (min est. impact):

- number of normothermic patient increased by 4.086/year
- Incremental LOS reduction related to surgical complications by 40%
- 23% surgical site infection/year (all types) avoided
- 14% of morbid cardiac complications/year avoided

From 57% to 75% of normothermic patient's rate

February 2024

2. Urinary Tract Infection - England

North Midlands University Hospitals

Urinary catheter closed-system insertion

- ***CAUTI** rate* reduced from 30% to **zero**

- Reduction **patient length of stay**
- Reduction **medication use**
- Reduction **patient complaints**
- Avoidance of 78kg **clinical waste** and 11kg **plastic waste**
- Nursing **time savings** 5 minutes per procedure
- Net TCC **savings** over **£47,000** per year

Potential Trust Benefits

80% infection reduction

£415,200 cost avoidance

1,200 additional bed day capacity

* Based on an average of 200 CAUTIs per year

3. Aortic Valve Stenosis - Spain

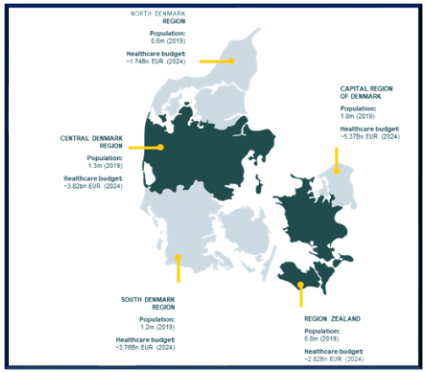
CLÍNIC BARCELONA Hospital Universitari

Analysis first 83 patients

Variable	Control	MITMEVA	Difference	p
Quality adjusted life years (QALY)	6.7	**8.8**	**+2.1**	0.02
Time from medical visit to decision (days)	120	**30**	**-90**	0.03
Peri-operatory complications (n)	42	**18**	**-24**	0.004
Length of Stay (days)	12.8	**7.3**	**-5.5**	0.01
Length of Stay at ICU (days)	15.2	**3.3**	**-11.9**	0.01
Cost per patient (€)	10,166	**5,401**	**-4765**	0.01
Cost per QALY (€)	1,516	**658**	**-858**	0.01

- Reduced time to medical decision
- Improved patient outcomes: survival, QoL, engagement & awareness
- Reduced complications
- Increased capacity: Reduced resource utilization (LoS, cathlab, personnel)
- Reduce overall disease management costs

Value-Based Procurement ‘Blue Zones’



VBP ‘Blue Zones’ characteristics

1. Procurement decisions are driven by the **impact on patient/clinical outcomes**

2. Instead of focusing on the purchase **Price or TCO**, considering the **Total Cost of Care**

3. **Stakeholders**, e.g. hospitals managers, suppliers, clinicians, and policymakers, are **aligned** and **co-create solutions** using innovation-friendly tender procedures

4. **Data** guides procurement decisions

5. Use of **outcome-based / risk-sharing agreements** to align incentives between healthcare providers and suppliers (and healthcare providers and payers)

Internal and Extern Collaboration is of the Essence

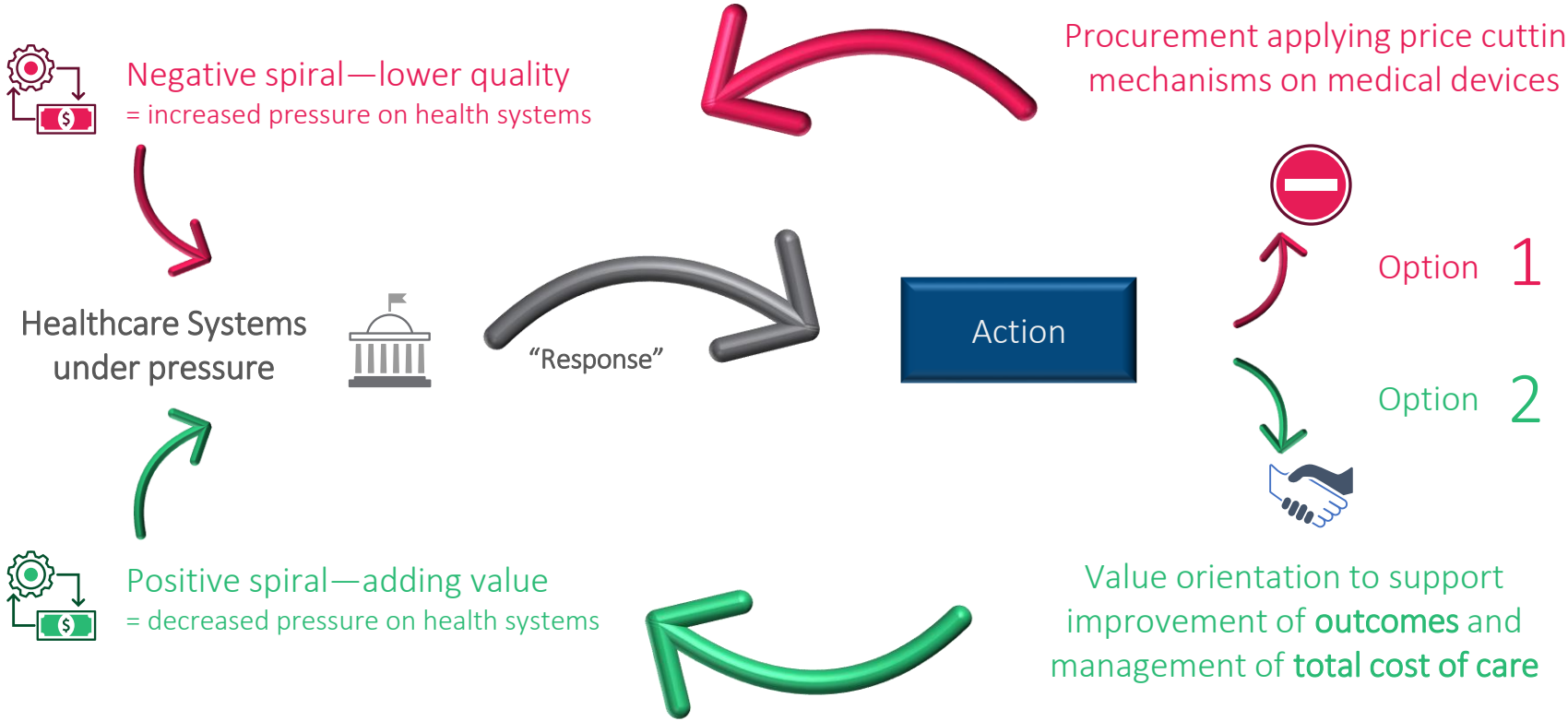
Internal Collaboration

- Hospital leadership/management, CxO
- Clinical professionals (e.g. clinicians, nurses)
- Procurement professionals
- Patients (….)

External Ecosystem

- Provider/Procurers and Supplier
- Sustainable Value-Based Health systems need *all* external stakeholders to align

VBP - A new ‘Procurement Paradigm’



Thank you

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