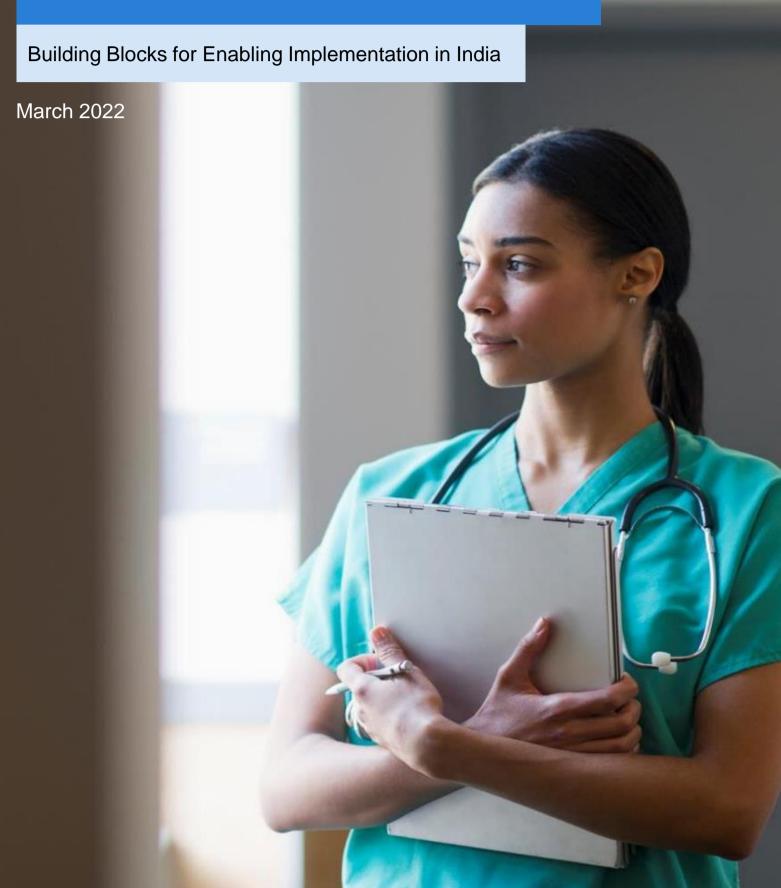




Value Based Procurement in MedTech



Contents

Detail

- 1. Executive Summary
- 2. VBP as a concept
- 3. VBP in the global landscape
- 4. Procurement in the Indian healthcare ecosystem
- 5. Challenges for implementing VBP in India
- **6.** Broad contours for VBP framework in India





Section 1

Executive Summary



Executive summary

Value Based Procurement (VBP) is a method in which procurement decisions are made focused on total value rather than cost. In doing this, VBP focuses on how a product or solution can best deliver desired outcomes, reduce the total cost of care, and provide long term benefits to all the stakeholders in the healthcare ecosystem, rather than focusing exclusively on initial cost, which is usually equated to price.

Standard procurement, in contrast, typically focuses on lowest cost. VBP, however, proposes to look at multiple aspects of value, instead of focusing primarily on the product's up-front cost.

VBP is enabled by agreements between manufacturers and purchasers (providers, commercial payers, governments) or even patients themselves. While these arrangements can take the form of risk sharing, which commits payers, providers, and manufacturers to share benefits and risk with the goal of providing desired clinical/health outcomes for patients while overcoming existing uncertainty about clinical or economic value. However, they can also take the form of more basic agreements that embed value-based criteria and transparent dialogue with industry into the bidding criteria and processes themselves. Over the years VBP has evolved globally and many countries in certain geographies have adopted the concepts of VBP for their MedTech procurement requirements.

In the Indian healthcare system, both the public and private sector have different models of MedTech procurement. In the public sector, qualification is based on technical specifications and the final decision is based on the lowest commercial quotation.

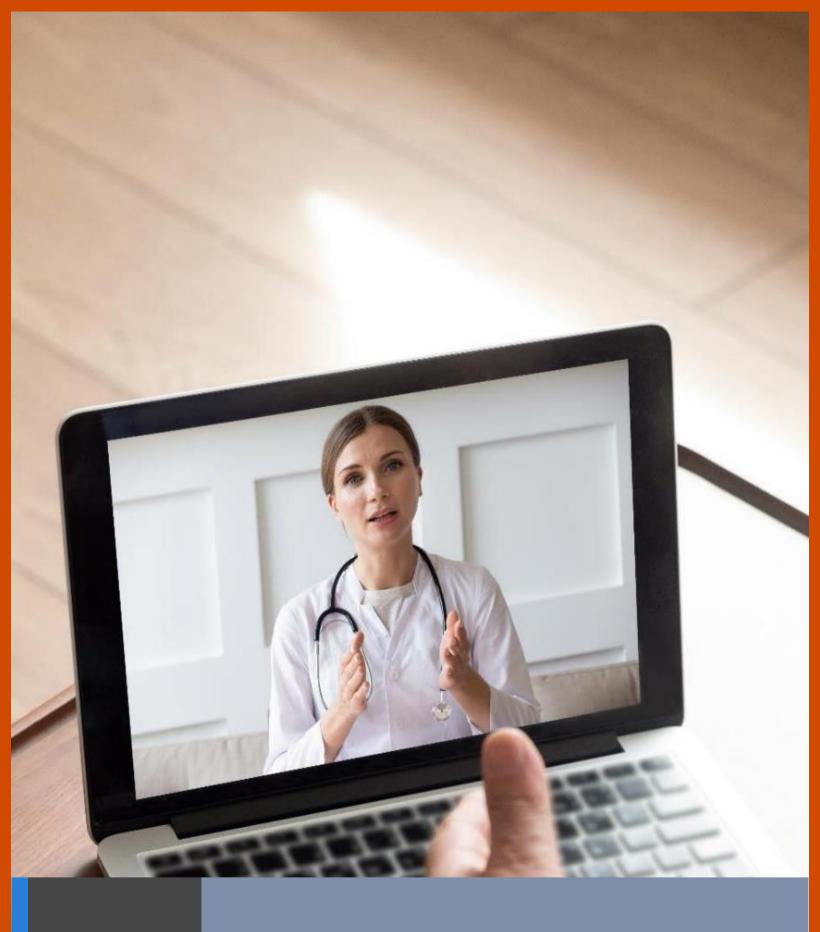
The providers in the private sector use various elements of cost benefit analysis to assess the value in MedTech procurement which currently focuses on cost saving.

VBP implementation in India faces certain challenges, such as like low awareness, high out of pocket expenses, lack of data on clinical outcomes, lack of capability in the procurement team to assess value, and the lack of incentivization for delivering the best outcomes and overall patient and user experience.

The suggested VBP framework can be used to comprehensively assess patient outcomes, stakeholder benefits, access to care, long-term relevance, and lifecycle costs. Both public or private providers should be able to customize the framework parameters and elements according to their needs.

A comprehensive approach is best advised going forward, with engagement of all key stakeholders. This would include the Government. MedTech companies. healthcare providers and the payors. Collaboration among these stakeholders is the key to successful implementation of VBP in India.





Section 2

VBP as a concept

While the definition of "value" may often be procurer specific and subjective, value can be defined as desired outcomes related to the costs incurred

What is VALUE?

While value can be specific to the product / solution, its market, its purpose of use, and its details can be defined differently to different procurers

VALUE is defined as the DESIRED OUTCOMES relative to the COST





- Improved patient care outcomes
- Improved patient and user safety
- Improved patient and user experience
- · Reduced cost of care
- Quality and sustainability
- Manufacturer's lifecycle support

Costs incurred to procure the product / solution across its life-cycle:

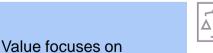
Transport, installation, training, operations, maintenance, upgrade, and disposal costs





COST





spending well, as well as spending lesser in the medium / long term



Value is **not merely about cost**, but about
the broader **patient health and ecosystem benefits**



Value assessment brings clinical and experiential factors on an equal footing with cost factors

Sources: https://www.advamed.org/wp-content/uploads/2021/09/Good-Practices-for-Procurement-Innovative-Medical-Technology-Barcelona.pdf

Hence, the concept of "Value Based Procurement" proposes a holistic approach to procurement with an end-to-end outlook, encompassing multiple aspects

What is VALUE BASED PROCUREMENT (VBP)?

VBP entails making purchasing decisions that consider how a product or solution can best deliver the predefined outcomes and reduce the total cost of care, rather than focusing exclusively on purchasing a specific product at the lowest possible price

Procurement perspective

Even a product/ solution with a high initial price can result in savings when its overall economic, clinical, social and societal context are considered

Procurement of a product

More focus on the effect of the purchase rather than the cost of the item itself – instead of buying inputs, the focus should be on outcomes

Procurement of a solution

Targeting care outcomes as the basis for awarding tenders.

Involves the procurement of all tools and value-added services that are necessary to manage a given disease, rather than the procurement of only one tool or one service

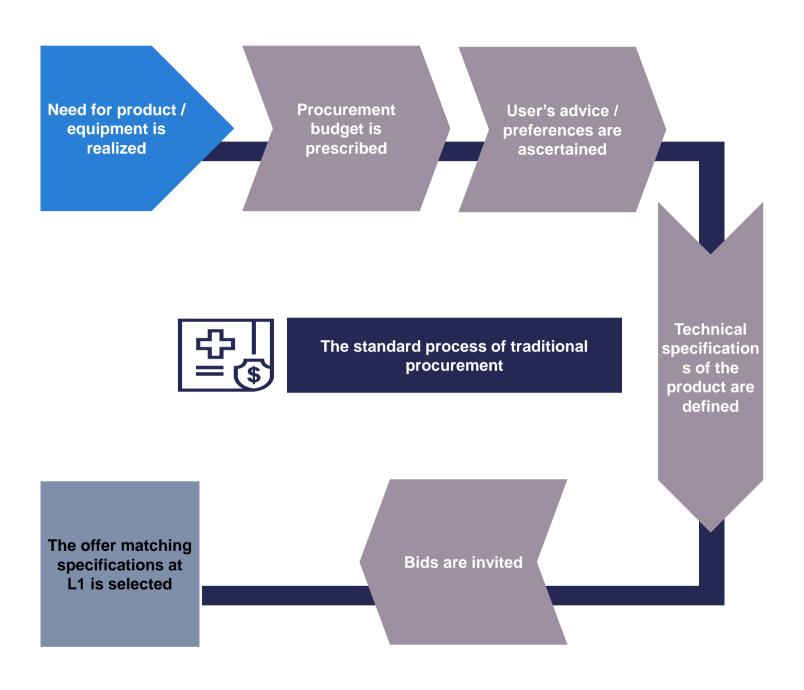






Sources: https://www.advamed.org/wp-content/uploads/2021/09/Good-Practices-for-Procurement-Innovative-Medical-Technology-Barcelona.pdf, Primary interviews

Traditionally, procurement in healthcare largely follows a standard chain of events where the lowest cost "L1" is the determining factor among competing bids



Stakeholder insight

"The qualitative & quantitative aspects of patient outcomes are rarely evaluated in traditional procurement. The focus is on technical specifications and cost aspects"

Source: Primary interviews; *This process is commonly followed for public procurement in most countries

Although standard L1 procurement is the prevalent model, it has inherent limitations in terms of the inputs, the processes, as well as the outputs

Escalating costs



Silos in the ecosystem



According to Eurostat, health care delivery costs are rising disproportionately across the European Union and make up ~70% of the total health care spend as seen over a ten-year period

Procurement today does not necessarily consider patient outcomes, comprehensive stakeholder involvement and other costs outside the procurement budget

Shortsighted procurement perspectives



Variability in patient outcomes



The focus on lowest price-based procurement leads to higher total costs due to low quality, breakdowns and lack of user friendliness

Even highly developed Organisation for Economic Co-operation and Development countries show a high level of variations in routine treatment modalities like:

- ~36x variation in capsule complications after cataract surgery in a Swedish hospital
- 18x variation in reoperation rates after hip surgery in a German hospital

Through its salient features, VBP proposes to address these limitations

Sources: Secondary research and primary interviews

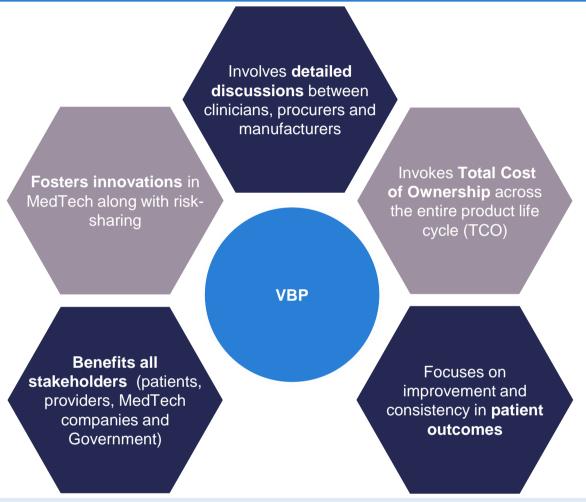
VBP, however, looks at multiple aspects of value such as patient outcomes, stakeholder benefits, sustainability, and total cost of ownership (TCO)

	Standard Procurement	Value Based Procurement		
Perspective	 Direct attention on the product/service itself Specifications of the product/service 	 Focus on enhanced desired outcomes End to end life-cycle of the product/service 		
Bid evaluation	Lowest Price (L1) is the main/major criterion	 Looks not only at commercials, but also at qualitative aspects and outcome impact of the product/service 		
Influencers +	 Physicians: opinion driven Procurement team: heavy bargaining and risk spreading, ensuring lowest cost 	 Data and Outcome driven. Outcomes relevant to all key stakeholders-providers (including physicians, nurses/paramedics), patients, payors All relevant stakeholder capabilities are leveraged 		
Cost weightage	 Reducing the purchase price Partial utilization of the planned budget 	 Management of total cost of ownership Optimal utilization of planned budget 		
Purchase strategy	Purchase strategy is 'minimizing costs' with little or consideration of benefits or outcomes	 Alignment with healthcare providers objective and pain points Sustained cost benefits across the lifecycle 		
Output	The isolated product at minimum cost isolated product at minimum cost, not factoring in already invested resources (in case of capital equipment's)	 A comprehensive solution that improves outcomes Management of total cost of ownership and care delivery 		

Sources: https://www.sailab.fi/wp-content/uploads/2021/01/sailab-finland-value-based-procurement-in-europe-16feb2021-hbax.pdf

VBP looks at the entire chain of procurement operations from procurement planning to product disposal and allows involvement of all relevant stakeholders

The practice of Value Based Procurement (VBP) evaluates potential new products, services, and solutions to maximize the overall value for money, rather than focusing only on the lowest purchase price



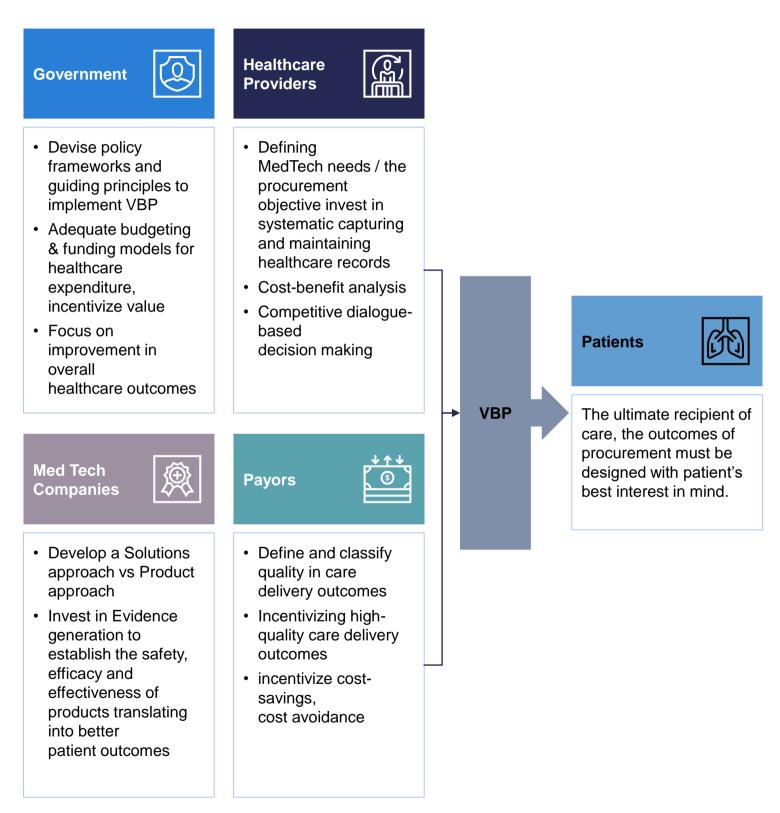
VBP offers long term clinical and financial benefits from a more holistic perspective;

VBP includes transparent, relevant, and objective measures that incorporate the right set of selection and awarding criteria, and consider the needs of patients, HCPs, and system managers. It also reflects realistic evidence requirements.



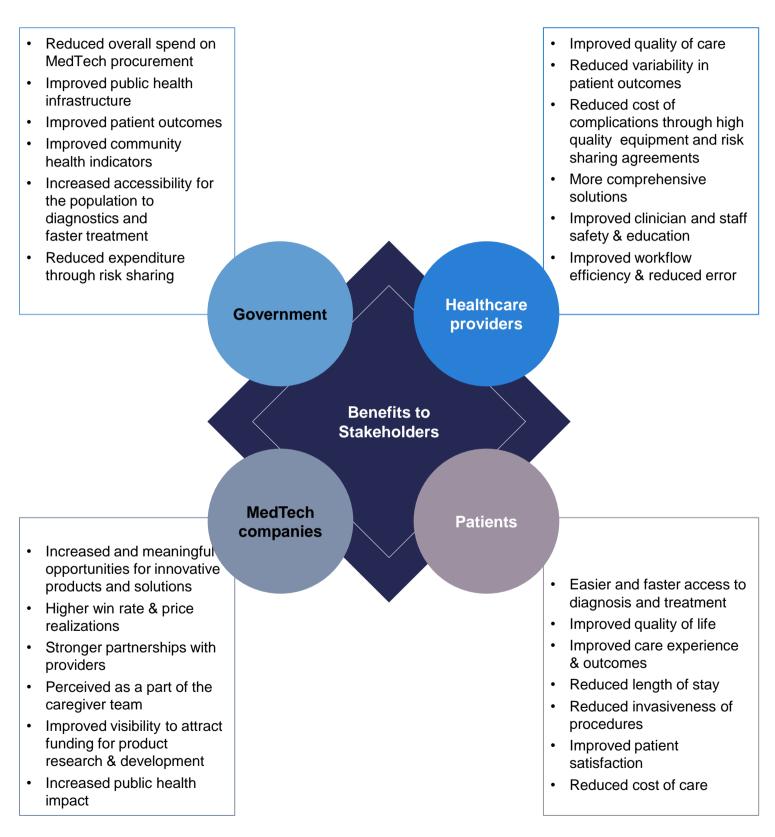
Sources: Secondary research, Primary interviews

The Government (regulators), healthcare providers (procurers) as well the MedTech companies (manufacturers) have vital roles to play in VBP implementation to ultimately benefit patient care



Sources: Secondary research, Primary interviews

The stakeholders involved in the VBP process have the opportunity of reaping relevant benefits in terms of desired outcomes, this in turn facilitates a healthier healthcare ecosystem



Sources: Secondary research, Primary interviews

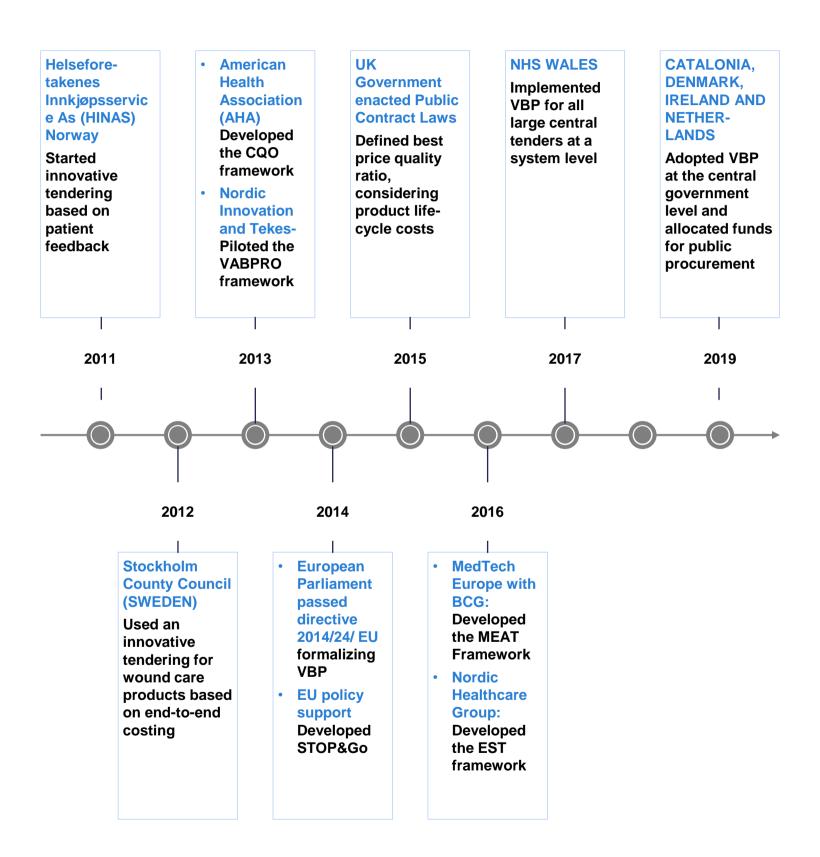


Section 3 VBP in the global landscape



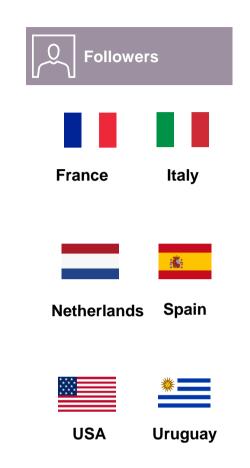
Advent and extent of VBP implementation globally

Over time, VBP has seen an uptake in multiple countries...



...though the intensity has varied across geographies





Implementation of VBP in developing countries has witnessed a slower uptake due to reasons such as lack of awareness and lower stakeholder capability.

- Basic versions of innovative procurement started in ~2011 in small pockets around Europe
- The American Health Association (AHA) developed the Cost, Quality and Outcomes (CQO) framework for VBP in 2013
- The EU directive in 2014 on VBP was a defining milestone which proposed the formal implementation of VBP in public procurement by 2016. The actual implementation began in 2017-2018

The EU directive on MedTech procurement in 2014 was a major impetus as it proposed formalized implementation of VBP in public procurement at the national level

EU directive: Article 67
Subsection 3, Award of the Contract
Article 67, Contract-Award Criteria

EU directive: Article 68
Subsection 3, Award of the Contract
Article 68, Life-cycle Costing

The Most Economically Advantageous
Tender (MEAT) from the point of view of the
contracting authority shall be identified on
the basis of price or cost, using a costeffectiveness approach, such as life-cycle
costing in accordance with Article 68, and
may include the best price-quality ratio,
which shall be assessed on the basis of
criteria, including qualitative,
environmental, and/or social aspects,
linked to the subject matter of the public
contract in question

Life cycle costing shall to the extent relevant cover parts, or all of the following costs over the life cycle of a product, service, or works:

- Costs related to acquisition
- Costs of use, such as consumption of energy and other resources
- Maintenance costs
- End-of-life costs
- Costs imputed to environmental externalities

Public bodies can procure based on value in terms of qualitative and financial benefits to all stakeholders, not just on price

Procurers can ask MedTech players to provide life-cycle costing calculations for making an objective assessment

Additionally, the directive mandated that all member states make VBP into a national law by 2016



Typical process and frameworks for VBP implementation

The following are the broad steps in the VBP process

1

Defining desired outcomes and evaluation criteria in the tender

- Review of current and historic patient, user and procurer outcomes with the current item
- Documentation of desired patient outcomes and outcome-based specifications
- Documentation of technical specifications
- Collaborative discussion between key stakeholders: users (clinicians, nurses etc.),
- Define the product/ solution evaluation and vendor selection criteria comprehensively in the tender document
- Float the tender in the public domain

2

Competitive dialogue and shortlisting the closest matches

- Review of available offerings including innovations
- Review of researchbased outcomes data on the offerings
- Competitive dialogue with MedTech companies based on desired outcomes
- Analysis of proposed patient, user and ecosystem benefits including return on investment
- Invite bids from the shortlisted vendors that match the desired outcomes
- Pilot usage of shortlisted products / solutions with documentation of patient, user and ecosystem outcomes

3

Cost & benefit analysis through VBP framework

VBP framework typically consists of the following parameters:

Cost parameters

 Analysis of Total Cost Of Ownership (TCO) for the shortlisted offerings

Outcome parameters

- Evidence of outcomes
- Risk-sharing
- Safety/convenience for patients and users
- Tech support and operational maintenance for providers
- Innovativeness
- Healthcare ecosystem benefits
- Sustainability & environmental impact

Select the vendor /
offering with the most
value through
Outcome vs Cost

4

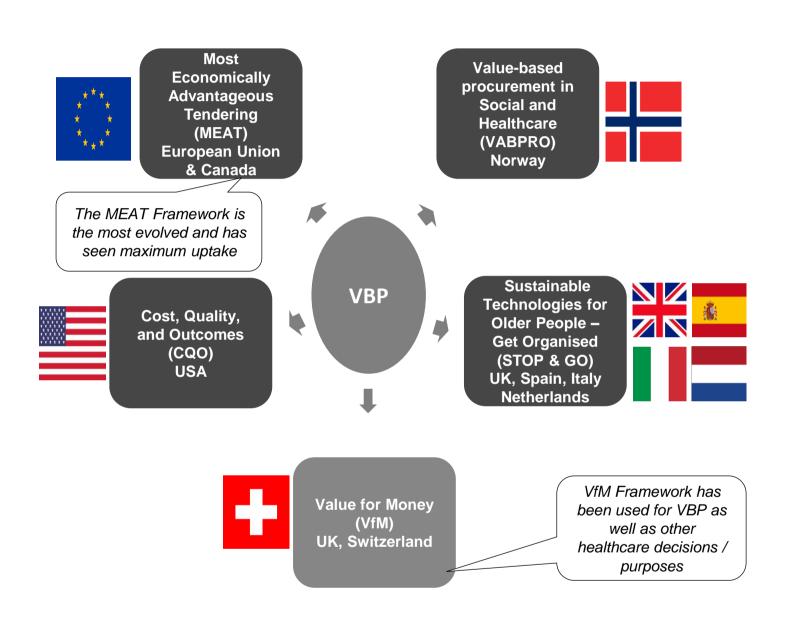
Awarding the tender & maximizing the value proposition mutually

- Rediscuss critical aspects of the tender with the winning bidder to maximize value including outcomes and user satisfaction
- Award the tender
- Jointly plan further steps for the product / solution lifecycle



Sources: Primary interviews, Secondary research

Multiple Value Based Procurement frameworks have been used in MedTech procurement globally



Cost, Quality & Outcomes framework (CQO)



Parameter	Details		
Inception	January 2013		
Governance	Association for Health Care Resource & Materials Management (AHRMM) of the American Hospital Association		
Location	Major focus on United States of America		
Salient features	The AHRMM Cost, Quality, and Outcomes (CQO) refers to the intersection of cosquality and outcomes and a more holistic view of the correlation between:		
	Cost: All costs associated with delivering patient care and supporting the care environment especially supply chain costs		
	 Quality: Patient-centered care aimed at achieving the best possible clinical outcomes 		
	Outcomes: Financial reimbursement driven by outstanding clinical care at the appropriate costs as instead of viewing each independently		

Value Based Procurement in Social and Healthcare (VABPRO)



Parameter	Details	
Inception	Between March 2013 and December 2014	
Governance	The project was funded by Nordic Innovation and Tekes, the Finnish Funding Agency for Technology and Innovation	
Location	Focus on Norway, Denmark and Finland	
Salient features	VABPRO seeks to promote value overlapping with outcome through the following:	
	An innovative procurement process design	
	 Considering both the manufacturer perspective as well as the user/patient perspective 	
	A dialogue with users/patients on their needs and requirements to reach a thorough understanding of their perception of value	
	User driven innovation methodology	

 $Sources: https://www.ahrmm.org/cqo-movement/what-is-cqo,: https://nhg.fi/vabpro/20150215_VABPRO_presentation.pdf$

Sources: https://www.ahrmm.org/cqo-movement/what-is-cqo

Sustainable Technologies for Older People –Get Organized (STOPandGO)



Parameter	Details
Inception	Launched in April 2014 and was under implementation for four years
Governance	A Public Procurement of Innovative Solutions pilot project funded by the Information and Communication Technologies Policy Support Programme as part of the Competitiveness and Innovation Framework Programme of the EU
Location	Focus on 11 geographies in four countries (Italy, Spain, UK, and the Netherlands) with a budget of 17 million euros
Salient features	 A service deployment project with the following features: Focused on procurement as a solution Redesigned the model of care to include technology as an integral part of the service and looked at integration and the simultaneous improvement of models of care and cure rather than utilizing specific products or technological components Focused on providing innovative solutions for elderly care

Most Economically Advantageous Tendering (MEAT)

MEAT Framework is the most recent tool. The weightage for parameters in the framework is flexible and is left for providers and procurers to deliberate and define



Parameter	Details		
Inception	March 2016		
Governance	MedTech Europe, in partnership with The Boston Consulting Group procurement experts	(BCG) and	
Location	Currently EU		
Salient features	The Most Economically Advantageous Tender (MEAT) criterion enables the contracting authority to take account of criteria that reflect qualitative, technical and sustainable aspects of the tender submission as well as price through a three-layered assessment framework:		
	Core Layer: Patient outcomes over costs (looks for improved our reduced costs)	utcomes at	
	 2nd Layer: Other benefits for key stakeholders (like patients, hos and the ecosystem) 	spital, staff	
	 3rd Layer: Broader impact on society (Sustainability, socioeconor and innovation) 	mic impact	

 $Sources: https://www.ingentaconnect.com/contentone/sil/impact/2017/00002017/00000006/art00034? crawler=true\&mimetype=application/pdf, \ https://www.sailab.fi/wp-content/uploads/2021/01/sailab-finland-value-based-procurement-in-europe-16feb2021-hbax.pdf$





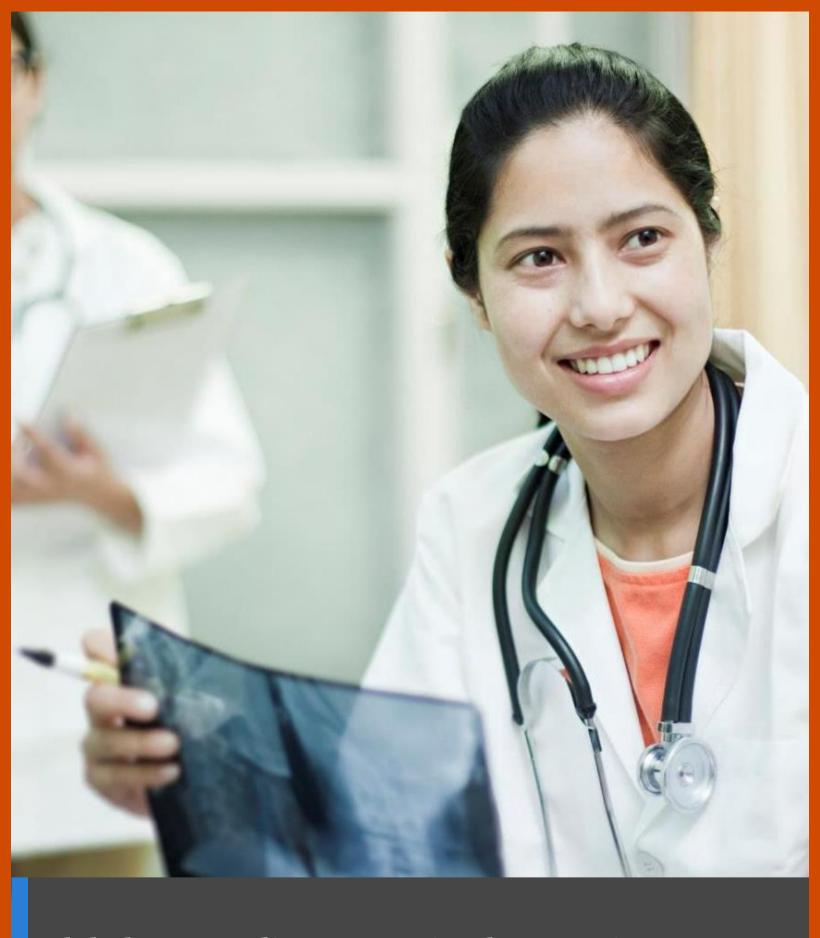


Parameter	Details			
Inception	July 2011, reformed in November 2019 and June 2020			
Governance	Originally by the UK Department for International Development; further development by "The Global Fund Geneva" Switzerland			
Location	Ethiopia, Malawi, Tanzania, Zimbabwe, Kenya, Sudan, Thailand, and other developing countries			
Salient features	VfM is a concept that defines how to maximize and sustain equitable and quality health outputs, outcomes, and impact for the given level of resources. VFM evaluation framework can be subjective; however, it typically considers five key elements.			
	• Economy : Does the equipment provide the required health services at the lowest TCO?			
	• Effectiveness : Can the equipment effectively contribute to better health outcomes?			
	• Efficiency : Does the equipment / service model maximize patient, clinician, or health system benefits relative			
	to equipment or service alternatives?			
	 Equity: Does the equipment support the health needs of all populations? 			
	 Sustainability: Can a health facility, program, or system maintain the equipment / service model over the long-term? 			

Sources: Value-based procurement of medical equipment, The Access and Delivery Partnership (ADP), June 2020; https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DFID-approach-valuemoney.pdf

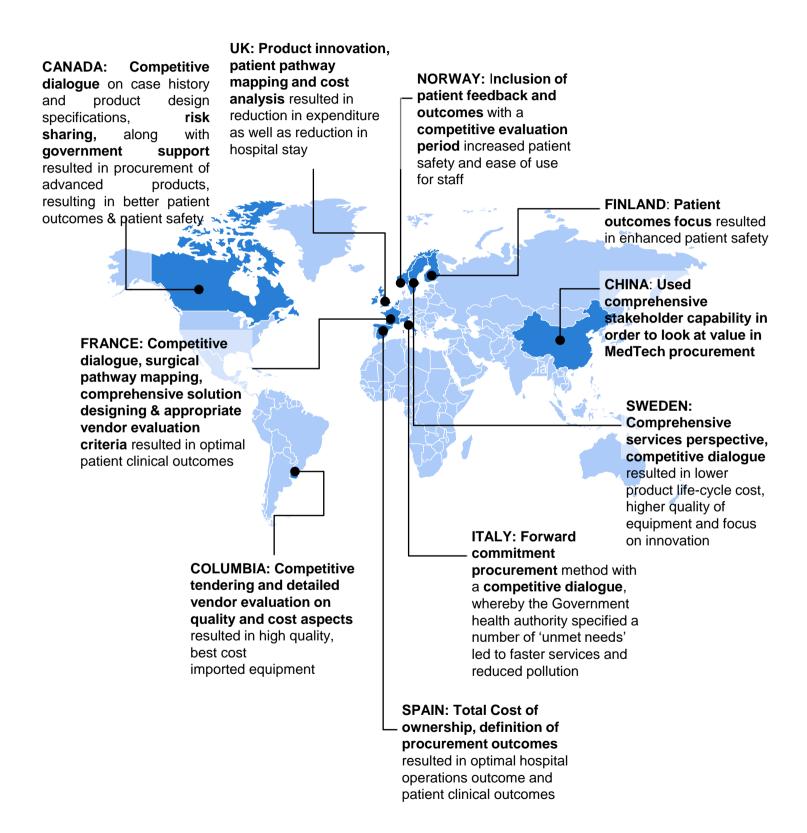
While all frameworks focus on evaluating outcomes in relation to costs, the relevant parameters and their importance vary

	STOP&GO	VABPRO Nordic Healthcare Group	CQO	VFM Department for International Development	VALUE-BASED PROCUREMENT Partnering for patient centre, usstandle heath-care
Assessment parameters	Patient's clinical outcomes Performanc e level of the technology used Population impacted	Overlapping factors between • Outcomes (patient, user, commissioner) and • Value (individual and subjective value) resulting in a win-win for the payer, provider, and patient	 TCO-across the product life-cycle, e.g., installation, maintenance, disposal costs etc. Product quality and patient outcomes rating against alternatives 	Health outcomes Impact on all directly related stakeholders Societal impact	Sequential evaluation of Patient's clinical outcomes divided by the TCO Patient and user safety and experience, hospital and ecosystem KPI improvement Innovation, sustainability, and socioeconomic impact



Global case studies on VBP implementation

Concepts of VBP have been implemented with varying intensities across different geographies



Case Study 1: VBP Implementation in United Kingdom Innovative solution reduced the cost and length of stay in parotidectomy surgery



Problem

Stakeholders

Intervention

Impact

- High length of stay for patients (2.5 days)
- High cost of procedure
- Patient discomfort due to placement of surgical drain after the surgery
- Hospital's clinical team
- Hospital procurement team
- Sealant manufacturer
- New innovative sealant product ARTISS
 - was introduced
- The Baxter
 Healthcare project
 team facilitated a
 broader pathway
 analysis
- Manchester
 University's NHS
 Foundation
 charted patient
 pathway and
 its costing
- The surgeon's team redesigned the surgery protocol

- Reduced the need for overnight stays in favor of a day care procedure
- Reduced 2.5 days of hospital stay and thus improved bed availability
- Reduced patient discomfort
- Reduced cost per patient by 805 pounds



Critical Success factors:

- The healthcare provider and manufacturer engaged in preprocurement dialogue.
- The manufacturer and provider collaborated and conducted pathway analysis to measure the desired outcome and incorporate appropriate innovation.
- The healthcare provider developed a core team with the relevant stakeholders for value assessment.

Sources: https://www.supplychain.nhs.uk/news-article/collaborative-working-reduces-overnight-stays-for-parotid-surgeries-in-value-based-procurement-pilot/

Case Study 2: VBP Implementation in Catalonia – Assisted in improving cost efficiency for Implantable Cardioverter Defibrillators (ICD device)



Problem

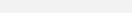
Stakeholders

Intervention

Impact

- High rate of complications post ICD implantation surgery
- Inability to monitor the patient's progress
- High cost of device
- AQuAS Catalan
 Agency for
 Health
 Information,
 Assessment, and
 Quality
- Clinicians & Finance
 Department of Sant Pau Hospital
- ICD manufacturer
- AQuAS initiated competitive dialogue after stating the needs of the service and expected companies to suggest solutions to them
- Total cost of ownership and delivery of outcomes beyond the device were mapped
- AQuAS procured a comprehensive service related to an ICD with a fouryear contract worth €10 million

- 10% drop in outpatient visits
- 10% reduction in complications
- A new service contract, which included devices, technical assistance and remote monitoring center for patients with ICDs
- Increased stakeholder collaboration along the care pathway



Critical Success

factors:

- The healthcare provider documented the desired outcomes developed a core team with the relevant stakeholders
- The Government agency facilitated pre-procurement dialogues
- The manufacturer mapped the Total Cost of Ownership (TCO) for the product
- The manufacturer enhanced the service KPIs to convert individual product into a solution

Sources: https://magnify.partners/wp-content/uploads/2020/06/The-European-public-procurement-opportunity-Delivering-value-in-medtech-final.pdf

Case Study 3: VBP implementation in Denmark – Helped in higher throughput & savings by using Artificial intelligence (AI) for providing optimal radiation therapy to pelvic area cancer patients



Problem

Stakeholders

Intervention

Impact

- High instance of complications and side effects in poor prognosis cancer patients
- Overspending in the total cost of care despite focus on reducing direct treatment costs
- Clinicians, physicists and administration of Herlev & Gentofte Hospital
- Regional Council of the Capital Region of Denmark (Government)
- Manufacturer
- Strategic procurement of radiation devices was done with pre-defined clinical and technical outcomes
- Targeted treatment approach for pelvic area cancer patients
- Selected the vendor who provided innovative Al with the linear accelerator, along with home care monitoring devices
- Manual processes around radiation therapy were automated, quicker treatment provided care availability to ~500 incremental patients annually
- Daily individualized advanced treatment plan for patients based on tumor size measurement
- Savings of ~DKK 260 million

Critical Success factors:

- The Government provided the appropriate regulatory framework for procurement based on value
- The healthcare provider developed a core team with the relevant stakeholders for value assessment
- The healthcare provider and manufacturers engaged in preprocurement dialogue
- The selected manufacturer enhanced the service KPIs to incorporate appropriate innovation

Sources: https://magnify.partners/wp-content/uploads/2020/06/The-European-public-procurement-opportunity-Delivering-value-in-medtech-final.pdf

Case Study 4: VBP implementation in France – *Helped in reducing the hypothermia rate in post-operative patients*



Problem

Stakeholders

Intervention

Impact

- Complication of hypothermia post-surgery in 54% patients
- Sub-optimal clinical care chain, surgery pathway & heating system
- Anesthetists, biomedical engineers, pharmacists, nurses of Hospices Civils de Lyon
- Manufacturer
- Detailed study of the surgical pathway and probable pain points
- Competitive dialogue among hospital stakeholders and vendors
- Vendor
 evaluation
 criteria was
 defined as 40%
 cost, 35% quality
 and 25% support
- Designing of a comprehensive solution to keep patient core temperature above 36.5 C along the peri-/postoperative process

- Active patient warming along the peri/post-operative process, skin & fluid
- Patient core temperature monitoring along the perioperative process
- Reduced incidence and the cost of complications due to hypothermia was avoided



Critical Success factors:

- The healthcare Provider documented the desired outcomes using comprehensive stakeholder capability engagement
- The healthcare provider and Manufacturers engaged in preprocurement dialogue
- The selected Manufacturer enhanced the service KPIs to design a comprehensive solution

Sources: https://www.sailab.fi/wp-content/uploads/2021/01/sailab-finland-value-based-procurement-in-europe-16feb2021-hbax.pdf

Case Study 5: VBP implementation in Sweden – Led to better patient outcomes and improvement in overall quality of services



Problem

Stakeholders

Intervention

Impact

- High equipment life-cycle cost
- High cost of upgrades
- Clinicians, biomedical engineers, quality and finance department of Karolinska University Hospital
- 5 tender participant comp anies
- Manufacturer
- Karolinska
 University Hospital
 issued 14-year
 tender for
 complete
 imaging services
 (MRI, CT, USG
 etc.) instead of
 individual
 equipment
- All relevant provider stakeholders specified the technical standards which needed to be maintained across the contract period (capability, services, replacement, upgrades etc.)
- Competitive dialogue was done for vendor selection

- Reduced product and services lifecycle cost
- High quality of equipment
- The provider also got a local innovation hub funded by the vendor for research and education which focused on improvement of outcomes in 10 high-priority therapy areas



- The healthcare provider documented the desired outcomes & developed a core team with the relevant stakeholders
- The healthcare provider and manufacturers engaged in preprocurement dialogue
- The selected manufacturer enhanced the service KPIs to provide comprehensive solution instead of individual product

Sources: https://www.sailab.fi/wp-content/uploads/2021/01/sailab-finland-value-based-procurement-in-europe-16feb2021-hbax.pdf

Case Study 6: VBP implementation in Canada – Led to optimal patient outcomes and significant cost benefits



Problem

Stakeholders

Intervention

Impact

Southlake Regional Health Centre in Newmarket, Ontario had:

- Almost all contracts for cardiac equipment were expiring at the same time
- The separate tenders represented a high spend (\$25M in supplies, or about 8% of the total hospital spend)
- Treating physicians & hospital administration
- Government authorities
- Manufacturer
- Regional Health
 Centre in
 Newmarket,
 Ontario engaged
 in competitive
 dialogue for the
 specific case
 with history of
 past multiple
 standard
 pacemaker
 implanted and the
 current infection
 state
- Government approved the procurement of an advanced leadless pacemaker



- Resulted in 35% average savings, at least 4% in additional value
- Creation of a new accountability framework with specific warranties for patient outcomes linked to performance targets (e.g., readmission rate).
- Improved clinical workflows,
- Lower readmission rates,
- Reduced length of stay

Critical Success factors:

- The healthcare provider documented the desired outcomes & developed a core team with the relevant stakeholders
- The healthcare provider and Manufacturers engaged in preprocurement competitive dialogue
- The selected manufacturer **enhanced the service KPIs** to incorporate appropriate innovation
- The Government provide appropriate regulatory framework for procurement based on value

Sources: https://www.medtronic.com/ca-en/about/news/Innovative_procurement.html

Case Study 7: VBP implementation in Netherlands – Assisted in cost efficient and effective patient monitoring by procurement of a comprehensive solution



Problem

Stakeholders

Intervention

Impact

Estimated benefit of

€5,00,000 per year

through reduced

- Erasmus Medical Centre wanted to procure beds for efficient patient monitoring
- The new facility's design had doors with no windows.
 This required the nurses to open each door to make sure patients were in bed
- Treating physicians & hospital administration
- Procurement team
- Manufacturer
- Digitally
 connected bed
 was developed
 which offered an
 innovative
 comprehensive
 solution
- The bed sent an alert to the nurse if the patient has moved from the bed
- The hospital purchased 800 beds, robotic washing solution, integrated digital monitoring devices for a 15year partnership



- nursing cost, coupled with reduced length of stay by 1 day

 The beds caused improved workflow efficiency they automatically weigh
- improved workflow efficiency – they automatically weigh the patient (a step avoided from the nurse's routine), reduced pressure ulcers and risk of infections

Critical Success factors:

- The healthcare provider documented the desired outcomes & developed a core team with the relevant stakeholders
- The healthcare provider and manufacturers engaged in preprocurement dialogue
- The selected Manufacturer enhanced the service KPIs to provide comprehensive solution instead of individual product as well as incorporate innovation

Case Study 8: VBP implementation in Wales – Led to reduced complications & better management of volumes by procurement of a comprehensive solution



Problem

Stakeholders

Intervention

Impact

- High rate of complications in patients requiring blood thinners
- High volume of ~400,000 blood tests for patients which require blood thinners were being done
- Pathologists, clinicians & hospital administration
- Procurement team
- Manufacturer
- A comprehensive solution-based offering was designed which included medical devices, diagnostics and consumables, training, software and care expertise
- Contract was awarded to single provider of testing equipment & consumables as well as anticoagulation dosing software

- Reduced patients visit to ER by up to 20%
- Patients can monitor their blood levels



Critical Success factors:

- The healthcare provider documented the desired outcomes & developed a core team with the relevant stakeholders
- The healthcare provider and MedTech company engaged in preprocurement dialogue
- The selected Manufacturer enhanced the service KPIs to provide comprehensive solution instead of individual product as well as incorporate innovation

Case Study 9: VBP implementation in Netherlands-Assisted best preferred provider selection for cataract surgeries



Problem

Stakeholders

Intervention

Impact

- Zilveren Kruis, the largest health insurer in The Netherlands wanted to engage the best preferred provider network for cataract surgeries
- Company administration
- Company business development team
- Business development and clinical teams from 5 hospitals
- SMEs from the provider's side defined quality of care
- Insurer set reimbursement criteria based on clinical outcomes
- Multiple providers engaged to reduce waiting time for patients

- Lower complication and follow up surgery rate
- Reduced long-term cost of care
- Lower waiting time for surgery
- High patient satisfaction rate
- Attraction of new members due to high-quality services



Critical Success factors:

- The healthcare Provider documented the desired outcomes
- The payor & the healthcare providers engaged in pre-procurement dialogue
- The payor used comprehensive stakeholder capability to enhance the service KPI

Sources: https://www.tmabevents.be/MedtechConference2019/Posters/6.pdf

Case Study 10: VBP Implementation in Switzerland – *Assisted in reduction of redo cases*



Problem

Stakeholders

Intervention

Impact

- High complication and redo rate in Atrial fibrillation ablation procedures at La Tour, a private clinic of 180 beds
- CEO, CFO and procurement & lead electrophysiologist from the clinic
- Managing
 Director,
 business unit
 leader, strategic
 account
 manager, value
 added solutions,
 finance, legal,
 health care
 compliance, and
 pricing teams
 from the
 manufacturer
- Cohort of patients was defined - patients undergoing paroxysmal atrial fibrillation procedures
- Outcome thresholds were defined
- Acquisition of new technology
- 50% rebate on products needed for redo for procedures above pre-set outcome thresholds (risk sharing)

- Reduction of redo% from 30% to 10% based on new technology
- 50% reduction in cost of redo procedures
- Reinforced reputation of hospital as high quality and innovative provider
- **>>**
- High patient satisfaction rate

Critical Success factors:

- The healthcare provider documented the desired outcomes & developed a core team with the relevant stakeholders
- The healthcare provider and manufacturers engaged in preprocurement dialogue
- MedTech companies enhanced the service KPIs to incorporate appropriate innovation as well as a risk sharing arrangement

https://www.vbpcommunity.eu/documents/1_AtrialFibrillation_Romanlselin_LaTour.pdf

Case Study 11: VBP Implementation in Uruguay – Helped in procuring quality imported equipment at lowest cost



Problem

Stakeholders

Intervention

Impact

- Total dependence on imported MedTech as negligible indigenous manufacturing
- High healthcare expenditure
- National Health Technology Management Unit under Ministry of Public Health (Government)
- MedTech companies
- Competitive tendering process was used for all MedTech procurement
- The evaluation before vendor registration included:
 - Quality
 certifications for
 the production
 process
 - Product quality certifications
 - Technical report of the product
 - Affidavit of maintenance of the equipment during the product life

 High quality, best cost, evidencebased procurement from developed countries



Critical Success factors:

- The Government provided the **appropriate regulatory framework** for procurement based on value.
- The healthcare provider developed a core team with the relevant stakeholders to assess value
- The healthcare provider and manufacturers engaged in preprocurement dialogue

Sources: https://2016.export.gov/industry/health/healthcareresourceguide/eg_main_116248.asp



Key learnings from the global case studies

In summary, the global case studies highlighted various facets of VBP implementation and offered evidences that VBP can be implemented across different types of economies as well as care settings



Developed

VBP has been implemented across both developed (case studies in Netherlands, UK, Switzerland and Catalonia) and developed economies (case study on Uruguay)

Stakeholder insights

"In developed economies, VBP implementation is often seen as a normative practice like in the EU"

 Developed countries have seen faster uptake due to higher awareness, regulatory reforms and better capability of the procurement teams to assess value

"A basic level of VBP implementation is being done in developing countries like Uruguay and India without any specific framework"





Public Sector

Private Sector

- VBP has been implemented in both public (case study in Catalonia) and private healthcare (case studies in Switzerland, Netherlands (Insurance)
- Public sector implementation is driven by the Government making regulatory reforms to include outcome-related aspects in procurement
- Private sector uses VBP to enhance care quality and reputation, which also aids in increasing patient footfalls through word-of-mouth referrals

"The EU directive on healthcare procurement was a major milestone in spurring governments to implement VBP"

"The private sector uses VBP to distinguish itself from competition and become a center for excellence through efficient treatment"

The global case studies also highlighted that VBP can be implemented across different types of procurement offerings and payment mechanisms in the healthcare ecosystem



Products

Solutions

VBP can be implemented for both individual products (case studies in Switzerland and Catalonia) and comprehensive solutions (case study in the Netherlands)

VBP is more suitable for products which are relatively more complex and have higher room for improvement through research & innovation

Stakeholder insights

"VBP has been implemented with good results in products ranging from radiation therapy machines right up to under pads!"

"We developed a digitally connected bed which automatically weighs the patient and alerts the nurse when the patient has gotten up out of bed"



Diagnostic Related Groups (DRG)

Fee for service

- VBP has been implemented irrespective of payor type
- DRG mechanisms also support VBP due to focus on outcome-based reimbursement
- The Fee for Service model focuses on process improvement to achieve effectiveness and efficiency vis-à-vis the cost

"In many member countries, the reimbursement is done on the successful outcome of procedure based on the DRG"

"The Columbian Health System still has a fee for service system, but steps are taken to customize VBP implementation.

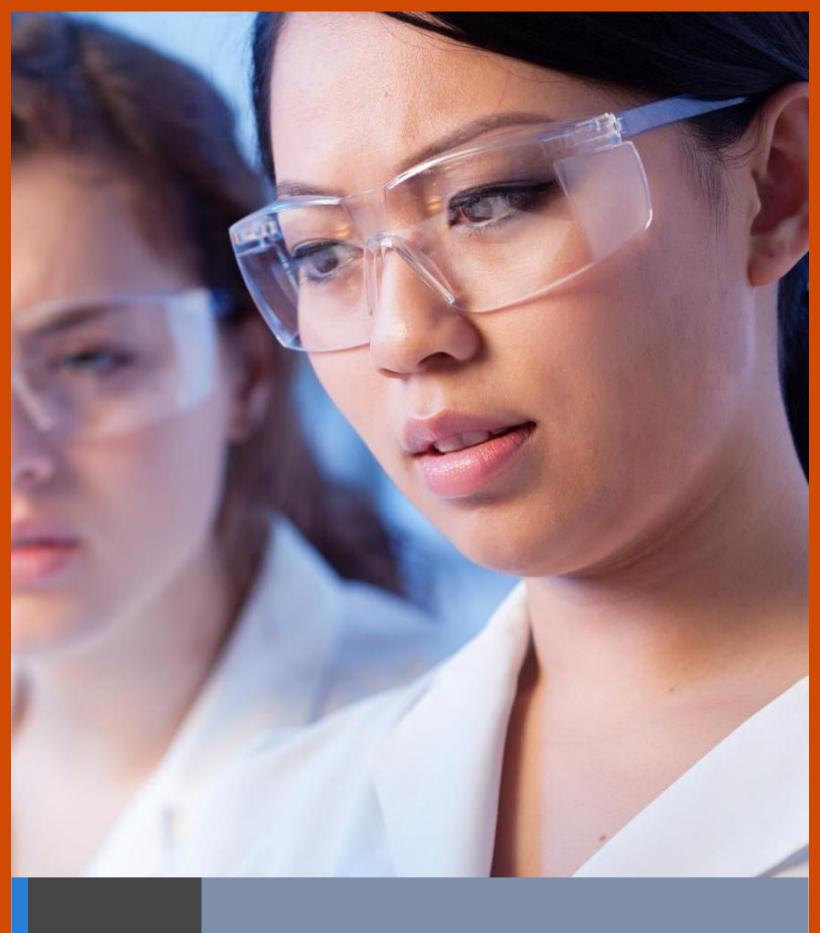
The case studies also highlighted that key stakeholders had to take multiple steps for effective implementation of VBP

Providers Government Focus on improvement in Define desirable criteria and patient outcomes procurement objectives Carry out care pathway process Appropriate regulatory landscape in mapping to highlight pain points procurement to include outcomes Facilitating transparent pre-**Engage comprehensive** stakeholder capability procurement dialogue with the MedTech companies **MedTech Companies** Engage in pre-procurement dialogue with the MedTech companies **Ensure availability of research-based** outcomes data Maintain and share data on care delivery outcomes Enhance the service offer for products as well as innovate to develop comprehensive solutions **Payors** ○ ○ Participate in competitive dialogue and Define and classify quality in care delivery outcomes ert trial-based selection process Incentivize high-quality care Propose feasible risk-sharing modules

Sources: Secondary research, Primary interviews

to share cost of complications

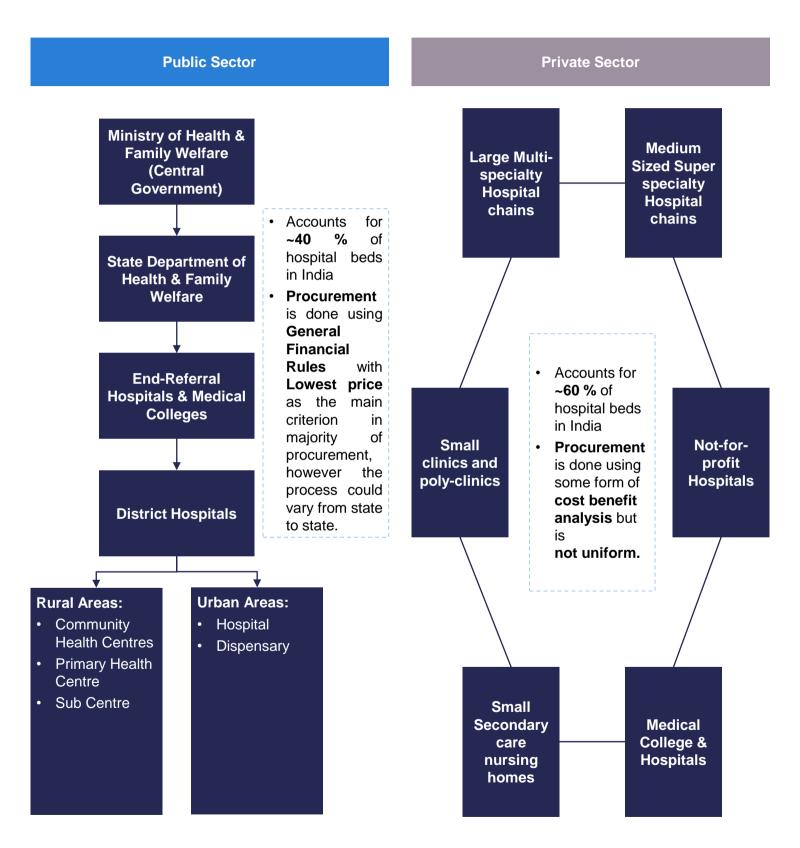
delivery outcomes



Section 4

Procurement in the Indian ecosystem

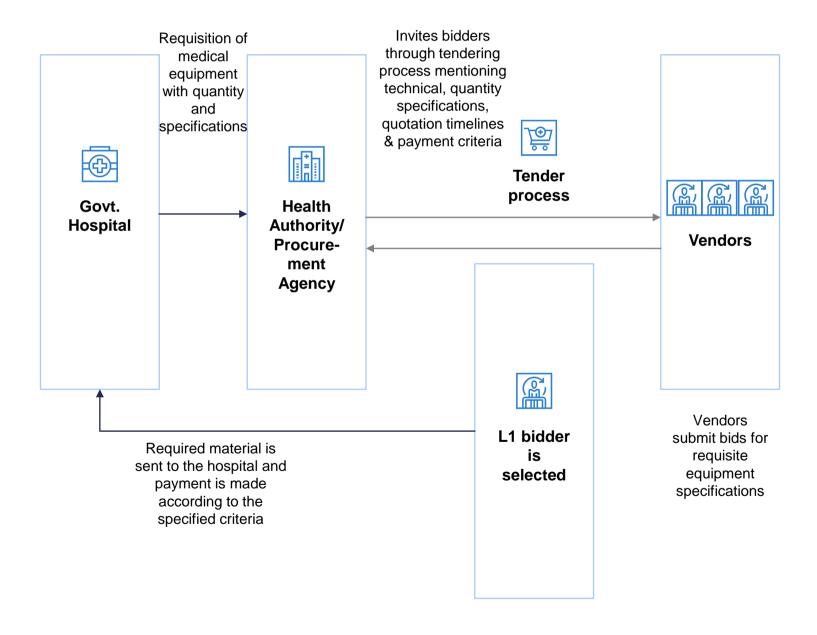
Both public and private providers engage in health care delivery in India, and both follow different models of procurement



Sources: https://ficci.in/pressrelease-page.asp?nid=3677

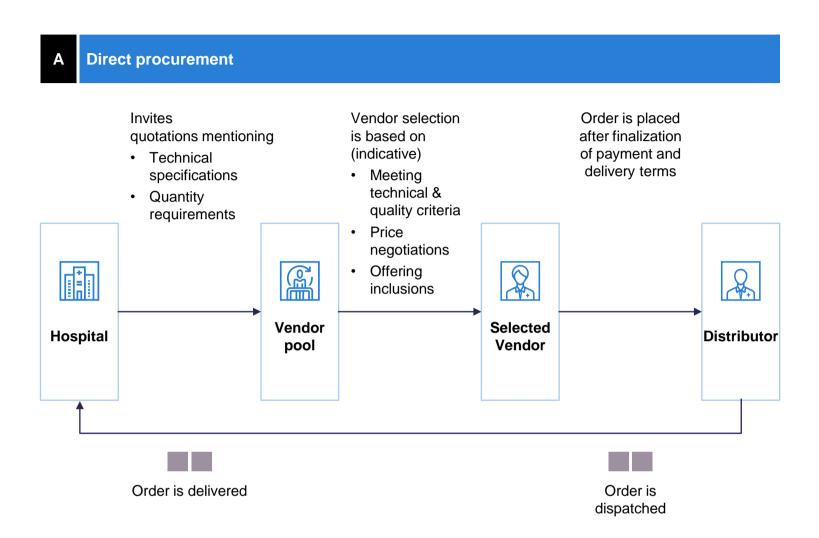
Procurement of MedTech in the public sector is done as per General Financial Rules (GFR) 2017 which specifies regulations for requisition, bidding, selection and payment among others

- General Financial Rules (GFR) are a compilation of rules and orders of Government of India for matters involving finances.
- These rules and orders are treated as executive instructions to be observed by all departments and organizations under the Government



Sources: https://doe.gov.in/sites/default/files/GFR2017_0.pdf

While the private healthcare sector does not focus only on L1, the procurement methodology today largely does not cover all facets of VBP



Stakeholder insights

"The private sector in India performs varying levels of cost benefit analysis before procurement of MedTech. The whole exercise is more often done to avail products at best costs" "Many corporate hospitals use the capabilities of a procurement team which involves the clinicians who are users, the operations team members, the biomedical engineering team and the finance department members"

"Private Hospitals while doing some aspects of VBP despite not under the name of VBP, do not generally map desired clinical outcomes and engage in risk-sharing mechanisms"

Case study 12: Methodology at a leading private healthcare provider in India for procurement of a new PET Scan machine

Α

The proposition

The **decision** had to be made **between** the **Analog PET-CT** scanner & the **digital PET-CT scanner**.

- The Analog PET-CT scanner has majority installations in the market, has a comparatively lower cost, but uses older technology.
- The digital PET-CT scanner on the other hand uses latest technology but is double the cost and has comparatively lower number of installations.

В

The people and parameters involved

- The Hospital Director along with the Head-Nuclear Medicine and Medical Strategy Operation Group conducted assessment of current and future clinical needs & prepared the specification requirements list.
- Global tenders were then invited, and product demonstrations were done before the Tender Evaluation Working Group (TEWG) which includes clinical and technical expert members.
- In addition to basic technical and infrastructural specifications, evaluation was also done on other quality and outcome parameters like image resolution, patient comfort, availability of advanced applications, accuracy of data readings, patient safety, scan TAT, redundancy of technology.

C

The process

- The TEWG evaluated each bid by rating the parameters like service level, user preference and usability, technical specifications and lifecycle costs on a scale of 1 to 5 and assigned a weightage of 25%, 20%, 25% and 30% to each parameter, respectively.
- The Tender Evaluation Committee then conducted price negotiations with the eligible vendors. The Unit operations team prepared the business plan which was then approved by the Executive committee and the board.

D

The product chosen

The provider **decided to procure the Digital PET-CT Scan** machine from the selected successful vendor (based on both technical and commercial score) as it yielded **benefits** like:

- Better image resolution helping in higher lesion detectability
- Advanced applications like flow motion scanning with continuous bed movement which provides higher patient comfort and avoids overlapping scans.
- Flow motion scanning also helps in differentiating normal physiological uptake vs localized FDG uptake.
- · Accurate data for clinical studies,
- Lesser amount of FDG consumption per patient,
- Reduced scan TAT translating to 40-50 % increase in scan capacity.



Innovative models in Indian public procurement

A. Government e-Marketplace (GeM) is an online procurement facilitating transparency and ease in all categories of procurement including MedTech procurement for public sector healthcare facilities



Ownership

Launched on 9th August 2016. Owned by GeM SPV (Special Purpose Vehicle) which is a Governmentowned, non-profit company under the Ministry of Commerce and Industries, Government of India



As per the General Financial Rules 2017, procurement of goods and services by Ministries or Departments will be mandatory for goods or services available on GeM

Purpose

GeM facilitates online procurement of common use goods & services required by various Government Departments / Organizations / PSUs either by direct buying or by the bidding process







Vendor Evaluation

The credentials of suppliers on GeM shall be certified by Directorate General of Supplies & Disposals (DGS&D)

Pricing

The Government buyers may ascertain the reasonableness of prices before placing the order using the Business Analytics (BA) tools available on GeM including the last purchase price on GeM, department's own last purchase price etc.

Golden parameters

Golden Parameters are further detailed specifications which have maximum impact on technical aspects and allow the procurer additional scope of evaluating a product to influence buying decision







Sources: Secondary research

B. Procurement under General instructions on Procurement and Project Management (October 2021) using Quality and Cost Based Selection (QCBS)

Parameter	Details
In effect from	29.10.2021
Governance	Procurement Policy Division, Department of Expenditure, Ministry of Finance, Government of India
Intent	To reform the public procurement policy for non-consultancy services and works (for items deemed as Quality Oriented Procurement (QOP), for procurement value of up to Rs. 10 Crore, where procurement was initially done using the L1 method only.
Features	 In all cases of QOP, a Special Technical Committee is constituted that defines the quality, technical, and financial rating criteria. The instructions allow Pre-Notice Inviting Tender (NIT) where the procurement entity may not have the required knowledge to formulate tender provisions; a pre-NIT conference can be organized publicly to get inputs from vendors. This conference also discusses the defined quality criteria and the scoring methodology. An independent committee is constituted to conduct an objective evaluation of the procurement based on the pre-defined criteria. The weightage given to the non-financial criteria (quality / technical) and financial criteria are 30% and 70%, respectively; the bidder scoring the maximum overall is selected.

Sources: General instructions on Procurement & Project Management (29th October 2021)

Case study 13: Methodology for procurement of Linear Accelerators by West Bengal Medical Services Corporation (WBMSCL) for 4 Government Medical College Hospitals

Α

The proposition

WBMSCL was requested by the Government of West Bengal to procure 6 Linear Accelerator machines on their behalf to be supplied and commissioned in 4 Government Medical College Hospitals. The 3 types required were as follows:

- High-End High Energy LINAC (2 nos.)
- High-End High Energy LINAC (with 15 MV photon Energy Trimmed off) (1 no.)
- High Energy LINAC (3 nos.)

Along with the machines, WBMSCL required relevant software, hardware and accessories to be included in the procurement.

В

The people and parameters involved

- The **Technical Evaluation** Committee and **Financial Evaluation** Committee of the **WBMSCL** and representatives from the manufacturer were main stakeholders involved.
- The technical committee
 pre-defined the
 specifications for aspects
 of machine performance,
 internal quality assurance
 checks, patient safety,
 ease of utility, currentness
 of technology etc.
- Measurable quality standards were also defined with their rationale e.g., radiation dose rate, image resolution, size, collimators etc.
- The finance committee looked for comprehensive aspects of costs like, product cost, maintenance costs, operationalization costs, import costs, training costs etc. along the product life cycle

C

The process

- The WBMSCL floated the tender mentioning detailed requirements of the manufacturer, the product, the accessories and the life-cycle costing.
- WBMSCL engaged in a pre-bid discussion with the manufacturers interested in bidding in order to clarify the requirements.
- Post the evaluation of quality. technical specifications and lifecycle costs. each bid was ranked in the QCBS method based on the total score obtained using the weightage of 40% and 60% for the "cost" and the "quality" respectively.
- The bidder obtaining Highest Combined Quality and Cost Score (CQCS) was awarded the contract.



Section 5

Challenges for implementing VBP

Low awareness, high percentage of OOPEs, lack of data on clinical outcomes are some of the challenges in the Indian healthcare ecosystem

Low awareness about VBP

- Globally the concept of VBP is evolving and gaining traction across multiple countries
- However, our discussions with the stakeholders highlighted that the awareness (and therefore also the benefits) about VBP in India is currently limited including in the private sector

Regulatory framework limiting procurement beyond L1

In India. policy the mandates the public sector hospitals to procure MedTech products as per the GFR (2017). The rules mandate that public sector entities engage in tenderina process mentioning technical and quantity specifications, and finalize the bid based on L1.

Lack of data on clinical outcomes

- The global case studies indicate that healthcare stakeholders measured and documented patient clinical outcomes.
- In India, however there is limited baseline information availability in capturing, terms of maintaining and sharing of clinical data w.r.t outcomes. This deters the evaluation of 'value' from a patient outcome perspective.

Stakeholder insights

"VBP is still a nascent concept in India, there needs to be a lot more generation of awareness regarding VBP, its features and benefits"

"Public sector procurement, including the GEM portal currently has bid qualification based on technical specifications and bid finalization based on lowest cost, the value based on outcomes is not seen"

"Due to high volumes of work with stressed manpower, it becomes difficult to actively capture and maintain data on clinical outcomes on a consistent basis"

Source: # hospitals, hospital beds per 1000 population are from various years post 2010 for different countries 'WHO's Global Health Observatory, World bank data

The challenges also include limited capability of the procurement team to assess value and lack of appropriate incentivization to healthcare providers

Limited capability in the procurement team

Our discussions with stakeholders indicated that there is a lack of alignment of the procurement team's focus to strategic objectives. Today, the focus is largely on product ensurina availability at the lowest cost. There is also the issue of limited capability value to measure beyond price

Lack of incentivization to focus on patient outcomes

- There is lack of а standards set for defining and classifying the treatment outcomes by private as well as public payors.
- While there is an incentivization to go for quality accreditation NABH. the treatment modality and outcome standards of excellence not defined and are incentivized by the payors.

High out of pocket expenditure

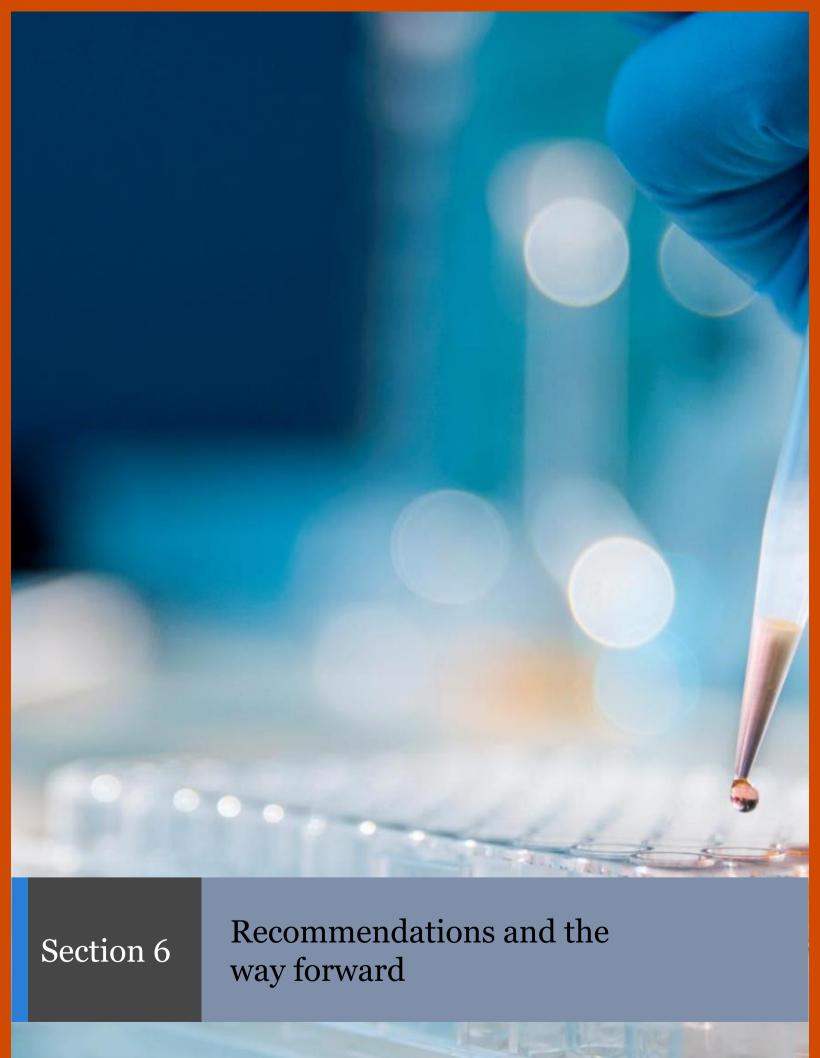
- In India, while the penetration of healthcare insurance is increasing, majority of healthcare expenses are still borne out of pocket
- Hence the focus of procurers is on reducing the up-front cost in order to pass on the benefits of reduced costs to the patient.

Stakeholder insights

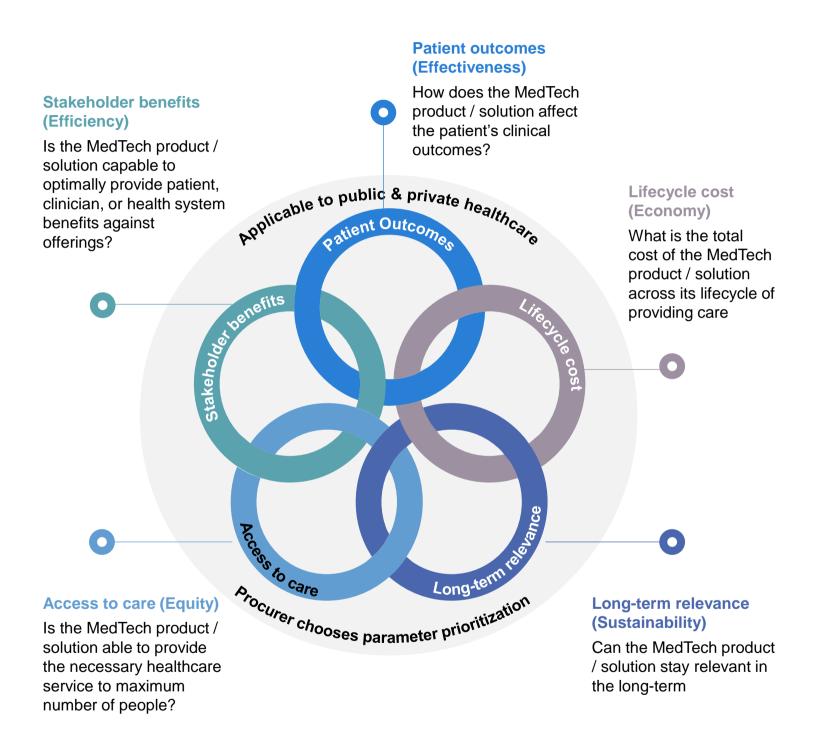
"Given that healthcare delivery in the private sector is majorly done by small hospitals and nursing homes, there is a lack of capability in the procurement team to assess value"

"Currently, the amount reimbursed for treatment is the same irrespective of the treatment modality used or the outcome achieved" "Due to the majority of out-ofpocket paying patients, emphasis in care delivery and MedTech procurement is on reducing up-front costs"

Source: # hospitals, hospital beds per 1000 population are from various years post 2010 for different countries 'WHO's Global Health Observatory, World bank data



The VBP framework in the Indian context could focus on the following parameters



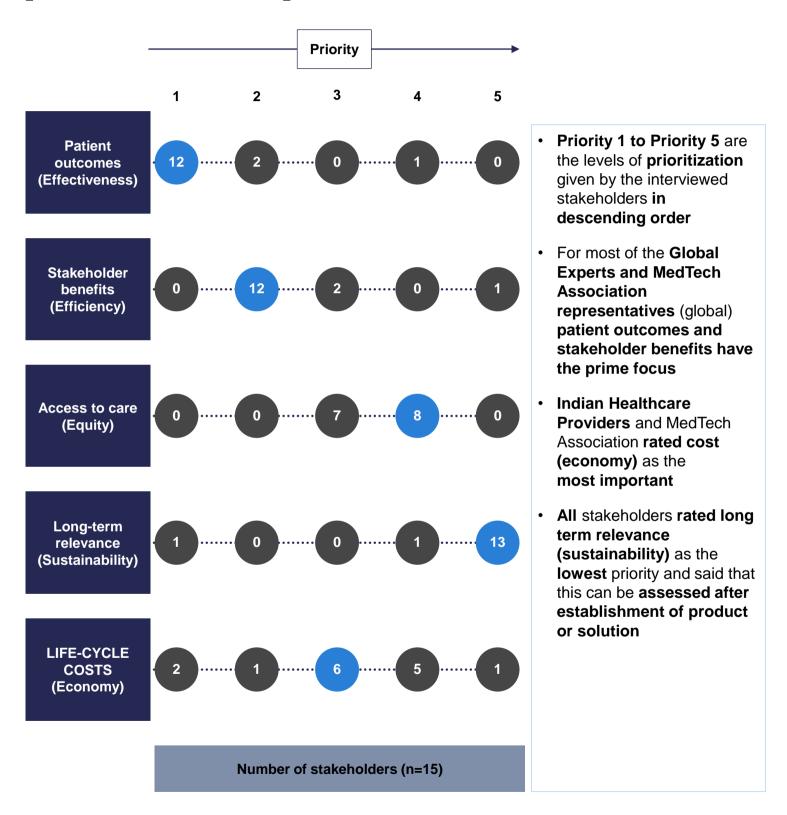
Adapted from Value-based procurement of medical equipment, The Access and Delivery Partnership (ADP), June 2020; https://www.theglobalfund.org/media/8596/core_valueformoney_technicalbrief_en.pdf?u=637169196780000000 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DFID-approach-value-money.pdf

For these parameters, the following is the indicative list of measurable elements; each provider can customize the relevant parameters and elements based on its requirements

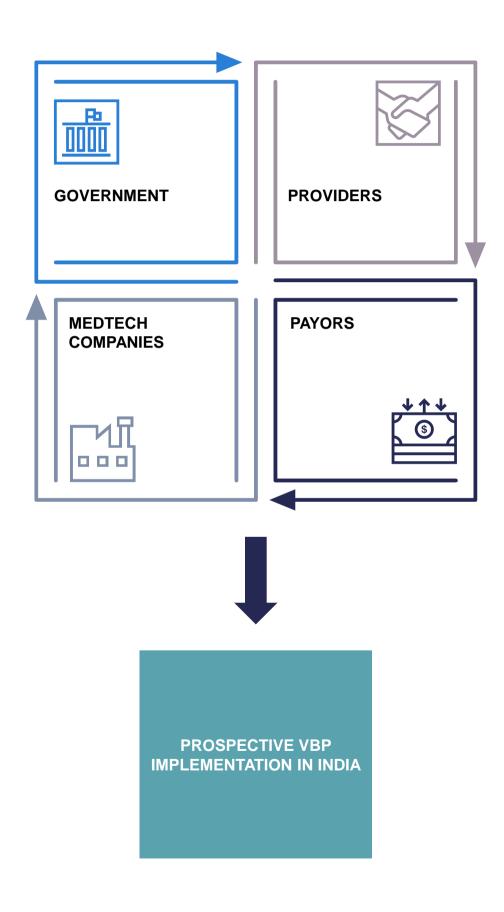
LIFE-CYCLE ACCESS TO **PATIENT STAKEHOLDER** LONG-TERM CARE **OUTCOMES** COSTS **BENEFITS RELEVANCE** (Sustainability) (Effectiveness) (Economy) (Efficiency) (Equity) 1. Phase 1 -Impact on 1. Care pathway 1. Increased 1. Quality clinical certifications Purchase. ease capability for outcomes like patient intake / Transport, 2. Staff safety & 2. Currentness reduction in: Installation, utilization feedback of technology Training costs return to OPD. 2. Improvement 3. Cost reduction 3. Level of etc., in social health re-admission/ technology use 4. Vendor 2. Phase 2 indicators redo-surgery, assistance in 4. Pace of Operational, 3. Patient re-infection. education & innovation & Maintenance. satisfaction / research innovativeness Breakdown. LOS. feedback of product Consumable 5. Vendor invasiveness 4. Cost reduction costs etc. provides 5. Need for etc. life-cycle 5. Improved upgrades 3. Phase 3 a) Proof of support as mobility / Upgradation. 6. Compatibility outcome independence / appropriate Post warranty, with Internet of improvement quality of life Condemnation 6. Reduction in Things (IOT) in patients cost etc. b) Proof of diagnostic time 7. Provision for outcome / processing remote standardization time / monitoring treatment time

Adapted from Value-based procurement of medical equipment, The Access and Delivery Partnership (ADP), June 2020; https://www.theglobalfund.org/media/8596/core_valueformoney_technicalbrief_en.pdf?u=637169196780000000 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DFID-approach-value-money.pdf

A varied group of 15 stakeholders including representation from Global experts, MedTech Associations, Healthcare providers, Government and Regulatory bodies rated the prioritization of the 5 parameters of the VBP framework



For facilitating VBP implementation in India, each of these stakeholders needs to take multiple steps



The Government of India can facilitate VBP implementation through updated procurement policies and develop standardized procurement guidelines...

Government

MedTech Cos

Providers

Payors

Modify the regulatory landscape to enable implementation of VBP in MedTech procurement

Increase focus on quality & patient outcomes

Increase
procurement team
capability as well as
facilitate
pre-procurement
dialogue

Develop standardized procurement evaluation criteria

- The European Union had recommended that the member countries include quality and outcome-based criteria in assessment of MedTech procurement in 2014 which led to the growth of VBP in those countries. Similarly, the Indian Government needs to bring in the appropriate regulations which will enable VBP for MedTech products in the public sector.
- Recently, the Indian Government has introduced the QCBS framework for procurement which allows assessment of quality parameters in addition to cost parameters

Modify the regulatory landscape to enable implementation of VBP in MedTech procurement

Increase focus on quality & patient outcomes

Increase
procurement team
capability as well as
facilitate
pre-procurement
dialogue

Develop standardized procurement evaluation criteria

- The Government has expanded Health Insurance coverage to vast sections of the society in the past few years including launching of PMJAY which covers ~500 million persons. While such health insurance coverage / schemes incentivize accreditations (like NABH), there is room to further incentivize outcomes and increased focus on quality
- As a policy, the government should take steps such which encourage providers to monitor and publish outcomes and deliver highest levels of clinical excellence. This in turn will aid providers to procure those MedTech equipment which help them deliver clinical excellence



...as well as develop policies to increase focus on patient outcomes

Government MedTech
Cos Providers Payors

Increase
procurement team
capability as well as

Modify the regulatory landscape to enable implementation of VBP in MedTech procurement

Increase focus on quality & patient outcomes

Increase
procurement team
capability as well as
facilitate
pre-procurement
dialogue

Develop standardized procurement evaluation criteria

- VBP entails involvement of multiple stakeholders within the providers, as well as looking at multiple aspects of value beyond L1. Hence the procurement team needs to be equipped with capabilities to evaluate aspects of other dimensions beyond price
- The Government thus should run training programs to equip the procurement team with the requisite skill sets
- The government should also encourage the public sector hospitals to undertake pre-bid discussions with the MedTech companies like it was seen in the case studies of Catalonia, Denmark, France etc.

Modify the regulatory landscape to enable implementation of VBP in MedTech procurement

Increase focus on quality & patient outcomes

Increase
procurement team
capability as well as
facilitate
pre-procurement
dialogue

Develop standardized procurement evaluation criteria

- While few states / procurement agencies might have started looking at procurement criteria beyond L1, Department of Procurement / Government of India can look at developing standard / suggestive guidelines with respect to procurement of medical equipment by incorporating aspects of VBP.
- Government can also work on creating awareness about the benefits of VBP as well as the abovementioned guidelines (as and when developed) amongst various Government procurement agencies / departments.



MedTech companies can engage in fruitful pre-procurement discussions with procurers to develop customized solutions...

MedTech Cos Government Providers **Payors Improve Develop** availability customized s **Engage in competitive Build feasible** of researchpre-procurement olutions for risk sharing based pro-positions dialogue procurer's outcomes needs data As MedTech companies are subject matter experts regarding the applications of technology in care delivery, both in terms of diagnostics and therapeutics, they can assess and understand the care delivery needs of the healthcare providers. MedTech companies could engage in transparent and well documented preprocurement dialogue with the providers and the government stakeholders in order to understand the defined outcome criteria as well as the pain points. This would help in proposing relevant innovative solutions which best address the needs.

Engage in competitive pre-procurement dialogue

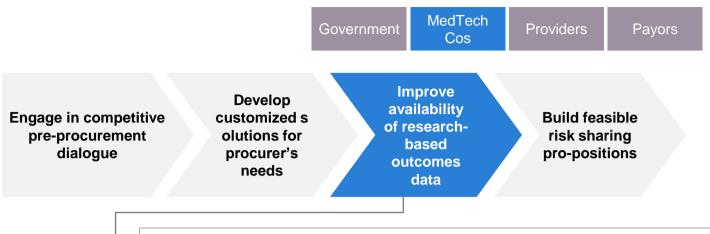
Develop customized s olutions for procurer's needs Improve availability of researchbased outcomes data

Build feasible risk sharing pro-positions

 Based on the pre-procurement discussions and understanding of the procurer's needs, as well as the desirable outcome criteria, the MedTech companies should develop innovative solutions to be able to provide a comprehensive solution given the procurer's pain point/ requirement and not look at only selling an isolated product



...as well as risk-sharing mechanisms



- Globally, it is observed that providers capture and maintain outcomes data for many steps in the care pathway. This data serves as a baseline for measuring the improvement in outcomes by using any MedTech product
- MedTech companies could collaborate with the Indian providers to engage in pilot studies. The data generated in these studies could be captured and used as indigenous standards for measurement of product performance

Engage in competitive pre-procurement dialogue

Develop customized s olutions for procurer's needs Improve availability of researchbased outcomes data

Build feasible risk sharing pro-positions

 MedTech companies can develop feasible risk-sharing propositions in order to reduce the overall cost of care to the providers as well as patients and in turn build trust for the product / solution in the ecosystem



Healthcare providers need to develop stakeholder capabilities to assess MedTech procurement...

MedTech **Providers** Government **Payors** Cos Care pathway Develop a health **Maintenance of** Engage in process pretechnology / data on care mapping to procurement procurement delivery highlight pain dialogue assessment team outcomes points A dedicated Health Technology / Procurement Assessment team can be developed which is becomes the central point in procurement evaluation prior to decision by the top management. The team could indicatively include relevant representatives from the end user department clinician / nurse / technician, biomedical engineering, operations, quality, finance & the medical superintendent.

Develop a health technology / procurement assessment team Care pathway process mapping to highlight pain points

Engage in preprocurement dialogue

Maintenance of data on care delivery outcomes

- It is important to carry out detailed process mapping of all care pathways in order to ascertain areas where improvement can be made.
- These pain points can be used to define desirable criteria on clinical outcomes for MedTech procurement



... as well as undertake pre-procurement dialogue with the MedTech companies along with maintaining patient and process specific KPIs regularly

MedTech **Providers** Government **Payors** Cos Care pathway **Develop a Health** Maintenance of **Engage in** process Technology / predata on care mapping to **Procurement** procurement delivery highlight pain Assessment team dialogue outcomes points

- The pain points which helped in creating desirable outcome criteria can be a vital tool in the pre-procurement dialogue to communicate clear and unambiguous expectations to the MedTech companies.
- The pain points can also be supported with baseline data on clinical outcomes and can me used as a comparative tool to evaluate the proposed improvement any product / solution can bring about in the same

Develop a Health Technology / Procurement Assessment team Care pathway process mapping to highlight pain points

Engage in preprocurement dialogue Maintenance of data on care delivery outcomes

- It is imperative to document the care delivery outcomes for all clinical specialties both pre-procurement as well as post-procurement.
- These outcomes can be used for evaluation of product / solution capabilities, as well as for risk-sharing mechanisms



Payors should incentivize high-quality patient outcomes which in turn will aid providers to procure medical equipment under VBP

Government MedTech Cos Providers Payors

Define, classify & incentivize highquality care delivery outcomes

- Payors need to enhance their outlook on clinical care to include a detailed understanding on clinical outcomes of treatment. They use subject matter experts to set standards of expected results from clinical care delivery which would help to evaluate quality of care.
- This in turn will lead to providers procuring MedTech products which yield high quality outcomes.

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