

# Value-Based Healthcare: Quick Guide Version 1



**MEDEC**

CANADA'S MEDICAL TECHNOLOGY COMPANIES  
LES SOCIÉTÉS CANADIENNES DE TECHNOLOGIES MÉDICALES



# TABLE OF CONTENTS

Introduction ————— 05

Where did the conversation begin? ————— 05

The Elements of Value-Based Healthcare (VBH) ————— 07

Common Terminology ————— 10

Summary ————— 15

Sources ————— 15



# INTRODUCTION

There has been a lot of discussion, debate and focus on Value-Based Healthcare over the last few years. Additionally, a lot of research, pilot work and demonstration projects are under way globally and while progress is being made and health-system implications are starting to be understood more clearly, there still appears to be confusion about terminology, buzz words and questions about how the theories can be operationalized.

This guide will explore the structure of the theories, the explanations of commonly used terms, the continuum of current methodologies and the potential impact on the management of medical technology and varying levels of innovation.

The document will serve as only an overview and, where available, will include links and references for additional detailed information.

The key questions are.....

Do we know what we mean by Value-Based healthcare?

Do we understand the terminology?

Do we know what the key elements are comprised of?

Do we understand the key players and their roles within the theories?

## WHERE DID THE CONVERSATION BEGIN?

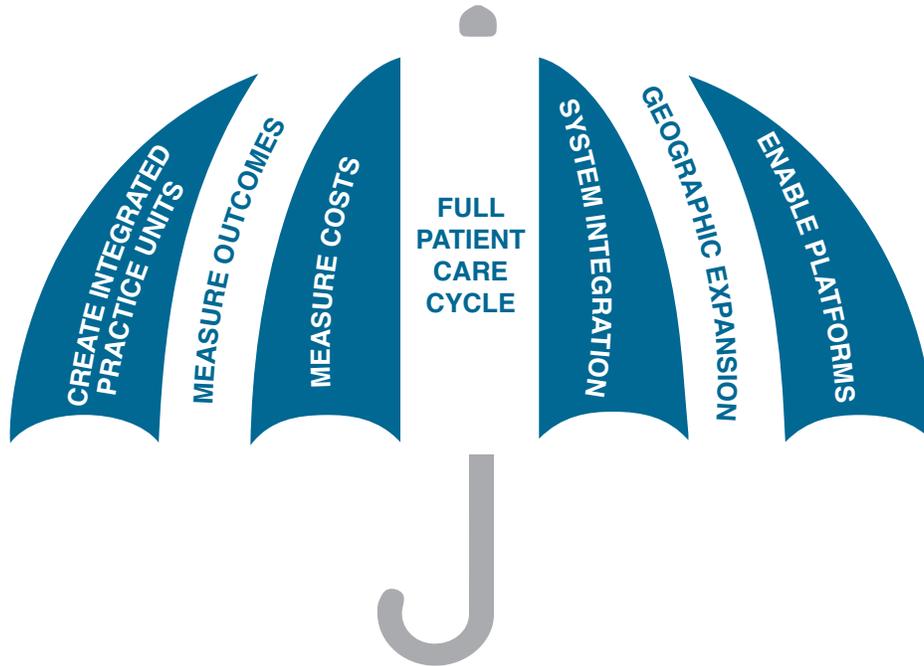
The big idea that is driving change and reform in healthcare and particularly in supply chain and management of new technologies is:

### Value-Based Healthcare

Sometimes referred to as Value-Based healthcare delivery, the basic definition is that within healthcare we need to aim for *better value for patients and increased quality per dollar spent.*

$$\text{VALUE} = \frac{\text{OUTCOMES}}{\text{COST}}$$

It's important to note that the concept will require us to redefine how we identify all *costs*, how we measure and benchmark *outcomes* and how we define and recognize *value*. Additionally, we need to understand that the changing paradigms will affect reimbursement and funding models and may create new patient pathways.



Commonly held perspectives on Value-Based Healthcare are largely driven by the original concepts offered by Professor Michael Porter and Harvard Business School Institute for Strategy and Competitiveness.<sup>2</sup>

**The spokes of this umbrella demonstrate each of the elements:**

- Integrated Practice Units**
- Measuring Cost**
- Measuring Outcomes**
- Full patient care cycle**
- System integration**
- Geographic Expansion**
- Enabled IT platforms**

Interestingly, Value-Based Procurement is not identified as an element of the overall concept, but as we delve into the definitions and terminology we will see how, if employed well, it could facilitate the change in many processes. There has been recognition over the last few years that without transformation in supply chain, it will be difficult to improve patient outcomes and ensure system sustainability.

# THE ELEMENTS OF VALUE-BASED HEALTHCARE

## Create Integrated Practice Units

### Key concept:

*Organizing care to address patient medical conditions. E.g. Hip and Knee*

The concept is based on the premise that if health care providers focus on the patient over the full care pathway as opposed to isolated interventions, they would be more able to address the complexity of the patients needs, improve quality and develop care models which would have more integrated focus and utilize multi-disciplinary services. In Canada, we have an excellent example of this concept in practice in Alberta where they have formed Strategic Clinical Networks ( SCNs) to address specific medical conditions.<sup>3</sup>

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## Measuring Cost

### Key concept:

*Costs are complex and extend significantly beyond the price of acquisition*

An important difference in this approach to cost is that it emphasizes that cost should represent the expense of patient care, the full life cycle of the condition and consider all the initial and ongoing resources involved beyond simply the price tag on a technology or solution. This area highlights the need for the shift from price to value when considering selection of technology and solutions for healthcare. Later in this document and in the appendix, when the MEAT methodology is reviewed, the full complexity of cost in VBH is discussed.

## Measuring Outcomes

### Key concept:

*The best way to measure value in healthcare is to measure patient outcomes and quality of care.*

In most current healthcare systems globally, it is difficult to measure how medical care has affected the patient in the short and long term, or to correlate the outcome back to a specific intervention. It is also rare for us to be able to fully consider the co-morbidities or inter-related circumstances or the patients view of their own condition.

As the Harvard theory cites "medical conditions reflect how patients view their medical issue. For example, for patients with diabetes, their medical condition includes co-existing hypertension, renal disease, and retinal disease. Success in treating diabetes incorporates the combined effect of caring for all of these needs."<sup>4</sup>

Going forward we will have challenges in measuring outcomes and several groups are working on models to standardize and help to benchmark across disease states. One example is the International Consortium for Health Outcomes Measurement (ICHOM) which is currently creating global standard sets against which we can potentially measure and report outcomes. Early work in Canada is being done at University Health Network in Toronto and in Alberta. For more information, [www.ichom.org](http://www.ichom.org).

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## Full patient care cycle

### Key concept:

*As value is defined by improved patient outcomes for lower overall cost, the health system should be set up to reward and compensate health care providers in that way.*

Currently most health care systems in the world allocate funding to HCP's in global budgets, compensate clinicians on fee for service or reimburse based on specific codes and schedules for specific interventions. Value-based healthcare theory suggests that alternate funding models which would allocate the money based on a total cycle of care for a medical condition would create more incentive to HCP's to provide quality care and better value for patients. In Canada, several jurisdictions are piloting bundled payment and activity based funding. One example is the Ministry of Health and Long-Term Care in Ontario (MOHLTC) who funded several projects in 2015 to test innovative approaches and to integrate funding across a patient's episode of care. For more information: <http://www.health.gov.on.ca/en/pro/programs/ecfa/funding/ifm>

## System integration

### Key concept:

*As Value-based care theory focuses on the patient's needs, it is proposed that concentrating volume of treatments by medical condition and moving non-acute care out of heavily resourced hospital facilities would improve outcomes and reduce costs.<sup>5</sup>*

By creating centres of excellence for acute care by specialty and deploying more funding to community resources, there could be significant improved value for all stakeholders ranging from the providers and patients to the taxpayers and governments. Most countries, including Canada, are now focused on creating better efficiencies, rationalizing services to better utilize resources, building areas of expertise and trying to facilitate more “hospital to community” and remote care solutions and initiatives.

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## Geographic Expansion

### Key concept:

*Leverage the skills and expertise of leading clinicians and health care providers across broader geographic areas.*

Simply put, in addition to creating centres of excellence and integrating the health systems as discussed above, expand the reach of the expertise by creating affiliations and better pathways to share and improve the patient experience.

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## Enabled IT platforms

### Key concept:

*Consistent and robust data in IT platforms that can accurately measure and report outcomes could enable better care delivery.*

Currently there is inconsistency in data collection, case costing and expense tracking which makes benchmarking to demonstrate improvements and measure outcomes very difficult.

# COMMON TERMINOLOGY

## Value-Based Healthcare (VBH)

Puts value for the patient first and places emphasis on better quality of patient outcomes per expenditure. Moves away from assumptions about “price” first and focuses on high value as the key goal for healthcare delivery.

## Value-Based Procurement (VBP)

Although it is not identified as one of the key concepts in the overall Value-Based Healthcare umbrella, Value-Based Procurement (VBP) is widely seen as a potential enabler of change in the healthcare system.<sup>6</sup> Traditional procurement processes tend to be very prescriptive, specification-oriented and focused on acquisition price. VBP aims to leverage needs and problem solving as opposed to specifications and moves beyond price and short-term savings to focus on quality and outcomes. In traditional procurement, the supplier or vendor may have very limited participation before the formal purchasing process begins and a “solution” may have been identified without their input; value-based procurement methodologies focus on diverse stakeholders and market engagement prior to the actual purchasing process.

## Commissioning

Commissioning is a term that has been most commonly used in the UK as a possible way to address the Value-Based Healthcare challenges. Simply put, it is “the process of defining, planning, specifying, purchasing, implementing, evaluating, and monitoring services to meet the health and social needs of a particular population”.<sup>6</sup> Commissioning is not one action, but many, ranging from the health-needs assessment for a population, through the clinically based design of patient pathways, to service specification and contract negotiation or procurement, with continuous quality assessment.

The National Health Service (NHS) Commissioning Assembly in the UK is currently working on trying to address their system challenges through this approach and in 2016, the Ontario Chamber of Commerce proposed in their report Prescription for Partnership: How New Models of Collaboration in Health Care Can Make Outcomes a Priority that “commissioning is a way of focusing less on what is done and more on the results of what is done.”<sup>7</sup> It begins with the establishment of a robust definition of needs and desired outcomes, engages third parties in solution design and delivery and seeks to optimize outcomes by effectively using resources.

For more information on this approach and the full report:  
<http://www.occ.ca/advocacy/health-transformation-initiative>

## Coverage with Evidence Development (CED)

Coverage with evidence development is the term given to a policy which allows conditional funding of a promising health intervention while more conclusive evidence is gathered to address uncertainty regarding its clinical or cost effectiveness.<sup>8</sup>

The phrase was first used in the US in the 1990's for a Medicare policy which allowed for usage of a product without sufficient clinical evidence and was conditional on patients participating in randomized controlled trials (RCT). Today, it is more commonly used in Europe for non-drug interventions where RCT's are scarce and thereby allows patients access to new devices and provides pathways for evidence development in real time. Germany has three different pathways within their regulatory pathway.

## Outcomes Based Specifications (OBS)

As simple as it sounds, this refers to the building of an RFP with specifications that refer to the outcome desired as opposed to the features required. Health Supply Chain Network (HSCN) defines it very clearly as:

Outcome-based specifications (OBS) describe the functions or performance that a product (equipment, goods, or services) must fulfill for the end user; in other words, what the product should do. This type of specification is preferably concise and allows for flexibility in determining how a specific need can be met. Proper OBS should be written in performance terms, which focus on the function of the product required. They build around a description of what is to be achieved rather than a fixed description of exactly how it should be done. This encourages innovation in the market place, allowing and encouraging suppliers to propose new and transformative products.<sup>9</sup>

### Example of OBS:

Technical Specification	Outcomes Based Specification
Replacement of oil fired boiler providing a heating capacity of X	New heating system for 2 story, 10,000 sq ft care unit that runs 24 hours/ day and is concerned about energy consumption
Supply of xxx quantity of ABC type monitor using 110 volt power supply	Replacement devices to serve approximately xx patients per month and measure xx, yy and zz and report abc to xx.

### Suggested OBS process:<sup>10</sup>



## Most Economically Advantageous Tender (MEAT)

In Europe and Scandinavia, similar to Canada and the US, there was recognition that if Value-Based Healthcare theories were to succeed, business practices and, in particular, procurement practices would need to adapt. Procurement in health care had gradually become more price focused and rarely addressed quality or the total cost of patient care. MedTech Europe, MEDEC's counterpart in the EU, reports that "procurement officials explicitly told them that they didn't directly consider patients when creating tenders for medical devices, equipment and supplies and had to be focused on their line budget."<sup>11</sup>

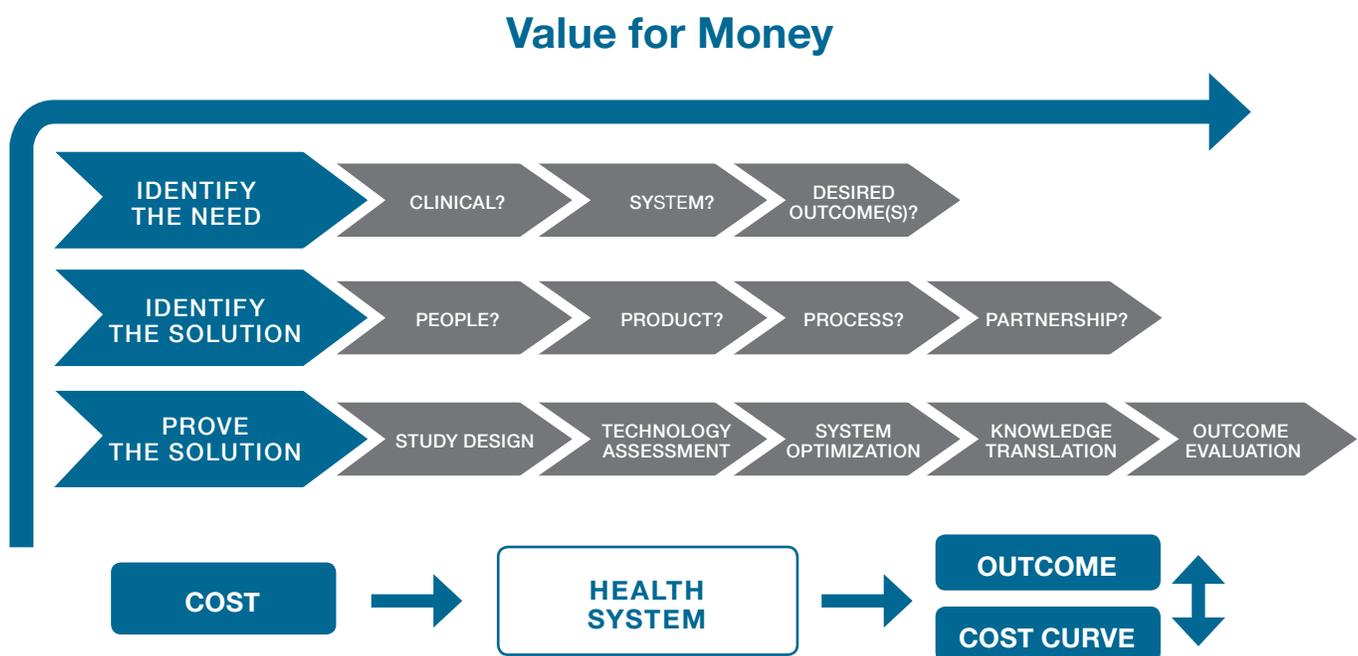
In 2014, the EU Parliament created a directive to put emphasis on the price/ quality ratio and this has provided an opportunity for a cross functional community of practice consisting of trade associations, medical technology suppliers, procurement organizations and local governments to collaborate and create a framework to potentially facilitate change in process and enable transformation. The framework integrates the key elements of Value-Based Healthcare and challenges both suppliers and purchasers to think differently. An excel based tool, it is scalable and adaptable in most situations where the purchaser knows what they want to buy but needs to question the full complexity of costs, measure and score outcomes and then evaluate what they would be willing to pay with a robust and clear scoring mechanism. For a supplier, it is key to understand what their value really is and participate actively in the process to ensure it will be measured.

Several pilots are currently underway in the EU and Scandinavia and in 2018, MEDEC will be leading several projects in Canada to evaluate the framework for the Canadian market. For more detailed information, contact MEDEC.

## Value for Money framework

The term value for money is commonly used in everyday language but within the context of this discussion, the Value for Money framework refers specifically to a ground-breaking project currently being undertaken in Alberta where, like other jurisdictions, they are challenged to sustain their health system, manage innovation and ensure improved patient outcomes.

It was proposed and is currently being validated that through a system management approach to the planned introduction (and exiting) of medical technologies, it could become possible to define, measure and validate the true value that an innovative medical technology offers the clinicians, the patients; and ultimately, the health care system based on a three-part Value for Money framework that could be scaled to the scope and complexity of a project.



Beginning in 2015, based on the identified needs of the Strategic Clinical Networks (SCNs), Alberta Innovates (AI) and MEDEC developed a process that identifies existing solutions (i.e. health innovations) to those needs and validates them in a real-world setting within Alberta. The evidence generated from this process will inform the decisions pertaining to adoption and diffusion of these solutions throughout the system.<sup>12</sup>

A significant output, in addition to the demonstration project, was the creation of the MEDEC Value for Money Principles document. A national and multidisciplinary Canadian team comprised of government, clinicians, suppliers and purchasers developed four key principles and corresponding messaging to capture the defining factors for ensuring that Value for Money can be easily understood and to advance the value-based agenda.

For more information on the project:

[www.medec.org/resource/resmgr/SCN-MEDEC\\_White\\_Paper/SCN\\_MEDEC\\_White\\_Paper\\_June\\_2.pdf](http://www.medec.org/resource/resmgr/SCN-MEDEC_White_Paper/SCN_MEDEC_White_Paper_June_2.pdf)

## Innovation Procurement

The term Innovation Procurement, not to be confused with Innovative Procurement or Procurement of Innovation is predominantly an Ontario term and refers to a set of methodologies which the Ministry of Government and Consumer Services (MGCS) is supporting and validating through funding to the Ontario Centres of Excellence (OCE) REACH grants for several demonstration projects. For more detail refer to:

<https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/English/BPSSC-Sec>

<http://www.oce-ontario.org/programs/commercialization-programs/reach-program/how-it-works>

MGCS outlines that the Innovation Procurement approaches are intended for:

“The purchase of solutions that do not exist in the market, or need to be adapted or improved to meet specified needs and create value for users and/or the procuring organization.”<sup>13</sup>

Ideally, it is positioned that use of the methodologies could help in early identification of patient and system needs, more customer-focused solutions from industry, improved efficiencies and a healthy business climate in Ontario through expanded markets and healthy innovation.<sup>14</sup>

It is very important to understand that Innovation Procurement is not synonymous with Value-Based Procurement and is considered a subset of the broader continuum of VBP methodologies which would also encompass incremental technological innovation in medical devices or existing solutions that can be easily differentiated. Furthermore, although titled Innovation Procurement, the processes are not necessarily initiated or led by procurement. A recent example at Southlake Regional Centre in Newmarket was led by the Research and Innovation group and involved a large multi-disciplinary team of stakeholders.

## RANGE OF METHODOLOGIES

Competitive Dialogue

Competitive Procedure with Negotiation

Innovation friendly Competitive Process

Innovation Partnership

Design Contest

R&D Procurement

**Definition:** Purchase of solutions that do not exist in the market, or need to be adapted or improved to meet specified needs and create value for users and the procuring organization.

Detailed information on each of the methodologies and the decision process for selection of the most applicable for any project is attached in the appendix of this document.

## Early market engagement strategies

This is another phrase or term that is being used generally and means exactly what it says and then is also being used specifically to outline seven common techniques which can be used alone or in combination with each other. They are global in usage but outlined in significant detail in the MGCS BPS Primer on Innovation Procurement. The basic premise is good common sense and supports that if buyers engage suppliers in dialogue early in a process of needs based problem solving, it can help to understand if, and what, products or solutions are, or might, become available.

A specific Broader Public Sector in Ontario (BPS) explanation is listed below but in all other provinces, the practices would be similar and applicable.<sup>15</sup>

1. *Market Sounding* is the use of a defined consultation process to assess the reaction of the market to a need.
2. *Market Creation* is a process intended to generate interest in the supplier community by communicating to suppliers the scale and scope of the future procurement opportunities and the intended procurement process. The market creation process uses the feedback collected from suppliers to create the market conditions needed to deliver the best solutions.
3. *Reverse Trade Shows* are events driven by BPS organizations to encourage new and existing suppliers to consider doing business with them.
4. *Request for Expression of Interest (RFEI)* is a document that enables BPS organizations to gather information about supplier capabilities, qualifications, and interest in a specific procurement opportunity.
5. *Forward Procurement Plan (FPP)* is the process of giving suppliers advance notice about the BPS organization's upcoming procurement opportunities.
6. *Trade Shows* are events that allow suppliers in a specific industry to showcase and demonstrate their latest products, market trends, and opportunities that might be relevant to BPS organization's needs.
7. *Unsolicited Proposals* are proposals submitted by suppliers to address a BPS organization's current or future needs that may or may not have been identified by that organization. BPS organization should establish policies and/or procedures for the receipt, assessment and use of unsolicited proposals.

## Summary

As we stated at the outset, this document is only an overview and we encourage you to explore the embedded links and additional resources that we've addressed.

In May 2018, we will be updating this document to include additional sections on defining value, measuring costs and addressing outcomes perspectives.

## Sources:

1. Harvard Business School Institute for Strategy and Competitiveness <https://www.isc.hbs.edu/health-care/vbhcd>
2. Ibid
3. <https://www.albertahealthservices.ca/assets/info/res/if-res-strat-doc.pdf>
4. Harvard Business School Institute for Strategy and Competitiveness <https://www.isc.hbs.edu/health-care/vbhcd>
5. Ibid
6. Ontario Chamber of Commerce <http://www.occ.ca/wp-content/uploads/Health-Transformation-An-Action-Plan-for-Ontario-1.pdf>
7. Ibid
8. NHS Scotland [http://www.healthcareimprovementscotland.org/previous\\_resources/hta\\_report/evidence\\_development.aspx](http://www.healthcareimprovementscotland.org/previous_resources/hta_report/evidence_development.aspx)
9. MGCS Ontario [https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/0/df7388300f40ae-c68525814d004a00bf/\\$FILE/BPS\\_Primer\\_on\\_Innovation\\_Procurement\\_Interim.pdf](https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/0/df7388300f40ae-c68525814d004a00bf/$FILE/BPS_Primer_on_Innovation_Procurement_Interim.pdf)
10. Ibid
11. Gerecke, Clawson and Verboven, Procurement: the Unexpected Driver of Value based Healthcare, December 2015
12. MEDEC/ SCN White paper
13. MGCS Ontario [https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/0/df7388300f40ae-c68525814d004a00bf/\\$FILE/BPS\\_Primer\\_on\\_Innovation\\_Procurement\\_Interim.pdf](https://www.doingbusiness.mgs.gov.on.ca/mbs/psb/psb.nsf/0/df7388300f40ae-c68525814d004a00bf/$FILE/BPS_Primer_on_Innovation_Procurement_Interim.pdf)
14. Ibid
15. Ibid

