

## **Value-Based Health Care: Moving Toward its Implementation in Swiss hospitals**

Date: 19.02.2024

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## Background

The term “Value-based health care” (VBHC) has been popularized by Michael E. Porter and Elizabeth Olmsted Teisberg in their 2006 book, “Redefining Health Care: Creating Value-Based Competition on Results” (1). To fix the rising costs and uneven quality of care, they propose to transform the health care systems maximizing the value for patients, that is, achieving the best outcomes at the lowest cost (2). Their idea consists in moving away from a supply-driven health care system, where providers are reimbursed based on the quantity of services delivered, toward a patient-centered system organized around what patients need (3), emphasizing the importance of outcomes measures - clinician-reported outcomes measures (CROMs) and patient-reported outcome measures (PROMs) - and patient-reported experience measures (PREMs). Vincent & Staines in their 2019 report observed that little is known about the standards of care Switzerland, however quality of care seems equivalent to other advanced healthcare systems while much more expensive (4) (5).

Nowadays, VBHC has evolved from a concept to being implemented in several countries (6). However, as demonstrated by Steinman and al. in 2020, the concept led to multiple interpretations depending on the frame of reference of an organization or actor (7), and consequently the implementation of VBHC to vary substantially across health care systems (8). While some Swiss healthcare organizations are turning to VBHC<sup>1</sup>, the variety of interpretations of the concept has been described by the European University Hospital Alliance (EUHA) as one important barrier to its adoption (9). Based on a consensus process involving experts from nine university hospitals implementing VBHC, they describe a list of barriers and gaps classified in seven main categories:

- Governance: lack of clarity on strategic priorities, lack of skills or willingness to contribute, lack of data on cost-effectiveness for decision making, lack of engagement to enable and support VBHC work (information technology support, project management officer<sup>2</sup> support training, pathways redesign).
- Communication, evaluation, and change management: no shared definition of VBHC, lack of understanding if progressing as expected and if generating value, no definition of the evaluation framework and criteria from the beginning.
- Training, research, and innovation: lack of training program, lack of capacity for delivering the training.
- Professional leadership and engagement: lack of social acceptance within medical teams of the VBHC concept, framework and tools, lack of engagement from all stakeholders that can contribute to implement Value-based healthcare.
- Patient engagement: lack of access to data and studies, internal skills on patients' engagement, lack of clarity on required skills for patient recruitment and requirements from their role and degree of engagement.
- Health informatics and data: fragmentation of communities and tools, lack of costing data.
- Transparency and benchmarking: lack of access to patient's data, lack of outcomes repository.

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<sup>1</sup> Personal communication with Elvira Häusler, co-founder and vice-president of the Swiss Association for Value-based Healthcare in December 2023

<sup>2</sup> PMO : project management officer

From another perspective, Lansdaal and al. shared the lessons learned by physicians and nurses on the experienced facilitators and barriers of implementing a VBHC model in a Dutch hospital (10). In this experience, clinical teams had been invited to sign up voluntarily for participation in implementation of VBHC. Based on the care for a specific clinical condition, a multidisciplinary “value team” had been created. For each “value team” a clinical lead had been appointed to drive the implementation process. This study explored these field teams’ perspective after 1 to 4 years of VBHC implementation. The main facilitators were linked to the presence of leadership within the value team, the quality of the cooperation with the IT team and other “value teams” with which they were able to share experience. The main barriers were the time consumption, the difficulty to shape the involvement of the patients, the ongoing changes in the departments and the frequent omission to work with information technology teams.

Facilitators and barriers to PROMs implementation in health-related services have been described by Foster and al. based on a systematic review of reviews (11). They found out that organizations needed to invest time and resources in two key stages early in the implementation process:

- in “designing” the processes for using PROMs within the organization: this stage including organization planning which PROMs to use, how to administer them, how the data would be used for clinical purpose,
- in “preparing” stage: getting the organization and the staff ready to use PROMs. Including persuading clinicians of the validity and value of PROMS, delivering training and developing electronic systems.

Having an implementation lead developing and overseeing the process was also identified as a facilitator to PROMs implementation.

In its 2022 report (12) Price water Company describes the specific systemic reasons VBHC has not yet been widely implemented in Switzerland: the fragmentation of healthcare service providers, payers and cantonal regulators, the conflicting legal bases (i.e., the Swiss legislation is mostly costs-based, which encourages healthcare providers to increase the amount of care they provide), the sluggish digitalization and the contradictory incentives in the remuneration systems (i.e., the Swiss DRG promotes efficiency, but focuses the decisions of healthcare providers and payers on economic and cost factors rather than quality indicators).

The Swiss Society for Value Based Healthcare (13) was created in 2012 by VBHC pioneers to promote initiatives, instruments, and measures to increase the quality of treatment and enable value-based optimization of the Swiss healthcare system. Through communications and publications, they spread the VBHC concepts in Switzerland.

Based on the need of our health care system for transformation to ensure financial sustainability and face quality challenges, we aim to explore VBHC as a potential approach in Swiss hospitals, identify barriers, and propose specific key enablers. In this research, we will map the definitions of VBHC and describe key stakeholders’ perceptions of VBHC in Switzerland, to contribute to a step toward VBHC implementation in Switzerland.

## **Objectives**

We will conduct two studies:

1. A scoping review of the definitions of VBHC and the operationalizations of the definitions.
2. A qualitative study with key stakeholders in Switzerland to assess a) how they understand VBHC, b) their experience with it, and c) what they identify as barriers and facilitators to its implementation.

## **Study 1 - Scoping review: the definitions of VBHC**

### **Method**

The scoping review will be conducted in accordance with the PRISMA-ScR methodology for scoping review (14), including the following steps:

1. Define the review questions using Population-Concept-Context (PCC) framework.
2. Develop the protocol which will include description of eligibility criteria, search strategy (timeframe, databases, search terms), charting process.
3. Identify relevant articles: conduct systematic searches.
4. Select the articles: screen the results matching the eligibility criteria.
5. Extract and chart data from included articles.
6. Wrap up the results.
7. Write the review accordingly to PRISMA-ScR checklist including limitations and conclusions.

### **Expected results and public health consequences**

This first study aims to map the available definitions and operationalization of VBHC and sum the varieties of these definitions and operationalization in a comprehensive “picture”. This will enable us to propose a concrete, activable, and reproducible definition for stakeholders in the Swiss healthcare system that can also be applied beyond Switzerland, extending its relevance to a broader context. Further, it will give a framework to design the second study (see below).

### **Limitations**

VBHC is a growing topic worldwide and the expected large volume of articles will be a challenge. The quality of the included articles may bias the quality of the results of this research. Finally, because of resources constraints, we may not be able to involve two researchers in the selection of articles to mitigate the risk of selection bias.

### **Registration**

The study protocol of the scoping review will be registered on Open Science Framework (15).

## **Study 2 - Qualitative study: the views of VBHC in Switzerland**

Goal: to explore perceptions, experiences, and opinions of clinical and non-clinical stakeholders in Switzerland regarding facilitators and barriers to VBHC implementation.

### **Method**

We will apply a standard methodology (16) at each step of this study, including data collection process and analysis.

#### **Target population and sampling**

We will use purposeful sampling based on group characteristics, targeting key individuals who have better-than-most understanding of VBHC, due to training and / or experience and maximum variation sample regarding their role in the health care system.

The following selection criteria will be applied:

- Stakeholders in the health care system in Switzerland
- Stakeholders with one of the following responsibilities:
  1. quality of care management,
  2. chief of clinical department medical doctor,
  3. hospital CEO,
  4. insurance VBHC project manager,
  5. patient representative,
  6. Swiss National Association for quality development in Hospitals and clinics representative
  7. Federal Quality Commission representative
- French or English speaking

We intend to realize at least 5 interviews.

Based on these criteria, we will directly solicit potential participants or via an intermediate contact when necessary. Participants will not be paid.

#### **Data collection**

We will use 1:1 semi-structured interview approach which will include the following steps: preparation (eligibility criteria, recruitment process), design and test of the interview guide and informed consent, running the interviews, data analysis. We will use the results of our first study (scoping review) as a reference for VBHC definition and operationalization.

The interview guide will include 6 to 8 questions for one-hour interviews investigating the following themes:

- experience and knowledge of VBHC,
- perspectives on benefits and limitations of VBHC,

- barriers and facilitators to VBHC implementation,
- vision for the future of VBHC implementation in Switzerland.

### Analysis

We will perform a thematic analysis of the interviews’ data. Codes will be constructed deductively using the interview guide and supplemented inductively with information from the interviews. A codebook will be created to organize and define codes.

### Expected results and public health consequences

The analysis of these stakeholders’ perceptions of VBHC will allow us to identify the main barriers and facilitators to VBHC implementation in Switzerland.

### Limitations

Generalization of the results will be low due to the chosen methodology, i.e. qualitative research. Participant selection process will lead to bias as will choose the participants we want to interview. We may encounter social acceptability bias: considering VBHC as a new “fancy” trend, some participants could answer inaccurately considering that they would be better accepted if embracing this innovation. The careful selection of the participants and adequate introduction of the interviews could mitigate this risk. Finally, the review of the questions and data by thesis director will lower this risk of researcher bias, in order to take into account the experience of the main researcher in VBHC including in the MedTech industry.

### Timetable for MD project and expected products

The project starts in November 2023 and will last for 1 year. Below a provisional timetable.

	2023		2024												
	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Study protocol	writing														
Part1_Scoping review				protocol writing											
					sources extraction										
						sources analysis									
							article writing	submission							
Part2_Qualitative study					Preparation										
							interviews and summaries								
								analysis							
										report writing communication plan prep PHL - Science meeting presentation					
Thesis														thesis wrap up and submission	
															submission to congresses

List of expected deliverables:

- At least one original peer-reviewed publication based on findings of the scoping review.

- A report in French (and maybe in German) on the results of the qualitative study, including an infographic summarizing the key messages.
- A presentation at a national or international congress.

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