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OPPORTUNITIES AND CHALLENGES TO THE IMPLEMENTATION OF VALUE-BASED HEALTHCARE (VBHC) IN SMES: THE CASE OF THE STATE OF QATAR

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Abstract:

The purpose of this paper is to identify the opportunities and barriers to the implementation of VBHC in SMEs in Qatar. A semi-structured survey was developed to investigate the perspectives of healthcare providers, from SMEs of public and private sectors, on the opportunities and barriers to the adoption of VBHC in Qatar. The respondents include government officials, CEOs, middle managers, first-line managers, and physicians. Twenty-four out of forty respondents responded. The collected data was aggregated and analyzed. Interestingly, the aggregated information is similar in content to some other countries. Examples of main opportunities include ease of implementation, focus being on outcomes that matter to patients and fosterage of integration and collaboration between public and private sectors. The key barriers/challenges include need for standardized communications and technological infrastructure, and conflicting interests of public and private sectors. The concept of VBHC was first introduced in the United States of America (USA) in 2006 to drive the move from fee-for-service (FFS) approach to fee-for-value (FFV) model. Nonetheless, the debate on the effectiveness of this transformation continues. Although the current emphasis on VBHC may offer new opportunities, barriers are also anticipated. Furthermore, the published evidence on this phenomenon is still limited.

Key words: *Value-based healthcare (VBHC). SMEs. Opportunities. Barriers. Qatar*

1. Introduction

Healthcare providing organizations exist to meet the demand of their customers. The increase in demand for healthcare services may be attributed to many factors. Mhlanga (2021) argues that these factors may be associated with the age of the individuals; i.e., as the individuals grow older, the need for healthcare services increases. Another aspect is the economic status of the nation; i.e., as the country gets wealthier, the expenditure on healthcare services increases (Mhlanga, 2021; Zhou *et al*., 2020). This increase in demand can result in creating a gap between supply of and demand for healthcare services. Factors that contribute to the unmet need for healthcare services can be provider-related and/or patient-related. The unmet need for healthcare services connected to the efficiency of the healthcare providers, may include waiting times before receiving care, availability of service, booking system and referral patterns; while individual-related factors encompass health status and socio-demographics (Fiorillo, 2020). Furthermore, the consequences of this shortage in healthcare services can go beyond affecting the patients to influencing policymakers and the society as a whole. In line with this, Smith and Connolly (2020) explain that the impact on individuals, policymakers, and society can be in the form of disability and pain, formulating polices to tackle this issue, and economic inactivity and informal care load, respectively.

The healthcare system can be considered as dynamic and complex in nature; the external constituents of the healthcare environment influence the healthcare providing organizations. To function well, healthcare providing organizations need to adapt to changes in the external environment; i.e., reforming. Nonetheless, these organizations can undergo restructuring due to internal factors. Nowadays, healthcare providers face pressures from different sources such as macroeconomics (e.g., expenditure control), social forces (e.g., values), pandemics (e.g., Covid-19), globalization (e.g., worldwide concern about quality) and routine organizational activities (e.g., improvement in productivity and efficiency) (Polin *et al*., 2021). For instance, the current Covid-19 pandemic necessitates the use of digital transformation as a way to adopt VBHC (Rosalia *et al*., 2021). Dwivedi *et al*. (2020) explain that the COVID-19 pandemic exerts pressure on many organizations to make a key movement to use technology to sustain operations. Currently, value-based healthcare (VBHC) strategy is considered as a recognizable driver of transformation from the traditional payment model (fee-for-service) to the fee-for-value approach (Harrill and Melon, 2021). Since the core idea of VBHC is the shift in the payment approach, it can be considered as an innovation. VBHC is believed to be a creative management system (Colldén and Hellström, 2018; Ramos *et al*., 2021). This is an efficient patient-centered system with the aim of achieving better value for the funds allocated to healthcare services on a sustainable basis (Arshoff *et al*., 2021; Crowson and Chan, 2020).

Adopting and implementing any change in the management system will be associated with some opportunities and barriers–the same applies to VBHC approach as a new management system. Barriers and opportunities to the implementation of VBHC vary from one country to another. Lokman (2020) and Nash *et al*. (2018) proposed some barriers and opportunities to the implementation of VBHC system; barriers include system inefficiencies, budgetary constraints, and differences in health literacy, population demographics and culture, while opportunities include improvements to the healthcare system.

Qatar is an Arab country located in the Gulf region, with a population of 2.8 million in 2019 (Planning and Statistics Authority [PSA], 2020b). Qatar has large deposits of oil and gas (World Health Organization, 2006). It has one of the highest per capita incomes in the world. In 2019, Qatar ranked number one worldwide in terms of real GDP per capita, which reached $112,531 (PSA, 2020a).

The Qatari healthcare delivery system has a strong public sector. This system witnessed a remarkable expansion during the past few years. For instance, during the past decade the number of public hospitals increased from 5 to 13, and the number of public healthcare centers grew from 21 to 27 (Ministry of Public Health [MoPH], 2018). The government also has Aspetar hospital that specializes in sports injury treatment (Aspetar, 2018). Police and military medical service departments serve the members of the military forces and their dependents. The public funds allocated to the healthcare sector in 2018 reached $5.2 billion, which is equivalent to 2.7% of the country's GDP (Chamali, 2020). In addition to the public sector, the private sector also delivers healthcare services. Key organizations in the private sector include the following hospitals: Al Emadi Hospital, Doha Clinic Hospital & Al Ahli Hospital. In addition to these hospitals, there are some private health centers and independent medical practitioners' clinics. The Qatar National Health Strategy (QNHS) for the years 2018-2022 focuses on achieving three main aims, which are better health, better care, and better value (MoPH, 2018).

The following sections will discuss in details the literature review, methodology, procedure, discussion, limitations and future research, and conclusion.

2. Literature Review

Insights into the concept of healthcare changing over time is a complex scenario. Accordingly, its definition needs to be modified to reflect prevailing perspectives. Academic literature has highlighted an early attempt to the definition by the World Health Organization (WHO) in 1948, which described health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (International Health Conference, 1948, p. 100). Although, this definition was recognized, widely accepted and gained a remarkable popularity, it no longer is a true representation. Many scholars criticized this definition, for instance, Huber *et al*. (2011) claimed that the shortcoming of the WHO definition for health surrounds the absoluteness of the word "complete" in describing physical, social and mental wellbeing. Following the WHO definition for health, other scholars proposed definitions for health. For instance, (Nordenfelt, 1995, p. 212-213) defined health as "A is completely healthy, if and only if A is in a bodily and mental state which is such that A is able to realize all his or her vital goals, given accepted circumstances". Furthermore, Bircher (2005) described health as a state of wellbeing that is dynamic and characterized by a person's potential (i.e. physical, mental and social), that meets life demands determined by a human being life cycle, personal responsibility and culture. From another point of view, health is termed as the ability of an individual to deal with different challenges (i.e., physical, social and emotional) through adapting and managing oneself (Huber *et al*., 2011). In the last decade, van Spijk (2015) introduced a new definition for health as a satisfactory and acceptable level of wellbeing in terms of emotional, social, economic, physical and mental dimensions. Even though Nordenfelt (1995), Bircher (2005), Huber *et al*. (2011) and Oleribe *et al*. (2018) proposed new definitions for health with a broader scope to adapt to the ever-changing human life, the aspects of physical, mental and social dimensions of the WHO definition for health in 1948 remained the centerpiece.

WHO is a worldwide institution that is responsible for handling health affairs that matter to all individuals on our planet. Although, the WHO was in the forefront to define health, it does not define healthcare. Sosic and Donev (2008) affirm that even though the WHO presented a clear definition of health, healthcare remained undefined. To fill in this gap, Sosic and Donev (2008) defined healthcare as "an entirety of measures and activities conveyed by the community and especially its integral part – the health" (p. 344). This means that healthcare is a system in which healthcare providers and each member of the community contributes to one's health and the health of the community as a whole.

Around the globe, especially in developed countries, different healthcare models and paradigms were proposed and adopted. For instance, in 2014, the prudent healthcare system was developed and implemented in Wales (Ellis, 2014). This system is based on four main principals: to emphasize co-production to arrive at health and wellbeing; prioritize care delivery to individuals according to their health need; offer care only as required; and minimize unnecessary variation (Addis *et al*., 2018). Another healthcare paradigm, suggested by the cardiologist Alberto Dolara, emerged in Europe, specifically in Italy in 2002, is the slow medicine healthcare model (Heffler *et al*., 2015). The core principal of this system surrounds the adequate use of medical resources – heart devices in the case of cardiology (Bauer, 2008). Examples of healthcare initiatives from the United States of America include parsimonious care, triple aim, and value-based healthcare (VBHC). In early 2012, the American College of Physicians proposed the parsimonious care model that focuses on employing the most efficient ways to diagnose conditions and treat patients effectively using resources in a wise manner to ensure equitability in resources allocation (Snyder and American College of Physicians Ethics, Professionalism, and Human Rights Committee, 2012). Another healthcare paradigm from the US is the triple aim framework. This approach was proposed by the Institute for Healthcare Improvement (IHI) in 2008 (Berwick *et al*., 2008). The IHI defined triple aim as "improving the individual experience of care; improving the health of populations; and reducing the per capita costs of care for populations" (Whittington *et al*., 2015, p. 263). While there appears to be widespread support for the principles of Prudent Healthcare by clinicians, it appears that there is a need to improve awareness, information sharing and most importantly the monitoring of patient outcomes to which should impact positively on operations management (Addis *et al.*, 2018).

There are many healthcare paradigms seeking to improve quality of health and care. However, VBHC forms the focus of this paper. The paradigm was developed in the United States in the 2000s by Porter and Teisberg (2006), with the focus on shifting the healthcare delivery from volume to value. The concept of VBHC is a relatively new and emerging paradigm in health and care delivery. Mjåset *et al.* (2020) and Walraven *et al*.

(2021) argue that VBHC movement is still at its early stages of development. One of the contemporary definitions for the notion of VBHC is the definition of the National Health Service (NHS) in the United Kingdom. Hurst *et al*. (2019) described VBHC as using the available resources in a sustainable, equitable and transparent manner in order to maximize the outcomes and the experiences for each individual. Despite formulating a new definition for VBHC, the NHS acknowledges that there is no standardized definition of value within the NHS (Hurst *et al*., 2019). This indicates that the ongoing debate surrounding the VBHC continues. Regardless of viewing VBHC as a management innovation or a business strategy, its popularity is on the rise. Despite the uncertainty concerning the adoption of VBHC, the transformation of healthcare systems to VBHC in the near future seems to be the prescription to enhance the performance of the healthcare systems; some people believe that the role of governments to facilitate this shift is significant (Hillary *et al*., 2016). In Wales, like in many nations world-wide, VBHC is perceived as a strategy to deliver healthcare in prudent approach to ensure sustainable services (Llywodraeth Cymru Welsh Government, 2019). Many countries around the globe implemented the VBHC agenda. Walraven *et al.* (2021) highlighted that this arrangement was adopted at a higher scale across the European nations. For instance, this system was first implemented in Wales at Aneurin Bevan University Health Board in 2015, in accordance with Welsh government efforts to cope with the issues of the growing demands and escalating expenditure, without compromising the quality (King's Health Partners, 2018).

Theoretical foundations

Formulating a sound strategy to carry out the implementation of an innovation in healthcare system requires conducting the analysis of the barriers, which constitute the factors that hamper the success of the initiative, and the opportunities which represent the elements that facilitate and stimulate the success of the shift. According to the Implementation of Change Model (ICM) proposed by Grol and Wensing (2013) and Grol *et al*. (2020), shown in **Table 1**, the third step is the most crucial phase that forms the foundation for identifying the appropriate strategy prior to moving to the execution and evaluation stages. Many studies employ the ICM framework to identify and analyze the barriers and facilitators to the implementation of change in the healthcare industry, for example the Zipfel *et al.* (2019) study.

	Table 1. The Seven Steps of the ICM[1]
1.	Development of proposal for change
2.	Analysis of actual performance, targets for change
3.	Problem analysis of target group and setting
4.	Development and selection of strategies and measures to change practice
5.	Development, testing and execution of implementation plan
6.	Integration of changes in routine care
7.	(Continuous) evaluation and (where necessary) adapting plan

1. Adopted from Grol *et al*. (2020)

Although Maddox *et al*. (2020) did not follow the ICM model, they conducted the analysis of data on barriers to the success of the Value-based Payment (VBP) model (Step 3 of ICM); and identified strategies for the implementation of VBP model (Step 4 of ICM).

These steps will lead to the potential next steps (Steps 5,6,7 of ICM) in the process of the implementation and evaluation of the model.

This study aims at identifying the barriers and opportunities to the implementation of VBHC in Qatar. The analysis of these factors will help the policy makers to identify appropriate strategies to implement VBHC in Qatar.

The implementation of VBHC as a shift from input-based fee-for-service (FFS) approach to fee-for-value (FFV) model brings in both opportunities and barriers. The adoption of VBHC as a management innovation may encounter various barriers; these barriers may encompass costly standardized technological systems that are required to enhance better collaboration among different healthcare stakeholders. Rana *et al*. (2019) argue that a key element for any business when institutionalizing an advanced technology is the price tag. On the other hand, opportunities related to VBHC may include integration of technological systems that support effective decision making. Integration and analysis of healthcare databases represents an opportunity for enhancing patient care (Brooks *et al*., 2015).

These barriers and opportunities vary from one context to another (Lokman, 2020). This does not eliminate similarity in some contents (European Institute of Innovation & Technology [EIT] Health, 2020). **Table 2** below presents opportunities and barriers from selected cases.

Table 2. Opportunities and barriers from real-life experiences

No	Author/ creator	Context	Opportunities	Barriers
1	Nash *et al*. (2018)	United States (North America)	Improvement in communication and collaboration among healthcare stakeholders.	Differences in demographic characteristics, health literacy and culture.
2	Arnold *et al*. (2018)	Afghanistan (Asia)	Rapid acceptance of global best practices.	Social-cultural factors.
3	Wider (2018)	United States (North America)	Control of expenses.	
4	Mejıa *et al*. (2018)	Latin America	• Aggregate demand to negotiate price at a regional level. • Transfer of knowledge.	• Limitation of the ability to assess value of medicines due to lack of real-world evidence. • Asymmetric information available to different countries. • Manufacturer-led pricing in small countries.

5	Van Egdom *et al*. (2019)	Netherlands (Europe)	Structured measurements create: • Performance improvements. • Benchmarking between various providers and healthcare systems. • Shared treatment decision making.	
6	Van Veghel *et al*. (2019)	Netherlands (Europe)		Limitations related to: • Data infrastructure. • Systematic approach to identify, select and implement initiatives. • Governance. • Implementation of outcomes within policy documents, hospital strategy and the planning and control cycle.
7	Bazzoli (2019)	United States (North America)		Cultural barriers.
8	Lokman (2020)	Lower and middle-income countries	Limited resources (can be a motivator, not a barrier).	• Budgetary constraints. • Inefficiencies.
9	Barlow (2016)	United States (North America)		• Unparalleled flow of data. • Ever-changing regulations. • Cultural changes.
10	Healthcare Financial Management Association (2018)	United States (North America)	• Control of expenses. • Shared savings.	

11	Weinstock (2020)	United States (North America)		• Lack of access to Internet. • Type of platform used. • Limited access to the platform.
12	Mjåset *et al.* (2020)	UK, Norway, Netherlands (Europe); USA (North America)	• Government involvement • Integrated IT systems • Development of VBHC culture across providers	• Ambiguity associated with the concept of VBHC

The Qatar's National Health Strategy (QNHS) for the years 2018-2022 is a nation-wide strategy. This strategy was built on the outcomes of the country's previous health strategy of 2011-2016. The current strategy focuses on better value in healthcare and strives to deliver a truly integrated model of care. This study attempts to bridge the knowledge gap on the healthcare system in Qatar (a Gulf Cooperation Council member).

Although the understanding of VBHC as an emerging healthcare concept is increasing, it remains relatively under-studied (Rees *et al*., 2021). The literature on the opportunities and barriers to the implementation of the VBHC agenda indicates that enriching this discipline will contribute to the feed forward control and preparation for the countries targeting the adoption and implementation of this paradigm.

3. Methodology

Respondents

Table 3 shows the characteristics of the participants. The respondents represent two different sectors (public and private) involved in the provision of healthcare services in the State of Qatar, with eighteen (18) from the public sector and six (6) from the private sector. Regarding nationality, participants were divided into two groups, namely Qataris and non-Qataris (expatriates); three (3) participants were Qatari nationals, whereas twenty-one (21) respondents were non-Qataris. In terms of gender, males and females participated; the sample included twenty (20) males and four (4) females. The age of the participants varied from twenty-five (25) years to fifty-six (56) years. Considering education, respondents who obtained a Bachelor, Master and PhD degrees were seven (7), fourteen (14) and three (3), respectively. Twenty-one (21) participants hold managerial positions while two (2) are doctors and one (1) is a Quality Reviewer. With regards to the years of experience of the participants, the minimum is three (3) years, and the maximum is twenty-four (24) years, with an average of fifteen (15) years and a standard deviation of 6.05 years.

Table 3. Socio-demographics of the Respondents

Characteristics	Number of Participants (*n=24*)	% of participants
Sector		
Public	18	75
Private	6	25
Nationality		
Qatari	3	12.5
Non-Qatari	21	78.5
Gender		
Male	20	83
Female	4	17
Age		
25 years	1	4.2
35 years	9	37.5
45 years	9	37.5
56 years	5	20.8
Education		
Bachelor	7	29.2
Master	14	58.3
PhD	3	12.5
Occupation/profession		
First line manager	10	41.7
Middle manager	9	37.5
Top manager	2	8.3
Quality Reviewer	1	4.2
Physician	2	8.3
Years of Experience		
3 years	1	4.2
8 years	3	12.5
13 years	8	33.3
18 years	6	25
24 years	6	25

Procedure

An online semi-structured questionnaire was developed to collect data on the opportunities and barriers to the implementation of VBHC in the State of Qatar. To avoid language bias, the survey was made available to respondents in a bilingual format. The participants were recruited through the researchers' personal network. The researchers shared a consent letter with the participants. This document states the objectives of the study, ensures the anonymity of respondents, assures the confidentiality of responses, and offers voluntary participation with the option to withdraw at any time without any consequences. Subjects were asked open-ended questions to describe their point of view on the opportunities for improvement with the transition to a VBHC approach. The respondents were also asked to describe the barriers associated with the movement to a

VBHC approach from their perspective. Twenty-four out of forty respondents responded with a response rate of 60%, respondents are top government officials, CEOs, middle managers, first-line managers, and physicians, they represent the healthcare providers from the public and private sectors. The study was conducted in compliance with the Qatar University-Institutional Review Board ethical standards for research involving human.

Qualitative data analysis

The reflexive TA technique (Braun and Clarke, 2019), the updated version of the Thematic Analysis (Braun and Clarke, 2006), is used to analyze the data. The data represent the bedrock for themes development through an inductive approach (Terry *et al.*, 2017). Data analysis was conducted in accordance with the six steps of the Thematic Analysis (Braun and Clarke, 2006). These steps are: familiarisation with the data, coding, generating initial themes, reviewing themes, defining and naming themes and writing up. To be familiar with the data and get a better understanding of all the responses, the first author read and re-read the data during the first step. Braun and Clarke (2006) argue that one of the reasons that qualitative research has the tendency to use far smaller sample sizes is that the process of reading and re-reading the data requires a significant amount of time. In the second stage, the first author followed line-by-line coding to identify the codes as they are directly connected to the dataset. After that, all authors were involved in the process of generating the potential themes based on the pattern or frequency of the codes. Next, themes were comprehensively reviewed, refined and filtered to make sure that they are significant and data-driven. Then, every single theme was analyzed in-depth with the focus on the essence of each theme to generate informative names. In the last phase, the final report was produced based on the outcome of the preceding steps. NVivo (March 2020 version) software was used to better organize, sort and analyze the unstructured data.

Korstjens and Moser (2018) posit that standards used to measure the quality of quantitative and qualitative research differ; while objectivity, reliability, internal validity and generalizability are suitable measures in quantitative research, these criteria are not applicable to qualitative research methods. Lincoln and Guba (1985) propose the standards of credibility, confirmability, dependability and transferability to measure trustworthiness, i.e. findings worth attention, in qualitative research according to the neutralist approach. To ensure trustworthiness in our study, we used these criteria. In terms of credibility, prolonged engagement with the primary data and subjects, peer debriefing between two researchers, and referential adequacy techniques were applied. Regarding dependability, the first author kept detailed notes on the process of code development and the data relevant to each theme.

4. Results

Table 4 depicts the summary of the findings of the data analysis, provided that the research followed a qualitative technique. Themes related to the opportunities and barriers to the implementation of VBHC are generated from the dataset.

Opportunities

Fosterage of integration and collaboration between public and private sectors

In our study, 9 out of 24 respondents highlighted that fosterage of integration and collaboration between public and private sectors is a major opportunity to the implementation of VBHC strategy in Qatar. VBHC offers an opportunity for 'integration between all the healthcare sectors in the country' (Respondent 4). One opportunity to the implementation of VBHC is 'partner for success' (Respondent 13). As public and private sectors are the healthcare providers, collaboration between these sectors is crucial in order to share resources and minimize costs.

Adopting a new approach recognized world-wide

According to respondents, 25% of them view adopting a new approach recognized world-wide as an opportunity. VBHC is seen as 'a universal initiative adopted by many respected healthcare facilities' (Respondent 2). VBHC is seen as a prudent healthcare management innovation that is accepted world-wide, especially in Europe.

Enhance better knowledge cycle of care

Enhancing better knowledge cycle of care is recognized as an essential opportunity by 4 participants. A sound knowledge of cycle of care, will contribute to the improvement of health services quality.

Focus being on outcomes that matter to patients

In our sample, 3 participants count the focus being on outcomes that matter to patients as an important opportunity. For instance, 'integration between all the healthcare sectors in the country will eliminate the redundancy of services and adds to the patient experience and care outcomes' (Respondent 4). Outcomes that matter to patients constitute the essence of the VBHC paradigm.

Easy to implement

Only 2 respondents consider ease of implementation of VBHC as an opportunity to implement this system. VBHC is considered as a system that is 'easy to be learned and applied' (Respondent 2). VBHC is believed to be easy to implement, especially in well-structured healthcare systems.

Barriers/challenges

Need for standardized communication and technological infrastructure

The subject of standardized communication and technological infrastructure is thought to be a significant barrier by 5 of the participants. One barrier to the implementation of VBHC is 'challenges in having a common process across various medical service providers' (Respondent 12). Unifying the communication system is viewed as a barrier to the adoption of the VBHC movement: 'need for the same system for all medical corporations, which is expensive' (Respondent 21). Building a standardized communication and technological infrastructure is a barrier as it involves upgrading of routine technological infrastructure.

Conflicting interests between public and private sectors

Conflicting interests between public and private sectors is identified as a crucial barrier (N=4). The public and private healthcare sectors differ in terms of their main objective: 'spending money on health care is very expensive and needs governmental support, as private sectors mainly look for profit' (Respondent 14). Since public healthcare organizations are non-profit in nature and private healthcare organizations are for-profit, conflict of interests is inevitable.

Resistance to shifting to a new approach

Four participants regarded resistance to shifting to a new approach as a key barrier. Shifting to a new system is believed to be a barrier to the implementation of VBHC: 'the challenge is to convince the private hospitals that switching to VBHC will improve the reputation of the hospital, and thus increase its revenues' (Respondent 9). As change in management systems and cultures is associated with risks, resistance is anticipated.

Poor integration and collaboration between public and private sectors

According to the perspectives of 3 participants, poor integration and collaboration between public and private sectors is a considerable barrier. One of the barriers to the implementation of VBHC is 'poor collaboration' (Respondent 24). The implementation of VBHC requires adequate integration and collaboration between public and private sectors.

Table 4 Opportunities and Barriers to the implementation of VBHC.

Categories	Themes
Opportunities	Fosterage of integration and collaboration between public and private sectors
	Adopting a new approach recognized world-wide
	Enhance better knowledge cycle of care
	Focus being on outcomes that matter to patients
	Easy to implement
Barriers	Need for standardized communication and technological infrastructure
	Conflicting interests between public and private sectors
	Resistance to shifting to a new approach
	Poor integration and collaboration between public and private sectors
	Funding
	Cultural constraint
	Government policies, rules, and regulations

Funding

Funding is addressed by 3 participants as a barrier. Inadequate financial resources represent a constraint to the implementation of VBHC: 'with budget limitations, value based healthcare will be challenging to implement' (Respondent 18). The adoption of VBHC arrangement requires allocation of financial resources.

Cultural constraint

Another barrier to the implementation of VBHC is cultural constraint (N=3). Cultural health knowledge is important to the implementation of VBHC.

Government policies, rules, and regulations

Only 2 participants identify government policies, rules, and regulations as a barrier. Lacking of 'shifting policies and regulations' (Respondent 13) is a barrier to the implementation of VBHC. The implementation of VBHC system requires supporting government policies, rules and regulations.

5. Discussion

This paper sheds light on the perspectives of senior healthcare government officials, CEOs of private healthcare organizations, middle managers, first line managers, and physicians on opportunities and barriers to the implementation of VBHC approach in Qatar. According to our findings, twelve themes were identified. These themes cover two groups, namely opportunities (five themes) and barriers (seven themes). Some of these themes are in line with recent literature, while others are limited to the Qatari context. The key opportunities are fosterage of integration and collaboration between public and private sectors, adopting a new approach recognized world-wide, enhance better knowledge cycle of care, focus being on outcomes that matter to patients and easy to implement.

Fosterage of integration and collaboration between public and private sectors, is perceived to be the most important opportunity. Participants highlighted that partnership between public and private sectors will eliminate redundancy of services and contribute to patient outcomes and continuous improvement. To exploit improvement opportunities, collaboration among various organizations is required (Nash *et al*., 2018).

Adopting a new approach recognized world-wide is another principal opportunity. Participants explained that VBHC is a new trend adopted by many healthcare facilities. For instance, VBHC is gaining more popularity in Europe (Walraven *et al.*, 2021).

In our sample, enhancing better knowledge cycle of care is considered as a significant opportunity. VBHC offers an opportunity for training on better understanding of the patient journey throughout the cycle of care.

Focus being on outcomes that matter to patients is counted as a valuable opportunity from the perspective of the respondents. Participants in the study indicate that VBHC is about linking how much money is spent on healthcare programs or services to the outcomes that matter most to patients – rather than focusing primarily on the volume of services. Healthcare is moving from fee-for-service approach to fee-for-value model, with "value" referred to as outcomes in relation to costs incurred; in general, outcomes that matter to patients are those achieved throughout the entire cycle of care (Porter *et al*., 2016).

According to the perspectives of the participants, ease of implementation is counted as an opportunity. Participants disclosed that VBHC plan is easy to be learnt and applied. In addition to the themes on opportunities, themes on barriers were generated from the dataset.

In our sample, participants viewed the need for standardized communication and technological infrastructure as a critical barrier. Respondents believe that the application of VBHC requires a standardized technological system to facilitate interoperability. Van Veghel *et al*. (2019) explain that data infrastructure is a major barrier to the implementation of VBHC in many Dutch heart centers in the Netherlands.

According to respondents, conflicting interests between public and private sectors is viewed as a fundamental barrier. Participants identify lack of shared vision between public and private sectors as a main factor that can hinder the implementation of VBHC.

In our study, subjects think that resistance to shifting to a new approach is a major barrier. Participants emphasized that resistance to shifting to a new approach is expected. Changing traditional culture is a barrier to the implementation of VBHC within healthcare organizations EIT Health (2020). Conway (2019), who is the Vice President of Healthcare Value at Global Health Exchange company (GHX), pinpoints that leaders who only advocate growth, resist a decision to shift to a new innovation.

Poor integration and collaboration between public and private sectors is perceived as a significant barrier. Subjects submit that low levels of collaboration between public and private sectors can limit the implementation of VBHC.

Participants assert that funding is a notable barrier. Respondents believe that as healthcare requires high expenditure, limited financial resources can slow down the implementation of VBHC. Financial constraints are considered as a barrier for healthcare providers, in lower- and middle-income countries (LMICs), when aligning their services with value-based arrangements (Lokman, 2020). Unavailability of adequate funds constitutes a major barrier to the adoption of an initiative such as VBHC. Chen *et al*. (2020) argue that substantial financial resources play a significant role in the adoption of an innovation.

According to our sample, cultural constraint is determined as a barrier. Participants highlighted that the culture of the targeted audience can impede the implementation of VBHC. The cultural aspects constitute a barrier in the world of VBHC (Arnold *et al*., 2018; Barlow, 2016; Bazzoli, 2019; Nash *et al*., 2018).

As per the opinions of the respondents, government policies, rules, and regulations represent a barrier to the implementation of VBHC. Participants affirm that lack of appropriate government legislations can be a barrier to the implementation of VBHC. Barlow (2016) explains that protean regulations can be a barrier in the field of VBHC.

The analysis of the barriers and the opportunities plays an important role in setting applicable strategies to the implementation and evaluation of VBHC in Qatar.

6. Limitations and Future Research

This study is in the forefront of the research on VBHC paradigm in the State of Qatar, GCC, and the Middle East. Despite the novelty of our study and the exceptional information generated from the views of recognized, trustworthy sources, including top healthcare government officials, CEOs of private healthcare organizations, and practitioners, the study encompasses some limitations. These limitations include time constraint as some of the key potential participants are very senior with a tight working schedule who are unable to complete the survey despite the frequent follow-ups. Though the study utilized the questionnaire as a tool to collect data, the initial plan was to use face-to-face interviews as there is an active interaction with the participants. Change in plans came in accordance with the prevailing Covid-19 restrictions.

This study gathered data from the healthcare providers' perspectives. As patients are part of the healthcare stakeholders, exploring their opinions may offer better insights into the opportunities and barriers to the implementation of VBHC in Qatar.

7. Conclusion

The essence of VBHC concept surrounds maximizing value relative to money spent. This concept has been proposed to drive the move from input-based fee-for-service (FFS) model to fee-for-value (FFV) approach. Many countries around the globe, including Qatar, realized the importance of this movement. Health care providers and patients need to be involved in the process of VBHC adoption. Currently, VBHC is receiving more recognition and adoption world-wide. Implementation of VBHC is associated with some barriers; at the same time, it offers new opportunities.

This study investigated the views of SMEs healthcare providers, from public and private sectors, on the opportunities and barriers to the adoption of VBHC in Qatar. The analysis of the data revealed various opportunities and barriers. Interestingly, some opportunities and barriers were similar in content to some other countries, while others were limited to the Qatari context. The opportunities identified are fosterage of integration and collaboration between public and private sectors, adopting a new approach recognized world-wide, enhance better knowledge cycle of care, focus being on outcomes that matter to patients, and easy to implement. On the other hand, the barriers were need for standardized communication and technological infrastructure, conflicting interests between public and private sectors, resistance to shifting to a new approach, poor integration and collaboration between public and private sectors, funding, cultural constraint, and government policies, rules, and regulations. In the case of planning for the implementation of VBHC initiative in Qatar, policymakers should consider exploiting these opportunities and overcoming the barriers, as this will be an appropriate preparation for successful implementation.

8. References

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