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Value-based healthcare for social insurance medicine: key enablers for adoption in practice

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ABSTRACT

Background Driven by rising retirement age and increasing prevalence of chronic diseases impacting work participation, there is an increasing need for quality and efficiency improvement in social insurance medicine (SIM). SIM provides guidance to individuals facing long-term work disability, assess their functional abilities and eligibility for long-term disability benefits. Value-based healthcare (VBHC) targets quality and efficiency improvements in healthcare by placing a priority on improving patient value. So far, VBHC has been introduced with fundamental principles and essential components for its adoption in curative care. Hence, there is room for debate on what are key enablers for the adoption of value-based SIM.

Purpose The study aims to explore key enablers for the adoption of VBHC in the practice of SIM.

Methods In this exploratory qualitative study, participants consisted of 15 professionals with expertise either in SIM (n=10) or with expertise in the adoption of VBHC in the curative care sector (n=5). Each participant took part in both a semistructured individual interview and a focus group interview. Thematic coding was employed to analyse the data.

Results Seven key enablers were identified: (1) investigate the meaning and implementation constraints of value in SIM, (2) integrate SIM into work-focused care networks, (3) explore the need and feasibility for specialisation based on functional problems, (4) identify the most important work outcomes for the patient, (5) identify proxy indicators for cost drivers, (6) identify value-driven financial incentives and (7) develop an information technology system to exchange data.

Conclusions This paper provides understanding of what is needed to adopt value-based SIM. Future research should delve deeper into these seven key enablers to facilitate the adoption of VBHC, and thereby promote value creation in the practice of SIM.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ The concept of value-based healthcare (VBHC) addresses the need for quality improvement in healthcare by prioritising the value for patients. In curative care settings, the adoption of VBHC appears to improve patient-centred outcomes relative to healthcare costs.

WHAT THIS STUDY ADDS

⇒ This study explores key enablers to adopt VBHC in the practice of social insurance medicine, giving insights in what is needed to provide value-based social insurance medicine.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The explored key enablers are expected to empower insurance physicians and policymakers to improve guidance to individuals facing long-term work disability and support the assessment of functional abilities and eligibility for long-term disability benefits. Future researchers can use the results to explore the adoption of VBHC for other care professionals involved in work-focused healthcare.

INTRODUCTION

The demand for care provided by social insurance medicine (SIM) is rising, as it offers guidance to individuals experiencing long-term work disability, conducts medical assessments of functional abilities and provides advice on supportive disability benefits. This rising demand is mainly driven by the increment in retirement age[1] and the increasing prevalence of chronic health conditions among the working population.[2] In turn, chronic health conditions contribute to an increasing strain on the experienced health, functioning and diminished ability to engage in work and society in the working population.[3 4] Consequently, the increasing prevalence of chronic health conditions cause an increasing financial burden on SIM attributed to prolonged periods of sick leave.[5] Therefore, there is a dual need for quality improvement initiatives within SIM improving work participation and efficiency.

The concept of value-based healthcare (VBHC) specifically addresses this need for quality improvement in healthcare by prioritising and enhancing value for patients.[6 7] In the concept of VBHC, patient value is defined as improving patients' healthcare outcomes relative to the costs.[6 7] Thereby, VBHC aligns with the current shift towards humanising

Table 1 The principles for the adoption of value-based healthcare (VBHC) in curative and paramedical care settings[15 16]

Key enabler	Explanation/definition
Structure healthcare into integrated practice units centred around a specific health condition for more integrated and focused care	Value is created over the full cycle of care. Therefore, all professionals involved in the care of a health condition should work together in so-called integrated practice units, delivering a comprehensive range of services as an interdisciplinary team.
Measure outcomes and costs for every patient (or group) throughout the entire care cycle	To determine value, outcomes and costs need to be measured. Since value is created for a specific health condition over the full cycle of care, outcomes and costs should be measured at the health condition level.
Shift towards bundled payments for comprehensive care cycles	To stimulate efficiency over the full cycle of care, the reimbursement should align with the full care cycle. For curative care the principles state that the best payment approach aligned with value is a bundled payment system, covering the full cycle of care for a health condition. Providers need to adopt bundles as a tool to grow volume and improve value.
Integrate care delivery across separate facilities	Value is created over the full cycle of care, so the VBHC principles state not only all professionals involved in the care of a health condition within one institution should work together. But also, across separate facilities care should be delivered in an integrated manner.
Learn and share information on outcomes and costs	To improve value, teams and institutions should share information on outcomes and costs to increase knowledge and learn inside and outside the own team/institution.
Establish a supportive information technology system	A supporting information technology platform needs to enable the value-based delivery system.
Encourage innovation and motivational culture to stimulate value creation	Value should be defined as the goal within healthcare provision. Therefore, teams/institutions should target a culture of enthusiasm and trust to create value by creating a sense of shared responsibility to learn and improve.

and personalising healthcare, improving valued experiences and outcomes. VBHC aims to counteract the rising costs and inefficiencies that are prevalent in healthcare systems.[8 9] To counteract this phenomenon, healthcare providers are encouraged to work towards delivering maximum value to patients by diminishing fragmented, volume-based care and emphasising integrated, value-based care.[10–13] The VBHC approach addresses the challenges posed by the increasing healthcare demands and shortages in personnel, extending beyond mere process optimisation.[14] To facilitate healthcare providers in curative and paramedical care settings adopt VBHC, seven principles have been outlined, including (table 1) (1) structure healthcare into integrated practice units centred around a specific health condition for more integrated and focused care (2) measure outcomes for every patient (or group) throughout the entire care cycle, (3) measure costs for every patient (or group) throughout the entire care cycle and shift towards bundled payments for comprehensive care cycles, (4) integrate care delivery across separate facilities, (5) learn and share information on outcomes and costs, (6) establish a supportive information technology system and (7) encourage innovation and motivational culture to stimulate value creation.[15 16]

In curative care settings, research has shown that the adoption of VBHC improves patient-centred outcomes relative to the costs.[17–19] However, it is not yet clear to what extent the principles as outlined for the adoption of VBHC in curative and paramedical care can be adopted in other healthcare settings. For example, in primary care, it was found that the principles did not fit the practice. The adoption of VBHC in primary care was hindered by the absence of clear endpoints and a clear definition of single health conditions.[20 21] Consequently, key enablers for an effective adoption of VBHC in primary care were suggested, including organising specialisation around subgroups of patients with similar needs and the integration of primary care patient subgroup teams within relevant specialty providers.[21] Similarly, it can be debated how VBHC can be applied to the practice of SIM. Therefore, this study aims to explore key enablers for the adoption of VBHC in the practice of SIM.

METHODS

Design and setting

This study employed a qualitative explorative study design including individual and focus group interviews. Since this study was conducted in the Dutch context, an explanation of SIM in the Dutch work-focused healthcare context is provided in box 1. Further explanation of the seven principles to adopt VBHC in curative and paramedical care is given in table 1. The consolidated criteria for reporting qualitative research checklist was used for reporting the results.[22]

Recruitment

Participants were selected through purposive sampling, targeting a various group of participants with (a) experts in

Box 1 The practice of social insurance medicine (SIM) as part of work-focused healthcare in The Netherlands

Work-focused healthcare helps patients to stay at work or return to work by assessing their abilities and limitations related to work participation and providing advice on functional recovery.[59–61] It involves a variety of healthcare professionals, including curative care, rehabilitation and occupational healthcare professionals.[43] In the Netherlands, work-focused healthcare is characterised by a strict division of roles: curative healthcare professionals treat the medical condition, while occupational healthcare professionals focus on work-related health aspects. SIM, an important component of work-focused healthcare, offers guidance to individuals experiencing long-term work disability and conducts medical assessments of their functional abilities.[62] Based on the assessment results, interventions that promote health and participation can be offered to the patient. This service is provided by social insurance physicians, mainly working for the Dutch Social Security Agency (SSA): the Institute for Employee Benefit Schemes. Additionally, labour experts utilise the medical assessment findings to evaluate the patient's remaining earning capacity, which determines whether the patient is eligible for facilities including disability benefits.

Respectively, social insurance physicians working for the SSA conduct the work disability assessments for three groups of individuals falling under different work disability regulations. First, social insurance physicians assess the disability for employed sick listed after 2 years of sick leave (Dutch Social Security Schemes: Work and Income (Capacity for Work) Act). Second, sick-listed individuals without an employer receive guidance and assessment by a social insurance physician already earlier during the first 2 years of their sick leave (Sickness Benefits Act). Third, they assist and assess young disabled persons in exploring their work opportunities (Young Disabled Persons Act). Self-employed workers can opt for private work disability insurance, which provides return to work support and supportive income in case of work disability. In this case, SIM is provided by an insurance physician working for a private insurance company.

SIM and (b) experts in the adoption of VBHC in the curative care sector. This ensured examination of the research question from two crucial perspectives. The participants were recruited through the network of the researchers. All participants were personally invited through e-mail. Four individuals declined the invitation to participate, because of no available time (n=2), no longer being employed in their position (n=1) or no response (n=1). When individuals were willing to participate, an individual interview was scheduled. Subsequently, participants were allocated to one of the two focus group interviews.

Data collection

All participants participated in both an individual and focus group interview, stimulating a productive iterative data collection to enhance data richness. First, all individual interviews were conducted and analysed, followed by the focus group interviews.

The semistructured individual interviews

The first author (MEH) conducted 1-hour semistructured interviews with each of the participants via a video call platform (Microsoft Teams) from November 2021 to January 2022. During the individual interviews, the participants explored opportunities and challenges to adopt VBHC in SIM. For this, separate interview guides listing topics and open-ended questions, of which the themes were derived from the principles to adopt VBHC in curative and paramedical care,[13 15 16] were developed for both the interviews with the experts in SIM and experts in VBHC separately (see online supplemental material 1). These interview guides were used as a memory aid for the interviewer.

All participants were given preparatory information in the form of an infographic and an accompanying video explaining the infographic. The participants with expertise within SIM received an infographic explaining the VBHC concept, and the participants with expertise in the adoption of VBHC received an infographic explaining SIM (see online supplemental materials 2 and 3). The aim of this preparatory information was to enable participants to understand the context of each other's work setting and facilitate answering the research question. All participants received the infographic in hard copy at their home address, enabling them to review it while watching the accompanying video and prepare for the individual interview.

The focus group interviews

The two focus group interviews, each lasting one and a half hours, were conducted in February 2022 and March 2022, using a video call platform (Microsoft Teams). We aimed to incorporate a mix of participants in the focus group interviews combining expertise from both perspectives. During the focus group interviews, the participants reflected on the identified opportunities and challenges and identified key enablers. During each focus group interview, three authors were present: MEH served as the moderator, NZ provided technical support to the participants and SJvdB-V acted as the comoderator and timekeeper.

Before the focus group interviews, all participants received a preparatory infographic in the form of a desk poster displaying an overview of the identified opportunities and challenges as gathered from the individual interviews (see online supplemental material 4). All participants received the infographic in hard copy at their home address to serve as conversation piece during the focus group interview.

Both the individual interviews and focus group interviews were audio-recorded with the permission of the participants. No follow-up interviews were conducted.

Data analysis

Thematic coding analysis for both the individual interviews and focus group interviews was conducted following the guidelines of Braun and Clarke.[23] First, all audio recordings were transcribed verbatim and anonymised for data analysis. The transcripts of the individual interviews were sent back to each interviewee for review. Due to the online nature of the focus group interviews, participants

had the opportunity to add to the discussion via the chat. These comments were also included in the transcripts. Second, for each transcript, initial codes were assigned to all relevant text fragments and potential key enablers were identified, independently by the first (MEH) and second (NZ) author. Third, the initial codes and potential key enablers were reviewed in consultation between the first (MEH) and second (NZ) author. Disagreements were resolved by discussion. After coding all transcripts, emerging key enablers were discussed with the research group (MEH, NZ, PJvdW, MM, JLH, SJvdB-V). The transcripts were coded using the MAXQDA V.2020 software programme.[24]

Role of the researchers

The first author (MEH) was experienced with conducting individual interviews from prior research. However, she was unexperienced with moderating focus group interviews. Therefore, a senior researcher (SJvdB-V), with experience in moderating focus group interviews, had the role to support the first author as comoderator. Due to her background as an insurance physician, SJvdB-V did not perform the role as main moderator. All authors are experienced researchers within the field of occupational health, SIM and/or VBHC and helped to shape the aim and relevance of the study.

RESULTS

Participants

The group of participants with expertise in the field of SIM (n=10; mean age 49.5 years (SD 10.8); 70% women) contained insurance physicians from a private insurance company and the Social Security Agency (SSA) (covering working experience in medical disability assessment within the Dutch Social Security Schemes: Work and Income (Capacity for Work) Act; Sickness Benefits Act; and Young Disabled Persons Act), staff insurance physicians, medical policy advisors in SIM and resident trainers in SIM. Furthermore, the group of participants with expertise in the adoption of VBHC in the curative care sector (n=5; mean age 48.4y (SD 12.1); 60% women) contained researchers, medical specialists and managers involved in the adoption of VBHC in hospital care. Both focus group interviews consisted of a mix of participants and combine expertise from both perspectives (focus group interview 1: n=5 experts in SIM, n=3 experts in VBHC; focus group interview 2: n=5 experts in SIM, n=2 experts in VBHC).

Key enablers for the adoption of VBHC

Seven key enablers were identified and explored from the data: (1) investigate the meaning and implementation constraints of value in SIM, (2) integrate SIM into work-focused care networks, (3) explore the need and feasibility for specialisation based on functional problems, (4) identify the most important work outcomes for the patient within SIM, (5) identify proxy indicators for cost drivers within SIM, (6) identify value-driven financial incentives and (7) develop an information technology system to exchange data between all care providers involved. These key enablers will be discussed in more detail in the sections below. Representative quotes for each key enabler are presented in table 2.

Investigate the meaning and implementation constraints of value in SIM

Both the VBHC and SIM experts underscored that the current laws and bureaucratic structures within the SSA often prevent SIM from adapting benefit assessments to meet unique needs of each patient. The Dutch law on social security, which includes strict legislations determining disability benefit eligibility, aims for a fair distribution of collective resources of society. The experts highlighted it is crucial to acknowledge that what is valuable to society may not coincide with what is valuable to the individual patient, as these legislations are not rooted in a value-based approach (table 2, quote 1).

Despite the strict legislation, experts in social insurance physicians have discretionary powers that ensure some flexibility in assessments. Insurance physicians can offer personalised guidance to patients, by, for example, investing in interventions aimed at enhancing health and work outcomes for the individual patient, which stimulates value-based SIM. To let insurance physicians realise their added value to stimulate the delivery of value-based SIM, experts in VBHC advised that it is of great importance to identify what the insurance physicians themselves think adds value (table 2, quote 2).

The VBHC experts suggested that recognising the unique added value for each patient could serve as a stimulus for bottom-up adoption of VBHC. They proposed that insurance physicians emphasising value-based innovations could be a key driver for the long-term adoption of value-based SIM. The VBHC experts underlined that it is not necessary to wait for the completion of all principles when adopting VBHC in practice. The first step is to simply get started.

Integrate SIM into work-focused care networks

The experts believed that for VBHC to be adopted in SIM, a key change regarding collaboration is needed. SIM should move away from fragmented care, being integrated into work-focused care networks. The experts in SIM claimed that involving the insurance physician in an earlier stage of the patient's work-integrating care trajectory increases the possibilities to add value (table 2, quote 3).

However, the experts in SIM identified some challenges for the integration of SIM in cross-domain work-focused care networks. Trust issues and conflicts over care-related interests exist, as curative care professionals target the patient's health while SIM aims at societal participation. These issues are suggested to pose significant hurdles to reach effective collaboration over the full cycle of work-focused healthcare (table 2, quote 4).

Table 2 Representative quotes for each of the key enablers

Quote number	Representative quote
Investigate the meaning and implementation constraints of value in SIM	
1	"As insurance physician, I need to work within the law that society has devised, therefore, I cannot take all aspects [of the patients personal situation] into account, otherwise I get in trouble."—PT 8, expert in SIM, focus group
2	"It is important to let insurance physicians answer the question 'When are you a good insurance physician and what can you do to improve?' (…) This cultural aspect is super important. By asking this question own responsibility and realization of the own added value is triggered."—PT 12, expert in VBHC, individual interview
Integrate SIM into work-focused care networks	
3	"I think it is true that the sweet-spot, [the moments with] the best chance [of adding value), is often much earlier than [the moment the insurance physician gets involved). So, therefore, I argue that [the insurance physician] should be involved earlier in the process."—PT 1, expert in SIM, focus group
4	"Different care professionals have different interests, and therefore, define value differently. Which contributes to fragmented care delivery [in work related healthcare)."—PT 7, expert in SIM, focus group
5	"In order to really work together, the common goal needs to be clear. And the common goal needs to target value."—PT 15, expert in VBHC, focus group
Explore the need and feasibility for specialisation based on functional problems	
6	"When patients come to the insurance physician, it is rare that they only have one health condition. Most patients have multiple health problems."—PT 6, expert in SIM, individual interview
7	"The question is if it is valuable [for the insurance physician] to have specific knowledge of [the type of disease of the patient] in order to be able to deliver value-based SIM. So if it helps to know everything about a specific patient group, you can investigate specific specialization."—PT 12, expert in VBHC, focus group
Identify the most important work outcomes for the patient within SIM	
8	"What adds the value? [To answer this questions] we need to know more about what the patient wants, and that is not clear now."—PT 3, expert in SIM, individual interview
9	"Existing outcome sets are developed for curative care with no or less focus on employment."—PT 15, expert in VBHC, individual interview
Identify proxy indicators for cost drivers within SIM	
10	"As an insurance physician you have to assess whether you expect functional improvements over time. (…) As a medical practitioner you want more insight into the expected chances of occurrence of functional improvements for a specific type of disease. When [a patient] appears to have a very small change of future functional improvements [based on these statistics), you invest higher costs in disability benefit, however you do not have to invite the patient again for a reassessment."—PT 8, expert in SIM, individual interview.
11	"If you start immediately focusing on cost savings, than there is a larger change of your outcomes decreasing instead of increasing. That is why it is important to focus on improving outcomes, based on the philosophy that this actually reduces your costs."—PT 9, expert in VBHC, focus group
Identify value-driven financial incentives	
12	"If you can make the outcomes measurable, it is still difficult to interpret the influence of the insurance physicians services on the outcomes. (…) So you have to be careful whether you give the right [financial] incentive."—PT 4, expert in VBHC, individual interview
13	"It is clear that [the current] incentives [in SIM] are not being value-based. You would want to identify an incentive encouraging improvements [in SIM). (…) That it is not just about running production."—PT 4, expert in VBHC, focus group
Develop an information technology system to exchange data between all care providers involved	
14	"I think it would be so much faster if an information technology system shows [the insurance physician] immediately which care providers are involved for the patient. And that [the insurance physician] can immediately contact [other care providers), after receiving digital consent from the patient."—PT 1, expert in SIM, individual interview
15	"If we are talking about an [information technology] system collecting information from both curative care and the disability assessment, I think that is difficult to realize, because not all professionals are allowed to access all patient information."—PT 11, expert in SIM, individual interview

SIM, social insurance medicine;

Furthermore, the experts in SIM indicated that the strict separation between curative care and work-oriented care in the Netherlands hampers the establishment of easy and transparent communication among care professionals involved in work-focused healthcare, including the social insurance physician. Social insurance physicians are not covered by the patient medical treatment agreement. Within curative care teams, the patient's consent is not required for data sharing, because all healthcare providers directly involved are covered by the same treatment agreement. However, insurance physicians need to obtain written consent from patients for all information exchange with other healthcare professionals. Therefore, to succeed in integrating SIM into work-focused care networks, the experts noted that it is pivotal that a common care goal is defined and information exchange and communication is facilitated (table 2, quote 5).

Explore the need and feasibility for specialisation based on functional problems

VBHC experts expressed that to adopt VBHC, and, therefore, facilitate interdisciplinary collaboration in work-focused care networks, overall understanding of the included patient population is needed. However, the experts within SIM argued that the approach of specialising per health condition, as done in integrated practice units for curative care, is not feasible for SIM. They attributed this to the diverse range of diseases and the high number of patients with multiple health conditions that are seen by insurance physicians (table 2, quote 6).

Nevertheless, an expert within SIM suggested that specialisation based on the type of functional problems may be an appropriate approach for SIM, as insurance physicians focus on assessing functional capabilities. However, the VBHC experts stated that it is important that the type of specialisation aligns with that of other healthcare professionals involved. VBHC experts highlighted that specialisation is only necessary if multiple patient groups have different needs. Therefore, to adopt value-based collaborations, the experts suggested further investigation into the need and feasibility of a specific level of specialisation within SIM (table 2, quote 7).

Identify the most important work outcomes for the patient within SIM

Experts in SIM stated that within SIM performance is assessed based on outcomes targeting quantity rather than value. As a result, the insurance physicians highlighted that they primarily receive feedback related to quantitative measures, as the number of assessments conducted, which lacks feedback on patient-reported outcomes (table 2, quote 8).

Therefore, the experts considered it crucial to start measuring the most important work outcomes relevant to the patient within SIM, stimulating insurance physicians to make their practice more value based. However, experts from both groups indicated that measuring patient-centred outcomes within SIM is hampered by a lack of knowledge on the most important outcomes. VBHC experts acknowledged that existing outcome sets focus predominantly on disease-related outcome measures with limited consideration for aspects related to work ability and employment (table 2, quote 9).

Therefore, the experts emphasised the importance to identify the most important work-focused outcomes for the patient within SIM.

Identify proxy indicators for cost drivers within SIM

Besides the lack of data-driven knowledge on outcomes, SIM experts also indicated the absence of data-driven understanding of costs-effectiveness within SIM. This results in insurance physicians not having information about the expected work ability levels for patients who have undergone interventions or reassessments. This leads to uncertainty about whether investments in interventions or reassessment yield added value (table 2, quote 10).

To gain data-driven knowledge on costs-effectiveness in SIM, the VBHC experts suggested a strategy common in curative settings. This involves identifying cost drivers and measuring them with proxy indicators. An expert involved in the private sector of SIM noted that private insurers already have data-driven insights on expenses related to specific interventions and work ability levels. Other SIM experts recognised this as a valuable starting point for making SIM more data driven. However, VBHC experts emphasised that the initial focus in adopting VBHC in SIM should be on measuring and steering on outcomes. This approach will naturally lead to cost reduction. Directly targeting cost reduction could compromise the outcomes (table 2, quote 11).

Identify value-driven financial incentives

SIM experts noted that in the Netherlands, the SSA and curative care fall under different ministries, leading to separate payment flows. The experts highlighted that these separate payment flows pose challenges to integrate bundled reimbursements, which could foster more value-driven collaboration between these care domains. VBHC experts anticipated that as long as these separate payment flows persist, it may be unfeasible to aim for an integrated reimbursement system throughout the full cycle of work-focused healthcare. Therefore, the VBHC experts suggested to strive for a reimbursement system that encourages value-based SIM. However, experts in SIM acknowledged that the current social security system lacks knowledge about existing financial incentives that could stimulate value creation in practice. This is stated to be primarily due to a lack of understanding of how SIM influences patient-centred outcomes (table 2, quote 12).

The existing financial incentives used in SIM are primarily focused on quantity, driving the growth in assessment volumes, compromising value creation. Therefore, the experts from both groups suggested that to adopt a value-based reimbursement system, it is crucial to identify

financial incentives in SIM that encourages value-driven innovations and collaborations (table 2, quote 13).

However, the VBHC experts emphasised that actual implementation of a value-driven reimbursement system is only relevant when measuring patient-centred outcomes over the entire width of the care cycle is fully mastered.

Develop an information technology system to exchange data between all care providers involved

Both, the experts in SIM and VBHC recognised that within SIM, an information technology system can contribute to value creation. This is achieved by enabling the tracking of outcomes and costs, fostering collaboration, and, ultimately, reducing lead time (table 2, quote 14).

The experts in SIM pointed out that the Dutch SSA is currently improving its information technology system to enhance collaboration, information sharing and workflow efficiency. However, the experts proposed to develop an information technology system that allows information exchange among all care providers involved in work-focused healthcare. To achieve this, they emphasised the need to explore how information can be exchanged within such a system without unnecessary obstacles, such as differing access rights among various professionals (table 2, quote 15).

DISCUSSION

Summary of the main findings

The study findings explored seven key enablers for VBHC adoption in SIM. These include investigating the meaning and implementation constraints of value in SIM, integrating SIM into work-focused care networks, investigating opportunities and needs for specialisation based on functional problems, determining what outcomes are most important to patients and understanding the costs associated with those outcomes, identifying financial incentives that promote value-driven SIM, and developing an information technology system to exchange data between all professionals involved in work-focused healthcare.

Reflection on the findings

It is important to acknowledge that the primary objective of our study was to explore the adoption of VBHC in SIM, rather than to establish a comprehensive VBHC adoption framework. In previous research, we identified what insurance physicians perceive as valuable for patients.[25] In this study, we extend our exploration of value-driven SIM by addressing it more broadly at a conceptual level. By identifying these opportunities and challenges to adopt the VBHC principles within this context, we aim to lay the groundwork for developing a future framework for VBHC adoption in SIM. In this manuscript, we specifically targeted the adoption of VBHC within the context of SIM. While other relevant concepts, such as Lean and Six Sigma,[26] aim to enhance healthcare services by optimising processes, VBHC aligns with the shift towards humanising and personalising healthcare to improve valued experiences and outcomes. It emphasises critical healthcare outcomes relevant for patients and provides a framework to assess person-centred innovations in learning healthcare systems.[14 26] Importantly, the VBHC approach addresses the challenges posed by the increasing healthcare demands and personnel shortages, extending beyond mere process optimisation.[1 2 27]

The key enabler to integrate SIM into work-focused care networks is presented to solve existing inefficiencies in the current work-focused healthcare. Earlier literature showed insufficient communication causing a lack of knowledge on patients' medical information[28–32] and conflicting interests and trust issues.[31] Interventions stimulating collaboration and information exchange between curative and occupational healthcare professionals claim better patient satisfaction.[33 34] Therefore, the value-driven approach to integrate SIM into work-focused care networks is suggested to offer the opportunity to stimulate value-based SIM. However, as also found for primary care,[20 21] in the current study, the experts in SIM expressed doubts regarding the suitability and feasibility of specialising solely in medical conditions. Instead, they suggested that specialising based on functional problems, rather than exclusively on medical conditions as proposed in the original VBHC concept by Porter and Teisberg,[6 7] would be a more appropriate approach. It acknowledges the complexity arising from comorbidity within the patient population, especially in the context of SIM. Moreover, challenges and solutions with regard to work participation show great overlap between medical conditions.[35] Additionally, specialisation based on functional problems aligns with the current fundamental shift in healthcare from focusing solely on curing diseases to a broader emphasis on caring for health, well-being and overall functioning.[36 37]

The study underscores the importance of an IT system for enhancing value-based collaboration and information exchange. It aligns with previous findings that eHealth solutions can boost efficiency and effectiveness in medical communication.[38] Online health communities can also facilitate cross-institutional collaboration.[39] However, consistent with the results from the present study, privacy regulations must be considered in the development of such systems to ensure efficient eHealth implementation.[38]

Aligning with the findings in the present study, innovative reimbursement systems are found to be necessary to promote integrated care pathways for individual patients.[40] It is found that both outcome and cost measurements can serve as a financial incentive.[41] Therefore, identifying and measuring the most important outcomes and costs is an important starting point for monitoring value creation in healthcare practices.[42] The importance of focusing on patient-centred outcomes within SIM is also highlighted by the patient's desire for a focus on their individual work-related needs.[43 44] However, international disease-specific outcome sets developed for use in practice[45–49] and those which are already implemented in

the Netherlands[50 51] do not include outcomes related to work. This absence limits the opportunity to measure and add value in healthcare specifically targeting work-related aspects. A generic core outcome set for work participation was developed to facilitate the uniform use of work outcomes in (experimental) intervention studies but did not focus on value creation for patients in practice.[52] To promote the identification of patient-centred outcomes, systematically mapping the patient pathways can provide insights in both the added value and inefficiencies associated with each care activity.[53] Reflecting on these care pathways, presenting the most important outcomes from the patients' perspective, may result in improvements on outcomes and processes in practice.[54]

Methodological considerations

A strength in the present study was the inclusion of both experts in SIM and VBHC, ensuring examination from two crucial perspectives. Participants' inclusion in both an individual and focus group interview stimulated productive iterative data collection, enhancing data richness and trustworthiness.[55] While we acknowledge the limitation of a small sample size, which may have led to limited saturation, the substantial number of identified key enablers suggest that we have successfully pinpointed the most crucial ones for our exploratory study. The recruitment of participants through the researchers' networks introduced a potential for sampling bias. However, the inclusion of a wide array of experts with diverse views mitigated this risk.[56] To increase credibility, preparatory information was used to increase understanding and generate a common level of knowledge, transcripts were reviewed by the interviewees and findings were discussion by the full research team.[57]

Implications for future research

For an effective adoption of VBHC within SIM, additional research is necessary to explore the practical application of the key enablers and, when implemented, to compare the outcomes with standard care practices. It is noticed that certain key enablers, such as the development of an information technology system, align well with ongoing trends in the field, facilitating further research. As VBHC focuses on organising the full cycle of healthcare, knowledge on enablers to adopt VBHC within all aspects of work-focused healthcare could be the first step to enhance the practical adoption of VBHC.[40 42 58]

Implications for practice

The given insights in key enablers are expected to empower insurance physicians to promote value creation in their own practice. For example, insurance physicians might feel empowered to start measuring patient-relevant outcomes or improve collaborations with other professionals. Positive results by bottom-up adoption of VBHC can be the driving force to convince higher management and guideline/policymakers to implement VBHC in the field of SIM.

CONCLUSION

This paper provides understanding of what is needed to adopt VBHC in the practice of SIM. The identified key enablers emphasised the need for the integration of SIM into work-focused care networks, the identification of work-focused patient-centred outcomes, cost drivers in SIM and financial incentives. Future research should further explore the value and adoption of VBHC in the practice of SIM.

Contributors All authors were involved in conceptualising the study. MEH, NZ and SJvdB-V were involved in the data collection. All authors were involved in the data analysis and interpretation. All authors were involved within the critical revision of the manuscript. All authors approved the submission. MEH is acting as guarantor. We used the assistance of an AI language model (Copilot—private version) to inspire us how to improve the language if necessary.

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Ethics approval The study is conducted according to the principles of the Declaration of Helsinki. The Medical Ethics Committee of the Amsterdam University Medical Centre gave ethical approval for the study. The same committee declared that no comprehensive ethical review was needed for this qualitative study, as the Medical Research Involving Human Subjects Act did not apply to this study (Reference number: W21_368 # 21.409). Participants gave informed consent to participate in the study before taking part.

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