

A Qualitative Research on The Applicability of Value-Based Payment Method in The Health System of Türkiye¹

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Değer Bazlı Geri Ödeme Yönteminin Türkiye Sağlık Sisteminde Uygulanabilirliği Üzerine Nitel Bir Araştırma²

Abstract

This study explores value-based payment reforms in healthcare, aiming to enhance productivity, efficiency, and quality of care by shifting the focus from quantity to value. Using a grounded theory approach and the Delphi technique, 28 healthcare stakeholders were selected through purposive sampling. Data were analysed with MAXQDA 2020, and value parameters were ranked by importance. Findings define value in healthcare as "a quality service," with participants supporting value-based repayment despite some limitations. Fifteen key value measurement parameters were identified. The study recommends addressing resistance to change and implementing necessary revisions for Türkiye to adopt this model successfully.

Keywords : Value-Based Reimbursement, Value in Health, Value-Based Healthcare, Health Reimbursement Methods.

JEL Classification Codes : D61, I13, I11, I18, H51.

Öz

Bu çalışma, odağı nicelikten değere kaydırarak üretkenliği, verimliliği ve bakım kalitesini artırmayı amaçlayan sağlık hizmetlerinde değere dayalı ödeme reformlarını incelemektedir. Temellendirilmiş teori yaklaşımı ve Delphi tekniği kullanılarak, 28 sağlık sektörü paydaşı amaçlı örnekleme yoluyla seçilmiştir. Veriler MAXQDA 2020 ile analiz edilmiş ve değer parametreleri önem sırasına göre düzenlenmiştir. Bulgular, sağlık hizmetlerinde değeri "kaliteli bir hizmet" olarak tanımlamaktadır ve katılımcılar, bazı sınırlamalara rağmen, değere dayalı geri ödemeyi desteklemektedir. On beş temel değer ölçüm parametresi belirlenmiştir. Çalışma, Türkiye'nin bu modeli başarılı bir şekilde benimsemesi için değişime karşı direncin ele alınmasını ve gerekli revizyonların uygulanmasını önermektedir.

Anahtar Sözcükler : Değer Esaslı Geri Ödeme, Sağlıkta Değer, Değer Esaslı Sağlık Hizmeti, Sağlık Geri Ödeme Yöntemleri.

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1. Introduction

Countries are seeking solutions to address rising costs of health services, increasing rates of chronic disease, and implementation challenges in health systems. As healthcare stakeholders strive to reduce costs and improve quality, reforms in health financing and reimbursement methods have recently become one of the most discussed topics among radical changes (Kasapoğlu, 2016: 133; Nathaniel, 2021; Tutar & Kılınc, 2007: 31).

With health financing systems, countries pay health service providers. In fact, the simplest form of payment is direct payment. With this payment method, the patient (the first party) pays the service provider (the second party) directly for the service received. The need for a third party arose to protect society against the financial risk of falling ill. The third party can be an individual, a public or private institution. The existence of a third party and the associated payment mechanism in health care is partly due to the uncertainty of health. However, it is also a way of ensuring interpersonal redistribution. To finance health care, the third party collects income, directly or indirectly, from the population it protects, which is used to reimburse health care providers (Casto & Layman 2006: 7; Mossialos & Dixon 2002: 2-3). Health service providers have been reimbursed by the reimbursement agency using various methods to date. These methods include salary- or wage-based payment, per capita payment, payment by the global budget method, payment per service or per day, payment by diagnosis-related groups, and performance-based payment methods. In addition to these payment models, the United States of America (USA) has developed a value-based reimbursement method to improve quality and control costs (Cashin, 2015: 3; Johnson et al., 2019: 539). This study briefly discusses health financing systems and reimbursement methods, with a focus on the value-based reimbursement model.

"Value" should be adapted to the unique circumstances and health system of each country. In health services, value is determined by outcomes, not inputs; therefore, the measurement of value should be based on outcomes rather than the number of services provided. In other words, improvements to the delivery process do not add value to the system unless they affect health outcomes. With the development of value, there will be gain for all parties, such as patients, health service financiers, health service providers, providers of medicines and supplies, and the economic sustainability of the health system will be ensured (Porter, 2010: 2477). These quality-based value-based initiatives that have emerged in the US are also seen in other countries. In addition to developed countries such as the UK and Australia, there are ambitious payment-modality initiatives in many other countries. Moreover, all OECD member countries are struggling to design systems that produce health outcomes that ensure the realisation of social concepts such as effectiveness, responsiveness, safety, efficiency, and equity (Custers et al., 2007: 226). With innovative payment models and team-based approaches, the UK is moving towards a patient-centred system. Other payment-performance models and quality standardisation measures have also been explored and implemented in the UK, and efforts are being made to move towards more standardised and efficient care. Many countries, such as France, the United Kingdom, Italy, Sweden, Spain, China, Malaysia, Pakistan, Japan, South Korea, and Thailand, have started to use

value-based methods as purchasing and reimbursement methods (Godman & Gustafsson, 2013; Kamae, 2010; Sorenson et al., 2013).

2. Data & Methodology

The main objective of this study is to discuss the suitability of the value-based reimbursement method for Türkiye, based on expert opinions, to reveal the pros and cons, and to determine which parameters are more important in the value formula. The concretisation of the concept of "value" based on stakeholders' views in Türkiye and the evaluation of the Turkish healthcare system's suitability for the value-based reimbursement method are expected to contribute to the national and international literature in this field. This study will guide practitioners, administrators, and policymakers on the applicability of the value-based payment method in Türkiye.

2.1. Study Sample

Criterion sampling and maximum variation sampling, among the purposeful sampling methods, were used to select participants for the research. For the research, participants were required to be familiar with the value-based reimbursement method. At the same time, the participants were determined by selecting the relevant key people from the following institutions and groups with maximum diversity sampling (the number of participants is indicated in parentheses): Ministry of Health (4), Social Security Institution (6), academics (4), relevant professionals (3), Non-governmental organization (NGO) representatives (2), Turkish Grand National Assembly Health Commission (2), patients (3), research centers (2), researchers in the United States (2).

2.2. Data Collection

The semi-structured interview form, which is a data collection tool, was discussed and developed by 3 experts and finalised by a qualitative research specialist. The form includes 11 basic questions:

- Explaining and concretising the concept of value,
- Whether or not to include value in reimbursement,
- Which parameters should be included in the value formula,
- Pilot implementation,
- Implementation process,
- Capacity to change the payment method,
- Possible impact on performance,
- Factors that will make the transition to value-based reimbursement more difficult and easier,
- Groups supporting and opposing the value-based payment method,
- What will be the advantages and disadvantages of the method,

- Questions were asked about their views on the suitability and future success of the Turkish health system.

In the second part of the study, the findings obtained from the opinions on which parameters should be included in the value formula, which were asked for during the qualitative interview, and the 40 parameters determined after the literature review, were prepared by 10 experts who are interested in the subject and have conducted studies on the subject using the Delphi technique.

2.3. Data Analysis

Semi-structured interviews were conducted face-to-face with 28 participants. The data obtained from the interviews were transcribed and converted from audio to Word. The data obtained from the transcription process were imported into MAXQDA, a qualitative data analysis package (Kuckartz et al., 2021: 306). After the data collection process was completed, nine participant groups were formed, and the data obtained from the participants were analysed. Before the analysis phase, although it was planned to first code the data belonging to each group within itself to determine the general group tendencies and differentiations from the group, and then to evaluate the group data comparatively, it was seen that the evaluations of the participants were complementary to each other during the data coding phase. Therefore, to avoid repetition and to support the research pattern, the findings were combined and interpreted. In the study, the grounded theory method and the Delphi technique were used as qualitative methods. In grounded theory, the researcher codes the data from the beginning of the research process, compares the data and codes, and defines temporary categories to be developed through further data collection (Charmaz & Belgrave, 2015; Vollstedt & Rezat, 2019: 86). Within the scope of the research, it is aimed to examine the phenomenon of "value" in depth.

The most important reason for choosing the qualitative research method in this study is to obtain detailed information on the subject by interviewing relevant parties face-to-face and investigating the applicability of the value-based reimbursement method in all aspects. To provide structure to the qualitative findings, guided by this study's conceptual framework, interview questions and transcripts were initially coded. Then, as Braun and Clarke (2006) suggest, another round of coding was conducted to reveal specific themes and their relationships. The researcher and another researcher in the field evaluated the thematic results and reached a consensus by assessing areas of agreement or differentiation. The researcher independently reviewed the thematic findings and clarified inconsistencies.

Additionally, the value parameters that emerged from the interviews were compiled in light of information obtained from the literature and sent by e-mail to experts related to the subject and/or who have conducted studies on it, to be scored for degree of importance using the Delphi technique. At this stage, the parameter evaluation was repeated until consensus was reached. It was aimed to reach the parameters that should be included in a value-based reimbursement model that could be implemented in Türkiye. It was decided to

use a Likert-type scale to identify the most important parameters in the value-based reimbursement model and to remove unnecessary parameters.

2.4. Limitations and Ethical Approval

This study was conducted using qualitative research methods with a select sample of experts, and the findings cannot be generalised independently of the context. Participants were assumed to be knowledgeable about the topic. The research was approved by the Hacettepe University Social and Human Sciences Ethics Committee. All participants provided informed consent.

3. Results

3.1. Findings of the Grounded Theory Study

THEME 1. Findings Related to the Explanation of the Concept of Value: The participants were first asked to explain the concept of "Value". The codes for this theme are given in the figure below. Under this heading, the findings were analysed in 3 categories: value as a concept, value as a concrete concept and value as a response in health. In Figure 1, the codes collected under this theme are presented by frequency.

Figure: 1
Word Cloud of the Concept of Value



- *Category 1. Value, as a concept, is coded as a result beyond output: doing the right thing, eliminating waste, achieving the target, superiority, contribution, importance, quality, benefit, and meaning.*

Some of the definitions of the concept of value made by the interviewees participating in the study are given below:

- ✓ "It is possible to define value as the benefit that a product or service provides, and the user clearly feels that or that the user expects to receive from that product or service." (Academician 1)
- ✓ "Anything that provides a cost advantage that creates a positive output for an organisation, or a person, can be defined as value." (Social Security Institution employee 6)
- ✓ "Value is worth, significance." (Health worker 1)
- ✓ "Value is the quality received for the money spent." (Health worker 3)

THEME 2. Findings on Thoughts on Transition to Value-Based Reimbursement Model: The codes were as follows: necessity (those who stated that transition to value-based payment method is necessary), sufficient capacity (those who think that there is sufficient capacity for transition to value-based payment method in the Turkish health system), willingness (those who stated that they are willing to transition to value-based payment method), insufficient (those who stated that there are some insufficiencies for transition to value-based payment method), unclear (participants who did not specify a clear statement for transition to value-based payment). Most respondents agreed that transitioning to a value-based reimbursement model is necessary (23 respondents).

THEME 3. Findings Regarding the Formulation of Value: The 10 most coded parameters that were thought to be included in the formula were patient satisfaction, hospital mortality rates, clinical quality indicators, number of patients recovered, number of days of hospitalisation, cost, complications, drug and material use, readmission rates and number of qualified personnel.

THEME 4. Findings Regarding the Pilot Implementation Method of Value-Based Reimbursement: Pilot implementation should start with the 1st step, begin with the general, and be based on medical equipment, patient-based, unit-based, hospital-based, disease-based, drug-based, and region-based. The most recurrent of these statements is that it should be done on a disease basis.

THEME 5. Findings on the Implementation Process of the Value-Based Reimbursement Method: For the implementation process of value-based reimbursement, the following codes were created: It will take a very long time, it will take 5-10 years, it will take 3-5 years, it will take 1-3 years, and it is difficult to determine the period for this. The most frequently coded term was the idea that it would take a very long time (8 participants).

THEME 6. Findings Regarding the Capacity to Change the Reimbursement System: It was stated that the information system (15) and infrastructure (9) of the Turkish healthcare system are sufficient for transition to a value-based payment system. However, 14 participants also stated that adaptation is necessary for this.

THEME 7. Findings on the Effects of the Value-Based Reimbursement Method on Performance: Participants most frequently reported that overall performance would increase (9). Then, it was stated that physicians' performance would increase the most (7).

THEME 8. Findings on Factors that will make the Transition to Value-Based Reimbursement Difficult and Facilitating: Participants were asked what they thought would make the transition of the Turkish health system to value-based reimbursement more difficult and easier.

Table: 1
Factors that will make the Transition to Value-Based Reimbursement Difficult and Facilitate

Category 1. Challenging Factors	Category 2. Facilitating Factors
The most frequently coded factor that would make the transition to value-based reimbursement difficult is resistance (21). Participants think that patients and healthcare professionals lack education on this issue (14). The next most frequently coded barrier was bureaucracy (12). 9 participants mentioned transparency and the inability to collect quality data. The difficulty of establishing an electronic system (8) and the difficulty of determining measurements (7) were also among the most frequently coded codes. Other emerging codes are; not determining the formula correctly, not explaining the system well to stakeholders, not everyone wanting and participating, decision makers not being on the same side, lack of ownership, low staff motivation, injustices in payment, politics, lack of leadership, lack of know-how, determination, technical preparation, unique characteristics of health services, ethical problem, lack of patient follow-up system, need for cultural change, persuasion of health workers, need for health personnel.	As a facilitating factor for transition to value-based reimbursement, the most frequently coded factor was the unification of the social security system (SGK) under a single roof (16). It is thought that our e-health system is good (9), which will facilitate the implementation of a value-based health system. The reward system (8) and the government's support for this payment system (8) are other factors that will facilitate the transition to the system. Other factors that are thought to facilitate are as follows; incentives, having young healthcare professionals, having willing managers, reducing costs, acting jointly with stakeholders, making it clear, patients' demand, cooperation between SGK and Ministry of Health, high patient satisfaction, existence of criteria, having good practice examples, using the advantages of the system, doing the right thing, TIG system, technology.

THEME 9. Findings Regarding the Groups Supporting and Opposing the Implementation of the Value-Based Reimbursement Method: Participant views on the groups that would support and oppose the implementation of the value-based reimbursement method in Türkiye are given below.

Table: 2
Groups Supporting and Opposing the Implementation of the Value-Based Reimbursement Method

Category 1. Supporting Groups	Category 2. Groups That Will Oppose
The Social Security Institution was coded 22 times as the group most likely to support the transition to value-based reimbursement. Patients are also thought to support the transition to this system (14). Participants also think that service providers (12) and the Ministry of Health (8) would support this payment system.	"Those who do not want extra burden" was coded 8 times by 7 participants as the leading group that would oppose the value-based reimbursement method. Those who are against innovation (7) and physicians (7) are also thought to oppose it. This is followed by health personnel (6) and the manipulators. It is also thought that the Turkish Medical Association (5) and those who do not want to be audited (5) will oppose.

THEME 10. Findings on the Advantages and Disadvantages of Value-Based Reimbursement Method for the Turkish Health System: Table 3 shows that according to the views of the participants, the advantages of the value-based reimbursement method are as follows, and the disadvantages that may be caused by the value-based reimbursement method are listed as follows:

Table: 3
Advantages and Disadvantages of the Value-Based Reimbursement Method

Category 1. Advantages	Category 2. Disadvantages
Quality will increase (28), satisfaction will increase (19), cost will decrease (19), efficiency will increase (12), health expenditures will decrease (8), payment will be made according to quality (8), transparency will be ensured (7), errors will decrease (5), health outcomes will improve (5), benefit to society will increase (5), performance (5) and efficiency (5) will increase.	Failure to address all aspects of the patient, insufficient demonstration of contributions, problematic data accuracy, political interference, risky results, calculation of the number of hospitalization days should be patient-specific, need for an audit mechanism, workload, inability of the needy to access the service, equity problems, penalization, cost of data collection, communication, identification of the source of the problem, rural hospitals, use for profit, difficulty of implementation, inability to calculate payment correctly, increased expenditures, handicap of mortality rate, patient's health literacy, disadvantage to pharmaceutical companies, international attack, lack of personnel, training cost and no disadvantage.

THEME 11. Findings on the Suitability and Future Success of the Turkish Health System for Value-Based Reimbursement Method: The main opinion of the participants on this issue is that it will be successful (coded 20 times). However, the number of those who think that revision is necessary (19) is also not small. Some thought compliance was possible (13), and others stated that we cannot know until we experience it (10).

3.2. Findings of the Delphi Study

As a result of the qualitative analysis and with support from the literature, 40 parameters, identified by the participants as potentially included in the value-based reimbursement model, were presented to 10 experts using the Delphi method. The parameters with a score of 4 or higher in the first round were resubmitted to the same experts until consensus was reached. As a result of the analysis conducted after the second round, it was seen that a consensus was reached among the participants. When the 16 parameters obtained from the 40 parameters in the first round were asked of the participants (10) again in the second round to score them, it was found that 15 parameters were classified as important or very important, with scores of 4 or above. Of the parameters, only "the rate of re-admission of the patient to the outpatient clinic within 30 days" received a score of 3 and was interpreted as not being included in the formula. The results of the second-round scoring and the final list of parameters reaching consensus are shown in Table 4.

4. Discussion

4.1. Evaluation of Grounded Theory Study Results

THEME 1. Evaluating the Concept of Value: Identifying and evaluating what constitutes value in health services is a highly controversial issue that requires detailed examination (Woods, 2016: 60). In literature, the concept of value is defined in many ways. The most frequently coded words explaining the concept of value in general terms, based on the study's findings, are benefit, worth, importance, and contribution. The Oxford Dictionary defines value as the importance or utility of something to a person. Porter (2010) defines value as the benefit gained for every penny spent. According to Diamond and Kaul, value is a "utility fee" (Boden & Redberg, 2018). The participants of the project defined the meaning of value as "benefit" and "worth". It was found to be one-to-one compatible with Diamond and Kaul's definition. In their study, Elf et al. (2017) defined the concept of value

in health as a patient-centred, high-quality service with improved patient safety. In this study, the participants' definitions of the concept of value in health were found to be compatible with those in the literature. The subcodes of the satisfaction code obtained from the study findings overlap with the findings of the study conducted by Seyfioğlu (2019).

THEME 2. Evaluation of Transition to a Value-Based Reimbursement Model: According to the study's findings, more than half of the participants agreed that the transition to a value-based reimbursement model is necessary. Egdom et al. (2019) also stated in their study that there is a need for a payment method that prioritises value for patients. In his study, Philips (2019) stated that innovative payments that share risk and align incentives across providers should be piloted to make healthcare more sustainable.

THEME 3. Evaluating the Formulation of Value in a Reimbursement Model: Lee, Austin, and Pronovost (2016) stated in their study that, in a value-based payment model, there should be a single metric that encompasses multiple variables. This measurement should cover complications, patient satisfaction, adherence to the care process, clinical and patient-based outcomes. The cost here includes all service costs, such as diagnosis, care, surgery, and treatment. Damberg et al. (2014), on the other hand, identify the key constructs underlying the value-based reimbursement model as: (a) clinical care process, (b) patient care experience, (c) outcome and (d) efficiency. These are in line with the study findings. MacLean (2017) defined health outcomes as events such as recovery from illness, death, and complications of medical care. Morris and Bailey (2014) also emphasised survival measures (mortality), disease incidence (morbidity), and health-related quality-of-life parameters as outcome measures. Based on the findings, the proposed grouping is supported by the literature.

THEME 4. Evaluation of the Pilot Implementation Process: In their study, Werner and Emanuel (2021) state that the transition to value-based payment should be based on regional trends. Joseph (2017) believes that change should be implemented in phases to help employees adapt gradually. He states that implementing new changes as a department will help evaluate progress. Ağlamış (2020) stated in his study that value-based purchasing in healthcare services is most common in the pharmaceutical sector.

THEME 5. Evaluation of the Transition Period to the Implementation of the Value-Based Reimbursement Method in Türkiye: According to the study's findings, half of the participants believe that the transition to the value-based reimbursement method will take more than 5 years. Although evaluating new processes takes time, it should be done well (Burgess & Radnor, 2013; Gustavsson et al., 2016; Toussaint & Berry, 2013). McWilliams et al. (2018) found that the transition to a successful value-based payment model will take time, years of experience, and investment to realise savings and practice transformations. Yıldırım et al. (2021) also noted that value-based healthcare and related topics are still very new and that a long, challenging process lies ahead, requiring time, patience, and perseverance.

THEME 6. Assessment of the Capacity of the Turkish Reimbursement System: The study found that the information system (14 participants) and infrastructure (7 participants) of the Turkish healthcare system are sufficient for the transition to a value-based payment method. However, 12 participants stated that adaptation is also necessary, and changes should be made to the system. Bergstrom (2015) stated in his study that healthcare organisations that can adapt to this new payment system and make the necessary changes will gain significant benefits. Seyfioğlu (2019) stated in his study that a National Health Information System was established through e-transformation efforts in Türkiye's health service delivery and that an effective information system infrastructure was developed by aligning with international standards through the E-Nabız system. This supports the findings of this study.

THEME 7. Assessing the Effects of Value-Based Reimbursement on Performance: Value-based payment is an approach that financially rewards physicians for performing better than expected. Participants most frequently reported that value-based payment would improve overall performance. Participants also stated that it could improve the performance of physicians, hospitals, and other healthcare professionals. Only three of the participants thought that it would not directly affect performance. However, the literature also supports this finding. For example, Schuttner et al. (2020) stated in their study that payment reform may not be sufficient to change performance. Eijkenaar et al. (2013) also found little evidence in their study that performance improves with increases in additional payments to providers. In their study, Chambers et al. (2015) stated that changes in payment methods may be associated with changes in hospitals' financial performance. Seyfioğlu (2019) stated in his study that value should be defined to improve performance in health services.

THEME 8. Evaluation of the Factors That Make the Value-Based Reimbursement Method Difficult and Facilitating: Although the idea of focusing on value rather than volume sounds good, it has a few challenges in practice. While the transition to value-based reimbursement requires a major cultural change, it also requires a strong technological infrastructure and detailed planning (Durur, 2020: 180). Among the factors that will make the transition to value-based reimbursement difficult, the most recurring was resistance to change. Other findings were as follows: the need for cultural change, bureaucratic obstacles, not explaining the system well, convincing healthcare professionals, inability to collect quality data, lack of technical preparation, inability to process data, transparency, difficulty in determining measurement, lack of training, lack of determination and the need for healthcare personnel. It is thought that these findings may also be encountered in other change processes to be carried out in the health system. Alsleben (2016) stated that appropriate input data must be defined to expect successful results. Izguttinov et al. (2020) and Yildirim et al. (2021) note that policy support and a coherent policy and regulatory environment play an important role in accelerating the transition to a value-based reimbursement model. Based on the qualitative data analysis, the most frequently cited factor facilitating the transition to a value-based reimbursement model was the unification of SGK under a single roof. When evaluated in Türkiye, it is seen as a valid factor. The fact

that reimbursements are made from a single source suggests that changes in method will progress more easily.

THEME 9. Evaluation of Groups that will Support and Oppose the Value-Based Reimbursement Method: When the value-based reimbursement method is evaluated in the Turkish healthcare system, it is thought to be a natural outcome to expect institutions such as SGK and the Ministry of Health to support this method, which was developed to increase quality and reduce costs in healthcare services. The value-based reimbursement method is supported in the literature by Kuhn and Lehn (2015). In their study, the authors state that value-based payment programs significantly reduce costs, improve quality of care, and increase efficiency by shifting clinical and financial risk from payers to providers. According to the study's findings, the main groups that will oppose the value-based reimbursement method are those who do not want additional workload. 4 of the participants stated that no one would oppose it. It is thought that some of the groups mentioned in the study are likely to oppose any change. Damberg and Reid (2020) also stated in their study that employees who do not want extra work will not support it. Woolhveler and Himmelstein (2014) explained in their study that doctors would not want extra workload, as it is associated with decreased job satisfaction.

THEME 10. Evaluation of the Advantages and Disadvantages of the Value-Based Reimbursement Method: It is evident that the advantages identified in the study align with the factors mentioned in the objectives of the emergence of value-based reimbursement. Since the method was developed to achieve these advantages, the findings are expected to point to them. The fact that the value-based reimbursement method is patient-centred and grounded in patient satisfaction, unlike other payment methods, has highlighted the need to include patients in the system. The idea that patients in the Turkish health system lack health literacy has led to the conclusion that this lack creates disadvantages in the system.

THEME 11. Assessing the Suitability and Future Success of the Turkish Health System for Value-Based Reimbursement: According to the study's findings, revisions are expected to replace the current payment method with value-based reimbursement. In general, it is thought that the method will be successful with revisions. Koç (2017) stated that there are various positive and negative views on value-based payment in Türkiye, as in the rest of the world. Fendrick et al. (2010), on the other hand, stated in their study that any change involves risk factors, but the transition to a value-based reimbursement method will be successful by focusing on the benefits rather than risks. In their study, Şimşir and Altındış (2019) stated that there is potential for a value-based payment program, but that revisions, such as implementing the DRG system, are necessary beforehand. This result is in line with the project's findings.

4.2. Evaluation of Delphi Study Results

The 16 parameters that emerged through consensus among participants from the two rounds of Delphi studies and the top 16 most frequently repeated codes obtained from the

grounded theory study are compared in Table 4. Those found to be similar are shown in green.

Table: 4
Comparison of Delphi and Grounded Theory Study Results

Parameters Considered to be Included in the Value Formula	
Delphi Study Results	Grounded Theory Study Results
Satisfaction of patients and relatives	Patient satisfaction (40)*
Proportion of patients recovering in hospital	Clinical quality indicators (37)*
Skills and competence of hospital staff	Mortality rate (37)*
Complication rate	Number of patients recovered (24)*
Patient readmission rate within 30 days	Cost (22)*
Safe medication practices	Number of days hospitalised (22)*
Correct diagnosis and treatment rate	Use of medicines, materials (17)*
Hospital-acquired infection rate	Complications (17)*
Communication of health personnel with patients	Qualified personnel (15)*
Education of patients and relatives	Readmission rate (14)*
Case mix index	Burden of disease (Qaly Daly) (20)*
Reducing the social burden of disease (Qaly, Daly)	Productivity (12)*
Malpractice rate	Clinical outcomes (12)*
Repeat procedure (examination, film, MR, etc.)	Process quality (10)*
Patient's health status after treatment	Patient safety (9)*
Within 30 days, the speed of re-admission to the outpatient clinic	Infections (9)*

* Those in parentheses indicate the frequency number of the code, i.e., how many times it was coded. Green colour indicates overlapping parameters.

Most of the first 16 most repeated parameters (9) obtained by applying the grounded theory technique overlap with the first 16 of the parameters thought to be included in the formula because of the Delphi study. This reveals that the results of the study found by two different techniques are compatible. In the second round of the Delphi study, "the rate of re-admission of the patient to the outpatient clinic within 30 days" received 3 points out of 5 and was interpreted by the participants as a question of whether it should be included in the formula. The remaining parameters considered important and very important in the value calculation remained. The parameters used to calculate value-based payment in the United States (CMS, 2021) are mortality and complications, healthcare-associated infections, patient safety, patient experience, efficiency, and cost reduction. These headings were found to be consistent with the study's results. In the value-based reimbursement method, calculations should be based on evaluating countries' own systems and determining which indicators or measures create value. The parameters in this study's findings were determined through both grounded theory analysis with 28 participants and the Delphi technique with 10 expert participants.

5. Conclusion

The value-based reimbursement model focuses on measuring success and assessing process effectiveness. To use the model successfully, it will be necessary to measure and analyse data. Healthcare providers need to be patient, as it will take time for outcomes to show measurable improvement in the population. The effectiveness of this model will be seen in the organisation's ability to use it to achieve better health outcomes, less overuse, and lower costs. As each of these may use different measurement metrics, it is important to establish a baseline before the program starts to demonstrate its success. The parameters identified serve this purpose. The study concludes with information that will help health

policymakers redesign the reimbursement model. In this study, the views of academics, health policy thought leaders (employees of the Ministry of Health and Social Security), and other healthcare stakeholders regarding the value-based reimbursement method were collected. As a result of the study, participants mostly defined value as "benefit" and "worth". Participants defined value in healthcare services as "receiving a quality service and leaving the institution in good health". In addition, the participants stated that value can be measured concretely through evaluations of "quality" and "patient satisfaction". The definitions of value in the literature and those obtained from the study's results were found to be compatible.

As a result of the study, the participants stated that the pilot implementation should be disease-based in the first place, hospital-based in the second place and region-based in the third place. According to the frequency of the answers given by the participants, the factors that make it difficult to transition to value-based reimbursement were identified as resistance to change, the need for training first for patients and then for healthcare professionals, bureaucratic obstacles, lack of transparency, lack of quality data collection, difficulty in establishing an electronic system and difficulty in determining measurement. Facilitating factors were identified as the unification of the social security system under a single roof, the existence of a reward system, and the ease of system changes with government approval. The advantages of value-based reimbursement management are widely thought to include improving quality and satisfaction, reducing costs, increasing efficiency, lowering health expenditures, paying according to quality, ensuring transparency, reducing errors, and improving health outcomes. The disadvantages are thought to stem primarily from low health literacy in society. It is also thought that the penalisation system would be a disadvantage, as it would be undesirable. Another disadvantage is that some people will use the system in ways that align with their interests. In addition, while participants stated that value-based reimbursement can increase overall performance, some noted that it cannot be considered performance-based.

Participants were mostly positive about the transition to a value-based reimbursement model. Despite the inadequacies, the necessity of transition was expressed. In addition, the most common view regarding the suitability of the Turkish health system for value-based reimbursement is that it will succeed. The second most common opinion was that it would be successful, the second most common was that it would require revision to be suitable, and the third most common was that Türkiye has the potential for transition. However, some thought that this could not be known without experience.

6. Recommendations

The study's conclusions and recommendations demonstrate its originality. In conclusion, when structured fairly and with the right framework, the value-based reimbursement model offers a realistic, rational, and sustainable blueprint for a new healthcare payment system. It can effectively incentivise and reward high-quality, efficient, patient-centred care. In addition, since an organisational model is expected to be needed for

the planned value-based reimbursement method, one has been proposed in line with the study's results. In addition, in line with the results of this study, the following suggestions were made.

- ✓ The health system should be transformed into one that pays for health and quality rather than disease and procedures, and that supports the provision of higher-quality health care at lower prices and rewards it in a value-based way.
- ✓ The groups that oppose the value-based reimbursement method should be carefully assessed, the reasons for their opposition investigated, and necessary efforts made to obtain their support.
- ✓ Factors such as resistance and bureaucratic barriers that would make the transition to value-based reimbursement difficult should be eliminated.
- ✓ More work is needed to ensure that the systems to calculate value are accurate. Further work could redefine existing elements and propose new ones. However, much work is recommended in this area to move forward successfully.
- ✓ As a result of this study, it is recommended to develop a formula based on the parameters thought to constitute the value.

In future studies, it is recommended to:

- ✓ Test the proposed value formula through pilot implementations in different healthcare settings and measure its impact on cost, quality, and patient satisfaction.
- ✓ Explore patient and frontline healthcare provider perspectives in more detail, as this study mainly included system-level experts.

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