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Stakeholder perspectives on payment reform in maternity care in the Netherlands: A Q-methodology study

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ABSTRACT

Based on theoretical notions, there is consensus that alternative payment models to the common fee-for-service model have the potential to improve healthcare quality through increased collaboration and reduced under- and overuse. This is particularly relevant for maternity care in the Netherlands because perinatal mortality rates are relatively high in comparison to other Western countries. Therefore, an experiment with bundled payments for maternity care was initiated in 2017. However, the uptake of this alternative payment model remains low, as also seen in other countries, and fee-for-service models prevail. A deeper understanding of stakeholders' perspectives on payment reform in maternity care is necessary to inform policy makers about the obstacles to implementing alternative payment models and potential ways forward. We conducted a Q-methodology study to explore perspectives of stakeholders (postpartum care managers, midwives, gynecologists, managers, health insurers) in maternity care in the Netherlands on payment reform. Participants were asked to rank a set of statements relevant to payment reform in maternity care and explain their ranking during an interview. Factor analysis was used to identify patterns in the rankings of statements. We identified three distinct perspectives on payment reform in maternity care. One general perspective, broadly supported within the sector, focusing mainly on outcomes, and two complementary perspectives, one focusing more on equality and one focusing more on collaboration. This study shows there is consensus among stakeholders in maternity care in the Netherlands that payment reform is required. However, stakeholders have different views on the purpose and desired design of the payment reform and set different conditions. Working towards payment reform in co-creation with all involved parties may improve the general attitude towards payment reform, may enhance the level of trust among stakeholders, and may contribute to a higher uptake in practice.

1. Introduction

In theory, alternative payment models (APMs) in healthcare incentivize collaboration between providers, reduce overuse of care and stimulate care coordination, as opposed to the fee-for-service (FFS) model, which is the dominant payment model in most healthcare systems (Miller, 2009; Conrad et al., 2016; Struijs et al., 2011). Within FFS models, payers bear all financial risks with respect to the number of patients and their care utilization, while providers are in a better position to assess the care need and have a bigger influence on care utilization (Miller, 2009; Frakt et al., 2012). This information asymmetry between payers and providers can create an incentive for providers to provide more care than medically necessary. Within APMs, a part of the financial accountability is shifted from the payer towards provider(s) (Frakt et al., 2012). By shifting more risk towards providers, information asymmetry between payers and providers is reduced and providers are

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incentivized to deliver appropriate care (i.e., increase of high-value care use and decrease of unnecessary and low-value care use (de Vries et al., 2016; Schwartz et al., 2014)) in coordination with other involved providers (Frakt et al., 2012; Robinson, 2001). Based on these theoretical notions, there is general consensus among stakeholders such as providers, payers and policy makers, that APMs are desirable in certain situations and that there is a need for payment reform in order to realize a high-quality affordable healthcare system which is accessible for everyone (Miller, 2009; Frakt et al., 2012). However, the uptake of APMs is still low (De Vries et al., 2021; Hussey et al., 2011; Liao et al., 2020a).

Previous research has shown that the low uptake of APMs is related to uncertainties for both payers and providers regarding upfront investments, return on investments and how APMs may affect aspects such as work satisfaction, income and autonomy of professionals (Hussey et al., 2011; Liao et al., 2020a; Roiland et al., 2020; Rudoler et al., 2015; RIVM, 2020; Harris et al., 2017). Furthermore, information asymmetry, a lack of trust and conflicting incentives between providers and payers, and a lack of a sense of urgency, are listed as barriers to payment reform (de Vries et al., 2019). Although these studies shed some light on various general factors that may explain why the uptake of APMs is still low, research identifying the perspectives of stakeholders on payment reform more comprehensively, considering potential differences in perspective between stakeholders, is still lacking. To gain a deeper understanding of the underlying reasons for the reluctance to implement APMs despite their apparent theoretical benefits, more insight into the existing perspectives of stakeholders on payment reform is required. This can help to inform policy makers trying to improve the uptake of APMs.

Also in the Netherlands, payment reform initiatives, particularly the voluntary experiment with bundled payments for maternity care, have faced challenges with low uptake due to the reluctance of payers and providers to fully embrace the transition (RIVM, 2016; RIVM, 2018). The payment reform initiative aimed to address high perinatal mortality rates by promoting improved collaboration among maternity care providers (Peristat, 2010). The Netherlands has a unique maternity care system in which midwives and postpartum care providers play an equally important role as gynecologists, and in which home deliveries are common practice (further details on the Dutch maternity care system in Textbox 1). Over the past six years, the bundled payment model has been implemented in eight regions, but the remaining 70 regions are still using the traditional fee-for-service (FFS) model. This low uptake is a challenge for policy makers. Although the eight participating regions generally reported positive experiences, citing improved collaboration among professionals and disciplines (RIVM, 2020), there remains a lively debate among stakeholders regarding the long-term implementation of bundled payments. The lack of conclusive evidence on improved outcomes for mothers and children, coupled with the time required to assess the full impact of such transitions, contributes to the uncertainty surrounding decision-making (RIVM, 2020). As a consequence, decisions on implementation and continuation of APMs have to be made before initial results of experiments with APMs become visible, let alone measurable. Therefore, decisions are based on other aspects. The Dutch Ministry of Health has made various attempts to bring stakeholders closer together and come to a joint decision on a future payment model for maternity care (Common Eye, 2021). These efforts have not yet made a notable difference in creating support from stakeholders for a final policy decision. In light of this, Dutch parliament decided in May 2022 - after first extending the five-year (2017–2021) experiment phase with one year (2017–2022) - to implement the bundled payment model structurally alongside the FFS model as of 2023. This implies that in each region, payers and providers have the freedom to choose their own payment model when contracting maternity care.

Understanding and considering the motivations and concerns of stakeholders with different perspectives can help in designing APMs that are supported by a wider range of stakeholders and, hence, implementing APMs more effectively and efficiently (Conrad, 2015; Van Herck et al., 2010; de Brantes et al., 2020). This can also help to limit the perceived uncertainty with respect to autonomy and income when adopting an APM, whilst avoiding excessive use of risk mitigation strategies (Conrad, 2015; Van Herck et al., 2010; de Brantes et al., 2020). Therefore, the aim of this study is to investigate stakeholder perspectives on payment reform in maternity care in the Netherlands. More specifically, we will study *how important various aspects associated with payment reform are for payment reform in maternity care.* Q-methodology will be employed to systematically identify, describe and compare the perspectives on this topic, as this is a suitable method for this purpose (Watts and Stenner, 2012; Churruca et al., 2021; Wallenburg et al., 2010).

2. Methods

2.1. Approach

This study was conducted using Q-methodology, an approach that combines aspects of quantitative and qualitative methods to identify and portray the perspectives on a certain topic (Watts and Stenner, 2012; Stephenson, 1935; Brown, 1980; McKeown et al., 2013). Q-methodology can be applied to any topic people can have an opinion on and is increasingly used in health sciences (Churruca et al., 2021; Truijens et al., 2019; Rotteveel et al., 2021; Patty et al., 2017; Baker et al., 2006). In Q-methodology, participants are asked to rank a set of statements on a sorting grid according to their own preference (quantitative data) and explain their ranking afterwards in an interview (qualitative data) (Watts and Stenner, 2012). Clusters of correlations among rankings are identified via by-person factor analysis. The assumption underlying this analysis is that participants who rank the statements similarly have similar perspectives on the topic (Watts and Stenner, 2012). The value of Q-methodology in comparison to other methods, for the purpose of identifying different perspectives on a subject, is that Q-methodology

Textbox 1
The Dutch maternity care system (based on (van Manen et al., 2021; Perdok et al., 2016; Amelink-Verburg et al., 2010))

The organization of maternity care in the Netherlands differs from most other countries. Low-risk pregnant women are cared for by a community midwife, who is usually self-employed. At the onset of labor, these women are attended by their community midwife and have the choice to give birth at home, in a birth center or as an outpatient in a hospital (still under the care of the midwife). If complications arise, women are referred to a hospital to receive care from a gynecologist. After birth in the hospital, women usually stay there for a short period of time (a few hours or days). At home, women and their babies are supported by a community midwife and a postpartum care assistant. The postpartum care assistant assists the parents with the care for their baby and with light domestic work during the first eight days after birth. Maternity care in The Netherlands is based on the principle that pregnancy and birth are fundamentally physiologic processes.

provides a highly structured approach to identify all distinct perspectives and not only the most dominant ones. Additionally, the statement rankings and quantitative analysis complemented by the qualitative explanations in Q-methodology, allow for in-depth interpretation of each perspective, for proper comparison between the perspectives and can help to provide a clear overview of topics of consensus and disagreement between perspectives.

2.2. Statement set development

In order to enable all participants to express their perspective, we developed a comprehensive and balanced statement set using the conceptual framework on the implementation of payment reform by Conrad et al. (2016). This framework consists of several components among which context, objectives, reform strategy, barriers and facilitators, value to patient and the implementation of the payment reform strategy. We enriched this conceptual framework with additional literature on the implementation of APMs in general and for maternity care more specifically, including several qualitative studies regarding bundled payments for maternity care in the Netherlands (De Vries et al., 2021; RIVM, 2020; RIVM, 2018; Berwick et al., 2008; Hendrikx et al., 2016; Proctor et al., 2011; Steenkamer et al., 2020; Sikka et al., 2015; Valentijn et al., 2015). In addition, information was extracted from policy documents, news articles and discussion forums on bundled payment models for maternity care in the Netherlands, thus broadly covering the public discussion on this matter. All this information combined is called the concourse on the topic, covering all relevant aspects and opinions on this topic in society, and is used as the foundation for creating a comprehensive set of statements representing this concourse to ensure all participants are able to express their perspective during data collection.

This process of combining the theoretical framework by Conrad et al. (2016) with the concourse, resulted in an extensive and focused, draft theoretical framework for this study consisting of the following domains and subdomains: value to patient (health, quality of care, care use, experience, cost to patient), value to professional (experience, responsibility, cost to professional), context (national level, regional/organizational level), objectives (system objective, organizational objective, individual objective) and reform strategy (payment reform, delivery system, alignment of payment reform and delivery system) (see Table 1 for a detailed operationalization of the domains). Four independent experts (two on APMs and two on maternity care) not involved in this study were asked to check the draft theoretical framework for comprehensiveness. No further additions or changes were required and, therefore, the initial framework was used for the development of the statement set.

Initial statements were formulated by the authors (ZS, EdV, JS, JvE) for each of the elements of the theoretical framework based on the materials collected (89 statements for the complete framework), and supplemented, revised and edited during three consensus meetings. For the process of refining the statement set we have used the following guidelines: 1) reducing overlap in statements, 2) defining which aspects require more attention because of their prominence in the discussion, and 3) reducing the overall number of statements to a feasible number for respondents to compare and consider, while maintaining full coverage of the concourse. This process resulted in an initial set of 46 statements. Next, this draft statement set was discussed with two researchers (not involved in this study) with experience of the research topic or Q-methodology, to check for clarity, ambiguity, overlap and completeness of the set of statements. Their feedback was discussed and changes were made to several statements, predominantly text editing for clarification. Thereafter, four stakeholders from different maternity care regions were invited for a pilot study: two managers, one gynecologist and one midwife, with varying backgrounds and knowledge of the bundled payment model. In response to their comments, we rephrased three statements (no. 17, no. 18, no. 41 (Table 3)) and added some clarifications to the introductory text and instructions. As no significant

Table 1
Theoretical framework for the statement set development.

Domain	Subdomain	Factor
Value to patient	Health	Experienced health of the mother (to be)
		Health of the child as experienced by the parents
		Objective health outcomes mother (to be)
		Objective health outcomes child
		Perinatal mortality
		Risk identification and prevention
	Quality of care	Efficiency
		Safety
		Effectiveness
		Equity
		Patient-centeredness
		Timeliness
		Accessibility
		Support
	Healthcare use	Duplicated care
		Under-/overuse
		(De)medicalization
		High vs. low value care
		Prevention
		Place of birth (home, hospital, out-patient)
		Mode of delivery (vaginal, caesarean section)
		Epidural use
	Experience	Overall care experience parents (to be)
		Freedom of choice (provider/ professional, mode and place of birth)
		Client/patient participation
		Continuity of care
	Cost to patient	Direct
		Indirect
		Avoidable costs
Value to professional	Experience	Joy of the workforce
		Communication
		Trust
		Collaboration
	Responsibility	Autonomy
		Task shifting
		Workload
	Cost to professional	Direct
		Indirect
Context	External (national level)	Laws and regulations
		Available evidence (on effects of the bundled payment model)
		Available information (on BP model in theory and practice)
		Role models and learning cycles
		Position/attitude of health insurer(s)
		Position/attitude of professional associations
		Cues to action
	Internal (regional/ organizational level)	Culture
		Level of collaboration
		Leadership
		Shared vision
		Urbanization degree
		Access to legal, fiscal and economic expertise
		Presence of multidisciplinary electronic patient record
		Cues to action
		Individual personality traits
Objectives	System objective: integrated maternity care	Improve collaboration
		Improve quality of care
		Improve efficiency
		Improve health outcomes
		Lower perinatal mortality

(continued on next page)

Table 1 (*continued*)

Domain	Subdomain	Factor
		Lower spending
		Facilitate task shifting
		Facilitate innovations
	Organizational objective	Being a pioneer organization
	Personal/individual objective	Improve value to patient
		Improve value to professional (self)
Reform strategy	Payment reform	Bundled payment model (key-design elements)
	Delivery system	Characteristics and specifics of maternity care
	Alignment of payment reform and delivery system	Acceptability
		Adoption
		Appropriateness
		Costs
		Feasibility
		Fidelity
		Penetration
		Sustainability

Table 2
Characteristics of the study sample (N = 33).

Characteristic	n (%)
Sex	
Male	9 (27,3)
Female	24 (72,7)
Age	
Mean	45,8
18-40	9 (27,3)
41 or older	24 (72,7)
Profession	
Postpartum care managers	4 (12,1)
Midwives/managers	5 (15,2)
Midwives	5 (15,2)
Gynecologists/managers	7 (21,2)
Gynecologists	3 (9,1)
Health insurers	3 (9,1)
Managers	6 (18,2)
Urbanization degree of working environment	
Urbanized	21 (63,6)
Not urbanized	6 (18,2)
National	6 (18,2)
Working in a bundled payment region	
Yes	7 (21,2)
No	26 (78,8)

*Number of interviews: 31; number of respondents: 33.

changes to the initial statement set were made after the pilot test, data from the four pilot participants were included in the main analysis.

2.3. Data collection

Before data collection started, this study was assessed by the Centre for Clinical Expertise (CCE) of the National Institute for Public Health and the Environment (RIVM), the Netherlands (study number VPZ-492). The CCE concluded that this study is exempted from further review by a medical ethics committee as it does not fulfil the specific conditions as stated in the Dutch Medical Research Involving Human Subjects Act.

Participants were sampled purposefully to represent diversity in terms of age, years of experience, gender, profession and region (urbanized yes/no; experimental bundled payment model yes/no). These characteristics were chosen based on previous research, indicating that they may influence the views people have on payment reform in maternity care (RIVM, 2020; RIVM, 2016; RIVM, 2018). Participants were recruited through the professional associations of midwives, gynecologists and postpartum care providers, the Centre for Perinatal Care (in Dutch: College Perinatale Zorg) (based on their knowledge of and close contact with the different maternity care regions), participants in this

Table 3
Average ranking of the 46 statements for each perspective.

Stat. No.	Statement	Perspective 1	Perspective 2	Perspective 3
1	The autonomy of professionals	0*	+3	+2
2	The existing mutual relationships within the region	−1	−1	+4*
3	The client participation in the design and organization of care in the area	+1	0	−1*
4	The client-centeredness of care for every mother (-to-be)	+2	+2	0*
5	The efficiency of care	+3	+4	−1*
6	The personal contribution to the care expenses for the parents (-to-be)	0	−1	−4*
7	The experienced health of the mother (-to-be)	+2*	+1*	−3*
8	The financial incentives for providers	0	0	+2*
9	The formal communication between professionals	−1*	−3*	0*
10	The administrative burden	−1	−1	0*
11	The identification and prevention of (high-) risk pregnancies	+3*	0*	+2*
12	The informal communication between professionals	−2*	0*	+2*
13	The influence of bundled payments on provider behavior	0	+2*	−1
14	The objectively measured health of the mother (-to-be)	+4*	+1*	−2*
15	The objectively measured health of the child	+4*	+1*	−3*
16	The support provided when implementing and developing bundled payments	0	−2*	+2
17	The monodisciplinary payment model	−4	−2	0*
18	The collaboration between maternity care and youth healthcare/the social domain	+1	−2*	+1
19	The collaboration between the different disciplines in maternity care	+2*	+1*	+3*
20	The urbanization degree of the area	−3#	−2#	−3#
21	The patient satisfaction of the mother (-to-be) and her partner with the received care	+3*	+2*	0*
22	Access to care	+2	+1	−1*
23	The opinion of the different professional associations on bundled payments	−3*	0	0
24	The opinion of health insurers on bundled payments	−4	−3	−2*
25	The design of the partial bundled payment model in modules	−2	−4*	−2
26	The freedom of the mother (-to-be) to choose the place and type of delivery	+1*	+3*	−1*

(*continued on next page*)

Table 3 (*continued*)

Stat. No.	Statement	Perspective 1	Perspective 2	Perspective 3
27	The freedom of the mother (-to-be) to choose a care professional	0*	+3*	−2*
28	The workload associated with implementation of bundled payments	−2	−1	+2*
29	The care expenses per pregnancy	+1*	−2	−3
30	A multidisciplinary electronic patient record	+3	−1*	+3
31	One (or a team of) permanent healthcare professional(s) for the mother (-to-be)	+1	+1	0*
32	Mitigation of financial risks for providers	−2*	0	0
33	A feeling of equality between the different disciplines in maternity care	+1*	+4	+3
34	A feeling of meaningful contribution for professionals	−2*	−1*	+1*
35	The income of professionals	−3*	+2	+1
36	The mutual trust between professionals	+2	+2	+4*
37	The process of care acquisition between providers and insurers	−2*	−4*	+1*
38	The risk of monopolization in the region	−3	+1*	−4
39	The tension between collaboration and competition	−1	+3*	−1
40	The encouragement of innovation	+2	−3*	+1
41	Shifting of tasks to other disciplines	0#	0#	+1#
42	The joy of the workforce	+1#	+2#	+1#
43	The scientific evidence for the effects of bundled payments	0*	−1	−2
44	Inspiring leadership within the region	−1*	−3*	+3*
45	Underuse of care services	−1#	−2#	−1#
46	Overuse of care services	−1	0	−2*

Note: +4 indicates which statements are considered as most important in that perspective and −4 which statements are considered least important. 0 indicates that a statement is seen as neutral or that people have no (clear) opinion on it. Distinguishing statements for each perspective are indicated by *. Consensus statements are indicated by #.

study (snowballing), calls in newsletters and in online groups for maternity care professionals, and through the networks of the authors.

Because of restrictions posed by the COVID-19 pandemic, we used a hybrid approach for the interviews. The study materials (i.e., informed consent form, instructions, statements printed on cards, sorting grid) were sent to the participants by post. Participants were asked not to open the envelop before the start of the interview. Interviews were conducted online using Microsoft Teams. After a brief introduction to the study, including obtaining informed consent, participants were asked to open the envelop, go over the study materials and, if everything was clear, to rank the statements from "least important" to "most important" according to the instruction: "How important are the following aspects in your region, according to you, when deciding whether the bundled payment model for maternity care should be implemented (or remain implemented)?" (see Fig. 1). The participant and interviewer both turned off their video and audio during the ranking process. Only if the participant had any questions, the video and audio were momentarily turned on again. After they finished their ranking, participants were asked to explain their ranking of the statements and provide information on some background characteristics. This part of the interviews was recorded (audio only).

Based on intermediate analysis and reflection on the individual characteristics of participants and the content of consecutive interviews, we concluded that saturation was reached after 31 interviews with 33 respondents; two interviews were with two stakeholders jointly. For both the quantitative and qualitative analysis, the 31 interviews were used.

2.4. Analysis and interpretation

By-person factor analysis (i.e., grouping participants instead of variables) was used to identify distinct patterns in the ranking of the statements by participants and an average ranking of the statements was computed for each identified factor (Watts and Stenner, 2012). These average rankings, together with the explanations of participants associated with each factor, were interpreted and described as distinct perspectives on payment reform in maternity care.

Considering expected correlation between perspectives of respondents, principal axis factoring was used as extraction method for the factors and direct oblimin as rotation method (Watts and Stenner, 2012). After inspection of the factor structures supported by the data, a three-factor solution was deemed most appropriate. This was determined based on the following criteria: 1) Eigenvalue of each factor >1; 2) a minimum of two participants associated with each factor; 3) low or moderate correlations between the factors in the given factor solution; and 4) coherence in the interpretation of the factors as decided by the authors (ZS, EdV, JS, JvE). Eight factors had an Eigenvalue >1, of which four factors were defined by at least two participants and had a coherent interpretation. The four- and three-factor solutions were interpreted in more detail and compared to each other. The first three factors of both solutions were found to be nearly identical between solutions, with very high correlations between corresponding pairs of factors from both solutions (>0.90). The remaining fourth factor from the four-factor solution was found to be very similar in content to factor 1 and, therefore, not to add a significantly different perspective. In addition, factor 1 had a somewhat clearer interpretation in the three-factor solution. For this reason, the three-factor solution was chosen as the final solution of the analysis.

The three factors together explained 51% of the variance in the data. Seventeen, six and five rankings were statistically significantly associated with the three factors, respectively, while three rankings were not associated with any of the three factors. Eigenvalues ranged from 7.5 to 2.1. Correlations between the three factors were moderate (factors 1–2, 0.40) to weak (factors 1–3, 0.08; factors 2–3, 0.02). In this solution, factor 1 seems to represent a general perspective on payment reform in maternity care, as 25 of the 31 analyzed rankings of the statements showed statistically significant correlations with this factor (i.e., ≥0.29 based on 46 statements and $p < 0.05$ (van Manen et al., 2021)). Factors 2 and 3 were defined by smaller groups of participants that were either correlated only with one of these factors, or considerably higher with one of these factors than with factor 1. Stata 17 and the *qfactor* command were used for the quantitative analyses (Akhtar-Danesh, 2018).

For the interpretation and description of the different perspectives, both the quantitative and qualitative materials have been used in an iterative process. In particular, we looked at the (characterizing) statements that were ranked highest (+4 and + 3) and lowest (−4 and −3) for each perspective, the (distinguishing) statements that were ranked statistically significantly differently between perspectives, and the (consensus) statements that were ranked similarly in all perspectives. The qualitative data from the interviews with participants defining the factor were examined to check and improve the interpretation of the quantitative data. In addition, exemplary quotes were extracted from the qualitative data to illustrate the perspectives in the words of

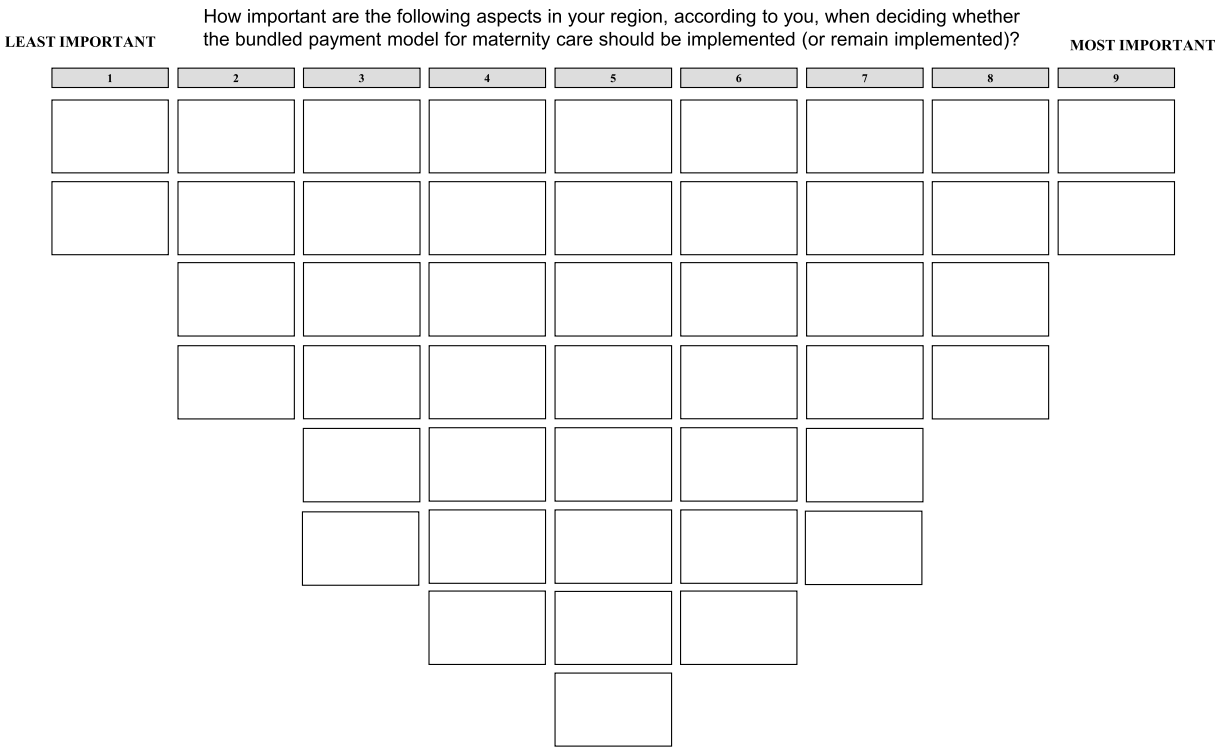

Fig. 1. Q sorting grid used in this study.

participants associated with them. Finally, a draft version of the description of each perspective was sent to two participants statistically significantly correlated with that perspective to verify and provide feedback to our interpretation of the data, to ensure the ethical integrity of our reporting. All six respondents recognized their perspective in the description. Based on their feedback, only minor changes were made in the descriptions of the perspectives.

For the purpose of this paper, the statement set was translated from Dutch to English by a native speaker (forward translation). The English translations were then translated back to Dutch by a native Dutch speaker not involved in the study (backward translation) to ensure that the English translations capture the same meaning and substance as the original materials in Dutch (Kuliś et al., 2011; Two et al., 2010; Koller et al., 2012).

3. Results

The sample consisted of 33 participants in 31 interviews; twenty-four (73%) women and nine (27%) men (Table 2). The average age was 46 years (ranging from 27 to 63). Among the participants were four (12%) postpartum care managers, five (15%) midwives who were also managers, five (15%) midwives, seven (21%) gynecologists who were also managers, three (9%) gynecologists, three (9%) health insurers and six (18%) managers. Twenty-one (64%) participants worked in an urbanized region, six (18%) in a non-urbanized region and six (18%) at national level (degree of urbanization based on the classification of surrounding address density by Statistics Netherlands which distinguishes five categories: non-urban, little urban, moderately urban, highly urban, very highly urban (Statistics Netherlands, 2022)). Seven participants (21%) worked in a region which adopted the bundled payment model and twenty-six participants (79%) only had experience with the traditional, predominantly FFS payment model.

Two of the interviews took place with two participants at the same time, on their request: one was with two postpartum care representatives, age groups '18–40' and '41 and older', both female and working at national level with the traditional payment model; the other interview was with two midwives, both female, age group '41 and older', from the same urbanized region and had experience with the traditional FFS model. No participants were excluded from the analysis. Therefore, the analysis was based on data from 31 interviews with 33 participants.

Below, we provide a description of the three perspectives based on the average ranking of the statements in each factor and the explanations of the corresponding participants during the interviews. Table 3 shows the average ranking of all 46 statements for each perspective.

3.1. Perspective I: Payment reform as a tool to improve outcomes for mother and child

Characterizing for the general perspective represented by perspective I is the focus on the ultimate aim of payment reform, namely improved maternal and perinatal outcomes (based on the ranking of statement (st.14, +4; st.15, +4). To improve health outcomes for mother and child, people associated with perspective I also value the identification and prevention of (high-)risk pregnancies (st.11, +3). Furthermore, people associated with perspective I consider the patient-satisfaction of the mother (-to-be) and her partner with the received care (st.21, +3) and the experienced health of the mother-to-be (st.7, +2) important. The interests of professionals, such as autonomy (st.1, 0), income (st.35, −3) and the opinions of professional associations (st.23, −3) and health insurers (st.24, −4) are deemed inferior to this and are considered significantly less important for decisions on payment reform in this perspective than in the other two perspectives.

> "What I consider very important is that it leads to greater health outcomes, measured objectively." (interview 3)

People associated with this perspective are less concerned with the details of how the ultimate goal (i.e., improved health outcomes) is achieved or the exact design of payment reform and how this affects stakeholders, but are focused on the end result.

> "Look, I don't really care what form it takes, as long as it leads to the goal." (interview 3)

People associated with this perspective express their belief in payment reform as a way to improve health outcomes by facilitating integrated maternity care, but they also convey that the current bundled payment model is not the 'be-all and end-all'. They are open to other ideas or modifications to the current bundled payment model as long as these changes will improve the outcomes. People associated with perspective I point out that the existing monodisciplinary, FFS payment model (st.17, −4) hinders the multidisciplinary collaboration between maternity care providers (st.19, +2), and that this may affect outcomes for mother and child. According to them, the counterproductive effect of the monodisciplinary payment model is the main reason why payment reform is desired and required in maternity care.

> "I think that the monodisciplinary payment model is the least important because it hinders us enormously in collaborating together. So, I personally think we should get rid of that as soon as possible." (interview 5)

In addition, it is also considered important in perspective I to improve health outcomes in an efficient way (st.5, +3). In this perspective, efficiency is defined as a collaboration between the core disciplines in maternity care in which optimal use is made of everyone's expertise. A multidisciplinary electronic patient record (st.30, +3) can be supportive of this, according to people associated with perspective I.

Finally, respondents associated with this perspective pointed out that they are in favor of implementing payment reform as soon as possible and improve the new model along the way. In addition to this, they note that the new model should continuously be evaluated to see whether this contributes to the goal of payment reform, namely improved outcomes for mother and child.

In the interpretation of the factor solution, perspective I is considered to portray a general perspective on payment reform in maternity care, broadly supported within the sector, while perspectives II and III represent complementary perspectives.

3.2. Perspective II: Payment reform only if perceived equality between the different disciplines is ensured

Characterizing for perspective II is the emphasis that is put on the sense of equality (st.33, +4) among care providers and the different disciplines in maternity care, and the importance that is given to this perceived equality in relation to payment reform decisions. People holding perspective II are in favor of payment reform to improve maternity care provision, but only if the perceived equality between the different disciplines in maternity care is ensured or brought about by this reform.

Respondents indicate that they currently do not experience a sense of equality between care providers from the various disciplines in maternity care, especially between midwives and gynecologists. They see this perceived inequality as a threat to their autonomy (st.1, +3) and the freedom of choice of the client (st.26, +3; st.27, +3) in the current design of the experimental bundled payment model. People associated with this perspective indicate that this is the main reason why the bundled payment model for maternity care has not been implemented in their region, or that attempts to do so have failed.

> "The perceived equality between midwives and gynecologists to work together and move towards a bundled payment model. That has not been possible to date and the problem lies in the equality, in the negotiation about it." (interview 8)

> "There is quite a gap now between the midwives and the gynecologists. […] And I would be afraid that if you are going to adopt a bundled payment model, that you say, "we are all one", so to speak, then I think the feeling of equality is very important, that we really have the feeling that we are all one and that we have no sense of 'oh, the gynecologists decide'." (interview 1)

The lack of this sense of equality causes people associated with perspective II to feel the need to formally protect their autonomy. These concerns regarding equality explain why they consider autonomy such an important aspect when it comes to payment reform decisions. In perspective II, autonomy is defined both as the freedom of the professional to decide for themselves which care is best for their client, but also the professionals' freedom in relation to their entrepreneurship.

The interviews show that both midwives and gynecologists associated with perspective II are afraid that the unequal power balance, which they expect as a result of the current design of the bundled payment model, will have a negative effect on their income (st.35, +2). Midwives are mostly concerned that more care will be delivered in a hospital setting instead of in a primary care setting. At the same time, gynecologists indicate a potential shift of care towards primary care and are worried that the current design of the bundled payment model will have a negative effect on their income if no additional reimbursement scheme becomes available for these alternative care activities such as availability for emergency situations and advising midwives on complex or high-risk clients. The risk of monopolization in the region (st. 38, +1) is also considered more important in perspective II than in the other perspectives, which is in line with the general fear for unequal power distributions and dominant positions as a result of payment reform, in this perspective.

> "There is already a lot of task shifting […] while there is no compensation for it. And what is starting to bother now, and that is particularly bothering the gynecologists, is that we already "gave away" a lot of things and we get very little in return." (interview 19)

Interesting about perspective II in comparison to perspective I is that while they both value efficiency in relation to payment reform, there is a difference in what constitutes 'efficiency' in both perspectives. In perspective II, efficiency (st.5, +4) is considered one of the most important aspects to consider for payment reform. Efficiency is defined here as reducing unnecessary care in the hospital (medicalization) and enforcing primary maternity care (provided by midwives). While efficiency is defined in perspective I as a collaboration between the different disciplines, making optimal use of each other's expertise. The interviews show that people associated with perspective II believe that there is a lot that can be gained from reducing medicalization and providing less duplicated care.

Similar to perspective I, perspective II argues that the monodisciplinary payment model (st.17, −2) has an obstructive effect, especially when it comes to task shifting towards midwives (st.41, 0). People holding perspective II, believe payment reform is required to improve this. People associated with perspective II also indicate that they would like to contribute constructively to the design of an APM that would work best in their region instead of having to say 'yes' or 'no' to an existing or proposed model. In their opinion, scientific evidence about the effectiveness of a bundled payment model (st.43, −1) is less important in relation to payment reform than carefully considering what is the appropriate fit in each region together with care providers from the various disciplines in maternity care.

> "I think that's really the least important, if there's any scientific evidence for it. I think it is more important that the region you work in that it is feasible and useful for both providers and clients, than that there is scientific evidence for it." (interview 1)

3.3. Perspective III: Payment reform based on mutual trust and improvement of collaboration

People holding perspective III emphasize the importance of payment reform to improve and encourage collaboration between maternity care providers from all disciplines (st.19, +3). According to them, this should be the main focus of payment reform. They believe other goals, such as improving health outcomes (st.14, −2; st.15, −3), will follow naturally if

the multidisciplinary collaboration among the core disciplines is organized properly.

> "I think that the objective health of the mother or child plays no part in that decision, or at least a subordinate one, while in the end we do consider it important as a result of our care. […] But I think this is really a process that providers have to go through, such a transition. And the patient can ultimately benefit from this." (interview 6)

The interviews show that participants associated with perspective III believe that without trust (st.36, +4) and perceived equality between the disciplines (st.33, +3) no payment reform can be implemented successfully because such a transition needs to be endured together. Inspiring leadership (st.44, +3) is considered important in perspective III, as this can contribute to a shared vision and can increase the mutual trust between people. At the same time, people associated with perspective III clearly state that a lack of trust should not be used as an excuse to not get started on the path to payment reform.

> "For any kind of change you need to have a strong foundation of trust, to get through that change together. […] But this can also be used as an excuse not to enter that transition. We have no trust. We have to work on trust first. Some regions have been working on trust for ten years and it just isn't progressing." (interview 6)

As in the other perspectives, the monodisciplinary payment model (st.17, 0) is seen as an obstacle in perspective III. People associated with perspective III mainly perceive that the monodisciplinary payment model hinders the collaboration between the various disciplines in maternity care. Participants indicate that they expect that improved collaboration, as a result of payment reform, will act as an accelerator for improved outcomes for mother and child and, therefore, payment reform is considered necessary in this perspective. People associated with perspective III also indicated that there is still insufficient scientific evidence (st.43, −2) on the empirical effects of the bundled payment model for maternity care. They believe that reform implementation should not be delayed because of this, as it may take several years to come to conclusive scientific evidence. Similar to perspective I, perspective III advocates for taking action now regarding payment reform and learn and improve along the way.

Perspective III attaches more value than the other perspectives to aspects related to increasing the joy of the workforce (st.42, +1), such as reducing the administrative burden (st.10, 0). Participants indicate that informal communication (st.12, +2) is important, while formal communication (st.9, 0) is considered less important. The qualitative data showed that the reason for this is that if the informal communication is good, formal communication is not necessary, according to people associated with perspective III.

4. Discussion

The aim of this study was to explore the perspectives among stakeholders on payment reform in maternity care in the Netherlands. Using Q-methodology, we identified three distinct perspectives. One general perspective, broadly supported within the sector, focusing mainly on outcomes, and two complementary perspectives, one focusing more on equality and one focusing more on collaboration. Based on the results of this study, it appears that consensus exists among stakeholders in maternity care in the Netherlands about the obstructive effect of the existing monodisciplinary, predominantly fee-for-service payment model and the need for payment reform to enable the delivery of complex integrated care. However, stakeholders have different views with respect to the purpose and desired design of the payment reform and set different conditions.

With this study, we have provided a structured overview of the different perspectives on payment reform in maternity care in the Netherlands and contributed to deeper insights into the underlying motives of stakeholders and the coherence in their line of reasoning. An important lesson from this study is that several key concepts were interpreted differently in the different perspectives (e.g., 'efficiency' and 'payment reform') and that the use of shared terminology is important in discussions about the design, implementation and evaluation of APMs. Another important lesson is that it is essential to pay sufficient attention to the perceived equality between different providers and disciplines and provide adequate reassurance to limit feelings of uncertainty, while avoiding excessive use of risk mitigation strategies and still boosting APM-uptake.

We did not find other studies looking into perspectives on payment reform in maternity care. We found some studies in which stakeholder perspectives on APMs were investigated, but in other areas of healthcare and applying other methods such as interviews, surveys or focus groups (Harris et al., 2017; Wu et al., 2019; Liao et al., 2020b; Ogundeji et al., 2021; Garabedian et al., 2019). These studies, however, only focused on the perspectives of providers and physicians.

This study contributes to the existing literature by providing structured insight into the underlying reasons of stakeholders for the low uptake of APMs in practice. In the Netherlands, the low uptake appears to be caused by a lack of trust between providers. This lack of trust may have originated during the design phase of the payment reform as not all stakeholders were sufficiently involved at an early stage (Steenhuis et al., 2020). Designing an APM from the beginning in co-creation with all involved parties may improve the general attitude towards the APM and the level of trust between stakeholders, payers and policy makers, and could eventually contribute to a higher uptake in practice (de Vries et al., 2019; Steenhuis et al., 2020). Furthermore, there are many choices to be made in the design of an APM that can significantly influence outcomes of the APM; participating in these decisions and understanding why they were made will have an effect on whether stakeholders adopt and how they will behave under the APM. The design process goes beyond changing the financial incentives for providers and extends to choosing the appropriate benchmark and many other design choices (Steenhuis et al., 2020; Chernew et al., 2022). Future payment reform initiatives should, therefore, from the early stages include all relevant stakeholders. As for maternity care in the Netherlands, it may not be too late to involve stakeholders more in the adjustment process of the design and to execute this in true co-creation with all stakeholders from now on. Although it will never be possible to satisfy everyone with the outcome of a chosen policy, involving and listening to everyone in the process of policy making, may make it more acceptable for stakeholders to compromise and accept the outcome (van Exel et al., 2015).

Some limitations of this study should be mentioned. Even though we used a theoretical model and other relevant literature, documents and web pages to identify all the relevant aspects regarding payment reform in maternity care and had this checked by experts and in a pilot study, it is possible that we missed some aspects and did not cover the full spectrum of aspects in our framework and thereby in our statement set. This could have affected the ability of participants to fully express their perspective with the material provided to them. We aimed to minimize the possible effects of this by giving respondents sufficient opportunity for explanation of their perspective during the interviews. Yet, we emphasize that the appropriate steps for conducting a Q-methodology study were taken (Churruca et al., 2021; Dieteren et al., 2023) and consequently we believe that the impact of this limitation on our findings is negligible.

Another general limitation of Q-methodology studies is that it is possible to have missed a perspective, because stakeholders holding that perspective were not included. However, in this study we did pay close attention to the characteristics that could influence someone's perspective on this issue and made sure to have a variety of respondents regarding these characteristics. Our sample size is a typical and generally adequate sample size for exploring the different perspectives on a subject using Q-methodology (Watts and Stenner, 2012). We also asked respondents if they knew someone with a similar or different opinion to them on this topic and invited those people to participate as well.

Additionally, it is important to note that some of the aspects in the statement set were interpreted differently by different participants, and therefore valued differently. An example of this is the ranking of statement no. 17 'the fee-for-service payment model'. Some ranked this statement as most important because they considered it one of the main drivers for payment reform, whilst others ranked it as least important because they said they wanted to get rid of the old model. This shows how a similar line of reasoning, i.e., the fee-for-service payment model is no longer suitable and needs to be replaced, can lead to a different ranking of the statement on the sorting grid. The qualitative material from the interviews has helped to prevent misinterpretation in these cases. In line with this, some participants noted that several of the statements overlapped in terms of concepts and aspects of maternity care that they addressed (e.g., 'efficiency', 'underuse' and 'overuse'). This was considered during the development of the statement set, but we did not want to condense the relevant aspects too much and potentially limit the ability of participants to express nuances in their perspective. Again, the qualitative material helped to clarify the interpretation and choices of the participants in these cases. Therefore, the impact of this limitation on the results of this study are expected to be limited.

One final limitation is that Q-methodology does not provide insight in the prevalence of the different perspectives identified by this method (Baker et al., 2006). It is a small sample method which is often combined with purposeful sampling, aimed at identifying the existing perspectives. If performed well, it is suited to identify perspectives held by both large and small groups of individuals. Nevertheless, it does not provide insight into the number or percentage of people agreeing with the perspectives, or their characteristics, since the composition of the sample is not representative of the general population (Watts and Stenner, 2012; Baker et al., 2006). Additional survey research incorporating the findings of this Q-methodology study can provide these insights, if deemed relevant (Rotteveel et al., 2022; Baker et al., 2010; Mason et al., 2016).

Future research into the perspectives of stakeholders on other types of APMs in other types of care, and also in other countries and healthcare systems, can contribute further to the knowledge base, and understanding of the motivations for the uptake and effective implementation of APMs in healthcare around the world. The more we learn about the motives and perspectives of different stakeholders on this, the more policy makers and APM experts can become successful in implementing payment reforms which in turn may lead to improved health outcomes for mother and child (de Vries et al., 2019).

In conclusion, stakeholders agree on the need for payment reform, but disagreement on the goal, conditions and design of this desired payment reform remains and hinders further uptake. Continuous attention is required for the sense of equality between the disciplines and the mutual trust between professionals. Through this, support and acceptance for payment reform among all stakeholders may be increased and maintained, which is important for the future uptake of payment reforms. For improving the quality of maternity care in the Netherlands, it is important to encourage the transition towards an APM whilst being attentive of interests and concerns of stakeholders, involving them in the design process, and providing each of them with adequate reassurances for a future within the sector. Now that the government in the Netherlands has decided to implement the bundled payment model structurally alongside the traditional payment model, it has perhaps become even more imperative to understand the perspectives of stakeholders in order to adjust the design of the bundled payment model so that it gains more support from stakeholders, thus potentially contributing to a higher uptake.

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Credit author statement

Zoë Scheefhals: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data curation, Writing – original draft, Writing – review & editing, Visualization, Project administration. Eline de Vries: Conceptualization, Validation, Writing – review & editing, Visualization, Supervision, Funding acquisition. Jeroen Struijs: Conceptualization, Validation, Writing – review & editing, Supervision, Funding acquisition. Mattijs Numans: Conceptualization, Writing – review & editing, Supervision. Job van Exel: Conceptualization, Methodology, Validation, Formal analysis, Writing – review & editing, Supervision

Declaration of competing interest

The authors declare that there are no conflicts of interests.

Data availability

Data will be made available on request.

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