GC_1000

"GROUP CARE FOR THE FIRST 1000 DAYS"

Grant Agreement number: 848147

Deliverable 3.3

Report of outcomes WP3 including recommendations for blue-prints for scale up

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EXECUTIVE SUMMARY

At the start of the Group Care 1000 project, we conducted context analyses to gain in-depth understanding of the implementation context of the participating sites. This way, anticipated challenges occurring in all participating implementation sites were identified and structured in the Anticipated Challenges Framework. Two of these anticipated challenges were highlighted: how to operationalize the health assessment within Group Care, and how to schedule Group Care within the regular care. Therefore, the adaptation process of these two challenges was analysed and mapped using the Framework for Adaptations and Modifications to Evidence-based Interventions-Expanded (FRAME). Recurrent adaptation strategies were found, with mainly adaptations in the context or implementation strategies, and only minor changes to the model itself. Both planned and unplanned adaptations occurred, both rather early in the implementation process. It were mainly joint decisions to adapt, with typically the facilitators and the management at the site involved. The adaptations aimed to optimize Group Care for participants and facilitators, and were influenced more by the healthcare organization than the socioeconomic situation of a site. Creative solutions were found for space and scheduling constraints, demonstrating flexibility in various cultural and policy contexts. Good practices are described, such as adapting the booking system to optimize enrolment and evaluation. To ensure sustainable implementation, the participating implementation sites focused on aligning the Group Care implementation with the local and national policies.

The analysis of the adaptation process underscores the value of collaboration and learning from different healthcare systems to overcome challenges and achieve a sustainable implementation of Group Care.

GC_1000 Consortium Partners

Abbv	Participant Organization Name	Country
TNO	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO	Netherlands
LUMC	ACADEMISCH ZIEKENHUIS LEIDEN	Netherlands
VUB	VRIJE UNIVERSITEIT BRUSSEL	Belgium
GCG	GROUP CARE GLOBAL	United States
CITY	CITY UNIVERSITY OF LONDON	United Kingdom
UCT	UNIVERSITY OF CAPE TOWN	South Africa
AMC	AKCIONI PER NENA DHE FEMIJE	Kosovo
PERISUR	STICHTING PERISUR	Suriname
PHS	PRESBYTERIAN CHURCH OF GHANA	Ghana
SIMAVI	STICHTING SIMAVI	Netherlands

OPEN ISSUES

No:	Date	Issue	Resolved
1			

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1 INTRODUCTION

1.1 Purpose and Scope

The purpose of this Deliverable 3.3 is to gain a structured and in-depth understanding of the adaptations when implementing Centering-Based Group Care, referred to in this text as 'Group Care'. In this process, we look beyond mere adaptations to the model. It also addresses what contextual adaptations or adaptations in implementation strategies were performed to implement Group Care in the participating implementation sites. This involves mapping the entire adaptation process applying the Framework for Adaptations and Modifications to Evidence-based Interventions-Expanded (FRAME).

1.2 References to other GC_1000 Documents

- GC_1000 Description of Work (Proposal)
- GC_1000 D3.1 Research Protocol WP3
- GC_1000 D2.2 Report of outcomes WP2
- GC_1000 D3.2 Overview of recommended adaptations to implement Centering-Based Group Care for each country

1.3 Definitions, Abbreviations and Acronyms

Table 1

List of Abbreviations and Acronyms

Abbreviation/ Acronym	DEFINITION
ANC	Antenatal Care
FRAME	Framework for Adaptations and Modifications to Evidence-based Interventions-Expanded
GC_1000	Group Care 1000 research project
RQI	Rapid Qualitative Inquiry
WP	Work Package

2 BACKGROUND

Within the Group Care 1000 project (GC_1000), an in-depth context analysis was conducted at the start of the project between 2020 and 2021, using the methodology of a Rapid Qualitative Inquiry (RQI) in all participating sites. The results of these RQIs can be found in Deliverable 2.2 and Deliverable 3.2. The methodological descriptions of the RQIs are explained in Deliverable 3.1.

The RQIs revealed, among other things, that challenges are expected when implementing Group Care. Some of these challenges were rather site-specific, but others recurred in every participating site. Based on these challenges occurring in every participating site, the 'Anticipated Challenges Framework' was developed (see Deliverable 3.2). A scientific article 'Identifying anticipated challenges when implementing Centering-Based Group Care in the first thousand days: extensive context analyses across seven countries to develop an Anticipated Challenges Framework' was submitted and is currently under review.

Among these anticipated challenges, we identified that certain challenges were often possible to address rather straightforwardly within the organisation. These were called 'surface anticipated challenges'. For example, adapting the content of the sessions and training facilitators. However, other anticipated challenges seemed more deeply rooted in one's culture or healthcare system, and therefore more complex to address. These were categorized as 'deep structure anticipated challenges'. For this Deliverable 3.3, we conducted a comprehensive analysis about two of these deep structure anticipated challenges: 'Health assessment', and 'Scheduling Group Care into regular care'. We aimed to get insights in what actions have been taken in the sites to address these challenges since they were present in each site and country and allow a cross-country analysis. In addition, there is not much literature available on these specific aspects. The first anticipated challenge category, 'Health assessment', is one of the core components of the Group Care model. Therefore, it was considered important to assess if adaptations were made to the component itself, or if changes in the context occurred in order to establish this the implementation of this Group Care model aspect. The second anticipated challenge category, 'Scheduling Group Care into regular care' was already touched in other Group Care implementation research, but clear insights on how these adaptations to the model or to the context could be applied in other contexts remains unknown [1]. More in-depth information about these anticipated can be found in D3.2.

To gain a structured and in-depth understanding of the adaptations to the model or context, we tracked them through the FRAME [2].

3 METHODS

3.1 Theoretical Framework

To gain in depth insights in how the sites tackled the challenges they anticipated regarding health assessment and scheduling Group Care into regular care, we applied the FRAME as a starting point. In the FRAME, multiple aspects of adaptations to the intervention or the context are reviewed.

For this research, we customised the FRAME to fit with our GC_1000 research through a multifaceted and thoughtful process. All aspects of the FRAME are maintained, but wording and structure has been aligned with our GC_100 project to result in a survey that was feasible to fill out for all respondents. Thinking aloud sessions were organised by the WP3 researcher, including multiple perspectives in one-on-one virtual contacts and one in-person meeting. Within thinking aloud sessions, stakeholders are performing a task and are talking aloud while they do this. In our case, stakeholders were filling out the FRAME survey, and talked out loud about how they interpreted the questions, where they struggled, their thoughts on language etc. By using this methodology, researchers get insights in the experiences and perspectives of the stakeholders and can tailor the questions to their needs [3]. These online sessions were organised with multiple Group Care Global consultants, who are experts regarding Group Care implementation and are part of the target population to fill out the survey, and with an experienced implementation science researcher. The live meeting took place with the GC_1000 consortium. All the thinking aloud sessions had a different focus, e.g. content of the Group Care model, feasibility to fill out the survey, research methods, etc. Based on the input of all these thinking aloud sessions, the customized FRAME was finalised, as visualised in figure 1.

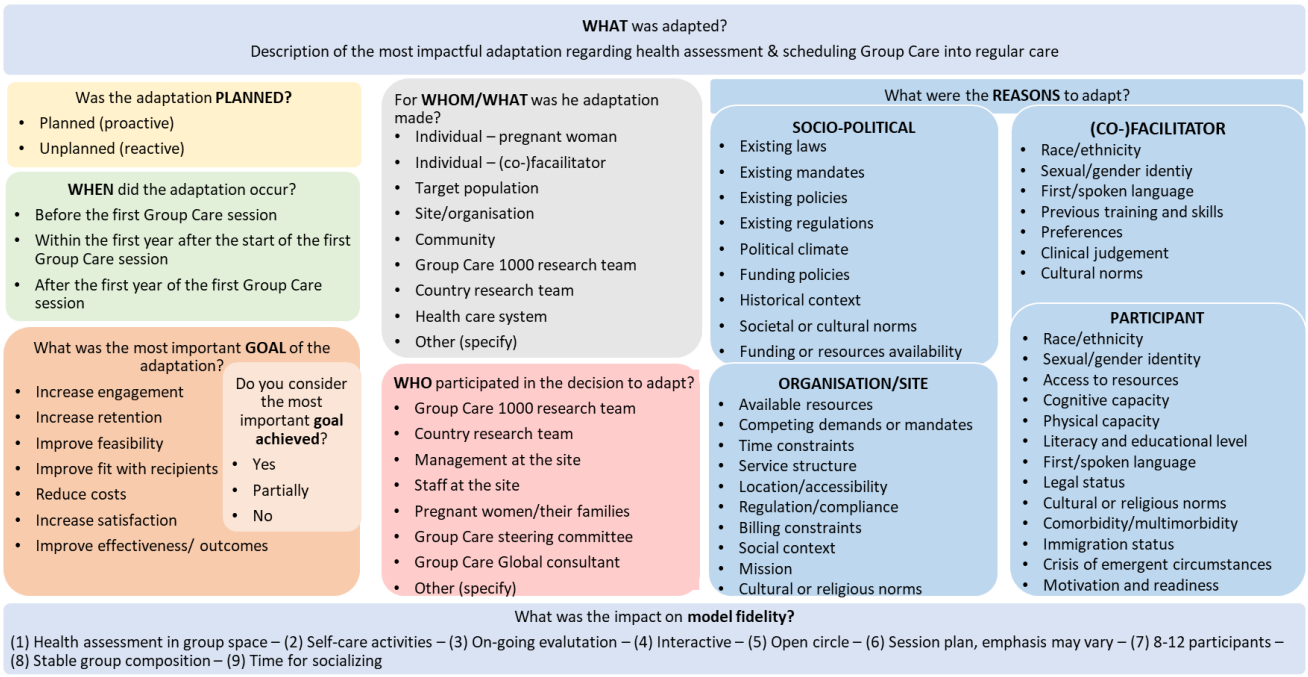

Figure 1 *The Frame customized for GC_1000 research*

In the FRAME, it is questioned if an adaptation is consistent or inconsistent with the model fidelity. As part of this GC_1000 research, we opted to look at this aspect more in-depth than a mere yes-no question. We surveyed all core components with their definers, and respondents

could indicate whether the described adaptation had a 'somewhat negative influence', 'strong negative influence', ‘somewhat positive influence' or a 'strong positive influence'. There was also the option 'I don't know/not applicable'. Figure 2 gives an overview of the Group Care core components and its definers. In the results section, the figure displays on which definers an influence was described in the survey. Whether it is a (somewhat) positive or negative influence is described in the subsequent text in the result section.

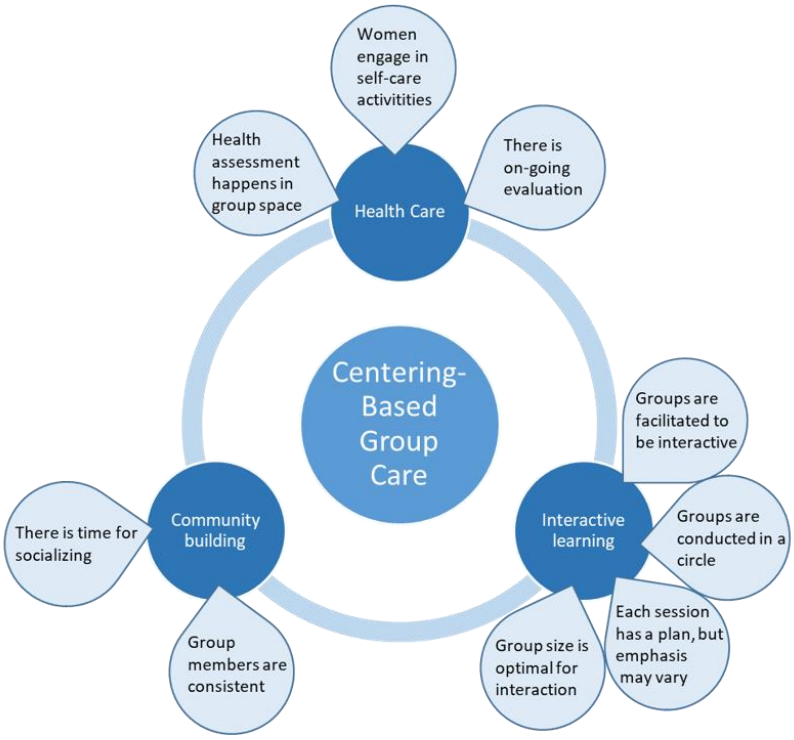

Figure 2 *The Group Care model core components and its definers.*

3.2 Data collection methods

A survey containing the customized FRAME (Figure 1) was presented to three respondents per participating site in the GC_1000 study: one facilitator at the site, one Group Care Global Consultant, and one country lead (or representative) from the GC_1000 consortium. This way, we gathered different perspectives of the adaptations to get a comprehensive insight in how they tackled the anticipated challenges and how this process proceeded. The survey was split in two parts. In the first part, each respondent was requested to describe the most impactful adaptation regarding health assessment, and then to proceed through all the different aspects of THE FRAME based on this described adaptation. In the next part, the respondents were requested to do the same, focusing on the most impactful adaptation regarding scheduling Group Care into regular care. In accordance with the FRAME, closed multiple choice answer options were presented. Respondents were able to clarify their responses in open questions following each closed question. Qualtrics, a programme for online surveys, was used.

3.3 Data analysis

The survey data is transferred to SPSS and then a qualitative descriptive analysis was conducted to characterize the main features of the survey data. All aspects of the FRAME are analysed per country, and subsequently a cross-country analysis was completed to gain in-

depth understanding of the adaptation processes when implementing Group Care. A data validation procedure was set in place. All data were grouped by the WP3 researchers, anonymised and presented to the country research teams during the GC_1000 consortium meetings. Clarifications and context were added to ensure a correct and qualitative interpretation. Text provided by the in-country experts were analysed thematically and added to the description of the results when relevant. This way, the generated data was interpreted both by the WP3 researchers and by the country research teams, which shed light from various perspectives on our findings.

4 RESULTS

For each country, there are one or two adaptations described regarding health assessment and scheduling Group Care into regular care. The results are first structured by country and then a cross-country analysis is presented. More in-depth information on the countries' context can be found in other deliverables of the Group Care 1000 project (D2.2 and D5.3) and in the country-specific blueprints. Table 1 lists the respondents of the survey.

Table 1 *Overview of respondents*

Country	N of participating **sites**	N of respondents – **country lead**	N of respondents **- facilitator**	N of respondents – **Group Care Global consultant**	**Total** N of respondents
Belgium	3	3	3	3	9
Ghana	6	6	6	6	18
Kosovo	2	2	2	1	5
South Africa	1	1	1	1	3
Suriname	5	5	5	1	11
The Netherlands	5	1	2	1	4
UK	2	2	1	2	5
Total	24	20	20	15	**55**

Of the estimated 72 surveys (i.e. three surveys in each of the 24 participating sites), 55 were effectively completed (76% response rate). The majority of the GCG consultants filled out the survey in one-to-one online meetings with the WP3 researcher. There, they stated that it was not always possible for them to fill out the survey for each of the sites independently, as a clear distinction between the different sites was not always possible for them. Therefore, it was opted in those cases that the GCG consultant filled out the survey one per country instead of one per site. The missing data for facilitators are linked to staff shortages. In one country, a country lead or representative filled out only one survey out of the five participating sites. Reminders were sent and possible solutions, such as completing the surveys together in an online meeting were offered. One site switched from the original Group Care model to fully online sessions, hereby omitting the medical component entirely. As a result, we can no longer consider this to be the Group Care model and this site was therefore excluded from this survey.

4.1 Anticipated challenge category 1: Health assessment

The first category for which we analysed the adaptations made in practice is the health assessment. Following the Group Care model, the health assessment is included in the Group Care sessions. The health assessment consists of two parts in the Group Care model. There is the part of the **self-assessment in the group space** in which participants assess their own health data such as blood pressure, or their baby's health data such as the weight of their baby. Conducting assessments within the group setting normalizes the pregnancy experience and strengthens bonds among participants [4]. The participants record their own data. This is described as 'self-care activities' by the original CenteringPregnancy® model and referred to as 'self-assessment' throughout this document. Next to the self-assessment, a short **one-to-one**

medical check-up happens in a private part of the group space and takes about 3-5 minutes. Each participant spends one-on-one time with the practitioner to discuss specific concerns, assess her progress, measure the fundal height, and listen to the foetal heartbeats. This one-to-one medical check-up serves as the routine clinical antenatal or postnatal assessment needed by the participant and/or their baby, not as additional care to the routine one-to-one care. At this time, a follow-up appointment is arranged for any issues requiring more privacy or in-depth assessment [5]. According to the data from the Rapid Qualitative Inquiries, described in Deliverable 3.2, challenges were expected to implement this health assessment aspect of the Group Care model in all the participating sites in the seven countries.

4.1.1 Belgium

In Belgium, there are two adaptations described regarding the health assessment in Group Care. Spending more time at the individual one-to-one medical check-up is one strategy used to incorporate one-to-one medical check-up. A second strategy put in place was tolerating additional one-to-one visits to an obstetrician on top of the Group Care sessions.

Adaptation 1: More time needed for one-to-one medical check-up

In Belgium, one of the most impactful adaptations regarding heath assessment described comprises the one-to-one medical check-up lasting longer than 3-5 minutes per patient. This leads to more than 30 minutes to include the health assessment, and thus causing less time for interaction. If the one-to-one medical check-up only lasts for 3-5 minutes, the midwife has the feeling of not knowing the participant enough. An extra inhibiting factor to **limit the time** for one-to-one medical check-up to 5 minutes involves the target population. All participating sites in Belgium focus primarily on patients in vulnerable situations, which causes often multiple issues to consider together with the participants during the one-to-one medical check-up, such as administrative support, making appointments to the lab etc. The midwife felt that many practical issues should be arranged by her, thus increasing the work pressure on the midwife.

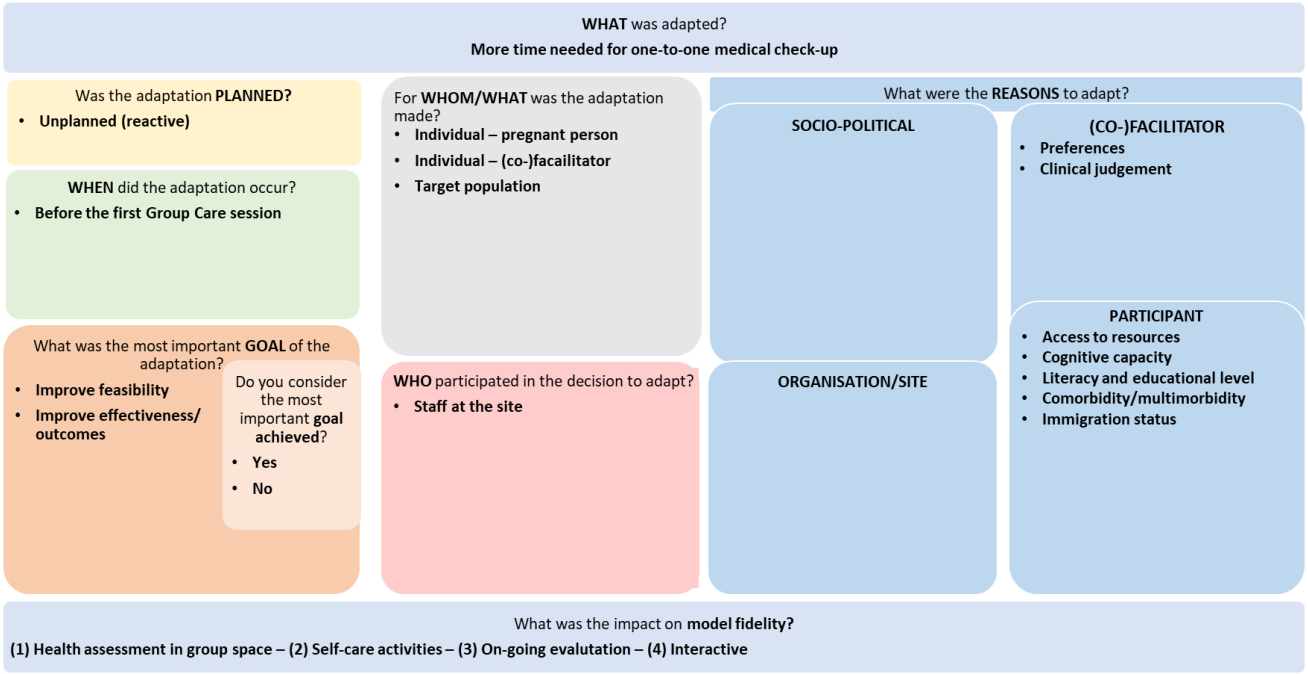

Figure 3 *Results from Belgium regarding health assessment – Adaptation 1*

The longer one-to-one medical check-up occurred **within the first year** after the start of the first Group Care, and was **unplanned**. At the start of the project, the sites really had the idea to follow the model as described. One respondent describes it as follows: "*Even at the first session, we felt we would not make it with 5 minutes. In the beginning we tried to keep the time tight, but it made us feel rushed and we always felt like we were 'missing' something.*" They've let it go and have one-to-one medical check-ups that last longer than 5 minutes. For this **decision**, only the staff at the site was involved. One respondent states that the **main goal** to improve feasibility is achieved. The respondent describes that the midwives feel to have a better and more complete picture of the pregnant person because of the extension in time of the one-to-one medical check-up. Another respondent considers the goal as not achieved. One describes that the midwives still experience a lot of pressure, even with the extended time. The respondent considers the adaptation not in line with the purpose of the group: "*It was not to make the women more engaged in their own care. She (the midwife) didn't use the strength of the group. It (=the one-to-one medical check-up) took a lot of time, so there was less time to do other things in group".* The midwife has the feeling of not offering good care within those five individual minutes, and therefore the extension is considered an adaptation **for both the participants as the facilitators**. Closely linked to this, the preferences of the (co-) facilitators is one of the selected **reasons** for this adaptation. Furthermore, several participant-related reasons are selected, such as access to resources and immigration status, pointing out the vulnerabilities of their target population. When questioning the influence of these longer one-to-one medical check-ups on the **definers of the** Group Care **model**, mainly a strong or somewhat negative impact is described, e.g. on the facilitative style of the session and the involvement in the self-assessment. One respondent states: *"However, because we prioritise the importance of good medical follow-up (and thus take our time to do so), that has to compromise on the time left to shape the content of the session. Consequently, women indicate that they regret the session's slow start and many topics remain undiscussed. We realise that we still need to find a better way to combine the medical with the substantive."*

Adaptation 2: tolerating additional one-to-one care next to Group Care

A second described adaptation related to 'health assessment' in Belgium includes the fact that Group Care serves as **additional care** in two out of the three sites. The participants still go for one-to-one medical appointments to the obstetrician or midwife around the same gestational age as the Group Care sessions are organised.

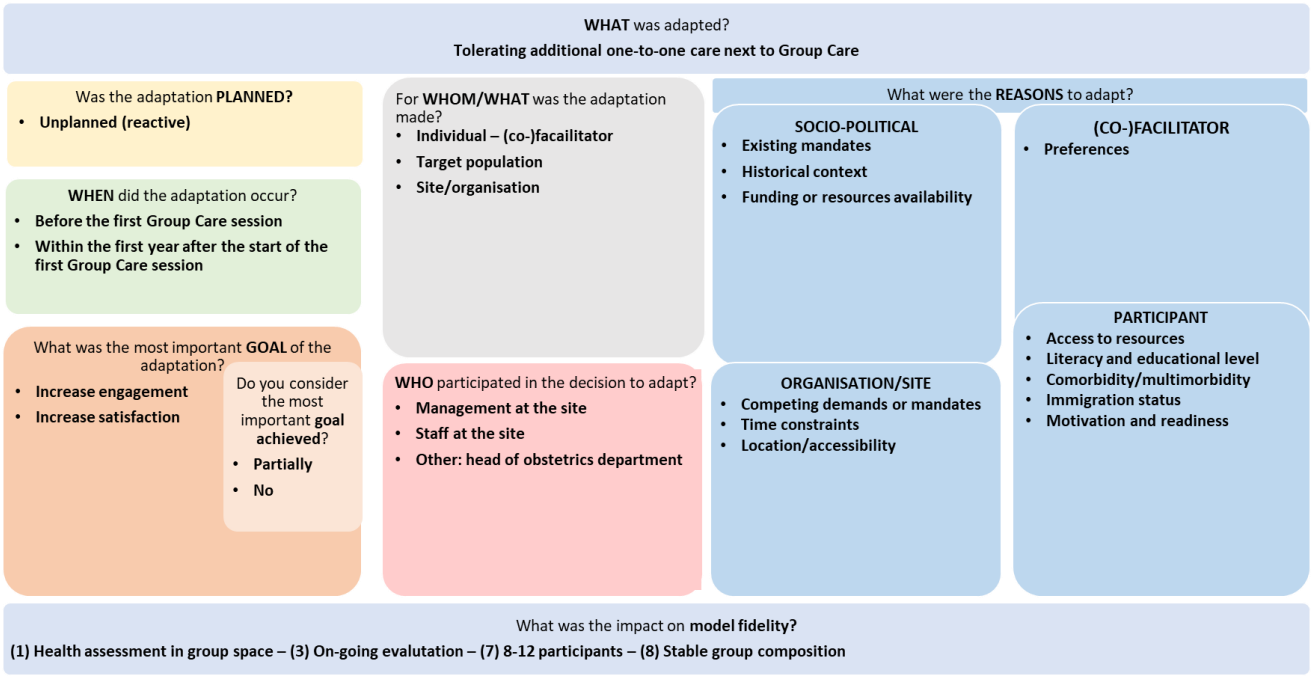

Figure 4 *Results from Belgium regarding health assessment – Adaptation 2*

Although they **planned** to have Group Care as routine care instead of additional care, try-out in practice showed otherwise. In one site, it was decided **before the start** of the Group Care sessions, because they felt this was needed to get the obstetricians on board. In another site, the facilitators experienced many no-shows for the Group Care sessions, and therefore they felt more comfortable when they knew the participants had also individual appointments planned, in case they didn't show up during the Group Care sessions. In the site where Group Care as additional care was decided before the start of the Group Care sessions, both the management at the site and the staff at the site, including the facilitators, were involved in the **decision**. One respondent describes the head of the obstetrics department as the final decision maker, as he rejected the suggestion to reduce the number of one-to-one appointments with the obstetrician for pregnant people attending Group Care. In the other site where this additional care was added after the start of the sessions, it was a decision of the facilitators. One respondent, a Group Care Global consultant, describes the original **goal** of the facilitators feeling more comfortable with Group Care as additional care and becoming more satisfied with their job, as not achieved: "*But in the end, they (the facilitators) didn't feel so much more satisfied with Group Care"*. Another respondent defines the main goal of **'**increase engagement' as 'partially achieved'. They agreed with the hospital that Group Care participants would receive traditional one-to-one care with the obstetrician, too, and hoped the obstetricians would refer more participants to Group Care because of this. However, the respondent adds that, so far, this is not the case. This goal is closely linked to the question **'for whom/what** is the adaptation made?' One respondent mentions that the adaptation is made for the site, and explains that without agreeing that Group Care was additional care, the obstetricians would not cooperate. The head of the obstetrics department has a strong vision to limit the authorities of the midwives in general. In the other site, where the facilitator decided to have extra individual care next to Group Care, the adaptation was put in place for both the facilitators themselves and their target population in vulnerable situations.

There are **several reasons** indicated for this adaptation. To start with, existing mandates and historical context are selected in this case because of the resistance of the head of the obstetrics department. The respondent describes the hierarchical strong position of the obstetrician as a

socio-political reason. Another respondent mentions that the funding and resource allocation plays a role in the decision to organise Group Care as additional care: "*individual appointments and Group Care appointments can be combined and refunded by insurance for the women. In general, it doesn't come with extra costs for the pregnant women".* As site-related reason, the existence of competing demands and mandates are stated, more specifically: those of the obstetricians versus the midwives. Last, the location and its accessibility is selected as another site-related reason to adapt. For example for Group B Streptococcus testing, the site itself preferred it at another location, i.e. a private room in the hospital. Besides socio-political and site-related reasons, there is also a facilitator-related reason mentioned by the respondents, more specifically the preferences of the facilitators. As visualised in Figure 4, multiple participant-related reasons are indicated, mostly related to their vulnerable target population. As one respondent describes: "a *vulnerable target population often comes with comorbidity, lower literacy levels etc. which the facilitators tried to capture by planning extra individual consults".* Another respondent states that some participants expressed that they wanted to go to the obstetrician, too. Antenatal care conducted by the obstetrician is the usual care in Belgium. There are some negative **influences** described **on some Group Care model definers**, mainly linked to group composition. One facilitator has the feeling that the participants are more likely to cancel their **Group Care** sessions because they have the consultations at the obstetricians and thus already receive their medical care. According to a midwife, the pregnant people prefer a consult with an obstetrician since almost each time an ultrasound is performed, and this is considered 'good care'.

4.1.2 Ghana

In Ghana, the health assessment is supported by the Check2Gether kit. There are two adaptations described regarding the health assessment in Group Care. The first is related to assistance during the self-assessment. The second described adaptation covers the creative exploration of a suitable location to host the Group Care sessions.

Adaptation 1: Assistance in self-assessment

The first described adaptation in Ghana is one with regard to the self-assessment. Participants were mostly **assisted to do the self-assessment,** independent from the Check2Gether kit, primarily due to low literacy levels and existing government policies governing issues around privacy and confidentiality within the health system.

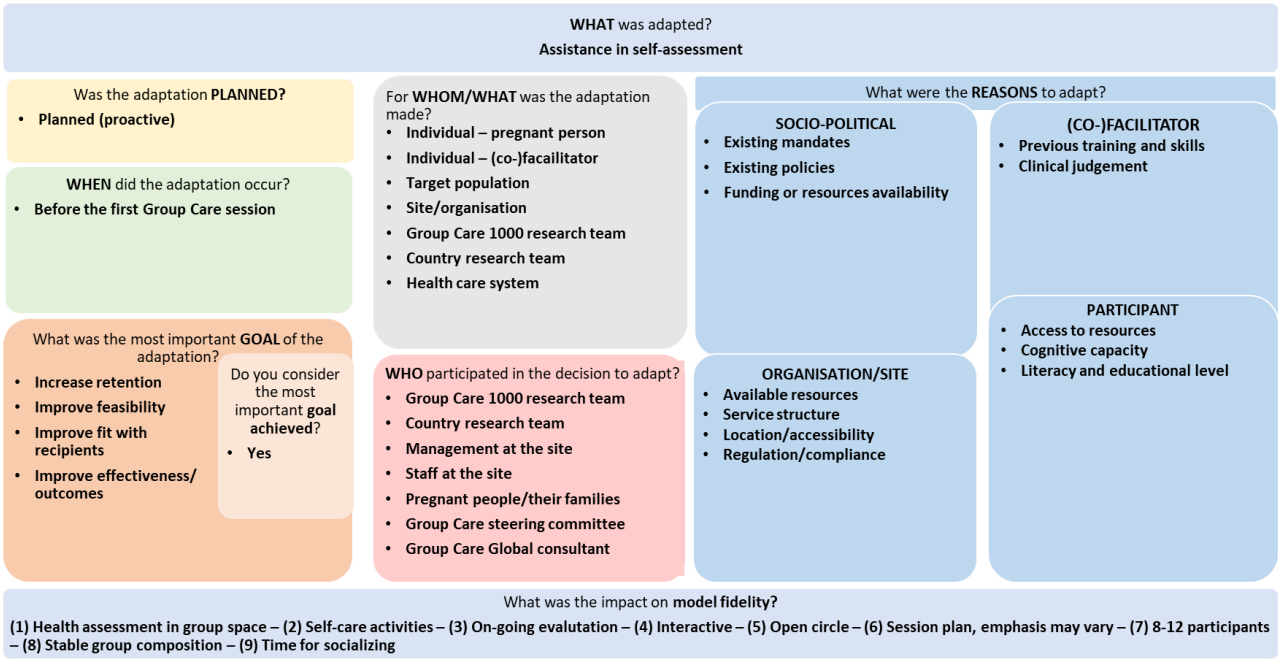

Figure 5 *Results from Ghana regarding health assessment – Adaptation 1*

This decision was **planned** and took place **before the first Group Care session** started. Multiple stakeholders were consulted regarding this **decision**: both the country and external researchers, group care global consultants, and key stakeholders responsible for policy, clinical and administrative colleagues, health system staff and pregnant people and their families. A variety of goals were selected as the **main goal**: improve effectiveness; increase retention; improve feasibility; improve fit with recipients; and increase engagement. Most respondents reported that the main objective was achieved, providing multiple justifications: "*It creates a more environmentally friendly atmosphere"* and *"Early diagnosis results in referrals to prevent further complications."* Another participant explained that these factors improved the relationships between healthcare providers and patients, stating, *"Both users and providers of services have reported increased bonding as a result."* Clinicians explained that due to the nature of the medical equipment, they need to step in to measure blood pressure as it would be impossible for participants to do it themselves: *"facilitators had to check women's blood pressure as only a Mercury blood pressure apparatus was available for some sites."* The most outstanding **for whom/what** the adaptation was done was for the direct beneficiaries of the intervention, i.e. pregnant people. Furthermore, the health care system is stated by every respondent as for whom/what this adaptation was put in place. One of the major **reasons** for this adaptation, are the existing national policies around privacy and confidentiality within the health care system. Another recurring reason concerns the health literacy of the respondents, as one facilitator explains: *"Pregnant participants are assisted by facilitators to do self-assessment because most of them cannot read and write."* This adaptation was made to keep **the fidelity of the model**, as a respondent noted that pregnant participants could be supported in a way to carry out the self-assessment without compromising existing policies and keeping fidelity. *"…pregnant women, though they cannot read and write, when assisted are able to do the self-assessment and the facilitators record it.*''

Adaptation 2: Creative solutions due to lack of suitable space for Group Care

Another impactful adaptation that occurred in Ghana was the manner in which the health assessment was done because of infrastructural reasons. Most health facilities **did not have large rooms** to have all components within the room; however, they adapted to make Group

Care possible. They solved the issue depending on the possibilities at the site, e.g. by conducting the health assessment behind a screen and the group discussion occurring under a tree. Or while one-to-one medical check-up is done in a room, this room is facing straight ahead the place where the group discussions take place.

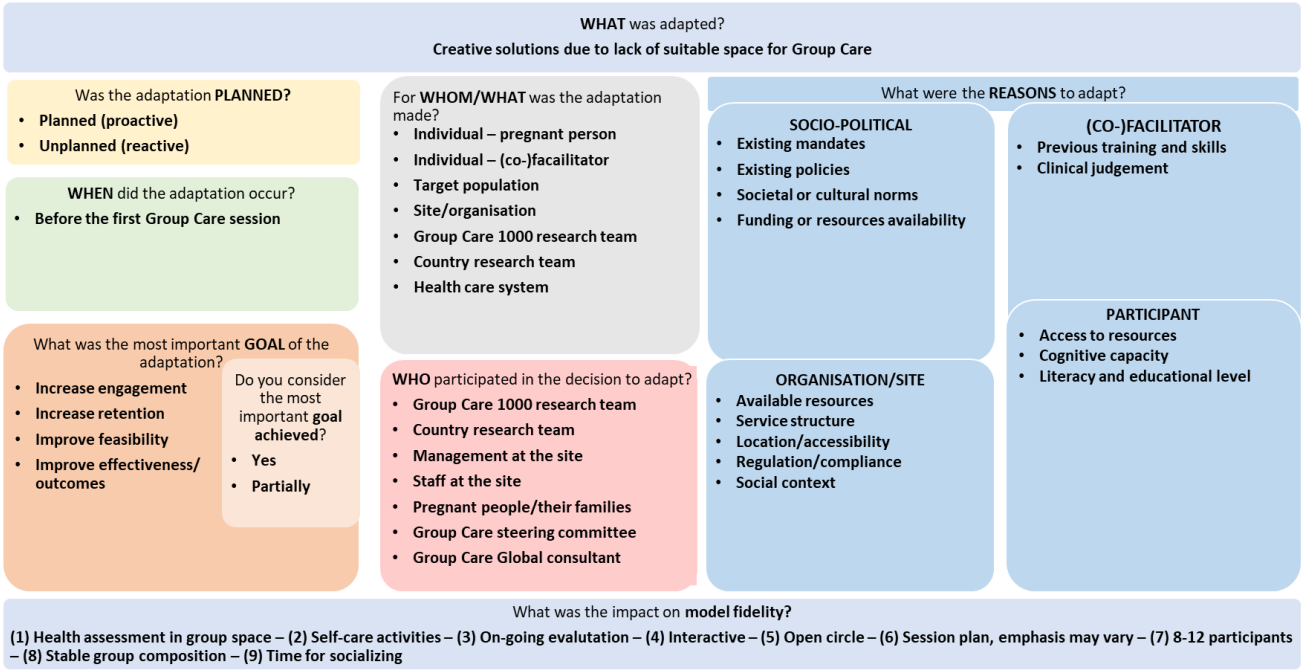

Figure 6 *Results from Ghana regarding health assessment – Adaptation 2*

The decision about the location was in most cases **planned before the first Group Care session**. In some cases, it was **unplanned and responsive** to the situation. One respondent states: *"We planned to use the pavilion and create a private space for the medical assessment, but it wasn't feasible."* This suggests that it may have been tailored to the specific needs and circumstances of the participants and location. Another respondent states there was a wide consultation of stakeholders before adaptations where made. *"Before the start of Group Care, there was stakeholders engagement both at the community and district level and this adaptation was agreed on*". Multiple stakeholders were consulted regarding this **decision**: both the country and external researchers, group care global consultants, and key stakeholders responsible for policy, clinical and administrative colleagues, health system staff and pregnant people and their families. Several **main goals** are selected, e.g. improve feasibility: *"It was the most feasible way to adapt health assessment to fit into the physical structures of the health system."* This links to the mentioned site-related **reasons**: available resources were key in determining the organisational factors influencing group care health assessment adaption. For instance, there were no large enough rooms for one-to-one medical check-ups and group discussions in the same space. Furthermore, the country's policy regarding not to compromise privacy and confidentiality is one of the primary socio-political reasons. A general **positive link with the Group Care model** definers is described, although not specifically linked to this adaptation: *"The best way to run group care was to adapt the medical/self-assessment space to suit the context."*

4.1.3 Kosovo

In Kosovo, one adaptation related to the health assessment was described, namely regarding the addition of Doppler use.

Adaptation 1: Adding Doppler use in health assessment

In Kosovo's Group Care implementation sites, an advancement in the health assessment is the **incorporation of Doppler** technology. By monitoring foetal heartbeats, Doppler enhances medical evaluations and establishes an emotional connection for expectant mothers. Audibly experiencing their unborn child's heartbeat fosters a deeper connection, ultimately engaging mothers more profoundly in the pregnancy journey. Implemented within group activities, Doppler technology creates a communal experience, promoting mutual support among expectant mothers. This adaptation acknowledges the intertwined emotional and physical aspects of maternal health and enriches the overall experience of antenatal Group Care in Kosovo.

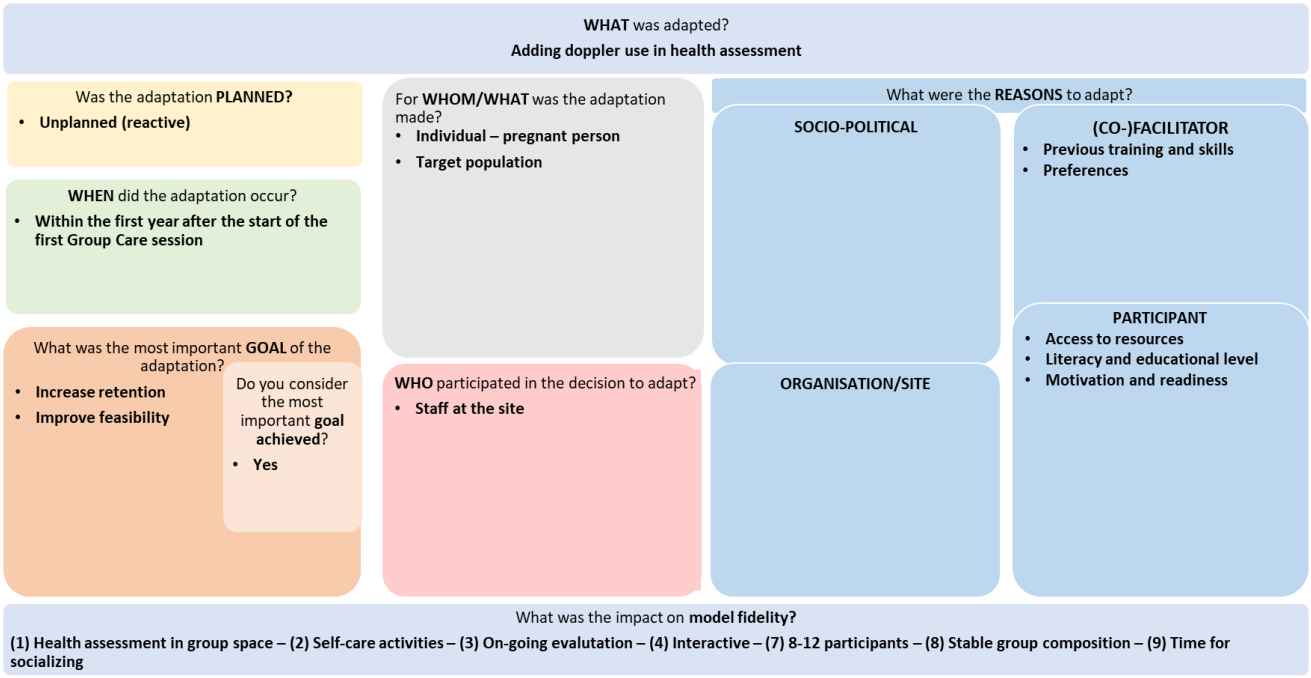

Figure 7 *Results from Kosovo regarding health assessment – Adaptation 1*

The adaptation occurred **within the first year** after the start of the first Group Care session, and was not part of the initial plan. It was chosen after facilitators observing the positive impact of Doppler on the emotional well-being of mothers and in response to regular requests from mothers eager to hear their babies' heartbeats. The **unplanned** nature of this decision reflects the institution's flexibility and ability to adapt based on observed benefits and the expressed needs of the participants. **The decision** of adding the Doppler was led by the facilitator at the site. Even though not reflected in the survey, this happened with support from the site management and the country research team of the GC_1000 project in Kosovo. The **main goal** is the dedicated focus on improving participant retention and feasibility. This indicates a strategic effort to ensure that individuals involved in the program remain engaged and committed, reflecting a commitment to the long-term success and effectiveness of the initiative. According to the respondents of the survey, the goal has been achieved. One respondent states: "*When women feel the baby's heartbeats, then they feel more confident and happy concerning the health of their babies. Also this is affecting their participation in each session.*" Consequently, there is now a more pronounced dedication to attending all sessions. The adaptation was implemented **for the benefit of the participants** of the Group Care sessions, with the intended outcome of increasing attendance rates and fostering greater interest in these sessions. This is also reflected in the participant-related **reasons** that were selected in the

survey, e.g. access to resources. Overcoming barriers to access fosters a healthcare experience that is more inclusive and comprehensive for the participants. The reasons for the inclusion of Doppler related to the site are related to the service structure. In primary healthcare facilities in Kosovo, Doppler services are exclusively provided in locations where obstetricians are available, and such services are limited to obstetrical appointments. There are also facilitator-related reasons selected, such as clinical judgement. The facilitators considered Doppler as highly useful for pregnant people, aligning with clinical judgement. The incorporation of Doppler into the health assessment procedures during the offered Group Care sessions is not considered as an adaptation that directly affects the **model fidelity** core components and definers of the Group Care model. Nevertheless, it has demonstrated a positive impact on enhancing specific definers of the Group Care model in the Kosovo implementation site, among others regarding continuous evaluation and group sizes of 8-12 participants.

4.1.4 South Africa

In South Africa, we observed two adaptations similar to those in Ghana: the support in supervision by a midwife of the self-assessments that pregnant people do themselves, and the creative search for a suitable Group Care location are also described.

Adaptation 1: Assistance in self-assessment

The first described adaptation in South Africa is with regard to the self-assessment. Each **self-assessment (weight and blood pressure) is supervised by a midwife**. The midwife records the data to ensure accuracy of measurement. Involving clients in self-assessment was the biggest shift from normal care to Group Care, for both clients and the midwives, but both participants and the facilitators are enjoying it. It is now becoming a habit for midwives to explain to all clients, including those who are not in groups, why they do what they do and to help them interpret the result themselves.

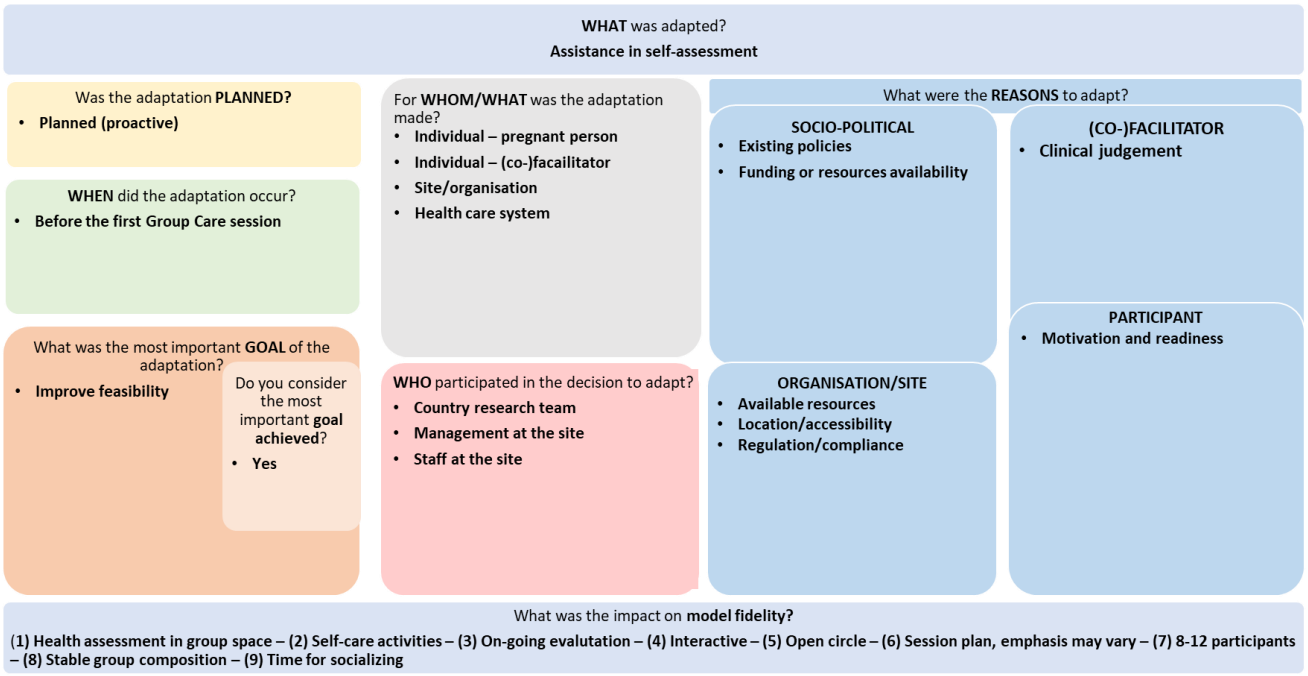

Figure 8 *Results from South Africa regarding health assessment – Adaptation 1*

These decisions about self-assessment were made **before the start of the first Group Care session**, and were **planned**. For the Group Care sessions, only low-risk participants were

included. The adaptations regarding close supervision of self-assessment by the midwife as well as recording of data were thought through during the ethics application process and with the antenatal care manager in the facility. It was important to both the country research team's ethics board and the hospital management that the introduction of self-assessments through Group Care should not compromise clinical assessment, in this case specifically the blood pressure measurement. The GBGC model had not been tested in South Africa before, therefore, all self-assessments completed by participants in this study in the South African site were to be supervised by a midwife as a safety precaution to ensure accuracy of measurement. Accordingly, the **main goal** was to improve feasibility. The **decision** was made to ensure accuracy of data for the broader purpose of ensuring correct clinical decision making and safety of the pregnant participants given that blood pressure is one of the determinants of a health pregnancy. There were discussions amongst the staff at the site as well as meetings with the country research team. The main issue for adaptations according to all involved (i.e. country research team, staff at the site, and ethics board) was that usual care is not compromised.

Existing policies play a role in the decision to adapt. In South Africa as part of normal routine individual care pregnant people do not do self-assessments, but a health care provider does it. To ensure that this standard is maintained, participants of the Group Care sessions must be supervised by a midwife during self-assessments and the midwife captures the data. The introduction of Group Care had to be done in a manner that appreciate the existing policies. Next to appreciating the existing policies, the routine care at the site for all patients should not be compromised because of the introduction of Group Care. The site explored ways in which the new model could be integrated into the routine systems with very minimal interruption or disruption. As one of the (co-)facilitator-related **reasons** 'clinical judgement' was assigned, as accuracy of measurement is important for clinical judgement. Last, there were participant-related reasons for the adaptation, namely their motivation and readiness. An overall positive **influence on the Group Care model definers** is expressed in the survey, focusing on the positive aspects of Group Care in general rather than on the possible influence of their adaptation on the definers.

Adaptation 2: Creative solutions due to lack of suitable space for Group Care

The second described adaptation is with regard to the **location of the one-to-one medical check-up**. In this project, it was set out explicitly to test Group Care within the health system, with local staff and in their routine spaces of care in the hospital as this would be better for testing implementation integrated in the system, instead of relying on NGOs outside partners who deliver care outside of the public health system and using their facilities. .Given space limitations, the staff at the site had to find a space to host Group Care, which was not a completely private space. The challenge of space in the facility led to an exploration exercise where consideration around what can be changed in the facility to accommodate Group Care sessions and what can be adapted in the Group Care model to accommodate the facility needs were made. As one respondent states: "*Because we do not have extra space in the site, we had to create space. We had to integrate group care within the existing space that we share with high-risk patients."* Therefore, participants are doing self-assessments in the open space designated for Group Care and do their one-to-one medical check-up in a private room, which is right next door to where the group is being held. This room has all the necessary facilities to conduct the one-to-one medical check-up. Currently Group Care is being held in the empty waiting area. CCBC is specifically held in the afternoon when the waiting room is empty, however the space does not allow a fully private space with a curtain etc. recommended by the model. The one-to-one clinical assessment however is held in a fully private space.

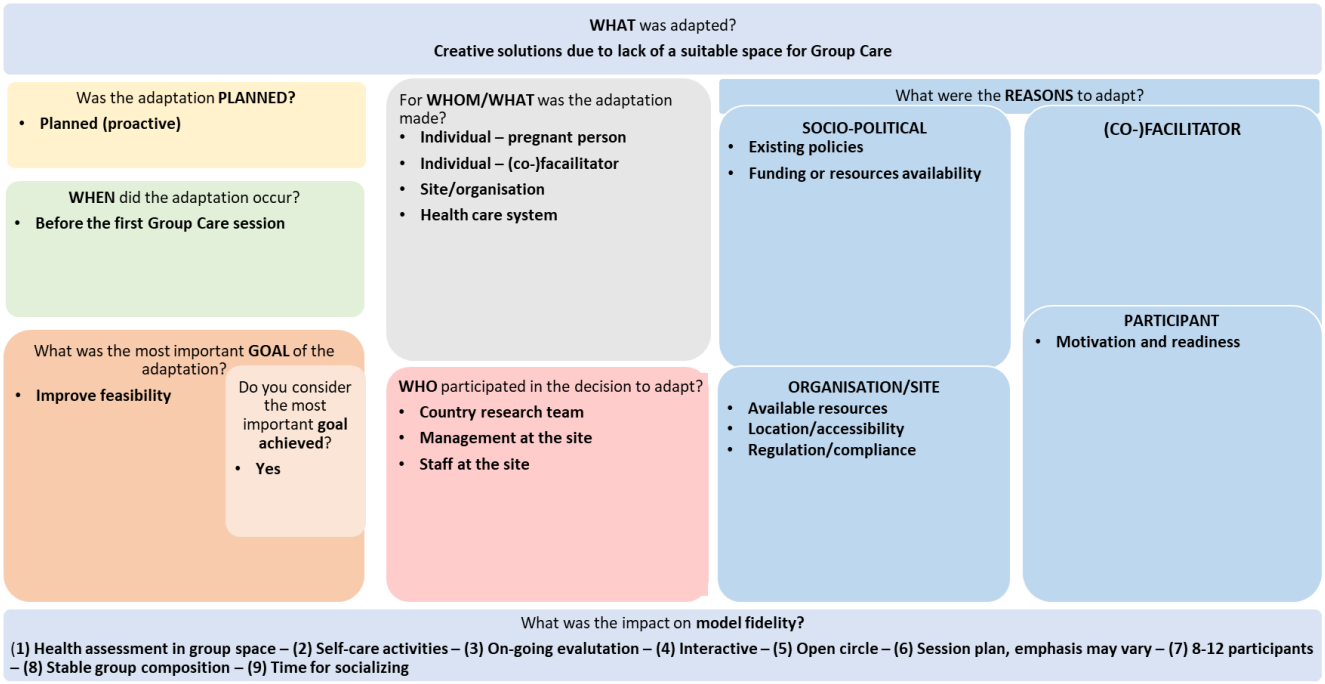

Figure 9 *Results from South Africa regarding health assessment – Adaptation 2*

This decision was **planned**, and made **before the start of the first Group Care session**. The lack of a place to host a private one-to-one medical check-up as part of the group space was known from the onset. The **decision** took place through lengthy discussions between the country research team and the implementation team at the site. The management and the facilitators at the site were central in making the decisions because they were determined to implement Group Care in their facility.

The **main goal** for the adaptation was to ensure that Group Care is implemented with minimal disruption to the systems and that the health care for pregnant mothers is not compromised. In short, as selected by the respondents in the survey, the primary goal of adaptation was to improve feasibility. As '**for whom/what** the adaptation is made', the respondents answers that it is both for the participants, (co-) facilitators, site, and the health care system. The available resources are pointed out as **reason** to adapt, more specifically referring to the issues to find a suitable space. The adaptation was negotiated and managed carefully between the site staff and research team, however this is different from the original model. It was considered to have a positive **influence on model fidelity**. Without this creative solution, Group Care would probably not have been possible at the site. While the health assessment could not happen in the group space, the groups are held in a waiting room and the examination room is right there. This to some extent ensure that the midwife and the participants on one-to-one medical check-up remain connected to the main group. The conversations and interaction move easily from the self-assessment to one-to-one medical check-up and back to the group.

4.1.5 Suriname

Similar to Ghana and South Africa, finding a suitable location to organize Group Care and include the health assessment in the same room appeared to be challenging.

Adaptation 1: Creative solutions due to lack of suitable space for Group Care

In Suriname, self-assessment of blood pressure and weight by participants for antenatal and postnatal Group Care is done within the group space while the **one-to-one medical check-up is done in another room**.

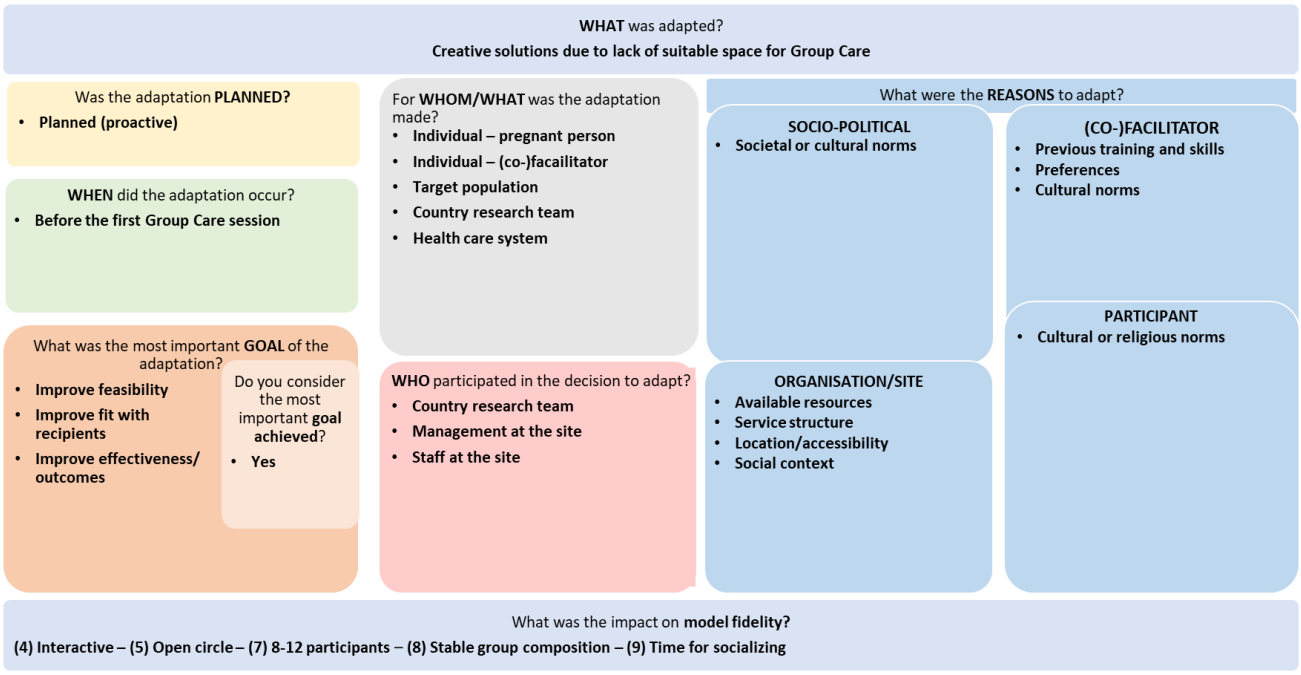

Figure 10 *Results from Suriname regarding health assessment – Adaptation 1*

According to most respondents, this decision was **planned** and decided **before the start of the first Group Care session**. It was a **joint decision** by the country research team and the management and staff at site. The final decision was mainly made by the management at the site and country research team. In one site, the Regional Health Service and country research team were appointed as final decision makers. In another site, the final decision was made by the facilitators and the country research team. The **main goal** of having the one-to-one medical check-up in a separate space was to improve feasibility of implementing antenatal and postnatal group care in Suriname, and improve fit with recipients (for privacy or practical reasons). Respondents stated that they considered this goal as achieved because the vast majority of the antenatal Group Care participants indicated that they preferred and felt at ease to have the one-to-one medical check-up in a private environment and parents learned to measure their baby's length and weight. One facilitator states "*We as facilitators feel more comfortable to implement the group sessions in the bigger/open waiting room and we are able to accommodate more participants."* Closely linked to this main goal, is the question **for whom/what** the adaptation was put in place. Respondents indicate the adaptations were done for the participants, the facilitators and the site. For example, it was anticipated that pregnant Surinamese participants appreciated some privacy and therefore it was decided beforehand to have the one-to-one medical check-up in a separate space. This was also given as a participant-related **reason**, described as 'cultural norms'. In general, no socio-political reasons were reported for the adaptation; one site mentioned cultural norms. As site-related reasons, the available resources and service structure was indicated as playing a role. One participants added social context of the organisation as one of the site-related reasons. Preference of the facilitators to do the one-to-one medical check-up in a separate room and previous training and skills were participant-related reasons for the adaptations. There is no impact or a positive impact on **model fidelity** described by the respondents. It was decided beforehand, during the training, to have the one-

to-one medical check-up of pregnant participants in a separate room because they would not participate if the check-up was done in the same space with other participants and their partners.

4.1.6 The Netherlands

In the Netherlands, two adaptations were described regarding the incorporation of health assessment into Group Care. The one-to-one medical check-up in antenatal care often appeared to require more time, and the postnatal health assessment still needed to be shaped for the implementation of Group Care in a refugee center.

Adaptation 1: More time needed for one-to-one medical check-up

For antenatal Group Care implementation in the Netherlands, the only adaptation that is mentioned is that the **one-to-one medical check-ups take longer than 3-5 minutes**. It seems that the midwives of one implementation site decided to spend more time on these one-to-one medical check-ups.

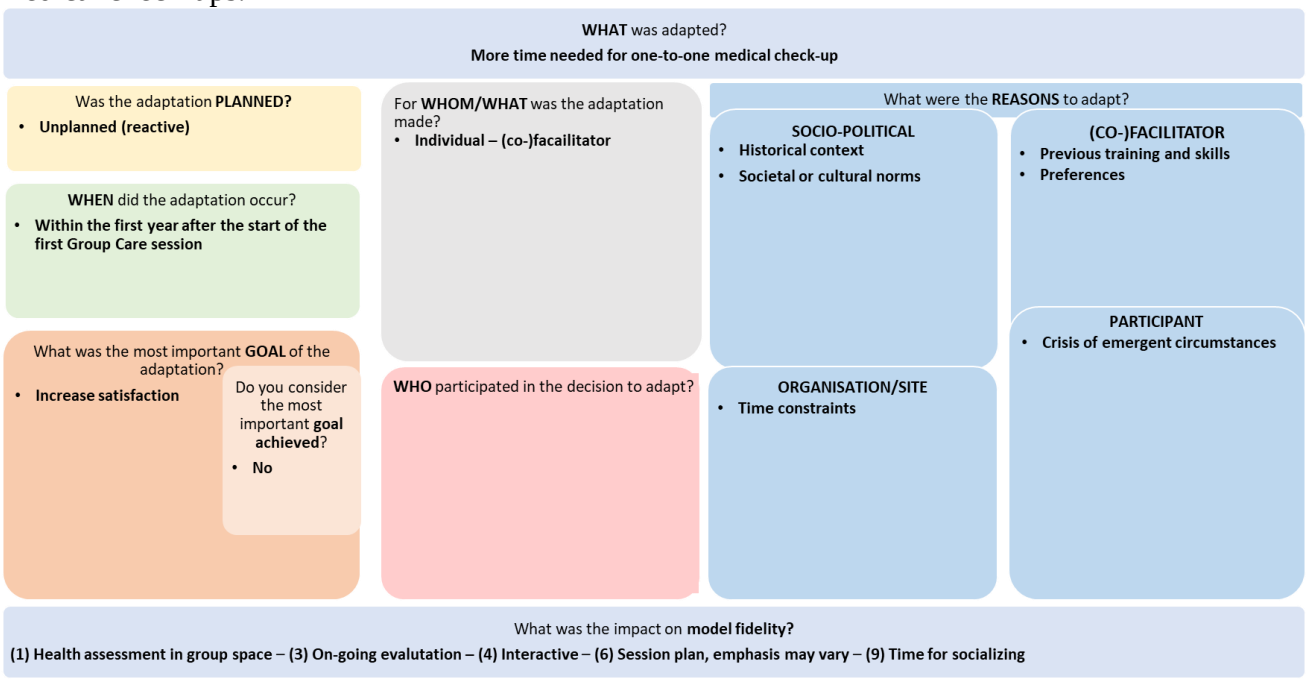

Figure 11 *Results from The Netherlands regarding health assessment – Adaptation 1*

This decision occurred **within the first year**, and was **unplanned**. There were no stakeholders appointed in the survey as being **involved in the decision**. The **main goal** was to increase satisfaction. The respondent considers this goal as not achieved, and states the following: "*They (the facilitators) want to facilitate the satisfaction of the women, they want to give 'good care'. They presume the women need more than 3-5 minutes individual time."* There, the survey showed that the longer one-to-one medical check-ups were put in place **for the (co-)facilitator**. This is also reflected in the results about the **reason** for the adaptation, where co-facilitator related reasons are selected. Facilitators anticipated, or assumed, that participants would be more satisfied. Another reason is the satisfaction of the facilitator and the fact that it fits more with their usual care, the care that they know. 'Previous training and skills' was also selected as reason to adapt. This is closely linked to the site-related reasons that were selected. One respondent added: "*they let an extra midwife in the first 30 minutes to conduct the medical check-ups, too*". Broader, historical context and sociocultural norms were selected as socio-political reasons that play a role in the adaptation. There is a rather negative influence on the **Group Care model definers** described in the survey. It stands out that there is less time for

discussion in the group, which may have an effect on the content and interactive learning. For example if questions are answered during the one-to-one medical check-ups then they will not be discussed in the group.

Adaptation 2: content of the postnatal Group Care self-assessment

For the implementation of postnatal Group Care in a refugee centre in the Netherlands, the **content and shaping of the self-assessment** part still needed to be shaped. The health-assessments consists of weighting and measuring the child and doing some of the development tests with the child that are normally done within the community paediatric services.

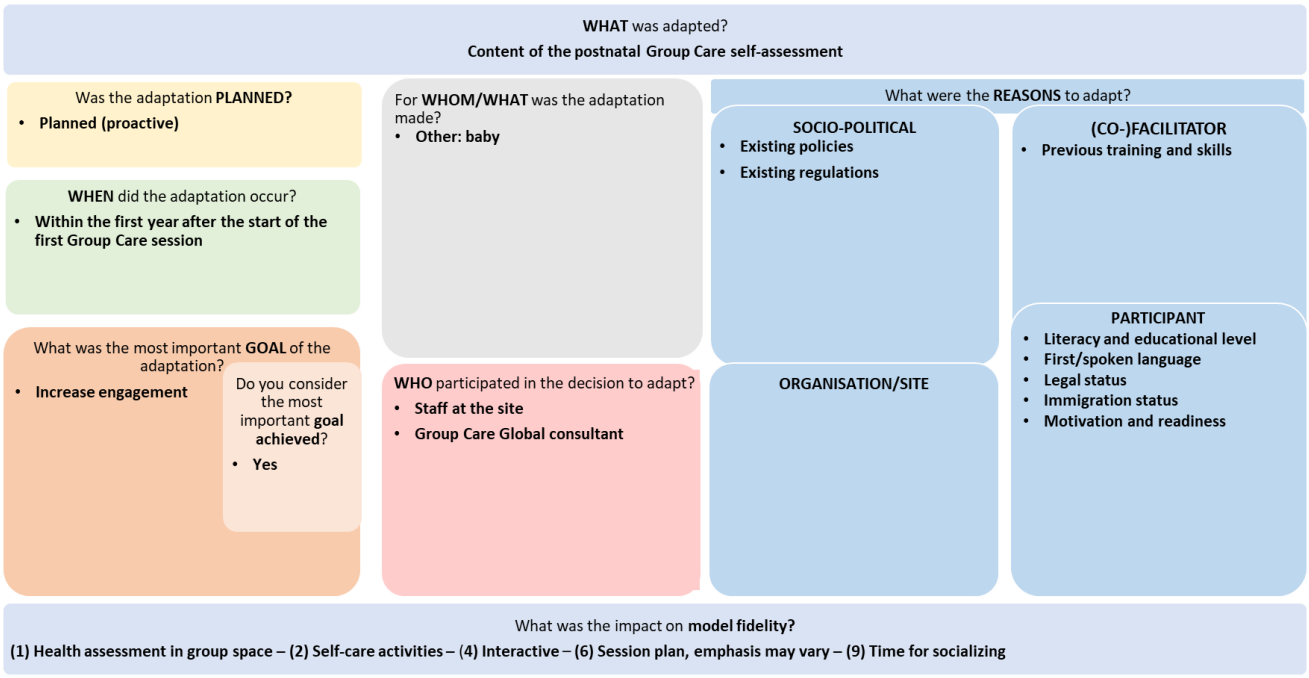

Figure 12 *Results from the Netherlands regarding health assessment – Adaptation 2*

The organization of the self-assessment in the postnatal groups was decided upon **in the first year** and was **planned**. It is actually part of the Group Care model but the decision of what and how parents self-assessed was decided in the first year. For this postnatal self-assessment, different stakeholders were involved in **the decision**, e.g. facilitators, and youth health nurses and doctors. The **main goal** was to increase engagement of the parents, their empowerment and improving health literacy. The goal seems to be achieved as participants liked to be involved. The postnatal adaptations were done for the baby, according to the respondents regarding '**for whom/what** was the adaptation made'. There are **reasons** described from different categories, such as socio-political reasons and (co-)facilitator-related reasons (i.e. previous training and skills). Multiple participant-related reasons were selected, as refugees are their target population. Involving refugees in self-assessment of care can be challenging due to language issues and cultural norm that the professional should do it (expertise) but seems to be rewarding because of their enthusiasm. There is a positive influence described on the Group Care **model definers**, such as a variable plan for each Group Care session.

4.1.7 UK

In the UK, we see two recurring challenges that required action. First, finding a suitable space for Group Care. Second, more time appeared to be spent on one-to-one medical check-ups.

Adaptation 1: Creative solutions due to lack of suitable space for Group Care

In the UK, there is in general lack of venues in health care. A creative solution had to be found regarding a **suitable space for Group Care sessions**.

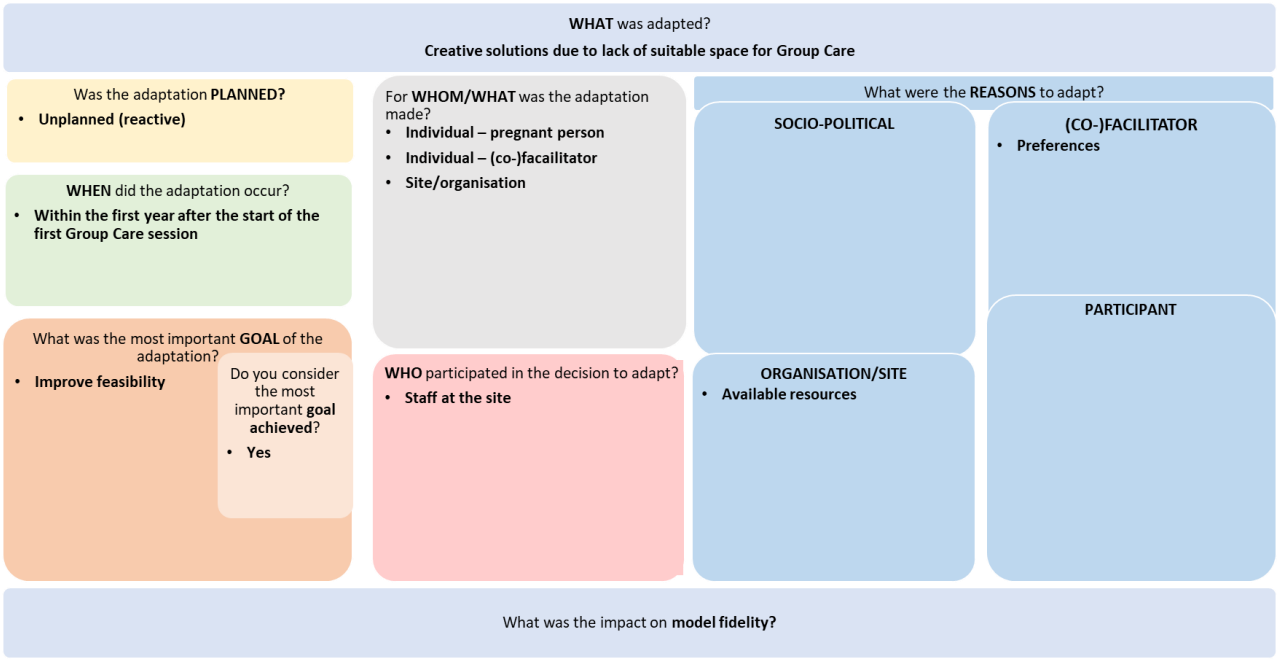

Figure 13 *Results from UK regarding health assessment – Adaptation 1*

The adaptation to organise the one-to-one medical check-up in a separate space was put in place **within the first year** after the first Group Care session. The room was not big enough to accommodate and because the room was small, the participants preferred this as a sense of privacy was not possible in this space. There was also an issue of the physical ability of the midwives: some felt they could not manage a mat on the floor, especially for repeated checks. The midwives felt that conducting the one-to-one medical check-up did not affect the functioning of the group. This was an **unplanned** and reactive adaptation, responsive to the situation and logistical challenges. The midwives facilitating groups made the **decision** for this adaptation, but the country research team had monthly site steering committee meetings. This way, this adaptation was also discussed with the local lead and other facilitators along the way. The **main goal** was to improve feasibility: ensure the approach was interactive and facilitative and to keep the focus on the group. Pregnant people, (co-)facilitator and site were selected as **for whom** the adaptation was put in place.

Despite no socio-political **reasons** being selected from the possible options, socio-political influence is discussed in an open-ended survey question, and elaborated by the country research team: the challenge in obtaining suitable rooms reflects the wider socio-political situation in that collaboration between health services and local authorities is desired in principle but with strong organisational and financial barriers. A previous decade and more of shifts to a quasi-market model of organisation led to different organisations being required to cross-charge for facilities. Likewise, a decade or more of austerity policies meant that services were all stretched financially and many suitable community venues, such as Children's Centres, had been closed down. Centralisation of hospital services likewise led to increasingly crowded NHS facilities with small rooms and competition for use of these. Time constraints and service structure are mentioned as site-related reasons. More local organisational impact of the wider socio-political context creates organisational and resource challenges for the sites involved. Regarding the **influence on the Group Care model definers**, there is no suggestion the adaptation had an

impact on model fidelity. As a respondent states: *"Having a private area with a raised bed does not seem to impact the structure/organisation of the groups to my knowledge."* The midwives felt that doing this did not affect the functioning of the group.

Adaptation 2: More time needed for one-to-one medical check-up

In the UK, there is one participating site where they implement continuous Group Care, meaning antenatal and postnatal Group Care flow over into each other. In this site, the midwives found it **difficult to keep the one-to-one medical check-up to 3-5 minutes**, especially if the group was small. They amended the time according to group size and dynamic to what would function best for the group on the day. There was also an element for midwives in adapting to this style of working, which some found easier than others. When groups were small, midwives responded to this by increasing length of the one-to-one medical check-up to help the group element to function well.

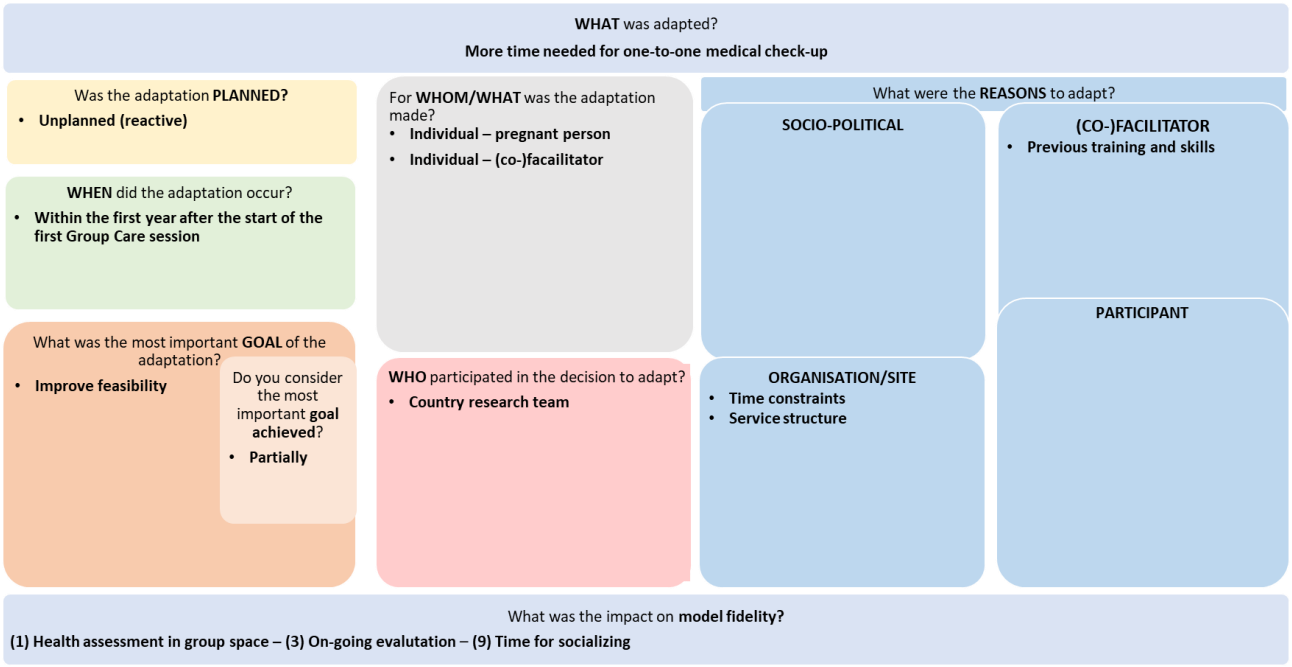

Figure 14 *Results from UK regarding health assessment – Adaptation 2*

This was **not planned** and occurred **within the first year** after the start of the first Group Care session. The midwives facilitating groups made the **decision** for this adaptation, but the country research team had regular site steering group meetings (usually monthly) so were also discussed with the local lead and other facilitators along the way. The **main goal** was to improve feasibility: ensure the approach was interactive and facilitative and to keep the focus on the group. One respondent states the goal is partially achieved, as they are still struggling on occasion to shorten the time for one-to-one medical check-up. As with the first described adaptation, this one too was **done for** the participants and the (co-)facilitators. There was also possibly an element of midwives needing to develop their experience of doing brief one-to-one medical check-ups but this was not the driver of the adaptation. However, it is one of the **reasons** for this adaptation, i.e. because of preferences of the (co-)facilitator, and previous training and skills. Midwife facilitators still needing to develop their confidence in working with groups, but the main driver was responding to smaller groups in some cases. It is noteworthy that this adaptation was pragmatic and situational, it was not a whole service plan or decision. It was recognised that individual facilitators need to be able to adapt aspects of their approach to the group needs, size and setting. Regarding the **Group Care model definers**,

there is not a strong impact experienced. The principle of keeping the time for one-to-one medical check-ups with the midwife short is to not disrupt or undermine the group element, and this didn't occur. The midwives simply adapted to the situation of a small group to spend a little more time on this and maintain a good overall group dynamic where small groups can actually be challenging to facilitate. One respondent state: '*I don't feel it has a huge impact on the functioning of the group, although in a small group it does reduce the number of people in active discussion and can then be more distracting.'*

4.1.8 Cross-country analysis regarding health assessment

There are two adaptations related to health assessment that recur remarkably often. First, finding a **space suitable** to organise Group Care where the one-to-one medical check-up can also take place in the same space as the group discussion appears to be difficult. Sites found creative solutions, such as organising Group Care sessions in a waiting room and conduct the one-to-one medical check-up in a connecting room, or organise the one-to-one medical check-up behind a curtain and the group discussion under a tree. A second common adaptation is the one-to-one medical check-up **taking longer than the 3-5 minutes** described in the model, possibly comprising the time for social interaction with the group.

We cannot make a general statement around **when** the most impactful adaptation regarding health assessment in the implementation of Group Care took place. It very much depends on the content of the adaptation when it took place. We do see a clear tendency within the described adaptations. In particular, the decision to organise Group Care in a separate room for group discussion and a separate room for one-to-one medical check-up mainly occurred before the start of the first Group Care session. Even though respondents described the adaptation as 'planned', it appears that it was often rather reactive to the situation, e.g. there was no suitable room available. Information from the survey and extra contacts with the country research teams revealed that the original idea in most sites was to organise the one-to-one medical check-up in the same room as the group discussion, but challenges such as logistical issues or preferences of the facilitators or participants, changed their plan. Therefore, the adaptation happened before the start of the first Group Care sessions in the pre-implementation phase, but can be considered as unplanned as it wasn't part of the original implementation plan and was rather reactive to the situation. The adaptation regarding the one-to-one check-up lasting longer than 3-5 minutes mainly occurred within the first year after the start of the Group Care sessions and was unplanned.

It is striking that the staff at the site is involved in the **decision process** in almost every site, which demonstrates **great commitment and involvement** from the participating sites. There appears to be a real co-operation to achieve sustainable implementation of Group Care, and not a research team determining how the implementation will happen. Of the 25 respondents describing who made the final adaptation, 16 appoint the facilitators themselves as the final decision makers. There are clear differences between the countries, e.g. in Ghana it appears that the Group Care Global consultant participated in the discussions to adapt, as well as the country research team. In Belgium, the country research team was not at all involved in the decision to adapt. In the UK, two out of three respondents didn't select the staff at the site as involved in the decision making process, but it has to be added that the research team was in close contact with the facilitators at the site, as they also described in the open questions. Another common group of those making the final decision to adapt is the 'management at the site'. But in the end, as one respondent states: **'team work brings good outcomes'**, and those decisions to adapt are often a result of teamwork.

A variety of **main goals** were selected out of the multiple choice question, as indicated by the FRAME. Despite the scattered responses according to The FRAME's options, it is clear from the descriptions that successful implementation of Group Care is usually paramount, with the **aim of better care for pregnant people and their families**. However, an important remark must be added. While respondents describe the goal of better care for the participants, unconsciously it may also originate from a more comfortable feeling for the facilitator. E.g. a respondent added that, in the end, it may be mainly the facilitator who becomes more comfortable when the one-to-one medical check-up time is longer: "*It might give the midwife more satisfaction, more closely related to the care they know, they are more used to do it this way."*

As with the 'main goal', the description regarding **for whom** the adaptation was made makes clear that the **pregnant participants and their families are** almost in every case the **priority**. A similar reflection can be made as with the previous category, with here a clear **distinction between the views of the facilitators and the GCG consultants**. Mainly in the cases of a longer one-to-one medical check-up or Group Care as additional care, a difference in views between the facilitators and Group Care Global consultants emerges. Specifically, the facilitators indicate that their decisions are made in the interest of the participants, where the Group Care Global consultants make the reflection that it is not the participants who indicate that this 3-5-minute one-to-one check-up is too short, but rather an assumption of the facilitators. Facilitators indicate that they need more time for the one-to-one medical check-up to provide 'good care'. This was the case for Belgium, The Netherlands, and UK.

In most cases, there were **reasons** from all of the four categories to adapt regarding self-assessment. Sometimes, these reasons are intertwined. E.g. when a general health care system where an obstetrician-led care model is prevalent, this is reflected in the organisation-related reasons. E.g. by competing demands between midwives and obstetricians. In other cases, the reasons were stand-alone reasons. Nevertheless, the survey showed that there are often multiple reasons why an adaptation is put into practice, which confirms the complexity of implementing new interventions in an organisation.

The Group Care model contains the three core components (health assessment, interactive learning, and community building), along with various definers, as described in the methods section. These definers are considered flexible, and the need for this flexibility is confirmed in our study. All the participating sites **succeeded to find creative solutions** to their challenges regarding the health assessment part when implementing Group Care, thereby adhering as closely as possible to the model core components and definers. E.g. regarding the suitable space for Group Care sessions, a strategy is to find a space for group discussion where an adjoining space can serve for the one-to-one medical check-up in order to disrupt the group flow as little as possible. Another strategy, to meet regulations concerning self-assessment while still including it as part of Group Care, was to opt for supervision of the midwife during the self-assessment. Omitting this core component of health assessment did not happen in the respective sites that participated in the survey. It did occur in one of the sites that participated in the context-analysis and moved to online Group Care sessions, but was therefore excluded from this survey. In that site, omitting the health assessment aspect had several positive and negative consequences. Because of their specific target population (Eritrean pregnant people), they had a wider reach through online Group Care sessions and could include more participants. But, it also led to difficulties in funding, because it was not considered health care anymore. As a middle ground between completely omitting the health assessment component and Group Care

as stand-alone care, we see that Group Care is sometimes implemented as additional care, e.g. in two Belgian sites. Here, it was indicated that this does have consequences, such as pregnant participants more often not showing up for a Group Care session, as they receive medical care elsewhere anyway. Despite the mainly positive view from the respondents about the adaptations' influence on model fidelity, it is necessary to consider whether these adaptations on the core component of health assessment do affect other core components. Like, for example, longer one-to-one medical check-ups, affect the time left for social interaction and group dynamics, this way possibly comprising the other two core components of interactive learning and community building. It should be noted that our research involves sites starting to implement Group Care. Another option at more experienced sites could include providing additional training for facilitators and allowing them to gain more experience in Group Care facilitation. This could lead to more confidence and trust that a 3-5 minute one-to-one medical check-up is feasible and will not jeopardize good care. This was already touched by Rising [5], where it is stated that the shift from individual care to Group Care can be disconcerting for healthcare providers, as they often initially believe that the provision of quality care must go hand in hand with an individually evolved relationship with the care recipient.

Overall, respondents feel that there is mainly **a positive influence** of the described adaptations on the implementation process. More than once, it is suggested that **these adaptations, sometimes containing creative solutions, are needed to make Group Care implementation possible** at all.

4.2 Anticipated challenge category 2: scheduling Group Care into regular care

Making the Group Care model fit into the regular antenatal or postnatal care often requires some challenging adaptations. E.g., it is not always easy or possible to adopt the 9 antenatal and 1 postnatal session as described in the Group Care model, and make these sessions fit with the health assessments indicated by protocol at the sites. According to the data from the Rapid Qualitative Inquiries, described in Deliverable 3.2, challenges were expected in all of the participating sites in the seven countries to schedule the Group Care model into regular care.

4.2.1 Belgium

In order to schedule Group Care into regular care in Belgium, the number of sessions were adapted to local policies.

Adaptation 1: number of Group Care sessions aligned with local policies
In Belgium, the Group Care **schedule was in each participating site aligned with the existing local antenatal care pathway**. In general, this meant that there were seven antenatal and one postnatal Group Care session, combined with individual appointments with the obstetrician or GP. Ten Group Care sessions would lead to overconsumption of antenatal care, considering there are at least 2 or 3 ultrasounds planned at the obstetrician, as these cannot be conducted by the midwives in Belgium. In two out of the three sites, an antenatal care pathway had been recently developed, and therefore the Group Care model should fit into this. In the third site, the reduction in the number of Group Care sessions was to meet the demand of the obstetricians and not jeopardize the relationship with them. If women only attended Group Care sessions and no longer had individual appointments with the obstetrician, it would mean a loss of income for them. In one of the sites, it is explicitly stated that this Group Care care pathway

enters the participant's medical record so that other health care providers see that the pregnant person received antenatal care through Group Care.

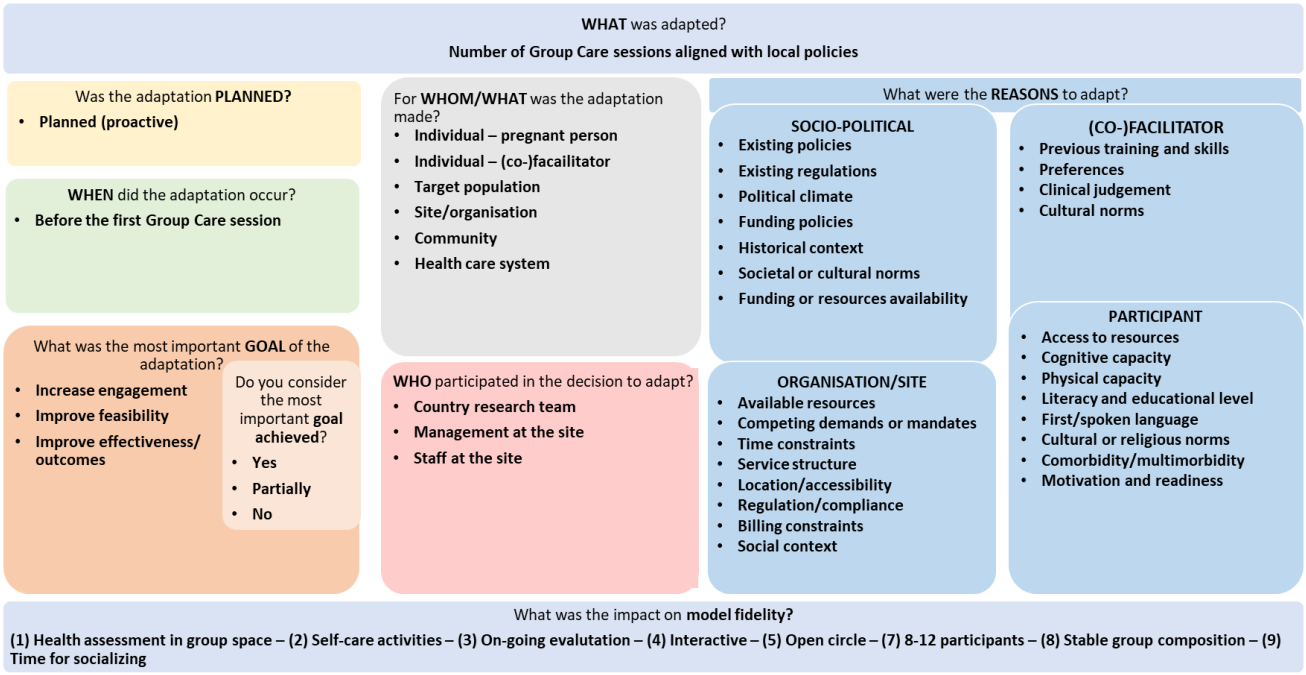

Figure 15 *Results from Belgium regarding scheduling Group Care into regular care – Adaptation 1*

The outlining of this Group Care schedule was **planned** and took place **before the start of the first Group Care sessions**. The sites tried to involve all the relevant stakeholders in the **decision** about the schedule, such as staff and management at the site, and partner organisations involved in the antenatal care pathway. One of the respondents stresses the complexity of this: "*The care pathway for women taking group care is being partially integrated into a long-standing negotiation of the prenatal care pathway and remains one of the most challenging aspects of group care in my opinion."* Regarding **for whom** the schedule is put in place, it appears that this is mainly done for the site and the health care system. One respondent states this is also done for the participants and the facilitator. As for the **main goal**, multiple answers are selected, but all with a similar explanation: the participating implementation sites want support from their partner organisations, such as the community health care centre and the obstetricians, to improve the implementation of Group Care in their site. Some respondents state that they did achieve this goal, as the community health center and the GPs support their Group Care schedule. Others only partially agree: *"I think we are taking a step in the right direction, but there is still a long way to go. All healthcare providers are not yet aligned with each other and not everyone takes agreed care pathways into account"* Several **reasons** played a role in the outline of the Group Care schedule. Two of the reasons that stand out are the existing policies and societal and cultural norms: "*it is the cultural norm to have medical follow-up of the pregnancy by an obstetrician, they can't be left out of the schedule. Midwives are not allowed to conduct ultrasounds in Belgium."* In general, the influence of this schedule on the **Group Care model definers** is described as positive. Regarding interaction, it might have a negative influence: "*because there are less sessions, less topics can be discussed"*.

4.2.2 Ghana

Comparable with Belgium in Ghana the number of Group Care sessions were also adapted to fit with the national policies.

Adaptation 1: number of Group Care sessions aligned with national policies

In Ghana, the intervals between sessions were designed to **fit into existing schedules and policies**. Each group participated in seven antenatal visits or sessions, followed by one postnatal session, totalling eight sessions. These group sessions were scheduled following regular ANC clinic visits.

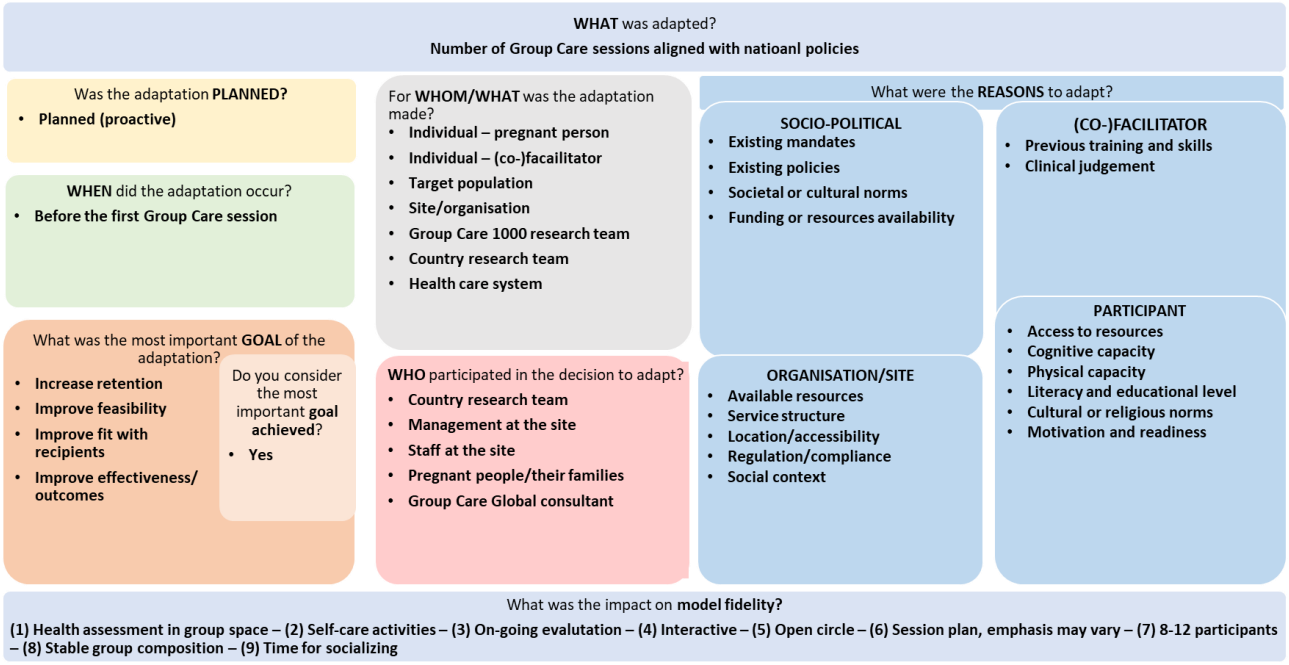

Figure 16 *Results from Ghana regarding scheduling Group Care into regular care – Adaptation 1*

This outlining of the Group Care schedule occurred **before the first Group Care session** and was **planned**. The **decision** to proceed with this Group Care schedule was a collaborative one that involved various stakeholders, including community leaders, healthcare leaders, service users, and providers. Research teams and Group Care Global consultants also played a role in this decision. It is worth noting that the flexible nature of the model gave facilitators room to make decisions at every stage of implementation as noted by one of the respondents. *"Anything can happen, so no blame game: We decide and move forward."* Based on the feedback received, it appears that Group Care schedule was primarily **made for** catering to the preferences of pregnant women, but are e.g. also for site itself and the broader health care system. The **main goal** was to enhance the practicality of implementing Group Care in various settings, and to increase retention of the participants. The majority of participants confirmed that this objective was accomplished as they stated that the attendance for antenatal care significantly improved. As on respondent states: *"Averagely the goal of 8 visits was achieved, which previously there was a struggle to make four visits."* In all the participating sites, the majority of participants attended all eight sessions, which was a significant contrast to previous attendance patterns in one-to-one antenatal care. This was achieved due to meticulous scheduling that corresponded with policy, allowing all pregnant people in the group to benefit fully from Group Care. As a result, every pregnant person in the group attended all seven sessions prior to delivery. To guarantee that groups could continue running, it was identified

that conducting continuous groups was one of the most effective strategies in areas with low populations. This means that every pregnant person at the site is invited to join Group Care, regardless of gestational age. So, as others deliver and exit the group new pregnant people are enrolled into the group. One of the main **reasons** to design this Group Care schedule in Ghana, was to align with the existing policies. The scheduling of antenatal appointments is based on the current number of visits and intervals outlined by the Ministry of Health's policies. Due to the widespread belief that it is not ideal for individuals to learn of a woman's pregnancy at an early stage, most people in this area delay booking their antenatal appointments. As a result, pregnant people who report for their first appointment at 16 weeks gestation can still attend all seven scheduled visits before giving birth. There was an overall positive experience about the **influence on Group Care model fidelity**, although not directly linked to the adaptations, but more to the overall implementation of Group Care in their sites.

4.2.3 Kosovo

In Kosovo, a strategy to integrate Group Care scheduling is the planning of the appointments for Group Care and the obstetrician on the same day, and shortening of the Group Care sessions.

Adaptation 1: Bundling appointments on the day of the Group Care session

One of the most impactful adaptations in scheduling Group Care into regular care in Kosovo involves **collaborative efforts between midwives and obstetricians.** Pregnant people are recruited for groups, and their appointments with the obstetricians are scheduled on the same day as the Group Care sessions. This convenient arrangement facilitates attendance, seamlessly integrating Group Care into regular care. Moreover, this scheduling strategy addresses the challenges faced by pregnant people residing in rural areas, eliminating the need for separate days for doctor appointments and Group Care sessions. This not only reduces travel costs but also saves valuable time for participants.

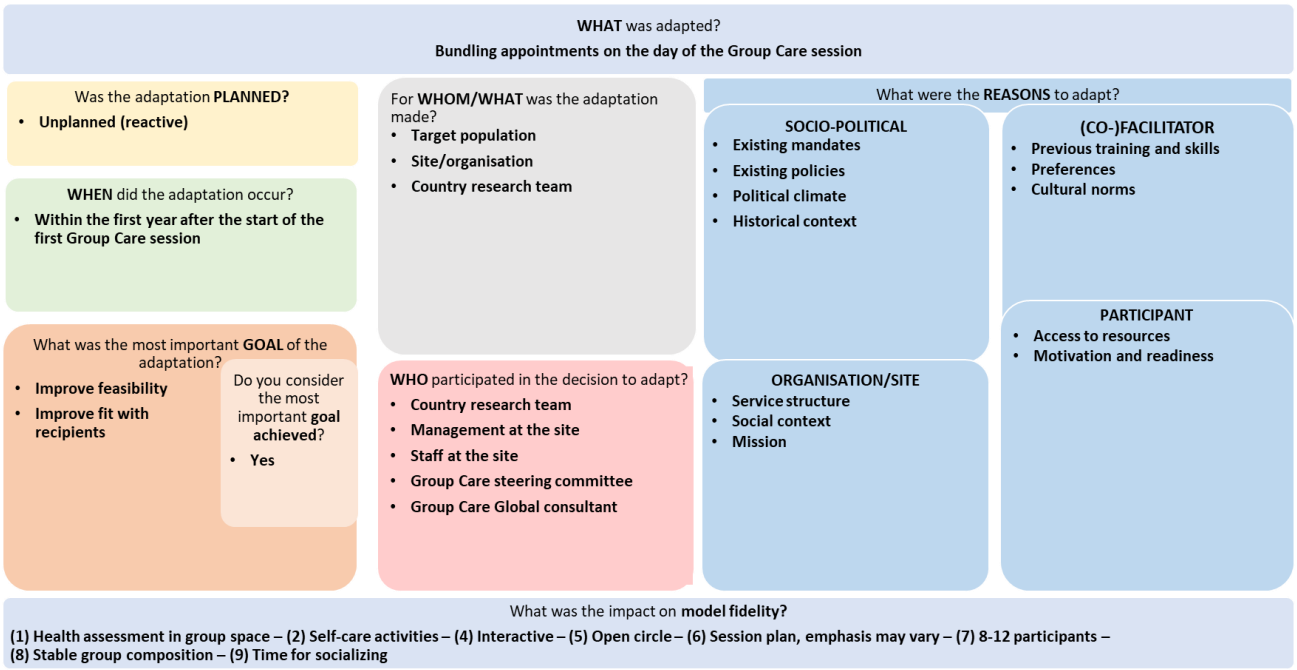

Figure 16 *Results from Kosovo regarding scheduling Group Care into regular care – Adaptation 1*

This decision was **unplanned** and took place **within the first year** after the start of the first Group Care sessions. It arose later in response to feedback from participants who expressed difficulties in attending medical services on separate days. The adaptation was a responsive measure, implemented to address the practical challenges faced by participants, highlighting the flexibility and adaptability of the program to meet the evolving needs of the participants involved. The **decision** was a collaborative decision between the facilitators at the site, management at the site, Group Care Global consultant, and Group Care general steering committee. The **main goals** were to improve feasibility and fit with the participants, and are considered achieved. Regarding **for whom/what** this adaptation was made, both target population, the site, and the country research team are selected. Only one respondent mentions socio-political **reasons** (e.g. historical climate and existing mandates), and site-related reasons (e.g. social context). These reasons pertain to the service structure, particularly because group care has not yet been integrated into the national antenatal care services. Reasons related to participants center on access to resources, specifically access to the services and information provided in the Group Care sessions. The adaptation was implemented to enhance the feasibility, motivation and readiness of participants of the sessions. The survey showed an experienced positive impact on the **definers of the Group Care model**. As one respondent states: "*without this decision to have the groups facilitated by the midwives, there wouldn't be Group Care in Lipjan*". It also had a positive impact on the numbers of participants, as there was less drop-out because of this measure to plan the appointment with the obstetricians on the same day as the Group Care session.

Adaptation 2: reduced time of Group Care sessions

The **duration of the Group Care sessions is reduced** from 2 hours to 1 hour up to 1 hour and 15 minutes.

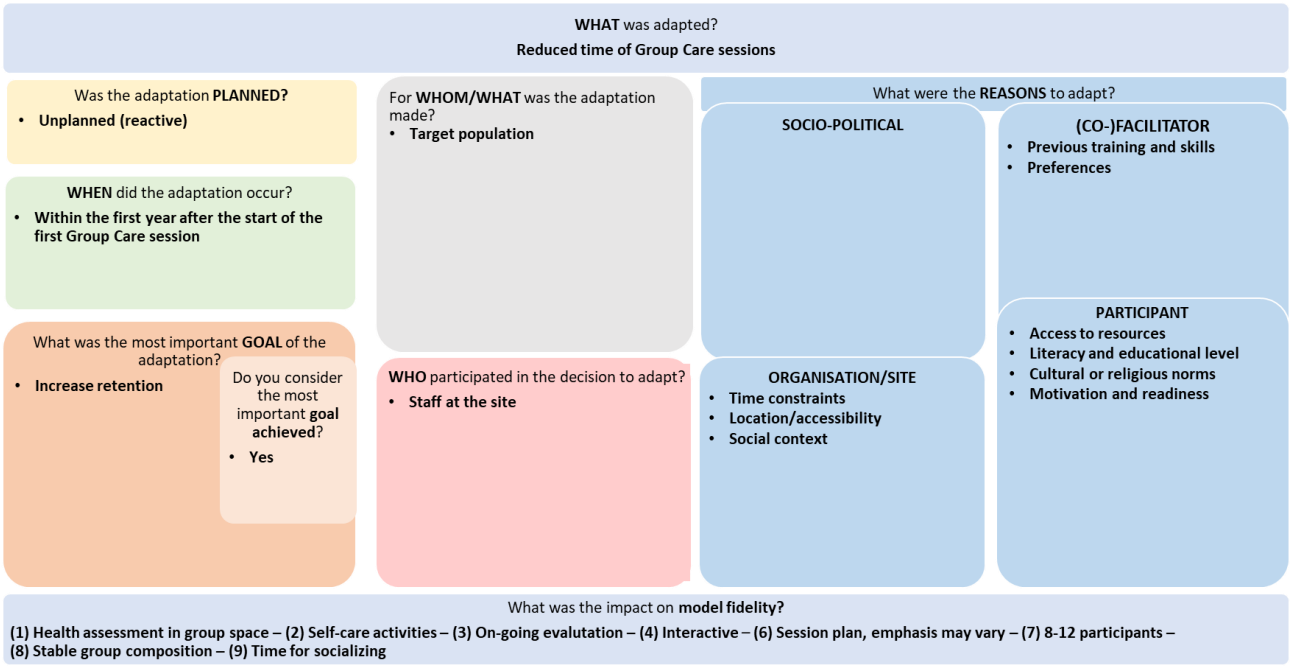

Figure 17 *Results from Kosovo regarding scheduling Group Care into regular care – Adaptation 2*

It was an **unplanned** adaptation that occurred **within the first year** after the start of the first Group Care session. One respondent explains: *"In the beginning, the sessions were strictly two hours, but by the end of the session, almost all the women went or were not calm enough to*

continue because their husbands or other family members were waiting at the door and they were pressured by phone." The participants often have travelled from rural areas and have always been in the company of their husband, mother-in-law or sister-in-law. The **decision** was made by the facilitators, to respond to the needs of the participants. Accordingly, the target population is selected as **for whom** this adaptation was made. The **main goal** was to increase retention, and this goal was considered achieved, as the participants are now staying until the end of the session. One respondent states *"Also during the time they are inside they are calm and not stressed by the others to leave or finish the sessions as soon as possible."* The respondents select no socio-political **reasons**, although the historical context of the relationship of a pregnant person with the partner and family-in-law seems to have played a major role in the decision. The respondents did state this as a site-related reason (i.e. societal context') and a participant-related reason (i.e. cultural norms). The preferences of the facilitators also played a role, in order for the participants to keep joining the full sessions. A positive impact was described on most of the **Group Care model definers**, such as number of participants and a stable group composition.

4.2.4 South Africa

One strategy to ensure qualitative scheduling was the optimisation of the booking system and bundling of the consultations and ultrasounds outside Group Care on the same day.

Adaptation 1: adaptation in the booking system

To facilitate the implementation of Group Care in the participating site in South-Africa, there was an adaptation made into the **antenatal care booking system**. The hospital uses a booking system to manage the number of people who present at the hospital daily. On the day of a Group Care session, the number of patients who are booked for the routine care is reduced so that there is time left for the midwife to facilitate the Group Care session. This does not however affect the total number of pregnant people booked in a month, only on that day the number is reduced. All those who are participating in Group Care are scheduled to come at 11AM on the day. The facilitator as well needs to attend to the low-risk clinic first, so the agreed start time was 11AM to limit disruption with routine antenatal care. Participants are booked for Group Care sessions on the day they would normally come for their scheduled antenatal care appointments so that they are not inconvenienced. Even if they are scheduled for an ultrasound, which is not part of Group Care, an arrangement is made so that they do not come at the usual time which is 7AM for all ultrasound appointments.

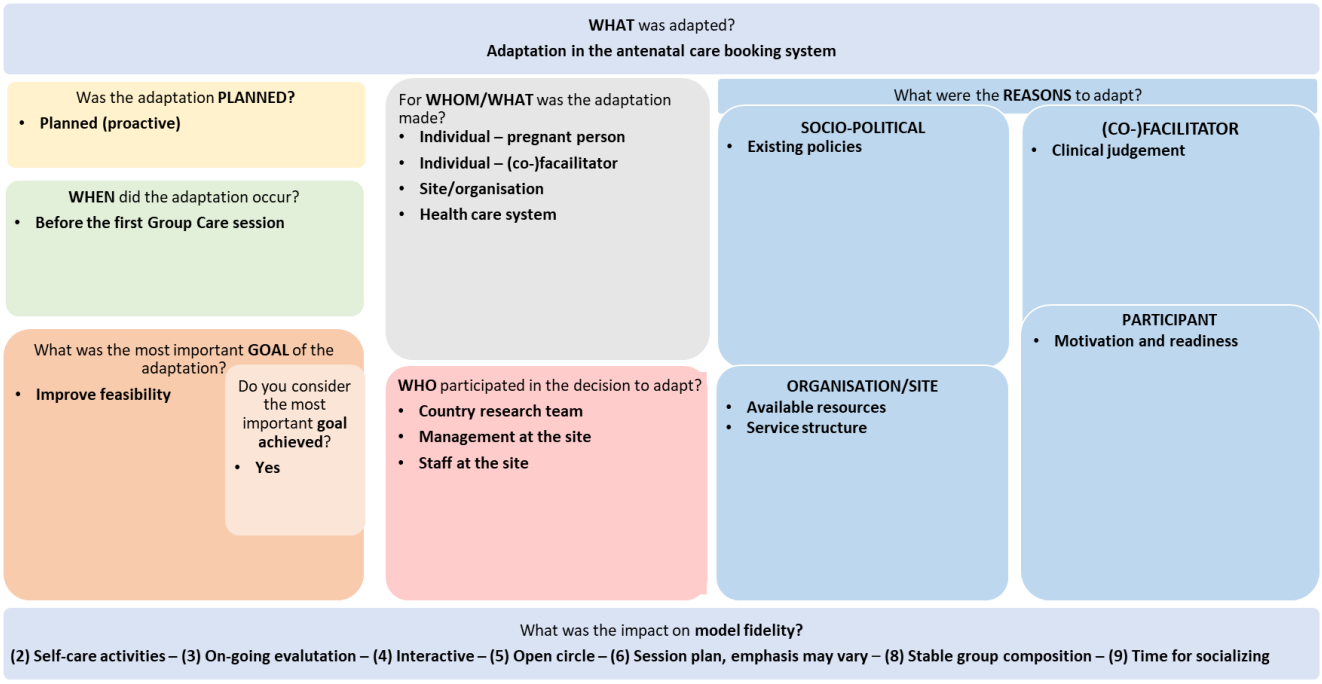

Figure 18 *Results from South Africa regarding scheduling Group Care into regular care – Adaptation 1*

The decision on how to reschedule the current antenatal care to make Group Care fit within was **planned** and took place **before the first Group Care session**. It was a joint **decision**: the staff working in the antenatal care clinic (the manager and the midwife who provides the antenatal care services) in the hospital were always part of the decision-making process as they were the ones who needed to implement Group Care. Their insight was the most important and they made the decision on how best it would work. Also, the midwife who runs the low-risk clinic is a champion for Group Care and she was highly motivated to make it work in the system as she believed that Group Care would be good for participants, and she has a very supportive manager in the antenatal care department. The nursing manager in the hospital was also part of the decision-making and the country research team provided input into the scheduling decision. The **main goal** selected was to improve feasibility, and added that the ultimate goal is patient satisfaction, and was achieved according to the respondents of the survey. One respondent states: *"It was designed to ensure that group care can be implemented in the site without compromising routine care and as well the quality of care that women get."* Another respondent stresses the importance of scheduling it on the same day as routine care: *"it is good to schedule the group on the days of regular care and that only time is changed, and it suits most women."* Different **reasons** for the adaptation are selected. The most important conclusion regarding these reasons seems that the overall approach is to make sure the new model is fit into service delivery with no or minimal disruptions into institutional functioning of the hospital. Some positive **influence on the Group Care model** definers are selected in the survey, although the adaptation did not directly impact the definers, they all remained intact.

4.2.5 Suriname

In order to optimise scheduling, Group Care sessions were planned in the afternoon instead of the morning. A second adaptation described in Suriname was allowing flexibility in offering child vaccination in postnatal Group Care.

Adaptation 1: shift in working hours of the facilitator

Regarding scheduling antenatal Group Care into regular care in Suriname, the most impactful adaptation was that groups were **shifted from morning to afternoon hours** to accommodate the need of the participants (after working hours). This required rescheduling of the working hours of the facilitators from 7AM-3PM to 11AM-7PM.

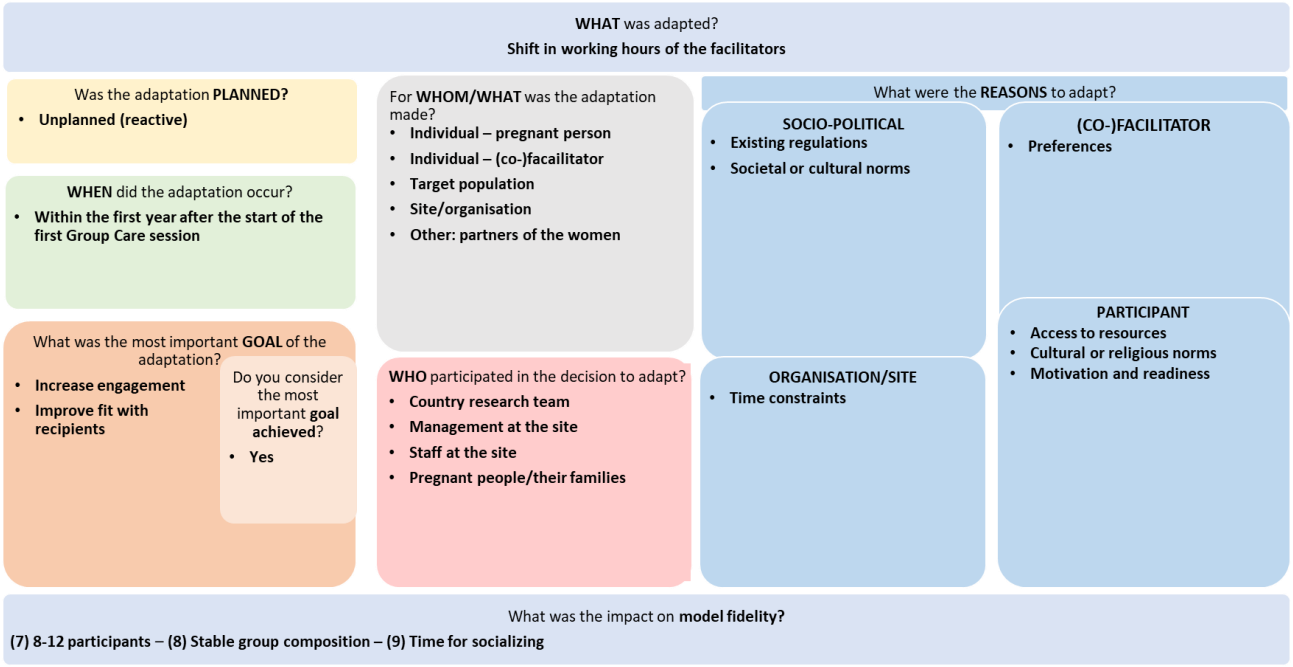

Figure 19 *Results from Suriname regarding scheduling Group Care into regular care – Adaptation 1*

Shifting from morning to afternoon sessions for antenatal care was discussed after the second group had low attendance rates and afternoon sessions started from the third group. Thus, it happened **after the start of the first Group Care sessions**, and this shift in working hours was **not part of the original Group Care implementation plan**. The adaptation was a joint **decision** by the facilitators, management at site, and the country research team. Indirectly, the participants were also involved in the decision, as they brought up the idea. The **main goal** of organizing the antenatal Group Care sessions in the afternoon was to improve fit with recipients: to be able to attend Group Care sessions after working hours. The goal is considered achieved, because before the adaptation the Group Care sessions' attendance dropped to a minimum, and after the adaptation the attendance increased considerably. This rescheduling was not a simple matter. There are several **reasons** behind this difficulty, including the need for approval of the management in the site and of the human resources department. The societal norms also played a role, more specifically considering that many pregnant people are working in the morning. There is also a cultural norm that is considered a reason to shift the Group Care sessions' timing: involvement of partners is generally low in Suriname, and they want to improve this by organising the sessions in the afternoon. This way the partners can join the sessions. A positive influence on some of the **Group Care model definers** is experienced, mainly those related to the group composition, as the adaptation solved an enrolment issue.

Adaptation 2: Flexibility around vaccination inclusion in postnatal Group Care

In Suriname, postnatal Group Care is a new concept. Therefore, they allowed **flexibility and parental choice around vaccination inclusion** during the sessions. Parents have the choice to have vaccination either during the Group Care session in the hospital site for a charge or at the

RGD (regional health service) free of charge. If during the session the baby did not reach the age to be vaccinated, parents are invited for another day to come with their baby for the vaccination only, in addition to the Group Care session. Because vaccinations are provided for free at the regional health service, the participating implementation site does not want to oblige parents to have their child vaccinated in Group Care for a charge. Additionally, by offering the possibility of vaccinations, the site grants the option of receiving full medical care for the children during Group Care sessions.

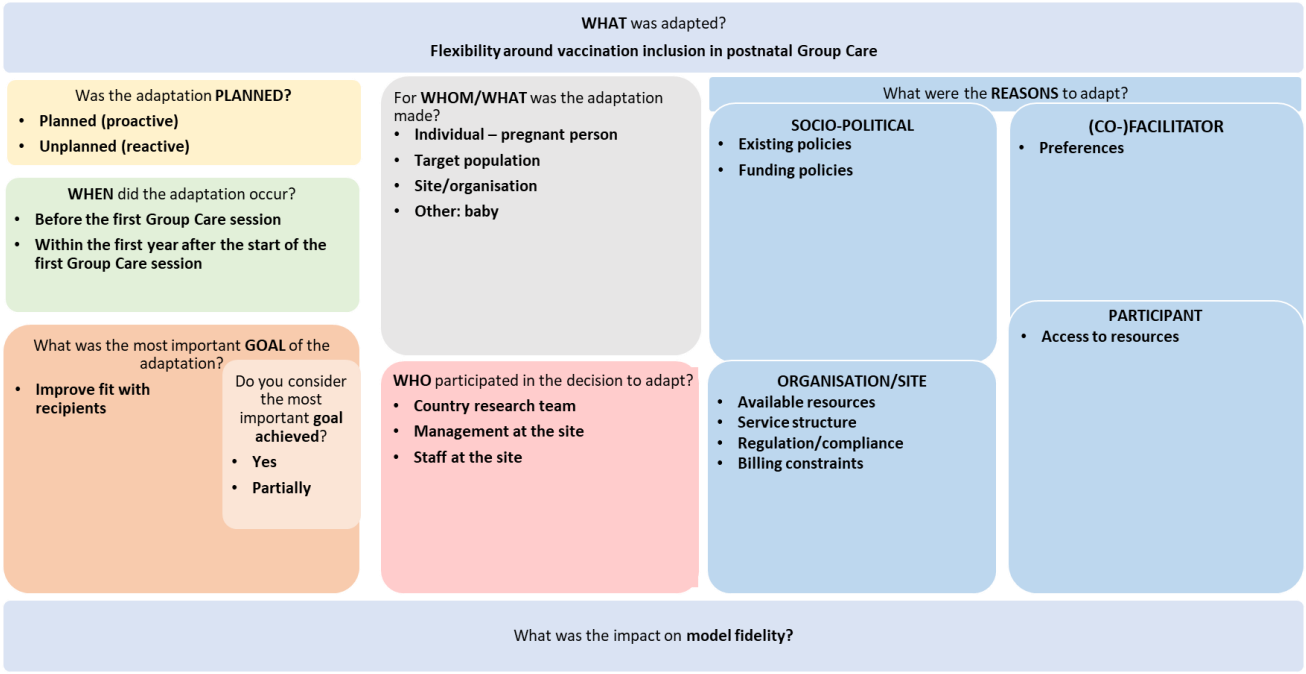

Figure 20 *Results from Suriname regarding scheduling Group Care into regular care – Adaptation 2*

The decision to give the parents a choice whether or not to include the vaccinations was **planned** and **took place before the start of the first Group Care sessions.** The suggestion for an extra individual consult when the baby did not reach the correct age for vaccination at the time of the Group Care was reactive to the situation and thus **unplanned**. These were joint **decisions**, among others with the staff and management at the site involved. The adaptation was **done for the participants** of the Group Care sessions (both parents and babies), and the site, with the **main goal** to improve fit with patients. This main goal is considered (partially) achieved: Some parents attending postnatal group care made use of the opportunity to vaccinate their children at the Group Care implementation site (for charge) instead of going back to the primary care for free-of-charge vaccination. One respondent gives an example of how this adaptation did work out in practice when a baby did not have the appropriate vaccination age at the time of the Group Care session: *"The mother came back with the baby and the baby was vaccinated at the appropriate age."* Several **reasons** are selected for his adaptation. E.g., the existing policies regarding timing and costs of vaccinations were reasons connected to the decision to include this flexibility regarding vaccinations in Group Care sessions, to align with the existing policies. No influence on the **Group Care model fidelity** is described.

4.2.6 The Netherlands

One adaptation to optimise scheduling of Group Care sessions in the Netherlands was described and includes a shift in the working hours of the facilitators.

Adaptation 1: shift in working hours of the facilitators

In the Netherlands, one of the participating sites **shifted the Group Care sessions to the evening**, instead of organizing them during the day. The midwives preferred to hold the sessions during the day, but they experienced difficulties in achieving a preferred group size of 8-12 participants. Therefore, they changed the timing of their Group Care session.

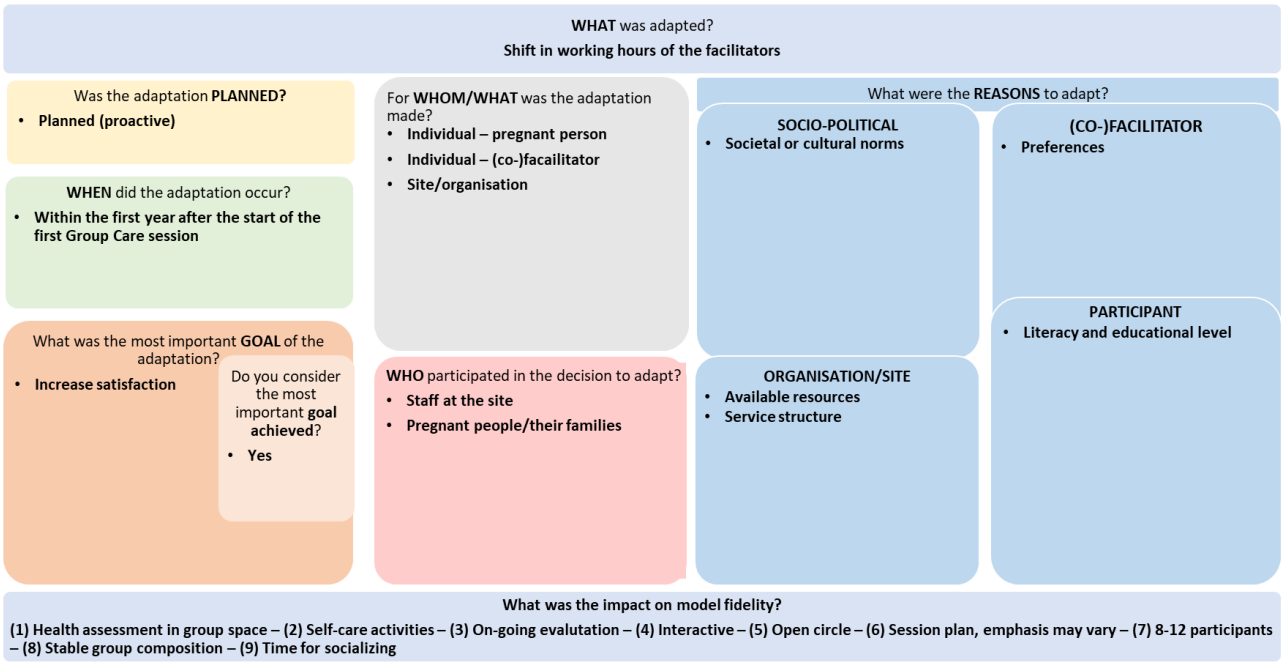

Figure 21 *Results from the Netherlands regarding scheduling Group Care into regular care – Adaptation 1*

It was a **planned** adaptation that occurred **within the first year** after the start of the Group Care sessions. The staff at the site, i.e. the facilitators, and the participants were involved in the **decision**. The **main goal** to shift the timing of the Group Care sessions, was to increase satisfaction, which is considered achieved. According to one of the respondents, the participants are very enthusiastic about Group Care. Societal and cultural norms are described as socio-political **reasons** to play a role in the decision, as most pregnant people are at work during the day. This makes it hard to arrange to attend a Group Care session within working hours. The evening attendance however could be a barrier for other groups, such as some pregnant people that are not at work during the day, but cannot attend sessions in the evening because of household and caring responsibilities. Multiple other reasons were selected, such as available resources at the site, educational level of the participants, and preferences of the facilitator. Despite the respondent indicating a preference for daytime groups at the beginning of the survey, it does not outweigh the benefits of a larger group in the evening: it makes it easier and more motivating to facilitate larger groups and is financially more profitable. An overall positive **influence on model fidelity** was expressed in the survey. The hypothesis is that the fidelity regarding interactive facilitating and group building activities is increased when the group size is not too small.

4.2.7 UK

Two adaptations to enhance scheduling of Group Care into regular care in the UK were described. A first adaptation includes the integration of Group Care in the online booking

system. Next, one of the sites scheduled the Group Care sessions in a mix with individual appointments.

Adaptation 1: integrating Group Care into electronic booking system

The first adaptation in the UK to get Group Care scheduled into regular care was that they worked very hard to **integrate scheduling of groups into their electronic scheduling system**. This required significant back and forth with IT, and resulted in some confusion for participants and missed Group Care sessions during the initial GC_1000 roll out. Despite these challenges, the site managed to make it work. One respondent states the following about this adaptation: *"I was impressed by how hard the site steering committee worked to correct this and I think early involvement of IT for scheduling in future in a context where there is electronic scheduling is essential."* The participants knew their appointments would be in a circle and so that their individual appointments were cancelled and replaced with the circle. A brand new clinic code had to be created for Group Care sessions.

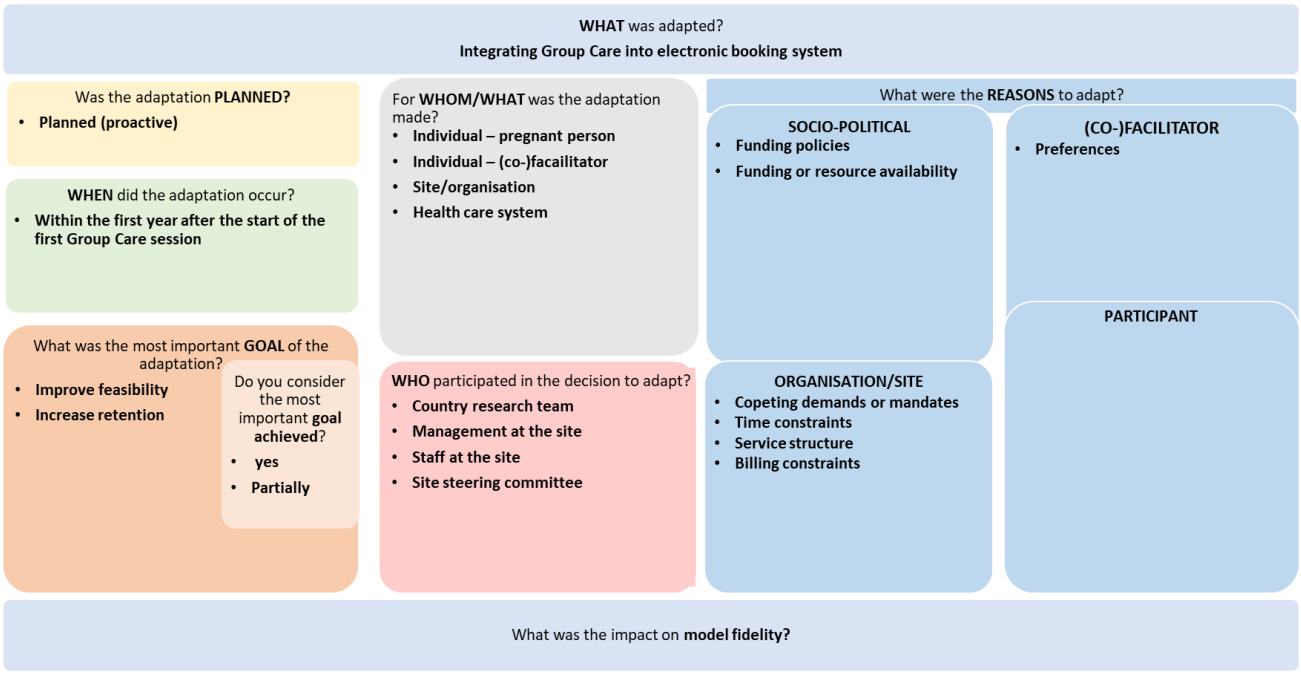

Figure 22 *Results from UK regarding scheduling Group Care into regular care – Adaptation 1*

The IT adaptations were **planned** and put in practice **after the start of the first Group Care sessions**. Respondents recommend to have these IT-changes before the start of the Group Care sessions. This adaptation was **made for** the participants, facilitators, the site and the broader healthcare system. The **main goal** of this adaptation was to improve feasibility and increase retention, which are considered (partially) achieved. Organizational chaos would be expected if the Group Care sessions were not in the booking system of the hospital. The mentioned **reasons** are related to funding and billing constraints: *"If the billing is not sorted, even in an NHS you need to understand the wider strategic outcomes of moving women about because it all comes into the costings how many women are being cared for in circle.*" This shows that the IT-system is not only helpful to solve practical booking issues, but also for billings, and possibilities for evaluation, e.g. on attendance. No **influence on the Group Care model** definers are described.

Adaptation 2: mix of individual appointments and Group Care sessions

One of the three participating implementation sites redesigned the format of exclusive Group Care sessions into **three individual antenatal appointments and five antenatal Group Care sessions**. The standard UK antenatal care standards as advised by NICE are followed. Also, it was decided in one group to try having **one of the sessions virtual**.

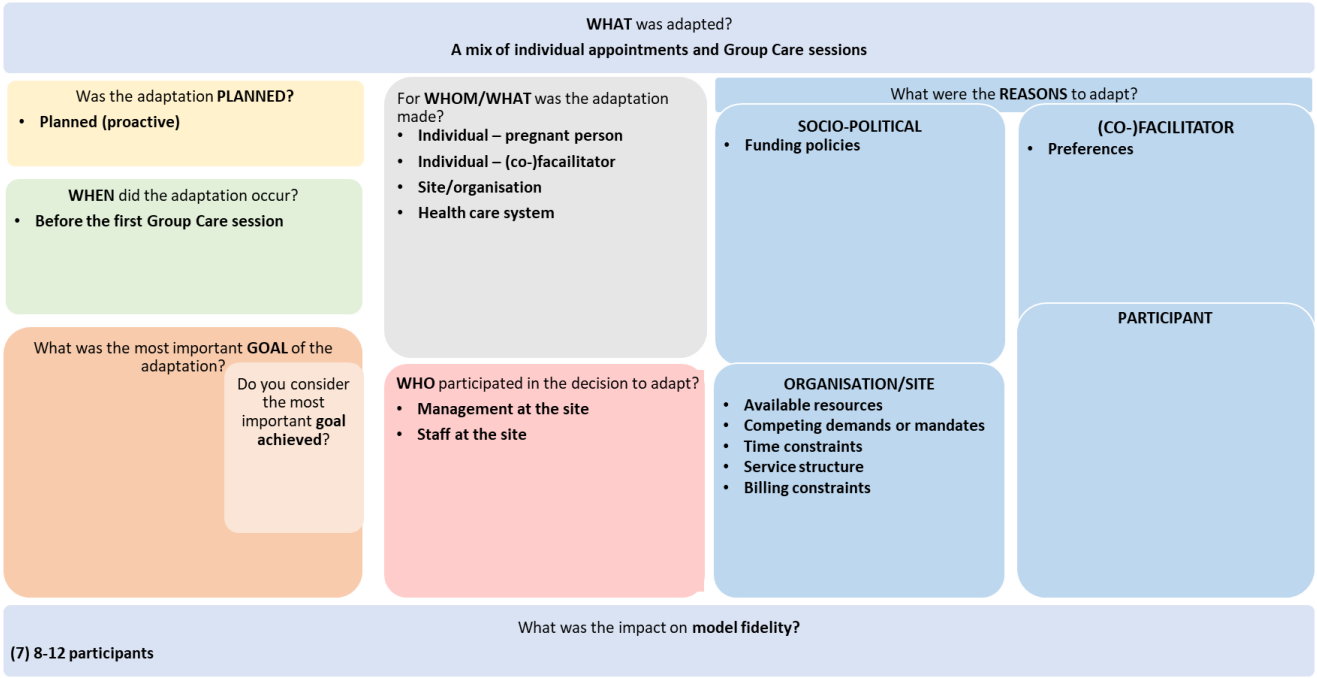

Figure 23 *Results from the UK regarding scheduling Group Care into regular care – Adaptation 2*

The adaptations in scheduling format was **planned** and **decided upon the start** of the first Group Care sessions. Both the mix of individual appointments and Group Care sessions and the online component was then dropped for subsequent circles as it wasn't working well. According to the survey, the adaptations are put **in practice for** the participants, the facilitators, the site, and the health care system. The plan to include a virtual visit was a post-Covid adaptation because this service had already been providing Group Care in the Pregnancy Circles trial and had to switch to virtual during Covid to maintain any group element. As this worked in the lockdown situation the teams decided to try keeping a small virtual element. Management and staff at the site were involved in this **decisions**. No clear **aim** was described for the adaptations, but there are some involved **reasons**. These are mainly site-related, such as available resources: additional time and personnel was needed for the Group Care sessions. With staffing shortages they hoped to save time. In fact, they found the mixed approach did not really save time, however, as it caused confusion and led to duplication when some participants did not attend the groups and so needed to be followed up. Furthermore, organizing Group Care sessions is linked to difficulties in finding large enough rooms. Facilitating midwives and those overseeing model implementation reported that participants were repeatedly missing the last Group Care session prior to an individual appointment. There was speculation that participants skipped the last group session because an individual appointment was scheduled shortly thereafter. Because of participants skipping Group Care sessions, this may **influence the Group Care model definers**, such as an ideal group size of 8-12 participants. One participant states: *"Scheduling individual appointments so close to group appointments may contribute to women missing either of the appointments."* The schedules were more complex and it seemed to undermine confidence in the group model as covering clinical care, not just like a parent education session.

4.2.8 Cross-country analysis regarding scheduling Group Care into regular care

There are three common described adaptations regarding scheduling Group Care into regular care. Some involved a change in the model to accommodate the needs of the context, such as a mixture of Group Care and individual appointments. Others involved a change in the context to accommodate Group Care, such as shifting the working hours of the facilitators.

In three countries (Belgium, Kosovo and UK), a Group Care schedule was created that had a mixture of individual follow-up appointments and Group Care sessions. Whereas in the UK this was rather confusing for the participants and later dropped, in Belgium and UK this appeared to be needed to get the obstetricians on board of Group Care implementation. In the UK and Belgium, this was a **planned** decision, whereas in Kosovo it was an **unplanned** reactive adaptation. As with the health assessment adaptations, these were also joint **decisions** with multiple stakeholders involved. The big difference between these countries is that in Belgium and Kosovo, there is an antenatal obstetrician-led care model, whereas in the UK there is a strong midwifery-led antenatal care model. In the obstetrician-led countries, the number of Group Care sessions was reduced to maintain some individual appointments at the obstetrician. This was considered essential to make Group Care implementation a possibility at their site. In both countries, the existing policies and historical context with this regard was one of the main **reasons** to opt for this schedule with both individual appointments and Group Care sessions. This was not the case in the UK, where there were more site-related reasons rather than socio-political reasons playing a decisive role. The staff shortages is one of these site-related reasons, as de facilitators hoped to save time by implementing this schedule. But in the end, it didn't save time and these schedules were more complex. A very important reflection with regard to these mixture of individual appointments and Group Care sessions, is that it seemed to undermine **confidence in the Group Care model** as covering clinical care. In the UK, as there were no existing policies forcing them to this schedule, they acted upon their lessons learned and shifted to exclusive Group Care sessions. This highlights the flexibility and open-mindedness of the team to switch from the original plan and develop a new schedule during an implementation process.

In two countries (South Africa and UK) adapting the booking system was central to start scheduling Group Care into regular care. In the UK, the most important lesson learned was that it would have been beneficial if this booking system was set-up **prior to the start** of the Group Care sessions. This was the case in South-Africa where the electronic booking system is not designed to book groups of women together, it was therefore decided before the first group session that the midwife would need to book participants in Group Care manually in a paper book before the first Group Care session. It worked for the midwife as she was highly motivated. The electronic booking system would need to be reconfigured in South Africa to allow for booking Group Care within the electronic booking system. The participation of multiple stakeholders in the **decision** to adapt the booking system enabling the inclusion of Group Care scheduling was similar in UK and South Africa. Mainly site-related **reasons** occurred in both countries, as this booking system is necessary for fluent patient follow-up and attendance evaluation, among others.

In the Netherlands, Suriname and Kosovo there was a shift in the timing of the sessions. In Kosovo, the sessions were shortened, and in the Netherlands and Suriname some of the Group Care sessions shifted in timing to afternoon or evening. Despite the different context of these countries, there are in all three of them societal norms as a **reason** for adaptation. In Kosovo

regarding the role of the partner and family-in-law, and in The Netherlands and Suriname to fit the working hours of the participants. In all three countries, it was a **reactive unplanned adaptation**, to improve the enrolment of participants in Group Care sessions.

In general, the participating implementation sites showed great flexibility and took into account different interests, always keeping the **interests of the participants in the foreground**. Although it is becoming clear that the actions taken to schedule Group Care in regular care go beyond merely these interests of the participants. Those of health care providers and the general health care system were often cited as well. The **main goal** of the majority of the described adaptations is to improve feasibility of Group Care implementation.

Regarding **model fidelity**, there is a similar observation compared to the adaptations when implementing the health assessment aspect of Group Care: these adaptations are often needed to make Group Care possible in a site. Overall, there is the perception of a positive influence on model fidelity, although these are often not directly linked to the described adaptation but rather to the general Group Care model.

5 DISCUSSION

At the start of the Group Care 1000 project, extensive context analyses were conducted via Rapid Qualitative Inquiries to gain an in-depth knowledge and understanding of the context of the participating implementation sites. These context-analyses indicated, among other things, that challenges were anticipated in each of the sites around specific aspects of Group Care implementation, and that adaptations are needed to tackle these challenges and make Group Care implementation possible. The occurring challenges identified in each of the participating implementation sites are elaborated in the GC_1000 Deliverable 3.2 and structured in the 'Anticipated Challenges Framework to support the implementation of Centering-Based Group Care'. The developed framework enables for anticipation of these required adaptations. Therefore, this framework can be regarded as part of a blueprint for start-up.

Recommendation for blueprint and scale-up

Anticipate necessary adaptations – the 'Anticipated Challenges Framework to support Group Care implementation' can be useful

Two of these general cross-country anticipated challenges came to the forefront: (1) how the health assessment component of the Group Care model can be operationalized, and (2) how Group Care as an antenatal care model can be integrated into regular antenatal care in the site. Based on this, we examined which adaptations the participating implementation sites made and who/what played a role in this adaptation process. Respondents were given the opportunity to describe the most impactful adaptation with regard to health assessment and scheduling Group Care into regular care. This included both adaptations to the model to operate within a particular context, and adaptations to the context to enable implementation of the model. In-depth understanding of these adaptations were gained through incorporating all aspects of the FRAME.

The data from this survey confirm the anticipated challenges related to health assessment and scheduling Group Care into regular care that emerged during the RQIs. In all participating implementation sites, actions taken to incorporate health assessment and to schedule Group Care into regular care are described. Remarkably, these are rarely real adaptations to the model, but rather changes to the context or implementation strategies to make it possible to implement the Group Care model.

Recommendation for blueprint and scale-up

In an implementation process, "adaptation" goes beyond merely modifying the original intervention. It can also include adaptations in the context or implementation strategies.

Despite careful planning in all participating implementation settings, there appears to be a mix of planned and unplanned adaptations. A well-planned adaptation process is strongly encouraged, but our research also demonstrates that the unplanned adaptations can lead to a beneficial result. More than that, it shows a strong flexibility of the sites to deviate from their planned implementation process. These unplanned adaptations are mainly linked to improve the fit the participants, and the general feasibility of Group Care implementation in the site. For example, a shift in working hours of the facilitator to create increased Group Care attendance possibilities for participants. Most of the unplanned adaptations occurred in an early stage of the implementation process. Regardless of whether the adaptation was planned or unplanned, it nearly always entailed a joint decision. Decisions to make adaptations are generally made by the facilitators and management of the organization. It was stated several times that this broad-based support contributed to successful adaptation.

Recommendation for blueprint and scale-up

Benefit from the steering committee to reach planned, informed, and supported decisions on adaptations. Monitor model fidelity in these choices.

The overall main goal of the adaptations was often linked to feasibility of Group Care implementation, mainly to optimize it for participants and facilitators. The reasons to adapt are mostly related to the organization of the healthcare system, either its policy or infrastructure. The importance of the current organization of antenatal and postnatal care, for example midwifery-led versus obstetrician-led, became clear. The health care system has a much greater influence on the implementation process and need for adaptations than the socioeconomic status of the country.

Recommendation for blueprint and scale-up

Lessons learned from others can contribute to optimized adaptation strategies. Identify countries with a similar perinatal health care system, rather than a similar socio-economic context.

Regarding the inclusion of the health care component in Group Care, which appeared to be the biggest change compared to regular care, we can conclude that this is possible in all countries. If a country has limited space available, it seems to be possible everywhere to find an adjoining room or other creative solutions to include the medical one-to-one medical check-up without deviating too much from the goal of organizing it all in one room. The time needed to realize this medical follow-up was an adaptation in several countries that has an impact on the time left for facilitated discussions. Learning from other facilitators could be a strategy to reduce this time in the long run, e.g. via a global and/or local Group Care community of practice. If, given the cultural or policy context, it is unusual or not allowed for participants to complete the self-assessment individually, facilitators can support them. In the long run, this strategy could be phased out, especially when the cultural context is the influencing factor.

When scheduling Group Care into regular care, good practices are described on changes in the antenatal or postnatal care booking system, to optimise enrolment and extend evaluation possibilities. In countries where the regular antenatal care pathway consists of less than 10 appointments or in case of an obstetrician-led care system, we see a reduction in the number of

Group Care sessions. This in order to reduce the gap with current care or avoid the overconsumption of healthcare resources. If there is no reduction in the number of sessions in obstetrician-led countries, we see Group Care shorter or fewer Group Care sessions.

All implementing sites strongly adhered to the vision to implement Group Care in a sustainable manner so that pregnant people in these sites can continue to benefit from Group Care, even when the Group Care 1000 project is finished. Hence, much attention was also paid to aligning a Group Care model of care as closely as possible with current local and national antenatal care policies. In general, the adaptation process is often a complex matter. However, creativity and flexibility of implementation sites has shown many possibilities. It is relevant to consider the various reasons that play a role in adapting. Hence, it is useful to put different perspectives together and place the adaptations within the local contexts to get a larger picture. Sometimes, important underlying reasons still emerge this way. By putting these different perspectives together, a joint decision can be reached to enhance the chances of a successful adaptation and, this way, a sustainable implementation.

Recommendation for blueprint and scale-up

The Group Care 1000 project demonstrates that creative solutions can be found by taking context-specific and manageable steps throughout the project phases, even for challenges that seemed too big to tackle at the start of the implementation process.

6 LITERATURE REFERENCES

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