Addressing perinatal health inequities in Dutch municipalities: Protocol for the Healthy Pregnancy 4 All-3 programme

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A B S T R A C T

Background: Health inequities are already present at birth and affect individuals’ health and socioeconomic outcomes across the life course. Addressing these inequities requires a cross-sectional approach, covering the first 1,000 days of life. We believe that – in the Dutch context – municipal governments can be the main responsible actor to drive such an approach, since they are primarily responsible for organising adequate public health. Therefore, we aim to identify and develop transformative change towards the implementation of perinatal health into municipal approaches and policies concerning health inequities.

Methods: A transition analysis will be combined with action research in six Dutch municipalities. Interviews and interactive group sessions with professionals and organisations that are relevant for the institutional embedding of perinatal health into approaches and policies regarding health inequities, will be organised in each municipality. As a follow-up, a questionnaire will be administered among all participants one year after completion of the group sessions.

Discussion: We expect to gain insights into the role of municipalities in addressing perinatal health inequities, learn more about the interaction between different key stakeholders, and identify barriers and facilitators for a cross-sectoral approach to perinatal health. This knowledge will serve to inform the development of approaches to perinatal health inequities in areas with relatively poor perinatal health outcomes, both in the Netherlands and abroad.

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1. Introduction

Substantial perinatal health inequities exist between and within cities across high-income countries [1–3]. These inequities have long-term health consequences and therefore major implications for public health [4]. Next to medical risk factors, accumulation of non-medical risk factors, such as low educational level, psychosocial problems, lack of social support, a low household income, unemployment, and neighbourhood deprivation underlie perinatal health inequities [1,2,5–8]. Perinatal health challenges associated with these non-medical risk factors are beyond the scope of the traditional remit of the perinatal health care system and are, at least in part, either directly or indirectly shaped by municipal policy.

As the preconception, prenatal, postpartum, and early childhood periods (i.e. the first 1,000 days of life) bear substantial plasticity, these allow for improvement via early interventions that help enable the development of the functional capacity of a child to respond to health challenges throughout life. Interventions during the first 1,000 days of life that address the early-life causes of health inequities require a holistic and cross-sectoral approach to...
health that appreciates the interconnectedness of medical, social, economic, cultural, and environmental risk factors.

Such a cross-sectoral approach to perinatal health, engaging the entire medical, social, and public health care chain, as well as the national and municipal government has been labelled ‘social obstetrics’. Based on the core ideas of social obstetrics, the Ready for Baby programme (2008–2012) was established to address perinatal health inequities in Rotterdam, the Netherlands [9]. Building on the insights of Ready for a Baby, the Ministry of Health, Welfare, and Sport subsidised the nationwide research programme Healthy Pregnancy 4 All (HP4All) [10]. The first HP4All programme (2011–2014) emphasised collaboration between the medical, social, and public health sector, as well as municipal governments on preconception and antenatal care [11,12]. This approach has been extended to cover postpartum care (i.e. maternity care), Preventive Child Health Care, and interconception care within the second HP4All programme (2014–2017) (Table 1) [13,14]. Building on the know-how acquired through Ready for a Baby and HP4All, the Ministry of Health, Welfare, and Sport launched a nationwide action programme entitled Solid Start in 2018. Solid Start supports municipalities in addressing health inequities before, during, and shortly after pregnancy. Through financial incentives, participating municipalities are encouraged and facilitated to build a cross-sectoral approach to perinatal health to support parents(-to-be) and/or young children living in precarious conditions.

The Ready for a Baby and HP4All programmes have demonstrated the potential of a cross-sectoral approach to perinatal health to interrupt the negative cycle of events associated with social and environmental risk factors among parents(-to-be) living in precarious conditions. Both programmes have sparked awareness of the impact of non-medical risk factors on perinatal health outcomes among professionals across different sectors. This resulted in a stronger focus of national and municipal policies on preventive care and health measures early in life, which contributed to the foundation of a cross-sectoral approach to perinatal health in the Netherlands [15–19]. Despite these promising results, this cross-sectoral approach is still not the status quo in the Netherlands. This might be explained by the fact that research into perinatal health inequities predominantly focuses on the identification of its causes and evaluation of subsequent interventions within the medical care sector. However, perinatal health inequities originate from a range of medical, social, cultural, and environmental factors [1,2,5–8]. Addressing them requires a holistic and cross-sectoral approach beyond the boundaries of the medical care sector, as well as those of the (separate) social, and public health care sector. We believe that - in the Dutch context - municipal governments can be the main responsible actor to drive such an approach, since they are primarily responsible for organising adequate public health. Local politicians and civil servants are ideally positioned to create such an approach [20].

To better understand the cultural, behavioural, and institutional barriers for a cross-sectoral approach to perinatal health and to find out how this approach can be implemented at the municipal level, action research – in which research, participation, and action form a simultaneous process – in combination with transition analysis can be a fruitful approach. Transition analysis assembles different perspectives on an issue in order to develop a new way of understanding a persistent societal problem and identifying the drivers behind this persistency. By sharing and discussing a transition analysis with key stakeholders that are struggling with a persistent societal problem, new strategies

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**Table 1** Overview of Dutch research and policy programmes that preceded the Healthy Pregnancy 4 All-3 programme.

| Programme | Initiator(s) | Financier | Time period | Location | Key approaches |
|-----------|--------------|-----------|-------------|----------|----------------|
| Ready for a Baby [9,15] | Erasmus MC, GGD Rotterdam-Rijnmond | Municipality of Rotterdam | 2008–2012 | City of Rotterdam | Health promotion through customised preconception care, Systematic antenatal risk assessment (R4U) with increased attention for non-medical risk factors, Interdisciplinary risk-directed care, Establishment of a primary birth care centre in the Erasmus MC (Rotterdam) |
| Healthy Pregnancy 4 All-1 [10,18,31] | Erasmus MC | Ministry of Health, Welfare, and Sport | 2011–2014 | 14 Dutch municipalities: Almere, Amsterdam, Appingedam, Delfzijl, Enschede, Groningen, Heerlen, Menterwolde, Nijmegen, Pekela, Schiedam, The Hague, Tilburg, Utrecht | Health promotion through customised preconception care, Antenatal R4U risk assessment followed by patient-tailored multidisciplinary care pathways |
| Healthy Pregnancy 4 All-2 [13,14,32,33] | Erasmus MC | Ministry of Health, Welfare, and Sport | 2014–2017 | 10 Dutch municipalities: Almere, Amsterdam, Arnhem, Dordrecht, Groningen, Rotterdam, Schiedam, The Hague, Tilburg, Utrecht | Interconception care through Preventive Child Health Care, Structured risk assessment during pregnancy and customised maternity care, Optimising postnatal R4U risk assessment in Preventive Child Health Care |

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a GGD Rotterdam-Rijnmond provides the Municipal Health Services for the municipality of Rotterdam as well as for the surrounding municipalities.

b All municipalities were selected based on their relatively poor perinatal and child health outcomes.

c R4U stands for Rotterdam Reproductive Risk Reduction and is a 70-item score card, assessing risks for adverse pregnancy and child health outcomes in six domains (social status, ethnicity, care, lifestyle, medical history, and obstetric history) [34].
and pathways for a desired transition can be identified. This type of analysis enables academics to take part in process-oriented research, rather than applying traditional descriptive-analytical methods [21].

1.1. Healthy Pregnancy 4 All-3

The HP4All-3 programme (2018–2021) aims to identify the dynamics and mechanisms that might enable a ‘sustainability transition’ (Box 1) towards a cross-sectoral approach to perinatal health. To achieve this, our research will take place in a selected sample of Dutch municipalities. We will focus on transformative change within local public health policies, as we hypothesise that municipal governments can play a central role in stimulating a cross-sectoral approach to perinatal health.

With the use of a transition analysis, combined with action research, we intend to increase the impact potential of local policies, approaches, and initiatives that address perinatal health inequities. To do so, we will develop a local action-agenda in a selected sample of Dutch municipalities. An action-agenda consists of suggestions on agreements to be made and actions to be taken. The results of this research will be used to inform a knowledge dissemination programme on the need to implement perinatal health into municipal approaches and policies concerning health inequities. The knowledge dissemination programme will be rolled out among the 156 municipalities with the highest share of disparities out of all 380 Dutch municipalities.

The HP4All-3 programme is a collaboration between the Erasmus MC, the Dutch Research Institute for Transitions (DRIFT), and the Dutch Centre of Expertise on Health Disparities (Pharos). The Erasmus MC and DRIFT are responsible for all research activities. In close collaboration with the Erasmus MC and DRIFT, Pharos carries out the knowledge dissemination programme. By collaborating with such a diverse set of partners, we aim to reach all relevant stakeholders and institutions in different Dutch municipalities and thereby promote the establishment of a cross-sectoral approach to perinatal health to address health inequities from their earliest origins.

The objective of this protocol article is to introduce the context and research questions of the HP4All-3 programme, as well as its innovative design and research methods that we intend to apply to address perinatal health inequities.

1.2. Research questions

The central research question posed in the HP4All-3 programme is formulated as follows: Which transition dynamics are driving transformative change in institutional structures, culture, and practices, towards the implementation of perinatal health into municipal approaches and policies concerning health inequities resulting in a cross-sectoral approach to perinatal health?

In addition to the central research question, the following sub-questions were posed:

1. To what extent are professionals from the medical, social, and public health sector, as well as the municipal government aware of the concept of perinatal health inequities, the degree to which these inequities exist in their municipality, and the urgency to address them through a cross-sectoral approach?
2. What is needed to increase awareness of existing perinatal health inequities and the urgency to address them through a cross-sectoral approach among professionals from the medical, social, and public health sector, as well as the municipal government?
3. What is needed to engage municipalities in activities aimed at addressing local perinatal health inequities (e.g. by introducing policies that address these inequities)?
4. What are the institutional facilitators and barriers that influence the implementation of perinatal health into municipal approaches and policy plans regarding health inequities?
5. How can collaboration between different municipal stakeholders (e.g. civil servants, aldermen, etc.) and professionals from the medical, social, and public health sector be stimulated in addressing perinatal health inequities?
6. Which lessons can be learned from best practices and front running municipalities regarding approaches to reduce perinatal health inequities?
7. How can we strengthen and accelerate existing local municipal approaches aimed at addressing perinatal health inequities?

2. Methods

2.1. Study design

In this study, transition analysis will be combined with action research. Action research is an umbrella-term for various research processes and methods that try to achieve change in a certain context and/or system. Notwithstanding its diversity, action research always consists of three balancing elements: research, participation, and action [24]. We follow Bartels and Wittmayer (2018) who define action research as “critical and relational processes through which researchers and their co-inquirers aim to collaboratively produce scientifically and socially relevant knowledge and transformative action” [25]. In our research programme, action research will be used to guide a process of knowledge co-production that contributes to the ability of the involved municipalities/participants to control perinatal health inequities more effectively and to keep improving their capacity to do so within a more sustainable and just environment. As our research will take place in various municipalities, we will use a multiple case study design [26]. We aim to highlight differences and similarities in (existing) municipal approaches and policies to perinatal health inequities. The commonality that allows for comparison of the participating municipalities are the relatively poor perinatal health outcomes, the relatively high share of children living in families on welfare, and the large proportion of inhabitants with a low socioeconomic status (SES).
2.2. Identification and selection of participating municipalities

Action research is an intensive and time-consuming process. Given the capacity of our research team, we were able to select six Dutch municipalities as cases for our action research. These municipalities were selected based on an extensive baseline measurement (supplementary file 1) that was carried out in 2018 among the 156 municipalities with the highest share of disparities out of all 380 Dutch municipalities. This baseline measurement, which was part of the transition analysis, consisted of a Google search, a document analysis and a quantitative analysis into municipal perinatal health outcomes.

We hypothesised that our action research would have the biggest impact in municipalities where inequities are greatest. A policy analysis towards improvements in perinatal health in the Netherlands showed that quantification of perinatal health data created urgency to act amongst politicians, aldermen, and the preventive health sector [17]. As such, we expect that the urgency to address perinatal health inequities will be stirred up more easily in municipalities with poor perinatal health outcomes compared to municipalities with better perinatal health outcomes. We therefore selected municipalities with a high incidence of adverse perinatal health outcomes (i.e. preterm birth and small for gestational age (SGA)), a high proportion of children living in families on welfare, and a low municipal SES. Municipalities were considered having a low SES, when a large proportion of their inhabitants are living in an area with a SES score within the lowest quintile (details are presented in supplementary file 1). Additionally, we considered whether municipalities were already implementing perinatal health into their approaches and policies concerning health inequities and whether they participated in previous HP4All programmes (Table 1).

Based on the findings of the baseline measurement, we first selected municipalities that belong to (1) the highest quintile regarding the incidence of adverse perinatal health outcomes, (2) the highest quintile regarding children living in families on welfare, and (3) the lowest quintile regarding municipal SES. This resulted in a selection of 20 municipalities. We then selected six out of the 20 municipalities to represent variation in the level of activity concerning approaches to perinatal health inequities, size, and location. Of these six, four municipalities were already active in addressing perinatal health inequities and/or participated in previous HP4All programmes and two municipalities were not. Seventy thousand inhabitants was used as a cut-off for municipalities to be considered large. Three of the six municipalities had less than 70,000 inhabitants and three had more than 70,000 inhabitants. Finally, the selected six municipalities had to be spread across the country. Accordingly, the following Dutch municipalities were invited to participate in our action research: Dellzijl, Enschede, The Hague, Vlissingen, Landgraaf, and Heerlen (see Fig 1 for an overview of their location within the Netherlands). All six municipalities are willing to participate in our research.

2.3. Data collection

The HP4All-3 programme is based on action research, an iterative process, in which theory and action are interlinked by reflection [24]. As mentioned, action research consists of three balancing elements: research, participation, and action. Regarding our roles as (action) researchers, it was a balancing act of constantly switching between being a change agent, knowledge broker, reflective scientist, self-reflexive scientist, and process facilitator. Various yet complementing types of expertise within the HP4All-3 research team facilitated this process. We will start our action research with conducting a transition analysis to gather knowledge and theories on the persistent societal problem at stake (i.e. perinatal health inequities) and to identify possible drivers behind this persistency. This knowledge will be used in a participatory research setting. Researchers and participants will collaboratively reflect on and analyse the findings of the transition analysis, while simultaneously formulating a theory or hypothesis about how to address this problem. Additionally, concrete actions are identified to actively tackle perinatal health inequities. To go through these steps, we will conduct interviews and interactive group sessions with various relevant stakeholders.

2.3.1. Sampling - interviews

The aim of our research programme is to accelerate the institutional embedding of a cross-sectoral approach to perinatal health. To do so, we want to stimulate collaboration between professionals with varying backgrounds, motives, and competences that can collectively address the variety of interconnected medical, social, economic, cultural, and environmental risk factors that underlie perinatal health inequities.

For the interviews, we will employ purposive sampling [27], selecting professionals who can provide the greatest insight into factors that either hinder or facilitate this institutional embedding, such as 1) municipal structures, 2) approaches to perinatal health inequities (if existing), and 3) relevant future plans/ideas. We specified a list of key stakeholders for a cross-sectoral approach to perinatal health (supplementary file 2) whom we intend to interview (corresponding sector between brackets):

- Alderman from the field of youth or public health (municipal government);
- Civil servant from the field of youth or public health (municipal government);
- Civil servant from the field of work and income or societal support (municipal government);
- Professional from a local multidisciplinary neighbourhood team (support team for inhabitants of a specific neighbourhood) or another relevant welfare organisation (social sector);
- Employee of the local Preventive Child Health Care organisation (public health sector);
- Obstetric professional, such as a midwife from a local midwifery practice or obstetrician from the nearest hospital (medical sector);
- Professional from a local maternity care organisation (medical sector);
- General practitioner (GP) from a local GP practice and/or paediatrician from the nearest hospital (medical sector).

We will search the websites of the participating municipalities, local hospitals, midwifery practices, maternity care organisations, GP practices, welfare organisations, etc. to identify potentially eligible interview respondents. Additionally, we will apply snowball sampling by asking participants whom we already interviewed about other potentially eligible participants in addition to our pre-specified list of key stakeholders [28]. We intend to conduct eight to 12 interviews in each participating municipality to gather information on what is currently being done within and across different sectors to address perinatal health inequities.

All interviews will be conducted by members of the HP4All-3 research team, using a semi-structured approach. Each interview will be conducted by two interviewers (alternately LSB, LAD, and FS), face-to-face or by telephone. An interview protocol (supplementary file 3) was developed and tested in advance to guide the interviews. During the interviews, there will be time for participants to share extra information which they consider relevant to our topic [29]. All interviews will be audio-recorded and will last about one hour.
2.3.2. Sampling – interactive group sessions

After completion of the interviews, we will organise two successive interactive group sessions within each municipality. These group sessions will focus on how to develop or accelerate local approaches and policies concerning perinatal health inequities. Each session will last three hours and will be audio-recorded. Professionals working in the medical, social, or public health sector or for the municipal government will be invited to both group sessions. We will apply purposive sampling, aiming to invite individuals of whom we expect that they can contribute valuable insights, questions, and ideas to a group discussion concerning the institutional embedding of a cross-sectoral approach to perinatal health. Interviewees who meet these criteria will be invited to participate in the group sessions. Additionally, stakeholders who can contribute valuable insights according to participants of the first group session, will be invited to join the second group session. We will use the methodology of transition management to guide the group sessions [30]. A central method in transition management are small-scale group sessions, so-called ‘arenas’, with key stakeholders from different backgrounds, who hold varying perspectives on perinatal health inequities. During these arenas, participants collectively go through a participatory process of 1) problem structuring, 2) envisioning, 3) agenda-building, and 4) developing action-oriented experiments. Between ten and 20 participants will participate in these sessions, as to safeguard space for personal interaction and exchange.

During the first group session, we will present the findings of our transition analysis. This includes local perinatal health outcomes for the period 2013–2017 (freely accessible on the webpage www.waarstaatjegemeente.nl), findings from the Google search and document analysis, as well as insights that we will gather during the interviews. These insights will be used to inform participants about: 1) the current orientation of local stakeholders towards perinatal health inequities, 2) local approaches and policies aimed at addressing perinatal health inequities (if existing), and 3) local challenges to build a cross-sectoral approach to perinatal health. Subsequently, participants will work in small groups (three to five participants each) to define future systemic changes that are needed within their municipality to overcome perinatal health inequities. The ideas of these small groups will be shared during a plenary discussion at the end of the meeting.

In the time between the two group sessions, the research team will synthesise the proposed future systemic changes into approximately five local key changes for each participating municipality. In the second group session, we will present and discuss these key changes to/to the participants to validate them. Subsequently,
using the five key systemic changes, participants will work in 
small groups to identify tangible actions to address perinatal health 
inequities on both the short- (within one year) and medium-term 
to five years). Next, prioritisation of the identified actions will 
take place during a plenary exercise, which will result in the for-
mation of a local action-agenda. Lastly, participants will discuss in 
plenary which steps need to be taken in the months following the 
group sessions. Additionally, they will identify which stakeholders 
are responsible for the implementation of the action-agenda. 

After completion of the two group sessions, the research team 
will draw up separate reports for each of the six participating 
municipalities. These reports will summarise relevant insights from 
the baseline measurement, the interviews, the group sessions, and 
the action-agenda. The reports will be shared with all participants 
of the interviews and group sessions, in order to fuel and guide 
future actions aimed at addressing local perinatal health inequities. 
Participating municipalities will be supported by Pharos until the 
end of the research programme to strengthen and expand local 
actions and activities directed towards a cross-sectoral approach 
to perinatal health. 

As a follow-up on the action research process, a questionnaire 
(see supplementary file 4 for a draft version) will be adminis-
tered approximately one year after completion of the group sessions. This 
questionnaire will be distributed via e-mail among all interviewees 
and participants of the group sessions, in order to provide insights into:

1. The actions taken in the period after the formation of the action-
agenda. We are in particular interested in the how, what, and 
why, the effect of the actions taken, as well as the extent to which 
different stakeholders are satisfied with the actions taken; 
2. The extent to which sustainable cross-sectoral collabora-
tions have been and are being built, as well as the extent to which 
the different stakeholders are satisfied with these collaborations; 
3. The extent to which perinatal health has been or is planned to 
be implemented in local approaches and policy plans aimed at 
addressing health inequities.

Towards the end of the HP4All-3 programme a closing sym-
posium will be organised in which the research team will share 
key findings of the HP4All-3 research programme with stakehold-
ers that are, or could be, involved in a cross-sectoral approach 
to perinatal health. The symposium will be accessible for all rel-
levant stakeholders from the 156 Dutch municipalities with the 
high share of disparities. This symposium also offers the 
possibility for professionals from the participating municipalities to 
share insights and learn from each other's experiences, struggles, 
and action-agendas.

2.4. Study timeline

The identification and selection of the six participating munici-
palities took place between June 2018 and January 2019. The 
interviews and group sessions took place between February and 
December 2019. All action-agendas are aimed to be drawn up 
between January and May 2020. The questionnaire will be admin-
istered in September/October 2020. The closing symposium will be 
organised in March 2021.

2.5. Analyses

All interviews and group sessions will be transcribed by an inde-
pendent organisation (TiptopGlobal, www.tiptopglobal.com). The 
transcripts will be checked by two researchers of the HP4All-3 
team (LSB, LAD). After transcription, all interviews and group ses-
sions will be analysed based on existing theories, elements of the 
research questions, and the interview protocol. All analyses will be 
undertaken by two researchers (LSB, LAD). Codes, themes, and sub-
themes will be used to answer the research questions. All analyses 
will be performed in ATLAS.ti.

3. Discussion

The aim of the HP4All-3 programme is to investigate which transi-
tion dynamics are driving transformative change in institutional 
structures, culture, and practices to strengthen and accelerate a 
cross-sectoral approach to perinatal health in Dutch municipalities. 
Six municipalities with relatively poor perinatal health outcomes, 
a high proportion of children living in families on welfare, and a 
low municipal SES were approached and have agreed to partici-
pat. The HP4All-3 programme will provide insight into: (1) the 
necessary future systemic changes in institutional structures, cul-
ture, and practices to overcome perinatal health inequities, (2) the 
various roles that municipalities are, or could be, playing in address-
ing perinatal health inequities, and (3) how local cross-sectoral 
approaches to perinatal health can be built and/or strengthened. 
Together, these insights will lead to a diverse set of drivers and 
barriers to institutionalise a cross-sectoral approach to perinatal 
health in Dutch municipalities. Finally, our research will provide 
knowledge on differences and similarities between urban and rural 
municipalities regarding approaches and policies aimed at address-
ing perinatal health inequities.

Next to these promising results that will be gathered through the 
HP4All-3 programme, there are some limitations that merit 
discussion. First, although we have included a diverse set of stake-
holders in our research, there are several groups that are missing. 
For instance, we did not include parents(-to-be), local community 
organisations, and informal networks in our research. We have 
chosen to focus on stakeholders directly involved in the institu-
tional embedding of a cross-sectoral approach to perinatal health. 
This choice stems from the experiences of the previous HP4All pro-
grammes. These programmes have showed how time-consuming 
and challenging it is to establish collaborations between different 
sectors and professions. Therefore, we started with a core set of pro-
fessionals that are directly involved in the institutional embedding 
as a starting point to establish a cross-sectoral approach to perinatal 
health. When there is a solid collaboration established between this 
core set of professionals, it is possible to enrich the cross-sectoral 
approach with perspectives from the aforementioned stakehold-
ers. Second, a limitation of the research design is its relative short 
time span. The transition towards a cross-sectoral approach to 
perinatal health requires multiple transformations in institutional 
structures, culture, and practices, which will not be accomplished 
in the time available for our research programme. A societal transi-
tion could take decades. As the HP4All-3 programme lasts three 
years, an in-depth monitoring of such transformations could not be 
included in our research design. However, the transition towards a 
cross-sectoral approach to perinatal health has been studied since 
2010. Building on the insights of among others the HP4All pro-
grammes, the national programme Solid Start was launched by the 
Ministry of Health, Welfare, and Sport in 2018. Within Solid Start, 
municipalities that wish to participate receive support and 
guidance in implementing existing approaches which are aimed at 
addressing health inequities before, during and after pregnancy. 
This, as well as the support provided by Pharos to strengthen 
and expand municipal activities, ensures that the transition is further 
guided. In addition, we aim to monitor short term transforma-
tions with a questionnaire one year after completion of the action 
research. We will also organise a closing symposium to evaluate 
transformations within the participating municipalities. It would 
be interesting to follow some municipalities more up close and
(collaboratively) monitor their transition process in the coming years.

4. Conclusion/Policy recommendations

To conclude, the HP4All-3 programme can serve as an example for other countries with persistent (perinatal) health inequalities. The design described in this protocol can be used by other countries to shape a cross-sectoral approach to (perinatal) health inequalities, both nationally, regionally, or locally. Our findings will therefore be of added value for institutional actors working for the national or municipal government, as well as institutional actors working in the medical, social, or public health sector, both in the Netherlands and abroad.

Our research approach along with knowledge dissemination across a large set of Dutch municipalities can contribute to the development of (inter)national action-agendas directed at sustainable approaches to (perinatal) health inequalities. This will contribute to enabling children to develop into healthy citizens who can live independently and participate in society.

CRediT authorship contribution statement

Lisa S. Barsties: Methodology, Investigation, Writing - original draft. Project administration. Leonie A. Daalderop: Methodology, Investigation, Writing - original draft, Project administration.

Jacqueline Lagendijk: Writing - original draft, Supervision.

Frank van Steenbergens: Conceptualisation, Methodology, Investigation, Writing - original draft, Supervision, Funding acquisition.

Jasper V. Been: Conceptualisation, Writing - review & editing, Supervision, Funding acquisition.

Loes C.M. Bertens: Writing - review & editing.

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Declaration of Competing Interest

The authors report no declarations of interest.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.healthpol.2020.12.013.

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