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International Nurse-Family Partnership® (NFP)

PHASE TWO ANNUAL REPORT

Phase Two: Feasibility and Acceptability through Pilot Testing and Evaluation.

Phase Two involves conducting a pilot test of the adapted NFP program with the projected number of sites and/or clients specified in the licensing agreement. The pilot includes testing the feasibility of referral pathways, data collection measures/sources, program materials, nurse recruitment, nurse education, and any other relevant measures. The pilot will determine acceptability of the program for the mothers, families, community partners, nurses, implementing agencies, and any other relevant partners. The results of this work will inform what additional adaptations may be needed to ensure the feasibility and acceptability of the NFP program within local contexts. At the end of this phase, the country develops its NFP information system or adapts its existing system to accommodate NFP data requirements. Continued recruitment of clients in existing pilot sites, or expansion to further sites for continued learning regarding required adaptations, may be approved if requested.

Purpose of annual report:
As part of the license agreement with the University of Colorado, each country is required to prepare and submit an annual report. Through the annual report, data are reported, analysed and reviewed, to guide discussion of the country's implementation successes and challenges, as well as emergent outcome variations. The annual report forms the basis of the Prevention Research Centre, University of Colorado's (UCD) annual review of NFP implementation and fidelity in licensed partner countries and for discussing quality improvement plans. By using quantitative and qualitative data, the annual report creates an opportunity for each country's leadership team to reflect on progress and develop quality Improvement plans for the following year.

Completing the report:
The country license holder is requested to coordinate the completion of this report, with contributions from the national implementing body, and others, as required.

Please note: If you are unable to complete any items in the report template, please indicate whether this data is not collected in your country or is not able to be analysed at this time. Where terms used in the report template are generic, please specify how items are measured in your country. Where you have adapted your data collection schedule/timings or approach to accommodate local systems, please adapt the document as necessary to take account of this. If you have any questions regarding the content of this document, please do not hesitate to get in touch with your NFP International Consultant.

The report should be sent to Dr David Olds, Ben Jutson and the country's International Consultant at least three weeks prior to the Annual Review meeting. Further guidance on the conduct of the annual review meeting can be found on the 'International NFP Resources' page of the international website.

PART ONE: PROGRAM OVERVIEW

Name of country:	Bulgaria	Dates report covers (reporting period):	1 March 2021 – 31 December 2021
Report completed by:	Ivanka Puleva, Maria Evgenieva and Luybka Georgieva	Date submitted:	February 10, 2022

The size of our program:

	Number	**Total**
Fulltime NFP Nurses	**6**	**6**
Part time NFP Nurses	**2**	**2**
Fulltime NFP Supervisors	**1**	**1**
Part time NFP Supervisors	**1**	**1**
Full time NFP Mediators/Family Partnership Workers (FPW) (if applicable)	**4**	**4**
Part time NFP Mediators/Family Partnership Workers (FPW) (if applicable	**0**	**0**
Total		**14**

- We have 2 teams (supervisor-led groups of NFP Nurses)
- Average Supervisor to NFP nurse ratio (include Mediator/FPW positions if you have them): 1:6

- Current number of implementing agencies/sites delivering NFP: 2
- Current number of NFP teams: 2
- Number of new sites over the reporting period: 0
- Number of new teams over the reporting period: 0
- Number of sites that have decommissioned NFP over the reporting period: 0
- Successes/challenges with delivery of NFP through our implementing agencies/sites: (see following sections)

Description of our national/ implementation / leadership team capacity and functions

License holder name: Sarah Perrine, CEO, Trust for Social Achievement Foundation (TSA)
Role and Organisation: TSA has the role of a central implementation agency for NFP in Bulgaria. The central implementation team within the organization is responsible for the overall implementation of the program, quality improvement efforts, team supervision and education, strategic goals in terms of sustainability and national dissemination of the service. The central team consists of 4 members – a full-time Project Manager and part-time: Clinical Leader, Data Analyst, and Project Assistant.

Description of our National implementing capacity and roles:

- Clinical Leadership:

For the period March-August 2021 the overall program implementation, together with most Clinical Leader duties (such as reflective supervisions with team leaders, accompanied home visits, team meetings and guidance in case conferences, etc.), has been carried out by the **NFP Project Manager (Ivanka Puleva)** due to the continuing maternity leave of the Clinical Leader. This working process has been regularly consulted and supported by the NFP International Consultant (Ann Rowe).

As of September 2021, the **Clinical Leader (Maria Evgenieva)** has resumed her position and responsibilities from before the maternity leave – on a 32 working-hour engagement per week. After an initial "handover" period, she re-assumed her program duties as requested by the program implementation model.

- Data analysis, reporting and evaluation:

NFP data analysis is coordinated by our part-time (50%) **Data Analyst (Lyubka Georgieva)** who took over the position since January 2021. Since the beginning of the current reporting period, after a few months of receiving support from the previous Data Analyst (Petya Zeynelova – currently TSA's Evaluation Officer), Lyubka has been fully responsible for the data collection process, information system management and updates, data analysis, reports to the central team and the NHV teams for strategic planning, advisory boards, etc.

In terms of program evaluation, the central team has finalized the process of having the **formative evaluation** completed by the external partner organization **Open Society Institute-Sofia (OSI)**. A final report was delivered in the reporting period, but in December instead of June 2021. The delay was largely due to Covid-19 restrictions. The TSA team had the chance to review the report and send it back to OSI for incorporation of feedback. As the central team's general impression of the report's quality was below expectations, a reworked final version is expected from the researchers by mid-February 2022. After TSA's final review, the central team will share the final report with UCD. We hope to use the final product as an advocacy tool in the efforts for NFP integration into the national or municipal system of health and social services.

As for the intended impact evaluation – the small-scale, outcome study funded by UBS Optimus Foundation, since March 2021 the central team has intensified the working process around the study design and identification of a proper research team and research agency for the study design, implementation and data analysis. We have selected those two parties based on their experience, reputability, and previous research work with TSA:

- **Prof. Joost de Laat, University of Utrecht** - Chair of Global Economic Challenges and Director for the Utrecht Centre for Global Challenges. The Centre promotes multi-disciplinary collaboration across Utrecht University researchers, its students, and societal stakeholders, around complex global challenges, in both research and education.

  Work on the study design to guide the project implementation has been in the hands of Prof. Joost de Laat. TSA has a history of successful collaboration with prof. de Laat - he previously managed the World Bank's impact evaluation of the Springboard for School Readiness project implemented by TSA, the flagship ongoing RCT research on preschool education in Bulgaria.

Prof. de Laat has considerable relevant experience, including outside of academia, such as managing large international consortia and influencing policy. He has managed the World Bank's Strategic Impact Evaluation Fund, one of the largest multi donor trust funds to support evidence-based policy making. He oversaw 61 impact evaluations in 31 countries while managing SIEF, the majority in Education, and led stakeholder workshops on use of evidence in Bangladesh, Côte d'Ivoire, Ethiopia, Hungary, India, Kenya, Senegal Rwanda, Serbia, South Korea, and Washington D.C. Prior to SIEF, he has led the World Bank's work on Roma inclusion.

- **Alpha Research** - a research agency with over 20 years of local and international professional experience in the fields of sociology, marketing, statistics, analysis, and consultations. TSA effectively collaborated with Alpha Research in 2015 on the NFP Readiness Assessment, community listings and baseline studies in potential communities where NFP can be implemented. Through a service contract with TSA the agency has delivered high-quality results when implementing the baseline studies for Sofia, Plovdiv, Stara Zagora and Varna as potential NFP sites.

In 2019 TSA and the First Foundations Program has also (through it's a grantee organization) collaborated with Alpha Research on conducting a study for the public awareness of the National Program for Improving Maternal and Infant Health with a Horizon 2020. Under this field task the agency has successfully conducted numerous focus groups with Roma women on the topic of maternal and infant health (related also to the scope of the NFP service and its outcomes).

Given this extensive experience, TSA has decided to contract once again Alpha Research for implementing the field work (data collection) of the NFP study. We believe that Alpha Research is the perfect fit for the task because as a reputable survey firm it has additionally demonstrated the following qualifications:

- Established track record and demonstrated experience in sample design, survey methodology and survey implementation.
- Experience in conducting household surveys, and the capacity to undertake data entry.
- Capacity to train and mobilize qualified surveyors and data entry personnel.
- Ability to evaluate the effectiveness of the survey instruments and methodology, and to revise as needed to achieve the best results.
- Proven ability to plan, manage and execute complex projects and to ensure high quality delivery of results.
- Ability to adapt to unexpected work program needs and changing work requirements.
- Ability to handle sensitive situations.
- High ethical standards and deep sense of integrity and commitment.

From TSA's side, the following team members are committed to the NFP study work:

- Petya Zeynelova - TSA Evaluation Officer; in addition to her evaluation and research knowledge, she is also a former NFP Data Analyst, so she has the necessary in-depth understanding of the program, its objectives and outcomes;
- Iskra Stoykova - First Foundations Program Officer (NFP is part of her program portfolio);
- Ivanka Puleva - NFP Project Manager;
- Maria Evgenieva – Clinical Leader;
- Lyubka Georgieva – Data Analyst.

More details about the progress of the evaluation work will be shared below in Part Four: Program Improvement and Evaluation.

- Service development/site support:

From the beginning of 2021 and especially in the reporting period, the central team got a new part-time addition – a Program Assistant (Nevena Tzeneva), who took the responsibilities related to securing logistical support to both NFP sites. Nevena is originally the TSA's Office Manager but due to ongoing home-office working mode of the organization's staff, she was able to dedicate almost 50% of her time to logistical and organizational support of the NFP teams. During the last months the Program Assistant covered the following duties:

- Purchasing and delivering office materials, client and nurse materials
- Printing and delivering program materials
- Organizing trainings and team buildings
- Organizing events such as Local and National Advisory Boards
- Dealing with central unit's payments
- Participating in NFP project meetings for planning purposes

Additionally, the Site 2 operations have been supported by a local coordinator – Vera Mihaylova, from TSA's local partner in Plovdiv, the National Alliance for Volunteer Action. She has been taking care of all team and office necessities, as well as arranging meetings with local stakeholders and media.

- Quality improvement:

Our team is committed to quality improvement by working to ensure our clients and workforce have the best possible experience through a model of continuous improvement and engagement of the National Unit with both NFP sites. During the reporting period our ambition was to maintain and develop the quality of delivery through a robust continuous quality assurance, improvement and sustainability system in few steps added below. Due to those continuous feedback loops with all NFP team members work continues to progress.

1. Quarterly strategic meetings (to reflect on quarterly goals and indicators, to analyse quarterly data from the Information System, to set new goals and indicators for the current quarter) In this meeting all NHVs and SVs from both sites are present, together with the National Unit (CL, PM, DA)
2. Quarterly reports by the NHVs and SVs (to collect data which is not collected by the IS)

3. Quarterly reports by SVs containing summarised data of HM work on recruitment process (this is not collected by the IS)
4. Quarterly data meetings on team level (to reflect on and analyse data for each of the two sites) In this meeting participants are NHVs, HM, SV and CL
5. Quarterly reflective data supervisions between a NHV and SV (to reflect on and analyse data on individual level)
6. Biannually reflective data supervisions between CL, SV and NHV (to reflect on and analyse data on individual level)
7. Ad-hoc clinical consultations with CL to support the process of timely decision making
8. Biannually performed accompanied home visits by CL to all home visitors (to understand the quality of program delivery on field or via Telehealth)
9. Learning needs assessments and Clinical competence assessments done by SV and CL (to reflect on and analyse education level and needs and to set new personal learning goals and indicators and to plan ongoing training on team level when needed)

Both qualitative and quantitative information is critical for helping us guide our improvement process. We need to understand the quality of programme delivery being provided and how our sites are performing. We use a range of data and feedback to help support what we need to know, learn from, aid decision making and plans.

Please refer to Part Four below for additional details on quality improvement.

- NFP Educators:

Our Clinical Leader – Maria Evgenieva is the qualified educator for the NFP Core trainings. The CL is responsible also for the additional ongoing trainings, part of which are led by herself and the others by various experts in the specific topics for the reported period. Those were attachment parenting, child development, case management, field work, child protection led by Reneta Veneva – psychologist and Ekaterina Uzhikanova – social worker.

- Other (please describe)

In terms of our implementing capacity and roles, another change within the central team needs to be mentioned. Our part-time NFP Communication Expert (Dena Popova) was replaced in April 2021 by another part-time expert (Zornitsa Mitkova) because of a maternity leave. For most of the reporting period Zornitsa has been responsible for communication with media, publishing articles and social media posts, issuing the NFP newsletter, co-organizing local and national advisory boards, etc.

Another shift in the communication capacity took place in September 2021. As our Clinical Leader resumed her duties, the Project Manager was able to dedicate more time and effectively assume the communication responsibilities as well. So, since last fall Ivanka Puleva is responsible for the NFP communication strategy along with her other strategic and administrative functions.

NFP implementation has continued to be overseen by the TSA First Foundations Program Officer (Iskra Stoykova) and CEO (Sarah Perrine).

Description of our local and national NFP funding arrangements:

As already shared with UCD in previous reports, NFP has guaranteed funding through September 2023 – the end of our current 3-year financial period. Since we are now halfway through this period and our primary donor (the America for Bulgaria Foundation) has indicated that no further funding will be available for the service implementation, we are on the look-out for other financial opportunities.

Our main target in this endeavour is naturally the government in the face of either the Ministry of Health or the Ministry of Labour and Social Policy. We believe that there is a good chance to win national support through the state budget or the EU funds operated by the Labour Ministry. Advocacy pathways are developed in both directions, and we anticipate putting them in action in the current year, with the new government sitting in office since just a few weeks ago.

Our goal is to entirely transfer the NFP service to the government structures and not just to win funds for sustaining the existing two NFP sites as an implementing agency (TSA). If this is achieved, our plan is to retain the NFP central team as a training provision and quality oversight unit within TSA – at least for an initial period of time. We expect to be able to secure the necessary funding for the central team's operational expenses – either through our primary donor or/and through fundraising.

As for the grant received by the UBS Optimus Foundations for the period October 2020 – September 2021, we managed to utilize it as planned and we also acquired another grant for an additional year. These grants have so far supplemented the ABF budget in two lines: sustaining the size of the Site 2 team (with UBS-funded payroll for two of the nurses) and covering the costs for the small-scale quasi-experimental program evaluation. This year's UBS grant (October 2021 through September 2022) will also cover the costs for a third arm of the study sample (300 women and 300 children from the general population in Sofia and Plovdiv).

Another funding success had emerged unexpectedly for the NFP central team as a result of our collaboration with the 3M corporation under its Global Health Impact Program. After completing a very successful 8-week initiative between March and May 2021 on developing marketing/fundraising strategy for NFP (to solicit individual donations), the 3M company has given us a $5000 grant through its partnership with the Global Giving fundraising platform. This funding has now allowed us to hire a part-time digital marketing expert to lead our fundraising efforts in the next 6 months.

On another note regarding funding, at the end of December 2021 the central team has received a small grant approval for telehealth activities – granted by the GIVE EUR-HOPE. Founded in 2010, the organization promotes the solidarity of EU staff with those living in poverty and social exclusion in the European Union. After the success of the telehealth project funded by the Sofia Municipality in

December 2020 and implemented in 2021, which secured tablets with a 12-month internet connection for all active NFP clients in Sofia, in July 2021 we submitted an application to GIVE EUR-HOPE with the intention to secure the same telehealth opportunities for the families in Plovdiv as well. As the funding has been approved, we expect to be able to initiate this small-scale Site 2 project in the next few months.

Current policy/government support for NFP:

Considering the financial sustainability pressure described above, we remain committed to our efforts for integration of the NFP in the national system of health and social services. However, dialogue with the state authorities has been almost entirely frozen as Bulgaria did not have a regular government for the entire reporting period. Being in a cycle of 3 general elections and temporarily appointed interim governments (because of inability to form a ruling coalition) from April to December, no real decision-makers were in power and could be targeted.

Just before the first elections – in February 2021, we managed to hold a session of the National Advisory Board. Due to the persisting Covid-19 restrictions, the meeting was organized online and along with the usual high-end representatives of institutions, professional associations, universities, and hospitals, it was also attended by the Deputy Minister of the Labour and Social Policy. She had an opening speech, expressing support for the national dissemination of NFP. However, she was replaced after the very first elections and her party is now in opposition as it lost the elections. This naturally puts us in a situation where we need to start advocacy and communication activities almost from scratch with the new ministries' staff – both in high and mid-level positions.

We took a strategic decision to skip the second NAB session which was meant to happen in the second half of 2022. As there was no regular government formed, we decided to move the session to the beginning of 2022 when the new people in power are elected and settled in the respective ministries. We have already prepared invitation letters for introductory meetings – to present the NFP service and invite them as our board members. Those meetings are planned for February-March 2022.

Besides the online NAB meeting, for the reporting period we also had 6 Local Advisory Boards (3 per each site) – 4 online and 2 in-person (in the summer period). Our general impression is that regardless of the format, those meetings in Site 2 are more well-attended with more stakeholders being active and sharing support for NFP opinions. Interest in the LAB sessions in Sofia has decreased dramatically with just a few board members showing up. This has led us to reflect more seriously on the situation and think creatively of ways to restructure the LAB meetings, to make them more attractive and interactive. These re-modelling activities and their implementation in the upcoming LAB sessions will take place throughout 2022. Feedback will be shared in the next annual report.

Throughout the reporting period we kept regular communication with the National Center for Public Health and Analyses (a sub-structure within the Ministry of Health) through one of the senior experts there. She has been a great supporter in the last few years and has agreed to prepare a formal statement or a pathway for integrating NFP into the national system of services. The final product

is almost ready, and we expect to be able to use it in the next few months during our meetings and ongoing communication with the state authorities. We also plan to build up their support by utilizing additional practical and evidence-based tools such as the final formative evaluation report, the impact evaluation report (expected by the end of 2022), Policy Brief (to be finalized based on the service integration pathway), video materials of the program implementation and clients' testimonials, etc.

In 2021 we also managed to improve our dialogue with UNICEF. We had several meetings to discuss common grounds and activities for joint advocacy efforts towards the sustainability of our 4 existing home-visiting sites (2 NFP and 2 UNICEF).

Along with the advocacy moves, we have been engaged in the following communication and visibility activities in the past 10 months:

NFP Newsletters

After the introduction of a quarterly NFP newsletter in 2020 we assessed that this was a convenient tool to make the service more visible among respective stakeholders. We got positive feedback from representatives of various universities and medical institutions – they all found the news about such an "innovative" service very interesting. Thus, in 2021 we decided to start issuing the **newsletter on a monthly basis** – sharing about our work with families, presenting our nurses and mediators, posting opinions about NFP gathered by doctors and public figures during events and interviews, etc. The newsletter is written in Bulgarian and gets disseminated among members of the National Advisory Board, Local Advisory Boards, NGOs, medical universities, and medical specialists from across the country.

NFP National Book Donation Campaign

Our annual campaign "Give a Fairy Tale" was once again the most successful initiative in terms of generating visibility for NFP in media and the general public. The campaign was launched once again on November 1st, a national holiday that celebrates culture and writers in Bulgaria. It was active throughout December 15.

The objectives of the campaign were to:

- Promote positive parenting and responsive care among the wider audience
- Promote early reading and learning
- Make NFP visible to the general public and find more supporters
- Collect books to distribute among all active NFP families and surprise them and their children for the Christmas holidays
- Encourage early reading /telling stories to babies among NFP parents

With each year of the campaign, we gain more popularity and collect more books from all over Bulgaria. This year the number was around 800 with donations arriving at the TSA office weeks after the official end of the campaign.

Each NFP family received a package of books before Christmas. Nurses also appreciate the initiative as they have the chance and materials to work more on the importance of books and early learning for babies among NFP families.

NFP outreach in media

Throughout the reported period, NFP was showcased as a good practice and an impactful service for health and social outcomes of vulnerable families. More precisely NFP appeared in:

- Two articles in online media, presenting NFP as a good practice for supporting vulnerable communities (Dnevnik and Marginalia)
- One long interview on Darik Radio focused on the importance of home-visiting for the early development of children
- As part of the NFP National Book Donation Campaign, a total of 10 media published news or disseminated information about the campaign but also about NFP as a service. We had:
    - 2 TV interviews (national broadcasters – Nova and Bulgaria on Air)
    - 2 radio interviews (Bulgarian National Radio)
    - 8 news or information about the campaign published on online media websites
    - Dozens of posts on social media

NFP in an encyclopaedia

We are very proud that NFP got included with text and a few pictures in the newest edition of "Encyclopaedia Bulgaria" by the Bulgarian Academy of Science (BAS). This substantial book gets updated and published every 10 years and the most recent version appeared in all bookstores throughout the country in the summer of 2021. Before its publishing, the NFP central team collaborated with the authors from BAS who were interested to include NFP as a unique targeted service under the Social Policies section of the encyclopaedia.

NFP Communications Materials

A new long NFP video was produced by the NFP team in Bulgarian. It contains testimonials by nurses and clients, stakeholders and TSA team. The video is about 6 minutes long and showcases the work of the family nurses on the field, as well as the objectives and results of the home-visiting program in Sofia and Plovdiv. The video was already shared on the social media channels and will be shared at the next National Advisory Board meeting as well. It can be seen here (we plan to subtitle it in English in the next few months): https://www.youtube.com/watch?v=ZUIbVREU2Ek

NFP in the Social Media

NFP's main social media channel remains the Facebook page, where currently 9150 people have liked the page (80 more in 2021) and 9211 follow the page (100 more in 2021).

On average, 2 posts per week get published, sharing relevant news about NFP activities, results, findings, as well as other relevant events, information and articles.

For this year, we plan to expand our social media outreach through NFP pages in Instagram and LinkedIn (part of our marketing and fundraising strategy).

NFP Communications – Challenges

A significant challenge for communications efforts is the lack of public debate on the topic of home-visiting services and the lack of interest from mainstream media to write longer pieces/feature stories on the work of NFP. We realize that we have to intensify our efforts to attract the media attention – mainly through our TSA public relations and communication expert.

Due to the persisting Covid-19 restrictions, it has been difficult to advance with clients' personal stories. As this endeavour requires in-person meetings with the NFP moms, it has been postponed several times throughout the year. We plan to give more voice to our clients in the communication pieces in 2022.

We note as an additional challenge the numerous changes in the NFP comm expert position – it got transferred two times between three different team members. This has broken the natural flow of planning and implementation in the previous 10 months as every change in personnel is related to a handover process and the start of a new planning process.

How our NFP supervisor and nurse education is organised:

The NFP Clinical Leader in Bulgaria is responsible for providing the core trainings – Foundations, Infancy and Toddler. Our new team members needed to go through all of them in the reported period but only in the last quarter the CL was back from her maternity leave. In March she led an online Foundations training with part of the practical modules carried out by the supervisor in person.

We need to say that nurses and midwifes in Bulgaria are not used to online trainings and have some difficulties concentrating in such an environment. In addition, it appeared in a few months that our newest nurse has some hearing disability, which doesn't allow her to be part of a group online training (this was something she hadn't shared with us initially, and we found out a few months later). The Infancy and Toddler trainings were planned in the last months of the year and postponed due to several reasons, the main one being the restrictions and fears related to the current Covid wave in which our country is. Our hope is that we will be able to conduct these trainings in the first quarter of 2022.

During the reporting period, our team in Site 2 has received additional ongoing in-person trainings such as Attachment parenting, Child development, Case management, Field work, Child protection led by Reneta Veneva – psychologist and Ekaterina Uzhikanova – social worker. Both are part of our local partner's (NAVA's) training team and have expertise in the topics.

The education curricula for the nurses, supervisors and mediators are described further in Part Two, the "NFP Education" section.

Description of any partner agencies and their role in support of the NFP program:

For the effective implementation of the program on local levels in both sites – mostly in terms of team support, TSA has continued to partner with two agencies (local NGOs) which provide

psychological group supervision, social work consultations and continuous learning support to the NFP teams.

In Sofia (Site 1) our local NGO partner is HESED (Health & Social Development Foundation) and it provides services for supervisory psychological support to nurses and health mediators. A psychologist conducts group supervisions with the team on a monthly basis with an option for individual consultations with team members, if additional psychological support is needed. A new grant annex was signed with HESED in October 2021 arranging our mutual work till the end of the current financial period (i.e. September 2023).

In Plovdiv (Site 2) TSA has formally extended its partnership with NAVA (the National Alliance for Volunteer Action) once again till September 2023. NAVA's commitments also include providing psychological support to the team. However, due to the relative remoteness of the second site from the central implementation team at TSA, the NAVA team is expanded to also include 1 part-time local coordinator (helping with office support, local events and communication with stakeholders) and 1 part-time social worker (providing monthly consultations on case management).

Because the Site 2 implementing agency (University Hospital St. George) that formally employs the NFP team of NHVs and mediators operates with lengthy and very heavy administrative and financial procedures which would cause additional obstacles to the operational service delivery, NAVA has stepped in to be our partner whose budget accommodates all client-related expenses – for example, for medicines and medical examinations, health insurance, contraception, etc. This kind of administrative cooperation is extremely important for the efficient work of the nurses who can easily access those budgeted resources and cover urgent needs of the clients.

In 2021 NAVA's psychologist was also engaged in the ongoing education of the Site 2 team. She organized a total of 5 trainings and led some of them. More details on the trainings and the ongoing education achievements of the team are described in the respective section below.

Challenges with partners:

A particular challenge arose in the end of 2021 when the local coordinator decided to terminate her engagement with NAVA, respectively with our project as well. Since the beginning of January 2022, we have been looking for a replacement and have had several talks with NAVA. A new person from their team is expected to take over and be trained in February.

Another challenge we faced in 2021 is the team's dissatisfaction with the group psychological support they receive from the NAVA psychologist. They have shared that the sessions are not very focused, practical and useful (in contrast to those provided in Sofia with the HESED psychologist). The central team took some measures to address the issue – we did a monitoring of the group sessions in Sofia and Plovdiv, then had a meeting with the Plovdiv psychologist to share impressions and guidance about the structure of those sessions. We agreed on a model to be followed to guarantee maximum practical benefit for the team. As a result of this, another monitoring was done and the feedback was quite positive. However, towards the end of last year, the team has shared that this improvement was temporary and the sessions are once again not productive. The issue will be tackled again in the next few months (we might also delegate some of the group sessions in Plovdiv to the Sofia psychologist, to be done online).

Other relevant/important information regarding our NFP program:

PART TWO: PROGRAM IMPLEMENTATION

Clients

# of NFP clients participating in the program over the last year: 156

- Current clients: Pregnancy phase (%): 23 (20%)
- Current clients: Infancy phase (%): 39 (34%)
- Current clients: Toddler phase (%): 52 (46%)

- Our national benchmark for % of eligible women referred/ notified who are successfully enrolled onto the program is _____% **(n/a)**

- % of eligible women offered the program who have enrolled to date (over lifetime of the program): 65%

- Within this year the % of eligible women referred/ notified who were successfully enrolled in the program: 54%

    - Our reflections on this figure (including any consideration of an appropriate national benchmark):

Our reflections on this figure (including any consideration of an appropriate national benchmark):

Enrolled eligible women of all met / year of reporting	% women enrolled for each year	Cumulative % women enrolled
2016/2017	62%	62%
2018	83%	66%
2019	73%	69%
2020	67%	69%
2021	54%	65%

In 2020 there was a large turnover of staff which led to low capacity of the teams and this has resulted in enrolling less of the identified eligible clients. During 2021, we have eligible potential clients who were referred to the program by clinicians. When referring girls, clinicians provide girls' addresses from ID cards. However, mediators are not able to find girls because the address where girls live is different from the one in their ID cards. We have these cases in Site 2 Plovdiv.

We do not think that currently we need a benchmark as we will continue to enrol all clients who wish to be enrolled until 30 May 2022 according to our teams' capacity.

Engagement of fathers/partners/other family members

- % of home visits, where father/partner is present: 5%

- % of home visits, where other family members are present: 8%

- How we engage fathers/partners/other family members in our program:

Engaging fathers/partners in the program is a priority. In the home visits, the nurses encourage the clients to involve (if they agree) the fathers/partners in the program.

- Our reflections on father/partners/other family members engagement:

As far as the extended family is concerned, the presence of the nurse is enough to attract the attention of external family members an no further steps are necessary. Only in 52% of the home visits the NHV is left alone with the client. The family members that are present are interested in most of the time in personal issues and ask different questions, most of them health-related and very few about the content. When the mother-in-law is present then she tries to actively participate in the home visit paying attention to all topics. This is one of the challenges that nurses try to deal with as they have difficulty staying alone with their client to hear her real thoughts and interests.

Nursing Workforce

Average nurse caseload: 77% (120 clients, total capacity 156) in the end of the reporting period

	Nurses	**SVs**	**Other**	**Total**
# of staff at start of reporting year:	7	2	5	15
# of staff who left during reporting period	0	0	2	2
% annual turnover	0%	0%	40%	13,3%
# of replacement staff hired during reporting period	1	0	1	1
# of staff at end of reporting period:	8	2	4	15
# of vacant positions	0	0	0	0

- Reflections on NFP nurse/supervisor turnover/retention during reporting year:

In comparison to the previous two years, 2021 was a bit calmer in terms of staff retention and turnover. However, we still faced some team changes that posed concerns for training but also for the operational work and service delivery.

In the summer of 2021, the Site 2 team had to part with two of its three Roma mediators. As we had originally planned for just two mediators and the third one (male) was contracted for a limited period of time to boost client recruitment, his leave was somewhat expected. However, this was still a big loss for the team as they had relied on his support a lot, especially for a particular neighbourhood in Plovdiv (Sheker mahala). Thus, we kept collaborating with him through a service contract for referring potential clients from this area.

The second mediator left the team because of her family's decision to emigrate to Germany. As many of our Plovdiv clients do, she also moved with her husband and children to seek better life and employment opportunities. However, she referred a very capable person as a possible replacement for her position and after a few interviews we hired this new mediator (since November 2021). Overall impressions from the work of the new team member are very positive.

As for the Site 1 team, some dynamics were registered there as well. One of the full-time nurses reduced her 8 working hours to 6 working hours per day (which reduced her capacity from 20 to 15 clients, respectively also the team capacity) since November. However, a part-time nurse who had been on a maternity leave for the previous 2 years resumed her work, so the balance of the team capacity was restored and even slightly increased.

- Successes/challenges with NFP nurse/supervisor recruitment:

Successes:

The biggest success for 2021 in terms of team management is the fact that we maintained the sizes of both teams (as team members and client capacity). This was very challenging in the persisting insecurity and unsafety of the fieldwork because of the Covid-19 pandemic and all the ongoing waves of new coronavirus cases in the country. This was mostly due to the support provided to the teams by the central unit (in terms of materials, supervisions, flexibility, etc.) and on some occasions by the hospitals as well. For example, the Site 2 hospital included our team in the "Covid-bonuses" list which supplemented their salaries. Both teams had access to free Covid-19 tests (provided by either the hospitals or the NFP central team at different times of the reporting period) to check their status on an ongoing basis and thus be relaxed about their fieldwork with the clients.

Naturally, in very practical terms, the extended UBS Optimus Foundation grant which allowed us to retain 2 of the Plovdiv nurses for another year, also played a major role in keeping the teams' sizes and structures in the reporting period. This also preserved the client recruitment capacity and the team's potential to reach its full capacity on a local level.

Contrary to a very uneventful 2020, the teams last year had the chance to organize their in-person 2-day team buildings – different for each team (to limit the number of people in one place). The Site 1 team chose a SPA resort combined with a mountain hike, while the Site 2 team spent two days at the seaside. Allowing and funding these initiatives turned out to be, as asserted by the nurses and mediators, a very motivating move by the central team.

Success in staff retention is also partially due to the central team's efforts to include nurses and mediators in the decision-making process for the program – both on operational and strategic levels. As our quarterly strategic meetings (started in the beginning of 2020) have already become a regular event on the nurses' schedules, we have heard on numerous occasions their appreciation of being included in the planning and execution of quality improvement and strategically important measures.

Challenges:

As 2021 was not so intense in terms of staff recruitment, the central unit did not experience such harsh challenges related to team management as in the previous two years. We were able to relatively quickly and successfully fill in the very few positions that needed replacement and adjust other team changes (as described above).

However, we registered a serious concern related to the level of training and the quality of work of a particular nurse from the Plovdiv team (the last one that joined in March 2021). She has

demonstrated a serious lack of concentration, as well as lack of knowledge in some essential program areas (we later learned of a hearing problem she had which also affected her ability to perform her duties such as participations in team meetings, for example). As the central unit is pursuing very strict project indicators and the program implementation is in its late stages, we have sought to avoid any decisions on terminating this nurse's labour contract and instead have focused on supporting her as much as possible.

Slow client recruitment (slower than expected) and nurses working under capacity has been another demotivating factor for the teams and a challenge for the central unit. This factor, combined with the high drop-out rate, has been a particular issue of concern for the Site 2 team. We are still exploring ways to address all possible aspects of the problem and creating a client recruitment and retention plan is on the agenda once again for the next few months of the program.

Last but not least, the unpredictable Covid-19 context with new waves of cases, restrictions and safety concerns continued to be a top challenge in 2021. Although a bit more aware and accustomed to the situation compared to 2020, nurses were still quite anxious and worried almost throughout the whole year. They had to think of their safety and the safety of the families they visit in a situation in which most of the families did not adequately realize the pandemic risks and did not observe many of the safety measures. The need for telehealth remained but could not always be very structurally utilized to efficiently replace the physical home visits. All these factors generated quite serious tension which we all had to address to retain our program workforce.

And one last point – salaries of the medical staff in the country have significantly increased during and as a result of the pandemic. This raises another concern of potentially losing some of the nurses to other employment opportunities. Fortunately, we did not experience this in 2021, but it remains a valid concern for the rest of the program implementation period.

- Any plans to address workforce issues:

Some of the measure we have planned to take or maintain include:

- Provide sufficient material support to team members to secure their safety and well-being during their fieldwork (in the Covid-19 context but also in more general terms)
- Provide an annual 5% salary increase to all team members in both sites
- Provide support with technical equipment, regular guidance, and capacity building resources
- Individual support to team members who need it
- One teambuilding event for the entire NFP program staff (or alternatively two separate events) in 2022 (when it is safe enough to be organized).

NFP education

- Briefly describe your NFP education curricula

Below you can see a table of the NFP education curricula in Bulgaria. A decision was made for our health mediators to be present in all trainings, so this plan is valid for all home visiting staff.

	Program fidelity	Theories	Communication and reflection	Program tools	Additional
foundations	History and evidence	Attachment theory	Communication skills	Data collection - information system, forms and manuals	Pregnancy - norm and pathology
	Bulgarian context and services	Self-efficacy theory	Righting reflex	Program domains - facilitators and instructions	Tests and check-ups during pregnancy
	Core model elements	Human Ecology Theory	Therapeutic Relationships	Visit to visit guidelines	Rights for patients - insured and noninsured
	Client centered principles	Maternal Role	Reflective supervision	STAR Framework	Client case management
	Translation and interpreting		Stages of change, goal setting, finding strenghts	PIPE	Work with diverse communities
	Recruitment criteria and pathways				Domestic violence
	Standarts and scope of practice of home visitors and mediators				other trainings according the individual Learning Needs Assessment
	Informed consent				schedule, taking decisions, signals to
	Roles and responsibilities				Safety in field work
					Social services and child protection
infancy	Applying the NFP theories	Attachment, self-efficacy, human ecology theoies - revision	Motivational interviewing	STAR Framework	Breastfeeding councelling
	CMEs, fidelity, data	Maternal Role	Therapeutic relationships and bounduaries	Visit to visit guidelines	Introduction of solid foods
	Retention of clients		Communication skills	EPDS and GAD 7	Child development - first year
				ASQ 3 and ASQ SE	Stimulation of child development
				Information system	Infant check-ups and vaccine calendar
				PIPE	Attachment parenting and resposive care
				Child feeding and anaemia form	
toddler	Therapeutic relationships and bounduaries		Advanced communication skills and MI	PIPE	Child healthy diet
	Managing caseloads		Ending thearpeutic relationship	ASQ 3 and ASQ SE	Toddler check-ups and vaccine calendar
	Case conferencing			Information system	Child development - second year
					Stimulation of child development
					School system
supervisor	NFP Supervision		Reflective supervision - in practice	Learning needs assessment	
	Self assessment and quality improvement		Staff retention	Clinical competences assessment	
	Role of the NFP supervisor		Team building and management	Reporting in information system	
	Leadership		Burnout and fatigue	Schedule monitoring	
	Managing caseloads		Giving feedback		

The Education curricula is provided also as a separate attachment.

Changes to NFP education since the last report

We have developed our own experiences and know NFP well after several years of testing the program in phase 2. The education is based on these experiences and the adaptations we made in Bulgaria gives the training a better coherence and quality than we could offer earlier. This applies to both NFP nurse and supervisor education.

There was a temporary modification – due to Covid-19, the Foundations training was modified to be delivered to the new NHVs in an online format (the training was delivered in a half-day mode because of our awareness that a full-day screen time version would not be a feasible option). Some modules and practical exercises were delegated to the team Supervisor to conduct with the new nurses during another offline time.

- Successes/challenges with delivery of core NFP nurse/supervisor education:

As our main educator (the CL) is back on the team since September 2021, she had the opportunity to make a Learning Needs Assessment and Clinical competences assessment to all home visitors, this resulted in individual education development plans for each nurse. In the Site 2 team we have a nurse who needed to go through a number of more topics (including basic NFP knowledge) than the others, so the CL is closely monitoring and guiding this process to give a chance to the NHV to continue to be part of the NFP team.

The fact that we have hired a new nurse, has resulted in having held trainings with only one or two nurses at a time. In small education groups, we are losing some of the group feeling and the quality

of being able to learn from the rest of the group. This is why we wanted the newly hired nurse to complete Foundations training and to be part of group trainings with other NHV, instead of being individually trained, and one of the additional reasons why we have postponed the trainings.
We are currently waiting to get out of the peak of the current coronavirus wave so that we can set dates for the upcoming trainings.

- Successes/challenges with ongoing (integration) NFP nurse/supervisor education:

After several years working in NFP we are proud that we deliver a more focused training, adapted to the challenges we have in Bulgaria. Unfortunately, the ongoing education was also negatively affected by the pandemic. The Site 2 team was able to catch up with postponed trainings from 2020 and went through them in the period April-July 2021 (Attachment parenting, Child development, Case management, Field work and Child protection).

Both NFP teams had the chance to go through one-day in-person trainings promoting anti-discrimination, anti-bias, and respect for diversity in communities, at the workplace, and in society. The modules were taken from the Embracing Diversity Training (a licensed program by the International Step by Step Association whose license holder for Bulgaria is TSA) and delivered by the NFP Project Manager who is also a certified Embracing Diversity trainer. The program guides participants through a process of personal transformation – they start by recognizing their own attitudes, beliefs and behaviours in relation to marginalized groups, and receive guidance on how to build their capacity for change on personal, professional and institutional levels. The modules were very well accepted by the team and they requested a longer training on this topic.

One external training that the central team had planned for the last quarter of 2021 was cancelled because of uncertainty around Covid-19, and we now are in the process of rescheduling. (Self-protection and attitude with aggressive dogs – important for the teams' fieldwork and safety in the served areas).

- Successes/challenges with delivery of NFP induction, education and CPD for associated team members (Family Partnership Worker/Mediator)

It is a challenge that the NFP program is complex, in all its components for non-medical staff but despite everything, our team of mediators puts a lot of effort into learning new knowledge.
During the reporting period an induction training was done for the newly hired mediator in Site 2 by the Supervisor and the Clinical Lead. The program knowledge of both mediators in Site 2 is planned to be increased with their participation in the forthcoming Infancy and Toddler trainings.

Reflective Supervision

- Successes/challenges with NFP nurse reflective supervision:

Reflective supervision is done regularly in both teams as well as observed sessions by the Clinical Lead. Joint supervision sessions with team supervisor, Clinical lead, and NHV/HM for analysing and reflecting on NFP info system reports and client's individual data were started in November. All these actions resulted in improvement of the quality of the reflective supervisions and program

quality. Additional guidance to SV was provided by CL for managing the processes of planning and preparation by the NHV/HM before the supervision sessions with a focus on their own plans for actions in order to have better structure and more effective and productive individual sessions.

- Successes/challenges with reflective supervision to our supervisors:

Since the Clinical Lead has come back from her maternity, the supervision sessions were transferred back to her from the Project Manager. Both supervisors have received in the reported period supervisions and were able to reflect on all needed topics. There is still less reflective supervision and more supportive and cooperative work to handle the unpredictability during the sessions, but both CL and SV are working to change that.

The clinical consultations of all team members were restored since September 2021.

- Successes/challenges with delivery of reflective supervision to our associated team members (Family Partnership Worker/Mediator)

All individual supervisions of the mediators are conducted by the SVs. New group supervision sessions are planned to start from January 2022, for Site 2 as the SV is requesting additional support with this process in order to make better progress with timely addressing issues over client recruitment, referrals, translation, and overall performance. During the reported period the CL observed supervisions with all mediators, afterwards feedback and brainstorming sessions with the supervisors were held. The need was clear - specific forms for mediator's supervision needs to be created. Those new forms will be created by the CL and started to be used in SV sessions in 2022.

NFP Information System

- High level description of our NFP information/ data analytical system, including how data are entered by nurses or others:

Our NFP information system (IS) is an online based custom-build platform with a user-friendly interface, which facilitates data input on an ongoing basis by the NHVs, SVs and CL, based on their respective roles and responsibilities. The DA creates the profiles of CL, SV and NHV in that order, so that SVs are assigned to a specific CL and NHVs are assigned to a specific SV. This way the CL can see all data inputs from SVs that she works with and respectively the NHVs working with those supervisors. SVs can see all data inputs from the NHVs they are working with and can approve new clients in the IS or the change of status of existing clients. NHVs create the profiles of their clients and input data from home visits and data collection forms and can see information only about their own clients. The DA can see information input from all CLs, SVs and NHVs and is responsible for manually checking and approving (or returning for revision) each data form input by the NHVs.

Client and child data is anonymized by assigning a unique ID number to each client and to each child. The profile of each client consists of several separate tabs: Client- with basic information needed for enrolment and info about the pregnancy of the client; Child –birth outcomes (weight, length, APGAR, gestation week, etc); Visits – chronological information about each visit with the client and data forms collected within each visit; Client Profile – charts showing client's results in

time points of assessment on some data points (e.g. smoking); Child Profile - charts showing child's results in time points of assessment on some data points (e.g. length and weight against quintiles).

The IS also generates automated reports with aggregated data (all clients) on most CMEs and other relevant data points under – Model Fidelity, Life Course Development, Maternal Health, Child Health Development and Environmental Health sections. The reporting on these data points updates automatically with each data entry and is available for each role in the IS with the same logic as described above about visibility of information – NHV can see aggregated data about all her clients; SV can see aggregated data about all her clients and clients of her NHVs, etc.

The IS allows for printing of data collection forms and can easily be adapted for mobile devices, so that the NHVs can input data in real time directly in the IS and afterwards print out the forms for the paper file of each client. Now this is an available and feasible option when using a computer in telehealth visits.

- Commentary on data completeness and/ or accuracy:

Data quality is guaranteed through automated checks in the IS developed in time and through experience of using the system. The DA also manually checks each submitted data collection form for accuracy and completeness. In addition, the DA works individually with each nurse (monitoring the work in the IS) on a biannual basis to check for data completeness, which has proven useful in identifying and correcting mistakes like systematically failing to collect a particular data collection form at a particular time point, failing to input collected data form in the IS, and inputting the same data form more than once. This monitoring practice has also helped in unifying the understanding of NHVs and SVs about some data points collected. The DA together with the Project Manager and the Clinical Lead perform monitoring of the paper files of clients, usually after the monitoring of the work in the IS, which has also proven useful for the nurses in correcting identified mistakes but also in reconfirming and sharing good practices of data collection among team members.

Besides the role of the IS and the efforts of all team members involved, the data completeness and accuracy depend also on the willingness and in some cases the ability of clients to share information. In this regard, we have identified several areas where it is difficult to achieve full completeness of data or where accuracy and overall quality of collected data is questionable. Such areas are:

  - housing conditions – clients are not willing to share all information and sometimes the nurses are not sure how accurate shared info is.
  - income – clients rarely share such information.
  - immunization – even information from doctors cannot be always trusted in this case.

- Reports that are generated, how often, and for whom:

On a national level, the NFP Bulgaria team is asked to set 2-3 goals for next quarter, based on trends reported for the previous quarters and priorities identified by the NHVs through their reflections on the work with families. The Site reports have a more planning role. Individual supervision

sessions based on data are regularly performed by the SVs with the NHVs and by the CL with the SVs. The individual supervision sessions based on data gives more detailed information about the work of each NHV, both to her and to her SV, which allows for unifying the work of NHVs towards delivering the program with fidelity to the model and allows for personal adjustments where necessary. The NHVs are also asked to set 2 quarterly goals for themselves based on the data and trends about their individual work. During the last quarter of the reporting period the CL started to observe and lead individual supervisions based on IS data and many data and clinical questions arise. We are currently trying to figure out where some of the system reporting errors are coming from and correct them.

The form of all three types of quarterly meetings, as well as the additional quarterly reports are continuously discussed with the teams to shape them in the most useful and effective way to support their work.

- Our reflections on our information/ data analytical system - what we need to do to improve functionality, usefulness, and quality:

The information system is regularly updated when data collection forms are changed. Additionally, some changes on the functionality and reporting in the IS are introduced on ongoing basis with the input from the NHVs, SVs and CL. The changes are communicated by the DA; however, their implementation depends on the IT company that has created and maintains the IS. This sometimes translates to significant delays in the implementation. Changes in staff within the IT company also slows down the process as the system is quite complex and is based on the logic of the NFP program, which must be communicated with new staff members and sometimes leads to additional work needed and more delays.

In 2021 DA managed to address some of the changed required by TSA in 2018. These changes include: improvement of reporting for required number of visits in pregnancy; modifications in the form for home visits and changes in the form for Infant Health Care.

In the end of 2021, DA prepared a list for improvement of the IS. The IT company is going to implement them in 2022. This list includes improvements on NHV's reporting, a function for the CL where she will be able to better review data, improvements on STAR and ASQ reporting, and modification on Infant layout for better reviewing the data.

Description of our implementing agencies/sites:

- High level description of our implementing agencies/sites:

In 2021 the central team extended formally its partnership with the two major hospitals which formally employ our NFP teams. Grant annexes were signed through the end of the current TSA's financial period (September 2023).

Sheynovo Hospital (Site 1 team employer)

Last year we continued our fruitful cooperation with Sheynovo Hospital. Regular communication for solving any operational issues was maintained with the hospital's director and administration.

Sheynovo Hospital is the oldest specialized obstetric and gynaecological hospital in Bulgaria and has been functioning since 1935. The hospital develops innovative technologies in the field of obstetrics and gynaecology, neonatology and anaesthesiology. The hospital employs 123 healthcare professionals who work in the fields of prevention, treatment of risk pregnancy, sterility and oncological diseases of the female reproductive system. The hospital is a training base in the field of gynaecology and neonatology.

The office of the NFP Site 1 team is in the hospital premises, close to the main entrance – TSA pays a monthly rent to the hospital for the office space. The proximity to the hospital administration is convenient for the team in terms of receiving administrative support.

St. George University Hospital (Site 2 team employer)

Due to its huge size as both medical institution and administration, in 2021 St. George Hospital has once again been a bit harder to communicate with regards to ongoing issues. Cooperation has been a bit more formal and bureaucratic in comparison with the one maintained with Sheynovo hospital. However, no major problems have emerged in the reporting period and we also have a grant commitment till end of the current project funding.

St. George University Hospital is the largest hospital in the country with a total of over 2600 employees. It was one of the busiest medical establishments in terms of accommodating and treating Covid-19 patients not only from Plovdiv district but also from the whole South Bulgaria region.

Our team continues using a rented office in the central part of Plovdiv, closer to other service providers. The location is convenient for the nurses in terms of transportation to city areas being served.

- Current number of implementing agencies/sites delivering NFP: 2

- Reflections on our successes/challenges with delivery of NFP through our implementing agencies/sites:

Successes:

Having these partnerships with two of the most well-known hospitals in Bulgaria brings additional credibility to the program and the results our teams achieve, especially when it comes to meetings with stakeholders such as doctors, external services, municipal or state authorities. Additionally, when attending our NFP events (such as the National Advisory Board) or external conferences, the senior management of those hospitals expresses valuable support for the home-visiting service and brings awareness/approval among attending medical professionals. All these instances are a good promotion and advocacy for NFP and we plan to create more opportunities for this kind of gatherings that focus stakeholders' attention on NFP and build on its reputation, such as different roundtables (planned for the next 2 years).

Challenges:

Most challenges in the program implementation area last year were similar or the same as those observed in 2020, with very slight changes:

- Continuous uncertainty and complexity of the field work and service delivery posed by the Covid-19 pandemic
- Slower than expected client recruitment in both sites – Site 2 was not able to fill in the capacity of the new NHVs with the anticipated rate; Site 1 was not able to fill in the capacity of the part-time nurse after her maternity leave (10 clients) and the others' capacity after client graduation with the anticipated rate
- Persisting issue with the communication barrier between NHVs and clients in Site 2 (Bulgarian vs Turkish speaking)
- As a result of the previous – almost permanent need for a mediator to serve as an interpreter during the home visits
- As a result of the previous – more difficult for NHVs to establish and maintain trusting relationship with the clients
- Conservative and very religious families in Site 2 – leads to the need to adapt some aspects of the program delivery to the local context (for example cancel almost all home visits for a month – for the duration of the Muslim holiday Ramadan; or not discuss the topics of contraception as it is considered a taboo among a great number of families, etc.)
- Migration abroad – very high levels in 2021 despite the Covid-19 situation.
- Clients living in extreme poverty and poor living conditions – nurses faced exhaustion, doubt, and reluctance to enrol into the program and work with such clients.

Program adaptation

- Brief description of our program adaptation processes:

Whenever an important program adaptation is needed due to country/community context or client specifics, usually our approach is the following:

- Adaptation need is assessed and raised by the NFP field team
- The issue is discussed within the central team
- Adaptations are carefully planned
- Plan is discussed with TSA management
- All this is consulted with NFP international consultant and, if needed, with UCD (Prof. Olds)

So far, program implementation in Bulgaria has been adapted to include free medicines for pregnant clients and for babies; coverage of prenatal check-ups or health insurance until birth; introduction of the health mediators as a CME for Bulgaria, etc.

- Adaptations undertaken during this reporting period and outcomes (successes and challenges) of these:

One of the necessary adaptations in the reporting period had to do with the way our service was delivered to the clients during the time of the Covid pandemic – with the use of Telehealth or in person. The decision was made by the nurse depending on the level of risk in each family and of course the condition of the home visitor (We had some cases of quarantined and/or positive colleagues who were working during this time from home).

Another adaptation for the period is the extension of the recruitment period in Bulgaria. We will enrol clients until May 31, 2022, so that we can guarantee that every pregnant woman will be able to participate in the program at least until the child reaches his/hers first birthday. After this period the client caseloads of the NHV will start to reduce and we will need to have a new strategy for filling the nurses' working hours. This will need to happen only if we are unable to secure funding for the NFP teams. This service delivery (dosage) adaptation was approved by UCD.

- Adaptations planned for next 12 months

  - Improve the functionality and appropriateness of the local advisory boards
  - Nurses in site 2 to start using Turkish language materials (facilitators)
  - Creation of strategy for filling the nurses' working hours after end of client recruitment
  - Tested structured Telehealth in Plovdiv

- Reflections on successes and challenges with our adaptation approach:

Successes:

We always include members of both teams in the process of proposing changes and necessary adjustments in program delivery. Their opinion is extremely important, because they know the families and the challenges out there, more than anyone. Through this approach everyone feels ownership of adaptations. Quality improvement like this takes time, but it pays off eventually.

Challenges:

We feel helpless when witnessing the deteriorating economic situation of many NFP families due to Covid-related loss of employment and income and drastically rising inflation.

Any other relevant information:

PART TWO: PROGRAM IMPLEMENTATION - NFP CORE MODEL ELEMENTS (CMEs)

Please complete the table below to identify how the CMEs are being monitored/assured, progress against benchmarks, and actions planned or undertaken to address any challenges. Where there is a need to add more content than space allows, please add appendices as necessary. **Please explain any missing data or analyses and comment on data completeness as necessary.**

NB: Where any temporary variances to the CMEs have been agreed, please indicate these in the text box below as well as completing Appendix 2 of this document

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
1. Client participates voluntarily in the Nurse-Family Partnership (NFP) program.	100% voluntary participation Monitored /assured by: signed informed consent form.	100% voluntary participation	We do not have challenges with voluntary participation as our program is not enforced by any governmental agency. All clients are recruited on voluntary basis. A challenge is the opposite, when the client wants to enrol but one or more family members do not approve of her enrolment.
2. Client is a first-time mother	100% first time mothers enrolled Monitored/assured by: health mediators, who personally know the families and pregnant women, first visit by the nurse and signed informed consent form.	99% first time mothers	We have 3 clients who were enrolled in the program with their second pregnancy with the permission of the CL. One client's baby was born with congenital heart defect and died at three months and the mother did not have the chance to care for the baby. Another 2 clients lost the first pregnancy and were enrolled with

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
			her second pregnancy. Only one of the clients had a previous live birth.
3. Client meets socioeconomic disadvantage criteria at intake	The eligibility criteria for inclusion in the program in our country are: • Expectant mothers up to 22 years old; • No previous live births; • Pregnancy by 28th gestation week. This includes the socio-economic criteria of: • Living in a Roma segregated community and/or economically disadvantage (personal monthly income is less than the minimal monthly salary); Application of these criteria are assured and monitored by: health mediators, who personally know the families and pregnant women, first visit by the nurse, medical documentation about the pregnancy and the SV.	94% clients enrolled who meet the country's eligibility criteria (3 client with second live birth and 15 clients enrolled after 28th gestation week).	An exception to the 28th gestation week rule was made in Plovdiv, where recruitment in 2019 was very slow. In 2020 when the was no longer an issue, it was decided not to make more exceptions. One exception however was made for a family where the daughter and the daughter-in-law were both pregnant, but one was past 28th g.w. Both women were enrolled in this case. In 2021 we have 5 clients who enrolled in the program after 28 gestation weeks. 3 of them were identified just before 28 gestation weeks. However, the nurse was not able to make the first program visit due to sick leave. When she came back to work the girls were above 28 gestation weeks. Another girl

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
			was enrolled in 25th g.w. but after changing her OBGYN she had a corrected due date with 3 weeks. As the nurse had already made 4 visits and built a relationship with the pregnant girl a decision was made by the CL to keep her in the program. Afterwards there was one more with the same situation. She was enrolled in 28th g.w.
4. Client is enrolled in the program early in her pregnancy and receives her first home visit no later than the 28th week of pregnancy.	a) 100% of NFP clients receive their first home visit no later than the 28th week of pregnancy. b) 75% of eligible referrals who are intended to be recruited to NFP are enrolled in the program. c) 60% of pregnant women are enrolled by 16 weeks' gestation or earlier	a) 95% of NFP clients receive their first home visit no later than the 28th week of pregnancy. b) 54% of eligible referrals who are intended to be recruited to NFP are enrolled in the program. c) 39% of pregnant women are enrolled by 16 weeks' gestation or earlier in the program. In the previous reporting period 38% of new clients were enrolled by 16 weeks' gestation or earlier. In the current reporting period, 41.5% of the new clients are enrolled by 16 weeks'	a) From now on, clients who cannot receive their first home visit before or at 28th week of pregnancy will not be enrolled, with the rare exceptions like the one mentioned above b) During 2021, we have eligible potential clients who have been referred to the program by clinicians. When referring girls, clinicians provide girls' addresses from ID cards. However, mediators are not able to find girls because the address where girls actually live

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
		gestation or earlier.	is different from the one in their ID cards. We have these cases in Site 2 Plovdiv. c) We still do not have a national benchmark for enrolling women by 16 weeks' gestation or earlier, however, the trend has been: - 2016/2017 – 30% (19/64) - 2018 – 41% (11/27) - 2019 – 53% (33/62) - 2020 – 34% (26/76) - 2021- 41% (21/51)
5. Each client is assigned an identified NFP nurse who establishes a therapeutic relationship through individual NFP home visits.	100% of clients are assigned a single NFP nurse.	100% clients are assigned a single NFP nurse.	
6. Client is visited face-to-face in the home, or occasionally in another setting (mutually determined by the NFP nurse and client), when this is not possible.	Current National benchmark is: ____% visits take place in the home - we do not have such benchmark.	92% of home visits are conducted in the client's home	Overall, about 90% of all visits before the pandemic were home visits. Within this reporting period only 76% (1675) of visits have been actual home visits and 24% (515) have been conducted through telehealth (THV). The overall ratio for the program is now 75% home visits and 25% telehealth visits.

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
7. Client is visited throughout her pregnancy and the first two years of her child's life in accordance with the current standard NFP visit schedule or an alternative visit schedule agreed upon between the client and nurse.	Current National benchmarks for: a) Program visit dosage patterns in relation to client strengths and risks benchmarks are: We do not have benchmarks for program visit dosage for clients who are on alternative visit schedule, as these are exceptions. b) Length of visits by phase country benchmarks are: • Pregnancy phase: • Infancy phase: • Toddler phase: We do not have benchmark for length of visits per phase. The benchmark for all periods is between 60 and 90 minutes with regular home visits. c) Client attrition by program phase country benchmarks are: 90% attrition in Pregnancy phase 70% attrition in Infancy phase 60% attrition in Toddler phase	a) Program visit dosage • 97% of clients being visited on standard visit schedule. • Average number of visits by program phase for clients on standard visit schedule is: in total 56 (based on data for the 93 graduated clients). – Pregnancy phase: 12 (108%) – Infancy phase: 24 (86%) – Toddler phase: 19 (87%) • 7% of clients being visited on alternate visit schedule. • Average number of visits by program phase for clients on alternate visit schedule is - such data is not available as no client is visited on alternate visit schedule for the entire program duration. b) Length of visits by phase (average and range): Data by program phase is not available. The average length of home visit is 66 minutes (6 min. the shortest and 300 min. the longest) c) Client attrition by phase and	Most clients are visited on standard visit schedule and where schedules are renegotiated with clients, those who need more visits are usually visited on weekly basis rather than biweekly, and those who need less visits are visited once rather than twice a month. The alternative schedules are renegotiated when needed between the client and the nurse and this is also consulted with the SV. Data on this point is collected quarterly and in 2021 we had 6 cases of clients of lower dosage and 1 receiving more frequent visits. b) We are currently interested in data on length of telehealth visits. This will be considered in updating the reporting of the IS. C) There is a considerable difference in attrition rates in Sofia (82%) and Plovdiv (64%), as migration rates of Plovdiv clients to other EU countries continues to be high. Our attrition rates in both

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
		reasons: 91% attrition in Pregnancy phase 81% attrition in Infancy phase 76% attrition in Toddler phase	sites are still within the benchmarks we use, however, if the trend in Plovdiv about migration continue, we may fall under the benchmark in the next reporting period.
8. NFP nurses and supervisors are registered nurses or registered nurse-midwives with a minimum of a baccalaureate /bachelor's degree.	100% of NFP nurses are registered nurses or registered midwives with a minimum of a baccalaureate /bachelor's degree. Monitored/assured by (e.g. standardized job description) - standardized job description; a copy of diploma is submitted upon signing of job contract. Countries may also want to analyze other nurse variables such as age, years within profession, specialist qualifications etc.	100% NFP nurses are registered nurses or registered midwives with a minimum of a baccalaureate /bachelor's degree.	Nurses and midwives in Bulgaria only began to be able to access bachelor's degree-level education in 2008. This has resulted in a change of variance for this CME. Most of our NHVs have 2.5 or 3.5 years of training in Nursing or Midwifery. However, many of them have bachelor's or master's degree in other majors (public health, health management, psychology,

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
			economics, etc.).
9. NFP nurses and nurse supervisors develop the core NFP competencies by completing the required NFP educational curricula and participating in on-going learning activities	100% of NFP nurses and supervisors complete the required NFP educational curricula 117% of NFP team meetings and case conferences are completed (against expected for the period April – December 2020) Data on team education sessions is not gathered at present.	100% Pregnancy 80% (8/10) Infancy 50% (5/10) Toddler 106% completion of team meetings, 76% completion of case conference *data in 2021 (12 months)	2 nurses in Plovdiv who joint NFP team in March did to have Infancy training. 4 nurses in Plovdiv and 1 in Sofia did not complete Toddler training. Toddler training will be conducted when the nurses in Plovdiv complete Infancy training so all together participate.
10. NFP nurses, using professional knowledge, judgment and skill, utilize the Visit-to-Visit Guidelines; individualizing them to the strengths & risks of each family, and apportioning time appropriately across the five program domains.	Please complete the section at the end of this table*.	Please complete the section at the end of this table*.	Please complete the section at the end of this table*.
11. NFP nurses and supervisors apply the theoretical framework that underpins the program (self-efficacy, human ecology, and attachment theories)	100% of 4-monthly Accompanied Home Visits completed (against expected). Nurses are expected to have 1 AHV with an SV each quarter and 1 AHV with CL every 6 months, which is a total of 6 AHV a year per nurse. This benchmark might need revision.	71% (32/45) completed Accompanied Home Visits with supervisors and CL. - 63% (17/27) completed Accompanied Home Visits with supervisors. - 83% (15/18) completed Accompanied Home Visits with CL.	In March 2021 one nurse joined the team in Plovdiv. Due to that she had target of 2 AHV with her SV and 1 with the CL. In the second 6 months in 2021, one of our nurses in Sofia came back from maternity leave. That's

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
to guide their clinical work and achievement of the three NFP goals.		* data for 2021 (12 months)	why she had target of 1 AHV with SV and 1 with the CL.
12. Each NFP team has an assigned NFP Supervisor who leads and manages the team and provides nurses with regular clinical and reflective supervision	100% of NFP teams have an assigned NFP Supervisor 100% of reflective supervision sessions conducted against expected (calculated by time – working weeks- and number of nurses). The minimum reflective supervisions (RS) per quarter include: 8 RS by SV for full time NHVs and by CL for SVs; 1 RS based on individual data report; 3 RS by psychologist for SVs and 3 group RS by psychologist for NHVs.	100% of NFP teams have an assigned NFP Supervisor 82% of reflective supervision sessions conducted on national level.	92% of reflective supervision sessions conducted in Site 1 72% of reflective supervision sessions conducted in Site 2.
13. NFP teams, implementing agencies, and national units collect/and utilize data to: guide program implementation, inform continuous quality improvement, demonstrate program fidelity, assess indicative client outcomes, and guide clinical practice/reflective supervision.	No benchmark. Data is collected through an online based custom-build platform. Monitored/assured by: Data collection is monitored by automated checks in the IS, Data Analyst, SVs and PM on ongoing basis and through biannual monitoring visits to Site teams.	Progress: Within last reported period we continued with regular quarterly based procedures were established to utilize data for fidelity of implementation and quality improvement purposes. Data reports are prepared by the DA on national, team and individual level and discussed on quarterly basis respectively. New data reports on data points not gathered in the IS were also established and used on quarterly basis in the discussions.	So far, the quarterly meetings on all levels have proven successful in monitoring and guiding implementation of the program with fidelity and quality improvement. The work on finetuning all abovementioned reports is ongoing to make them more functional and useful for Site teams and national implementing agency. So far we had 7 QSM since 2020 when we starting conducting them.

Core Model Element	National Benchmarks and how these are being monitored	Progress against Benchmarks	Challenges + suggested actions to address these
14. High quality NFP implementation is developed and sustained through national and local organized support	100% of Advisory Boards or equivalents held in relation to expected (8 per year – 6 LABs I the two Sites and 2 NABs). 100% attendance at Advisory Boards held in relation to expected (5 government officials per meeting). Monitored/assured by (including other measures used to assure high quality implementation): attendance sheets; photos of meetings.	87.5% of Advisory Boards or equivalents have been held (6 LABs – 3 in each location, and 1 NAB). 74% (11 out of 15 expected) attendance at Advisory Boards (overall number of participants); 71% of government officials expected have attended the meetings.	We have observed a decreasing interest of the stakeholders in the LAB meetings. Thus, we have planned to restructure those sessions in an attempt to make them more interactive and appealing for the potential participants. A survey will be made among the members in the upcoming month and a new structure will be suggested by the central team. No issues have been observed re the NAB sessions.

Domain coverage*

Please complete with your country benchmarks and average (for proportion of time spent within each domain during visits)

Domain	Pregnancy Benchmark (%)	Pregnancy actual (%)	Infancy benchmark (%)	Infancy actual (%)	Toddler benchmark (%)	Toddler actual (%)
Personal Health (My Health)	35-40%	50% ↓	14-20%	16%↑	10-15%	13%↑
Maternal Role (My Child and Me)	23-25%	22%	45-50%	53%↓	40-45%	45%↓
Environmental Health (My Home)	5-7%	7%	7-10%	8%	7-10%	11%
My Family & Friends (Family & Friends)	10-15%	9% ↑	10-15%	10%	10-15%	13%
Life Course Development (My Life)	10-15%	12%	10-15%	13%↑	18-20%	18%↑

Commentary: (please identify any successes and challenges highlighted for CME 10 and any suggested actions to address these here):

Delivery of the program has continued throughout the pandemic via Telehealth or in person. The decision was made by the nurse depending on the level of risk in each family. Although challenging the nurses have found very imaginative ways of implementing this change and have had to adapt programme delivery and content to meet the needs of the specific client in the current challenging times. NFP nurses are always individualizing the visit-to-visit guidelines to the strengths & risks of each family, and apportioning time appropriately across the five program domains. As always, the topics of Health are high during the pregnancy period most of the time due to lack of any doctor's explanation during check-ups and the many questions all clients have. This is a constant trend in Bulgaria that we don’t anticipate being changed. Compared to the last year our domain dosage got closer to the model recommendations in most disbalanced areas. Overall, our domain coverage is mostly within the benchmarks. At all quarterly strategic meetings, we discuss domain percentages and afterwards during individual supervisions as well. Each nurse is trying to follow the V2V guidelines and to use topics from each domain as suggested but this is not always interesting to the client no matter the way of presenting the information. We should have in mind that all clients have individual needs and most of them are living in poverty which means that their attention is occupied with basic needs and survival.

PART THREE: PROGRAM IMPACTS

Countries report on data indicative of program outcomes to demonstrate continuing achievement of the three NFP program goals:

1. Improve pregnancy outcomes 2. Improve child health and development 3. Improve parents' economic self-sufficiency

Please complete the tables below and/or add any additional text or diagrams in Appendix 1. Where terms used in the report template are generic, please specify how items are measured as necessary. Please also explain any missing data or analyses and comment on data completeness as necessary.

Characteristics of our clients at enrolment		
Health, Social and economic Conditions at enrolment	**Previous year(s) (n/%)**	**Current Period (n/%)**
Age (range and mean)	Range: 12-21; mean 16 12 – 1/0,4% 13 – 7/3% 14 – 19/8% 15 – 47/20% 16 – 45/19% 17 – 37/16% 18 – 28/12% 19 – 32/13% 20 – 11/4,6% 21 – 9/4%	Range: 12-21; mean 16 12 – 1/0,4% 13 – 8/3% 14 – 21/8% 15 – 56/20% 16 – 54/19% 17 – 44/16% 18 – 33/12% 19 – 38/14% 20 – 16/6% 21 – 9/3%
Race/ethnicity distribution	Bulgarian – 12/5% Roma – 165/70% Turkish – 60/25%	Bulgarian – 14/5% Roma – 187/67% Turkish – 79/28%
Father involvement with client	In 9% of the visits in pregnancy	In 8% of the visits in pregnancy
Income (please state how this is defined)	1/1% info for income above minimum monthly income	6/2% shared info for income above minimum monthly income.
Inadequate Housing (please define) - **No running water.**	90/38%	110/39%

Educational Achievement	39/16% (have completed or are still in high school or higher education)	43/15% (have completed or are still in high school or higher education)
Employment	7/3%	8/3%
Food Insecurity (please define)	N/A	N/A
Ever in the care of the State (as a child or currently)	4/2%	4/1%
Obesity (BMI of 30 or more)	5/2%	5/2%
Severe Obesity (BMI of 40 or more)	0/0%	0/0%
Underweight (BMI of 18.5 or less)	57/24%	70/25%
Heart Disease	6/3%	6/2%
Hypertension	5/2%	6/2%
Diabetes – T1	0	0
Diabetes – T2	0	0
Kidney disease	11/5%	12/4%
Epilepsy	1/0,4%	1/0,3%
Sickle cell Disease	0	
Chronic Gastrointestinal disease	0	
Asthma/other chronic pulmonary disease	4/2%	5/2%
Chronic Urinary Tract Infections	5/2% (16/4% - during pregnancy)	5/2% (18/6% - during pregnancy)
Chronic Vaginal Infections (e.g., yeast infections)	11/5% (29/12% - during pregnancy)	12/4% (32/11% - during pregnancy)

Sexually Transmitted Infections	2/1% (5/2% - during pregnancy)	2/1% (6/2% - during pregnancy)
Substance Use Disorder	0	0
Mental Illness	2/1%	2/1%
Other (please define)	2/0,8% (Anemia)	2/1% (Anemia)

Please comment below on the vulnerability of your client population, including analysis of STAR (or equivalent) data and reviewing trends over time.

Trends for STAR

For the reporting period we observe reduced percentages of assessed risk in most of the categories. This may be due to the increased use of client case presentation with STAR form, which sharpens the nurse's attention and helps her address needs quickly and use protective factors and strengths. All nurses in both teams started to use STAR form during all case conferences and individual supervision sessions (when a client case is discussed).
Personal Health:

- We observe a significant reduction of substance use and abuse in Toddler 18 months. The change is by 7% compared to the data in 2020. We also see a decrease in Infancy 12 months by 4%.
- In terms of pregnancy illnesses and/ or chronic illnesses we can say that in 2021 we have a decrease in all program phases except in Infancy 6 months where the data is the same in 2020.
- According to the data in 2021 on intellectual Disability we see a decrease in 36 gestation week and Infancy 8 weeks by 9% However, there is also an increase by 6% during the last two periods we collect information (Infancy 12 months and Toddler 18months).
- Compared to the data in 2020 on Depression, Anxiety and other Mental Health Issues we see that we have in 2021 a decrease by 6% during the first 3 periods (4th visit, 36 gestation week and Infancy 8 weeks). However, we see an increase by 4% during the last two periods (Infancy 12 months and Toddler 18 months). Probably the explanation for this is that in the first periods there is a standard anxiety levels for pregnancy or the postpartum period, but subsequently we observe the result of the severe economic crisis in which our country enters, and which affects first the poorest citizens.

Maternal Role:

- Caregiving Attitudes and Behaviours- We have a total decrease by 6% In all phases except Toddler 18 months where the data is the same as the one from 2020.
- Child Health and Development. We have a total decrease by 6% From Infancy 8 weeks to Toddler 18 months.
- Child Care. We have a total decrease by 5% in the last two periods (Infancy 12 months and Toddler 18 months) and an increase by 1% in Infancy 8 weeks.

Environmental Health:

- Maternal Education and Work. In 2021 we see a significant decrease by 20% of the clients who have been assessed with high and moderate risk.
- Pregnancy Planning. In terms of this factor, we see that we have a total decrease by 5% of the clients who have been assessed with high and moderate risk.
- Literacy Limitations. From one hand we have a total decrease by 8% but from the other hand there is also an increase of the girls with moderate and high risk by 5% in the last two periods (Infancy 12 months and Toddler 18 months).
- Criminal Justice/Legal Issues. There is a decrease by 2% in Toddler 18 months. The other data is the same as 2020.
- Loneliness and Social Isolation. Observed decrease by 5% the first 3 periods when we collect data and in increase by 1% in Toddler 18 months.

My Family and Friends

- Intimate Partner Violence. There is a decrease by 3% in Toddler 18 months.
- Unsafe Family or Friend Network. Total decrease by 8% in all phases except Pregnancy 36 gestation week.

Life Course and Development

- Economic Adversity. We observe a significant decrease by 21 % in all program phases where we collect data.
- Homelessness and Residential Instability. There is a total decrease by 8% in all phases except in 4th visit.
- Environmental Health. Total decrease by 8% in all phases.
- Home Safety. 10% decrease in all phases except during the 4th visit.

Health and Social Services

- Health Services Utilization. There is a total 14% decrease in all phases.
- Child Care. There is a total decrease of 6% in all phases.
- Use of Other Community Services. There is a decrease by 10% in Toddler 18 months.

Part of the big shifts in the Toddler 18 months could probably also be explained with the high number of graduates within this period. More than a quarter of all the data comes from clients who have graduated within 2021.

*data is compared between 2020 and 2021. The data includes clints who have been assessed with moderate and high risk.

Alterable Maternal Behaviour/ program impacts for clients (please complete for all the time periods where the data is collected)					
	Intake	**36 Weeks of Pregnancy**	**Postpartum**	**12 months**	**18 months**
Anxiety (n, % moderate + clinical range) *mild + severe anxiety	38 (14%)	27 (13%)	46 (18%)	9 (6%)	7 (6%)
Depression, (n, % moderate + clinical range) *moderate + moderately severe + severe depression	8 (3%)	5 (2%)	8 (3%)	1 (1%)	2 (2%)
Cigarette Smoking, (n, % 1+ during pregnancy, mean number /48 hours) 91/32%, 9 cigarettes – before pregnancy	83/30% 3 cigarettes	55/27% 3 cigarettes	N/A	53/35% 3 cigarettes	34/38%, 3 cigarettes *At 24 months
Alcohol, (n, % during pregnancy, units/last 14 days)	8/3% 1 drink	0/0% 0 drink	N/A	3/2% 1 drink	4/5%, 1 drink *At 24 months
Marijuana, (n, % used in pregnancy, days used last 14 days)	4/1% 0 days/0 units	1/1% 1 days/0 units	N/A	1/1% 0 days/1 units	0/0%, 0 days/0 units *At 24 months
Cocaine, (n, % used in pregnancy, days used last 14 days)	0	1/1%, 1 time	N/A	1/1%, 10 times	0
Other street drugs, (n, % used in pregnancy, days used last 14 days)	0, 1 days/ 1 time	1/1%, 1 time	N/A	0	0
Excessive Weight Gain from baseline BMI - Pregnancy, (n, %)	N/A	N/A	N/A	N/A	N/A
Mastery, (n, mean)	14	15	15	16	18
IPV disclosure, (n, %)	21/8%	11/5%	N/A	14/9%	N/A
	6 Months	**12 Months**	**18 months**	**24 Months**	
Reliable Birth Control use, (n, %)	115/62%	96/63%	77/66%	60/68%	

NB! When asked how often they use these methods, the percentage of women who use them all the time or often is very low.					
Subsequent pregnancies, (n, %)	5/17%	4/13%	15/50%	5/17%	
Breast Feeding, (n, %)	71/38%	38/25%	20/17%	11/13%	
Involvement in Education, (n, %)	5/3%	7/5%	6/5%	3/4%	
Employed, (n, %)	2/1%	2/1%	6/5%	6/7%	
Housing needs, (n, %)	1. 87/47% 2. 74/40% 3. 56/30%	1. 76/50% 2. 56/37% 3. 51/33%	1. 68/59% 2. 48/41% 3. 41/35%	1. 55/62% 2. 40/45% 3. 26/29%	**1. No running water.** **2. No central sewage.** **3. No inside toilet**
DANCE (or equivalent), (mean - 2, 9, 15, 22 mos.)	N/A	N/A	N/A	N/A	
Father's involvement in care of child, (n, %)	N/A	N/A	N/A	N/A	
Other (please define)					

Please comment below on the program impacts for clients, as indicated by the data provided (include comparisons where possible e.g. to previous years, to rates achieved in RCT, to equivalent populations etc)**:**

In which areas is the program having greatest impact on maternal behaviours?

Which are the areas of challenge?

Birth data		
	Number	**% of total births for year**
Extremely preterm (less than 28 weeks gestation)	**1**	**0.4%**
Very preterm (28-32 weeks gestation)	**3**	**1%**
Moderate to late preterm (32-37 weeks gestation)	**54**	**23%**
Low birthweight (please define for your context) <**2500 grams**	**36**	**16%**
Large for Gestational Age (LGA) (please define for your context)	**NA**	**NA**
Other (please define)		

Please comment below on your birth data:

Measure / year	2016 - 2018 (n, % of all births within the period)	2019 (n, % of all births within the period))	2020 (n, % of all births within the period	March- December 2021 (n, % of all births within the period)
Birthweight < 2500 grams	12/81 (15%)	6/34 (18%)	14/74 (19%)	3/41 (7%)
Preterm birth < 38 g.w.	14/81 (17%)	6/34 (18%)	29/74 (39%)	10/41 (24%)

Child Health/Development				
	6 months (% of total)	**12 months (% of total)**	**18 months (% of total)**	**24 months (% of total)**
Immunizations Up to Date	102/53%	88/56%	68/55%	62/69%
Hospitalization for Injuries	1/1%	0	1/1%	0
ASQ scores requiring monitoring (grey zone)	Communication - 1% Gross motor - 7% Fine motor - 10% Problem solving - 3% Personal-social - 11%	Communication - 0% Gross motor – 7% Fine motor – 21% Problem solving – 5% Personal-social - 4%	Communication - 4% Gross motor – 9% Fine motor - 21% Problem solving - 8% Personal-social - 1%	Communication – 2% Gross motor – 12% Fine motor - 10% Problem solving – 7% Personal-social - 3%
ASQ scores requiring further assessment/referral (black zone)	Communication – 2% Gross motor – 1% Fine motor – 1% Problem solving – 1% Personal-social - 3%	Communication – 0% Gross motor – 1% Fine motor – 4% Problem solving – 1% Personal-social - 2%	Communication – 0% Gross motor – 2% Fine motor – 2% Problem solving – 3% Personal-social - 1%	Communication – 1% Gross motor – 2% Fine motor - 2% Problem solving - 1% Personal-social - 1%
ASQ-SE scores requiring monitoring (**above the cut-off**)	0	3%	0	3%
ASQ-SE scores requiring further assessment/referral (**Here the child is either below or above the cut-off.**)	NA	NA	NA	NA

Child Protection (please define for your context) **Signals to Child Protection Services (CPS) could be by NHVs or other people outside the program. Families can also turn to CPS for support services and the NHVs can encourage them to do so.**	Signal from outside the program – 1/1% Signal by an NHV – 0/0% Family turn to CPS – 2/1% cases NHV encouraged family to turn to CPS - 4/2%	Signal from outside the program – 2/2% Signal by an NHV – 0/0% Family turn to CPS – 4/3% cases NHV encouraged family to turn to CPS - 3/2%	Signal from outside the program – 0/0% Signal by an NHV – 1/1% Family turn to CPS – 1/1% cases NHV encouraged family to turn to CPS - 2/2%	Signal from outside the program – 2/2% Signal by an NHV – 0/0% Family turn to CPS – 3/3% cases NHV encouraged family to turn to CPS - 2/2%
Other (please define)				

Please comment below on your child health/development data: *Please see data report for more detailed information*

Additional analyses
Please insert here any additional analyses undertaken to further explore program impacts: N/A
Client experiences
Please insert here any materials you would like to present regarding client experiences of the program. This can include collated client feedback, a case study or by clients providing video evidence etc.: N/A
Sentinel / Significant events that deserve review:

Event	Number	What was the learning?
Child death	3	All three cases were within previous reporting periods. All cases were in Site 1 Sofia.
Maternal death	0	
Other - mother lost the custody of the child	2	One case was in 2019 and one case within the previous reporting period. One case is in Site 1 Sofia and one case is in Site 2 Plovdiv. In both cases the child continue participation in the program with the grandmother. The program is delivered well with the grandmother as a primary caregiver and nurses had no problem continuing the work with a different person, as they usually already know the grandmother.

Any other relevant information or other events to report:

PART FOUR: PROGRAM IMPROVEMENT & EVALUATION

Continuous Quality Improvement (CQI) program

- Briefly describe your system for monitoring implementation quality:

As described in **PART TWO** - section **NFP Information System**, we (DA, PM, and CL) continue to perform biannual monitoring on individual basis (each NHV and SV) of the IS data input and the client's paper files keeping. These two types of monitoring help clear any mistakes and misunderstandings, unifies the understanding of all NHVs and SVs, and facilitates the process of sharing of good practices regarding data collection, data input and home visits.

In 2021, we conducted two monitoring visits dedicated to client's paper files. One per site visit.

- Goals and Objectives for any CQI initiatives undertaken during the reporting period:

To secure continuous quality improvement, we stuck very strictly to the mechanism we have established in early 2020 described in detail in the previous annual report. In short it includes the following components:

1. Quarterly strategic meetings (to reflect on quarterly goals and indicators, to analyse quarterly data from the Information System, to set new goals and indicators for the current quarter)
2. Quarterly reports by the NHVs and SVs (to collect data which is not collected by the IS)
3. Quarterly data meetings on team level (to reflect on and analyse data for each of the two sites)
4. Quarterly reflective supervisions between a NHV and her SV (to reflect on and analyse data on individual level)

Following rigorously those CQI components, teams have set the following common goals and objectives for quality improvement throughout the reporting period:

- For Q1:
  - Increasing the dosage in "My family and friends" domain at the Pregnancy and Infancy stages (to fit or come closer to recommended dosage range)
  - Improving clients' knowledge and practices related to home safety and child's environment (because of insufficiently good results)
  - Resuming the accompanied home visits by CL and SV (which had been put on hold in 2020 as a result of the pandemic)
- For Q2:
  - Analysis of the STAR risks at 18 months and drafting a plan for action (data-informed practice with clients) – this was a trend noticed after the 2020 annual report data was prepared
  - Change in the dosage of two program domains ("My Health" and "My Child") at the Pregnancy stage (to fit or come closer to recommended dosage range)

- Analysis of data on depression and anxiety and a plan for action (utilizing resources) to tackle this issue with clients (after increased depression and anxiety levels as a result of the 2020 pandemic)

- For Q3:
  - Improving clients' knowledge and practices related to healthy eating in pregnancy and introducing solid foods to babies' diet (because of insufficiently good results)
  - Increasing the dosage in "My family and friends" domain at the Infancy stage (to fit or come closer to recommended dosage range)
  - Further adaptation of some NFP facilitators (to better serve NFP clients in our context)
- For Q4:
  - Increasing the number of newly enrolled clients (because of insufficiently good results)
  - Increased teams' capacity for work in the Toddler stage (because of identified gaps and needs)
  - Analysis of the clients' risks and vulnerabilities and drafting an action plan (to better inform nurse practice in addressing risks/vulnerabilities and achieving results)

For each of the quarterly goals the teams had come up with a different number (usually between 2 and 4) indicators which would prove whether the goals were achieved.

- Outcomes of any CQI initiatives undertaken during the reporting period:

Ten out of these 12 quarterly goals were successfully achieved by the teams. As a result of this process and more strategically targeted work, nurses were able to better modify their practice, to base it on data and to track their individual, team and program level progress. Changes in data clearly showed, for example, that domain dosage got closer to the model recommendations in most disbalanced areas. Nurses were given the means to put more efforts into problematic issues (such as feeding practices, home safety, addressing vulnerabilities, etc.) and were able to register progress at the end of each quarter when analysing and comparing the available data.

Both individual nurses and teams got more confident to analyse data and to reflect on it – looking for reasons and explanations for certain trends or problems. They became more open to share opinions and practice examples, and to think collectively about potential solutions and team objectives.

- Lessons learned from CQI initiatives and how these will be applied in future:

As we have now completed a whole 2-year cycle of quarterly strategic meetings and goal-setting, we have already accumulated the following lessons learned:

- Because of the Covid-19 restrictions the meetings have been held in an online format which is a convenient and easy way to gather nurses from both teams but we always have to plan some time for technical adjustment and preparation
- At first those meetings were a bit chaotic with many people expressing their opinion at the same time, some of them sparking long discussions which were way off-topic. We found a way to make the discussions more structured and orderly by allocating time for each element of the meeting, for each participant, introducing rules, etc.

- The central team always starts the meetings with an agenda – reminding what the purpose of those sessions are, what structure they follow, etc. This has made the meetings once again more concise and productive.
- We have now managed to squeeze everything we have to do in the meetings in 3 hours with a 15-minute break (presentation of quarterly data, reflections and explanations, summary of nurse quarterly reports and suggested goals, discussing and determining goals and indicators).
- In terms of achieving the quarterly goals, we have already observed that whenever regularly reminded of what they have committed to do and to track their progress, the goals are achieved. However, whenever left on their own, the teams tend to forget purposefully targeting the goal achievement. Thus, close oversight of the process is very helpful.

- Goals for CQI in next year:

Some of the quality improvement goals that were already identified for the service implementation include:

- More focus on the adequate use and implementation of the ASQ, with a specific training on follow-up referrals and activities for clients whose children are assessed in the grey or black area of development
- More focus on the rising number of subsequent pregnancies among the graduating clients (and an action plan to address this issue)
- Delivering the Infancy and Toddler core trainings to team members who have still not gone through this mandatory education
- Focusing more on the use of PIPE and sharing knowledge internally among team members on good practices and most well accepted lessons
- Continuously assessing learning needs, with a special focus on the mediators who are sometimes unintentionally left behind in terms of ongoing education
- Sticking to regular team meetings (weekly and quarterly) to analyse data, invite reflections and take informed decision about ways to better modify our work.

Program innovations tested and/or implemented this year (this includes both international and local innovations)

- Program innovations tested[1]:

In the first half of 2021 we focused more intensely on exploring the IPV innovation from the NFP international context and assess if/how it could be introduced in the Bulgarian context. As part of this process we:

- Came up with an IPV innovation ToR and expert profile
- Shared and discussed these "prerequisites" with NFP International and prof. Susan Jack
- Had a few interviews with potential IPV experts
- Had 2 meetings with a potential expert from the Animus Foundation to discuss possible adaptation and application of the IPV innovation in Bulgaria

[1] Please attach the materials used for the innovations.

- Had 2 meetings to dig more into IPV and what was possible for Bulgaria – one with prof. Jack and another one with Australian Clinical Leader and prof. Jack

The overall collective conclusion (also expressed by prof. Jack) after all these efforts was that at this point the IPV innovation was not feasible for adaptation to the Bulgarian context and introduction into the NHVs' intervention. Its critical pathway (of the nurses' practice) is built on the assumption that some key services and support mechanisms are in place and easily accessible by potential IPV victims (NFP clients). Most of those foundations were found to be either missing or insufficient in Bulgaria for the adequate functioning of the IPV innovation model. So, although not really tested, this innovation was still considered, explored, and assessed in the reporting period. But unfortunately, its testing was found to be inapplicable at this point of the program delivery in Bulgaria.

Another critical point from the innovation process that we had planned in the beginning of 2021 was the adaptation of some program materials (most used facilitators in the respective domains) to better serve the Turkish-speaking population we serve. With most of our Site 2 clients not being able to understand, speak or read in Bulgarian, our goal was to translate and simplify a pool of selected facilitators. For that purpose:

- Site 2 team went through all materials and selected the ones for adaptation
- The central team made some changes to simplify some of the facilitators (remove excessive text and use more pictures)
- The central team found a reliable interpreter who translated the selected facilitators in Turkish
- We decided to keep both versions in the facilitators – Bulgarian and Turkish, for everyone's convenience while using them (nurse, client, and mediator).

We have just now started testing this innovation/adaptation (beginning of 2022). Some nurses have expressed doubts that these adapted facilitators might turn out to be not very useful as many clients are also illiterate in Turkish. However, we would like to test their application for a few months – until March and see what the feedback and findings would demonstrate. Lessons learned will be shared accordingly with the NFP International consultant and with UCD in the next annual report.

On the topic of facilitators, another innovation took place in the summer of 2021. The central team accepted a collaboration with another TSA project which grants university scholarships to Roma students in nursery and midwifery. As a result of this joint initiative some of the students were accepted for a summer internship with the Site 1 team. A few of them chose an in-person format and took part in the actual work of the NHVs – participating in team meetings, shadowing nurses during home visits, etc. Other students chose the online internship options because of pandemic-driven concerns, so they were given the task to develop new facilitators that the nurses felt were missing from the original NFP materials but very necessary for the context of our clients. The topics of these facilitators focused on:

- What is anemia. Anemia during pregnancy, anemia and babies
- Harmful pregnancy and baby practices in the Roma community
- Why the use of baby gloves should be avoided (fine motor skills, etc.)
- Some popular harmful practices on sleeping safety
- The harmful use of sugar and juices given to babies instead of water

- The harmful practice to offer babies junk food and packaged food
- IUD-related myths in the Roma community
- Contraception practices in the Roma community
- The use of baby food services available for toddlers

At the end of their internship period, the students had produced these materials. However, most of them need serious revision and corrections. So far, only 4 facilitators have been somewhat finalized with comments and guidance from the Clinical Leader. We hope that those facilitators could be tested in 2022 and other internship collaborations could take place in the summer period – to support the students' practical knowledge of the home-visiting area. Again, follow-up will be shared with UCD accordingly.

- Program innovations implemented:

In 2021 we were able to apply a more structured telehealth approach with our Site 1 clients. As a result of a small project grant by the Sofia Municipality, we managed to provide tablets with 12-month internet plans to our pool of active NFP client in Site 1 (60 families). They received the devices after signing a contract with TSA, the condition being that if they were to keep and use the tablets for the purposes of NFP in the duration of 12 months, after this period the tablets will officially become their own.

The online consultations started officially in the second half of February and were most intense through May (during the third wave of Covid-19 cases in the country). Naturally, NHVs tried to prioritize physical home visits whenever safe and feasible. For most of the reporting period, both kinds of approaches were combined.

However, we observed that the innovative telehealth service delivery was very well accepted by both clients and nurses. With over 300 online meetings in just about 3 months, this technological shift has brought sustainability and structure to the Covid-impacted home-visiting work of our team in Sofia and lifted some of the nurses' pressure caused by the unpredictable working environment.

- Findings and next steps:

Along with the observations shared above, we found that as a result of the innovative approach Site 1 nurses accumulated valuable experience and know-how in the application of telehealth and the use of technologies for a structured provision of the NFP service. This experience further developed the competencies of our team members, and of our clients, for communication and interaction in a digital environment. At the end of the project, TSA was recognized by the Sofia Municipality as one of the pioneers in the online service provision (especially when we consider such a traditional service for most countries as home-visiting).

However, we've also learned some not-so-positive but still valuable lessons:

- Some clients were very tempted to use the tablets and the internet for other purposes (for example: to watch videos, for social networks, etc.). This sometimes meant that the internet limit for the month was exhausted and insufficient for the needs of the online consultations with the NFP nurses. Therefore, in the next such activity we would consider

the option to limit the use of the device only to a specific platform or application within the duration of the project, and then to "unlock" the other functionalities of the device. However, we are aware that such a modification would probably require additional financial resources.

- Some NFP moms shared that for the first time in their lives they had such an expensive item that is only theirs. Therefore, we are convinced that as an added value the project managed to instil in them a sense of care and responsibility for a property.
- We have also had cases of users who lost or broke the devices within the project. This was a risk we expected and were willing to take, because the benefits for most clients outweigh those incidents.

Since the telehealth grant was provided by the Sofia Municipality, we were not allowed to extend the innovation to our families in Plovdiv. This created a disbalance in the service provision in both locations. This motivated us to seek additional resources and to pilot this kind of a structured online approach with the clients there as well. As mentioned in a previous section of the report, one of our applications was successful with a donor approval in December 2021. So, our next steps consist of replicating the Site 1 model to the second site and see what the results would demonstrate.

Temporary Variances to CMEs (OVER 28TH WEEK)

For each variance agreed please attach a report of the variance evaluation methods and findings to date in Appendix 2 to this document
N/A

Additional Approved Model Elements (AAMEs)

Please attach a summary of findings in relation to any Additional Approved Model Elements in Appendix 3 to this document
N/A

Feasibility & acceptability study:

- Goals:

A key aim of the evaluation has been to explore whether it is possible to implement the NFP program according to the core model elements within the Bulgarian context and to identify barriers and enablers to implementing the NFP model, and to inform policy and practice around its future development.

The study has looked to find answers to the following questions:
- Is it possible to deliver the NFP program elements (e.g. nurse-led intervention, referral process (including additional help from health mediators), curriculum, frequency of visits, community partnerships) with fidelity in the current Bulgarian context (focusing on both existing health and social services offered to pregnant women and first-time mothers)?
- Is the program being implemented as intended (and if not, why not)? What is the nature and extent of any changes that have had to be made to planned implementation arrangements to deal with existing problems?
- Are the NFP program elements (e.g. nurse-led intervention, referral process (including additional help from health mediators), curriculum, frequency of visits, community partnerships) acceptable to nurses, young, first-time mothers and their family members, and community stakeholders

(policy-makers, health, and social-service providers; professional associations; medical universities)?

- Methods:

The study has been intended to be both formative (feeding back into the work of the sites as they develop) and summative (drawing conclusions at the end). It has followed the experiences of a group of young mothers, and the staff working with them, over a period of time and through the various stages of the program. The study has employed two main types of information: quantitative monitoring of data collected from (or about) all clients at key stages in the delivery of the program, and qualitative interviews with clients, NFP staff and other stakeholders with an interest in the program. The qualitative element of the evaluation has aimed to capture a diverse range of circumstances, characteristics, views, and experiences and to generate insight and understanding about how the program operates on the ground. However, it has not been intended to ensure „representativeness" in a statistical sense.

- Sample:

The initial plan of the F&A study was to conduct 183 in-depth interviews, 2 panel survey waves of 200 respondents (400 quantitative interviews), one survey of 20 nurses, and 2 focus group discussions with Roma elders by the end of the study. However, due to slow initial recruitment of clients and changes in the initial survey questionnaire based on feedback from clients, nurses and mediators, the number of quantitative interviews with clients in all three stages of the program has been much lower. Additional difficulties in the study's fieldwork in the last two years have been faced as a result of the Covid-19 crisis and restrictions.

The aim of the survey was to cover the knowledge, awareness, opinion, attitudes, and practices of 14 types of stakeholders, concerning pregnancy and childbirth, infancy and toddlerhood, and with regard of the existing social work policies and early childhood development programs in Bulgaria.

- Progress to-date:

We received our first Preliminary Field Report long after the expected deadline - in the beginning of 2019. It outlined the scope and methodology of the study and gave a lot of details on the situation in Bulgaria, as well as the served communities. However, it failed to include analysis of the interviews done with clients, as discussed with UCD. After discussions with the OSI team the goals of the study were restated, and we agreed that we would have two more preliminary reports – one focusing on nurses and clients and another one focused on the stakeholders.

We received the final version of the second preliminary report in June of 2020 and a first draft of the third preliminary report in the beginning in March 2021.

A draft of the final Feasibility & Acceptability report was submitted to TSA in December 2021 – 6 months after the agreed deadline. However, the quality of the draft was unsatisfactory with many feedback comments for incorporation from the TSA's side. Thus, in the writing period of this Annual

Report the final version of the F&A report is still being reworked by the OSI team. Their final product is expected by the end of February the latest. When ready, it will be shared with UCD.

Findings from feasibility & acceptability study to date:

- Key findings from our study

In the table below are the final report's assessment of the feasibility and acceptability of the adjusted core elements of the NFP program as implemented in Bulgaria by March 2021.

The scores to be read as follow: *++ feasible/acceptable, + rather feasible/acceptable, 0 neither-nor, - rather not feasible/acceptable, = not feasible/acceptable, n.a. – not applicable to this indicator; n.d. – no data at the current stage of the research*

(In yellow we have marked the assessment from the previous report, so the change/improvement could be more easily noted)

DAC criteria	feasibility					acceptability
Core element	relevance	effectiveness	efficiency	impact	sustainability	
Good community and organizational planning	+ (0)	+	n.d.	+	+	+
Intensive nurse learning	++	++ (+)	++ (+)	n.a.	+ (=)	+
Visit-by-visit guidelines	++	+	++	++	++	++
NFP data collection and reporting system	+	++	+	++	++	++
Standardized evaluation and reports	n.d.	n.d.	n.d.	n.d.	n.d.	++
Quality improving processes	+ (n.d.)	+	n.d.	n.d.	+ (n.d.)	++
Health mediators	++	+	+	++	++	++
Full coverage for all medical needs of all clients	++	++	=	+	=	++

- Reflections on our findings/results

The summary table from the third preliminary report on feasibility and acceptability of the program in Bulgaria shows that all evaluated elements are acceptable in our context, with the Community & Organizational planning and Intensive nurse learning being scored lower than the other elements but still acceptable.

Previous comments of the research team on acceptability of Community & Organizational planning have also been regarding the need to work with local community and religious leader more closely, however, our experience in Plovdiv showed that although a buy-in from the leaders is necessary, the close work with them is not always productive, since the model of work established in these communities is through financial incentives which is not sustainable or productive. What has worked well is hiring and training motivated members of the communities as mediators. Although they are community-bound, like the research team has pointed out several times in the F&A study, they manage to establish good rapport very quickly, both with the teams of nurses and with the community members, which makes the program delivery acceptable.

Another recommendation of the research team is to engage former clients and community members such as grandmother and mothers-in-law in additional activities to make the program more acceptable and sustainable in the communities where the program operates. The central team has been working on such ideas but the COVID 19 outbreak has suspended efforts in this direction.

The Intensive nurse learning has become more feasible as evident from the table above. On the one hand, the continuous learning is a central principal of the medical professions, but on the other hand this is not well-established philosophy in Bulgaria yet. As part of the EU, where the continuous learning throughout the lifetime has been established as one of the guiding principles, this is becoming more widely accepted in Bulgaria as well and the future developments will be in that direction.

Another aspect of the Intensive nurse learning that has been highlighted by the researchers and we need to address is the sustainability of their training. The need for trained trainers within the teams in the country and having more than one trainer has been recognized considering the staff turnover within the last two years.

The Visit-by-visit guidelines and NFP data collection and reporting system have been both evaluated as very feasible and acceptable. They are becoming more acceptable and appreciated by the teams which now see a direct correlation between guidelines and data analysis on one side, and quality improvement of the service on the other side.

The research team has not been able to thoroughly evaluate the Standardized evaluation & reports and Quality improving processes due to lack of data.

The evaluation on feasibility and acceptability of health mediators shows that this element of the program is central for the service delivery in Bulgaria. The research team has commented previously on the fact that their work is community-based and that steps towards sustainability of this element should be taken and both of these issues can be addressed with the formal training they need to undergo to become trained health mediators who can be then hired by the respective municipalities. Such steps have been taken by the central team and two of the mediators in Sofia have undergone the training. The experience of the central team shows that the issue with the

community bound work of the mediators cannot be entirely overcome with formal training only and hiring mediators from different communities is also necessary.

The coverage of medical costs for clients has been a very relevant element of the program, according to the researchers' assessment, because the communities which the NFP program targets are on average economically disadvantaged, have low access to quality education and suffer many health risks due to poverty. However, this aspect is rated as unsustainable, which the central team is aware of and has been working to address through publications and raising the topic in discussions with stakeholders and other allies working on ECD. TSA also manages several advocacy initiatives addressing the issues of uninsured pregnant women and the need of free medication for children 0-3.

Another issue related to feasibility of the program in Bulgaria, which the research team is raising in each report and supports with data is the shortage of nurses and midwifes in Bulgaria. In this regard a more strategic action on behalf of the government is needed in order to solve this systematic issue, which threatens not only vulnerable communities in the country, but the sustainability of the healthcare system at large. This is one of the topics that consistently raised in NABs in front of the government officials from the Ministry of Health, not only by the central team, but by other important stakeholders as well. However, it is not a major concern for a potential NFP dissemination on a national level as the initial research by TSA has identified 8 to 10 possible NFP sites. This means that a relatively small number of nurses and midwives – around 60, could cover the capacity needs of those sites. This is not a huge number on a national scale but could lead to a substantial positive impact for vulnerable communities around the country.

- Any actions planned based on results

In response to recommendations on the learning needs of teams – the central team has trained another team member (the Site 2 SV) to deliver some of the Core Training modules. Thus, new staff members can be timely and cost-effectively trained. Moreover, TSA plans to continue being responsible for staff training even after NFP is (presumably) transferred to government or municipal authorities. Depending on the number of future sites, more team members could be trained as NFP educators.

The central team has provided all necessary data and information gathered so far on Standardized evaluation & reports and Quality improving processes with clear instructions for the research team for them to be able to evaluate these two elements in the final F&A report. However, changes have not been reflected in the draft version of the final report and comments/guidance have been provided to OSI in this direction.

The central team has a long-term goal to collect and summarize all practical knowledge and experience of the team mediators. Our idea is to follow the researchers' recommendation and have a practical handbook for fieldwork towards the end of 2022.

The central NFP team, together with the TSA's first foundations team, keeps working on advocacy initiatives towards improving vulnerable communities' access to healthcare and social services, free medicines, address registration for obtaining ID cards, etc.

The central team has worked towards resolving the issue of shortage of nurses on a smaller scale by securing funding to provide scholarships for women from Roma communities to study nursing and midwifery (as mentioned above). Hopefully this initiative will expand to include more stakeholders and donors and eventually support more future medical professionals who could potentially work as home-visitors.

Anything else that would be helpful for the UCD international team to know?

- Preparation of an outcome evaluation of maternal and infant outcomes

As mentioned in the first section of the report (under the Evaluation Capacity and roles in the national program implementation), the central team spent a great deal of reporting period in preparation for the implantation of a small-scale outcome evaluation instead of a full-scale RCT (not possible for various reasons, including lack of financial resources). According to the design, crafted by TSA and Utrecht University team, the Maternal and Infant Outcomes Study will assess intermediate outcomes of NFP client mothers' knowledge, attitude, and behavior regarding childbirth and early childhood development, and will also assess the development of their children. Three main activities are foreseen:

1. Elaborating the study design and the tools to be used. This activity was led by Prof. Joost de Laat and involved other researchers from Utrecht University and TSA staff members working on the NFP program. This activity intensified after March 2021 and a clear design was outlined by September 2021. All researchers have been working pro bono on the design structure.
2. Data collection through field interviews and assessments. The fieldwork will be carried out by the chosen research agency and supervised by TSA.
    - For mothers: A knowledge, attitudes, and practices survey (KAP survey) on NFP curriculum, also identifying some barriers to behavioral change (lasting not more than 1 hour).
    - For children: an assessment of child development using the Ages & Stages Questionnaire (ASQ) (lasting between 1 – 1 ½ hours).
    - Collection of birth record copies if mothers have it with them or release form for birth records to be collected from hospitals (if possible).

    The survey firm will be asked to fill the questionnaires with the following three groups in Sofia and Plovdiv:

    - Active NFP clients (with children aged 6 months to 2 years) and NFP graduates (with children aged 2 to 5 years) – about 200 women and 200 children
    - Roma mothers from the same neighborhoods were NFP operates (in Sofia and Plovdiv), who had their first-born child below the age of 22 and within the period 2017-2021 – 300 women and 300 children
    - Mothers from the general population, who had their first-born child within the period 2017-2021 – 300 women (possibly 300 children if data on national testing of ASQ is not available)

3. Data analysis and report on findings from the study. The data analysis will be caried out by data analyst from Utrecht University and Joost de Laat, together with his colleague researchers will analyze the result and report findings of the study.

We have anticipated the following risks related to the study implementation:

- Numbers of the samples groups hard to be achieved
- Hard to match sample groups' representatives according to defined characteristics
- Sample sizes of compared groups too small to have statistically significant results
- Obtaining some of the needed data (such as birth records) might be hard due to GDPR, participants' unwillingness to share, etc.
- Interviews with women (KAP surveys) mostly self-reported
- Quality of ASQ depending on training of surveyors and availability of the child to participate in the assessment
- Including the 3 identified sample groups (over 1000 participants) might make the study too expensive.

To mitigate the anticipated risks, we will take the following measures:

- Engage our health mediators in supporting the research agency field staff when it's necessary (to make sure highest number of Roma women in the respective sample groups is reached and matched according to defined characteristics)
- Challenges of achieving statistically significant results due to small samples will be taken into consideration when analyzing the data and thoroughly explained in the final study report
- Field workers will be prepared to explain in details the importance of collecting birth records as well as the confidentiality policy; incentives will be in place for the participants
- Field workers will be trained to also observe some of the questions on the KAP survey and the ASQ (whenever possible) and take notes
- Research agency will first test the implementation of the KAP and ASQ to assess quality before surveys are rolled out
- Funds to cover even the most expensive scenario will be identified internally (indications in place that this can be accommodated).

PART FIVE: ACTION PLAN

LAST YEAR:

Our planned priorities and objectives for last year

Last year we had planned the following 13 priorities and objectives for the current reporting period (10 months):

- Continue improving the quality of the service through strategic meetings, data-informed practice, regular reflective supervisions, monitoring, etc.
- Develop a marketing strategy for NFP and intensify communication with stakeholders (more videos, monthly newsletter, new annual book donations campaign, start of roundtable sessions, etc.)
- Deliver Toddler training to Site 2 team and some nurses from Site 1
- Deliver Infancy training to new nurses in Site 2
- Finalize formative evaluation process (final F&A report submitted, info disseminated)
- Finalize impact evaluation design and select implementing agency
- Adapt the most used facilitators for Site 2 context (more pictures, less text in Turkish)
- Explore further feasibility to adapt and use the IPV innovation
- Finalize the NFP policy brief
- Finalize Bulgarian NFP methodology
- Provide planned ongoing education modules to fill the gaps in NFP nursing workforce
- Update Lessons Learned Report with findings from the Covid-19 period
- Update IS reporting and functionalities (according to actions described in data sections above)

Progress against those objectives

Out of these 13 objectives, we managed to fully achieve 10:

- Continue improving the quality of the service through strategic meetings, data-informed practice, regular reflective supervisions, monitoring, etc.
- Develop a marketing strategy for NFP and intensify communication with stakeholders (more videos, monthly newsletter, new annual book donations campaign, start of roundtable sessions, etc.)
- Finalize formative evaluation process (final F&A report submitted, info disseminated)
- Finalize impact evaluation design and select implementing agency
- Adapt the most used facilitators for Site 2 context (more pictures, less text in Turkish)
- Explore further feasibility to adapt and use the IPV innovation
- Finalize Bulgarian NFP methodology
- Provide planned ongoing education modules to fill the gaps in NFP nursing workforce
- Update Lessons Learned Report with findings from the Covid-19 period
- Update IS reporting and functionalities (according to actions described in data sections above)

We have made significant progress on 1 of the remaining 3:

- Finalize the NFP policy brief

We have not managed to address 2 of the objectives:

- Deliver Toddler training to Site 2 team and some nurses from Site 1
- Deliver Infancy training to new nurses in Site 2

NEXT YEAR:

Our planned priorities and objectives for next year:

- Deliver Infancy training to new nurses in Site 2
- Deliver Toddler training to Site 2 team and one nurse from Site 1
- Finalize the NFP policy brief
- Develop a detailed version of the NFP training curriculum
- Finalize NFP service integration map (methodology) and submit to the Ministry of Health
- Implement advocacy activities targeting the Ministry of Health and the Ministry of Labour and Social Policy (meetings; roundtables; NABs; etc.)
- Implement the NFP outcome evaluation – receive final report
- Restructure the LABs to be more effective
- Bring caseload to 100 percent
- Agree on new duties for teams after end of client recruitment (from June 2022)
- Identify funding opportunities/proposals for existing sites
- Include more personal stories of clients in the communication pieces
- Test structured telehealth in Plovdiv
- Draft a practical handbook for fieldwork towards the end of 2022 (collect feedback from mediators)
- Put marketing/fundraising strategy in action
- Update Lessons Learned report with lessons of health mediators as interpreters
- Finalize and test new facilitators (developed by NFP interns)
- Evaluate the feasibility of Turkish facilitators after their use with Site 2 clients
- Explore options for follow-up activities with NFP graduates

Measures planned for evaluating our success:

The central team, as part of the TSA's First Foundation team, also has a regular (quarterly) strategic meetings to plan goals and indicators for each quarter. Each project's annual goals and priorities usually get planned and listed with indicators and deadlines during those meetings. Follow-up is regularly discussed with the First Foundations Officer as well. This is a mechanism that has proven to be effective for planning, acting on and evaluating strategic goals and priorities. We will stick to this process in 2022.

We will know we have reached our goals when we have the achieved the following:

- Infancy training is delivered to new nurses in Site 2
- Toddler training is delivered to Site 2 team and one nurse from Site 1

- NFP policy brief is finalized (final product)
- A detailed version of the NFP training curriculum is finalized (final product)
- NFP service integration map (methodology) is finalized (final product) and submitted to the Ministry of Health
- At least 1 roundtable, 2 NAB sessions and 3 meetings with ministries' officials take place
- The NFP study is implemented, data is collected and analysed, final report is received
- LABs are held according to a new structure
- Teams have updated job descriptions after end of client recruitment (from June 2022)
- At least 2 funding opportunities are identified and proposals submitted
- At least 2 personal stories of clients are published on a monthly basis
- Telehealth in Plovdiv is tested and final report is submitted to the donor
- Practical handbook for fieldwork towards the end of 2022 is drafted (final product)
- Marketing/fundraising strategy is in action
- Lessons Learned report is updated.

Any plans/requests for program expansion? No.

FEEDBACK FOR UCD INTERNATIONAL TEAM:

The most helpful things we have received from the international team over the last year have been:

- Regular guidance on program delivery with fidelity to the model
- Meetings of CAG and Research and Analytical Group (shared learning)
- Meeting with NSO (NFP in the US) advocacy expert (guidance)
- Connecting to experts in Australia, UK, and Canada to further explore IPV innovation and its feasibility in the Bulgarian context
- Guidance on the program evaluation design and implementation
- Shared learning for NFP education (materials and videos from Scotland teams)

Our suggestions for how NFP could be developed and improved internationally are:

- Organize the 2022 conference/international event for learning exchange
- Explore more options for such events, even on a smaller scale
- Library with resources on successful advocacy tools and initiatives
- Exchanging knowledge or meeting some of the NFP moms-ambassadors of the program (to learn more about their role and functions)

This what we would like from UCD through our Support Services Agreement for next year:

- Provision of mentoring and coaching via Zoom and ad hoc advice
- Monitoring of license and oversight of fidelity, including annual report and review
- Feedback on final formative evaluation content
- Expert guidance re research methodology, plans and findings

Please note: with permission, all completed annual reports are uploaded to the restricted pages of the international website so that every implementing country can mutually benefit in sharing their progress and achievements.

Please indicate your country's willingness to share this report in this way by checking one of the boxes below:

I agree to this report being uploaded onto the restricted pages of the international website	X
I do not agree to this report being uploaded onto the international website	

PART SIX: ANNUAL REPORT FROM UCD

(To be completed by UCD following annual review meeting)

Brief summary of services/support provided by UCD over the last year:

- Monitoring of license, oversight of fidelity and agreement of quality improvement plans
- Liaison and expert guidance regarding the development of research design and methodology for phase three study.
- Feedback on formative evaluation reports
- Consultation meetings with Project Manager and Clinical Lead to provide guidance, updates and collaborative problem solving
- Updating and maintaining the international NFP website, including creating opportunities for accessing international program resources, educational materials, and NFP news updates.
- Access to the international website forum for discussion of issues with leads in other NFP implementing countries
- Development and dissemination of international guidance documents on program content and implementation that draw on the experiences of all NFP implementing countries.
- Provision of the international Clinical Leads' Advisory Group meetings.
- Sharing new program innovations developed and researched by PRC and all implementing countries
- Developing additional opportunities for international collaboration and networking, such as the data analytic and research-leads forum and the PIPE education group.
- Facilitating the sharing of good practice between countries on particular topics.
- Sharing new NFP international research outputs from all countries via the website and through the international research seminars.
- Promoting NFP internationally as an example of a program that ensures high quality replication in all contexts and maintains its international reputation for effectiveness and quality.

Identified strengths of program:

- The commitment, talents and resourcefulness of the TSA Leadership Team, resulting in continued adaptation and development of program implementation and an exemplary annual report
- The ability of the leadership and local teams to adapt to the challenging environment created by the COVID pandemic and to continue to provide a service to clients in times of great challenge, whilst at the same time continuing to undertake a program of quality improvements and adaptations
- The continued ambition and expert strategic work of TSA to develop Governmental and other national influential support for the program in order to enhance the opportunities for sustainability.
- The ability of the nurses to develop and maintain relationships with clients, to work purposefully with families and maintain their resilience in the face of multiple challenges
- The collaborative approach to program adaptation, in which learning from the frontline is developed and thoughtfully integrated into processes and program adaptations.
- The continued development of the Information system and the high-quality analysis of data evident in the annual report and data presentation

Areas for further work: A number of areas for suggested follow up were discussed in the Annual Review Meeting and summarised in the meeting notes
Agreed upon priorities for country to focus on during the coming year: As itemised in Part Five
Any approved Core Model Element Variances: No additional variances discussed
Agreed upon activities that UCD will provide through Support Services Agreement: - Provision of mentoring and coaching via Zoom and ad hoc advice - Monitoring of license and oversight of fidelity, including annual report and review - Feedback on final formative evaluation content - Expert guidance re research methodology, plans and findings In addition, potentially facilitate; - Meeting with another NFP country Govt. official - Arrange meeting with Charlotte Min-Harris, Chief Operations Office, NSO, re advocacy - NSO meeting re NFP moms as ambassadors

Appendix 1: Additional data analyses and /or graphic representations of the data

Appendix 2: Evaluation of temporary CME variances

Please complete the table below for each variance agreed for your country.

CME #:
Temporary Variance to CME agreed:
Brief description of approach taken to testing the variance:
Methods for evaluating impact of variance:
Findings of evaluation to date:

CME #:
Temporary Variance to CME agreed:
Brief description of approach taken to testing the variance:
Methods for evaluating impact of variance:
Findings of evaluation to date:

Appendix 3: Additional Approved Model Element (AAME)

AAME agreed:
Reflections and findings in relation to use of the AAME