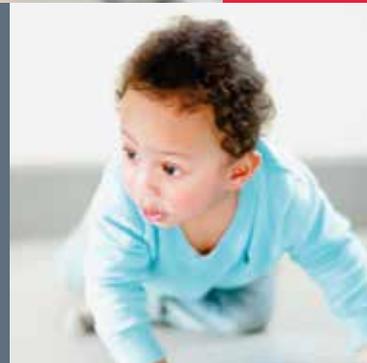


# FNP ADAPT



Using **evidence**, **pragmatism** and **collaboration** to change the Family Nurse Partnership programme in England.

# Acknowledgements

**Well over 200 people worked on the ADAPT project:**

nurses, researchers, service design specialists, project managers, communicators, data scientists and administrators, among others.

**This report brings together voices from across the project to share the story of our work.**

We hope this report, like the interim report that preceded it, serves as a record of the passion, creativity and dedication that all those involved have shown to improving the lives of children, parents and families.

**We would like to thank:** the supervisors, family nurses and quality support officers in each FNP team involved in the project, who have delivered this work alongside existing responsibilities without additional resource; local leaders in areas where FNP is commissioned, whose continued support and commitment made this project possible; Sarah Gibbs and the National Lottery Community Fund's A Better Start programme; Sebastien Ergas at Impetus, colleagues at the Tavistock and Portman NHS Foundation Trust and Public Health England, as well as the many other colleagues and friends who have provided advice, challenge and support along the way; Sara Burns, Joy MacKeith, Dr Anna Good, Sandra Greaves and colleagues from Triangle Consulting Social Enterprise, who developed the New Mum Star with us; Marija Ruscic, Rudolf Kohulak and their colleagues from Math Labs Research, and Dr Bella Wheeler; Dawn Hodson and Samantha Kyriacou at the NSPCC and Professor Susan Jack at McMaster University School of Nursing; and Jason Strelitz who helped develop the ideas and implementation plans around system adaptations and personalisation of the FNP programme.

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# Foreword

By David Olds

Nurse-Family Partnership Programme Founder and Professor of Paediatrics,  
University of Colorado, USA



Family Nurse Partnership's success in improving the lives of vulnerable children and families can be traced to three fundamental principles shared by FNP leaders around the world – its commitment to clinical excellence, respect for good evidence in guiding its efforts, and constructive dissatisfaction.<sup>i</sup> The ADAPT project is a beautiful illustration of these principles applied to challenges faced by the programme today.

One of the key successes of this effort has been the development of the New Mum Star, a tool for nurses to use in adapting FNP content and dosage to the individual needs and aspirations of young parents served by the programme. A key strength of the New Mum Star is its explicit engagement of mothers and fathers in reflections on where they are and where they want to go – for their new child and for themselves.

In a remarkable parallel, an effort had been set in motion in the US to develop and operationalise an approach to programme delivery with exactly the same goal: adapting programme content and dosage to the needs of individual families on a visit-by-visit basis. This effort, also known as STAR (Strengths and Risk Framework), grew out of our observation that families in US community replication were dropping out of the programme at higher rates than they had in the original trials.<sup>ii</sup> Some nurses and sites were retaining families at rates similar to the original trials while others were struggling. A key factor in distinguishing sites and nurses with high and low retention was the degree to which nurses were adapting the programme to families' individual needs and aspirations.<sup>iii</sup> Quasi-experimental and experimental evaluations of site-level interventions designed to adapt content and dosage to individual families found that such adaptations led to higher rates of family retention.<sup>iii, iv</sup>

The FNP programme has been designed from the very first trial in Elmira, New York to be adapted to individual families on a visit-to-visit basis. We failed to embody this principle in a sufficiently thorough way, however, in programme design, nurse education and US replication<sup>iv</sup> – a shortcoming carried over in our guidance to those responsible for creating nurse-education outside of the US (and that we have since worked hard to correct).

What a reflection of shared commitment that teams on both sides of the Atlantic identified the problem and set out to operationalise a way to address it – using similar approaches and nearly the same name!

Another aspect of shared work is our insight that FNP is likely to produce its greatest benefits if it focuses on families with overlapping vulnerabilities. In the US, community replication of the programme has focused so far on those who qualify for Medicaid – government funded healthcare for the poor. In the last decade, following the introduction of the Affordable Care Act, income eligibility for Medicaid has risen throughout the US, meaning that higher income families (such as poor graduate students) can receive Nurse-Family Partnership, as it is called in the US. In the US, NFP currently is not sufficiently focused on those in greatest need and most likely to benefit. In England, I hope that additional analyses of the Building Blocks trial and the demographic data of current FNP families will guide FNP leaders to further develop their understanding of which families are in greatest need and most likely to benefit. This is a concern for all NFP implementing countries and another area where recognition of shared challenges and international collaboration are likely to accelerate learning and our ability to promote maternal and child health.

One final reflection. This report is refreshingly honest about the challenges of conducting Rapid Cycle Design and Testing efforts that have undergirded this work. None of this is easy, but when you have passionate, skilled nurses, stakeholders, and parents working together, it's remarkable what they can accomplish.

# Executive summary

## Introduction

**This report tells the story of the Family Nurse Partnership (FNP) ADAPT project.**

ADAPT, or Accelerated Design and Programme Testing, was conceived as a project in 2015 by the FNP National Unit (the national body responsible for FNP in England, at that time part of the Tavistock and Portman NHS Foundation Trust) and Dartington Service Design Lab. The project began in March 2016 and concluded in October 2019. It involved FNP teams in 20 local authority areas across England<sup>1</sup> and many other colleagues and stakeholders.

This report builds on an interim report published in February 2018.<sup>2</sup> It describes what we did and why, what worked well and not so well, where we are now, and what this means for FNP in England in the future.

A core part of the story is about collaboration, and this is why it is told by the many people involved in the work, and in their words.

## Background

FNP is a public health home-visiting parenting programme for first-time young mothers and their babies. It was introduced to England from the US in 2007 and delivered by FNP teams in 132 local authority areas at its peak; it is the first evidence-based early years early intervention programme to be taken to scale by the UK government.<sup>3</sup>

In 2015, FNP faced significant challenges. These included disappointing results from a randomised controlled trial, changes in commissioning arrangements, and funding cuts. At the same time, however, there were opportunities. Directly related to FNP, these included: its strong scientific and research foundations; learning from international programme innovations; a highly motivated workforce; and considerable stakeholder support. More widely, there was: new evidence and clinical guidelines about the range of issues FNP seeks to address; a more nuanced appreciation of evidence, considering not only 'what works' but 'what works for whom and in what context', and developing thinking about evidence in complex systems.<sup>4</sup> There was also recognition of the value of improvement and implementation science, and greater personalisation of practice in health and social care.

The ADAPT project sought to build on these opportunities, and to learn from the challenges FNP was facing.

## What we set out to achieve

In ADAPT, we sought to harness the strength of research and the pragmatism of improvement approaches to adapt, test and learn how to change the FNP programme in England, while respecting its strong evidence base.

The primary aims of ADAPT were to: **(1)** enhance the flexibility of FNP to better meet the needs of families, and respond to ongoing change in the local and national context; and **(2)** improve the efficiency of the programme, through sharper targeting of support to those who would most benefit, with just the right amount of support. We wanted to do this in a way that at least maintained or ideally improved outcomes for clients.



## What we achieved and learned

Over three-and-a-half years, in 20 areas across England, we undertook a significant programme of design, adaptation and testing. Broadly speaking, we achieved our primary aims:

- Change at scale and a more flexible FNP programme, to respond better to local contexts and client needs; and
- A programme that can be more efficiently delivered to those that need it most.

We are confident that this has been achieved in a way that does not undermine the integrity of the programme, nor negatively impact on client outcomes – although further exploration of impact on outcomes is required and continues as part of the FNP National Unit's work to monitor programme data.

Furthermore, we have advanced innovative methods of learning and improvement: what we refer to as Rapid Cycle Design and Testing. We think these have scope for further development and wider application.

These developments contribute value to both FNP and the wider early years and public health communities, and to those thinking about the implementation and transportability of evidence-informed programmes and practice.



Furthermore, we have advanced innovative methods of learning and improvement: what we refer to as **Rapid Cycle Design and Testing**.

## The report

chpt.1

**Chapter 1** sets out the background, drivers and context for ADAPT. It discusses the need to balance tensions of pace, scale and real world pragmatism with continuing respect for FNP's historical evidence base, its relational core and the need for local ownership of considerable change. A methodology which combined good research, good enough data, rapid cycle testing, iterative improvement and development and collaboration was developed in response.

chpt.2

**Chapter 2** describes the changes to the core FNP programme which we designed and tested through the ADAPT project – changes we will go on to implement across all FNP teams in England in 2020. It details: work to develop a more personalised and flexible FNP programme, covering what we considered core to FNP and where we chose to increase flexibility; the New Mum Star clinical tool; flexing the frequency of visits (dialling up and down) and also content; and early 'graduation' from FNP (finishing before the child is two, where appropriate). It also summarises the data we collected about the implementation of these changes and some early indications of outcomes.

chpt.3

**Chapter 3** describes some methods and approaches we used in ADAPT, including how we used data, and what we learned about applying these in practice.

chpt.4

**Chapter 4** discusses the Rapid Cycle Design and Testing approach developed throughout the ADAPT project. It sets out a series of tensions navigated during the course of the project: learning at scale and with pace, evidence, co-production and power; rigour and pragmatism; the urgency for outcomes and a slow, steady look at implementation; and managing change well amid uncertainty.

chpt.5

Finally, in **Chapter 5**, the end note signals how changes made as a result of ADAPT are being implemented more widely across England in 2020. It highlights further development work planned, and looks forward to the next stage of FNP's life in England, as the National Unit moves into Public Health England.





# A new chapter for FNP in England

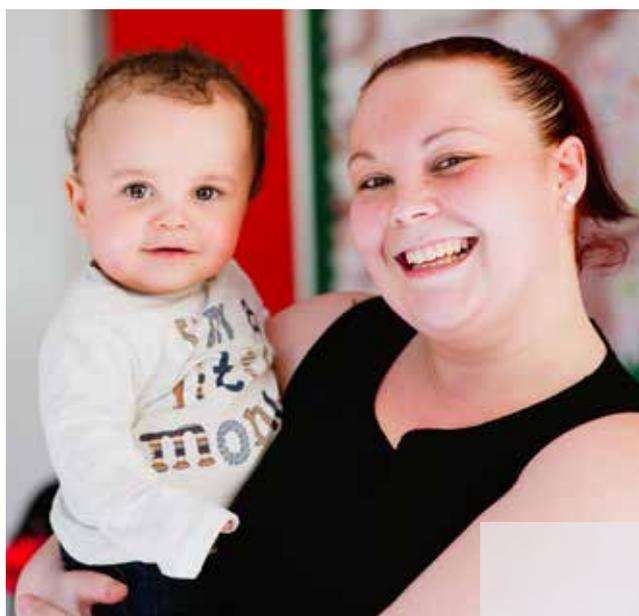
By Ailsa Swarbrick

Former FNP National Unit Director, 2012 – 2020,  
Tavistock and Portman NHS Foundation Trust

**The Family Nurse Partnership (FNP) National Unit aims to improve outcomes for children and young parents, now and in their future lives; and to reduce inequalities.**

This report is about how we have sought to do that better, by adapting FNP in order to learn from evidence, to address changing contexts and to respond more closely to the needs of clients, their babies and the local environments in which they live.

From the outset, the FNP National Unit and our partners, the Dartington Service Design Lab, recognised this would not be a linear process: we acknowledged, embraced and explored a number of inherent tensions in the way we did the work.



These included our aims to:

- Retain the scientific and evidentiary integrity of a highly respected evidence-based programme developed in the US in the late 20th century, while making its delivery relevant to a different era and a different country;
- Learn from traditional scientific research as well as more timely and pragmatic sources of data; and
- Navigate a delicate balance between creating structures and processes to ensure consistent delivery at scale, while allowing space for clinical judgement, intuition and for the relationships that are a catalyst for change.

As we progressed, it became clear the work would also involve thinking differently about power and authority, including our own as nurses, as researchers, and as the leaders and national custodians of a licensed programme. In particular, this meant listening to many perspectives in order to bring about meaningful and sustainable change. That is why we thought it best for this report to tell the story of the ADAPT project through the voices of our many collaborators.

## How we got here

FNP was introduced to England in 2007, with much support for its robust and extensive evidence base. Great care was taken to oversee implementation with fidelity to a clear model, even as the programme spread from ten to eventually more than 130 local authority areas.<sup>5</sup> This work was informed by implementation science and supported by clear guidelines, a national database reporting on client characteristics, delivery and short-term outcomes, and a high-quality family nurse learning programme. An early formative evaluation, programme monitoring data, and nurse and client feedback were largely positive.<sup>6</sup>

There was therefore widespread disappointment when a large-scale randomised controlled trial (RCT) of FNP in England reported in 2015 that no effect had been found by age two in the primary outcomes chosen (smoking in pregnancy, birthweight, subsequent pregnancies, child A&E and hospital attendances), although there were some positive signs in relation to secondary outcomes, including aspects of child development.<sup>7</sup>

Coming at the same time as changes in commissioning arrangements, austerity and significant reductions in local authority budgets, this was very challenging. Some suggested that FNP in England should wind down and indeed many sites did eventually decommission FNP. However, there were also strong arguments for continuing. The programme was based on sound theory and research in relation both to the issues it was seeking to address and the mechanisms for change. The previous evidence of effectiveness was robust and still stood.



An RCT in the Netherlands had also recently reported some positive findings, including intervention effects for smoking in pregnancy, and reduced child abuse and neglect reports at age three.<sup>8</sup> As a preventive public health programme, it was possible that some long-term benefits were not yet detectable.<sup>9</sup> There was some criticism and debate about the primary outcomes chosen in the study.<sup>10</sup> It appeared that quality of delivery was good, supported by a skilled and motivated workforce and a national delivery infrastructure. There was also considerable stakeholder support for FNP and nearly 11,000 families at a vulnerable time in their lives enrolled in the programme, with high levels of engagement.<sup>11</sup>

Many commissioners across the country decided to continue funding the delivery of FNP in their areas, and Public Health England continued its support of the FNP National Unit. However, it was also clear that if FNP was to continue in the longer term, we had to learn from the RCT and other pressures, and to make changes.

## Defining our approach

### A number of considerations informed our approach:

- Since the evidence that FNP could work was sound, we needed to be careful not to introduce changes that would undermine the existing evidence base. That meant thinking carefully about what was core to **FNP and what could be flexed**, and also ensuring that the design of **changes was grounded in good, up-to-date research**.
- While we knew which outcomes the programme seemed to be effective in addressing and which ones it didn't, we needed to know more about why things might work or not. We therefore wanted more detailed and nuanced information and feedback – from a variety of sources – about the effects of any changes we were implementing.

chpt.2

chpt.4

- We had to test and introduce change relatively rapidly, to ensure that clients and their babies had the best-possible service and to maintain local commissioning support. However, we knew it could take many years until results were known if we followed traditional, often linear, methods of design, implementation and evaluation. This prompted us to think differently and pragmatically about what evidence would be good enough to support the work.
- We knew from implementation science that enabling contexts and effective implementation can be as important as the intervention itself.<sup>12</sup>
  - With regard to **context**, many believed that the disappointing outcomes in the RCT in England were attributable at least in part to the availability of universal NHS support for the control group, and because the target group (first-time teenage parents) included some clients who were less vulnerable than those in the US and Dutch trials. There were also new contextual factors, including increased personalisation in health and social care; variations in the way local authorities were configuring services for their populations; and public sector austerity, with the pressure to achieve more with less. We therefore wanted to reconsider initial eligibility criteria for FNP, and then to offer a more flexible and personalised programme to respond to emerging client strengths and needs while they were on the programme, as well as to take account of local service contexts and priorities.<sup>13</sup>



We had to test and introduce **change relatively rapidly**, to ensure that clients and their babies had the **best-possible service** and to maintain local commissioning support.

- In relation to **implementation**, we were asking local FNP teams to embark on quite significant practice and cultural change, while at the same time continuing to ensure a safe and high-quality service. Engagement, support and ownership amongst local leaders, practitioners and clients would be critical to good and sustainable implementation, and so we took seriously collaboration, co-design and the need to build good relationships, alongside existing FNP implementation approaches such as high-quality training, coaching, data collection and reporting, and local engagement. As the work progressed, we also became increasingly alive to the value of good project management and professional communications to support rapid change at scale and to help ensure a consistent approach.

We discussed our thoughts and emerging plans with nurses, commissioners, providers, national experts and academics in a series of conversations and consultations across the country, seeking also to listen to their views and priorities. At the same time, working with Dartington, we thought about methodology, agreeing that changes to the programme would be based on a combination of good evidence, consideration of context, co-production and user feedback. Drawing on quality improvement methods,<sup>14</sup> we would use relatively rapid tests of change and work through a series of cycles to incrementally develop new solutions, informed by both quantitative and qualitative data. We also sought to do this with an eye to scale-up and implementation in a changing and complex real world.<sup>15</sup>

And so ADAPT was born, launched in March 2016. We worked first with FNP teams in 10 areas, increasing to 20 areas from summer 2018. All FNP teams tested a more personalised FNP and **contributed to initial work to better understand and track vulnerability factors for FNP clients. Some teams took part in the additional development of more focused clinical adaptations.**

## Where we are now and what we have learned

chpt.2

Four years on, we have a **more personalised FNP model** which has been iteratively developed and tested. This is now being **extended to other FNP sites** along with a new evaluation framework to enable the FNP National Unit and local leaders to monitor implementation quality and performance data for personalised FNP. We have also explored new approaches to specific aspects of clinical practice in order to enhance and improve impact in key areas such as breastfeeding, smoking, intimate partner violence and neglect.

chpt.5

We hope we have contributed to wider thinking about how to reconcile evidence-based practice with practice-based evidence, and about the relationship between fidelity to a model and dynamic adaptation to meet user needs. This work shows that it is possible to develop the implementation of an evidence-based programme to better align with new contexts, and indeed it is necessary to do that in order for them to evolve and remain effective.



We have seen how structured methods for **managing and implementing change**, as well as for testing, offer an important and necessary framework for learning and improvement at scale.

In relation to methodology, we have tried to explore what evidence works best (and is good enough) in complex, fluid and real world delivery environments. Traditional, objective methods of impact evaluation, such as RCTs, play a very important role in identifying, with a reasonably high degree of confidence, the extent to which interventions are effective in improving outcomes. It is often necessary, though, to complement this with a more agile approach that delivers actionable insight at pace when seeking to improve or adapt interventions in context. Methods of Rapid Cycle Design and Testing enabled us to identify relatively quickly useful approaches for some areas of clinical practice. That said, we also found that more complex interventions such as those addressing intimate partner violence and neglect, whilst still benefitting from rapid cycle testing, required a longer-term approach as the nature of the topics required a different pace of implementation.

We have seen how structured methods for managing and implementing change, as well as for testing, offer an important and necessary framework for learning and improvement at scale. At the same time, even when working at pace and scale, these need to be balanced with time and space to listen, to nurture relationships and to allow practice to develop and mature.

Finally, we have learned about the challenges and the benefits of sharing power and authority. This applies amongst the collective of multidisciplinary professionals in the project team. It also applies, critically, to the way the project team worked with those who deliver and use services, through co-design, through listening to nurses and clients as we interpreted data, and through shared decision making with clients about their care.



# FNP ADAPT: An overview

## Personalisation

### Eligibility criteria and vulnerability

All FNP teams involved in ADAPT (starting with teams in 10, later 20 areas)

**Development, delivery and testing:**  
November 2016 – October 2019

- As part of work to target the most vulnerable clients, FNP teams involved in ADAPT were offered the opportunity to adjust their eligibility criteria to enrol clients later in pregnancy.

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chpt.3

- A work stream which examined aspects of FNP client vulnerability** was developed as part of work to identify who can benefit most from FNP.

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chpt.2

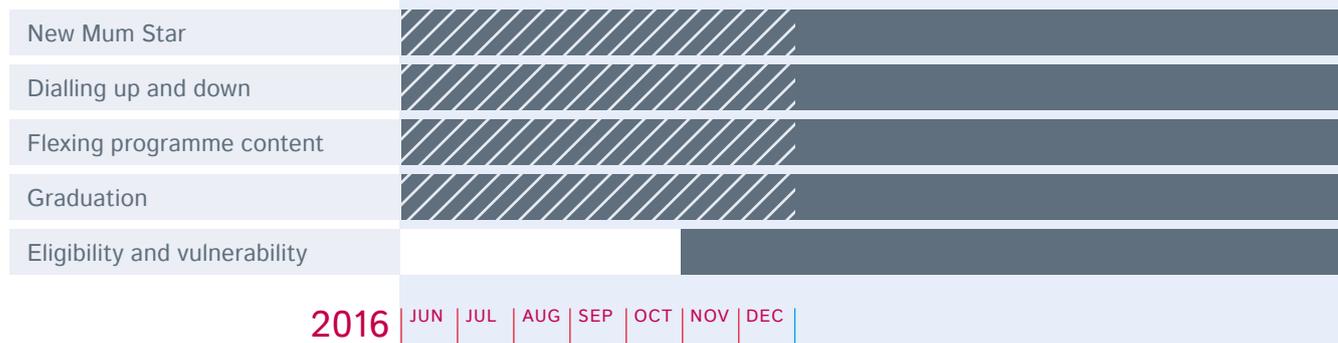
### New Mum Star Dialling up and down Flexing content

All FNP teams involved in ADAPT

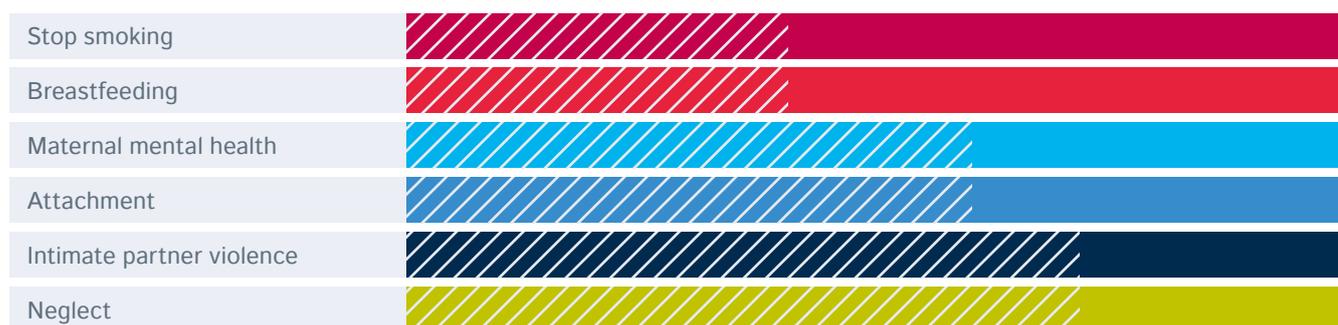
**Development:**  
August 2016 – December 2016  
**Delivery and testing:**  
January 2017 – October 2019

## Personalisation

### PHASE 1 - FNP TEAMS IN 10 LOCAL AUTHORITY AREAS

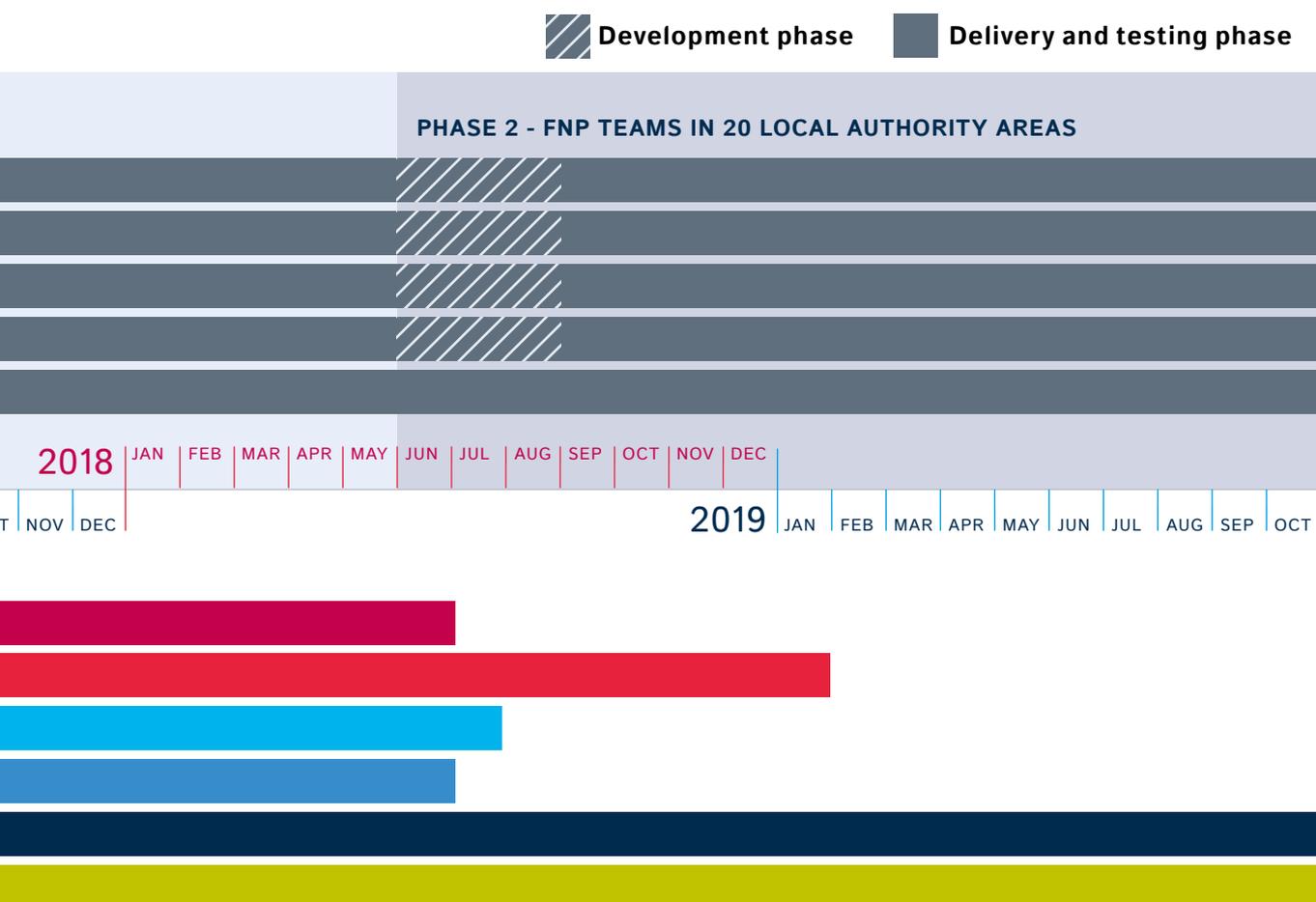


## Clinical adaptations



- All FNP teams involved in the ADAPT project tested the delivery of a more personalised FNP programme – a new approach which enables nurses to work with clients, using the new clinical tool the New Mum Star, to identify how they can personalise the programme according to the client’s needs, in relation to frequency of visits, the content of visits and when they are ready to graduate from FNP.
- Initially developed in a pilot phase from August to December 2016, and tested from January 2017, further work to develop the New Mum Star was undertaken in summer 2018 and the updated version was rolled out in October 2018.

- Qualitative data from the ADAPT project suggested that the majority of both clients and nurses were positive about the New Mum Star and opportunity to personalise the FNP programme. Quantitative data suggested no deterioration of outcomes for FNP clients in FNP teams involved in ADAPT compared to FNP clients in other areas.
- The FNP National Unit is working with all FNP teams to deliver a more personalised programme across England from April 2020.



# FNP ADAPT: An overview

## Clinical adaptations



### Intimate Partner Violence

FNP teams in Lambeth, Lewisham, Wirral, Tower Hamlets, Tameside, Nottinghamshire (1&2), West Sussex

#### Development:

June 2016 – May 2017

#### Delivery and testing:

May 2017 – continues

- Initial testing in Lambeth and Lewisham focussed on healthy relationships, and new materials and approaches were well received by nurses and clients. However, there was limited data to evaluate the full impact of the adaptation on outcomes.
- A decision was made to expand to more sites to improve data collection and incorporate elements of an intimate partnership violence adaptation being tested in Nurse-Family Partnership in other countries, enabling this work to become part of an international effort to improve programme outcomes in this area.
- Additional FNP teams began delivery of this adaptation in January 2019 and 8 FNP teams in total continue to deliver this adaptation, with further work planned in 2020/21 to continue evaluating this **adaptation**.

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chpt.5



### Neglect

FNP teams in Portsmouth, Southend, Bromley, Gateshead, Hampshire (1&2), Sunderland

#### Development:

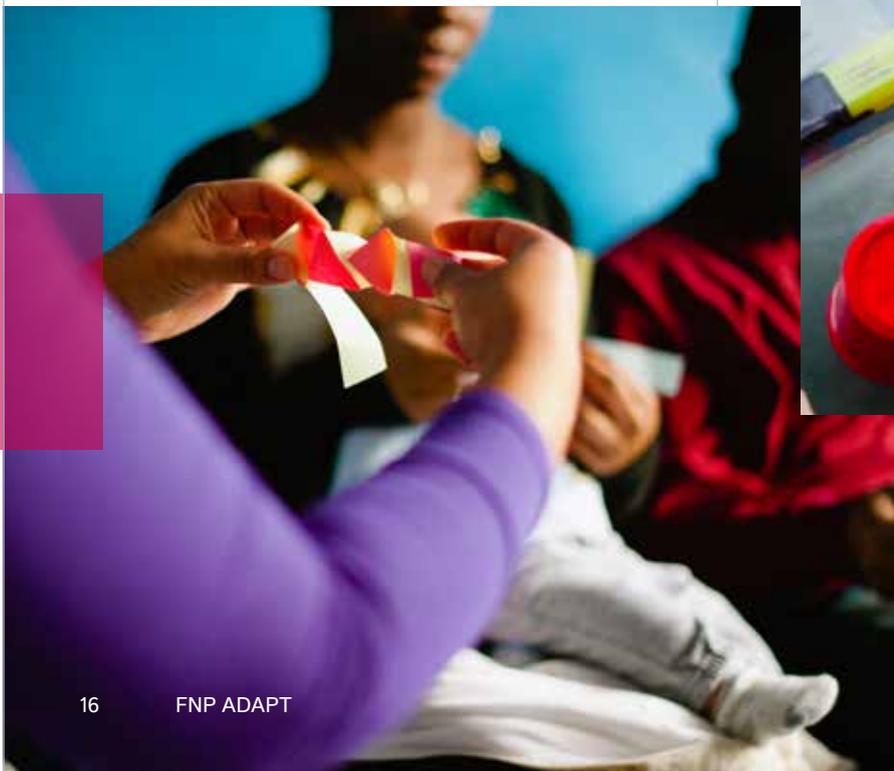
June 2016 – May 2017

#### Delivery and testing:

May 2017 – continues

- Initial testing in Portsmouth showed many elements of the adaptation were well received by nurses and clients; however, there was limited data to evaluate the full impact of the adaptation on outcomes.
- Further work in 2018 identified the most promising new materials and evaluated the best use of the NSPCC's Graded Care Profile 2 assessment tool within the programme.
- Additional FNP teams began delivery of this adaptation in January 2019 and 7 FNP teams in total continue to deliver this adaptation, with further work planned in 2020/21 to continue evaluating this **adaptation**.

p.68  
chpt.5





### Breastfeeding

FNP teams in Blackpool and Dudley

#### Development:

June 2016 – December 2016

#### Delivery and testing:

January 2017 – March 2019

- Initial testing in Blackpool showed the adaptation was well received by nurses and clients; however, not all of the adaptation was implemented and there was limited data to evaluate the likely impact on outcomes.
- This clinical adaptation was expanded to Dudley later on in the project, in October 2018, to allow for additional data collection.
- Data from the first cycle was limited and proved inconclusive because of additional localised materials and activity to support breastfeeding in Dudley, as a result of a local area initiative.
- A decision was made to discontinue this work in the ADAPT project. Dudley FNP team successfully pursued local funding to support the implementation of a peer-support scheme, developed in part as a result of the original ADAPT breastfeeding clinical adaptation design.



### Maternal mental health

FNP team in Nottingham

#### Development:

June 2016 – March 2017

#### Delivery and testing:

April 2017 – July 2018

- Initial testing showed elements of the adaptation were well received by nurses and clients; however, there was limited data to evaluate the impact on outcomes. Further exploration with the FNP team and ADAPT project team suggested that this adaptation did not add anything sufficiently new or different within the field of maternal mental health to warrant further testing.
- A decision was made to discontinue work on this clinical adaptation in July 2018.



### Attachment

FNP team in Bradford

#### Development:

June 2016 – March 2017

#### Delivery and testing:

April 2017 – July 2018

- Initial testing showed that new materials developed for this adaptation were well received by nurses and clients (and went on to be well received when rolled out to all FNP sites). The team developed resources and tested the use of the Ainsworth scale in supervision. The use of VIPP (video-feedback intervention to promote positive parenting) was also tested. However the high cost for training and delivering VIPP was a financial barrier to delivering this aspect of the adaptation at scale across all FNP teams. A decision was made to discontinue testing this adaptation. Meanwhile, family nurses in Bradford completed their accreditation to support the use of VIPP as a complementary tool in local delivery of FNP.
- A commissioning decision in Bradford meant the FNP service closed June 2019.



### Stop Smoking

FNP teams in Dudley and Cheshire East

#### Development:

June 2016 – November 2016

#### Delivery and testing:

January 2017 – July 2018

- Testing showed the adaptation was well received by nurses and clients, its design met NICE guidelines and initial data indicated the new materials and approaches have the potential to improve outcomes.
- The decision was made to incorporate the adaptation into the FNP programme in July 2018. New materials and guidance were rolled out to all FNP as a result of this work.
- Focussed work on improving quit smoking rates in pregnancy continued with a quality improvement project in 2019 (independent of the ADAPT project).<sup>16</sup>
- Overall programme data indicates that quit smoking rates are improving among FNP clients.<sup>17</sup>





# How FNP has changed:

## Introduction to a more personalised FNP programme

By Lynne Reed

Director, FNP National Unit

### What is different and what remains the same in a more personalised FNP programme?

In some ways, this question is easy to answer. However, behind an easy answer lies an enormous amount of more complicated context, including the real world of service delivery, the commissioning landscape, and the recurring question of what content is 'core' to the programme.

In this chapter, we will set out what we have changed and why, and what remains the same. We will also share some of the complexities of implementing personalisation through the experiences of supervisors and family nurses involved in this ambitious project.

We knew that we wanted to improve the programme in England, for the reasons set out in Chapter 1. Our new delivery model (see:

p.23  
chpt.2

**A brief guide to a more personalised FNP programme**) included the introduction of a new clinical tool, the New Mum Star, which would be used by nurses, alongside their clinical judgement, to inform changes to FNP delivery in three main areas: adjusting the frequency of visits (dialling), considering the content of visits (flexing content), and shortening the time a client might remain in the programme (early graduation). It also offered an increased opportunity for local flex in eligibility criteria, including enabling some clients to join FNP later in pregnancy.<sup>18</sup>

Testing these modifications meant 'unfreezing' our usual ways of working to allow for change to happen in practice.<sup>19</sup> This felt unnerving at times – like we were breaking the rules. How could we be confident that we were not unravelling the fabric of an FNP programme which has a high-quality evidence base built up over four decades? This question was asked of us from across the FNP community during the course of the ADAPT project, and we asked it of ourselves. It gets to the very nub of how this kind of contextual evolution and refinement fits into the lifecycle of an evidence-based programme.<sup>20</sup>

It is important, then, to remind ourselves of the solid foundations supporting FNP and what remains the same as we build in changes that personalise the programme for FNP clients.

First, the theories that underpin the FNP model remain at its heart:

- Human ecology theory emphasises the impact of social context and environment on human development.<sup>21</sup>

In a more personalised FNP programme, this theory underpins nurses' decision-making when increasing or decreasing the frequency of home visits (dialling), or when planning a mother's graduation from FNP. In evaluating readiness, family nurses and clients will consider the network of support available to them through family and friends, and the availability and accessibility of other local services.

- Attachment theory describes the importance of a safe and secure relationship with a primary caregiver for a child's healthy emotional development.<sup>22</sup>

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chpt.2

The **New Mum Star**, our new clinical tool developed during the ADAPT project, has prongs that focus particularly on the child's needs, providing a greater opportunity for the client to reflect on and recognise her role as caregiver and the importance of developing a secure attachment with her child.

- Self-efficacy theory<sup>23</sup> guides family nurses' efforts by enabling clients to understand why particular actions are important and supporting them to build the confidence necessary to achieve positive change.

This is central to the client-nurse collaboration as they jointly review the client's self-efficacy in aspects of her life using the New Mum Star. It is also an important early step towards behaviour change and establishes a collaborative approach to care, through which the client will engage in and have greater authority over decisions about how FNP can be best tailored to her needs. These decisions might include changes to the frequency of their visits, the focus of their programme content or when the client is ready to graduate.

Secondly, we continue to use key FNP programme delivery tools, such as DANCE and as PIPE,<sup>24</sup> and FNP's focus on 'looking backwards to move forwards' using psychodynamic approaches and engaging materials to help clients think about their lives and behaviours.

Thirdly, FNP is not just a set of materials or a visit schedule. Its methods and approaches are absolutely critical and remain central in a more personalised programme. This includes family nurses' use of communications skills, based on motivational interviewing, and their strengths-based, client-centred approach. Working alongside clients and using their clinical judgement, family nurses offer respectful challenge to clients when needed. In FNP, we champion all these skills and never take it for granted that these are innate in nurses, nor acquired – or embedded – without practice. The FNP learning programme helps family nurses build skills that go on to be honed through ongoing team learning and supervision.

In many ways, delivering a personalised model puts even greater emphasis on nurse skill – something David Olds, the developer of FNP, has championed. It also gives nurses new tools, such as the New Mum Star, and the ability to tailor FNP to work with clients, focussing on what they need, at the right time and the right frequency, in a way that acknowledges that each young mum's journey towards self-efficacy is different.



The FNP learning programme helps family nurses **build skills** that go on to be honed through ongoing team learning and supervision.



## Personalisation in FNP: theory of change



The theory of change describes the specific observable changes that we expect to see for clients as a result of the delivery of a more personalised FNP programme, based on a set of hypotheses. **It sets out:**

- **Strategies:** what actions do family nurses take when delivering FNP using Personalisation to achieve desired changes?
- **Targets:** what knowledge, skills, behaviours, beliefs and/or attitudes does Personalisation directly aim to change in clients?
- **Outcomes:** what are the ultimate goals of the FNP programme?
- **Moderators:** factors that could affect which participants benefit more from a programme and which participants benefit less or not at all.

### CREDIT:

This theory of change was developed using The IDEAS Impact Framework – a joint initiative between the Center on the Developing Child at Harvard University, the University of Oregon Center for Translational Science, and the University of Washington College of Education.

## A brief guide to a more personalised FNP programme

Before	Now
No explicit tool to identify clients' needs and goals in a holistic way	Regular, planned use of a new tool – New Mum Star – an outcomes tool that enables collaborative work to identify a client's strengths and needs to inform programme delivery.
Fixed frequency of visits	Flexible frequency of visits – dial up or down according to a collaborative nurse-client assessment of need.
Structured programme content	More flexible delivery of programme content – to respond to client's (and child's) needs and to support development of self-efficacy in areas specific to her needs.
Graduation from the programme when child reaches two years of age	Clients can graduate from the programme between their child's first and second birthday, in a decision made collaboratively between nurse and client, and with FNP supervisor based on high-quality supervision, and supported by good evidence of progress for both client and child, and other protective factors, such as a strong support network.





# The New Mum Star

By Emma Cook

Clinical Quality Lead, FNP National Unit

## New Mum Star prongs – the Journey of Change

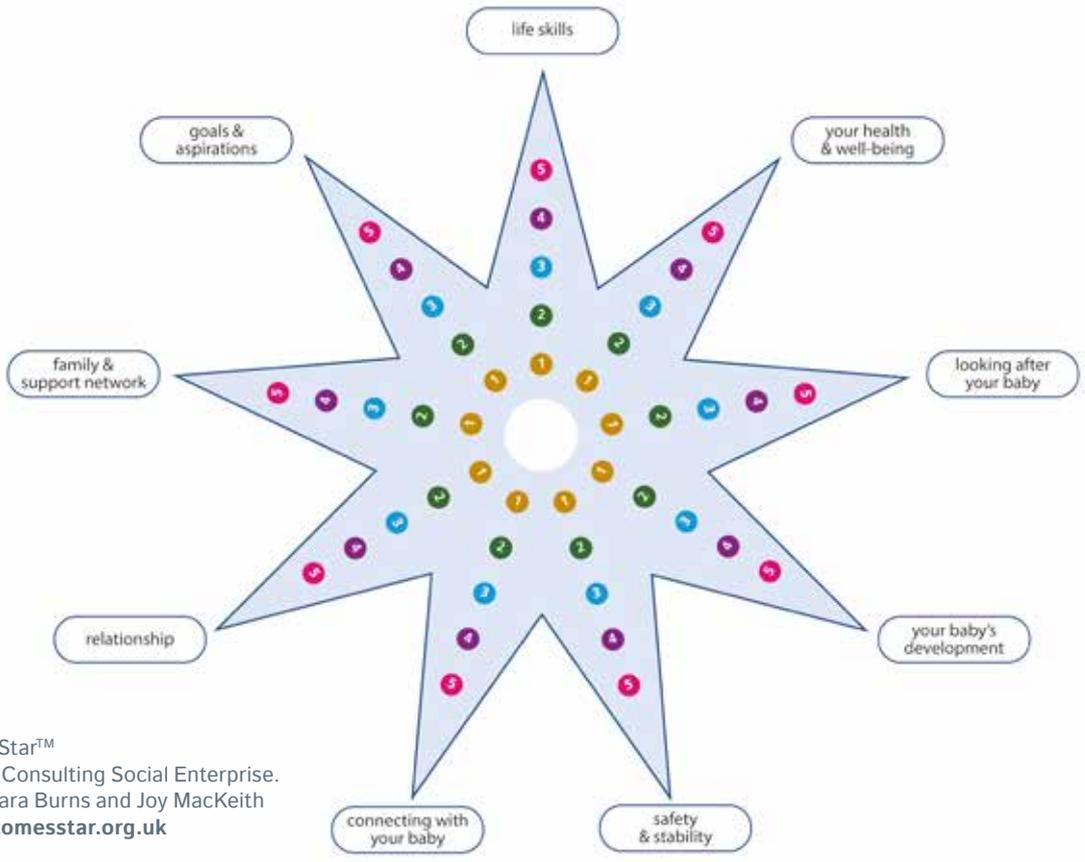
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Each prong of the New Mum Star represents a different domain. Within each domain, there are five 'stages' on **the Journey of Change** from feeling 'Stuck' to achieving 'Self-Reliance'. The New Mum Star has clear definitions of each stage in each area, which FNP clients and nurses use to collaboratively assess where the client should be plotted in each domain.

- 5 Self-reliance
- 4 Learning what works
- 3 Believing and trying
- 2 Accepting help
- 1 Stuck

## What is it?

The New Mum Star is a new clinical tool intended to facilitate structured and collaborative decision-making between clients and their nurses about how to shape FNP to meet the client's needs. It supports some of the key changes we have made in FNP – dialling up and down, flexing content and early graduation – and is also a tool which helps behaviour change in its own right. Action planning, based on what this assessment reveals, informs decisions about the content of home visits, adjustments to visit frequency and the timing of graduation. In other words, the New Mum Star is designed to drive personalisation.



New Mum Star™  
© Triangle Consulting Social Enterprise.  
Authors: Sara Burns and Joy MacKeith  
[www.outcomesstar.org.uk](http://www.outcomesstar.org.uk)

The New Mum Star was developed by Triangle (authors of the Outcomes Star™), in collaboration with FNP teams and clients, and Dartington Service Design Lab.<sup>25</sup> In our theory of change, this clinical tool is conceived as a way to help develop a client's self-efficacy in areas specific to their needs.

## What's different?

The New Mum Star is designed to enable family nurses to work with clients to identify their individual needs and plan together, drawing on all the content available in the FNP programme – delivered at the right time at the right frequency.

Its purpose is to enable nurses to take a more focussed and flexible approach to programme delivery, selecting materials to work purposefully with clients to better meet their needs. It puts greater focus on the skill and expertise of nurses, who must ask themselves: "How can I work most effectively with this client to enable them to achieve their goals? How can I help enable this mum to achieve the best possible outcomes for her child?" The New Mum Star aims to enable nurses to do this through the lens of an holistic view of the client's strengths, circumstances and unique perspective about their own life. It then provides a new way to capture this information in one place, which is visible to both client and nurse, not previously used in FNP.

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In areas where a client feels she is '**Stuck**', or where she identifies she needs more support, the nurses can shape their work to focus on helping the client progress towards specific outcomes. This might be around stopping smoking ('your health and wellbeing' prong), or continuing breastfeeding ('looking after your baby'), or returning to education ('goals and aspirations'), for example. Clear descriptions for each number on the prongs help to provide an objective sense of progress.<sup>26</sup> The nurse then has the option, having identified the priority areas of focus with the client, to consider whether it is useful to increase visit frequency and which materials might support work towards behaviour change.

While some clients are able to engage with the New Mum Star, there will be clients for whom this is more challenging. It may reveal aspects of behaviour they are not ready to acknowledge needs changing, for example relating to behaviour that supports good parent-infant attachment, or building the confidence to go to the park or to parent-baby groups. This, then, places even greater emphasis on the skills of the nurse to facilitate conversations and offer respectful challenge, using the capabilities they will have developed through the FNP learning programme, including communications skills, an understanding of how teenagers think and make decisions, and a trauma-informed approach to practice. Using the New Mum Star to collaboratively assess a client's strengths, needs and readiness to engage with change requires an honest and transparent acknowledgement of risks to both client and her child. That can be a difficult – but vital – conversation.

### For example:

- Smoking in pregnancy. The New Mum Star gives particular visibility to smoking in pregnancy, when the overall score is capped at '2' if the client is smoking (on 'your health and wellbeing' and 'your baby's development' prongs), to emphasise the health risks for both mother and child. This can help show clearly how important it is to stop smoking in pregnancy and opens up conversations about setting goals and planning work to achieve that.
- Neglect. If a nurse is working with a client who needs support with keeping her baby safe, the New Mum Star can help initiate a conversation about a gap in knowledge or understanding through the 'looking after your baby' prong. This then surfaces it as a focus for development with that client and the nurse can design activities to address this need.



The New Mum Star is designed to enable family nurses to work with clients to identify their individual needs and plan together...

## 2.1.1



# New Mum Star:

## What we learned through data collection and analysis<sup>27</sup>

By **Andreea Moise**

Data Science Lead, FNP National Unit

We collected data to explore, firstly, whether nurses were using the New Mum Star with their clients – an implementation measure.<sup>28</sup>

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- By the end of the **first cycle** (4 months), 50% of clients in FNP teams involved in the project had completed a New Mum Star with their family nurse.
- This rose to 70% of clients enrolled in the FNP programme over a 12-month period by the end of the project.
- Variation was wide across FNP teams at 12 months, after 3 cycles of testing, ranging from 42% to 91% of a team's clients having completed New Mum Star. This was mostly due to differences in timing and approach taken to embed the tool in practice locally.<sup>29</sup> Apparent low levels in some sites reflected the fact that the New Mum Star would not always be delivered to clients in very early pregnancy and was not appropriate to introduce to clients already approaching the end of the programme, therefore when there were large volumes of clients in these stages of the programme; completion levels appeared artificially low.

Qualitative data exploration of these issues revealed that some clients struggled more to engage with the New Mum Star, primarily those with English as a second language, very young clients or those with learning difficulties. Some nurses were able to adapt their practice to enable these clients to engage more easily and to benefit from the tool.

**Family nurse:** ... now we have bear cards that we use for emotions... for clients who are not very good at expressing verbally their emotions... if they were a 1 and 2, "I don't want to talk about it", that would be the bear who would be either head in his hands, it would be something very graphic to say, "don't approach me on this subject".

We also learnt that one positive aspect of this holistic assessment was that it provided the clients with a renewed understanding of both their strengths and areas of challenge, which could be was encouraging for them.

**Family nurse:** Because it's all well and good saying, "But actually you're doing really well," because when you've just heard you're going to have a pre-birth assessment, you're not feeling like you're doing very well. So, to then do the Star with her, to be that specific, look at all aspects of her life, you could see that it did really build her confidence.

**FNP client:** It was good to see the end result, like we're not perfect, we're going to have our up and down days but it's all right. So yeah, it was actually helpful.

Completing a New Mum Star was revealing for many clients, who recognised through the process that there were things in their lives that should, and with the support of their family nurse, could change for the better.

**FNP client:** I think I knew but I wouldn't admit it. So when I did that I had to say well yeah, that is the problem, but then as soon as I sorted that out, I've been fine.

The process of completing the Star was a learning process for both nurses and clients. Nurses learnt new information that they felt would not have otherwise been apparent.

**Family nurse:** *Actually, I've done that on a few occasions when you think everything's okay, and actually it's not okay. So, I think it's really good from that perspective.*

Clients learnt language to articulate their situation clearly, which would then guide the subsequent support offered by the family nurse.

**FNP client:** *You understand yourself a bit more. You can better express yourself more, it gives you the words really, especially when you're speaking with the family nurse.*

In terms of clinical practice, recognising and understanding where the challenges were and knowing that the support was available to help them address these challenges, was a positive experience for many clients.

**FNP client:** *And the good thing is in the areas that I'm stuck, my family nurse helps me improve. She works with me and that's good.*

**FNP client:** *Yeah, I think it just... it makes people, like the mums think properly of, if they're not doing well in it, how can they improve it, or if they're doing good, how can they do anything else to improve it even more, and stuff like that. It definitely helps, and obviously it's made me think more about what I wasn't doing good with him.*



## The co-development of the New Mum Star

By Sara Burns

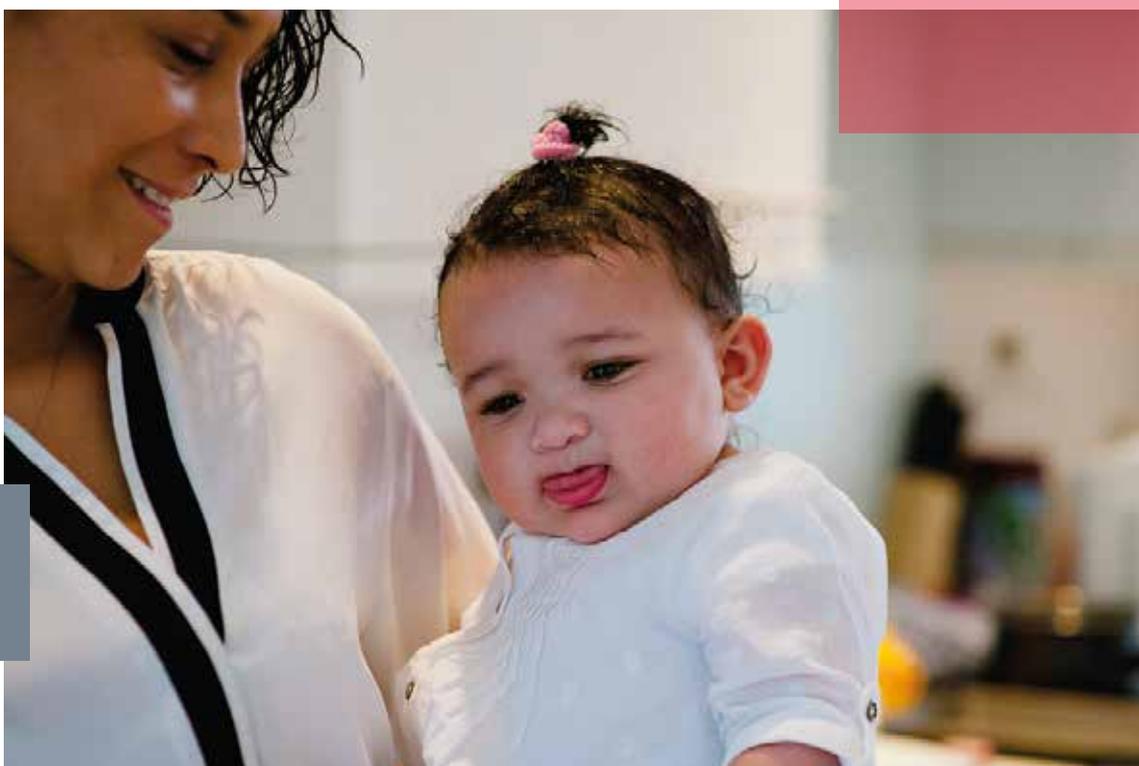
Director, Triangle – creators of the Outcomes Star™

Outcomes Stars are visual tools to support good conversations at all levels within a service. Integrated with support planning, they enable workers and service users to tease apart and clarify what can feel like a messy situation to identify a person's strengths, support needs and accessible next steps. The outcomes information generated can inform discussions in supervision, management and with funders.

We created the first Outcomes Star in 2006 for the homelessness sector. It was the right tool at the right time and people approached us for tailored versions in other sectors. Today there are nearly 40 Stars and a social enterprise to support their use.

The FNP National Unit was attracted by the accessible and co-produced nature of the Stars. None of the existing versions were quite right so we embarked on a collaboration to develop the New Mum Star. During and between a series of workshops, we listened, drafted and had many rounds of consultation, testing, piloting and feedback over two years, including hearing from many new mums.

The process was positive and very thorough! We are not experts in the sectors in which we create Stars; our expertise is in modelling complex change to make it accessible and measurable. We relied on FNP for their learning and expertise with new mums. Even after so many developments, I still love the process of creating new Outcomes Stars, especially really understanding a client group and sector. This worked particularly well with FNP nurses and others because of their depth of understanding and wholehearted engagement. It was a real and effective collaboration and we are proud of the New Mum Star.



2.1.2

## The New Mum Star in practice



**By Jayne Price**

Family Nurse Supervisor, Wirral

I am from an adolescent health background and what I really like about the New Mum Star is that it helps young mums reflect on their own life in a way they may never have done before. It can often reveal information that they may have not really clarified for themselves in their own minds.

The structure of the New Mum Star guides the developing brain of the young person, with its underdeveloped prefrontal cortex, through a process of reflection and planning. It helps set a framework for clearer cognition and it teaches young women a way of breaking down goal planning into manageable chunks. It helps them to develop these kind of high-functioning skills. By going back to that repeatedly throughout the programme, you are reinforcing that process and developing these skills, which are important skills for parenthood and for life.



# The New Mum Star helps support self-efficacy in FNP

By Julie Bennett

Family Nurse Partnership Supervisor, Cheshire East

Some clients come to FNP with a whole set of professionals already around them. Imagine a teenager whose unborn child is on a child in need or child protection plan. Social care concerns have been identified and she may have been referred to FNP late in pregnancy. For whatever reason, there is something in her life that has got her to this place and she must cooperate with social care. That has not been a choice for that girl. When a family nurse goes out to meet her, she will be given a choice to join the programme – or not. It's entirely voluntary. It sets up a completely different mind-set and relationship from the start.



Together they can then talk about where she is on **her journey** and what she needs to change to move forward.

Using the New Mum Star is a natural extension of this. The family nurse can explain to her: “We want to help you focus on the things that matter to you to help you be the best mum you can be. Let’s use this New Mum Star to think about the areas you’re doing well in and the really difficult areas for you. We also need to think about and discuss the areas that other professionals working with you think are working well and are worried about.”

The way the tool is structured can also help tackle difficult subjects. “We know that social care are worried that you don’t have your stuff together ready for the baby’s arrival,” the nurse might say. “So let’s look at the ‘looking after your baby’ prong on the New Mum Star. What do you think is working well? What are you worried about?” Nurses will use their clinical judgement and skill to facilitate a conversation, contributing what they think alongside the client’s own assessment. Together they can then talk about where she is on her journey and what she needs to change to move forward.

2.1.4



# The New Mum Star can open up honest conversations

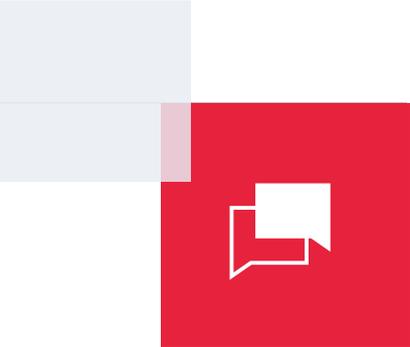
By Alison Goodall

Family Nurse Partnership Supervisor, Tameside

The New Mum Star, and being able to flex content or dial visit frequency up or down, makes a huge difference to how clients engage with FNP. It means we're working on things they have acknowledged they want or need to work on. You have agreed collaboratively: "This is the piece of work we're going to be doing." Or: "This is how often we'll meet." It makes a client feel listened to.



It opens up **honest conversations** about what's happening and means we can focus work there.



Personalisation definitely benefits clients' children directly because nurses are able to use the New Mum Star prongs to think with the client about what their child needs. It makes the child the focus. It opens up honest conversations about what's happening and means we can focus work there. It also enables nurses to give respectful challenge when things aren't going well.





# Dialling up and down

By Lindsay Andrews

Clinical Quality Lead, FNP National Unit

## What is it?

In a more personalised FNP programme, nurses are able to alter the frequency of home visits using their clinical judgement and on the basis of nurse-client assessment facilitated by use of the New Mum Star.

### The FNP programme has a very intensive schedule of up to 64 home visits:

- In pregnancy, after enrolment, the nurse visits weekly for four weeks, then fortnightly until birth;
- After the baby is born, nurses make weekly visits during the first six weeks, then fortnightly visits up until the child is aged 20 months;
- Between 20 and 24 months, visits are monthly in preparation for graduation at or around 24 months – the child's second birthday.

Dialling the number of visits up or down means visit frequency is no longer fixed by the programme schedule, but by a mutual decision taken between the nurse and client, based on a shared review of needs.

If there is strong family support around a client, for example, and a strong attachment between mother and child, and perhaps she is moving on with her education, it may be appropriate to ask: "Is a fortnightly visit really needed?" Equally, if there are safeguarding concerns, and more intensive work is needed, this flexibility allows a nurse to increase visits from fortnightly, say, to weekly.

The number of visits in each phase of the programme (pregnancy, infancy, toddlerhood) has been a fidelity goal since FNP was introduced in England in 2007. FNP teams report this data to their commissioners.

Introducing greater discretion around visit frequency, then, is a significant change – but not without evidence. Research from the US showed that Nurse-Family Partnership clients who were doing well and had less intensive visiting had just as good outcomes as those with more need and more visits.<sup>30</sup>

As we have given nurses permission to move away from this dosage goal, we have seen them feeling more empowered to use their clinical judgement. It means that nurses and clients can acknowledge when clients are doing well and that helps build the client's own sense of self-efficacy: a key goal of FNP. It is a very tangible way of being able to recognise a client's progress and enable her to make decisions about what she needs.

It is important to note that these decisions need to be made carefully, with clarity of purpose, and explored in supervision sessions between family nurses and their supervisors. While dialling down may be perceived as a strategy to support improved engagement, this alone should not be a reason for reducing visit frequency.

Guidance for family nurses in ADAPT sets out clear parameters for dialling visits up or down.

- **Dialling up** for short periods of time can support clients to establish breastfeeding or to address concerns about the safety of a child and/or mum.
- **Dialling down** can acknowledge that some clients no longer need such intensive support and can support engagement of clients for whom fortnightly visits are too intense or not practical because of other life commitments, such as going to work or returning to education.

2.2.1



# Dialling:

## What we learned through data collection and analysis

By **Andreea Moise**

Data Science Lead, FNP National Unit

As the New Mum Star became embedded into clinical practice, we started seeing changes to visit frequency ('dialling'): increasing from cycle 1 to cycle 2 and then remaining fairly constant through cycle 3. The highest increase in the proportion of visits dialled was in the toddlerhood phase (after a client's child turns one year old).<sup>31</sup>

In infancy, the proportion of visits dialled up and dialled down were consistent across the three cycles of data analysis. In toddlerhood, a higher proportion of visits were dialled down with each cycle, while dialling up remained constant after a considerable increase between cycles 1 and 2.<sup>32</sup> This seemed to confirm our hypothesis that some FNP clients who are doing well can benefit from less intensive support from their family nurse. Qualitative feedback from nurses and clients confirmed that changes to the intensity of visits were acceptable to clients and allow nurses to direct their resources more efficiently and effectively.

**Table 1:** Percentage of client visits dialled\* in each analysis cycle

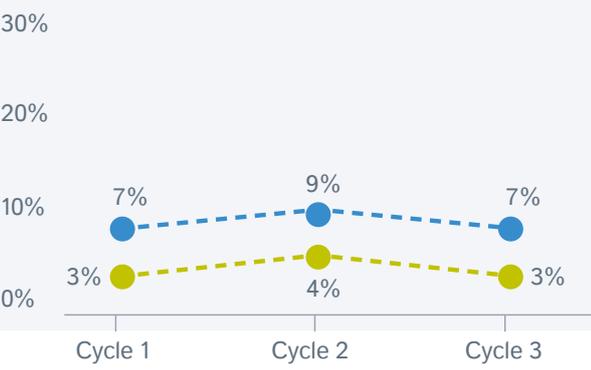
	Cycle 1	Cycle 2	Cycle 3
<b>All stages combined</b>	<b>8.04%</b>	<b>12.8%</b>	<b>12.5%</b>
Pregnancy	0.3%	0.3%	0.4%
Infancy	9.2%	12.9%	10.3%
Toddlerhood	15.8%	28.2%	29.0%

**Note:** Dialled visits include both dialled up and dialled down in frequency.

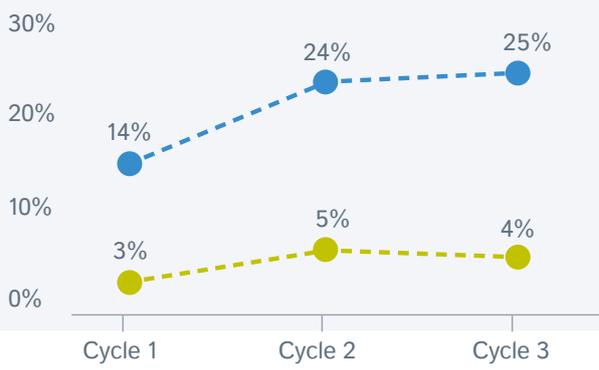
**Chart 1:** Dialled visits in infancy and toddlerhood

● Dialled up visits ● Dialled down visits

### Infancy

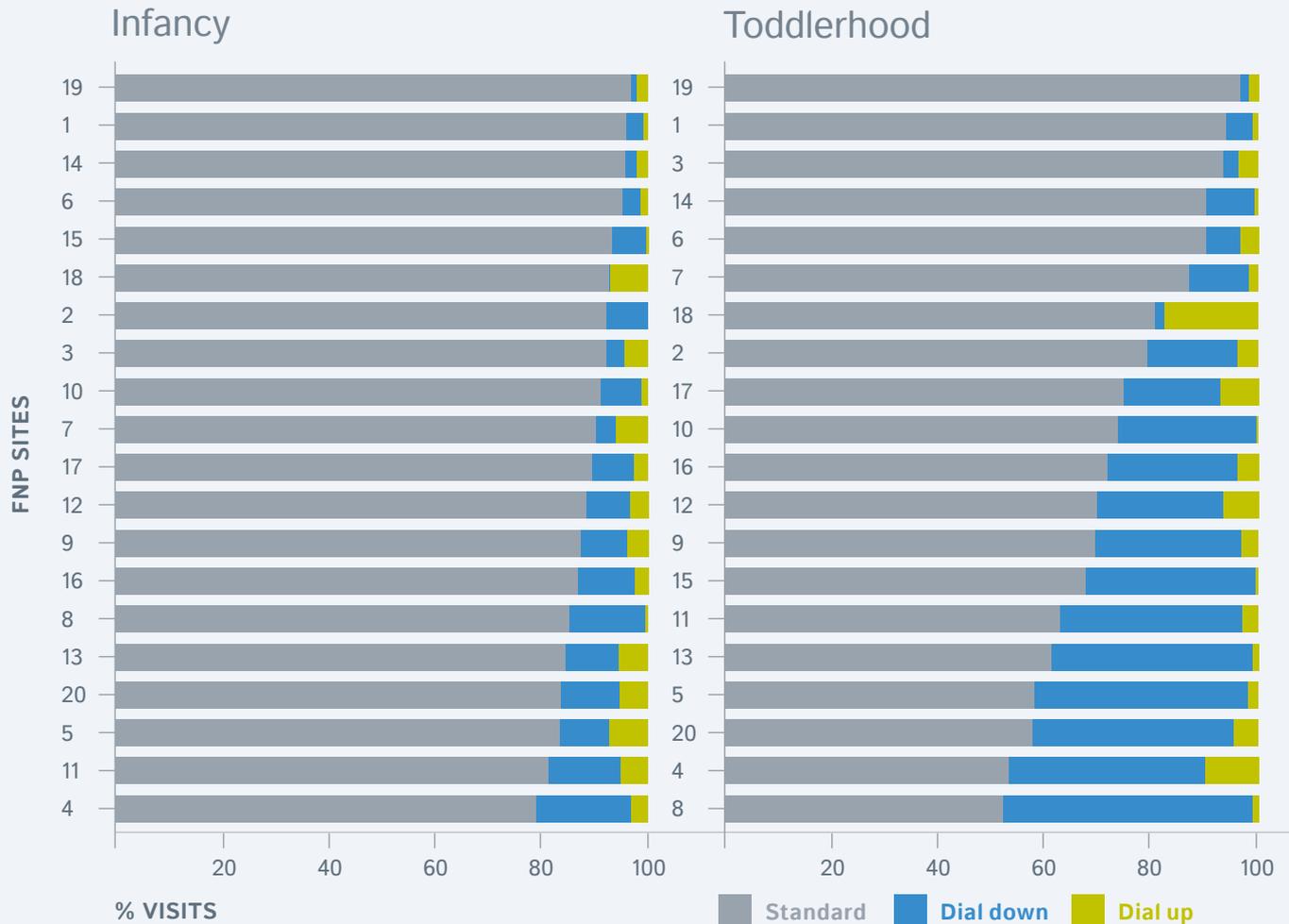


### Toddlerhood



**Chart 2:**

Dialled visits in infancy and toddlerhood by site



There was significant variation in dialling patterns across FNP teams, with visits in the toddlerhood stage exhibiting the widest range of activity, from 3.5% to 48% of visits. The range illustrates, in part, the learning curve of nurses and clients as they worked collaboratively to build confidence in implementing dialling. However, much of the variation reflected the real world variability in clients' journeys towards self-efficacy.

Some dialling down activity was employed to support client engagement with the programme, and client feedback suggested that technique could be effective.

**FNP client:** *Well, we've actually dropped the visits down to once a month... Because [my family nurse] said that everything's fine and she's happy with the way that I'm parenting and the way [child] is actually developing... It feels really good because I feel like I'm doing something right.*



There was significant variation in dialling patterns across FNP teams, with visits in the toddlerhood stage exhibiting the widest range of activity, from 3.5% to 48% of visits.

As shown in **Chart 3**, we saw lower attrition rates in FNP teams in ADAPT compared to all other FNP teams across England during the first stage of the project. We wondered whether this might be, in part, due to improved client engagement as a result of the ability to alter the frequency of home visits in a more personalised FNP.

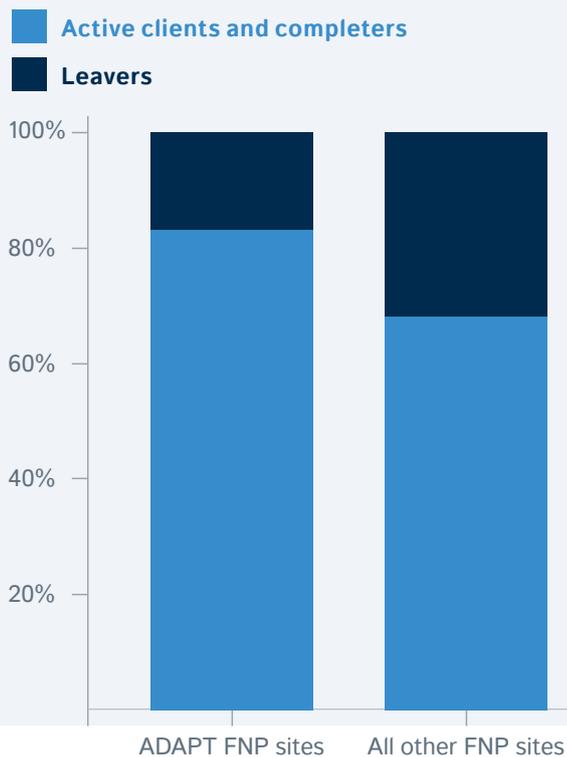
This picture may be subject to change, however, once we are able to see a complete dataset covering the entire course of the project.<sup>33</sup> There may also be other factors that have influenced these results, such as the closure of the service in some areas (not involved in the ADAPT project), which could drive higher than normal (planned) leaving – which appears as attrition in FNP programme data.

p.72

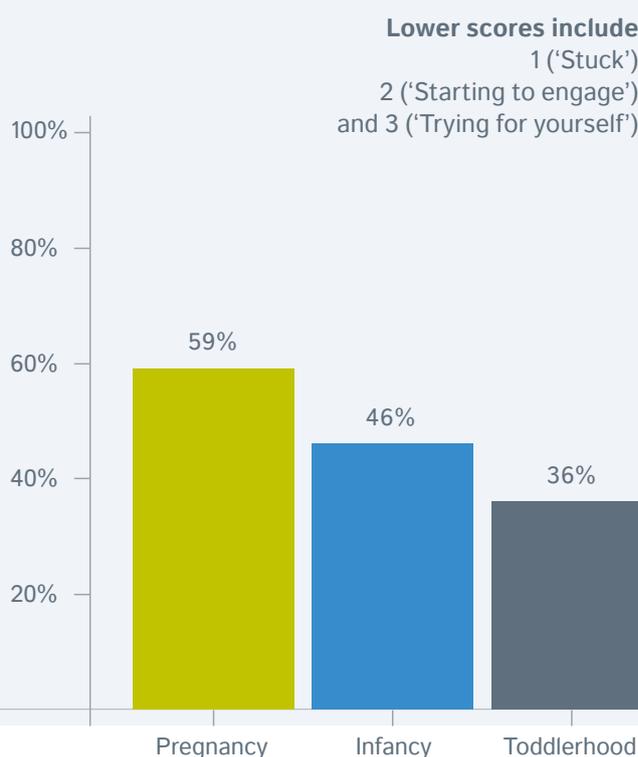
Overall, dialling patterns appear to be in line with the client's sense of 'self-reliance' as illustrated by the data on the New Mum Star. The New Mum Star give a sense of the client's journey towards self-efficacy. This '**Journey of Change**'<sup>34</sup> is plotted against numbers one to five on the New Mum Star prongs, from 'Stuck' (number one) to 'Self-reliance' (number five).

The shared (client-nurse) view of clients' sense of self-reliance was, on average, higher for those at later stages in the programme, with clients in toddlerhood achieving a greater sense of self-reliance (i.e. further along the prongs of the Star) indicating a greater sense of self-efficacy (see **Chart 4**). This suggests that, on average, clients in later stages of programme are closer to self-reliance and can be well supported by less frequent visits, where appropriate.

**Chart 3:**  
Client attrition in the first phase of ADAPT



**Chart 4:**  
Clients with lower New Mum Star scores



The qualitative data expands our understanding of this process by suggesting family nurses can base visit frequency decisions (dialling) on New Mum Star scores as a visual and concrete basis of collaborative decision making, as intended.

**Family nurse:** *So, I've sort of said, "Look how well you're doing? What do you think about dialling down the visits to monthly?" And they've sort of agreed with it.*

Some clients described how a reduced visit frequency was actually a good thing for them, allowing them to put advice into place and test out their new parenting plans.

**FNP client's partner:** *She used to come out every two weeks, but now they're coming out like every month, it's just like, it gives us a bit of time to actually go out. It's like put in practice the plans we put together. It is really good.*

We also learnt from the qualitative data analysis of the challenges faced when negotiating this bittersweet decision. Clients appreciate the support from their family nurses, although they have to concede that they may not need her as much as they previously did.



We can model trust and respect by **listening to clients** and help them build their self-efficacy as they learn to think about what they need...

**Family nurse:** *Like one [client] said, "I'm absolutely gutted," and I said, "But I have no reason, you know, we've done the New Mum Star, we're looking at all these areas and you've done so well," and she said, "Yeah, I have haven't I?" So it's a celebration but it's also really hard as well.*

Some clients see dialling down as the ultimate seal of approval from their family nurse, that they are doing well and progress is good.

**FNP client:** *...that you're doing something right. They've not got any concerns about you, they're not having to come and see you so often.*

Nurses also recognise the value it brings to clinical practice, despite some initial hesitation.

**Family nurse:** *I think dial down, when I first heard of dial down, I was like that's ridiculous... But actually, I think seeing it in action, it does work a lot better than I expected it to work. It does make sense.*





# Decision-making and dialling

By Jayne Price

Family Nurse Supervisor, Wirral

Decisions about the frequency of visits depends on clients' needs and wishes, and where they are on their 'Journey of Change'. Dialling up the frequency of visits in our team is usually linked to safeguarding concerns. The availability of local services definitely affects our decisions about the frequency of home visits. We've dialled up the number of visits in some cases because we know other support isn't around, where we may have kept to a standard visit schedule otherwise.

There might also be clients who find it difficult to commit to fortnightly visits. Maybe they can't fit them in around work or college later on in the programme, but they still want to work on areas they've identified from the New Mum Star.

Dialling down for a couple of months can build their trust in the nurse to listen, rather than stick to a formula regardless of what they want or need. We can model trust and respect by listening to clients and help them build their self-efficacy as they learn to think about what they need and negotiate that with their nurse.



2.2.3

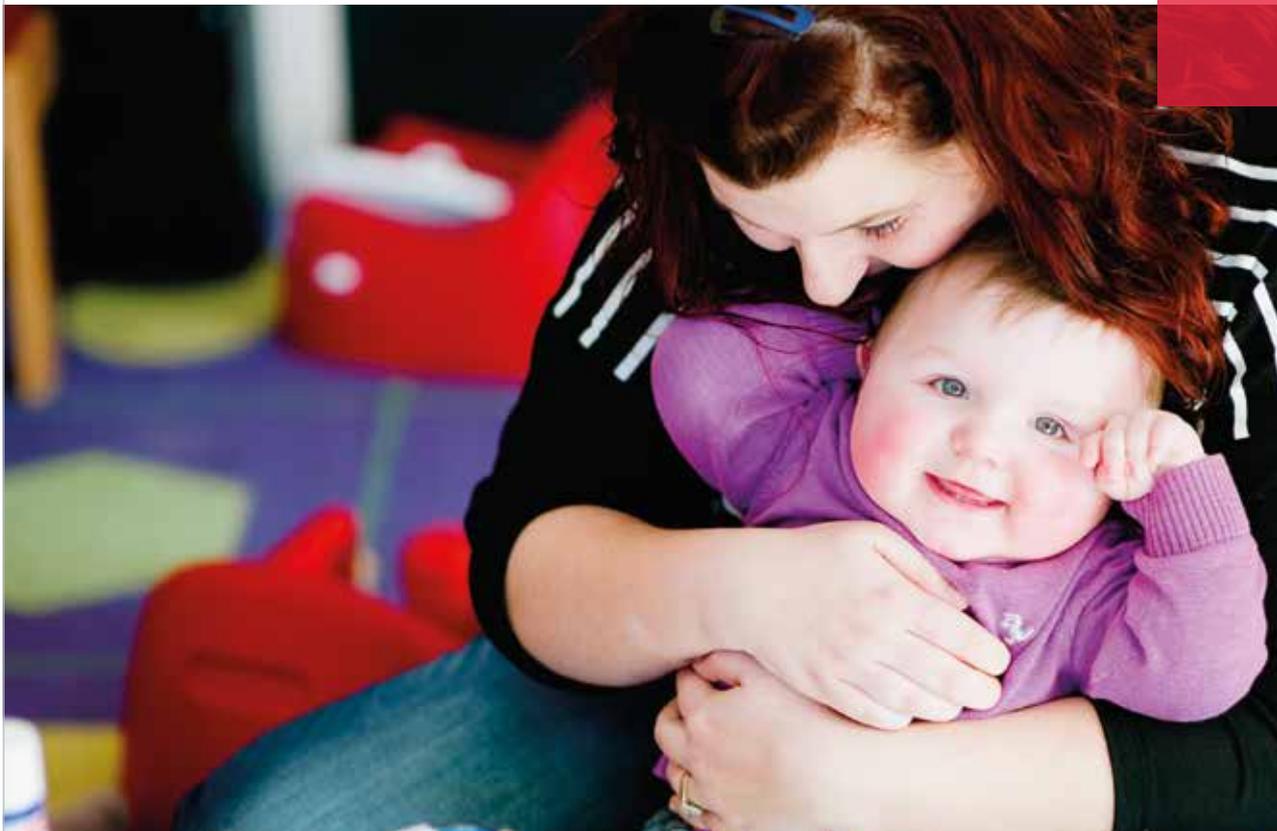
# Dialling and self-efficacy

By Julie Bennett

Family Nurse Partnership Supervisor, Cheshire East



Dialling visit frequency up or down is a mutual decision and this supports growing self-efficacy in a client. If she knows she is doing well and she doesn't need fortnightly visits, we have the flexibility to change that. We might still keep in touch with a client by text if we're not seeing her for a month. It's about being mindful – if you know something is coming up for that client in between visits, for example, and you can ask: "How did that go?" Contact and affirmations by text can help show that the nurse is still there in between monthly visits, where we have dialled down visit frequency.





# Flexing FNP programme content

By Sarah Tyndall

Clinical Quality Lead, FNP National Unit

## What is it?

Flexing programme content gives nurses more freedom to use their knowledge of the FNP programme and an understanding of the client's needs, identified through clinical judgement and the New Mum Star, to deliver content in a more flexible way, based on mutually agreed priorities and plans.

## What's different?

The FNP programme sets out specific materials for each visit in pregnancy, infancy and toddlerhood phases, along with visit guidelines which suggest what to cover in each specific visit.

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Nurses have always used '**agenda matching**' to adapt this content schedule according to what's happening at that particular time for a client and their baby. Flexing content, as part of a more personalised FNP programme, builds on this and creates a purposeful approach, based on action planning, informed by a joint client-nurse view using the New Mum Star, towards specific goals over a number of visits.

Nurse and client together identify what to work on to achieve these goals. Nurses can then plan visits, drawing on relevant materials from across the programme. This way of working acknowledges that different clients have their own individual strengths and needs, as do their children. It also recognises that the path towards behaviour change isn't linear. A client's context can change rapidly: housing may become insecure or an important relationship may deteriorate. Her motivation, confidence or mental health may fluctuate. All these things can affect a client's capacity to engage in change at different points during the course of the programme. FNP content is so broad and wide ranging. It is particularly powerful to be able to target content in the right way at the right time, when and where it is needed most, so that nurses can shape the programme for the benefit of each mum and baby. A more personalised programme delivery model is designed to give nurses the confidence and authority to do this.

Alongside this flexibility, there are some elements of programme delivery and key information that remains core, such as the Healthy Child Programme content,<sup>35</sup> and materials to support the underlying theories of self-efficacy, attachment and human ecology.



Alongside this flexibility, there are some elements of **programme delivery** and **key information** that remain core...



# Flexing content:

## What we learned through data collection and analysis

By Andreea Moise

Data Science Lead, FNP National Unit

Family nurses in ADAPT flexed programme content, to some extent, during all programme stages but more commonly in infancy and toddlerhood.<sup>36</sup> There was a notable increase in flexing content from cycle 1 to cycle 2 and not much change afterwards.

The shift from a manualised to a personalised delivery of content was a step change in the way FNP was delivered and a significant challenge for many family nurses. This was supported by the development of a 'core programme' against which the nurses were encouraged to flex. Once that was clarified, nurses found it much easier to deliver focussed support.

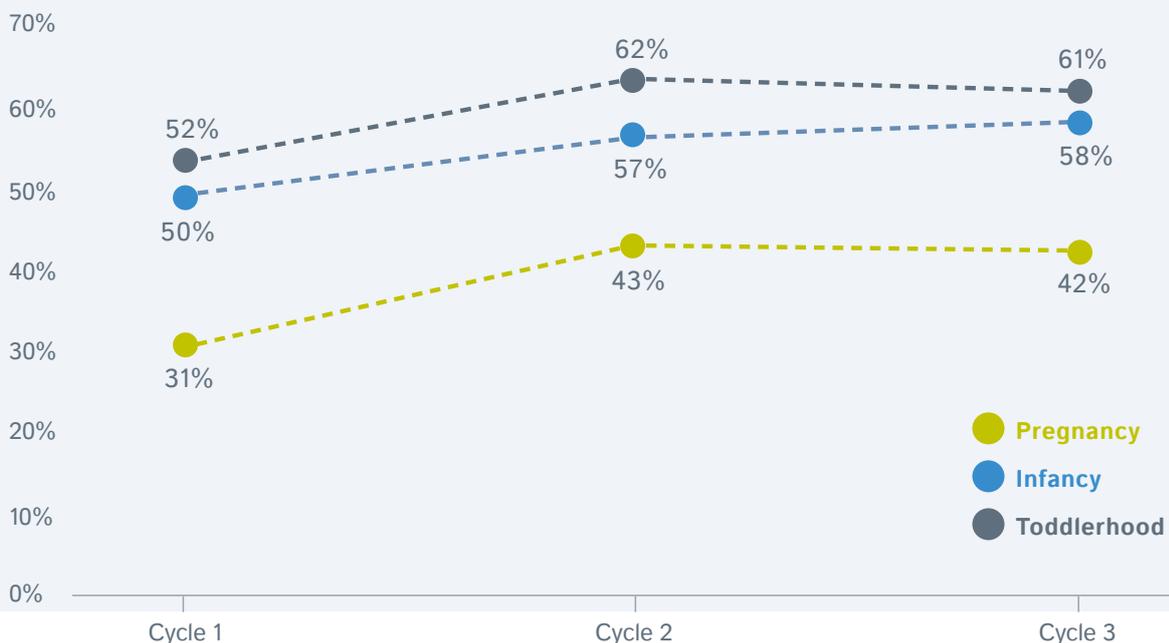
**Family nurse:** *It seems to be that we've still got the core programme, but we're able to pull what were, you know, the ones... on New Mum Stars, that we've decided to work on and are relevant to that client.*

Clients appreciated the shift to a more personalised and 'relevant' content.

**FNP client:** *I think it's really good because it's like you progress after you do that. I realised that I am so rubbish at saving money... with [my nurse] we set targets, we're going to do this this week and we're going to do that because I've realised I'm not amazing with certain things.*

**Chart 5:**

### Visits with content informed by the New Mum Star





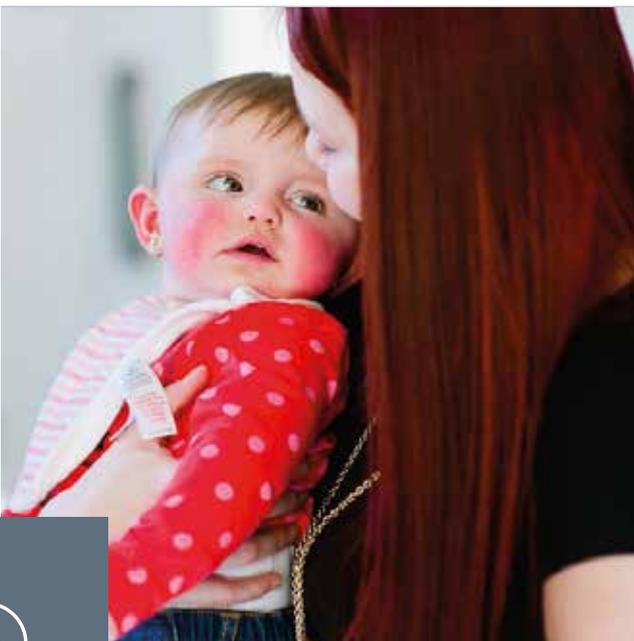
2.3.2



## Flexing programme content is different to agenda matching

By Jayne Price

Family Nurse Supervisor, Wirral



**Agenda matching comes from the same place as flexing programme content:** it's about wanting to meet clients' needs. But flexing content takes that one step further. The New Mum Star gives clarity, it helps reveal what the real issues are and flexing content means we're able to work on these things with a client over a period of weeks or months, with the themes of the New Mum Star as a framework. The New Mum Star has made a huge difference to being able to genuinely personalise the FNP programme for clients.





# What it takes to support nurses to deliver a more personalised programme

By Julie Plets

Quality Support Officer, Family Nurse Partnership Team, Tameside

It's taken some time to change the way we work to support flexing content. My role as quality support officer has been important in this because I've taken pressure off nurses by being able to do the administrative work required to reorganise programme materials to underpin the new model of clinical delivery.

In the early stages of testing, the nurses decided together what they needed in order to deliver the programme in a more bespoke way to clients. We have developed new 'core packs' which group materials together in a different way. Nurses decided on a series of packs that support more flexible delivery: a recruitment pack, an early pregnancy pack, a late pregnancy pack, an infancy pack and a 12-to-24-month pack. All these packs contain leaflets, facilitators and data forms. It means the nurses can focus on the work with the mums, drawing from the pack according to the needs of the client.

We felt a bit snowed under with making changes at times. We've reorganised the way materials are stored and accessed, tweaking things as we've gone along. We have really come together as a team to get it right. It's still a bit different, after almost a year, and we are still learning what's working. But it is great hearing nurses talk about the New Mum Star and how it helps clients make changes in their lives. That has felt really good. It's taken nearly a year, but we are seeing results of the hard work we have put in.



But it is great hearing nurses talk about the New Mum Star and how it helps clients make changes in their lives. **That has felt really good.**



# Early Graduation in FNP

By Sarah Tyndall

Clinical Quality Lead, FNP National Unit

## What is it?

We have given nurses greater flexibility to decide when a client can 'graduate' from FNP – the term used for the point at which a client leaves the FNP programme. This acknowledges that some clients and their children may be doing well and are ready to transition back to universal services sooner than others.

## What's different?

In FNP, clients usually graduate when their child turns two years old. Graduation is now possible for mums when their child is between one and two years of age.

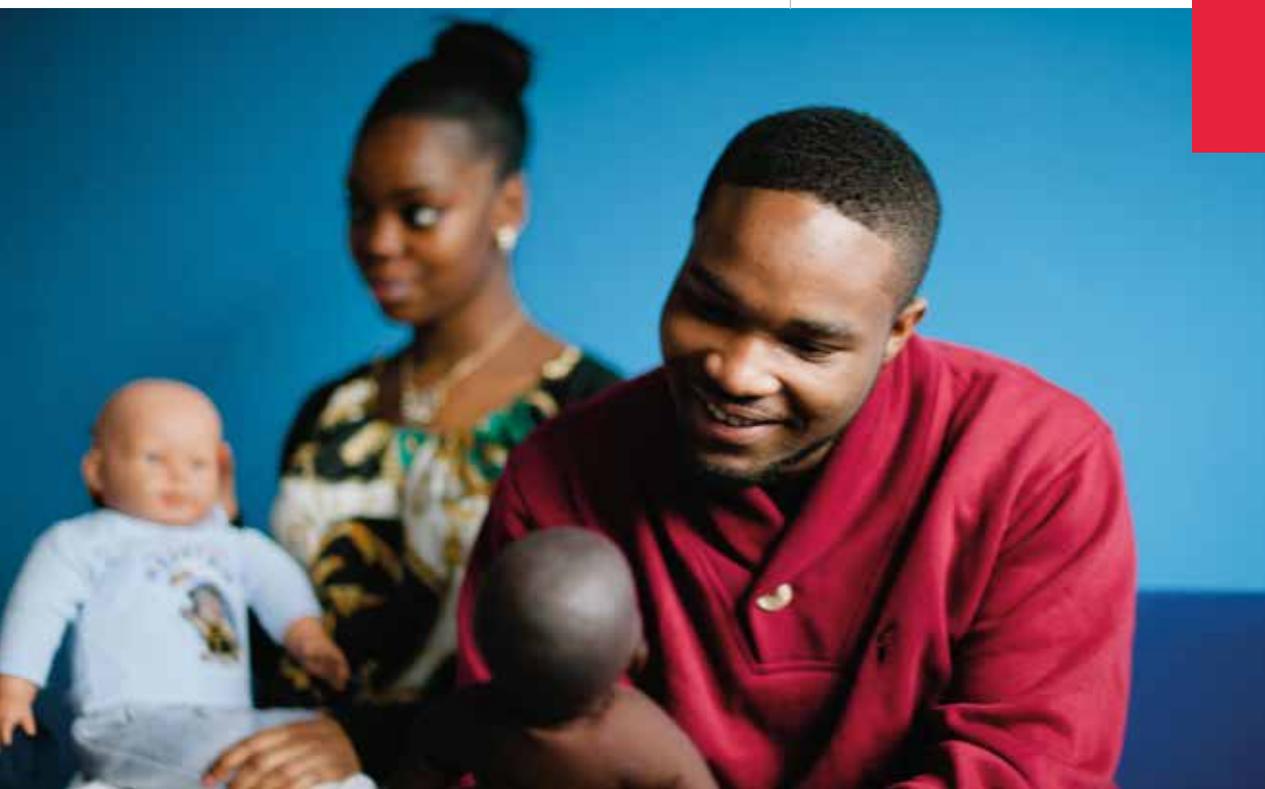
Like dialling, this approach to graduation enables nurses to acknowledge where a client is on their **Journey of Change**. If she is showing sensitive and responsive parenting and she has good support from her partner or family, it offers the opportunity to acknowledge that she is ready to move on from the level of intensive support the family nurse provides.

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The decision for early graduation is jointly made between client, nurse and supervisor and based on concrete information gathered through tools used within FNP, such as **Ages and Stages Questionnaire scores and DANCE assessments**, as well as insight gathered through collaborative use of the New Mum Star.

This flexible approach to graduation creates the opportunity for a nurse to take on a new client sooner – potentially as much as a whole year's worth of work with another client. It allows an FNP team to manage its caseload according to the needs of its clients rather than being led by a fixed programme structure.

p.72





# Early graduation:

## What we learned through data collection and analysis

By **Andreea Moise**

Data Science Lead, FNP National Unit

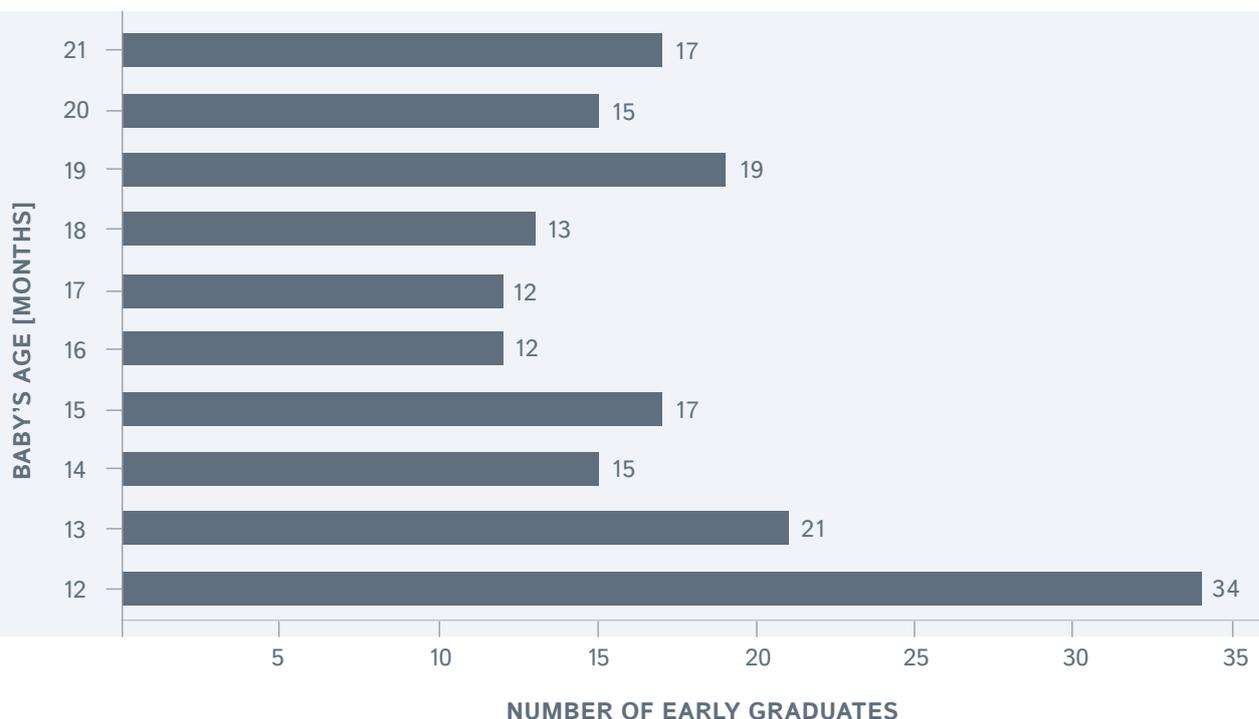
Over the last 12 months of the project, across all FNP teams involved in ADAPT, a total of 174 clients graduated early, when their child was aged between 12 and 21 months. This represented 22% of all clients who completed the programme during this period. In each cycle, the most common age of the baby at graduation was 12 months and clients received on average between 42 and 44 visits in total, notably fewer than the 64 visits in the standard version of the programme (up to a child's second birthday).

There have always been clients who do not receive all 64 visits; on average, historically, FNP clients have received around 53 visits. It appears that early graduation, when appropriate for individual clients, can create programme efficiencies and enable family nurses to redirect time towards clients with greater needs.

Qualitative data analysis revealed the process of early graduation to be one of skilled assessment, communication and negotiation. Clients were sometimes hesitant about how they would manage without the support of their family nurse, and family nurses were also aware that they would miss these clients. This was helped by making graduation a gradual process.

**Chart 6:**

### Distribution of baby age at graduation



**FNP client:** *So it's kind of like, well I can do this, I know I can do it. If she's got faith in me, then I know I can do it. But then on the other hand, like it's the company, like it's someone you see frequently and they become your friend rather than someone to come look at your child.*

**Family nurse:** *You've built a relationship up and for some of these girls, it's probably one of the biggest relationships, in addition to that baby that they've built up in their lives. The biggest challenge is, you know, how do you deal with that sensitively? But again the program works, saying those goodbyes gradually, and it's felt OK.*

During the ADAPT project, as new ways of working became usual ways of working, nurses began to see the potential in early graduation, including it being a way of celebrating client progress.

**Family nurse:** *But I think, at the beginning I was one of the ones who actually said I didn't like to let mine go, I'd hold it on and I'd say, "Do I have to do early graduation?", that's how I felt. But now I actually, I've got more confident in that and I feel like I'm celebrating that they don't need me as much. It's actually quite a Woo! You know, she didn't need me that much for that long...*



**Qualitative data analysis** revealed the process of early graduation to be one of skilled assessment, communication and negotiation.



2.4.2

# More flexible graduation is less daunting for some clients



By Alison Goodall

Family Nurse Partnership Supervisor, Tameside



Two-and-a-half years is a long-time commitment, especially for someone in their teens or early twenties. Some clients have wrestled with whether to come on the programme when we've given that message – that we'll be working with them for two-and-a-half years. I think if someone is thinking "I don't know whether it's for me," it's great now to be able to offer more flexibility from the outset. It's less daunting.



I think if someone is thinking **"I don't know whether it's for me,"** it's great now to be able to offer more flexibility from the outset. It's less daunting.



# Local context and individual needs are key factors in graduation

By Jayne Price

Family Nurse Supervisor, Wirral

What has given us confidence to graduate clients early? It is usually when there is a support structure in place, when outcomes are looking good for them and their child, and when there are lots of protective factors in place. Some might be achieving good education outcomes, for example, and we have had some clients go on to university.

That said, very few of our clients here have graduated early because we know from our ongoing vulnerability audit that our clients are enrolled with multiple levels of vulnerability, including difficult and complex risks, such as child sexual exploitation. Some of our most vulnerable clients are aged 18 or 19, still being groomed and exploited – which we often find out as we get to know them – but who are no longer recognised as a ‘child’ in the system, so can’t access services. We are often the only service involved with them: helping them make good decisions, understand risk and think about how their experiences impact on them as a parent.





# Checks and balancing measures:

some final insights from our analysis of the data

By **Andreea Moise**

Data Science Lead, FNP National Unit

We used in-depth quantitative and qualitative data analysis to explore how the changes made to personalise the FNP programme were implemented in practice.

First, we sought to understand whether dialling down the frequency of visits was associated with fewer visits and less visit time overall, and whether dialling up was associated with more visits and more visit time overall.

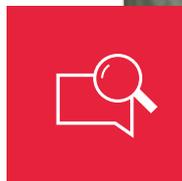
We found statistically significant<sup>37</sup> differences in the total number of visits received by standard, dial-down and dial-up clients as follows:

- Clients whose visit frequency was dialled down in infancy or toddlerhood stages had on average fewer visits: on average 57% of the maximum number of visits prescribed by the standard schedule.
- Clients whose visit frequency was dialled up over the course of the programme received just over the maximum number of 64 visits prescribed by the standard schedule (101%). These should be considered in the context of the average client on a standard schedule receiving around 74% of the maximum number of prescribed visits.
- Similarly, the average duration for dialled down visits (66 minutes) was slightly shorter than standard visits (69 minutes), and longer for dialled up visits (76 minutes).

The fact that dialled down clients received fewer numbers of visits than standard clients, without an increase in visit length, is in line with the most commonly reported reason for reducing visit frequency, which is that 'the client is doing well', suggesting that they might need less input. This suggests that dialling down decisions were implemented appropriately: with clients whose circumstances merited less frequent visits and without any unintended consequences for visit duration.

Conversely, dialled-up clients received more frequent visits and their visits were longer. This suggests that a minority of FNP clients may occasionally need more support than what is considered to be 'standard' at times during the course of the programme.

Second, we wanted to understand whether clients who graduated early, when their child was aged between one and two, were different in terms of intake characteristics from those who graduated when their child was two, comparing data from FNP teams involved in ADAPT and all other FNP teams across England.



Descriptive analysis of a range of intake characteristics<sup>38</sup> of early graduates in comparison to regular graduates suggests that the majority of risk factors that we measured were less prevalent in clients graduating early compared to regular graduates. This is an early observation from a limited dataset and we will continue to monitor programme data to see how this develops over a longer period of time. Similarly, New Mum Star data showed clients who graduated early to have progressed further along in their **Journey of Change** in toddlerhood, compared to earlier stages of the programme, in line with the time frame for early graduation. **Qualitative feedback from family nurses described a thoughtful and safe process for ensuring clients identified as being on-track for early graduation were indeed ready to leave the programme earlier.**

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At the same time, we gathered a wide range of evidence exploring the acceptability of changes to clinical practice and of tools used in supporting clinical decisions. This suggested that the New Mum Star was well-received overall by both nurses and clients. For example, a survey measuring family nurses' perceptions and experiences of using the Star was conducted during the first analysis cycle and then repeated towards the end of the third cycle (response rate 54%, n=72). Nurse responses indicated overall a very positive view of its impact in involving clients in decision-making and a perception that the New Mum Star represented a positive addition to their work with clients. The strength of positivity in nurses' survey responses increased from cycle one to cycle three (response rate 72%, n=96), potentially reflecting increased nurse confidence that comes with the added experience of delivering the New Mum Star in practice over time. As expected, we were able to identify some quantitative evidence of synergy between the strands of personalisation. Specifically, more programme content was flexed when visit frequency was altered, suggesting that when nurses adjusted visit frequency they also personalised more content.

Chart 7:

## Comparison of overall nurse agreement in analysis cycles 1 & 3



## Comparing client outcome data in ADAPT with overall FNP programme data

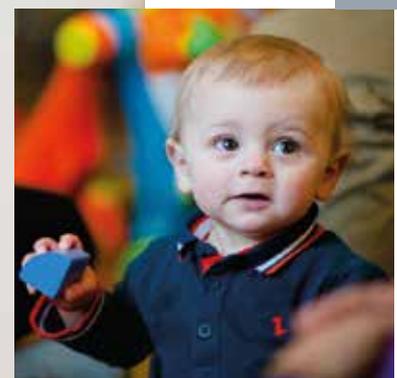
Lastly and most importantly, data collected during the ADAPT project suggest that clients who received a personalised programme had similar outcomes compared to clients receiving the programme under the traditional FNP model. This suggests that the efficiencies made during the ADAPT programme, and delivery of more personalised programme, do not contribute to poorer outcomes. We found no statistically significant difference in most outcomes for clients and babies in the ADAPT sites (on average) compared to all other FNP sites where the standard programme was delivered (further detail in appendix).<sup>39</sup>

In addition, there were two instances where we identified small and positive statistically meaningful differences favouring ADAPT sites as follows:

- There was a smaller proportion of young mothers with medium to high levels of anxiety (collected at 36 weeks in pregnancy, 6 weeks and at 12 months post birth)
- There was a smaller proportion of children with social-emotional development outside the normal range (collected at 6, 12, 18 and 24 months).

Caution should be exercised in interpreting these findings, despite confirmation of positive differences by further robustness checks.<sup>40</sup> The reliability of these findings may be hindered by the small sample size. This is because a limited number of clients receiving a more personalised programme had graduated by the end of the ADAPT project, and for clients who had not yet graduated, outcome data collected do not represent their entire FNP journey. We plan to collect more data over longer periods of time to explore the generalisability of these differences in outcomes beyond the studied sample.

As the FNP National Unit moves forward to embed a more personalised programme across England, we will continue to use data to monitor both the implementation of changes to practice and outcomes for clients and their babies.



## Data collection in FNP ADAPT

By **Andreea Moise**

Data Science Lead, FNP National Unit

The FNP National Unit routinely collects and analyses a wealth of data about client characteristics and outcomes, recorded by FNP teams on a central FNP information system. This informs local and national quality assurance and improvement.

In ADAPT, the FNP information system was modified with additional data fields for the FNP teams involved in the project so that we could monitor the implementation of more personalised programme delivery, including visit frequency ('dialling') and flexing programme content.

Key data items less frequently collected, such as nurse surveys, and clinical adaptation data, which could not be embedded in the existing system due to technical constraints, were included on FADS2 (FNP ADAPT Data System), a new data system designed and maintained by Dartington Service Design Lab throughout the course of the project.

The two systems together sought to capture quantitative insights on implementation, acceptability and outcomes of personalisation, as well as measures linked to the clinical adaptations.

Qualitative data was collected through a range of focus groups with nurses and clients (further described in Chapter 3 and Chapter 4 and in the appendix) and individual client interviews conducted by an independent researcher.







# How we used data to support and measure change in the ADAPT project

By Beth Heller

Head of Innovation Management, FNP National Unit

Using data in this innovation work was critical and powerful. It was a tool to advance change, to correct our course, to bring to light things that warranted further investigation, and to measure whether we were achieving what we set out to do.



## Measuring implementation

Our first goal was to monitor whether each adaptation was being implemented as designed. Our mixed methods approach allowed us to use data effectively to inform our interpretation of results. We found that when we reviewed quantitative data with FNP teams, analysed in a thoughtful and meaningful way, it helped nurses clarify, reflect and challenge themselves about what they perceived to be happening in their practice. Sometimes we found that nurses – or whole teams – thought they were delivering in a certain way; however, when confronted with quantitative measures, their perception changed and they were then able to reconsider their practice and strengthen their delivery.

An opposite example occurred in our work exploring the vulnerabilities of FNP clients at enrolment, when qualitative feedback caused us to consider what was not being captured through the quantitative data. As part of the adaptations to personalise the programme, new eligibility criteria were developed to target increased vulnerability with the aim of enrolling clients who could benefit most from FNP. Dartington designed a data-driven effort to track implementation of the new eligibility criteria, beginning with four categories of risk identified through a review of the scientific literature on the risk and protective factors for poor child outcomes addressed by FNP.



**Chart 8:**

## Prevalence of four key vulnerability indicators in clients enrolled in FNP in the first phase of ADAPT



Note: Data from cycles in the first phase of ADAPT, 2017-18

\*LAC = looked after child, CIN = child in need plan, CP= child protection plan. Comparison data from ADAPT sites in 2016.

Data analysis and graph: Dartington Service Design Lab.

This work took an interesting turn, triggered by **Chart 8**, which suggested the prevalence of four key vulnerability indicators appeared to decrease for clients enrolled in the programme in the first phase of ADAPT (2017-18) compared to the client cohort from 2016 in the same sites. This was at odds with the reports from the family nurses, who firmly described a picture of increasing client vulnerability.



To explore this, we asked three FNP teams to catalogue the vulnerabilities of their client caseload in detail and we then compared their descriptions with our four categories of risk.

Through this process, we identified further risk factors which were understood by nurses to be relevant vulnerabilities that informed their work and influenced outcomes, but which had not arisen through the literature search. We also clarified the shared definitions of others. We used this information to create a revised list of nine categories that was the basis for data collection in later data cycles of the ADAPT project. The expanded list of vulnerability factors comprised of:

- Young age (15 or under at enrolment)
- Ever abused or neglected or known to social care;
- Current mental health difficulties;
- Previous mental health difficulties;
- Low educational attainment;
- Current domestic violence;
- High-conflict relationship;
- Family dysfunction;
- Substance use (any of illegal drugs, alcohol or smoking).



This more detailed list reflected a collaboration, bringing together the contribution of nurse insights and research evidence, and drawing on the strengths and limitations of both sources. The results of later data cycles revealed that concurrent vulnerability risks of FNP clients were actually closer to 2.6 factors per average client rather than the originally measured 1.1 factors per client under the narrower definition suggested by the literature review identified risk factors alone.

Vulnerability data was collected at intake (when a client was enrolled in the programme) and at 36 weeks gestation, nearing the end of pregnancy. Measuring intake vulnerability characteristics at two time points revealed that significant risk factors were unknown at intake and only became available after the therapeutic relationship between nurse and client had developed. Nurses reported that this more detailed capture of vulnerability risk factors proved beneficial and informed their clinical judgement and decision-making processes as part of personalising the programme. The learning from this work is being taken forward by the FNP National Unit as part of the **redesign of FNP's data system in 2020**, which will include more detailed capture of client vulnerabilities. Dartington, in turn, will continue to explore the implications of differing approaches to grouping clients' needs in a **forthcoming paper**.

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chpt.5

## Balancing pace and safety

We chose not to set implementation benchmarks to say 'what good looks like' for the various aspects of a more personalised programme delivery, or for specific elements of the clinical adaptations. While implementation science suggests that setting clear measures would have provided a stronger catalyst for change, we had to balance this in counterpoint with clinical safety. We were developing adaptations for delivery in the real world without certainty of how they would impact on outcomes, so we took a cautious approach and allowed the take-up curve to develop slowly and organically. We wanted the data to help define what good looked like by allowing evaluation measures to emerge, taking into account the quantitative metrics alongside the qualitative input from nurse and clients.

Using data well as part of a rapid-cycle method was tricky. We were testing changes to an intervention delivered over a period of up to two-and-a-half years and it was important not to misinterpret data collected over short intervals. It would take a number of 3-4 month cycles before we could begin to see the direction of travel on client outcomes, and that was a tension we had to hold. This was another reason why mixed methods data collection – including the open and honest dialogue with nurses – was so important, allowing nurses and the project team to monitor and evaluate their progress in making changes safely, while working with a highly vulnerable client group.

Over the course of several cycles of testing, we began to develop a clearer sense of possible benchmarks in the programme data. We can now be much clearer about establishing implementation measures and having increased confidence that the changes do not have any detrimental impact on outcomes for clients, **as we roll out this service delivery model more widely** to FNP teams across England in 2020.

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chpt.5

## Using data to help understand what is happening in practice

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chpt.2

In the early days of the project, we had a real challenge to accurately interpret data cycle by cycle. When we looked at **dialling data**, for example, about the frequency of nurses' visits, we expected to see much more movement in the quantitative data and it worried us when we couldn't see that. Even when viewed at an FNP team level, the data seemed to suggest low levels of implementation. Yet nurses told us that they were dialling their visits with clients.

It wasn't until we broke down the data into the stages of the programme – pregnancy, infancy and toddlerhood – that we began to understand what was happening. There was no change to visit schedules in pregnancy, a little in infancy; all the change was happening in toddlerhood. This was where the meaningful levels of change in visit frequency were taking place – at age 12-24 months. It took about two cycles (around 6 months) before this began to shift in a significant way, as implementation bedded in, and by the end of the third cycle, we saw an average of about 25% of visits dialled down from the standard schedule, meaning the frequency of home visits had been reduced.

Understanding this change would not have been possible without the dialogue with nurses who were able to explain why this pattern of dialling was happening. It does not happen in pregnancy, for example, because these first visits are about building a relationship, getting to know the client and understanding what is going on in their world, and there is a lot of important content to deliver before the baby arrives. In infancy, there is work to do to support mums to build their skills, confidence and self-efficacy as a new parent, plus more content relevant to the Healthy Child Programme to deliver. By toddlerhood, when the child is between 12-24 months, nurses were able to identify clients and children who were doing well and were ready to receive fewer, less frequent visits.

Importantly, there was significant variability across teams, as dialling activity across all phases of the programme ranged from 2% to 50% of visits being dialled. This variability in results reinforced our learning around the length of time required to embed change which was often influenced by variations in the local context within which teams were operating. It also showed us the importance of how we looked at the data. Looking at the whole dataset had masked the nuance of what was happening. And this is the power of analysing data well and using qualitative data to help interrogate it carefully to understand what is happening in practice.

All data – quantitative and qualitative – has limitations and it has been important in this project to use both well in order to capture the complexity of the real world for clients and nurses. Bringing people together to examine the interplay between quantitative and qualitative data, while time consuming and challenging, is a necessary technique to guide meaningful change. A slice of quantitative data might show that a client has a particular vulnerability or risk factor, for example, but that view doesn't show the depth or scale of it, nor any protective factors that might be in place. Keeping open the space for, and faith in, professional judgement, while using data well, has been crucial in this project as we have developed the FNP programme. Collaboration around data enabled a space to listen to many voices – FNP nurses and supervisors, clients, researchers, and clinical leads in the FNP National Unit. It enabled us to explore the gap between 'hard numbers' and 'practice reality' and in doing so we developed a greater understanding of some elements of complex practice.



Keeping open the space for, and faith in, **professional judgement**, while using data well, has been crucial in this project as we have developed the FNP programme.



## Data collection challenges

We encountered a number of challenges with data collection. Our rapid pace, for example, meant that we often designed data collection forms without enough time for testing. This meant we didn't always hone wording well enough or define things clearly enough at the outset, and we had to use early cycles of testing to correct or clarify forms to enable us to capture the right data.

We created a form to capture New Mum Star data, for example, to measure the way nurses delivered it, including frequency and scoring. But we had overlooked some practicalities of using the tool, for example, the need for the nurse to be able to record when there was disagreement between client and nurse about where the client was on her **Journey of Change** on a prong of the New Mum Star. The data system did not enable this to be recorded clearly without requiring the nurse to enter a second complete data recording for the same Star, which placed additional administrative burden on nurses and confusion when this data was analysed.

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The delivery context was more complex than we had accounted for and so we had to retrofit a solution for this unexpected real world situation. Significant variation around the definition nurses used to record their decisions to flex content was another example of this challenge. Ultimately, the wording of data capture questions needed adjustment and the time delay to enact changes limited our ability to use the data to evaluate delivery as quickly as we had wanted to.

Some of this was a learning curve which helped us improve our approach during the course of the project – and will inform our **future service development work**. Some of it was due to immutable factors, including the sheer complexity and pace of the project, which required a pragmatic response.



# How we used Agile project management methodology to support rapid cycle testing

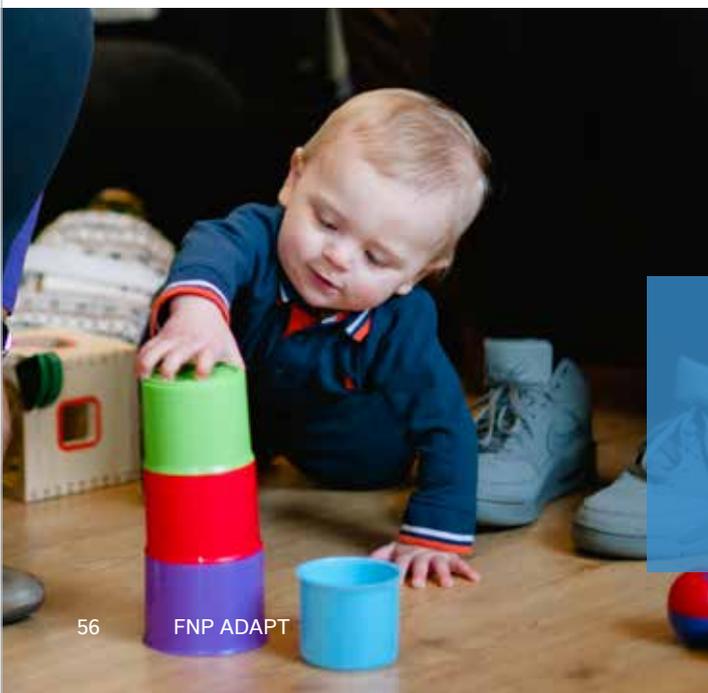
By Kelsey Reiersen

Project Manager, FNP National Unit

We started the ADAPT project without a defined project management methodology in place. The beginning of the work was very exploratory – trying to focus in on what we were doing, working on logic models<sup>41</sup>– and it felt huge and undefined. We underestimated the need for agreed project management approaches at the start and efficiencies were further affected by the fact that the core project team sat across separate organisations. The lack of agreed, shared principles meant there were challenges with respect to communications and organisational differences that had implications for project deadlines and approaches to tasks. Project management tools and techniques later allowed us to identify priority areas of work, enabling us to see what we needed to do and when we needed to do it.

We began to focus on really practical things like creating timelines, defining phases more clearly, and breaking down larger pieces of work into smaller ones. We assembled a project team in a more purposeful way and gave people clearly defined roles and responsibilities. We tried to put well thought-through structures in place to support the collaborative, iterative process of innovation.

Once we moved into the testing phase, each 'cycle' lasted 3-4 months. This included a 'cycle point' which was a 6-week window during which the project team analysed the data from the preceding 'test' period. It involved downloading and reviewing data, discussing it with our cohort of nurses and supervisors, and interpreting it together against our hypotheses. We would then go on to define any changes we wanted to make, in response to the data and before updating the data entry system, any relevant guidance, and releasing the changes to the FNP teams involved in the project. This 6-week window always felt very tight, due to the scale and scope of the project, and we sometimes had to allow some time for any changes we had made to embed in practice at the beginning of the next cycle.



## How project management helped

Project management methods certainly focussed the work and gave us a sense of realism about what was possible. It sometimes meant we needed to take difficult decisions about what wasn't possible to deliver in the time available. This project involved over 200 people at its peak and so this sense of clarity felt important in the context of the exploratory and iterative nature of the work we were doing.

We knew the stakes were high if we missed deadlines and it was really important that we were able to clearly communicate milestones both to FNP teams within the project and beyond. We knew that many commissioners and FNP teams not involved in the project were waiting to see the outcome of the project.<sup>42</sup>

## Agile – what worked and what didn't

We introduced Agile project management methodology into the FNP National Unit at around the time the ADAPT project began. I introduced elements of the method into the project management of ADAPT, though it wasn't a perfect fit. Agile traditionally limits how far in advance you should be planning, which wasn't always practical in this project, given the context. Documentation tends to be minimal in Agile methods, but the scale and complexity of this project meant we needed clarity: we had to be sure of shared understanding to work at pace with FNP teams in 20 areas across England and contributors from other organisations.



**This project employed principles and methods spanning research, quality improvement, implementation science and project management.**

However Agile did lend itself to rapid cycle testing in other respects, such as establishing a framework to support iteration and delivering value in real time. If we had been purer in our application of Agile, we would have done more user testing of some of our solutions, such as the data systems we developed. This was in part about the pace of the project. We ended up using our early cycles to iron out some data entry and guidance glitches, which we could have perhaps tackled in a beta testing phase to ensure what we developed fully met the needs of the nurses and supervisors using the systems. This is one example of how we had underestimated the time and capacity commitment required to deliver a project of this scale and scope.

A more generalised, but equally important, benefit of Agile was the way in which the methodology promoted multi-disciplinary working, ensuring the needs of key stakeholders were brought to bear on project elements. As the team embraced Agile methods, there was better cross-functional input which resulted in stronger delivery and more effective resolution of issues as they arose.

Agile project management has the potential to offer a valuable framework for improvement work. It can be challenging to work in an iterative way when you need to work within slower-moving, sometimes cautious public sector governance structures. As a method, it requires leaders to articulate a clear vision and step back to give a project team the authority to develop solutions directly with the end-users – another example of thinking differently about power and authority.

This project employed principles and methods spanning research, quality improvement, implementation science and project management. It sometimes felt like we were constantly holding tensions in a wrapper of pragmatism. We learned a lot, however, and we continue to develop our thinking about how the principles of Agile project management can be applied and strengthened in service improvement work in the FNP National Unit.





# Learning from Rapid Cycle Design and Testing at scale

Keira Lowther, Tim Hobbs and colleagues<sup>43</sup>

Dartington Service Design Lab

**In 2015, Dartington was exploring various approaches to formative or developmental evaluation, having recognised the limitations of traditional summative evaluation approaches in providing service developers or providers with timely, accurate and usable data. We were focussed on approaches to inform service improvement, rather than external accountability demands for proving impact.**

At the same time, the FNP National Unit, our long-standing collaborators, were also interested in exploring a more applied approach to evaluation and programme quality improvement in order to respond to and quickly learn from a large RCT and the rapidly changing commissioning context. The FNP ADAPT initiative was born!

Over a short space of time, we developed our first iteration of the approach we now call Rapid Cycle Design and Testing.

**The core features included:**

- A strong grounding in scientific research evidence (particularly during the initial design phase);
- Co-production with service users and stakeholders;
- An initial sharp focus on implementation before addressing questions of outcomes and impact;
- Proportionate and minimally sufficient data collection;
- Rapidity and responsiveness; and
- A systems perspective in design and implementation.

It is not the purpose of this report to describe in detail the methods of Rapid Cycle Design and Testing. You can read more about this in the FNP ADAPT interim report<sup>44</sup>, as well as a forthcoming paper by Dartington. We focus here on some key learning from work over the last four years. Inevitably, the richest learning always comes from exploring tensions and challenges in practice (rather than when everything goes smoothly). As such, we reflect on what we learnt through trying to navigate five specific tensions:

1. Learning at scale and with pace
2. Evidence, co-production and power
3. Rigour and pragmatism
4. The urgency for outcomes and a slow steady look at implementation
5. Managing change well in an uncertain context

Whole books could be written about each of these themes (and people have done so!). We only touch upon each of these themes by way of an open and honest reflection about some of the things that we – at Dartington and the FNP National Unit – have learnt together as a team.

At the heart of this work was the curiosity and courage of both organisations to navigate these tensions together. Curiosity to see what would happen if changes were made with and by FNP sites, and courage to design, adapt and test the programme accordingly in the light of what we learnt.

## Learning at scale and with pace

The pace and scale at which we were undertaking design, adaptation and testing was an important theme feeding into many of the tensions we navigated. Right from the outset, there was a trade-off to manage between the scale or breadth of testing, and focussed depth of enquiry and learning. On one hand, we could have chosen to work with fewer sites, in more depth and with more concentrated resource and greater rigour. Yet in reality, the context outlined in Chapter 1 demanded that the FNP National Unit explore a greater variety of adaptations, at pace, within a time-limited window.

During 2016, the FNP National Unit and Dartington were developing a significant programme of personalisation at the same time as designing and testing eight different clinical adaptations in eight different sites across England, as well as designing and developing a new data system to inform testing. This breadth of work inevitably stretched our collective resources, and the effects were felt throughout the work – as reflected in previous sections. It is a tension that inevitably exists with any ambitious service improvement effort. To manage this tension well required creativity and pragmatism: knowing when we could afford to proceed at pace with more limited information, and when to slow down and take a closer look through interrogating the data.

Despite our best efforts, we believe that high-quality implementation of changes to the programme, in the context of this combination of scale with breadth and depth and pace, was not always possible to achieve, with depth of learning being sacrificed to some degree. We suggest that future large-scale improvement efforts invest sufficient time at the outset to ensure clarity in aims and ambitions, prepare all stakeholders for change, and test a narrower range of changes in order to create the greatest opportunity for learning.

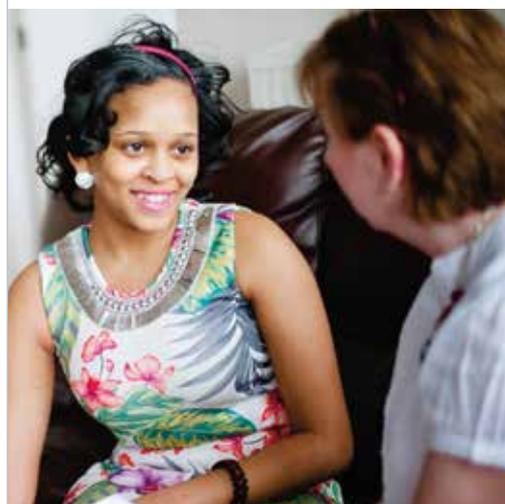
## Evidence, co-production and power

Co-production, informed by evidence, was a core principle for both Dartington and the FNP National Unit. We worked with nurses, supervisors, clients and other stakeholders to develop, test and refine adaptations, drawing on scientific evidence and the perspectives and experiences of these varied stakeholders.

There were examples where co-production worked as intended. One such example was the development of the New Mum Star – a clinical tool that subsequently informed much of the personalisation of FNP ([see Chapter 2](#)).

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Through focus groups, interviews and surveys, we were able to gather qualitative and quantitative data from the nurses and clients at all sites on their experiences of using early designs of the New Mum Star, and their thoughts about potential developments. These data were brought to our colleagues at Triangle to inform the subsequent iterations of the Star. At times, the findings from the research in different groups (nurses and clients) were conflicting. For example, some practitioners felt that clients might find a 10-point scale overwhelming but clients did not see this longer scale as a problem; in fact, they liked that they could see progress more easily. In cases where there was divergence in perspectives, the project team had to make a call. In the case of the scale on the Star, ultimately a shorter scale was adopted, largely to aid differentiation between points but also due to concerns about the representativeness of the clients providing feedback.



This process led to a refined version of the New Mum Star, which was substantially different to the original version. Once the changes had been made, we were able to test the revised version with nurses and clients. Quantitative data revealed a wider distribution in scores, which we felt represented a more realistic view of the client's journey and therefore gave us hope that the assessment was likely to be more accurate. Nurses reported that this revised New Mum Star was easier to use to identify client priorities for a personalised programme in practice because of the simpler visuals and clearer narrative that accompanied it. We were reassured to hear from nurses that it had retained the properties that created opportunities for clients to reflect on their situation and at times disclose new information to their nurses. This revised and co-produced New Mum Star continues to be an essential and well-integrated component of clinical practice in FNP teams involved in ADAPT.

Yet at times co-production was more challenging. One tension was our commitment to ensure that the best-available evidence featured in the designs of clinical adaptations or personalisation, which at times created an 'evidence as expert' power imbalance. We asked practitioners to use the evidence summaries we prepared for them and their knowledge of clinical practice to produce evidence-informed articulations to descriptions of proposed changes to clinical practice. We asked that this was accompanied with documents such as logic models, context maps and analyses of the 'dark logic' of any adaptations.<sup>45</sup> Many nurses rose to the challenge, but what we learnt along the way was the importance of effective knowledge brokerage. Whilst we recognised that all members of the ADAPT community brought different skills to the table, with hindsight, we should have explicitly acknowledged this and worked with this more intentionally, adapting language and sharing tasks accordingly. This would enable a more effective use of the specific skills of practitioners and researchers to empower and harness the expertise, insights and skills of practitioners to support them to meaningfully engage with evidence.

Other tensions with co-production stemmed from the pace and scale at which we were operating, as previously described. Often, a context of hard-pressed public service delivery, the fullness of nurses' caseloads and their work with vulnerable clients made it difficult for nurses to engage fully or deeply in a co-design process and maintain pace.

Authentic co-production with often vulnerable clients was predictably the most challenging aspect of co-production, and where we did not make as much progress as we would have liked. We learnt quickly that traditional approaches to engagement – such as focus groups, in situ interviews, online engagement or incentives – resulted in low attendance that we suspected was biased towards the more articulate and engaged clients. We felt these issues were exacerbated by a centralised project team working across multiple sites in England, which made it difficult to establish deep and ongoing relationships that would enable more meaningful co-production.

We tried other approaches, including working with a developer to create a chat bot to engage a broader range of clients in a familiar text-message medium. This showed some promise – at least for initial exploration of viewpoints – but was more complicated and costly than initially conceived and we lacked the capacity and funding to pursue it. Through persistent efforts, we learnt about where best to find and engage diverse groups of clients, for example, by attending groups they already participated in and enjoyed, rather than holding a separate focus group they had to travel to. We found playful interactions and games incorporated into the sessions helped elicit valuable contributions to design efforts. Yet none of this enabled us to undertake authentic co-production with clients at the scale or pace we wanted. This is an aspect of the work that would have benefited from a deeper, albeit more narrow, dive at the expense of scale and breadth.

## Rigour and pragmatism

High-quality data are critical for any service improvement effort. We collected a mix of quantitative data, on things like whether a client was receiving a dialled up or down programme, and qualitative data on how such decisions were made and how the nurses and clients felt about this opportunity to change the programme. The practitioners collected the quantitative data as they practised as family nurses and supervisors, while the project team members collected the qualitative data. More can be read about the methods in Chapter 2 and in the FNP ADAPT Interim Report. We strove to collect high-quality data, in terms of its fitness for purpose, completeness, accuracy and depth. Yet we had to balance this with the pragmatism required to operate at the pace and scale required.

This pragmatism was expressed in a few different ways. Proportionality became a key principle at Dartington for this new approach – we began to use the phrase ‘minimally sufficient data for decision making’, meaning that we collect the data we think we need to inform important questions and no more. These data were explored in every possible way, making each data point “work hard” to generate as much learning as possible. For example, an assessment was introduced for the adaptation to address intimate partner violence. This assessment was due to be used at four time points during the programme. In addition to analysing the data collected from the assessment itself, we examined the completion rates at each time point, comparing different sites and different nurses and the timing of each assessment, to try and identify patterns of behaviour that could direct our focus for making improvements in collaboration with nurses. It was important to shift the focus of the data collection from accountability (adherence, dosage etc.) to testing, learning and improving. The effort required to make this considerable shift at every level of the system was underestimated at times.

Initially, we took a fairly traditional scientific approach, prioritising researcher objectivity and subject anonymity. But as the need for more implementation support for nurses and teams making adaptations became apparent, this highly objective approach needed to be relaxed. This meant collecting qualitative data from teams during implementation support meetings, where team supervisors and clinical leads from the FNP National Unit were present. Initially we resisted this in case it compromised the openness with which the nurses would be able to speak and therefore the quality of the data (which is probably true to a degree). However, constraints on nurses’ time, and their pressing need for support with implementing the changes to the programme, meant that this pragmatic compromise was necessary. It may have increased the risk of some variability in data quality, but it meant that we had some data to work with (as opposed to none at all!).

The scale and pace of the work also exposed this tension between rigour and pragmatism. We did what we could to automate aspects of quantitative data, collection and analysis, and for the qualitative data we took the pragmatic step of analysing the qualitative data much more deductively, based solely on the topic guide (an example of minimally sufficient data analysis). This reduced the time taken in analysis and reporting. In an ideal world, we would have dug deeper into the data, but we felt this was an acceptable compromise in relation to pragmatism versus rigour. Most importantly, this meant that decisions could still continue to be data driven as findings were reported in a timely way.



**It was important to shift the focus of the data collection from accountability (adherence, dosage etc.) to testing, learning and improving.**



## The urgency for outcomes and a slow steady look at implementation

A fundamental tension we experienced was between a desire to focus on good implementation and service improvement and the need to explore impact as soon as possible. Service improvement efforts focussed on ensuring we were serving those most at risk of developing the outcomes FNP addressed, creating faster throughput or reduced cost using rapid, nimble methods. Exploring impact meant generating the confidence that changes in programme content and delivery were associated with at least stability (or ideally improvements) in child, parent or family outcomes. This emphasis on outcomes was even greater in the light of the findings from the RCT of FNP in England and the context of reduced public expenditure.

An additional complication was that FNP in its full entirety spans two and a half years: from early pregnancy until that child is two years old. This is a long-term, intensive, multi-component intervention, which could push the limits of the word 'rapid' in Rapid Cycle Design and Testing. How did we navigate this?

The initial focus on implementation – making sure that changes were acceptable and feasible in practice – lent itself to rapid cycle testing. Practitioners were very quickly able to tell us what worked well and what needed amending to work better. Cycles of three months were long enough to allow changes to intervention content and delivery to bed in and the collection of initial data on which to base decisions about changes, but short enough that practitioners and their clients were less likely to disengage from adaptations that were unfeasible or unacceptable. This focus on implementation quality before rushing to look at outcomes meant that we were confident that adaptations were implementable as well as being based on scientific research and practitioner experience. This gave us confidence to expect changes in outcomes further down the line, once the changes had been implemented fully.

Having said this, we still faced inevitable challenges in exploring the impact of adaptations on outcomes, mostly due to small numbers and the absence of a control group. It was also impossible to consider attribution (the extent to which these specific changes impacted on the outcomes), due to the many simultaneous changes to practice. The use of mixed method enquiry was pivotal to our sense of confidence in what we found; understanding the qualitative reasons for the quantitative trends that were revealed. Although this approach does not give us the same level of confidence about movement in outcomes that we would have in an experimental trial, it does provide sufficient confidence that, should these changes be tested in a more rigorous way, we might reasonably expect to **confirm these indicative trends**. We are actively exploring ways to build this confidence in future applications of the Rapid Cycle Design and Testing method.

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chpt.2



## Managing change well in an uncertain context

The ADAPT project was hugely ambitious. We instigated a great deal of change – both to systemic and clinical aspects of the programme. This was done with a large number of FNP teams, over a large geographical area, in a relatively short space of time and in a rapidly changing context.

We were asking highly experienced practitioners and teams trained in and used to delivering a manualised programme to deviate from much that they had been taught by introducing the opportunity to flex content, dial visit intensity up or down, and graduate clients ahead of the previous schedule. It was a big deal for many practitioners to move away from reliance on clear visit guidelines and fidelity goals to greater reliance on clinical judgment and an emphasis on testing and learning to inform a new approach to programme delivery.

Furthermore, it must also be acknowledged that we adapted FNP practice in the context of austerity, with cuts to the surrounding supportive services and the very real threat of cuts to many FNP teams. This affected the extent to which some nurses felt able to implement some of the changes, such as early graduation before the age of 2 years. We learnt from the qualitative data that this was because some sites were concerned about the impact of reducing provision in a context of otherwise stretched clinical or community support.

Implementation science tells us that introducing new practice in any environment is challenging, but particularly so where there is a lot of change occurring. We drew on this literature in our attempts to make implementation easier, introducing more implementation support through in-person meetings, trainings and guidance documents.<sup>46,47</sup> We were also mindful of theories of change management, and how they provide insights into how we might support the FNP community to make these changes, iteratively learning from what went well as we progressed the project.<sup>48,48,50</sup>

For example, we tried to remove barriers such as difficult-to-navigate materials (by creating a themed index of materials for nurses to draw from) and used regular communication to build momentum and a sense of cohesion (e.g. through a regular ADAPT email bulletin). We also learnt about the power and potential of a community of peers in the FNP ADAPT sites, who were able to help each other, actively talking about what might be difficult and sharing solutions that had worked for them. As a project team, we introduced regular implementation support and coaching calls with FNP teams where the new ways of working would be reinforced, and issues identified early and resolved (which required the aforementioned flex in objectivity of data collection). What we didn't do was adequately prepare for and invest in these change management approaches from the outset, building on this learning to scaffold our emerging change and transition supportive processes. This is easy to say in retrospect, as during set-up and implementation phases, we were working at a great pace and intensity – which of course makes the investment all the more important and worthwhile.



ADAPT produced a lot of rich learning on the **realities and challenges** of implementing a Rapid Cycle Design and Testing initiative at pace and at scale.

## Concluding reflections

ADAPT produced a lot of rich learning on the realities and challenges of implementing a Rapid Cycle Design and Testing initiative at pace and at scale. We learnt about the 'sweet spot' between drawing on principles from academic disciplines, where rigour, conceptual clarity and objectivity create value, balanced against real world challenges of implementation, where pragmatism, responsiveness and pace create value.

Sometimes it was right to take a more rigorous approach. At other times, we came to understand that to serve the programme and its clients well, it was right for the researcher to dial down the scientific objectivity – and certainly to recognise and reduce the jargon.

Finally, building on the previous points of the difficulties of implementing change in uncertain environments, the FNP community had a further challenge in this context – changing from a culture of strict fidelity, to building a culture of experimentation and giving nurses greater permission to use their clinical judgement and skill in new ways. Family nurses had previously worked on the basis that achieving fidelity goals was a core part of the work to deliver outcomes for clients: a perspective challenged by the results of the UK randomised controlled trial. The impressive shift nurses and clinical teams have made in weighing their trust in the evidenced authority of a manualised programme with their own clinical judgement, and the data their practice generates, cannot be understated.







# What next for the FNP programme in England?

By Lynne Reed

Director, FNP National Unit

**It seems fitting, in the World Health Organisation's International Year of the Nurse and Midwife, that we should be reporting on our efforts in FNP to lean into the skill and capabilities of our nursing workforce to provide improved, personalised care to some of the most vulnerable parents in England.**

What we have learned, in the process of doing this, has significance for anyone transporting a programme or service from another country. What it tells us is that it is not enough to unwrap the box. We must unpack the parts and put it all together in a format that fits the new context.

What I believe this shows is that the core value of a licenced programme is its integrity. The best return on investment is to be found in the ability to hold on to that core while exploring the flexibility that enables best fit to context and ongoing improvement.

It takes courage, capability and time to do that. Courage to hold your nerve – or let go, if you need to, and be willing and able to learn through failure; multidisciplinary capability, to leverage a range of professional skills to challenge each other and find solutions; and time to build capacity and confidence, to mature and evolve.

This report sets out what we have changed in FNP and what we have learnt in the process. I would like to share more about what we plan to do next.

We have begun work to prepare FNP teams to implement a more personalised FNP programme, as described in Chapter 2 of this report, from April 2020. We are drawing on implementation science to inform this work and using learning from the ADAPT project to develop an evaluation framework that will recalibrate FNP programme performance data for public health commissioners and FNP provider organisations.







This will include continuing our work to better understand for whom the FNP programme is most beneficial, using what we have learned to better capture and monitor the vulnerabilities of FNP clients as individuals and as a cohort (also described in Chapter 2). The new FNP information system, which will go live in 2020, is being designed to better capture this data, using the rich insights gleaned from the ADAPT project – the product of a very fruitful collaboration between researchers, data specialists and nurses.

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chpt.1

The FNP teams who have been testing neglect and intimate partner violence adaptations to the programme, described **on p.14 in Chapter 1**, will continue to deliver and refine these adaptations working in collaboration with the FNP National Unit. We plan to take a phased approach to rolling out these adaptations to all FNP teams, once a more personalised programme is well embedded across England in 2020/21. We will continue our work to improve specific areas of clinical practice in FNP, such as our recent quality improvement project to help improve stop smoking rates in pregnancy,<sup>51</sup> which was borne out of early clinical adaptation work in the ADAPT project.

From 1 April 2020, the FNP National Unit will move into Public Health England. In the 13 years since FNP was first established in England, we have built rich insights: working with some of England's most vulnerable families; building a skilled workforce of family nurses; and embedding an evidence-based programme and adapting it for context. We will draw on this, and the capabilities we have developed as a tight-knit, multidisciplinary FNP National Unit team, to contribute to work 'to improve the health of babies, children and their families to provide the best start in life and the foundations of good health into adulthood' – one of ten priorities for Public Health England for 2020-25.<sup>52</sup>



The new FNP information system, which will go live in 2020, is being designed to better capture this data, using the rich insights gleaned from the ADAPT project – the product of a very fruitful collaboration between researchers, data specialists and nurses.



# Glossary

## A brief guide to a more personalised FNP programme

Acronym or term	Meaning
ADAPT	ADAPT stands for Accelerated Design And Programme Testing. The ADAPT project was initiated by the FNP National Unit in partnership with Dartington Service Design Lab, FNP teams in 2016.
Agile	<b>Agile</b> is a project management approach, originally conceived by a group of software developers, which is designed to support iterative development (usually of a product), focussed on business priorities and the needs of the end user.
ASQ	<p><b>Ages and Stages Questionnaires</b> are a series of validated developmental and social-emotional screening tools for young children aged up to six years old. ASQs are used to track development and identify possible developmental delays in young children. ASQs are used as part of the Healthy Child Programme to generate data for a population measure of child development at age 2-2½.</p> <p>In FNP, family nurses use ASQs to identify whether babies of mothers enrolled on the FNP programme are meeting expected development milestones at age 4, 10, 14, 20 and 24 months.</p>
Agenda matching	The process used by nurses in FNP by which the family nurse maintains alignment between the goals of the client and those of the programme.
Cycle – in ADAPT project	A cycle is a period of time (usually of 4 months) in the ADAPT project during which changes to service FNP delivery are implemented. Meanwhile, data are collected and captured by nurses and supervisors.
DANCE (Dyadic Assessment of Naturalistic Caregiver-child Experiences)	An assessment framework which uses observation to facilitate work with families on important aspects of the caregiver – child relationship.
FNP information system	The FNP National Unit routinely collects and analyses a wealth of data about client characteristics and outcomes, recorded by FNP teams on a central FNP information system. This data informs local and national quality assurance and improvement.
FADS2	FADS2 (FNP ADAPT Data System) was a new data system designed and maintained by Dartington Service Design Lab throughout the course of the project to collect data that could not be collected through the FNP information system. This included nurse surveys and clinical adaptation data.

Acronym or term	Meaning
Journey of Change	The Journey of Change is a five-step progression, from 1 ('Stuck') to 5 ('Self-reliance'), set out on the prongs of the New Mum Star. See Appendix 1.
NFP (Nurse-Family Partnership)	Nurse-Family Partnership (or Family Nurse Partnership in England, Scotland and Northern Ireland) is an evidence-based, intensive home-visiting programme for young, first-time mothers. It was developed by Professor David Olds at the University of Colorado and is now delivered in several countries across the world, including Canada, Bulgaria, Norway, and England, Scotland and Northern Ireland in the UK.
Personalisation	Personalisation in FNP refers to the flexibility available to nurses and clients to shape FNP programme visit content, visit frequency and the timing of graduation, based on a collaborative review using the New Mum Star.
PIPE (Partners in Parenting Education)	PIPE's primary focus is to support clients to develop a good understanding of the importance of sensitive and responsive caregiving and the skills to practice this kind of parenting with their babies. PIPE aims to develop skills in young first-time parents who may not have had positive experiences of parenting and can therefore benefit from a learning experience, which includes role modelling and interactive skill building.
RCT	A randomised controlled trial is a type of study in which people are allocated at random to receive an intervention, while a control group receives no intervention or standard practice. It is designed to find out whether a treatment is effective by comparing outcomes for the two groups.
Rapid Cycle Design and Testing	Rapid Cycle Design and Testing is the method applied by Dartington Service Design Lab to service and programmatic work, broken down into five rigorous stages to complement the impact and feasibility of the work. Each stage draws upon implementation science, user-centred research and systems thinking to result in evidence-informed, co-produced and sustainable services that can be adapted to different contexts.
Theory of change	A detailed set of beliefs or hypotheses which describe specific observable changes that are expected from a particular intervention or approach.

# Appendix 1

## Extract from New Mum Star guidance

### 1. Definitions for the five stages in a client's 'Journey of Change'.

#### The Journey of Change

Change doesn't happen in one go and it can help to understand the steps along the way. Everyone makes changes in their own way, but the pattern is often similar. The scale underpinning the New Mum Star is in five stages:

##### 1. Stuck

People are concerned about you and/or your baby before or after the birth. Perhaps where you live is not suitable for a baby, you are struggling to look after your baby or you are facing family problems. You may not be aware of your baby's needs or are not doing anything to change the situation, so at this stage things are **stuck**. Perhaps other things are taking your attention or your own needs are so great that you can't meet your baby's needs. Maybe you are really worried but don't know what to do. You don't want others involved and may feel criticised or too anxious to talk about the problems.

##### 2. Starting to engage

At this stage, you are struggling to prepare for or look after your baby or having difficulties in other areas of your life, but you acknowledge the problems, talk about your concerns and **start to engage** with people offering help or with the problems that you face. You don't really believe things can improve or know what to do and may feel angry, resentful or let down by people or you may struggle in other ways, but this is a positive place to be because change is possible. You go along with help when it's urgent and/or organised for you; perhaps you feel you have to co-operate. For example, you may attend a group if someone arranges it (and perhaps even takes you). However, you don't yet take the initiative to improve things for you and your baby, even though you may want things to be different.

##### 3. Trying for yourself

The next stage is **trying for yourself**. You know that you need to improve things for your baby and take the initiative to try out new ways of doing things. This behaviour is new and often things don't go well at first. Sometimes you do things in a positive way and may feel confident but at other times you don't manage to or you want to give up. You may continue to face obstacles that make it hard for you to make progress. This can be a difficult place to be and it can be hard to keep going with changes so you may need lots of support.

##### 4. Finding what works

The next stage is **finding what works** and what doesn't work for you and your baby, and developing new skills, confidence and consistency. You may be learning how to look after your own health, supporting your baby's development and/or sorting things out at home. However, there are some problem areas and you still need support to stay on track.

##### 5. Self-reliance

As you learn, you move towards the final stage of **self-reliance**. You can look after yourself and your baby is doing well in your care so you don't need the support of a specialist service. You have a good connection with your baby and you are able to look after them well and provide a safe and secure life for them. You are able to reflect on what you have learnt and continue to learn new skills.

## 2. Example of descriptions for each number on the prong of the New Mum Star: Your health and well-being

# 2 Your health and well-being

Health appointments and treatment, healthy lifestyle, coping with stress and difficulties

### Key points

- This scale is about both your emotional well-being and your physical health, so focus on what is most important for you and your baby
- At 5 you can mostly cope with the added ups and downs and changes that being pregnant or having a baby brings

### 5 Self-reliance

I look after my health and well-being and my lifestyle is healthy

### 4 Finding what works

I'm finding ways to look after my health and well-being, with support

### 3 Trying for yourself

I'm trying to do more to look after my health and well-being, but it's hard

### 2 Starting to engage

People say I'm neglecting my health and well-being but I'm starting to accept help with this

### 1 Stuck

People say I'm neglecting my health and well-being. I don't want to talk about it

## 2 Your health and well-being (detail)

This scale is about how you look after your health and well-being – which affects your baby as well as you. It's about attending health appointments, eating healthily, exercising, not smoking, using drugs or drinking too much alcohol, and looking after your personal care, contraception and sexual health. It also covers how you feel most of the time and how you cope when things are difficult.

### 5 Self-reliance

#### I look after my health and well-being and my lifestyle is healthy

- You attend all health appointments and look after minor problems at home
- Your lifestyle is mostly healthy. You eat healthily, get enough exercise and look after your sexual health and contraception. You don't smoke and you drink within safe limits or not at all
- You mostly cope emotionally even when it's hard. You make time for yourself or have other ways to stay positive
- You are able to manage any mental health issues well
- You don't need extra support in this area

### 4 Finding what works

#### I'm finding ways to look after my health and well-being, with support

- You mostly attend health appointments and follow advice
- You are finding ways to live a healthier life. You mostly look after your sexual health. If you used to smoke, take drugs or drink too much, you have now stopped but may still struggle to maintain this at times
- You are finding ways to feel more positive and to deal with difficulties such as when your baby cries a lot or you or they are unwell or exhausted
- If you have a mental health issue you are learning to manage this well
- There are a few things to sort out so you need support to stay on track

### 3 Trying for yourself

#### I'm trying to do more to look after my health and well-being, but it's hard

- You attend health appointments on your own initiative and are trying to follow advice
- You may be trying to have a healthier lifestyle, look after your sexual health, stop smoking or using drugs and/or stop or significantly reduce drinking. There are no concerns about your personal care
- You may be trying new ways to cope with difficult emotions, such as relaxation
- If you have a mental health issue, you are trying to follow advice and treatment
- Some things go well but some don't and you may give up easily

### 2 Starting to engage

#### People say I'm neglecting my health and well-being but I'm starting to accept help with this

- As for 1, but you are starting to engage with this and may go along with suggestions
- If you smoke, use drugs or drink too much alcohol, you are engaging with help to stop
- If you have a mental health problem you are getting help and may be starting treatment
- You may want things to be different, but you don't take the initiative yourself

### 1 Stuck

#### People say I'm neglecting my health and well-being. I don't want to talk about it

- One or more of these apply to you:
  - You don't attend health appointments when necessary
  - You don't eat healthily or take exercise or there are other concerns about your physical health or personal care. Perhaps you don't use contraception or look after your sexual health
  - You smoke, use drugs or drink more alcohol than is safe
  - You are stressed, anxious or irritable most of the time and/or struggle to cope with difficulties
  - You are experiencing depression or another mental health issue
  - You don't talk about this or engage with support if it's offered. Perhaps you don't recognise or admit to a problem

### 3. Example of descriptions for each number on the prong of the New Mum Star: Connecting with your baby

## 6 Connecting with your baby

Bonding with your baby, their emotional well-being, enjoying and responding to your baby

### Key points

- There are many reasons why you might not feel a positive connection with your baby, at least initially. This isn't about blaming you but about finding out if you need support
- From 4 to 5 you can enjoy and respond well to your baby

### 5 Self-reliance

I have a positive connection with my baby

### 4 Finding what works

I'm learning to build a positive connection with my baby, with support

### 3 Trying for yourself

I'm trying to build a positive connection with my baby, but it's hard

### 2 Starting to engage

I don't feel a positive connection with my baby but I'm starting to accept help with this

### 1 Stuck

I don't feel a positive connection with my baby. I don't want to talk about it

## 6 Connecting with your baby (detail)

This scale is about building a positive connection with your baby. It means being able to enjoy them, being warm and responsive so that they can feel emotionally secure and understanding their cues and what they are communicating to you. It's also about confidence in yourself as a parent, which may include some understanding of how you were parented. While you are pregnant this scale is about how you connect with your unborn baby.

### 5 Self-reliance

#### I have a positive connection with my baby

- You love your baby and have positive feelings about being a mum. You enjoy your baby most of the time and are confident enough in yourself as a mum
- You respond to your baby's needs. You are mostly sensitive to their cues, and are warm, affectionate and consistent
- During the pregnancy, you feel positive about having your baby and there are currently no concerns about how you will connect with your baby when they are born
- You don't need professional help in this area

### 4 Finding what works

#### I'm learning to build a positive connection with my baby, with support

- You mostly feel positive towards your baby and feel a bond, even when things are difficult
- You usually manage to understand and respond to your baby's cues and are gaining confidence in your ability as a mum
- During the pregnancy, you mostly feel positive or accepting of your baby. You may think about them as an individual
- There are a few things to sort out so you need support to stay on track

### 3 Trying for yourself

#### I'm trying to build a positive connection with my baby, but it's hard

- You are trying out new ways of connecting with your baby and may be exploring what is getting in the way of this, including how you were parented. You try to only use affectionate names for them
- You are trying to understand and respond to your baby's cues
- During the pregnancy, you are trying to feel positive or accepting about having your baby, perhaps imagining how they will be once they are born and growing up
- Some things work well but others don't and you may give up easily

### 2 Starting to engage

#### I don't feel a positive connection with my baby but I'm starting to accept help with this

- As for 1, but you are talking to someone about the way you feel towards your baby and are sometimes willing to let them help
- You may be discussing how you were parented and the impact this has on you as a mum
- You may want things to be different but you don't take the initiative yourself

### 1 Stuck

#### I don't feel a positive connection with my baby. I don't want to talk about it

- You don't enjoy or feel a positive connection with your baby, for one or more reasons, including:
  - You feel too anxious, tired or ill, are under a lot of stress or struggling emotionally
  - The pregnancy or birth were traumatic or you were separated from your baby for a while
  - You mostly don't know how to respond to their cues, or you have unrealistic expectations of them. Perhaps you think they are deliberately being difficult and you respond with irritation or call them names
  - You feel resentful of them because of the impact they may have on you, your life or your relationship
  - During the pregnancy, you find it hard to think about your baby as a person. Perhaps you resent them, or you don't want to be pregnant
- You don't talk about this or engage with support if it's offered. Perhaps you don't recognise or admit to a problem

# Appendix 2

## Approach to quantitative analysis of personalisation data

The incorporation of key data items into the FNP Information System provided potential for expanding the scope and increasing the depth of the analysis. During the first phase of ADAPT, all quantitative data was collected through the FNP ADAPT Data System (FADS) and analysis performed by the Dartington Service Design Lab. During the second phase of ADAPT (data collection: 1 October 2018 – 31 October 2019), the quantitative analysis of personalisation data collected on the FNP Information System was conducted by Dartington Service Design Lab for the first analysis cycle. Analysis for cycles 2 and 3 was conducted by Math Labs Research Limited in line with an analytic plan co-produced with FNP National Unit, in consultation with Dartington Service Design Lab. This summarises the approach, processes and measures used in the evaluation of personalisation in the second phase of ADAPT against the relevant project success criteria.

The analysis plan sought to generate insights from the data routinely collected on the implementation of programme strategies (such as aspects of personalisation – dialling, flexing content, the delivery of New Mum Star and early graduation; local site recruitment criteria) separately and in relation to maternal and child outcomes and a range of moderators (such as client vulnerability at intake) (Figure 4: Analysis plan overview). Throughout this process, a set of hypotheses were tested, helping determine the extent to which the strands of personalisation were implemented in practice, how the different changes to practice fit together and whether the implementation of personalisation is associated with a selection of FNP programme outcomes.

The quantitative data collected to date has not allowed for in-depth exploration of personalisation in relation to local site recruitment criteria and client vulnerability and has only allowed a partial investigation into the main programme outcomes, the main constraint being the limited sample size. Other factors include technical limitations of the FNP information system to accommodate the collection of some key information such as detailed client vulnerability. This resulted in data being collected through FADS2 and only for sites that part of the intervention and therefore meaningful comparisons with the sites delivering the prescribed programme were not possible. However, internal dissemination from the ADAPT project will inform further developments and refinements of the wider FNP programme data collection to permit more in-depth monitoring and analysis of personalisation and outcomes in the context of client vulnerability and site eligibility criteria.

Quantitative data analysis was conducted in three analysis cycles in the second phase of ADAPT.

Analysis cycle	Period
Cycle 1	15 October 2018 – 3 March 2019
Cycle 2	4 March 2019 – 30 Jun 2019
Cycle 3	1 Jul 2019 – 31 October 2019

The analysis solution for the data collected using the FNP information system included descriptive statistics and, where possible, significance testing for the following areas:

1. Summary of nurse activity
2. Personalisation in more depth
3. Personalisation and Programme Outcomes

Analysis covering the first two areas was run at the end of each analysis cycle and re-run for the whole period of testing. Analysis covering the third area was run for the whole testing period.

The analytic solution in cycles 2 and 3 was co-created jointly with MathLabs and was subject to a multi-stage review. First, Math Labs undertook a thorough two-stage internal review, followed by a final review with the National Unit in each stage of the analytical process (see 'multistage review' table). After agreeing the work plan, weekly showcases were held to review progress, to ensure iterative optimisation of the analysis build and timely responses to emergent issues such as clinical and strategic input into decisions around data selection, handling, visualisation and interpretation of results (see 'analytical process for each component of the solution' diagram). This approach ensured constant mutual alignment of the analytical process with emerging learning from the other project work streams through feedback and course correction, as well as a shared understanding of any data-related issues such as small sample sizes that prevented more in-depth analysis and led to some adjustments to the initial analysis plan.

The analysis started from a set of research questions and hypotheses, moving on to understanding the type of data gathered to inform the choice of summarising and presenting data and where possible statistical significance testing of differences in means or proportions.

In order to reduce the limitations of individual tests, an ensemble method, commonly used in data science, was followed in conducting statistical testing (see 'analysis flow' diagram). This involved running three different statistical tests – a main test and a confirmation and a verification test involving resampling simulation (see 'analysis plan overview'). Differences were only deemed significant when all three tests converged, otherwise results were regarded as inconclusive.

Most statistical testing was conducted to test for potential differences in programme outcomes between ADAPT and non-ADAPT sites (see 'programme outcomes explored in the quantitative analysis'). Since not all clients who received personalisation graduated from the programme by the end of the ADAPT programme, leading to relatively small subsamples for outcomes collected, statistical analysis is not included as part of the report. The FNP National Unit will continue to monitor these outcomes and may choose disseminate results in the future once an appropriate sample size is reached.

**Figure 1: Multistage review**

Multistage review (data scientist review, chief scientist review and FNP review)		
Workflow	Data & Features	Analytics
Work plan	Data selection & scope	Alignment on hypotheses to test
Area wise build-cycles	Cleansing rules	Decisions on metrics & math
Weekly rhythm: Co-build, Problem solving and Showcase & course correction	Feature transformation (e.g. from numerical to categorical data)	Mock-up followed by full build per area
Joint deep dive into results	Data matching and integration	Visualisation
Visualisation	Creation of unified data tables from various sources	
	Iterative optimization	

**Figure 2: Analytical process for each component of the solution**

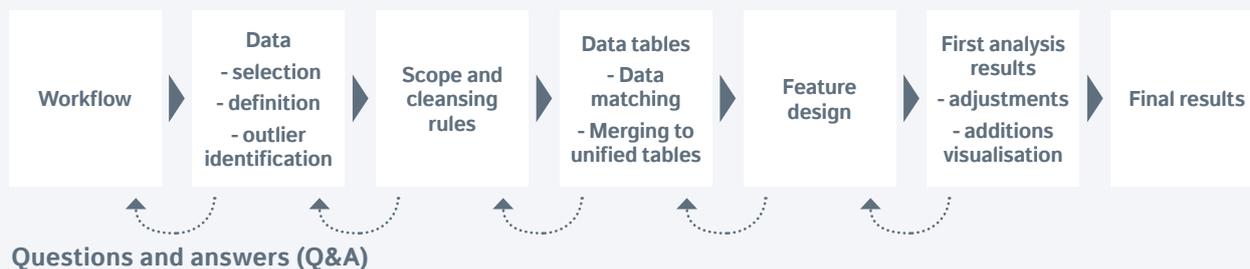


Figure 3: Analysis flow

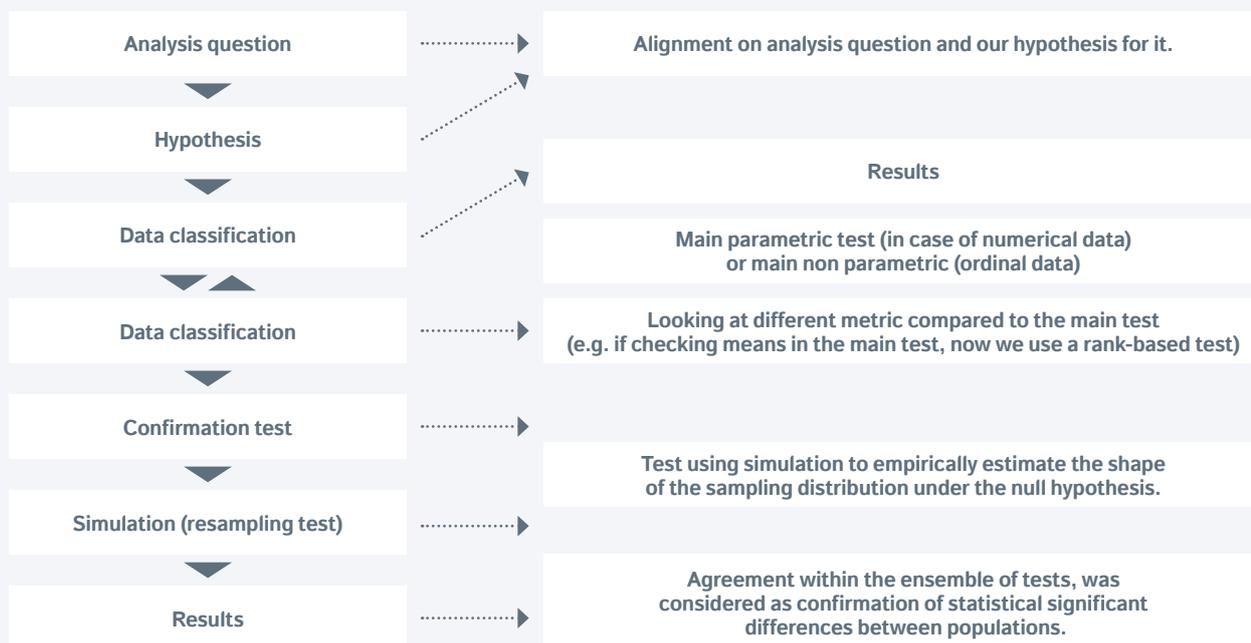


Figure 4: Analysis plan overview

Analysis area	Research questions	Metrics
<p><b>1. Summary of nurse activity</b></p>	<p>Hypothesis</p> <p>To what extent are family nurses implementing personalisation?</p>	<p>For all sites combined, by each individual site and by programme stage (pregnancy, infancy and toddlerhood):</p> <p>Collaborative and nurse-only New Mum Star assessments completed (N, %)</p> <p>Visits delivered by type standard, dial up, dial down (N, %)</p> <p>Dial up and dial down visits by reason (N, %)</p> <p>Duration of visits delivered by visit type (standard, dial-up, dial-down) (N, Mean, Min, Max)</p> <p>Visits with non-standard content delivered (i.e. all/most/some flexed content combined and reported by each category – all/most/some/none (N, %)</p> <p>Visits informed by most recent New Mum Star assessments with client (N, %)<sup>53</sup></p> <p>Visits where a New Mum Star was delivered (N, %)</p> <p>New Mum Stars delivered per client with a NMS (N, Proportion)</p> <p>Early and regular graduates (N, %) and age of the baby at graduation (mean)</p>

<p><b>2. Personalisation in more depth</b></p>	<p>Does the nurse time invested depend on dialling?</p> <p>Dialled down clients receive less nurse time compared to standard clients while dialled up clients receive more.</p> <p>Is flexing more prevalent in dial-up and dial-down visits compared to standard visits?</p> <p>What is the distribution of New Mum Star scores on each prong and for each programme stage? Do clients in the later stages of the programme (infancy, toddlerhood) have a lower level of need compared to clients in pregnancy according to the New Mum Star assessments?</p> <p>On average, clients in infancy and toddlerhood are expected to show, lower level of need compared to clients in pregnancy.</p>	<p>Visits for standard, dial-up and dial-down clients (Sum per client)</p> <p>Duration of standard, dial-up and dial-down visits (Mean, Std. dev)</p> <p>Main test: T-test</p> <p>Confirmation test: Mann-Whitney</p> <p>Verification: Permutation</p> <p>Flexing by visit type (N, %)</p> <p>Main test: Kruskal Wallis</p> <p>Confirmation test: Chi squared test (X<sup>2</sup>)</p> <p>Verification: Permutation</p> <p>Clients with low scores by programme stage (N, %)</p> <p>Distribution of scores for each prong (N, %, Barcharts)</p> <p>Distribution of child age for early graduates (N, %, Barcharts)</p>
<p><b>3. Personalisation and programme outcomes</b></p>	<p>What is the age distribution of the baby at the time for clients who are graduated earlier from the programme?</p> <p>Are there any significant differences in the selected outcomes for clients and their babies in ADAPT compared to non-ADAPT sites?</p> <p>Clients receiving a personalised programme have similar or better outcomes compared to clients receiving the standard programme.</p> <p>Is there an association between personalisation and programme attrition?</p> <p>Attrition (i.e. proportion of leavers) is significantly less prevalent in ADAPT sites.</p>	<p>Statistical testing run in 3 stages depending on the variable type:</p> <p>Main test: Chi squared test (X<sup>2</sup>), t-test, Kruskal Wallis</p> <p>Confirmation test: Z-test, Mann-Whitney, Chi squared (X<sup>2</sup>)</p> <p>Verification: Permutation</p>

Figure 5: Programme outcomes explored in the quantitative analysis

Outcome category	Description	Pregnancy (Intake & 36 weeks)	Infancy	Toddlerhood
<b>Maternal</b>	BMI	•		
	Depression and anxiety	• •	•	
	Mastery	•		•
	Smoking status	• •	•	
	Breastfeeding		•	•
	NEET status	•	• •	• •
	Subsequent pregnancies		•	
	<b>Child</b>	Birthweight by gestation		•
	Ages and Stages Questionnaire (ASQ3 and ASQ:SE) scores on the following dimensions: Communication Gross Motor Fine Motor Problem Solving Personal and Social Social Emotional		• •	• • •
	Immunisations		• •	• •
	A&E attendances due to ingestion		• •	• •
	Hospital admissions due to ingestion		• •	• •
	Child referrals to social care (as reported by nurses)		• •	• •
<b>Programme attrition</b>	Leavers			

# Appendix 3

## Qualitative data collection and analysis methods

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During the first phase of ADAPT, two researchers travelled to each ADAPT site to conduct a focus group with the nursing team and a separate group for any clients who were able to attend. Each focus group was structured with a topic guide, the content of which was directed by the findings of the previous quantitative analysis and jointly agreed by all members of the project team. Focus groups occurred in each site as close to every cycle point as was feasible.

The nurse focus groups were held in the local FNP offices at a time most convenient to the team and the researchers. Nurses were asked to reflect on the quantitative data reported by their site, to explain any trends or patterns apparent and to explore their experience of the barriers and facilitators to implementing the changes (for personalisation and their clinical adaptation). As the project progressed, it became clear that teams needed additional implementation support and, in order to utilise the limited time that the family nurses had, members of the FNP National Unit clinical team joined with the researchers at the focus groups so that the meetings could fulfil a dual purpose.

Client focus groups were held at children's centres or other neutral venues that would be welcoming to the clients. Participants were guided through each of the strands of personalisation and asked to reflect on each one. All client participants received small financial incentives (in the form of a voucher) to participate.

Each focus group lasted roughly 60 minutes and was digitally recorded for transcription. Transcriptions were analysed using thematic analysis in Nvivo (computer assisted qualitative analysis software) and a summary narrative report was produced to inform subsequent decisions.

During the second phase of ADAPT, given the increase from 10 to 20 sites and recognition of the higher levels of support needed than previously anticipated, qualitative feedback and implementation support sessions were held online using video-conferencing software with every FNP ADAPT site. For each session, a member of the clinical team, a researcher and a non-technical member of the project team was in attendance. Initially, content from these calls was summarised into a spreadsheet with sites in the first column and topics from the topic guide along the first row. Subsequent adaptations to this method included obtaining professional transcripts of the calls to enter into the spreadsheet to increase transparency and trustworthiness of the data analysis and ensuing findings. A simple narrative summary report was drawn from this spreadsheet as a record of progress at each cycle point and to increase transparency around decision making.

In addition, 37 individual client interviews were conducted by an independent researcher, Dr Bella Wheeler, during the second phase of the ADAPT project.

# Endnotes

## Foreword

- <sup>i</sup> Olds DL, Donelan-McCall N, O'Brien R, MacMillan H, Jack S, Jenkins T, Dunlap III WP, O'Fallon M, Yost E, Thorland B, Pinto F, Gasbarro M, Baca P, Melnick A, Beeber L. Improving the Nurse-Family Partnership in Community Practice. *Pediatrics*, 2013;132(2):S110-S117. [↩](#)
- <sup>ii</sup> O'Brien RA, Moritz P, Luckey DW, McClatchey MW, Ingoldsby EM, Olds DL. Mixed methods analysis of participant attrition in the Nurse-Family Partnership. *Prev Sci* 2012;13(3):219-228. [↩](#)
- <sup>iii</sup> Ingoldsby EM, Baca P, McClatchey MW, Luckey DW, Ramsey MO, Loch JM, Lewis J, Blackaby TS, Petrini MB, Smith BJ, McHale M, Perhacs M, Olds DL. Quasi-experimental trial of intervention to increase participant retention and completed home visits in the Nurse-Family Partnership. *Prev Sci*, 2013 Dec; 14(6):525-534. [10.1007/s1121-013-0410-x](#). [↩](#)
- <sup>iv</sup> Olds DL, Baca P, McClatchey M, Ingoldsby EM, Luckey DW, Knudtson MD, Loch JM, Ramsey M. Cluster randomized controlled trial of intervention to increase participant retention and completed home visits in the Nurse-Family Partnership. *Prev Sci*, 2015; 16(6): 778-788. [↩](#)

## Chapter 1

- <sup>1</sup> The ADAPT project involved FNP teams from: Bexley and Bromley, Blackpool, Bradford and Airedale, Cambridgeshire, Cheshire East, Derby City, Dudley, Gateshead, Hampshire, Lambeth, Lewisham, Nottingham City, Nottinghamshire, Peterborough, Portsmouth, Southend, Southwark, Sunderland, Tameside, Tower Hamlets, West Sussex and Wirral. (Not all teams participated in the project for its full duration.) [↩](#)
- <sup>2</sup> Dartington Service Design Lab & Family Nurse Partnership National Unit (2018) Interim report of the FNP ADAPT project. London, UK. <https://fnp.nhs.uk/media/1246/fnp-adapt-interim-report.pdf> [↩](#)
- <sup>3</sup> FNP is delivered in England, Northern Ireland and in Scotland, where the Scottish Government has made it available to all mothers aged 19 and under, and to mothers aged up to 24 in some areas. [↩](#)
- <sup>4</sup> Rutter, H. et al. (2017) The need for a complex systems model of evidence for public health. *Lancet*, 390(10112), pp. 2602-2604. [http://dx.doi.org/10.1016/S0140-6736\(17\)31267-9](http://dx.doi.org/10.1016/S0140-6736(17)31267-9); Greenhalgh, T., Papoutsi, C. Studying complexity in health services research: desperately seeking an overdue paradigm shift. *BMC Med* 16, 95 (2018). <https://doi.org/10.1186/s12916-018-1089-4> [↩](#)

## Chapter 2

- <sup>5</sup> FNP teams were funded in 132 local authority areas in 2015/16. Source: FNP National Unit. [↩](#)
- <sup>6</sup> Barnes, J. (2010). From evidence-base to practice: Implementation of the nurse family partnership programme in England. *Journal of Children's Services*. <https://doi.org/10.5042/jcs.2010.0691> [↩](#)
- <sup>7</sup> Robling, M., Bekkers, M. J., Bell, K., Butler, C. C., Cannings-John, R., Channon, S., Martin, B. C., Gregory, J. W., Hood, K., Kemp, A., Kenkre, J., Montgomery, A. A., Moody, G., Owen-Jones, E., Pickett, K., Richardson, G., Roberts, Z. E. S., Ronaldson, S., Sanders, J., Stamuli, S., Torgerson, D. (2016). Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): A pragmatic randomised controlled trial. *The Lancet*. [https://doi.org/10.1016/S0140-6736\(15\)00392-X](https://doi.org/10.1016/S0140-6736(15)00392-X) [↩](#)
- <sup>8</sup> A randomised controlled trial of VoorZorg, Nurse-Family Partnership in the Netherlands, found intervention effects for smoking in pregnancy and postnatally, domestic abuse (both as victim and perpetrator), reduced CPD referral during first three years of life and reduced internalising behaviour (but not externalising behaviours) at 24 months. Mejdoubi, J., 2014. The primary prevention of child maltreatment in early life: Study on the effectiveness of VoorZorg. Vrije Universiteit Amsterdam, Netherlands. Mejdoubi, J., 2014. The primary prevention of child maltreatment in early life: Study on the effectiveness of VoorZorg. Vrije Universiteit Amsterdam, Netherlands; Mejdoubi, J., Heijkant, S. van den, Struijf, E., Leerdam, F. van, HiraSing, R., Crijnen, A., 2011. Addressing risk factors for child abuse among high risk pregnant women: design of a randomised controlled trial of the nurse family partnership in Dutch preventive health care. *BMC Public Health* 11, 823. doi:10.1186/1471-2458-11-823; Mejdoubi, J., Heijkant, V.D., C.c.m, S., Leerdam, V., J.m, F., Crone, M., Crijnen, A., HiraSing, R.A., 2014. Effects of nurse home visitation on cigarette smoking, pregnancy outcomes and breastfeeding: A randomized controlled trial. *Midwifery* 30, 688-695. doi:10.1016/j.midw.2013.08.006; Mejdoubi, J., van den Heijkant, S.C.C.M., van Leerdam, F.J.M., Heymans, M.W., Hirasing, R.A., Crijnen, A.A.M., 2013. Effect of Nurse Home Visits vs. Usual Care on Reducing Intimate Partner Violence in Young High-Risk Pregnant Women: A Randomized Controlled Trial. *PLoS ONE* 8, e78185. doi:10.1371/journal.pone.0078185 [↩](#)
- <sup>9</sup> Similar 'sleepier effects' have been observed in other early intervention programmes, including Head Start. Asmussen, K., Feinstein, L., Martin, J., & Chowdry, H. (2016). Foundations for life: What works to support parent child interactions in the early years. Early Intervention Foundation Publication. <https://www.eif.org.uk/files/pdf/foundations-for-life.pdf> p24 [↩](#)
- <sup>10</sup> Barlow, J., Barnes, J., Sylva, K., Fonagy, P., & Fearon, P. (2016). Questioning the outcome of the Building Blocks trial. In *The Lancet*. [https://doi.org/10.1016/S0140-6736\(16\)30201-X](https://doi.org/10.1016/S0140-6736(16)30201-X) [↩](#)



## Chapter 3

<sup>18</sup> Late gestation recruitment, in exceptional circumstances, responded to local requests from FNP teams and commissioners to be able to offer places to highly vulnerable clients who conceal pregnancy or who present themselves to midwifery services late on in pregnancy. As a result of the ADAPT project, we have decided to retain the 28 week cut off for recruitment of FNP clients – to realise the benefits of work in pregnancy – while enabling FNP teams to take on clients who conceal pregnancy, or present late in pregnancy, in exceptional circumstances. We will continue to monitor outcomes data to help improve our understanding of what impact FNP can have for this small but very vulnerable group of clients.

<sup>19</sup> Wirth, Ross. (2004). Lewin/Schein's Change Theory. ↗

<sup>20</sup> See: <https://www.eif.org.uk/files/pdf/10-steps-for-evaluation-success.pdf> ↗

<sup>21</sup> Paquette, D., & Ryan, J. (1992). Bronfenbrenner's Ecological Systems Theory. *Human Ecology*. *Human Ecology*. ↗

<sup>22</sup> Bretherton, I. (1992). The Origins of Attachment Theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*. <https://doi.org/10.1037/0012-1649.28.5.759> ↗

<sup>23</sup> Bandura, A. (1977) Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*. <https://doi.org/10.1037/0033-295X.84.2.191> ↗

<sup>24</sup> See Glossary on p.70 for a description of DANCE and PIPE. ↗

<sup>25</sup> The New Mum Star is the copyright of Triangle, developers of the Outcomes Stars, see [www.outcomesstar.org.uk](http://www.outcomesstar.org.uk) for license conditions. The FNP National Unit and FNP teams are licensed users. ↗

<sup>26</sup> See Appendix 1 for examples of descriptions for each number on sample prongs of the New Mum Star. ↗

<sup>27</sup> Further qualitative and quantitative feedback from nurses about the acceptability of the New Mum Star is published in Triangle's New Mum Star Development Report: [www.outcomesstar.org.uk/using-the-star/see-the-stars/new-mum-star/](http://www.outcomesstar.org.uk/using-the-star/see-the-stars/new-mum-star/) ↗

<sup>28</sup> All quantitative data in Chapter 2 is from the period 1 October 2018 to 31 October 2019, the second phase of ADAPT, which involved 22 FNP teams in 20 local authority areas. ↗

<sup>11</sup> At year end 2015/16, there were 10,832 mothers (or 'active clients') enrolled in FNP across England. Source: FNP National Unit. ↗

<sup>12</sup> Fixsen, D., Blase, K., Metz, A., & Van Dyke, M. (2015). Implementation Science. *International Encyclopedia of the Social and Behavioral Sciences*, 11, 695-702. ↗

<sup>13</sup> McKleroy, V. S., Galbraith, J. S., Cummings, B., Jones, P., Harshbarger, C., Collins, C., Gelaude, D., & Carey, J. W. (and the ADAPT Team.) (2006). Adapting evidence-based behavioral interventions for new settings and target populations. *AIDS Education and Prevention*. <https://guilfordjournals.com/doi/10.1521/aeap.2006.18.supp.59> ↗

<sup>14</sup> Rossi, P. H., Lipsey, M. W. and Freeman, H. E. (2004) *Evaluation: A Systematic Approach* (7th Edition). Thousand Oaks, CA: Sage; Fraser, M. W., Richman, J. M., Galinsky, M. J. and Day, S. H. (2009) *Intervention Research: Developing Social Programs*. New York: Oxford University Press; Axford, N., Berry, V., Blower, S., Little, M., Hobbs, T. and Sodha, S. (2013) *Design & Refine: Developing Effective Interventions for Children and Young People*. Dartington: The Social Research Unit. ↗

<sup>15</sup> Dartington Service Design Lab & Family Nurse Partnership National Unit (2018) Interim report of the FNP ADAPT project. London, UK. <https://fnp.nhs.uk/media/1246/fnp-adapt-interim-report.pdf> ↗

<sup>16</sup> See <https://fnp.nhs.uk/media/1311/fnp-qi-stop-smoking-report-in-brief.pdf> ↗

<sup>17</sup> 54.5% of FNP clients stopped smoking by the end of Q3 2018/19, which is the highest proportion over the last three years. Source: FNP National Unit. (As cited in: FNP QI stop smoking report in brief - see link above.) ↗

- <sup>29</sup> One explanation for this variation is team culture. Some teams at the low end of the implementation range were (understandably) cautious about introducing the tool to clients, engaging in significant team skills practice to build self-confidence before employing with clients. This was about team 'personality' and culture. Some nurses, however, proved highly skilled and confident, despite their own caution, when they finally introduced the tool with clients. In these cases, they could never make up for the 'lost time' in their data set, so their overall delivery of the New Mum Star in these teams was mathematically lower in the calculation of total New Mum Stars delivered. ↩
- <sup>30</sup> Holland, M. L., Xia, Y., Kitzman, H. J., Dozier, A. M., & Olds, D. L. (2014). Patterns of visit attendance in the nurse-family partnership program. *American Journal of Public Health*. <https://doi.org/10.2105/AJPH.2014.302115> ↩
- <sup>31</sup> The FNP programme has three phases defined by the development of the child: pregnancy, infancy (0-12 months), toddlerhood (12-24 months). ↩
- <sup>32</sup> Family nurses were advised not to dial down in pregnancy as this time is crucial for developing the therapeutic relationship between the nurse and the client and to allow enough time to deliver programme content in this phase. However, in a small minority of cases it was appropriate for nurses to reduce visit intensity to support client engagement. Dialling up was not common as visits take place weekly for the first 4 weeks and then fortnightly throughout pregnancy. ↩
- <sup>33</sup> This graph only includes data covering the first phase of ADAPT because data covering the second phase was incomplete at the time of writing this report. Clients who become inactive are only classified as leavers in the data systems only after 6 months of non-contact. ↩
- <sup>34</sup> The New Mum Star 'Journey of Change' is described in Appendix 1. ↩
- <sup>35</sup> The Early Intervention Foundation provides a helpful overview of the Healthy Child Programme in the introduction to its report about "the evidence for approaches to early intervention for mothers and infants, which may be commissioned and delivered locally as part of the Healthy Child Programme." <https://www.eif.org.uk/report/what-works-to-enhance-the-effectiveness-of-the-healthy-child-programme-an-evidence-update> ↩
- <sup>36</sup> Nurses were asked to enter data in response to the following question, collected every client visit: 'Were your plans for this visit informed by your most recent New Mum Star assessment with the client?' (Y/N) These data gives us the percentage of visits informed by the most recent New Mum Star out of all visits per each stage and cycle. For each stage and analysis cycle: the percentage of visits informed by the most recent New Mum Star assessment = (Number of visits informed by the most recent New Mum Star Assessment/Number of visits delivered by nurses) divided by 100. ↩
- <sup>37</sup> Statistical significance reported at 0.1% conventional level (less than one in a thousand chance of being wrong for the difference to have occurred by chance). ↩
- <sup>38</sup> Intake characteristics included: low income, history of mental health problems, receiving mental health services, being NEET, history of abuse, being a smoker, alcohol use, drug use, low mastery, not living with mother or partner, LAC, CIN or CPP, young age (less than 16) and current partner not being the father of the baby. Low baby birth weight was also included. ↩
- <sup>39</sup> For a list of all the outcomes we looked into, see Appendix 2, Figure 5: Programme outcomes explored in the quantitative analysis. ↩
- <sup>40</sup> Additional significance testing: In order to reduce the limitations of individual tests, an ensemble method, commonly used in quantitative data science, was followed in conducting statistical testing (see Appendix 2, Figure 3: Analysis flow). This involved running three different statistical tests – a parametric and a non-parametric test, followed by a verification test involving resampling simulation. Differences were only deemed significant when all three tests converged, otherwise results were regarded as inconclusive. ↩
- <sup>41</sup> Work undertaken during this early phase of the project is described in an earlier interim project report: Dartington Service Design Lab & Family Nurse Partnership National Unit (2018) Interim report of the FNP ADAPT project. London, UK. <https://fnp.nhs.uk/media/1246/fnp-adapt-interim-report.pdf> ↩
- <sup>42</sup> The ADAPT project was cited in two House of Commons select committee inquiry reports, in which commissioners were encouraged to "act on the conclusions reached by the FNP's [ADAPT] initiative in due course." House of Commons Science and Technology Committee Inquiry Evidence-based early years intervention, 30 October 2019; House of Commons Health and Social Care Committee Inquiry First 1000 days of life, 12 February 2019 (quoted). ↩

## Chapter 4

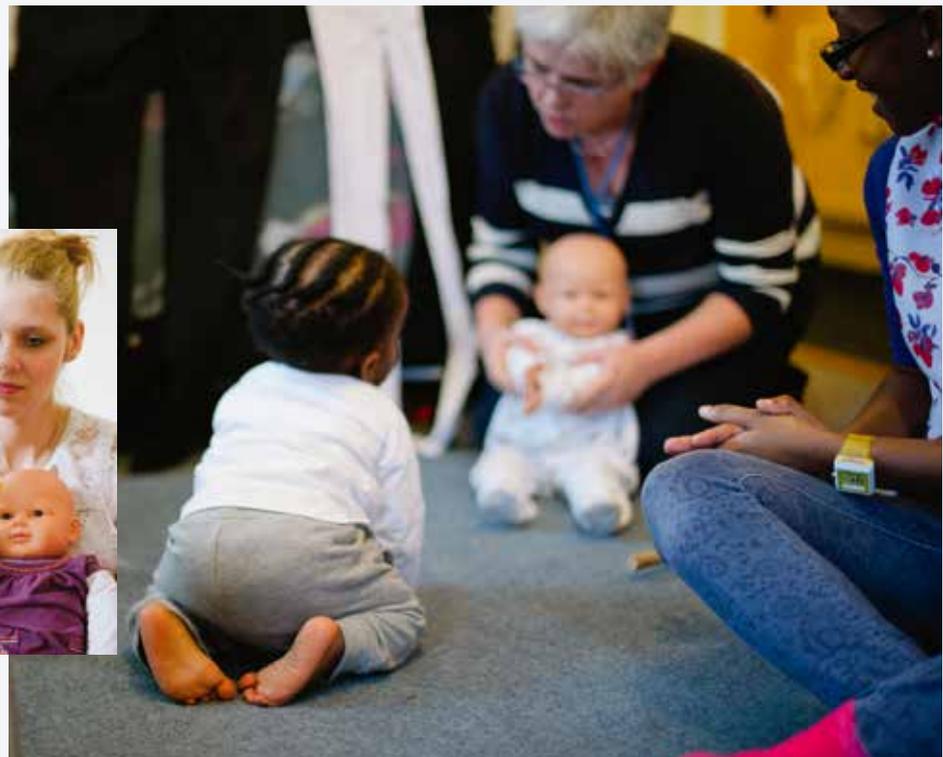
- <sup>43</sup> Dartington Service Design Lab colleagues Finlay Green, Deon Simpson and Jenny North, as well as Nick Axford at the University of Plymouth, all made valuable contributions to this report and to the ADAPT project. ↻
- <sup>44</sup> Dartington Service Design Lab & Family Nurse Partnership National Unit (2018) Interim report of the FNP ADAPT project. London, UK. <https://fnp.nhs.uk/media/1246/fnp-adapt-interim-report.pdf> ↻
- <sup>45</sup> Documents developed during this stage of the project are published in a 'key documents' booklet. See: <https://fnp.nhs.uk/media/1247/fnp-adapt-key-documents-booklet-042018.pdf> ↻
- <sup>46</sup> Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on social work practice*, 19(5), 531-540. ↻
- <sup>47</sup> Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 4-23. ↻
- <sup>48</sup> Kotter, J. P. (1995). *Leading change: Why transformation efforts fail*. ↻
- <sup>49</sup> Bridges, W. (2009). *Managing transitions: Making the most of change*. Da Capo Press. ↻
- <sup>50</sup> Stacey, R. D. (2012). *Tools and techniques of leadership and management: meeting the challenge of complexity*. Routledge. ↻

## Chapter 5

- <sup>51</sup> See: <https://fnp.nhs.uk/media/1311/fnp-qi-stop-smoking-report-in-brief.pdf> ↻
- <sup>52</sup> Public Health England Strategy 2020-25, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/830105/PHE\\_Strategy\\_\\_2020-25\\_\\_Executive\\_Summary.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/830105/PHE_Strategy__2020-25__Executive_Summary.pdf) ↻

## Appendix

- <sup>53</sup> We set the expectation that at least 30% of the programme content delivered should be informed by a New Mum Star assessment, evidencing nurses are collaborating with clients to address their needs by using the tools to select content. ↻



## Chapter 1

A new chapter for FNP in England

## Chapter 2

How FNP has changed:  
Introduction to a more personalised FNP programme

## Chapter 3

How we used data to support and  
measure change in the ADAPT project

## Chapter 4

Learning from Rapid Cycle Design and Testing at scale

## Chapter 5

What next for the FNP programme in England?

Glossary and appendix



**Family Nurse  
Partnership**

*Changing the world one baby at a time*