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Nurse-Family Partnership® (NFP) International

International NFP Core Model Elements | July 2023

Executive Summary

The Nurse-Family Partnership (NFP) program has developed over many years to become the highly respected evidence-based program that is now being offered to disadvantaged families in nine different countries. As the program has developed and expanded, its various components have needed to be described and delineated, so that the many thousands of NFP nurses, supervisors and implementing bodies who have become involved, are able to faithfully reproduce the program model that has been rigorously tested. The key features of the program (both the clinical model and the organisational supporting arrangements) that need to be reproduced have been identified as Core Model Elements (CMEs) and each country or organization provided with a license for NFP agrees to adhere to these as they implement the program within their own context. Applying the CMEs in practice provides a high level of confidence that the outcomes achieved by families who enrol in the NFP program will be comparable to those achieved by families in the initial three randomized controlled trials and outcomes from ongoing research on the program.

Fidelity is the extent to which there is adherence to the CMEs alongside application of new research findings, and carefully developed innovations. Fidelity helps protect the integrity, quality, and effectiveness of the NFP program while being respectful and sensitive to local context. License holders are responsible for ensuring that implementing agencies/sites, NFP nurses, and nurse supervisors implement the program with fidelity to the NFP model. For a number of CMEs, benchmarks have been created that enable teams, NFP leads and license holders to assess the extent to which the program is being implemented with fidelity. It is expected that progress against these benchmarks is reviewed regularly to inform priorities for quality improvement measures. In addition, progress in relation to these benchmarks and for indicative outcome measures are reported to UCD in the annual report.

It has been many decades since the first publication of the Elmira trial results. Since that time there has been a commitment to continuous refinement of the NFP program through ongoing research internationally and the development of innovations such as DANCE, Mental Health, Intimate Partner Violence, and the STAR Framework.

A thorough and highly collaborative review of the original 18 CMEs was conducted during 2016-2017, with expert advice from the NFP International community. A number of revisions were made to 1) incorporate new research evidence; 2) seek expert advice from the NFP international community, reflecting on lessons learned over time; 3) address the various contextual issues of the different countries implementing the program; 4) ensure that the expectations for each CME are clear, including benchmarks; 5) and provide clear and consistent guidance for requesting variances.

Some adaptations or adjustments to program implementation as well as NFP practice are expected for the changing context and demographics of NFP clientele, as well as cultural and policy contexts. Country-specific variances for a CME based on local context may be requested and granted by the Global Collaborative Guidance Group (GCGG) , if there is compelling rationale to justify doing so. It is expected that these variances will be evaluated for impact as part of this process.

It is also possible for countries to request use of authorized additional model elements where it is felt that their context would benefit from the addition of new, as yet untested, program components (such as the use of associate NFP team members such as Family Partnership workers or community mediators).

This document sets out the 14 International Core Model Elements with detailed descriptions of the rationale and evidence that underpin them, as well as guidance to support their practical application. **The expectation is that each country delivers the NFP program with fidelity to each CME unless a variance has been granted.**

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Introduction

The Nurse-Family Partnership® (NFP) program has developed over many years to become the highly respected evidence-based program that is now being offered to disadvantaged families in nine different countries. As the program has developed and expanded, its various components have needed to be described and delineated, so that the many thousands of NFP nurses, supervisors and implementing bodies who have become involved, are able to faithfully reproduce the program model that has been rigorously tested. The key features of the program that need to be reproduced have been identified as Core Model Elements (CMEs) and each country or organization provided with a license for NFP agrees to adhere to these as they implement the program within their own context.

During the initial planning for the first NFP randomized-controlled trial (RCT) in Elmira, each of the program components was designed to work in an integrated, complimentary way to promote the health and well-being of mothers and children from socially disadvantaged families, to prevent maltreatment and to achieve the three program goals.

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

Detailed record-keeping systems and regular case reviews were used to ensure that the home-visited protocol was followed by each NFP nurse (Olds, 1985). At that time, there were no visit-to-visit guidelines, only a broad outline of discussion topics and weekly staff meetings at which Olds and the nurses discussed specifics of the visits and applicable theory. These early reflections suggested and informed many of the NFP's current components, including the six program content domains.[1] Through this process, Olds understood that he and the nurses shared the "ownership" of the program's clinical model (Dawley et al., 2007).

The Memphis and Denver trials provided additional theoretical, observational and empirical data to further inform the original set of 18 CMEs. These CMEs were defined to articulate the essential components of the model, thereby protecting the integrity and quality of the program. This is necessary because of the risk that programs with good scientific evidence, are

[1] The six NFP content domains (Environmental Health, Family & Friends, Health and Human Services, Life Course Development, Maternal Role, and Personal Health), provide a system and structure designed to ensure that each nurse is comprehensive in her approach with every client. The domains are also useful in observing the changing emphasis in content areas during the pregnancy, infancy, and toddler phases of the intervention.

'watered down' in the process of being scaled up unless measures are put in place to preserve the integrity of the program (Olds, 2006). The original 18 Core Model Elements of NFP were designed to delineate and articulate the essential program elements in two distinct areas:

1. Key components of program implementation (e.g. client recruitment, program duration)
2. Key supporting aspects that ensure high quality delivery of the program (e.g. supervision arrangements, community support)

In addition to the CMEs, a series of ongoing fidelity measures were introduced, variously known as stretch goals, benchmarks and objectives. These measures were, and continue to be, used as part of a quality assurance program designed to provide data demonstrating the extent to which the program is implemented with fidelity and achieving positive client outcomes.

It has been over 30 years since the first publication of the Elmira trial results. Since that time there has been a commitment to continuous refinement of the NFP program through ongoing research internationally and the development of innovations such as DANCE, Mental Health, Intimate Partner Violence, and the STAR Framework. Through our international work, we discovered anomalies in the wording and application of the CMEs between countries.

Consequently, a thorough and highly collaborative review of the original 18 CMEs was conducted during 2016-2017. A number of revisions were made to: 1) incorporate new research evidence; 2) seek expert advice from the NFP international community, reflecting on lessons learned over time; 3) address the various contextual issues of the different countries implementing the program; 4) ensure that the expectations for each CME are clear, including benchmarks; 5) and provide clear and consistent guidance for requesting variances.

This document sets out the International Core Model Elements developed through that project.

Responsibilities for use of the Core Model Elements

License holders are responsible for ensuring that implementing agencies/sites, NFP nurses, and nurse supervisors implement the program with fidelity to the NFP model. Fidelity is the extent to which there is adherence to the CMEs alongside agency/nurse uptake, application of new research findings, and carefully developed innovations. Some adaptations or adjustments to program implementation as well as NFP practice are expected for the changing context and demographics of NFP clientele, as well as differing international cultural and policy contexts. Applying the CMEs in practice provides a high level of confidence that the outcomes achieved

by families who enrol in the NFP program will be comparable to those achieved by families in the initial three randomized controlled trials and outcomes from ongoing research on the program. In a complex intervention such as NFP, effectiveness is not likely to be linked to individual aspects of the program such as the therapeutic relationships the nurses establish with mothers. Rather the effectiveness of the NFP is likely due to the synthesis of all the components of the program (Landy et al, 2012).

Benchmarks

The term '**benchmark**' is used in this document to identify expected levels of indicative achievements in relation to particular Core Model Elements. These enable countries to assess their progress in relation to fidelity with the program model and also enables the agreement of a consistent minimum standard and the comparison of fidelity internationally. A summary of all the benchmarks is included in Appendix A.

It is expected that countries will set their own benchmarks in relation to some areas (these are indicated in the text) and also for the achievement of indicative outcome measures.

Language use

This guidance document has been created, as far as possible, to accommodate differing international use of language and descriptions for common issues, services and organisational structures. There are, however, some commonly used terms that need to be understood and accommodated. These are as follows:

- Participants in the NFP program are generally referred to as 'clients', a term that seems to be generally acceptable, but may need adjusting in some contexts. Clients are always referred to as female, an issue that is expanded within the text of *CME 2: Client is a first-time mother.*
- While we use the term "she" to refer to nurses in the document, this should be taken to also include male NFP nurse/supervisors
- While we usually refer to "fathers" of the baby in this document, some clients may be in a same-sex relationship with both partners in a parenting/caregiving role
  - NFP strives to be an inclusive program, therefore the Visit-to-Visit Guidelines and other program materials are expected to be adapted to become gender neutral when needed.

What components of the guidance for individual CMEs may countries change?

The table below indicates which components of the CME can be changed, enhanced, or adapted by countries:

Component of Core Model Element	What changes are permitted?
CME	No changes permitted
Definition	Changes require approved variance
Rationale	Countries may add in additional relevant evidence
Supporting Evidence/Literature	Countries may add in additional relevant evidence
Practices That Support Implementation of This Core Model Element	Countries may add in additional relevant guidance
Variations and Challenges Across Countries	No changes permitted
Permissible Variations	No changes permitted
How Core Model Element Measured and Analysed	Countries may adapt as needed
Benchmark(s)	Countries will set their own benchmarks for CME # 3, 6, 14, 5 (client retention and attrition component), and 14

Request for a Variance

Country-specific variations for a CME based on local context may be requested, if there is compelling rationale to justify doing so. This will help protect the integrity, quality, and effectiveness of the NFP program while being respectful and sensitive to local context. If a country feels that they have a strong need with compelling justification, they would complete the ***Request for Variance to Core Model Elements*** form (refer to Appendix C). The wording of the specific CMEs will not be changed, but countries may request changes to the definition/implementation. This form should be submitted to their designated NFP International Consultant who will then review and discuss this request with the Clinical Lead and license holder. The full International Team, including David Olds, will then review the request and make a final determination if it will be approved. The signed *Variance to Core*

Model Elements form will be returned to the license holder with the decision of the International Team and a date identified for reassessment of the request.

Authorised Additional Model Elements

It is also possible for countries to request use of authorized additional model elements where it is felt that their context would benefit from the addition of new, as yet untested, program components (such as the use of associate NFP team members such as Family Partnership workers or community mediators).

Summary

This guidance document sets out the International 14 Core Model Elements with detailed descriptions of the rationale and evidence that underpin them, as well as guidance to support their practical application. The expectation is that each country delivers the NFP program with fidelity to each CME unless a variation has been granted. This will help protect the integrity, quality, and effectiveness of the NFP program while being respectful and sensitive to local context.

- The individual CMEs begin on the next page

Element 1: Client participates voluntarily in the Nurse-Family Partnership (NFP) program.

DEFINITION

Nurse-Family Partnership (NFP) clients participate voluntarily in the program. In all situations, clients must be enabled to understand that they are participating in the program voluntarily and that they may withdraw from the program at any time. Written materials, including pamphlets setting out the voluntary nature of the program and/or signed consent should be used to support this.

RATIONALE

The NFP program is designed to be strength-based, building self-efficacy through collaborative goal- setting and supporting behaviour change. Voluntary participation is a key component of the development of a trusting relationship between NFP nurse and client that is supportive, empowering and long lasting. Choosing to participate empowers the client, while involuntary / coercive participation is inconsistent with building self-efficacy. On occasion, implementing sites may receive referrals or notifications about potential clients from the legal system, child welfare, health care providers, and other service providers where client participation is an implicit or implied expectation. Even when participation is discussed as being voluntary by the NFP nurse during the initial home visit, the client may perceive participation as non-voluntary, depending on how the referral source has introduced the NFP program. The expectations in the plan of care developed by the referral source for the client may lead the client to believe her involvement in the NFP is involuntary. It is essential that the decision to participate be between the client and her NFP nurse without any pressure to enrol. It is also important to discern between the clients feeling coerced versus those ambivalent regarding participation.

Whenever clients are asked and agree to participate in NFP related research, countries will follow the guidelines of their local/national research ethics boards to ensure informed consent is obtained.

SUPPORTING EVIDENCE/LITERATURE

- All women participating in the 3 US randomized controlled trials were required to sign an informed consent and participation was voluntary as it would be unethical to study involuntary participation (Olds et al., 1999).
- Voluntary participation is a home visiting best practice identified by Healthy Families America (2001)
- In most countries, participation in home visitation programs is voluntary (American Academy of Pediatrics, 1998).
- Clients have the right to decide whether they need to or want to engage in services. The families who may benefit most from home visiting are also the ones who may be hardest to reach, enroll, and retain (Staudt, 2007).
- Evidence from home visiting and other service sectors suggests that participation alone is a poor predictor of client outcomes. Rather it is the client's engagement in the program, which starts with willing participation (Staudt, 2007).
- The effectiveness of non-voluntary participation in NFP has not been studied.

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

- As part of the enrolment process the client is informed about the program benefits and responsibilities, the client understands what to expect, including the frequency of visits and length of time in the program, and agrees to participate.
- Lessons from the field indicate that attrition and retention are impacted negatively when the NFP nurse is associated too early as a partner with service providers wielding power. For instance, prenatal case conferences with Child Protection workers, if introduced too early in the development of the new NFP nurse-client relationship, often has a negative impact because of the perceived power imbalance.
- Sometimes the referring/notifying individual/agency puts pressure on the client to participate. Some sites have found it works very well when the NFP nurse informs the client about the program and then gives the client several days to make a final decision regarding her participation. This "space" creates the potential for the client to realize that indeed she does have choice about participating in the program.
- When clients are ambivalent about participating ("a normal human process on the path to change") (Miller & Rollnick, 2013, pg. 166), the NFP nurse (when involved in the recruitment process) will use her motivational interviewing skills and techniques to

explore how the program might support the client. It is essential that referral partners become knowledgeable about the important benefits of voluntary participation in the NFP.

- Sites can use a variety of strategies to promote the program, including marketing, community outreach, and promotion/advocacy though Local Advisory Boards etc.
- Some countries have added community workers to NFP teams in order to promote and facilitate enrolment of families within specific communities. In these instances, it is important that these workers are also able to ensure that client participation is voluntary.
- As always with NFP, the nurse would adapt the recruitment and enrolment process as needed for clients without losing the intent. For example, the nurse would carefully read all the information on the consent for low-literacy or visually-impaired clients.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

When sites identify situations in which a court, child welfare agency etc., has required or ordered a pregnant woman to participate in the NFP program, the NFP nurse (or NFP supervisor, program manager/director etc.) should follow-up with the judge, probation officer, or social services staff member. She will thank them for the referral, then explain that the program is voluntary and that we have no evidence that NFP is effective in situations where the client is ordered to participate. Most of the time, given this information, the requirement is dropped, and replaced with a recommendation to participate. There may be some populations/countries where obtaining written consent is not culturally appropriate or in contradiction to health care norms. In these instances, there would be a clear process developed and communicated to all NFP team members regarding how informed consent to participate would be obtained.

PERMISSIBLE VARIATIONS

There are no permissible variations to this element.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

In countries where signed consent is expected, a copy of the signed consent is kept in the client's record/chart. It may be possible for this information to also be recorded in a NFP national database/information system, to enable confirmation of this CME. Information is by self-report (signed informed consent /nurse confirmation of voluntary participation and continued client engagement are indicators of this element).

BENCHMARK(S)

It is expected that all clients (100%) will participate in the program voluntarily. Voluntary participation relates directly to the NFP program theory of self-efficacy. Where countries expect written consent, this CME can be measured through chart reviews to ensure all clients have a signed a consent to participate in the program.

Element 2: Client is a first-time mother.

DEFINITION

First-time mother is either a nulliparous woman (i.e., has experienced no previous live births) or has never parented a child before. Women who have experienced a neonatal death, have had a child removed from their care immediately after birth, or had their first baby adopted immediately after birth would therefore be eligible for inclusion in the program.[2]

RATIONALE

- The criteria for this CME include woman who had delivered a live infant, but never parented. These women tend to have a large number of risk factors; therefore, we expect them to have a high benefit from the program.
- NFP seeks to prevent a number of child health problems that emerge early in the life cycle and that might be prevented with improvements in prenatal health habits, care of the child, and the psychosocial context of the family. The NFP conceptual model illustrates how the program aims to prevent child maltreatment and promote parents' competence in providing care that is sensitive and responsive in order to foster optimal children's development (Donelan-McCall, Eckenrode, & Olds, 2009).
- While the NFP does focus specifically on improving child health and development as one of the three program goals, the mother (not the child) is the identified client. The NFP nurse develops and maintain a therapeutic relationship with each client and uses the NFP program methods to enable necessary behaviour change, ensuring the mother as the identified client is able to nurture, develop and protect her child from harm.
- Mothers are the clients of the program, rather than fathers or other family members. This is on the basis that the program model produces improved outcomes for the child by impacting on the caregiver. If parental relationships break down, it is the mother who is most likely to remain the primary caregiver for the child and as the client will provide continuity of program visits. However, it is expected that fathers and other family members will be actively included in visits whenever possible and appropriate. If others

[2] Additional information regarding client demographical inclusion criteria can be found in CME #3

in the family become the primary caregiver on a permanent basis, it is possible for that family member to become the NFP client.

- Rubin (1976) identified 4 tasks of pregnancy: 1) seeking safe passage for the woman herself and her child through pregnancy, labour, and delivery; 2) ensuring the acceptance of the child by significant persons in her family; 3) binding-in to her unknown child; and 4) learning to give of herself. All four tasks are worked on concurrently and equally. An impasse in any one task area can impact negatively on the pregnancy. Nurse visits within the pregnancy phase support women to manage all these aspects of the transition to parenthood.
- Becoming a mother for the first time is a time of great change in a woman's life, when she is more vulnerable and so tends to be more willing to accept support and help. A woman with no prior experience with parenting, is more open to advice and guidance, and may be more receptive to intervention and change. The skills and sense of her identity as a mother should carry over to subsequent pregnancies and births.
- Limiting enrolment to first-time mothers therefore maximizes the opportunity to improve outcomes for families.

SUPPORTING EVIDENCE/LITERATURE

- NFP targets first time mothers on the theory that such a major change as the first experience with motherhood makes them receptive to receiving education and support from visiting nurses (Dawley et al., 2007; Olds & Kitzman, 1993).
- All three of the US trials focused on women who had no previous live births because it was hypothesized that: 1) such women would be more receptive to home-visitation services concerning pregnancy and child rearing than would women who had already given birth; 2) As the client/family learn parenting and other skills through the program, they should be better able to care for subsequent children; 3) by helping parents plan subsequent births, it will be easier for them to finish their education and find work (Olds et al., 2003; Olds, 2006).
- Women bearing first children are particularly receptive to this service, and to the extent that they improve their prenatal health, care of their firstborns, and life-course they are likely to apply those skills to subsequent children they choose to have (Olds, 2002; Olds, 2006).
- All three of the trials focused on women who had no previous live births because it was hypothesized that such women would be more receptive to home-visitation services

concerning pregnancy and child rearing than would women who had already given birth. (Olds, 2006). The outcomes of providing NFP to multiparous women are currently untested and therefore unknown.

- An RCT conducted in Canada involving an intensive 2-year program of home visitation by nurses with many of the same features as NFP was delivered to families where confirmed child abuse had occurred. The intervention was not more effective than standard services in preventing recurrence of abuse. The high rates of recurrence in this study suggest that substantive efforts must be invested in prevention of child abuse or neglect before a pattern is established [i.e. working with first time mothers] (MacMillan et al., 2005).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

- Working with external agencies to inform them of the program's eligibility requirements, along with the reasons for this, is essential to secure information regarding eligible women for the program. It is also important to be aware of other programs and resources available to mothers who are not eligible for NFP, so that NFP nurses can redirect women who are not first-time mothers to other programs.
- All client recruiting materials and information about the program should contain information that explains that the program is for first-time mothers.
- Although the mother is the designated client, the NFP is also orientated toward the inclusion of the father of the baby, friends and other family members. Regardless of the exact living arrangements, these "significant others" are encouraged to sit in on the home visits if the mother so desires. Special emphasis is placed on involving the father (Olds, 1980). Where the father takes sole responsibility for care of the child it is possible for him to be recognised as the client for the remainder of the program.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

As NFP is expanded internationally to countries where there are unique cultural contexts, this CME will need to be carefully considered. Some countries are now evaluating providing the program to multiparous women. Where variations to this CME are sought, consideration should

be given to the impact that this will have on clarity of the NFP offer, as well as the need for research to determine impact and effectiveness (see below).

PERMISSIBLE VARIATIONS

The effectiveness of delivering NFP to multiparous women has not been rigorously tested using a randomized controlled trial. The Tribal Nations in the US have conducted formative assessment of delivering NFP to multiparous women. This variation is in alignment with the specific cultural norm for this community of offering and providing the same services to all. There are unique challenges for the nurse when delivering NFP to multiparous women including addressing childhood issues of various aged children, changes in family dynamics related to the possibility of multiple adult caregivers, and the potential for increased visit length along with increased time necessary for preparation and follow-up. There are many benefits to the client including the opportunity to learn and make changes in her approach to pregnancy and child growth and development with the new pregnancy and additional child. Australia was granted a variation to deliver NFP to multiparous women given their unique cultural context of providing NFP solely within an indigenous culture where the exclusion of these women would be deemed inappropriate. At this time, as this variation is of unproven impact, countries wishing to deliver NFP to multiparous women in any way must negotiate this with their international consultant, providing clear rationale for doing so and a viable plan to evaluate this.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

This CME should be monitored and assessed through each country's program referral /notification data form or similar documentation. It is expected that NFP nurses will take care to enquire about the outcome of previous pregnancies with all potential clients before enrolling them onto the program. However, it is possible for countries to include confirmation of this by the nurse within their information system or clinical records if desired.

BENCHMARK(S)

It is expected that all clients (100%) will meet the NFP definition of "first time mother".

Element 3: Client meets socioeconomic disadvantage criteria at intake.

DEFINITION

Each country will set its own socioeconomic threshold/criteria using existing national definitions, ensuring this criterion can be easily and consistently applied. In addition, using population-health statistics and relevant research data, countries may establish additional rigorously defined psycho-social disadvantage eligibility criteria, including an upper age cutoff where applicable.

RATIONALE

The Elmira trial was open to women of all socioeconomic backgrounds. The mothers with higher incomes had more resources available to them outside of the program, so they did not get as much benefit from the program compared with mothers with lower incomes. The most pronounced effects of the NFP program were found among the low-income, unmarried participants including: improved maternal life course; the provision of more sensitive and competent care; reductions in both substantiated child abuse and neglect reports; and reductions in emergency health care visits during the first year of life (Olds et al., 1986). In the Elmira trial, most married women and those from higher socioeconomic households managed the care of their children without serious problems and were able to avoid lives of welfare dependence, substance abuse, and crime without the assistance of the NFP nurse. This pattern of results challenges the position that these intensive programs should be made available on a universal basis. Doing so is likely to be wasteful from an economic standpoint and may lead to a dilution of services for those families who need them most because of insufficient resources to serve everyone well (Olds et al., 1999; Donelan-McCall et al., 2009; Olds, 2012).

Overall, the US trials identified that program benefits (such as mothers' use of cash-assistance welfare, timing of subsequent pregnancies, verified reports of child maltreatment, injuries and ingestions, and language and cognitive development), were most pronounced in: 1) families living in concentrated disadvantage; and 2) children born to mothers who had few psychological resources (which is defined as a constellation factors which includes limited intellectual functioning + mental health + some sense of control over their life circumstances) to cope with adversity (Olds, 2002; Olds et al., 2002; Olds et al., 2004). The Dutch trial demonstrated

reductions in child maltreatment, children's internalizing behavioural problems, and intimate partner violence. These outcomes might be attributed, at least partly, to its serving mothers who are highly vulnerable, irrespective of their age (Mejdoubi et al., 2013; Mejdoubi et al., 2014; Mejdoubi et al., 2015).

The Rand Corporation has conducted an economic evaluation of NFP that extrapolates the results of the 15-year follow-up study to estimate cost savings generated by the program (Kilburn & Karoly, 2008). While there were no net savings to government or society for serving families in which mothers were married and of higher social class, the savings to government and society for serving families in which the mother had a low-income and was unmarried at registration exceeded the cost of the program by a factor of four (4) over the life of the child (Olds, 2006). Therefore, the intent is to target the NFP to those women and families who will most benefit from this intervention.

SUPPORTING EVIDENCE/LITERATURE

- Women who had fewer coping resources (limited psychological resources, limited intellectual functioning, high levels of mental health symptoms, limited control beliefs) received more home visits in the Elmira and Memphis trials than clients with greater resources (O'Brien, 2005).
- The environments of families experiencing multigenerational disadvantage are often characterized by high levels of psychosocial and physical stressors and little to no "buffering" resources (Cheng et al. 2016).
- Infants born to mothers experiencing socioeconomic disadvantage are at increased health risk for low birth weight (Aizer & Currie, 2014).
- There is a consensus that children with lower SES have poorer health outcomes. (Phips, 2003).
- Living in low income for a longer period of time is more strongly associated with worse child outcomes (McEwen & Stewart, 2014).
- Family income appears to be more strongly related to children's ability and achievement than to their emotional outcomes. Children who live in extreme poverty or who live below the poverty line for multiple years appear, all other things being equal, to suffer the worst outcomes (Brooks-Gunn & Duncan, 1997).
- Women with a low-income having first births will include large portions of unmarried and adolescent mothers. These populations have higher rates of the problems NFP was

designed originally to address (e.g., poor birth outcomes, child abuse and neglect, and diminished parental economic self-sufficiency) (Elster & McAnarney, 1980; Overpeck et al.,1998).

- In the Elmira trial, the presence of domestic violence limited the effectiveness of interventions to reduce incidence of child abuse and neglect (Eckenrode et al., 2000).
- The more successful home visiting programs contain the following: (1) a focus on families at greater need for the service, (2) the use of nurses who begin visiting during pregnancy and follow the family at least through the second year of the child's life, (3) the promotion of positive health-related behaviors and qualities of infant care giving, AND (4) provisions to reduce family stress by improving the social and physical environments in which families live (Olds, 1992).
- Sir Michael Marmot proposes using a model of "proportionate universalism" to ensure that disadvantaged children and families receive support that is appropriate for their needs, with the most vulnerable families receiving more intensive interventions such as NFP (Marmot et al., 2010).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

Countries will utilize their own national population health statistics to monitor characteristics and outcomes of their NFP clients compared with the general population and relevant subsets. Data regarding income and other sociodemographic risk factors will be obtained through the Client Intake/Client Intake update forms (or equivalents). Once the socioeconomic disadvantage eligibility criteria are established, it is imperative that the client referral form, intake form, NFP program promotional material, and related processes facilitate the application and understanding of this criterion. NFP nurses and supervisors (along with those in a community mediator[3] role [or similar position]) may need guidance and training regarding ways to sensitively explore these issues, in particular income. Establishing clear criteria will only be successful if countries also have a process in place that establishes effective and efficient referral pathways so that eligible women are referred to NFP and non-eligible women are referred to other services. In every caseload, it is important to balance out those clients that have more challenges and therefore require increased support with those families that accept help more easily and readily access the program (Olds & Korfmacher, 1998). The focus of this CME is on ensuring that each country has robust, clear, and easily applied eligibility criteria that

[3] The role of a community mediator in NFP is explained in CME # 5*: Each client is assigned an identified NFP nurse who establishes a therapeutic relationship through individual NFP home visits*

will ensure the program is offered to those women and families who will most benefit from the intervention.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

There may be some specific population groups (such as Aboriginal, Tribal, and First Nations populations) where setting socioeconomic disadvantage criteria to determine eligibility would be culturally inappropriate. In these situations, the overall level of disadvantage may be pronounced and a more population-specific eligibility may be preferred. Agencies/sites are encouraged to consider the research findings from the trials that demonstrated greater results for clients who had less resources and lower income and understand the process for the development of eligibility criteria within their country. If a country feels a population approach is required versus socioeconomic disadvantage criteria, this would require an approved variance

If a site is considering enrolling a client that does not meet the established criteria for socioeconomic disadvantage agreed for their country, it is suggested that they consider what other resources and programs might be available to the client in making their decision and if they should review the issue with their NFP Supervisor, Program Manager, NFP Nurse Consultant (or equivalent) or Clinical Lead. As part of the annual review process, the International Consultant will review the low- income criteria that each country is using and explore the challenges and successes with applying it.

PERMISSIBLE VARIATIONS

Definitions of low-income and poverty thresholds in particular will vary amongst NFP countries. There will also be variations amongst counties related to which additional psycho –social disadvantage risk factors are predominant and likely to impact on client and child outcomes in the context of usual services in the country.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

Information regarding countries related socioeconomic status is collected by the NFP nurse using the Client Intake/Client Intake Update forms and entered into the NFP information system. Regular review and analysis of collated data reports for client demographics should be undertaken at local and national levels to review consistency with the agreed eligibility criteria and undertake quality improvement measures where necessary.

BENCHMARK(S)

It is expected that 100% of NFP clients will meet the country's established socioeconomic disadvantage criteria.

Element 4: Client is enrolled in the program early in her pregnancy and receives her first home visit no later than the 28th week of pregnancy.

DEFINITION

A client is considered to be enrolled when they receive their first NFP visit and any necessary consent forms have been signed. Prior to this, NFP nurses may undertake pre-enrollment visits to assess a woman's eligibility, explain the program to the prospective client and invite them to participate. The 28th week of pregnancy is defined as no more than 28 weeks and 6 days of gestation.

RATIONALE

Early enrolment allows time both for the client and NFP nurse to establish a relationship before the birth of the child and to address important prenatal health behaviors that affect the child's neurodevelopment and birth outcomes. It also enables the program to be offered early with anticipatory guidance, before women are experiencing any challenges in their parenting and allows other issues that may impact on the client's ability to benefit from the program (e.g. IPV, mental health problems) to receive early attention.

If clients are enrolled after week 28 of pregnancy, it is unlikely that there will be sufficient time to achieve the first program goal, which is to "improve outcomes of pregnancy by helping women improve prenatal health" and the impact of the program may be reduced. Additionally, program dissemination data show that earlier entry into the program is related to better engagement during the infancy phase, increasing a client's exposure to the program and offering more opportunity for behaviour changes.

SUPPORTING EVIDENCE/LITERATURE

- There is growing evidence that pregnancy is associated with a variety of alterations in neural plasticity, including adult neurogenesis, functional and structural synaptic

plasticity in women. Changes begin during early stages of pregnancy, with numerous adaptations that occur towards the end of pregnancy and into the period of lactation. Some of these brain regions most impacted are crucial for the onset, maintenance, and regulation of maternal behavior such as nurturing and protection of the young); others control memory and learning and therefore impact on maternal motivation. During the peripartum period mothers also show a significant decrease in working memory, verbal memory, word recall, visual memory, spatial memory, explicit and implicit memory, and attentional processes (Stevens et al., 2013; Hillerer et al., 2014). The greatest physiological brain changes occur with a mother's first child (Stevens et al., 2013).

- "We begin the program during pregnancy and continue it into infancy because these are considered highly labile phases in the life cycle of families during which the potential for helping (as well as harming) the child and family is unusually strong. From the standpoint of helping, it is our clinical judgment as well as the judgment of other investigators (Siegel et al, 1980) that beginning the program during pregnancy is important in terms of developing an effective caring relationship with parents. We reason that mothers are more likely to accept support when they are going through the profound and sensitive biological, psychological, and social changes produced by pregnancy. Parents
- are less likely to be defensive, we believe, if help is offered during pregnancy when all first- time parents, regardless of their income or personal situation, have questions and special needs." (Olds, 1982, page 272).
- In working with the parents in the Elmira trial, David Olds and his research team believed that it was essential to build the program on a foundation of respect for them, an appreciation for differences in their life-styles, and their strengths. Because they wanted to avoid giving parents the message that they were incompetent or incapable of caring for their children, it was important to begin the program during pregnancy. They theorized that offering to help once the baby was born might have been interpreted as an indication that they thought parents had made mistakes or were incapable of caring for their children. The program also needed to start in pregnancy because some of the NFP (at that time called the Prenatal and Early Infancy Project) program goals (prevention of low birth weight and prematurity) had to be accomplished by the time of the baby's birth. In general, they reasoned that women would be more likely to accept support when they were going through the profound biological, psychological, and social changes in pregnancy (Olds, 1985).
- Before conducting the Denver trial, David Olds and his research team conducted a thorough literature review to determine the ideal time to begin NFP. Beginning visits early in pregnancy is based on 2 complementary strategies – timing and ecology. Gordon

(1971) as reported in Olds (1980) provided evidence that the earlier work is begun with parents, the more effective it is. There is ample evidence to suggest that events taking place during pregnancy have enduring effects on the development of the fetus. It was the experience of the research team clinicians that offering assistance once the baby is born (possibly after a problem has emerged) is often interpreted by parents as a message that they have cared for their child poorly. If assistance is offered before the birth of the first child, when all families have questions and special needs, parents are less defensive. Based on this, the research team "insisted" on early enrolment (before the 24th week of pregnancy) to allow sufficient time for the intervention (NFP program) to affect the health of the mother (Olds, 1980).

- Nurse home visits are important early in pregnancy so that the women receive regular prenatal care, follow healthy diets, avoid smoking, drinking alcohol, and abusing drugs which can be harmful to normal fetal development (Olds et al, 1986).
- Enrollment of at-risk women during pregnancy fosters supportive relationships with their nurses before postpartum stresses begin and to encourage healthful behaviors that improve fetal outcomes (Dawley et al., 2007).
- Emphasis on beginning the intervention in pregnancy affords an opportunity to help women avoid unhealthy behaviours (cigarette smoking, alcohol consumption, and use of illegal drugs) that have the potential to result in neurodevelopmental impairment of the developing fetus, a significant factor in childhood behavioural problems and the later emergence of antisocial and criminal behaviour (Olds et al., 1998).
- Nurses work with the mothers early to form good parenting habits before dysfunctional ones are developed and link families with health and social services as needed (Olds, 1982; Olds et al., 2003).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

It is important that each country establishes positive processes for identifying potential NFP clients within their target population as early in pregnancy as possible. In countries that have existing universal health care systems for women in pregnancy, this is often achieved more easily than in countries without this provision. However, the challenges of data sharing and consent issues in many countries can take time to identify and negotiate when the program is initially being implemented and for this reason it is important to take time to establish positive and productive information sharing pathways.

Some countries may utilize an exploratory recruitment visit(s) to identify program eligibility (see section on Permissible Variations below), or incorporate the use of a community mediator (or similar role) to ensure that specific communities are encouraged to access the program. In these instances, it is important that this is managed positively and productively to cause minimum delay to NFP enrolment and to enable women to access other services in a timely way. Whilst it is important that women are given the chance to understand and positively choose to participate in the program, pre-enrolment visits should be kept to the minimum possible so that women are able to benefit from the maximum number of program visits.

If women are enrolled very early in pregnancy (8-12 weeks), NFP nurses may experience difficulty engaging the client because the pregnancy may not yet be real to them. Some nurses have approached this situation by meeting with the new client, providing them some information on nutrition and good prenatal practices, and then setting an appointment to meet at a later time when the pregnancy is further along (as appropriate). It is expected that implementing agencies/sites that enroll clients before 12 weeks may see higher rates of attrition due to fetal loss. NFP does not have criteria for a minimum gestation to be registered in the program – sites/countries will determine this.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Establishing routes and mechanisms for sharing information regarding potentially eligible women early in pregnancy is a challenge in many countries, especially when the program is first introduced into a health and care system and community. Where specific, and especially minority, communities are being served, it is especially important to take the time to prepare the community for the program, to work collaboratively with others to establish local Advisory Boards or similar structures so that a sense of local ownership can be engendered. This helps to establish trust in the program amongst local people and professionals who will share information about the program with pregnant women.

Some sites/countries have experienced pressure from internal staff and/or community partners to enrol clients later in pregnancy than 28 weeks. This may particularly be the case where clients have multiple challenges or have concealed their pregnancy. In these situations, it is important to help staff and stakeholders to understand the importance of the NFP nurse's work in pregnancy for the outcomes for the child and of the program. Where limitations on provision of the program exist, as is usually the case, it is very important to consider a client's capacity to

benefit from the program. This will be reduced where clients are unable to receive sufficient visits to achieve the pregnancy goals.

PERMISSIBLE VARIATIONS

It is to be expected that in a small number of cases, a client may be enrolled later than was first thought (and so later than 28 weeks of pregnancy) because the initial due date was incorrect. Some implementing agencies/sites have found that enrolment rates go up if they do an initial home visit with some/all women referred, to determine eligibility to the program (refer to CME #3: *Client meets socioeconomic disadvantage criteria at intake*). If the sole purpose of the visit was to determine eligibility but the client was not ready to sign the program consent or agree to participate in the program, it would not be considered a NFP home visit as the client has not yet enrolled in the program. This practice is permissible as long as the first visit with signed consent and/or when client is enrolled occurs no later than the 28th week of pregnancy. This approach should be developed in such a way that it does not unduly undermine efforts to enrol women early in pregnancy.

HOW THE CORE MODEL ELEMENT IS MEASURED AND ANALYSED

As the client's expected date of delivery (EDD) is not a recordable field on the client intake form, each implementing country should establish a mechanism for measuring this information, using their national NFP Information System. The system needs to be sufficiently flexible to adjust for changes in the EDD where the client's self-report is found to be inaccurate.

National leaders should monitor trends and variations in weeks of pregnancy at enrolment and take a quality improvement approach to issues as they arise. Rates of conformity with this element are reported annually to UCD via the annual report.

BENCHMARK(S)

This CME has three benchmarks:

1) *100% of NFP clients receive their first home visit no later than the 28th week of pregnancy.*
2) *75% of eligible referrals who are intended to be recruited to NFP are enrolled in the program*. This benchmark was set using the percentages of referrals that converted to participants from each of the trials and from the early dissemination of the program, which averaged about 75%. The purpose for having a benchmark is to minimize the possibility that agencies become selective and not enroll clients that are higher risk. It should be measured using the denominator of referrals of women who meet the eligibility criteria of the country and where the NFP team has capacity, and the intention, to recruit the woman to the program.
3) *60% of pregnant women are enrolled by 16 weeks' gestation or earlier*.
   This benchmark was established to ensure that implementing agencies/sites focus on enrolling clients early in their pregnancy, not just by the 28-week cut-off point. Licensing bodies in each country may adjust this benchmark so that it is in line with good practice expectations for early enrolment within their context and recruitment processes.

These benchmarks are designed to focus efforts on the importance of enrolling and providing the program to eligible women starting early in pregnancy. Achievement of the benchmarks should be measured and monitored regularly to enhance opportunities for quality improvements in this area.

Element 5: Each client is assigned an identified NFP nurse who establishes a therapeutic relationship through individual NFP home visits.

DEFINITION

The process of developing and maintaining relationships is central to nursing professional practice. A specific type of relationship, the therapeutic relationship, is developed between the assigned NFP nurse and the client through the one-to-one home visits that occur over the duration of the program. The overarching core competency for a NFP nurse is: *The ability to support and maintain a therapeutic relationship with each client and use NFP program methods to enable necessary changes in understanding, capabilities, and behaviours; ensuring the mother is able to nurture, develop and protect her child and herself from harm.*

The mother may choose to have other supporting family members and/or significant other(s) in attendance during scheduled home visits. In particular, fathers and/or partners are encouraged to be part of visits when possible and appropriate. In collaboration with her client, the NFP nurse engages other relevant and appropriate individuals in the client's family and social networks, promoting healthy relationships and nurturance of the child (Flory, 2007). Although the therapeutic relationship is essential, it is not sufficient by itself to support the achievement of the three program goals. For this reason, NFP nurses must be supported to learn specific information sharing, anticipatory guidance and behavior change techniques and be able to apply them within the context of their relationships with clients.

RATIONALE

- The success of the NFP has been attributed to the nurses' development of therapeutic relationships with their clients (Kitzman et al., 1997).
- Nurses seek to develop an empathic and trusting relationship with the mother and other family members because experience in such a relationship is expected to help women eventually trust others and to promote more sensitive, empathic care of their children (Olds, 2006).
- Mothers who have a history of troubled relationships are likely to have difficulty establishing relationships and have difficulty trusting and being open, or even can

attribute malicious intent to those who want to help them. The one-to-one relationship allows a relationship to be established that can become a model for attachment. This is a foundation for developing capacity for healthy attachment between the client and her baby.

- Healthy, supportive, fathers are encouraged to participate actively in child rearing because when they do mothers and children function better. Generally, fathers have a strong protective influence over their children. However, it is recognized that not all fathers should participate due to safety concerns. (Cole et al., 1998).

SUPPORTING EVIDENCE/LITERATURE

- The length of time that mothers are enrolled in the program (over two years) allows for a gradually increasing level of trust and comfort. Many mothers will not be able to focus on their child and
- accept direct guidance on caregiving. In NFP, information exchange between the mother and nurse occurs in the context of an empathic, trusting, and caring relationship, and is therefore more likely to honour the client's expertise and autonomy (Miller and Rollnick, 2013). Besides providing the means for structured guidance, the home-visiting relationship by itself is expected to affect the parent-child relationship by offering a model to mothers of care and support, challenging views she may have of herself as undeserving of care or cynicism about relationships. The nurse's presence supports the mother, providing a safe context in which to learn skills regarding how to enhance emotional availability to her baby, thus supporting the development of the infant's self-regulation (Robinson et al., 1997).
- Client engagement reflects the quality of client attitudes toward, emotional investment in, and behaviours related to their services and service providers (Staudt, 2007).
- Mothers feel vulnerable and frequently powerless when they allow service providers into their home. Mothers with children at-risk engage with public health nurses through a basic social process of limiting family vulnerability, which has three phases: (1) overcoming fear; (2) building trust; and (3) seeking mutuality. The personal characteristics, values, experiences and actions of the public health nurse/ family visitor and mother influence the speed at which each phase is successfully negotiated and the ability to develop a connected relationship (Jack et al., 2005).

- Alongside this anticipatory information and guidance, nurses facilitate the development of clients' belief in their ability to change and enable them to acquire new skills needed to make changes in a range of areas (Rowe, 2016).
- Family engagement can be affected by home visitor and supervisor characteristics, staff turnover, and the quality of relationships (Barak et al., 2010).
- The NFP is orientated toward the inclusion of friends, the father of the baby, and other family members. Regardless of the exact living arrangements, these "significant others" are encouraged to sit in on the home visits if the mother so desires. Special emphasis is placed on involving the father (Olds, 1980).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

It takes reflection, insight, and adaptability for nurses to maintain a positive and professional therapeutic relationship with complex clients in crisis. It is critical that nurses be provided with: 1) information about, and opportunities to develop skills, related to establishing and maintaining therapeutic relationships as part of their core NFP education; and 2) ongoing support through the use of reflective supervision with their NFP supervisors.

Whenever possible, NFP nurses should involve other family members in the program, to the extent that they are supportive of the mother. When this support is available, it helps to reinforce what the mother is learning and enables other caregivers to the child to develop their understanding and capabilities alongside the client. However, including the father/partner in the program may create an inherent conflict for the nurse. Does she focus on establishing the therapeutic relationship with the client or introduce greater complexity to the intervention? This is especially the case when the mother does not want the father to be involved. In this instance, it may be beneficial for the NFP nurse to educate the mother about the benefits to her and her child of maintaining father involvement and by exploring immediate risks (i.e., violence, criminal behaviour, substance abuse) that justify limiting the inclusion of the father until such a time that he remedies these risks. The mother then can make a logical, not simply a passion-driven, decision about including the father in program participation. Actively referring fathers to additional providers in the community to mitigate obstacles to program involvement and direct involvement with care of the child are important support services for the nurse to conduct.

NFP clients establish very strong attachment to their nurses, so much so that participants whose nurses leave NFP before the end of the child's first birthday are much more likely to drop out of

the program (O'Brien et al. 2012). Although the focus is on developing the relationship, it is very important that clients engage in the program, not just the therapeutic relationship with their nurse. Teams have found it helpful to introduce another nurse (once the trusting relationship has been established) to the client who will be the backup for vacations, unexpected leaves etc. Other teams have done things such as developing a calendar with pictures of the entire NFP team, giving each client a copy of the calendar. This tells the client that their primary nurse is also supported by a team, who are also available to the client when needed. When it is known that a NFP nurse will be leaving, a transition plan should be established as soon as possible so that the client has time to adjust to the change before it is permanent.

Evidence from the USA is that higher-risk participants (especially unmarried teens) are more likely to drop out of the program and have fewer completed visits during pregnancy and infancy. Nurses from sites with lower attrition reported adapting the program to the needs and aspirations of the families they visited. This collaborative, flexible style of interacting with participants may be especially appreciated by higher-risk participants, who are likely to experience uncertainty about where they will be living next week, and other stressors in their lives that can interfere with their having consistent household routines (O'Brian et al., 2012). Use of STAR can enable nurses to systematically identify the strengths and risks of individual clients and families, so increasing the likelihood of matching with their needs, aspirations and stage of change.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Even though NFP uses a one-to-one visiting model, there are times when it is appropriate for the nurse to be accompanied by a community mediator (or individual in a similar role), another nurse (for a peer, consultation, transfer, planned coverage, or shadow visit), a supervisor (for a joint visit), or another professional/service provider (e.g. a social worker). The client should understand the purpose of these visits in advance of their happening.

In order to be able to deliver NFP to women from other cultures and/or whose predominant spoken language is not the primary national language, it may be necessary to use an interpreter. Barnes et la (2011) conducted focus groups in England to examine if the Family-Nurse Partnership program can be delivered with a language interpreter present and to explore the impact of interpreters on nurse-

client therapeutic relationships. They found that there was no difference in length of the visit but that not surprisingly, significantly less planned content was covered, with less client involvement. The clients and nurse felt that the interpreter did not hinder their relationship building, however, many would rather that the interpreter was not required.

PERMISSIBLE VARIATIONS

The addition of groups and activities to enhance the NFP program are allowed but cannot be counted or substituted as home visits and should not take nurses away from their primary role as home visitors.

Some countries have introduced unique community mediator (or similar) positions whose role focuses on building a "cultural bridge" (cultural awareness, sensitivity, and competence). This role supports the nurse to: ensure the program is being delivered in a culturally appropriate way; facilitate acceptance of the NFP with the community; ensure the program materials are culturally relevant etc. The individuals in these positions may also visit in the home either jointly with the NFP nurse and/or individually. The introduction of this role requires a formal request for a variation to this CME. It is expected that specific guidance will be developed by clinical leads within these countries to support the successful introduction of this role in such a way that balances the spirit, values, and intent of NFP with those of the local culture.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

Information about who participates in the home visit is collected by the NFP nurse using the home visit/alternate visit encounter form.

BENCHMARK(S)

It is expected that 100% of clients will be assigned a single NFP nurse at any given time. Clinical Leads in each country should ensure that appropriate benchmarks are created to ensure that expectations of nurse caseload sizes are in accordance with the achievement of expected visit schedules, geography and consequent travel times, usual working hours, expectations regarding clinical record keeping and additional professional expectations such as inter-agency child protection obligations.

Benchmarks for client attrition can also enable a focus on the levels of client engagement in the program, thus providing an indication of the quality of the therapeutic relationships established. Countries can set appropriate benchmarks for their own context. Information regarding NFP client attrition in other countries can be provided to support this decision-making in countries implementing NFP in phase 1-2 of international Implementation of NFP (refer to guidance document - *Five Phases of International Research and Implementation of NFP – 2023*).[4]

[4] Phase One: Adaption; Examine the adaptations needed to deliver the NFP program in local contexts while ensuring fidelity to the NFP model. Phase Two: Feasibility and Acceptability through Pilot Testing and Evaluation; Conduct a pilot test of the adapted NFP program to inform what additional adaptations may be needed to ensure the feasibility and acceptability of the adapted NFP program.

Element 6: Client is visited face-to-face in the home, or occasionally in another setting (mutually determined by the NFP nurse and client), when this is not possible.

DEFINITION

The program is delivered in the client's home, which is defined as the place where she is currently residing and/or to which she feels an emotional connection. Her home can be a shelter, refuge, mother and baby home or a situation in which she is temporarily living with family or friends for the majority of the time. Meeting with the client in this kind of living arrangement should be considered as meeting with her in her home.

RATIONALE

Seeing a client in her home environment is an essential part of the program. When a client is visited in her home, the NFP nurse or supervisor, will have a better opportunity to observe, assess, understand, and monitor the client's context and challenges. Those areas include but are not limited to safety, social dynamics, ability to provide basic needs, and the mother/child interaction. Assessing the client's current status with respect to the critical domains of maternal role, environment, family and friends can be accomplished better in the home. As a visitor within the client's home, the NFP nurse needs to show respect for the client's norms and values, and as such the power balance between them is more equal than is the case in a clinic or other health care setting. Working in the client's home allows the NFP nurse, or other team member, to provide more informed and personalised care.

SUPPORTING EVIDENCE/LITERATURE

- Home- based assessments are done by the NFP nurse with the client related to maternal, child, and family functioning and specific interventions are recommended to address

issues identified. After delivery, the NFP nurses helped mothers and other caregivers improve the physical and emotional care of their children (Olds et al., 1999).

- A greater portion of families with high risks are more likely to receive a service offered in the home versus one they must make the effort to attend. Pregnant mothers at greatest risk for pregnancy complications and for problems coping with their children use traditional health and human services the least (Olds, 1980).
- The NFP nurse can acquire a more accurate and complete understanding of all the factors in the home that interfere with the parent's efforts to create optimal conditions for pregnancy and early childrearing. By assessing the home environment, the NFP nurse can provide more sensitive, informed service themselves and can help other service providers do the same.
- Because parents who are socially disadvantaged with high-risks may not always articulate their needs clearly and completely, it helps to have a sensitive NFP nurse spend time getting to know the parents, and simultaneously assess the home and family, so that appropriate services can be offered. In this way the potential of the home visiting model can be realized (Olds & Henderson, 1989).
- Home visiting is effective in observing and promoting positive parent-child and family interactions in their own environment, which have the greatest success in promoting healthy long-term outcomes in children and families. Home visiting is a safe starting place for families to gain comfort in accessing health and social services and later to participate in groups or programs and they provide a wonderful opportunity to reach out to all families (Nzen'man' Child and Family Development Centre home visiting programs).
- It has been proposed that home visiting can: 1) reach out to those who do not seek services; 2) enhance clients' comfort and ability to reveal their conditions; 3) provide opportunities for providers to tailor their support and guidance to clients' real-life situations; and 4) result in satisfying provider–client relationships (Kitzman, 2007).
- Home visitation has a number of characteristics that makes it particularly well-suited for the prevention of child maltreatment:
    - It provides a means of reaching out to parents who lack self-confidence and trust in formal service providers.
    - If properly carried out, home visitation can eventually increase parents' confidence and help them feel more comfortable expressing themselves among other parents and with other service providers (Olds & Henderson, 1989).
- By being in the family home rather than a social service agency office, NFP nurses can: observe parent/caregiver interactions with children in a normal setting; better assess a

family's needs and strengths; assess the home environment; and provide guidance tailored to their situation.

- Visits in the home overcome transportation and child care barriers that often plague social service delivery (Family Strengthening Policy Center, 2007).
- Most of the mothers in the Hamilton (Canada) NFP Feasibility and Acceptability study did not have access to cars, nor could they afford regular use of taxis. Use of public transportation became more difficult once their infants were born. The mothers felt that the home visits made it much easier for them to engage with their NFP nurses on a regular basis (Landy et al., 2012).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

National implementing bodies should ensure that site policies are established to support nurses with adequate time and support, reimbursement for mileage, caseloads that are geographically clustered whenever possible, and so forth. They should also consider the nurse's safety and employ practices to ensure that this can be protected within specific communities or homes.

For NFP nurses, and other home visitors such as community mediators (or similar role), especially those new to home visiting, it is essential that supervision includes discussions about the process of being invited into their client's home. In the NFP nurse's work with a family, four central elements should be made explicit in initial contact with a family: 1) expectations, 2) agenda, 3) roles, and 4) setting. The setting of home visitor's work in the parents' personal space raises issues different from work that occurs in offices, clinics, or classrooms (Klass, 1997, page 3). As guests in parents' homes, effective home visitors take cues from parents, for example, asking the parents' permission before touching or picking up their baby. Similarly, they never enter rooms in the home unless invited to do so (Klass, 1997, page 6). If the NFP nurses are not highly skilled and provided with on-going reflective supervision, they may inadvertently undermine rather than enhance family functioning (Olds, 1983; Olds & Henderson, 1989).

It is important for NFP nurses to establish a therapeutic nurse-client relationship and maintain professional boundaries. It is also important for the site to have policies and procedures in place to provide direction and clarity regarding the boundaries of the nurse-client relationship. For example, attending a public event such as a client's graduation can celebrate the client's achievement of the program's self-efficacy goal, however attending such private events may create confusion about the relationship being professional versus a friendship. Policies related to similar conflicts such as accepting gifts, giving money, making loans, babysitting for client,

transporting client, etc. are also helpful.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Some clients are very mobile, and many countries report that there may be safety issues, trust issues, embarrassment, crowding/lack of privacy, clients may be busy with work, or school, resulting in client's preference for visit location to be outside their physical home. In addition, some countries manage teams across wide geographical areas, making home visits sometimes very challenging. Where there are also community mediators (or similar positions) within NFP teams, these staff may also visit clients in their homes and support access to community services by initially accompanying families to these services.

PERMISSIBLE VARIATIONS

It is permissible, though not optimal, to visit the client and her child in locations other than the client's home, especially in situations that will keep the client in the program. Data from the retention study showed improved retention when clients were offered visits in alternate locations when they were needed (Olds et. al., 2015). Clients are supported and encouraged to return to school and work, and as such, may be home less often, and not as available for visits. The NFP nurse can arrange to visit clients at school or at their place of work, if necessary. In the work environment, time may be an issue, as clients might only have ½ hour for a lunch break. These varied visit locations should be exceptions, and not the rule. At times, the client may be visited using telehealth options in lieu of an in-person visit. General guidance based on the experience of nurses in many countries has been developed that can support countries to work on their approach to virtual visits.

At times, there may be safety issues that do not allow a client to be seen in her home. NFP nurses may use their own discretion to arrange alternate meeting settings, such as phone calls, clinic visits, or alternate meeting locations. When visiting in these less private locations; special care has to be taken to uphold the principles of confidentially and privacy. However, visits should not be moved to the site office for the convenience of the NFP nurse.

It is important for the NFP nurse and the Supervisor to review these situations to identify strategies to encourage visits in the home. If it becomes apparent that the majority of visits are

taking place in locations other than the client's home, the Supervisor should explore this with the NFP nurse and consult with national clinical leads as required to address any emergent challenges. At this time, the best ratio of telephone visits to in-person visits is unknown, but this area is being evaluated by a number of countries.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

Location of each visit is collected by all team members and recorded in the country's data system. Teams, sites and national leads should review the patterns of visit locations at least annually to identify emerging trends and issues and address challenges to the establishment and maintenance of visits within the home setting.

BENCHMARK(S)

It is expected that NFP nurses will predominately meet with mothers/families in their home in-person visits. Each country will set their own benchmark.

Element 7: Client is visited throughout her pregnancy and the first two years of her child's life in accordance with the current standard NFP visit schedule or an alternative visit schedule agreed upon between the client and nurse.

DEFINITION

The client (and boyfriend, partner, and/or family when appropriate) is visited throughout her pregnancy and the first two years of her child's life. A schedule of visits with proposed content has been developed for the program to: match the expected stage of program delivery and public health issues; schedule assessments for maternal, or child health and development; build the therapeutic relationship; and support achievement of three program goals.

The standard schedule of visits is established as:

- Four weekly visits upon initial enrolment prenatally, then every other week until delivery
- Six weekly visits after infant birth, followed by visits every other week until the baby is 21 months of age
- Monthly visits from 21 through 24 months of age.

An Alternate Visit Schedule is defined as any planned visit schedule other than noted in the standard schedule. The mothers and children enrolled in NFP deserve the support that can be provided throughout the full length of the program. It is also often the case that a client's circumstances and needs will alter over the course of the program, becoming more, as well as less, acute over time.

Therefore, it is expected that the program will continue until the child's second birthday for all clients regardless of visit schedule. The schedule of visits is adjusted in collaboration with the client using the STAR Framework (or equivalent tool) as guidance in combination with the NFP nurse's judgment.

Studies led by the Prevention Research Center show improved client retention when NFP nurses adapt, increase, or reduce visit frequency to meet client needs, rather than automatically adhering to the recommended schedule. The process of purposefully adapting the visit schedule to meet specific client and child needs over the course of the program is now supported by the STAR framework.

RATIONALE

The three goals of the program are to:

1) Improve outcomes of pregnancy by helping women improve prenatal health
2) Improve children's health and development by helping parents provide sensitive & competent care giving
3) Improve parental life-course by helping parents develop vision for the future & plan subsequent pregnancies, complete education and find work.

- It is important to start visiting clients early in pregnancy for many reasons. During pregnancy, the NFP nurse has the opportunity to impact maternal behavior, which impacts fetal development. Some of the major influences on fetal development include substance use, smoking, and nutrition. By addressing these issues with the client, risks for adverse outcomes for mother and baby can be reduced (refer to CME # 4: *Client is enrolled in the program early in her pregnancy and receives her first home visit no later than the 28th week of pregnancy*).
- It is also important to continue to visit clients during their child's infancy. An infant's early experiences can program their reactions to their environment and later life experiences. During the infancy phase NFP nurses help parents learn to understand this process and develop competent parenting/caregiving skills. The goal is to reduce the potential for child abuse and neglect, help the child develop trusting relationships and maximize their physical, cognitive, social and emotional development.
- Visiting clients during their child's second year is important because during this time period children have a vast growing capacity in terms of language development and motor skills. Children also begin to become more independent at this age. It is important for parents to recognize these aspects of their child's development and be supportive as their child grows.
- The STAR framework is used to guide the NFP nurse to consider the specific strengths and risks within each family and review and discuss this within reflective supervision. This enables a thoughtful discussion with the client regarding her needs and can be used to negotiate and agree on an alternate schedule of visits when appropriate.

SUPPORTING EVIDENCE/LITERATURE

- Understanding just how much contact is necessary for a program to be successful is an issue that takes on increased relevance as the program model becomes more widely disseminated. Although most women received a lower number of visits than expected, there are reasons to be cautious about recommending a reduced home-visiting schedule. For one thing, the visitation schedule (roughly every other week for over two years) implies a commitment to the mothers that they may never have felt before from a service agency. An expectation that a home visitor is available for regular contact with the family over a long period of time, even if families do not use the home visitor to the maximum level recommended, can be a powerful tool for change. The effort that nurses made to connect with families may ultimately have been appreciated by families as a sign that the nurse cared enough about them to go out of her way to stay in contact with them. This is reflected in the high scores that mothers gave their nurses when rating them on their empathy and helpfulness (Olds & Korfmacher, 1998).
- A large analysis of data from the Healthy Families America (HFA) and the Hawaii Healthy Start (HHS) programs in the US indicate that if families only receive half of the intended content of visit, it makes it less likely that they will change behaviour (Gomby, 2007). We do not know equivocally the implications of delivering reduced content in NFP – this is an area that requires further evaluation.
- The evidence concerning the exact quantity of service intensity and timing is not entirely clear. Programs must have enough contact with families for the NFP nurse and family members to establish a trusting relationship and for the nurse to understand the families' needs. The program must provide enough visits with the family, so that the NFP nurse can help the family change behaviour and/or living conditions that interfere with parent and child health (Olds and Kitzman, 1993).
- Clients who had lower risks, and higher functioning in the Memphis trial had good outcomes despite a reduced visit schedule (Holland et.al., 2014).
- NFP nurses completed substantially more visits with women who had few coping resources:
    - Elmira - limited belief in their control over their life circumstances
    - Memphis – limited psychological resources, limited intellectual functioning, high levels of mental health symptoms, and limited control beliefs (Olds & Korfmacher, 1998)
- Attachment theory and results from the Memphis trial suggest that regular home visits during and after pregnancy allow nurses to explore the childrearing histories and beliefs of the mother (Olds et al., 1997).

- By discussing the beliefs about parenting with the NFP nurse, the mothers develop understanding about the motivations and communication methods of infants. This overall improves their level of responsive caregiving (Olds et al., 1997).
- Although NFP nurses have a set of structured Visit-to-Visit guidelines, they adapt them as needed to address the individual needs of families (O'Brien, 2005).[5]
- The emphasis on beginning the intervention in pregnancy affords an opportunity to help women avoid unhealthy behaviours (cigarette smoking, alcohol consumption, and use of illegal drugs) that have the potential to result in neurodevelopmental impairment of the developing fetus, a significant factor in childhood behavioural problems and the later emergence of antisocial and criminal behaviour (Olds et al., 1998).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

Alternate visit schedules are provided as one strategy in improving client retention in the NFP program as they enable clients to feel in control of their use of the program. Use of alternate schedules also enables nurses to exercise thoughtful caseload management as they prioritize clients with greater risks and difficulties when under pressure:

- This schedule applies when the NFP nurse and client have had a formal discussion at an earlier time point in which they have intentionally agreed to a modified visit schedule.
- Alternate visit schedules may include routine visits on a less frequent basis, or more frequent basis and should be based on the client's needs. The STAR Framework will guide this process.
- Decisions regarding alternate visit schedules for clients should be made in consultation with the NFP supervisor.
- Minor deviations from the routine visit schedule such as missed visits due to nurse or client related issues are to be expected and do not constitute an alternate visit schedule.

Close monitoring of client caseloads and the number of completed visits provided to each client is an important strategy to minimize client attrition. Supervisors should assess and guide program implementation through documentation of the NFP services received by clients. If there are patterns for clients who are disengaging, NFP nurses can discuss the

[5] Refer to CME #10 (NFP nurses, using professional knowledge, judgment and skill, utilize the Visit-to-Visit Guidelines; individualizing them to the strengths & risks of each family, and apportioning time appropriately across the six program domains) for details regarding the use of the Visit-to-Visit guidelines.

potential for disengagement with the Supervisor or the team in case conference. This involves the team when the nurse is reflecting on the situation.

Additional strategies for retaining clients in the program:

- Ensure careful review of program expectations in the initial assessment/first home visit, to make sure clients understand the time commitment (both frequency and length of participation).
- Nurses are very diligent and build excellent relationships. They are also persistent and resilient in the face of client ambivalence or potential disengagement from the program.
- Offer flexibility in the visit schedule, spacing out visits to meet the client's needs/schedule,
- i.e., taking a break and skipping a few visits and starting up again later.
- Flexibility in the time of the visit, after school, evenings, and weekends as possible.
- Flexibility in location for visit, parks, work, school (although focus should be on home visits whenever possible)
- Use of videos/social media to increase interest and keep younger clients engaged.
- Use of therapeutic texts and letters
- Group activities (to supplement the home visits) like picnics, preparing a meal together, crafts

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Common challenges:

- Clients are very mobile, move from house to house, and are hard to find.
- Clients sometimes initially don't want to commit for 2 ½ years.
- If a NFP nurse leaves, then the client might leave the program because they do not want a different nurse.
- Once the baby is born, the client doesn't see the need for the program.
- Clients going back to work/school, and it is hard to schedule time for visits.
- Clients rely on text messaging which creates challenges for NFP nurses to communicate effectively while complying with privacy legislation requirements.

All countries need to support NFP supervisors and nurses as well as NFP community mediators (or individuals in similar roles) to develop skills and strategies to address these issues. For example, in the United Kingdom a process has been developed to enable the client to have time to meet and negotiate her commitment to a new nurse, with the help of her existing nurse and program materials, where the exiting nurse is planning to leave her position.

The emphasis given to parents' perceived needs should not be interpreted to mean that parents who are hard to reach should be excluded or dropped from the program because they will not be helped. Many highly stressed and reluctant parents are at first, wary of accepting NFP nurses into their homes. These parents require persistent and sensitive efforts to establish a relationship so they can be in a better position to know whether the offered service is one that can be of benefit to them. Many public health home visiting programs have established policies that call for the termination of efforts if parents are chronically not at home, break appointments, and so on. These parents are often at greatest risk and, therefore, are in greatest need of the service. Within NFP, efforts should be continued to connect with them until they have explicitly indicated that they do not want the service (Olds and Kitzman, 1993).

PERMISSIBLE VARIATIONS

a) Flexibility

To meet the needs of the individual family, the NFP nurse is encouraged to adjust the frequency of visits and visit in the evening or on weekends. Rather than simply reducing the number of visits or the length of a program, recognizing that program elements, including frequency of visitation, can be modified to the needs of individual families remains important. Research trials completed by the PRC demonstrated increased client retention when clients were proactively introduced at enrolment to options in the visit schedule and client needs regarding visit schedule was proactively revisited at specified intervals. In the study, visit frequency was increased or decreased according to client needs. In the retention studies, when the standard schedule and visit options were offered proactively, 7% of the clients chose reduced frequency and 1% chose increased frequency. Reports from visitors and supervisors suggest that nurses were flexible in their approach, and that they reached informal understandings with the mothers. If visiting every other week was too difficult for families, then they would have in-

person contacts at least once per month, with telephone contacts as needed (Olds & Korfmacher, 1998, pgs 60-61).

A decreased schedule over the course of the program or a "vacation" from the program may be used to meet the client's needs and retain the client in the program when the nurse and client collaborate to establish an "Alternate Visit Schedule" and is approved by the NFP supervisor. Decisions about appropriate use of the "Alternate Visit Schedule" will be guided by an assessment of the client's risks and strengths as determined by the STAR Framework, nursing judgment and client requests. Higher functioning clients with lower risk are better candidates for reduced frequency, particularly if they are engaging in education and/or work. Clients that disengage despite very high risks may also be offered reduced visit frequency if it will retain them in the program and keep them engaged.

b) Caseload Management

In the retention studies, clients on the "Alternate Visit Schedule" did not exceed 10% of individual nurse caseloads (Holland et al., 2014). The nurse supervisor should be consulted on all decisions to move clients to an Alternate Visit Schedule to ensure that they are designed to meet client (versus nurse) needs. When clients are on reduced visit schedules, they may miss the window for certain routine nursing assessments or data points required by NFP. Some of the assessments can be completed on the phone while others require in-person assessment. Infrequent visits are even more important for connecting with the client, honouring the client's choices and responding to needs. Too much time devoted to "paperwork" may drive the client further away. When clients are "on vacation" or on a reduced visit schedule, NFP nurses can add additional clients to maintain a full caseload.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

The Home Visit form (or Alternate Visit) provides information about every visit that a NFP client receives including: the duration and location; participants' engagement; program content covered; whether the visit resulted in any referrals to government or community services, and plans for the next visit. This form supports program documentation and reporting on fidelity requirements.

Additionally, this form records the content and length of each visit which will help determine whether clients in the NFP program are receiving similar services to participants in the previous

randomized controlled trials.

BENCHMARK(S)

The previous version of this CME focused on benchmarks for number of visits i.e. “visit dosage” by completed program phase. However, based on what we now know from the retention studies, Dr. Olds is NOT supportive of using benchmarks related to number of completed visits given the importance of adapting the program to the needs of individual clients (personal communication to NFP International Team, 2017.02.15). However, it is important that during 1:1 and team reflective meetings, supervisors and NFP nurses reflect critically on the patterns of visits to clients both at the individual and aggregate level. They should also explore how the STAR Framework (or equivalent tool) is used to guide the decision-making regarding numbers of visits. The international NFP team are committed to work with international partners to reflect on patterns and trends of visits and will do so as part of the annual review process. As more knowledge and experience with using STAR (or equivalent tools) is gained across countries, more specific guidance will be provided in this area.

Element 8: NFP nurses and supervisors are registered nurses or midwives with a minimum of a baccalaureate /bachelor's degree.

DEFINITION

NFP requires that a registered nurse or registered midwife[6] deliver the program. Similarly, all NFP supervisors must also be registered nurses/midwives. A registered nurse/midwife is someone recognized as professionally licensed or regulated in either or both of these professional roles according to the policies of the NFP host country. All NFP nurses (defined as a registered nurse or midwife for the remainder of this document) should hold a minimum of a baccalaureate/bachelor's degree in nursing /midwifery. NFP nurses are usually hired by the site, which will have its own recruitment rules and processes. It is expected that license holders/National Units in each country will assure themselves that this process results in the employment of NFP nurses and supervisors with a valid registered professional license (nurse or midwife), baccalaureate/bachelor's degree, and the desired skills, knowledge and abilities required to successful deliver the NFP program. In addition to these academic qualifications, nurses must have personal qualities, values, and beliefs, that will ensure that she is a good fit with the spirit of NFP.

RATIONALE

A fundamental tenet of NFP is that it is a nurse-led program and nurses provide direct clinical care to women and children as part of their NFP nurse role. In most cultures, the public perceives registered nurses as holding high standards of ethical practice and honesty. In addition, nursing is widely respected as a caring profession that is knowledgeable and trustworthy, with strong academic preparation in the social, life and caring sciences. This gives NFP nurses credibility with families and helps make them highly acceptable as home visitors, welcomed into clients' homes and in the community. Although other professionals, such as social workers or psychologists, have some of the core competencies that are required for NFP practice, they do not have the necessary clinical competence to support clients in maternal and

[6] Some countries have direct-entry midwives (i.e. midwives with no pre-existing qualification in nursing ; this avenue to become a Midwife has now superseded the requirement to be a registered nurse prior to undertaking Midwifery education and training in many countries) please refer to section "Variations and challenges across countries"

child health. In addition, research has not been undertaken to assess the impact of these professionals within NFP.

Pregnant women have many questions and concerns about their own and the baby's health, and value the expertise that registered nurses/midwives bring during this critical life transition. The educational background and sound judgment of registered nurses/midwives make them ideally prepared to conduct strengths and risks focused assessments and to deliver individualized NFP interventions to families.

Working with disadvantaged families requires skill, professionalism and sensitivity that are characteristic to nurses. The NFP nurse must integrate the program interventions and maintain their professional standards of practice in order to develop/maintain therapeutic relationships with appropriate boundaries and achieve program outcomes. NFP requires that nurses use their extensive clinical knowledge and skills to deliver a comprehensive, holistic service to clients and their families. It has been established that unqualified staff (e.g. paraprofessionals/lay home visitors) working within the program are unable to achieve the same level of impact for families (Olds et al., 2002).

At a minimum, a baccalaureate or bachelor's degree is required because of the complexity of the role, the level of critical thinking required, and the expected level of autonomy in practice and decision- making in ambiguous situations. For NFP nurse supervisors, a Master's degree is preferred, as this will support the necessary analytical approach and leadership required in this role.

SUPPORTING EVIDENCE/LITERATURE

- Nurses have formal training in women's and children's health and the ability to manage complex clinical situations often presented by at risk families (Olds et al., 1999; Olds et al., 2003, Olds, 2006, Olds 2007).
- Nurses have increased credibility and are less threatening to clients compared to social workers (Jack et al., 2012).
- In the Denver trial, paraprofessionals received exactly the same education as the NFP nurses and in addition received twice the amount of supervision. Compared to the nurses, the paraprofessionals completed fewer visits and had a higher turnover rate. The paraprofessionals produced small effects that rarely achieved statistical or clinical

significance while NFP nurses produced significant effects on a wide range of maternal and child outcomes (Olds et al., 2002).

- Given the consistency of significant effects for nurse-visited women compared to counterparts in the comparison groups across the trials, the NFP is disseminated only to sites that agree to employ nurses (O'Brien 2005).
- The ability of nurses to address issues of concerns during the antenatal and postnatal period, including the infant's health, often provide nurses with increased credibility and persuasive power in the eyes of family members. By teaching mothers and family members to identify emerging health problems and to use the health-care system, nurses enhance their clinical influence through the early detection and treatment of disorders. (Olds et al., 2003; Olds, 2007).
- Nurses are already educated in the basics of pregnancy, early childhood development, and therapeutic communication, and mothers are likely to trust them (Dawley et al., 2007).
- It is our clinical experience that mothers are particularly concerned about their physical health during pregnancy and the physical health of their newborns. Consequently, they especially value nurses as home visitors because of nurses' abilities to address their concerns about health (Olds and Kitzman, 1993).
- The more successful home visiting programs contain the following: (1) a focus on families at greater need for the service, (2) the use of nurses who begin during pregnancy and follow the family at least through the second year of the child's life, (3) the promotion of positive health-related behaviours and qualities of infant care giving, AND (4) provisions to reduce family stress by improving the social and physical environments in which families live (Olds 1992).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

The careful selection and recruitment of NFP nurses is a very important element of high-quality implementation of the program. Various countries have developed a number of innovative ways to identify and select staff, including the involvement of NFP clients (or representatives from the community being served where the program has yet to be established) and role-play of scenarios to elicit the usual response of candidates to challenging situations.

It is recommended that the implementing agencies/sites of countries implementing NFP for the first time find collaborative ways to work with the employing organizations to find and select

NFP nurses, building on the learning from other countries. This will enable the development and spread of 'best practices' in this important area over time.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Because the educational requirements and curricula for nursing and midwifery vary between countries, it is important that Clinical Leaders in each country understand the requirements of the role and consider the educational requirements of the CME carefully.

It is rarely the case that a NFP nurse begins in the program with all the required background knowledge and skill required in relation to pregnancy and child development. Nevertheless, experience across countries suggests that pre-existing proficiency within these fields will enhance the strength and speed of the development of nurse competence in NFP. The NFP nurse's background, pre-existing knowledge, skills and attitude (to ensure overall optimal fit with the program) should always be assessed as part of her recruitment and induction to the role. A tailored program of learning in relation to these background areas should be established locally (see also *CME #9: NFP nurses and supervisors develop the core NFP competencies by completing the required NFP educational curricula and participating in on-going learning activities*). In some countries, nurse education is differentiated between physical and mental health specialization at an early stage. Registered nurses who have never worked in the field of

maternal-child health may have difficulty successfully transitioning to the NFP nurse role and it is recommended that they should not be considered for the program unless additional individualized orientation can be provided that includes clinical content in this area.

If the country's Clinical Lead and license holder are satisfied that the educational standards for direct- entry midwives in their country are equivalent to nursing and the curriculum contains sufficient relevant content in maternal public health and health promotion, they may take the decision to include recruitment of such practitioners to the program. However, all staff undertaking NFP home visits should be known as NFP nurses (or equivalent term used in that country) and Clinical Leads should ensure that this expectation is allowed within national registration/ licensing requirements. In line with best practice, all nurses delivering the program should ensure that the client is aware of the nurses' professional background. The combination of a variety of professional backgrounds in a team, including Midwives, is reported by a number of countries to enhance the delivery of care to families through the richness of shared skills.

PERMISSIBLE VARIATIONS

In countries where baccalaureate level nurse education is at a formative stage, it may be very difficult to recruit nurses with this level of education. In this case, a temporary variance to the CME may be sought and a transitional plan made, to enable the program to be implemented using nurses with a lower level of education. In this instance, the NFP education program would be enhanced/adapted to address any identified knowledge and skill deficits the nurse may have. This would need to pay especial attention to child and public health, critical thinking, research and evidence-based practice. Over time it is expected that these countries will work with others in their national system to find ways to improve the educational level of NFP nurses.

Some countries have worked with universities to create routes that enable NFP nurses to gain academic credit for their NFP education and it may be possible to support nurses to transition to master's level educational qualifications in this way.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

Each country should develop a process for ensuring that this CME is understood and adhered to by implementing agencies. License holders for each country are expected to confirm that the CME is being adhered to as part of the annual review report to UCD.

BENCHMARK(S)

All (100%) of NFP nurses are registered nurses or registered midwives with a minimum of a baccalaureate /bachelor's degree.

Element 9: NFP nurses and supervisors develop the core NFP competencies by completing the required NFP educational curricula and participating in on-going learning activities.

DEFINITION

NFP educational curricula (for NFP nurses and supervisors[7]) are devised by Clinical Leads in each country, and agreed with their International NFP consultant, based on the international guidance.

In countries where a variance has been granted to incorporate a 'family partnership worker', 'community mediator' or similar role, an NFP specific educational curriculum will need to be developed by the country for this role.

NFP education curriculum should incorporate:

- *Conceptual and intellectual knowledge* regarding the program theories, research base, conceptual model and use of Core Model Elements and quality improvement in replication.
- *Sense-making* i.e., reflection on the program model in relation to the learner's own experience and nursing practice foundations, consideration of the application of the model in practice and development of a coherent clinical model of practice, integrating the various inter-related elements [e.g., the program domains, use of dyadic assessment, PIPE, Motivational Interviewing skills, and the Strengths and Risks Framework (STAR) etc.]
- *Skills development.* This is a significant part of the NFP education program and needs to be intentional using multi-staged, multi-faceted and multi-modal methods. This learning is best done face to face with opportunities for demonstration, practice and feedback.

International NFP nurse core competencies have been developed[8] and each country's NFP educational curricula should reflect these. The NFP curricula should include content designed to prepare nurses and supervisors for their roles, as well as activities developed to sustain and

[7] In countries where a variance has been granted to incorporate a 'family partnership worker', 'community mediator' or similar role, an NFP specific educational curriculum will need to be developed by the country for this role

[8] See: guidance document Nurse-Family Partnership Core Competencies

maintain competence over the longer term. The NFP supervisor is responsible for ensuring that the NFP nurses on her team, achieve and maintain competency in their role. The NFP supervisor should therefore develop mechanisms for actively assessing competence over time, supported by processes put into place by the Clinical Lead for the country. In addition, Clinical Leads should assure themselves that processes are in place for the assessment of supervisor competence.

NFP supervisor and nurse education should be seen as a continuous process where team learning activities, reflective supervision and reflection on Accompanied Home Visits all contribute to the ongoing development and maintenance of competence in NFP roles. Clinical Leads should model these approaches and support continuous learning by enquiring about clinical challenges nurses are encountering, providing materials for team learning activities and highlighting and discussing challenges with the international NFP community.

RATIONALE

NFP nurses need to apply the theoretical framework that underpins the program, emphasizing self-efficacy, human ecology, and attachment theories through current clinical methods, focussing on the achievement of the program goals. In order to do this with fidelity, they need specific NFP education that enables them to understand the theoretical framework and apply the specific expected clinical methods in a range of family contexts and circumstances. NFP supervisors need, in addition, a variety of strategic competencies, including leadership and management as well as those for supporting reflective supervision. The NFP educational curricula developed within each country are supplemented by the program expectations of observation in practice (within accompanied home visits) regular reflective supervision and team-based learning (including peer coaching) to embed and sustain understanding and skills over time (see also Core Model Element 11). In addition, it is expected that timely reports on program implementation, generated from the data collected by nurses, are shared with NFP teams, and individual nurses, and used is the foundation for continuous quality improvement.

NFP nurses are expected to manage and take responsibility for a wide range of nursing assessments and interventions as part of their NFP role, and this requires a high level of flexibility, skill and autonomous practice. For this reason, nurses need to be carefully selected and consideration given to the additional tailored education/ learning program that they may require in order to be able to practice at this advanced level (see also Core Model Element 8).

Education, training and coaching of practitioners are key to the successful implementation of evidence- based programs (Webster-Stratton & Hammond, 1997; Fixsen et al., 2005) and education curricula should be adapted and changed over time to accommodate evaluation from participants, findings of the replication data reports and new innovations to the program.

SUPPORTING EVIDENCE/LITERATURE

- The most successful programs tend to devote enormous efforts to initial training of staff and maintenance of intervention fidelity over time (Webster-Stratton & Hammond, 1997).
- Key components of staff training for the implementation of evidence-based programs are; knowledge of the program (history, theories, philosophies and rationale) and expected practices, demonstrations of key skills, and behaviour rehearsal to practice, and gain feedback on, those skills. (Fixsen et al., 2005)
- In the US, education of the NFP nurses & supervisors occurs over the course of a year and involves face-to-face interactive sessions, as well as online modules and self-paced tutorials that nurses complete at their worksite. Ongoing consultation with training staff on issues encountered in the course of program implementation is available by telephone and through a list serve. Education of program staff and the provision of home Visit-to-Visit guidelines maximize the likelihood that program implementation will utilize clinical interventions with families comparable to those tested in the trials (O'Brien, 2005)
- The NFP has adopted a competency-based approach in its training of program staff at replication sites. The clear delineation of behavioral criteria for assessing the ongoing development of NFP Nurses' clinical competence in implementing the program model should facilitate quality improvement activities with sites (O'Brien, 2005)
- This CME focuses of facilitating the NFP nurse's learning and development in the practice of new methods, skills and approaches to working enhances practice (Andrews and Oxley, 2016).
- NFP is innovative, and its effective implementation requires significant new learning for staff. The development of a new role is an iterative process, requiring action and reflection (Andrews, 2016).

- In the Elmira trial the presence of domestic violence limited the effectiveness of NFP to reduce incidence of child abuse and neglect (Eckenrode et al., 2000), emphasizing the importance of NHVs to be able to address this issue skillfully.
- Home visitors are not always willing or able to identify and respond to maternal depression, domestic violence, and substance abuse—the very risk factors that they must address to prevent child abuse and neglect. Home visitors also often feel ill-prepared to address risk factors for child maltreatment (Gomby, 2007).
- In the early US replication sites, it was found that NFP nurses were spending excessive visit time on health-related domains of family functioning and not enough on maternal role and life course development. NFP implementers realized that, nurses new to NFP often have a tendency to revert to a focus on physical health as the domain of family functioning in which the nurse felt most comfortable and experienced. This led to a greater focus during NFP core education on experiential learning exercises to help new home visitors become confident using the intervention tools related to parent–infant attachment and the maternal role (Hill & Olds, 2013).
- Experienced NFP nurses and supervisors benefit from refresher courses on fundamental aspects of the intervention, incentives and recognition for particularly good work, reminders that the hardest- to-serve families are generally those who benefit most in the long run, and time as a team to learn together and continue growing. Program leaders may need to be reminded that investing in the mental health and sustained performance of frontline staff may well be the most important investment they can make in keeping their program producing the outcomes that their funders are paying for (Hill & Olds, 2013).
- Data from the US retention studies suggest that how to adapt the NFP to families' individual needs is a critical aspect of intervention fidelity itself, which had until then been insufficiently addressed in nurses' learning the model. Core education now has a greater emphasis on motivational
- interviewing (Ingoldsby et al., 2013).
- Motivational interviewing training is best when it incorporates a focus on the underlying philosophy and principles of motivational interviewing rather than solely the technical aspects of asking questions and listening, adequate duration to allow embedding of skills, opportunities to practice skills through simulation and role play rather than relying solely on self-study or written resources and opportunities for ongoing feedback and supervision (The Health Foundation, 2011).
- Many NFP clients will have experienced a range of types of trauma across the lifespan. The traumatic impacts of exposure to family violence (child maltreatment, intimate partner violence [IPV] and children's exposure to IPV), have long-term effects, whether

the violence itself is ongoing or in the past. When serving people who have experienced family violence, systems and providers that lack understanding of its complex and lasting impacts risk causing further harm, therefore NFP nurses need to be highly skilled in this area (Varcoe et.al., 2016; Manitoba Trauma and Information and Education Centre (2016).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

A number of elements support the development of high- quality educational curricula, including; a staged program of educational events, use of a variety of learning approaches and methods, including reflection on cases, skills practice and demonstrations of skills and use of skilled and authentic educators (including those drawn from NFP practice). Regular observation of NFP nurses during home visits, providing reflective feedback, will support the implementation of expected competencies in practice and use of data reports to guide quality improvements. Countries may wish to enhance their NFP education by adding in additional content such as the principles of Trauma & Violence Informed Care, Cultural Respect, etc.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

As pre-existing nurse and supervisor education within individual countries varies, it is expected that the content of the educational curricula will vary also. Educational curricula and methods are expected to be developed in accordance with educational evidence and adapted for context, including country geography and stage of program replication.

Where “community mediators” (or similar roles) have been incorporated into a country’s NFP program, care and attention should be given to the clear articulation of their role and expected competence. It is likely, based on experience to date, that parts of the NFP nurse educational curriculum will also be relevant to this role, but that additional education specific for the role will also need to be developed.

PERMISSIBLE VARIATIONS

It is expected that there will be variations in the educational programs needed within each country to ensure that NFP nurses and supervisors achieve the expected level of competence for program delivery.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

The National Units (or equivalents) in all countries should monitor attendance at, and completion of, the core NFP educational curricula. Reporting of the achievement of core NFP competencies by nurses and supervisors is an important element of the International Annual Review process and therefore Clinical Leads should have some assurance processes in place to ensure that they can confidently assess levels of nurse competence within their country.

BENCHMARK(S)

All (100%) of NFP nurses and supervisors will complete the required NFP educational curricula and participate in on-going learning activities. Each country will determine the specific content, teaching methods used, and timing of the components. Counties will also set their own policies for required updating and "retraining" when nurses/supervisors leave and then return to the NFP program.

Element 10: NFP nurses, using professional knowledge, judgment and skill, utilize the Visit-to-Visit Guidelines; individualizing them to the strengths & risks of each family, and apportioning time appropriately across the six program domains.

DEFINITION

The purpose of the NFP Visit-to-Visit (V2V) Guidelines is; to maintain consistency in implementing the NFP model, to ensure that comprehensive and essential information is introduced to clients and to support reflection and goal setting with clients. They provide the flexibility needed to meet the clients' needs and desires as well as program goals. In addition, they provide a framework that helps NFP nurses and clients avoid focusing solely on the day-to-day challenges the client may be facing and instead focus on potential solutions and introduce other issues of relevance and importance through an agenda matching process. The format of the V2V Guidelines offers NFP nurses a guide to explore the content topics most relevant to clients. They also introduce content that supports clients in developing the knowledge, skills and self-efficacy to achieve the three NFP program goals of:

1) Improved pregnancy outcomes through the practice of good health-related behaviours
2) Improved child health and development
3) Improved economic self-sufficiency

The Strengths and Risks Assessment (STAR) Framework (or equivalent) is the approach by which nurse assessments in the Nurse-Family Partnership (NFP) program are used to guide program delivery. The six NFP program domains provide a system and structure for delivering a comprehensive nursing approach as NFP nurses complete the nursing process in their assessment, planning, interventions, and evaluation of client care. The content of the International V2V Guidelines are organized using the first five program domains (Health and Human Services is imbedded in all the other domains):

1. Personal Health (Health Maintenance Practices; Nutrition and Exercise; Substance Use; Mental Health)
2. Environmental Health (Home; Work; School and Neighborhood)
3. Life Course (Family Planning; Education and Livelihood
4. Maternal Role (Mothering Role; Physical Care; Behavioural and Emotional Care of Child)
5. Friends & Family (Personal Network Relationships; Assistance with Childcare)

6. Health and Human services (linking families with needed referrals and services) (Dawley et al., 2007)

Attention is paid to aspects of each of the domains within all home visits, with the proportion of time spent on each topic varying to enable focus on expected outcomes of each phase of the program.

RATIONALE

- NFP nurses carry out three major activities:
    - Promote improvements in women's (and other family members) behaviours thought to affect pregnancy outcomes, the health and development of the child, and parents' life course
    - Help women build supportive relationships with family members and friends
    - Link women with their family members with other needed health and human services.
- The NFP program must resonate with and meet the clients' needs and aspirations. The V2V Guidelines include tools to help NFP nurses guide clients to consider changes that could improve life for themselves and their children. Menus, choice sheets, scaling questions, open-ended questions, and a goal setting facilitators are some of the techniques/resources imbedded in the V2V Guidelines.
- The home visit structure built into NFP, builds trust and continuity over time, and strengthens the therapeutic relationship between the nurse and her clients. NFP clients learn that visits with their NFP nurse are predictable and client-centered. When the client knows what patterns and routines to expect, she will feel safer in the relationship.
- STAR provides a systematic framework for bringing together the outcomes of regular assessments completed across the domains of the NFP program, with nurse professional judgement regarding client and family risks, strengths and readiness to change. The strengths and risks identified through STAR directly influence clients' abilities to achieve the three NFP programs goals (e.g. substance use during pregnancy, parental care of the child or maternal education). In some cases, these risks create challenges for clients because of their indirect influence, such as homelessness or economic adversity. The STAR Framework is designed to help NFP nurses synthesize these risks and corresponding strengths, and set priorities for intervention.

- The amount of time that should be spent on different content areas are dependent upon which phase of the NFP program the client is in (pregnancy, infancy, toddler). Suggested content areas for each visit enable the nurse to keep this in mind as they plan and individualize visit contents.

SUPPORTING EVIDENCE/LITERATURE

- In an analysis of 5,433 NFP participants from the United States after the three trials indicated that while the proportion of time spent on the different program domains generally met NFP objectives, NFP nurses tended to underemphasize maternal role development during the infancy and toddler phases of the program (O'Brien, 2005)
- NFP nurses follow detailed visit-to-visit guidelines whose content reflects the challenges parents are likely to confront during specific stages of pregnancy and the first two years of the child's life. Specific assessments are made of maternal, child, and family functioning that corresponds to these developmental stages, and specific activities are recommended to address problems and strengths identified through the assessments. PIPE (Partners in Parenting Education) was introduced during the Denver trial as a way of helping parents gain an empathetic appreciation for their infants' needs and ways of engaging their infants in joyful, regulated play and interaction through simple interactive games and observations of their babies. (Olds et al., 2003; Olds, 2007).
- Within each domain, NFP nurses focus on understanding the client's circumstances, usual practices and views whilst also exposing her to new information and a structure within which to explore change. The assessment of the client's personal and situational strengths and protective factors, as well as her challenges and any risks faced by her or her child, is supported by a number of validated tools and measures, combined with the nurse's clinical judgement and experience (Rowe, 2016).
- Central to the successful implementation of the NFP is the establishment of a trusting relationship with the family, referred to as core ingredients of the relationship: caring; ongoing commitment; active involvement. of the family, consideration of family's culture and life situation; and harmony or congruence among the family's values, goals for change, and behaviours (O'Brien & Baca, 1997; O'Brien, 2005).
- NFP nurses utilize a strength-based approach directed toward optimizing the family's sense of efficacy. Four strategies intrinsic to this strength-based approach are: (a) listening to what families want and starting there; (b) believing that families are the experts on their own lives and are capable of making choices to attain desired goals; (c)

expanding families' visions of options; and (d) helping families set small and reasonable goals that when attained contribute to their growing sense of efficacy (O'Brien & Baca, 1997; O'Brien 2005).

- One of the criticisms sometimes made by those outside the NFP program, who are not familiar with its details, is that it is overly specific and prescriptive. However, what the critics fail to appreciate is that within the structure provided by the visit-by-visit guidelines, NFP nurses exercise a high level of discretion in what to do when with the families they serve. If, for example, a visit guideline calls for discussing breast-feeding with the mother, and the NFP nurse sees that the mother is not ready for that discussion, then the NFP Nurse does not force the issue, but looks for a more opportune time in the near future to return to it. The structure helps the NFP Nurse remain focused, but it does not dictate her actions. In essence, the detailed structure of the NFP is simply the way in which nurses develop the expertise to respond effectively to the often complex and changing life circumstances of young, low-income families (Olds et al., 2003).
- The NFP nurses focus on six domains during their home visits: 1) personal health, 2) environmental health, 3) friends and family, 4) maternal role, 5) use of health care and human services, and 6) maternal life course development (which encompasses planning for future pregnancies, education, and employment). (Dawley et al., 2007)
- Encouraging NFP nurses to:
    - Directly address parents' ambivalence about participation in the program
    - Offer flexible scheduling and content to match their needs

  Shows promise as a means of reducing participant attrition and increasing completed home visits (Ingoldsby et al., 2013)

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

- NFP supervisors and nurses should review/reflect on the data related to time spent on content domains on a regular basis, both in individual supervision, and as a team.
- Supporting NFP nurses to skilfully promote adaptation of program dosage and content to meet families' needs improves participant retention and completed home visits (Ingoldsby et al., 2013; Olds et al., 2015).
- When evaluating effective home visiting models, the aspect of program implementation that matters the most are:

- The delivery of program content is aligned with program goals
- The home visitor addresses the behaviours or risk factors associated with the outcome the program seeks to change (Gomby, 2007).
- It is important for nurses to have a good understanding of the culture of poverty and to acknowledge and respect cultural differences and family traditions of the families they serve. This kind of understanding supports the individualizing of the program to meet client's needs. Implementing agencies/sites have reported the importance of cultural and linguistic competence among their staff. It is important to provide this kind of support and competency training as part of staff orientation and ongoing professional development.
- In order to make the content resonate with clients, more user-friendly domain names have been introduced in the NFP International Visit-to-Visit (V2V) Guidelines:

Original	Revised
Personal Health	My Health
Maternal Role	My Child *
Environmental Health	My Home
Family & Friends	My Family & Friends
Life Course Development Health & Human Services	My Life

*These can be combined together as "My Child and Me" if desired

- Completion of STAR facilitates a holistic review of client and child progress in relation to program goals and enables NFP nurses to make appropriate judgements regarding the alignment of program inputs with client needs and desires. This includes both visit dosage and specific content, thereby increasing program efficiency and effectiveness.
- Use of STAR enables NFP nurses to focus on the client's stage of behavioural change and view this as a strength that can be enhanced through their interaction with the nurse and the program. Deep reflection, high quality analysis and decision-making is enhanced by reviewing STAR within reflective supervision and during case conferences.
- In order to agenda match, the NFP nurse has the flexibility to move topics included in the V2V Guidelines from one visit to another especially for clients who enter the program later in pregnancy (e.g. 26 weeks gestation). The NFP nurse may need to rearrange visit content in order to cover the essentials for a given client prior to the birth.
- When planned in advance of the visit, reapportioning visit content or covering a topic at a time other than when it appears in the V2V Guidelines because a client expresses interest in the topic need not be viewed as not following the program plan.

- During many visits, the NFP nurse may not cover all the planned material.
- However, the NFP nurse may find that on some visits clients are so distracted by an immediate crisis that much of the plans for the visit has to be set aside in order to help the client problem- solve how to handle the crisis (e.g. utilities have been turned off due to lack of payment, or there has been a recent incident of intimate partner violence and client is asking for help on how to handle it).
- When this agenda matching within a visit occurs, the nurse will need to estimate the percentage of time spent following the plans that had been established for the visit versus that spent dealing with a crisis or unexpected need of the client.

The goal is that planned content does not take a back seat to crisis the majority of the time, since the planned content is that which is expected to provide the long-term benefits of the program. It is important to remember that some clients will frequently have crises and this may detract from undertaking any of the program content. Part of the NFP program is to help clients regulate and problem solve, so the NFP nurse will need to decide when to respond to regular crises, and when to encourage the client with some of the established program which will help the client deal with crises in the longer term. Reflection on patterns of time spent following planned visit content will help to identify nurses who are falling into a pattern of 'following' the client's agenda rather than actively matching her professional assessment of client needs with the client's requests, so that both proactive and reactive elements are addressed within visits to achieve the program goals.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

There may be variations regarding time spent on content domains between individuals, amongst teams, and amongst sites/implementing agencies, and/or countries. Some of the variations may appropriately reflect local contextual issues. Other changes may reflect individual NFP nurse/team practice styles, which should be explored during reflective supervision or team patterns, which should be explored as part of the quality improvement approaches developed in each country.

Reviewing the apportioning of time among the content domains is an opportunity for the team to consider the needs of their clients, their own skill and background, and their own professional needs to grow and meet the needs of their clients. Review of data reports identifying the percentage of planned content covered within visits enables exploration of the balance

between use of staged V2V guideline contents with responsiveness to the client's current challenges with nurses and teams.

Reviewing this data with implementing agencies/sites is a great opportunity for them to learn more about the content of their team's practice, and should not be used to "grade" them.

PERMISSIBLE VARIATIONS

NFP nurse assessment skills are crucial in the application of the NFP model to individual client circumstances. Home visit plans may be altered or revised as NFP nurses find necessary and appropriate, based on their professional knowledge, judgment and skill and the achievement of the program goals. For example, when enrolling a client early the suggested content for the first visit as outlined in the NFP Guidelines may be dispersed among several visits in order to fill the additional visits with even amounts of program content. Additionally, time spent in the domains on a given visit may be adjusted based on the client's needs.

During the US trials, nurses were allowed to adapt the frequency of visitation to the needs of the family. They could increase visitation during times of crisis, which women with lower mastery over their lives were more likely to have experienced. It appears that nurses were able to make an extra effort to help those mothers who needed external reinforcement or motivation in their attempts to make appropriate decisions in crisis situations, while visiting those with fewer needs less frequently. The mothers in Elmira with lower feelings of control did not appear to be proactive in seeking contact; they actually spent less time on the phone in self-initiated calls to the nurse. It appears, instead, that the nurses perceived the increased need for visitation by these mothers and responded with greater effort to see that the protocol was met with this particular group. (Olds and Korfmacher, 1998, page 33)

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

The Home Visit form (or Alternate Visit) provides information about every visit that a NFP client receives including: the duration and location; participants' engagement; program content covered; whether the visit resulted in any referrals to government or community services, and

plans for the next visit. This form supports program documentation and reporting on fidelity requirements.

Additionally, this form records the content and length of each visit which will help determine whether clients in the NFP program are receiving similar services to participants in the previous RCTs.

BENCHMARK(S)

An analysis of 5,433 NFP participants from the United States after the three trials indicated the average percent of time spent during home visits on each domain by program phase (O'Brien 2005).

Domains	Pregnancy	Infancy	Toddler
Personal Health (My Health)	35-40%	14-20%	10-15%
Maternal Role (My Child and Me)	23-25%	45-50%	40-45%
Environmental Health (My Home)	5-7%	7-10%	7-10%
My Family & Friends (Family & Friends)	10-15%	10-15%	10-15%
Life Course Development (My Life)	10-15%	10-15%	18-20%
Health and Human Services *	Included in the above domains		
Total	100%	100%	100%

*Note: Health & Human Services is addressed within each of the other domains so does not have a separate benchmark.

The rationale for the variation in in time spent by program phase is as follows:

Domains	Rationale for Variation in Time Spent on Each Domain by Program Phase

Personal Health (My Health)	• There is a larger focus on Personal Health during pregnancy as this phase of the program is specifically focused on achieving the program goal "Improve pregnancy outcomes (particularly prematurity and low birth weight)" • The focus shifts to the infant in the other two program phases with gradually less emphasis in the toddler phase
Maternal Role (My Child and Me)	• There is a much larger focus on maternal role during infancy due to the focus on developing effective parenting /caregiving skills. • Maternal role also encompasses the parenting/caregiving role of fathers where they are included in visits • There is a small decrease in time spent on maternal role during the toddler phase so that there is time to focus on self-efficacy for the mom such as personal goal setting, completing school, seeking employment etc. • Care of the child, including clinic visits and illness, is documented under Maternal Role
Environmental Health (My Home)	• The goal is to spend about 5-7% of time during pregnancy in the Environmental Health domain • After the baby is born, there is more emphasis on Environmental Health to encompass child safety issues • There should be a consistent emphasis in both the infancy and toddler phases
My Family & Friends (Family & Friends)	• The time spent is consistent across all program phases
Life Course Development (My Life)	• The emphasis on Life Course Development increases after the birth of the baby and after the client has had time to build parenting skills

It is not expected that NFP nurses will work within these parameters at every visit, indeed it would be a cause for concern if they were, as visit content needs to be adjusted according to current client needs and the STAR framework (or equivalent tool) assessment. However, reviewing domain coverage over a number of visits is a helpful guide and check back for NFP nurses to ensure that they are prioritizing the important domain areas primarily impacting on outcome achievement during each program phase.

Element 11: NFP nurses and supervisors apply the theoretical framework that underpins the program (self-efficacy, human ecology, and attachment theories) to guide their clinical work and achievement of the three NFP goals.

DEFINITION

The underlying theories are the basis for the NFP Program. The clinical methods that are presented in the education sessions and promoted in the NFP Visit-to-Visit Guidelines are an expression of these theories.

RATIONALE

Theories are a set of interrelated concepts that give a systematic view of a phenomenon (an observable fact or event) that is explanatory & predictive in nature. Theories are composed of: concepts, definitions, models, and propositions; and are based on assumptions. They are derived through two principal methods: deductive and inductive reasoning (Current Nursing 2012).

There are three theories that provide a framework for practice in the NFP:

1. Human Ecology (Bronfenbrenner, 1994)
2. Attachment (Bowlby, 1969, 1977, 1992; Bretherton 1992)
3. Self-Efficacy (Bandura, 1977, 1998)

The three theories that serve as the foundation for NFP, complement one another and have been a part of the model since the original trials. The theories provided a framework that guided the development of the NFP Visit-to-Visit Guidelines, NFP Nurse and Supervisor Competencies, and NFP core education content (Olds et al., 2003). They are a constant thread throughout the model and NFP clinical nursing practice. Applying these theories to everyday practice helps NFP nurses and supervisors ensure they are implementing the model successfully.

Human Ecology Theory

Bronfenbrenner's theory of human ecology emphasizes the importance of social contexts as influences on human development. Characteristics of families, social networks, neighbourhoods, communities, cultures and interrelations among these structures influence parents' care of their infants. Human ecology focuses the nurse's attention on the social and material context in which mother and child are living. What is the quality of the mother's relationship with her husband or boyfriend, with her own mother and other important people in her life? These social relationships are profound influences on the client's adjustment to her pregnancy and care of the child. Human ecology also focuses on the importance of changes in roles – such as young women becoming parents.

Human ecology theory emphasizes that children's development is influenced by how their parents care for them, and that in turn is influenced by characteristics of their families, social networks, neighbourhoods, communities, and the integration among them (Bronfenbrenner, 1979). Drawing for this theory, NFP nurses attempt to enhance the material and social environment of the family by involving other family members, especially fathers, in the home visits, and by linking families with needed health and human services (Olds, 2007). The implementation of this theory during pregnancy and the first two years of the child's life presents opportunities for significant positive changes in behaviour.

Attachment Theory

Historically, NFP also owes much to John Bowlby's Theory of Attachment. This theory holds that human beings have evolved a repertoire of behaviours that promote interaction between caregivers and their infants, and that these behaviours tend to keep specific caregivers in proximity to defenceless youngsters, thus promoting their survival, especially in emergencies (Olds et al., 1999). Attachment theory also hypothesizes that infants are biologically predisposed to seek proximity to specific caregivers in times of stress, illness, or fatigue in order to promote survival (Bowlby, 1969). Children's trust in their world and their later capacity for empathy and responsiveness to their own children once they become parents is influenced by the degree to which they formed attachment with a caring, responsive, and sensitive adult when they were growing up, which affects their internal representations of themselves and their relations with others (Ainsworth & Bowlby, 1991). First attachments are usually formed by seven months, attachments are formed to only a few persons; and virtually all infants become attached. Children with secure attachments are the most resilient and have the lowest risk for poor social emotional outcomes (Main, 1996).

Attachment theory focuses the nurse's attention on the importance of a mother's awareness and attitudes towards her baby during pregnancy and the development of secure attachments between the baby and the baby's consistent caregivers. NFP explicitly promotes sensitive, responsive and engaged caregiving in the early years of the child's life through the use of dyadic assessments (NCAST Feeding and Teaching Scales and more recently DANCE) and Partners in Parenting Education (PIPE) (Dolezol Buckingham & Butterfield, 2002)[9]. In addition, NFP nurses help mothers and other caregivers review their own childrearing histories and make decisions about how they themselves were cared for as children. The NFP nurses also seek to develop an empathetic and trusting relationship with the mother and other family members because experience in such a relationship is expected to help the women eventually trust others and to promote more sensitive and empathic care of their children. To the extent that the NFP nurse's relationship with parents (primarily the mother) is characterized by deep appreciation for mothers' needs and assistance in helping mothers gain control over a host of challenges that are of concern to them, the NFP nurse will demonstrate the essence of an effective attachment relationship. In theory, this will make it easier for parents to understand what the program is designed to accomplish with respect to the care of their infants (Olds et al., 1997; Olds, 2007)

Self-Efficacy Theory

Self-Efficacy Theory, which is part of Social Cognitive Theory, provides a useful framework for promoting women's health-related behaviour during pregnancy, care of their children, and personal development. According to Bandura (1997), differences in motivation, behaviour, and persistence in efforts to change a wide range of social behaviours are a function of individuals' beliefs about the connection between their efforts and their desired results. According to this view, cognitive processes play a central role in the acquisition and retention of new behaviour patterns. Individuals' perceptions of self-efficacy can influence their choice of activities and settings and can determine how much effort they will put forth in the face of obstacles (Olds et al., 1999).

Self-efficacy theory provides a useful framework for understanding how women make decisions about their health-related behaviours during pregnancy, the care of their children, and their own personal development. This theory posits that individuals choose those behaviours that they believe will lead to a given outcome and that they can carry out successfully (Bandura, 1977). The NFP curriculum is designed to help women understand what is known about the

[9] The guidance document - Use of Dyadic Assessments in NFP - 2016 provides guidance on the principles and processes to guide non-English speaking countries who may not be able to utilize DANCE/NCAST, as they determine the alternative measures that they will integrate into NFP within their context.

influence of particular behaviours on their own health and on the health & development of the babies. The program guidelines are updated periodically to reflect the most recent evidence regarding family and child health. NFP nurses help parents establish realistic goals and small achievable objectives that, once accomplished, increase parent's reservoir of successful experiences. These successes increase their confidence in taking on larger challenges (Olds, 2007).

The emphasis on forming a warm, caring relationship (therapeutic alliance) is a crucial component of the program. "By making efforts to maintain a consistently supportive relationship, the home visitor shows the parent that positive, caring relationships are possible. The parent begins to see herself as someone who deserves support and attention, and by extension, sees her child as deserving the same. In this way, the helping relationship becomes a 'corrective' experience for those mothers (and fathers) who had experienced neglectful and abusive relationships in their own childhood and thus promotes positive experiences with the child and healthy relationships with others" (Olds et al., 1997, pg. 20)

SUPPORTING EVIDENCE/LITERATURE

- The conceptual framework guiding the design of the NFP program and its evaluation was based on evidence that "suggests that parental behaviour is the most immediate, powerful, and potentially alterable influence on child health during pregnancy and the early years of the child's life" (Olds, 1992, p. 705).
- Theoretical constructs should provide the principles that underpin practice and help to generate further nursing knowledge. Theory is important because it helps us to decide what we know and what we need to know (Parsons 1949 as reported in Colley 2003) and as such helps to distinguish what should form the basis of practice.
- The benefits of having a defined body of theory in nursing include better client care, enhanced professional status for nurses, improved communication between nurses, and guidance for research and education (Nolan 1996 as reported in Colley 2003).
- The terms 'model' and 'theory' are often wrongly used interchangeably. In nursing, models are often designed by theory authors to depict the beliefs in their theory (Lancaster & Lancaster 1981). They provide an overview of the thinking behind the theory and may demonstrate how theory can be introduced into practice, for example,

through specific methods of assessment. Models are useful as they allow the concepts in a theory to be successfully applied to practice (Lancaster & Lancaster 1981).

- The NFP has been significantly influenced by attachment theory with a focus on promoting sensitive parenting and promoting a sense of joy and regulation in the parent-child relationship. However, when he first started his work in the 1970s, David Olds realized that attachment by itself would provide an insufficient foundation for guiding the development of the interventions for low-income families or for those whom parenting is complicated by stressors external to the parent-child dyad. Single theories almost inevitably focus attention on just part of the set of influences that shape the health and well-being of the developing child (Olds, 2007).
- In the Elmira trial, nurses worked with clients to plan and take small, achievable steps which, when reached, increased clients' confidence and built evidence of success for further goal setting and action. The most important outcomes in Elmira were observed in women who had a low sense of control over their lives at the time they enrolled. For this reason, the Memphis and Denver trials emphasized building self-efficacy to an even greater degree than the Elmira trial (Olds et al, 1997).
- The research findings from the Memphis trial supports the importance of continuity in the nurse- family relationship. Those women who had continuous relationships with their nurses made greater advances in several aspects of parental functioning than did their counterparts who had broken relationships. Given that there were no differences in the amount of contact between the two groups, it appears that the severed relationship interfered with the families' abilities to gain as much in parental care giving as did their counterparts who had continuous relationships (Kitzman et al., 1997).
- While nurses in the first trial in Elmira, New York emphasized setting small, achievable objectives and building on clients' strengths as an essential component of the clinical methods, a specific approach for doing this was not well articulated. In the next trial. In the Memphis trial, NFP nurses utilized a problem-solving approach to promote client self-efficacy (O'Brien & Baca, 1997).
- In their application of the NFP theoretical framework to the individual needs of pregnant women, parents of young children, and their families, NFP nurses have found that the theoretical and empirical foundations of the program often provide less specific guidance than they need in order to guide their work with unequivocal success (Olds et al., 1997).
- Children with disorganized attachments are likely to exhibit more severe emotional, social and academic problems; they are the most at risk for abuse and neglect (Zeanah, 2011).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

The three theories have been a core part of the model since the initial research (Olds, 2006) and understanding of them and their application within the program should be a key element of the NFP education curricula. NFP nurses and supervisors are provided with education, training and on-going support to use clinical methods that include: solution-focused approach, strength-based approach, client-centred principles, behaviour change strategies, agenda matching, and motivational interviewing.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Nurses, as part of their professional responsibility, should seek out and integrate into their practice other current/appropriate clinical methods and nursing theories that are consistent with the underlying theories and principles of the NFP model.

PERMISSIBLE VARIATIONS

Individual NFP nurses/countries may wish to augment the three program theories with another relevant theory that is clearly aligned with the NFP model in such a way that it enhances/supports their delivery of intervention. In order to maintain the rigour of the theoretical framework of the NFP, at this time the addition of a theory will require formal consultation and will be considered as an approved variance. This request should be delineated with a clear rationale to ensure congruence with the program model.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

This information is part of the individual client documentation, is reviewed in 1:1 supervision and case conferences. It is also part of the information collected/observed during accompanied home visits.

BENCHMARK(S)

It is expected that NFP nurses and supervisors will apply the theories through current clinical methods/delivery of the program. There is no specific benchmark for this CME.

Element 12: Each NFP team has an assigned NFP Supervisor who leads and manages the team and provides nurses with regular reflective supervision.

DEFINITION

A full time NFP supervisor can lead a team of no more than eight NFP nurses (including community mediators or similar positions where applicable) and a team administrator. The minimum team size is four NFP nurses with a half time supervisor. It is important that NFP team members are supported by NFP supervisors who understand the requirements and expectations of the role and the program model and for this reason it is recommended that nurse supervisors have a very small caseload of NFP clients. Arrangements should be made for supervisors to reflect on her role and NFP with a qualified person that understands reflective practice and has an adequate understanding of the NFP model. The individual providing reflective supervision to the NFP supervisor is ideally in a position at the same level or higher t o the organization/external agency - it cannot be provided by NFP nurses.

Reflective practice is the capacity of the individual to reflect on his/her action so as to engage in a process of continuous learning (Schön, 1983). *Reflective supervision* is distinct from other types of supervision as it utilizes a reflective cycle to explore the NFP nurse's experiences, allowing her to discover solutions, concepts and perceptions on her own without direction from the supervisor.

Individual reflective supervision should be provided weekly for a full-time NFP nurse (approximately one hour in length) and on a pro-rated basis for part time nurses. Countries should use the NFP framework as set out in the reflective supervision international guidance document to structure their local expectations and guidance for this Core Model Element. In countries where associate NFP practitioners (eg family Partnership workers, mediators) are also team members, the same model of 1:1 reflective supervision should be used for these practitioners.

In addition to supporting 1:1 reflective supervision, the supervisor is also expected to facilitate:

1. *Case Conferences* are meetings with the team dedicated to joint review of cases, data reports and team challenges using reflection to explore and critically analyze issues in order to develop understanding and professional growth. Experts from other disciplines are invited to participate when such input would be helpful. It is recommended that case conferences occur twice per month alternating with team meetings.

2. *Team Meetings* are held for administrative purposes, to discuss program implementation issues, and team building (Team Meetings and Case Conferences are expected to alternate weekly so there is one meeting of the team every week). It is recommended that team meetings are held twice a month alternating with case conferences.
3. *Accompanied Home Visits.* Every 4 months the supervisor makes an accompanied home visit with each nurse to at least one client and additional visits on an as needed basis at the nurse or supervisor's request. Joint reflection on the visit can support a deeper understanding of observed family dynamics and relationships as well as enable exploration of the nurse's clinical practice.
4. *Education/learning activities* – this can include: structured time for revisiting and extending learning undertaken as part of the NFP curriculum, team skills practice sessions, learning with external experts to support responsiveness to particular client challenges, or facilitation of team learning activities provided by the country's national unit.

RATIONALE

When the NFP was first developed, and evaluated in the Elmira trial, formal reflection on one's work was not an established practice of nursing professionals. Like many other home visiting nurses, NFP nurses work alone with clients in often difficult environments, in contrast to hospital nurses, who may have the support of on-site peers and supervisors. The Elmira, NY nursing team identified a need for structured support to sustain them in this work that was isolating and often emotionally draining (Dawley et al., 2007). As a result, reflective practice and clinical supervision were built into the program with Dr. Olds leading weekly case conferences. Following the three US RCTs, reflective supervision became a central activity within the NFP program model.

NFP clinical work is emotionally demanding, carries many clinical challenges, and is carried out by individual nurses who are largely unobserved within home visits. NFP nurses need to practice with high levels of autonomous decision-making, often in situations of risk and uncertainty. The relational nature of the work and the expectation of emotional availability to clients and families is draining of nurses' emotional and physical energy. For all these reasons, having a supportive, encouraging space to critically reflect on their practice is a core element of the NFP implementation model. It enables nurses to maintain emotional resilience, make robust decisions and develop their understanding and skilfulness. This enhances safety for the nurse and for NFP enrolled families.

NFP teams that are well led create a culture of excellence and mutual growth, by developing a reflective and open approach to the analysis of the teams' work. In addition to reflection, regularity and collaboration are essential features of reflective practice (Parlakian, 2001). Regularity refers to scheduled, uninterrupted time for a supervisor to meet individually with each nurse and for the team to meet together. Developing an environment of acceptance, trust and support requires time and a commitment to protect that time. A commitment to be prepared and open for learning through reflection is also essential and is a core attribute to seek when recruiting nurses.

The original CME included a benchmark that each fulltime NFP nurse carried a maximum called of 25 clients. This was removed for a number of reasons:

- With the introduction of STAR and other assessments of caseload complexity, caseloads will and should vary.
- The annualised hours worked by NFP Nurses in different countries vary considerably.
- The original benchmark was not based on any research evidence.

SUPPORTING EVIDENCE/LITERATURE

- Reflection is currently regarded as essential to professional practice not only in the field of nursing but also in medicine, social work and teaching (McDonald & Glover, 2000; Place & Greenberg, 2005).
- In the hour-long weekly individual conferences, supervisors encourage nurses to examine and
- discuss their interactions with clients and feelings engendered by the work. Gibbs's "reflective cycle" (or similar model) is used to guide this process for both nurses and parents so that the analysis of past actions and emotions can inform more effective action in the future. It takes time to learn reflective practice and to build the network of supportive supervisory and peer relationships. (Dawley et al., 2007)
- NFP uses a solution-focused approach to support the achievement of self-efficacy. A basic assumption of this approach is that clients are experts about their own lives (one of the NFP client-centered principles) and can work with health professionals to co-create solutions to problems confronting them. To support the NFP nurses in effectively using this approach, opportunities are provided weekly during team case conferences to discuss application of the techniques to specific families. Additionally, individual supervision is utilized to role model the principles of solution- focused interactions. Such

ongoing guidance and supervision is crucial to prevent misuse of the approach. It is important that the interview techniques be thoughtfully applied as opposed to becoming a routinized formula superficially used in every situation (O'Brien & Baca, 1997)

- After considering community and maternal level effects, the only home visitor attribute significantly associated with program retention was the average hours of supervision that the home visitor received each month. Supervision is essential, as families with multiple risks often require services beyond the home visitor's expertise (McGuigan, et al 2003, page 374).
- NFP supervision includes reflecting on the application of the methods, approaches and materials of the program. The NFP supervisor can then highlight the nurse's growing skillset and knowledge base of the approaches, their efficacy and increasing skills and experience of working with the mother and her infant (Andrews, 2016).
- Supervision can lead to a more accurate empathic response by the nurse and protects empathic distress that may lead to burnout (Kinman and Grant, 2011). Nurses may feel anxious about managing their workload; supervision facilitates consideration of the nurse's feelings and ability to meet all clients' need (Andrews, 2016).
- NFP supervision asks nurses to address the 'why' and 'how' of their practice, supporting them to move from current understanding and knowledge to a more uncertain place where they question their assumptions, understanding and beliefs. It is therefore able to open up new truths and possibilities (Andrews and Oxley, 2016).
- Home visit observations can be used to evaluate the content and quality of activities that occur during the home visit, the quality of the provider-client relationship, and the level of family engagement in services. This focus on assessment and feedback on the quality of services can help inform home visiting practice, guide overall program improvement, and inform continuous quality improvement (CQI) efforts (Design Options for Home Visiting Evaluation, 2012).
- The program quality data system and its use by both staff at the NFP National Service Office and local program supervisors remain critical components of an integrated and compensatory system of implementation supports. Using reports based on data gathered from every supervisor and every nurse home visitor on every home visit enables regionally based NFP nurse consultants to recognize and address implementation challenges in their consultation with nursing team supervisors (Hill & Olds, 2013).
- In the early replication sites, supervisors were not consistently conducting weekly one-on-one reflective supervision or timely case consultation sessions. In their orientation of new agencies, the NSO began to strongly encourage new implementing agencies to

assign supervisors to NFP full-time rather than part-time, even if they were not immediately able to hire a full team of eight nurse home visitors - the maximum a full-time NFP supervisor can support (Hill & Olds, 2013).

- Three types of supervision have been identified: 1) Administrative (oversight and monitoring of organizational policies & procedures, regulations, business procedures, and quality assurance); 2) Clinical (case and client-focused); and 3) Reflective (shared exploration of parallel process, attention to all of the relationships are important) (Michigan Association for Infant Mental Health, 2007).
- A supervisor has four distinct functions in their role: 1) counsellor giving support to their staff; 2) an educator helping the individual staff member and team learn and develop; 3) manager with responsibilities for the quality of work the supervisee is doing with their clients; and 4) manager/consultant carrying out responsibilities expected by to the organization (Hawkins & Shohet, 2006).
- "Reflective practice is about getting into the habit of consciously and deliberately examining situations, actions and responses, and changing your practice as a result. Clinical supervision can provide a supportive and safe framework for reflection, helping nurses develop their professional skills" (McDonald & Glover, 2000, p.49). In other words, reflection is a process for learning, professional growth, and change.
- Reflection is an exploration of the "content, process and premise underlying the experience in an attempt to make meaning or better understand the experience." This in turn will lead to changes in your "behavior that reflect changes in underlying values, attitudes, and beliefs." (Place & Greenberg, 2005, p. 1547).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

In addition to carrying out supervision, the supervisor will: manage the team; develop and sustain NFP implementation and client recruitment; guide the nurses' learning; lead quality improvement initiatives; and represent the program within the local community. Ideally, nurses recruited into NFP supervisory positions come with strong clinical experience in home visiting and the program. When this is not the case, additional education will be required. It is recommended that where possible, the supervisor carry a small caseload to assist them in understanding the clinical aspects of the program, provide them with ongoing experience and enhance their credibility and effectiveness as a clinical supervisor.

The development of an effective supervision model that is in line with the expectations of this CME, the reflective supervision guidance and with professional expectations of the host country

is an important element of the NFP Clinical Lead's responsibilities. The leadership group within the country should prioritise the understanding and implementation of regular reflective supervision for all NFP staff, as this will play a key role in developing competence, maintaining morale and minimising nurse attrition from the program.

It is clear that at least half-time employment is necessary in order for Supervisors to become proficient in the program and provide the necessary supervision. A half-time Supervisor can supervise up to 4 NFP nurses. It is important to consider other resources that may be available to Supervisors, for example, time available from Administrators. When supervisors are working half time for NFP, it is important to be cautious that their non-NFP responsibilities do not infringe on their dedicated NFP time.

It is essential that supervisors have the support of their internal administration and put in place policies and procedures to assure that the expected supervisory activities occur. National leaders should ensure that local implementing organizations understand the importance of this program element for safety and quality of program implementation.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

As countries have differing employment practices and expectations regarding the maintenance of professional competency and registration, this should be taken into account in the implementation of this Core Model Element. In some countries, the distances required for supervisors to travel are so great that supervision and team meetings sometimes take place via telephone or video conference.

PERMISSIBLE VARIATIONS

It is expected that countries adopt the NFP reflective supervision framework described in the guidance document. Any adaptations required for context should be in line with the expectations of good professional practice, meet the intent specified in this CME and be agreed with the country's international consultant. Care should be taken to ensure that this adaptation process does not undermine the expectations of the NFP reflective supervisory model or limit

the opportunity to learn through use of an alternative model to that usually employed within a country.

Variations to accommodate geographical distances are permissible but care should be taken to ensure that there is sufficient regularity of face to face contact to ensure that remote and isolated NFP nurses are supported and feel part of their NFP team.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

This CME is measured through analysis of data generated by completion of the supervisor data forms for frequency and content of supervision, team meetings and field supervision. This will provide evidence only of completion of supervisory events, not the quality of supervisory practices or relationships. Some countries have introduced mentoring practices for new supervisors and peer observation of supervisory practice to enable the exploration and development of good practice and to support quality improvement measures.

BENCHMARK(S)

It is expected that each (100%) NFP team will have an assigned NFP Supervisor who leads and manages the team and provides nurses with regular reflective supervision.

Accompanied Home Visits should be completed for all (100%) NFP nurses on a 4-monthly basis. In addition, each country should develop benchmarks for monitoring the frequency and length of reflective supervision along with frequency of team meetings, case conferences and team education sessions, taking into account expected annual leave for both nurse and supervisor.

Element 13: NFP teams, implementing agencies, and national units collect/and utilize data to: guide program implementation, inform continuous quality improvement, demonstrate program fidelity, assess indicative client outcomes, and guide clinical practice/reflective supervision.

DEFINITION

NFP nurses collect information for four distinct purposes:

1. To support and guide clinical practice
2. To assess and guide program implementation through documentation of the NFP services received by clients
3. To measure achievement of core program goals
4. To inform reflective supervision and support quality improvements

Information is recorded on nursing assessment/data collection forms, which are collated into an information system within each country. Data collected is analysed and reports are generated for individual clients, nurses and teams in a timely way. In addition, this data may be used by research teams (contingent upon adherence to required permissions for release of data), alongside other data, to inform their evaluation of the implementation of NFP.

RATIONALE

The collection of data by NFP nurses and supervisors is an integral part of the NFP program and assists in the maintenance of high quality of program delivery for families. Through use of standardized measures, along with clinical observations and experience, NFP nurses are able to make high quality assessments of individual clients' health and social circumstances. When combined with use of the STAR Framework, discussed and analysed within reflective supervision, this enables the NFP nurse to identify priority areas to address within visits. In addition, the use of standardized assessment tools over time, enable the NFP nurse to evaluate the client's progress over time. When client outcome data are aggregated, they can also support the evaluation of program impact within a country.

Data collected on implementation (number of visits, time spent in the various program domains, caseload size, and client retention, etc.) enables NFP nurses and teams to assess the quality of program implementation. Reflection on emerging visit patterns within supervision encourages adjustment of clinical practice to ensure that nurses faithfully reproduce the program model on an ongoing basis.

SUPPORTING EVIDENCE/LITERATURE

- The Denver research team developed a data collection and reporting system that would enable evaluation of how well key features of the model were being implemented and whether or not early indicators of anticipated program effects were positive. The system incorporated descriptive data on the population enrolled to make sure it was consistent with the aim to enroll those most likely to benefit (primiparous women living in poverty); elements of program implementation such as visit frequency, duration, and content; critical aspects of program management such as the frequency of reflective supervision; and selected indicators of desired outcomes that could be observed during the course of the intervention such as women's use of tobacco and alcohol during pregnancy, birthweight, measures of maternal depression, and results of child development screenings (Hill & Olds 2013).
- Ongoing monitoring of health services provided and evaluating whether the desired outcomes are attained are other critical components of NFP dissemination strategies. (O'Brien. 2005)
- It is essential for home visiting programs to have a formal approach and structures to support monitoring, program performance, and quality assurance. An important component of this approach is the ability to assess performance within and amongst sites. Developing common systems for collecting data are critical to building a system and being able to show its impacts (Spielberger et al., 2011).
- Data collected through performance measurement provides the basis for evaluations to assess the impact and success of a program. Home visitation programs should designate a portion of their program budget for monitoring and evaluation. (Alberta Children's Services 2004).
- Two central assumptions underpin the notion of scaling up home visiting programs with quality: 1) that the outcomes observed in the demonstration programs will also accrue in

the scaled up/replicated programs (Dee et al., 2004); and 2) local programs will be able to routinely implement those particular core elements that contribute to the success of the model (Goldberg 2016).

- Home visiting programs must regularly collect and report information to ascertain if their hypothesized outcomes are being achieved. If they are not, they should determine why, modify their work accordingly, and continue to report on their progress (Weiss & Klein, 2006).
- Implementation teams should focus on using data to monitor and improve program quality (Metz et all, 2013)
- Data collection is a key mechanism for understanding quality and need for innovation within NFP internationally (Billingham, 2015)
- Process and outcome data should be utilized for high quality implementation of evidence based programs (Fixsen et al, 2005)

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

NFP national units should create data collection and analysis systems that support high quality. This should be organised in a way that is efficient and effective within the national context and is proportionate to the phase NFP of testing. Data reports should be produced regularly and shared with individual NFP nurses, NFP teams, implementing bodies, and Local Advisory Boards (or equivalents). Care should be taken to guide analysis of these reports, as they often pertain to small numbers and are not expected to reveal much variation in the short term. Consideration should be given to obtaining client consent, and maintenance of client confidentiality within the specific legal and regulatory requirements of each country.

The data collected by NFP nurses and supervisors reflect the objectives of this activity, i.e. supporting high quality assessments of families, guiding quality of implementation and enabling review of outcome achievement. All members of the NFP team should be educated to understand the use of data within NFP and how to collect it to a high quality. For this reason, detailed guidance is given for each nursing assessment/data collection form utilised within the program within the International Data Collection Manual. In addition, teams should be given education and guidance regarding use of data reports to guide high quality practice. This should include the understanding and skills to make good decisions with regard to;

- Adjusting visit contents and schedule for individual clients (through use of STAR or equivalent)

- Priorities across caseloads, at points when caseload demands outstrip time available.
- Benchmarking and looking for ways to improve their practice.

Special attention should be paid to the education of supervisors in this area to ensure that they are able to use data reports effectively to guide clinical implementation and reflective practice with their team.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

The expectations regarding collection and timely analysis of data to inform quality of NFP implementation is a challenging area for all countries. The creation of a NFP data collection and analysis system specific to each country takes time and funds. For this reason, it is recommended that countries begin with a spread sheet- based system. This approach allows time, to identify needed changes to the nursing assessment/data collection forms, learn about the data analysis they will require, before creating an automated system alongside the scaling up of a program. Nevertheless, it is expected that there will be variations in the application of this CME (see below)

PERMISSIBLE VARIATIONS

In order that the potential for comparing data analyses internationally is established and maintained, as well as through use of the best available clinical screening and assessment tools, the contents of data forms have been standardized. However, it is expected that each country will review and revise these forms to meet their local contexts. This may include removing or adding to the data measures to meet an identified local or national need/requirement. National Units and implementing agencies should take care not to unnecessarily burden NFP nurses with additional data collection requirements as this will take away from time spent directly with client.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

It is expected that each country will collect, analyse, and review data reports on a regular basis at a team/license/ or national level. Reviews should be used to guide adjustments in NFP implementation and/or further enquiry regarding a particular aspect of program delivery. Internationally, this CME is measured through use of the annual report submitted by each country. Through the annual report, data is reported, analysed and reviewed, to guide discussion of the country's implementation successes and challenges, as well as emergent outcome variations.

BENCHMARK(S)

Although there are no objectives that relate to the collection and use of data, all the NFP benchmarks for the program are measured through use of regular standardised data collection

Element 14: High quality NFP implementation is developed and sustained through national and local organized support.

DEFINITION

Organised support should include national strategic, operational and clinical leadership (as set out in the licensing requirements) as well as local site support for implementation and on-going quality improvement.

Local site support for NFP includes:

- Ensuring that local community leaders and agencies working in the field provide guidance regarding the introduction and maintenance of the program within the site context. This is usually organised through a local NFP Local Advisory Board[10] or other formal service network
- Ensuring that the necessary infrastructure and resources for the team, including office equipment, printed guideline materials and other resources, cell phones etc., are made available
- Employment of team administrative support (suggested as 0.5 full time equivalent per 100 clients) to ensure team efficiency in administrative tasks

RATIONALE

Community readiness and involvement has been identified as a key element of successful introduction and maintenance of evidence-based programs (Fixsen et al., 2005) and has been shown to have a direct impact on client attrition rates within NFP (Hicks et al, 2008). In order to be effective and become a sustainable, integrated element of local services, NFP needs to be supported by community partnerships of committed individuals/organizations whose expertise can advise, support and sustain the program over time. This should include both professional and lay supporters, including local community leaders and NFP clients or representatives of the client group. When organized as a Local Advisory Board or similar structure, these local supporters can:

- Facilitate community awareness of, and ongoing support for, NFP.

[10] Refer to Community Advisory Board Guidance an Introduction (2010) – United States NFP National Service Office

- Generate and sustain a steady flow of notifications/referrals into the NFP Program
- Enable the NFP team to gain knowledge of local services and build relationships with community service providers in order to help clients access needed services.
- Help to assess and respond to challenges to program implementation.
- Understand client resources and needs and identify gaps in local services.
- Provide consultation to the NFP team regarding quality improvements to the program and program expansion, where appropriate.
- Network with other local, regional and national bodies to generate the support needed to help sustain the NFP Program over time.

The need for referrals/notifications of eligible pregnant women, identification and access to other services for NFP clients and ongoing program support are so vital to the program that the NFP team, with the supervisor's leadership and support, should devote time and energy to building and maintaining these important partnerships. A group of supportive community leaders can offer long term support to the local program to ensure program quality and sustainability and the NFP supervisor should actively participate in these meetings.

SUPPORTING EVIDENCE/LITERATURE

- Collaborative partnerships (alliances among community stakeholders and organizations from multiple sectors working together to improve conditions that promote and sustain community health) are an increasingly prominent strategy for addressing community health needs. (Feinberg et al., 2004; Roussos & Fawcett, 2000).
- Collaboration entails more than sharing information and transferring knowledge, and more entails more than coordinating efforts so each party can achieve its goals. Rather, the aim of collaboration "is to create a shared vision and joint strategies to address concerns that go beyond the purview of any particular party" (Chrislip and Larson, 1994: pg. 5, as reported in Hicks et al., 2008).
- As part of the initial NFP implementation assessment process, community leaders are encouraged to identify how the NFP will integrate with other maternal and child health programs provided in the community and to collaborate with representatives of these programs in order to reduce competition and resistance as planning for initiation of the NFP progresses. Since the NFP targets low income, first-time parents only, policy

development regarding how the program contributes to the community's overall plan for addressing diverse population needs is important. Such careful policy development not only facilitates appropriate referrals to the program, but it also is likely to help with fiscal decision-making when budget resources are limited (O'Brien 2005).

- There is a consistent relationship between the quality of local collaborative processes and program outcomes. These program outcomes are of two kinds: 1) mother attrition and 2) variables associated with birth (birth weight, the number of premature births, and subsequent pregnancies). The results show a very clear empirical relationship between the commitment of the stakeholder groups and the dropout rates of the young mothers in the program several years later. The authors call this fundamental pattern of a learned level of cooperation among people the "*transfer of commitment"* (Hicks et al., 2008).
- Program sustainability is enhanced by working with partners who are free to conduct the community organizing and political activities necessary to advocate the program's interests and needs in legislative, governmental, and public venues over time (Olds et al., 2003).
- No single program in isolation can overcome the multiple challenges facing families with higher risks, to be effective, home visiting programs must have strong connections to a full system of family-strengthening supports, including other child and youth services, in the community (Weiss & Klein, 2006).
- Each site choosing to implement NFP needs certain capacities to operate and sustain the program with high quality, ideally expanding it gradually to reach a significant portion of the target population. These capacities include having an organization and community that are fully knowledgeable and supportive of the program; a staff that is well trained and supported in the conduct of the program model; and real-time information on implementation of the program and its achievement of benchmarks to guide efforts in continuous quality improvement (Olds et al., 2003; Olds, 2012).
- There must be a good match between the community of people to be served and the evidence- based program itself. Leaders within the pre-existing service system to which an evidence-based program relates should agree that introduction of the program is important and valuable, and they must be willing to adjust their own practices and behaviour in whatever way will foster necessary integration. Leaders at multiple levels in the host organization must value what the program will bring, understand its implementation requirements, recognize and address changes in usual organizational behaviour that will be necessary for the program to be introduced and survive, and commit to providing the resources and personnel necessary to implement and sustain

the program with fidelity. Last, the policies that govern workforce behaviour and program financing must align with, and adequately support, the underlying principles, practices, and implementation requirements of an evidence-based program with incentives that encourage excellent practice and a focus on outcomes (Hill & Olds 2013).

- Ongoing monitoring of health services provided and evaluating whether the desired outcomes are attained are critical components of NFP dissemination strategies (O'Brien, 2005).
- To facilitate NFP nurses' implementation of a solution-focused approach used in NFP, it is recommended that sites utilize nursing documentation forms that emphasize clients' strengths, goals, and actions, rather than the typical problem- oriented record system that is maintained in many health care agencies (O'Brien & Baca 1997).
- The Denver research team developed a data collection and reporting system that would enable evaluation of how well key features of the model were being implemented and whether or not early indicators of anticipated program effects were positive. The system incorporated descriptive data on the population enrolled to make sure it was consistent with the aim to enrol those most likely to benefit (primiparous women living in poverty); elements of program implementation such as visit frequency, duration, and content; critical aspects of program management such as the frequency of reflective supervision; and selected indicators of desired outcomes that could be observed during the course of the intervention such as women's use of tobacco and alcohol during pregnancy, birthweight, measures of maternal depression, and results of child development screenings (Hill & Olds 2013).
- Two central assumptions underpin the notion of scaling up home visiting programs with quality: 1) that the outcomes observed in the demonstration programs will also accrue in the scaled up/replicated programs (Dees et al., 2004); and 2) local programs will be able to routinely implement those particular core elements that contribute to the success of the model (Goldberg 2016).

PRACTICES THAT SUPPORT IMPLEMENTATION OF THIS CORE MODEL ELEMENT

The engagement of community leaders to support and become involved with the program is an important facet of site implementation and ongoing quality improvement. The context into which NFP is introduced will be different in each country, and the local communities in which the program is offered is also likely to vary by locality within any country. However, what these

communities generally have in common is a history of services being introduced in a less than respectful way. Given this background, it should be anticipated that lay community leaders will have a degree of scepticism and distrust of initial requests to provide guidance for local implementation. Nevertheless, it is important that great efforts are made to enable the local professional and lay community to welcome the program and feel that their involvement will be valued and have impact on the progress of the work as this will pay dividends for NFP clients.

Each NFP site needs certain capacities to operate and sustain the program with high quality, ideally expanding it gradually to reach a significant portion of the target population (Olds, 2006). These capacities include having:

- An organization and community that are fully knowledgeable and supportive of the program.
- Administrative, management, and senior leadership staff that are provided with education regarding the NFP model and requirements for successful implementation, including adherence to fidelity.
- The provision of real-time information on implementation of the program and its achievement of benchmarks to guide efforts in continuous quality improvement.

VARIATIONS AND CHALLENGES ACROSS COUNTRIES

Experience has shown that NFP leaders in countries working with communities with an identified history of trauma, colonization, racism and/or exclusion (such as the Roma, Aboriginal or Native American communities, immigrants, refugees) need to take special care when considering how to introduce and implement the program. This will include consultation with experts from the community regarding necessary adaptations to the program to ensure for cultural safety. Enabling local ownership of the program will be vital to its positive acceptance and the engagement of local families and community elders may be needed to enable families to develop the trust necessary to participate in the program.

PERMISSIBLE VARIATIONS

As the policy, system, local service provision for families and community engagement expectations vary greatly between countries, it is expected that countries will create appropriate arrangements for local supportive structures for program implementation, integration and quality improvement.

Implementation guidance documents have been developed by a number of countries, alongside roles for site development and quality improvements. These can be shared and adapted between countries.

HOW CORE MODEL ELEMENT MEASURED AND ANALYSED

Adherence to this Core Model Element should be measured within a country by review of each site data reports at regular intervals and by an annual review of implementation quality with each site. Many countries take the opportunity to undertake this review by attending the Local Advisory Board or similar structure. At national level data reports are aggregated and reported on as part of the Annual Review process.

BENCHMARK(S)

There are no related benchmarks for this CME, although countries may want to introduce these for data completeness and /or accuracy.

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Appendix A: Benchmarks

CME	Benchmark
Client participates voluntarily in the Nurse-Family Partnership (NFP) program.	100%
Client is a first-time mother	100%
Client meets socioeconomic disadvantage criteria at intake	Countries will set their own socioeconomic disadvantage criteria with 100% of clients meeting this criteria.
Client is enrolled in the program early in her pregnancy and receives her first home visit no later than the 28th week of pregnancy.	100% of NFP clients receive their first home visit no later than the 28th week of pregnancy. 75% of eligible referrals who are intended to be recruited to NFP are enrolled in the program. 60% of pregnant women are enrolled by 16 weeks gestation or earlier
Each client is assigned an identified NFP nurse who establishes a therapeutic relationship through individual NFP home visits.	100% of clients are assigned an identified NFP nurse Countries will set their own benchmarks for client retention/ attrition
Client is visited face-to-face in the home, or occasionally in another setting (mutually determined by the NFP nurse and client), when this is not possible.	Countries will set their own benchmark
Client is visited throughout her pregnancy and the first two years of her child's life in accordance with the current standard NFP visit schedule or an alternative visit schedule agreed upon between the client and nurse.	No benchmark should be set related to number of completed visits given the importance of adapting the program to the needs of individual clients
NFP nurses and supervisors are registered nurses or registered nurse-midwives with a minimum of a baccalaureate /bachelor's degree.	100%
NFP nurses and nurse supervisors develop the core NFP competencies by completing the required NFP educational curricula and participating in on-going learning activities	100% of NFP nurses and supervisors will complete the required NFP educational curricula and participating in on-going learning activities. At this time, each country will determine the specific content, teaching methods used, and when to provide it. Counties will also set their own policies for required "retraining" when nurses/supervisors leave and then return to the NFP program.

<table>
<tr><th>CME</th><th>Benchmark</th></tr>
<tr><td>NFP nurses, using professional knowledge, judgment and skill, utilize the Visit-to-Visit Guidelines; individualizing them to the strengths & risks of each family, and apportioning time appropriately across the five program domains.</td><td>
<table>
<tr><th>Domains</th><th>Pregnancy</th><th>Infancy</th><th>Toddler</th></tr>
<tr><td>Personal Health</td><td>35-40%</td><td>14-20%</td><td>10-15%</td></tr>
<tr><td>Maternal Role</td><td>23-25%</td><td>45-50%</td><td>40-45%</td></tr>
<tr><td>Environmental Health</td><td>5-7%</td><td>7-10%</td><td>7-10%</td></tr>
<tr><td>My Family & Friends)</td><td>10-15%</td><td>10-15%</td><td>10-15%</td></tr>
<tr><td>Life Course Development</td><td>10-15%</td><td>10-15%</td><td>18-20%</td></tr>
<tr><td>Health and Human Services *</td><td colspan="3">Included in the above domains</td></tr>
<tr><td>Total</td><td>100%</td><td>100%</td><td>100%</td></tr>
</table>
</td></tr>
<tr><td>NFP nurses and supervisors apply the theoretical framework that underpins the program (self-efficacy, human ecology, and attachment theories) to guide their clinical work and achievement of the three NFP goals.</td><td>It is expected that NFP nurses and supervisors will apply the theories through current clinical methods/delivery of the program. There is no specific benchmark for this CME.</td></tr>
<tr><td>Each NFP team has an assigned NFP Supervisor who leads and manages the team and provides nurses with regular clinical and reflective supervision</td><td>100%</td></tr>
<tr><td>NFP teams, implementing agencies, and national units collect/and utilize data to: guide program implementation, inform continuous quality improvement, demonstrate program fidelity, assess indicative client outcomes, and guide clinical practice/reflective supervision.</td><td>Although there are no objectives that relate to the collection and use of data, all the NFP benchmarks for the program are measured through use of regular standardized data collection.</td></tr>
<tr><td>High quality NFP implementation is developed and sustained through national and local organized support</td><td>There are no related benchmarks for this CME, although countries may want to introduce these for data completeness and /or accuracy.</td></tr>
</table>

Appendix B: Request for Variance to Core Model Elements

(please complete a separate form for each variance requested)

Country: Click here to enter text.	Date: Click here to enter a date.
Name of individual requesting variance: Click here to enter text. Title: Click here to enter text. Email: Click here to enter text.	
International Consultant: Click here to enter text.	

CORE MODEL ELEMENT #: Click here to enter text.

Reason for Request:

Click here to enter text.

Summary of any strategies utilized to adhere to the core model element (CME) and the results:

Click here to enter text.

What are the potential positive and negative impacts of changing or varying the CME? (Address fidelity, implementation and outcomes):

Click here to enter text.

Anticipated time frame for variance CME and plans to evaluate its benefit/outcome:

Click here to enter text.

Variance approved: ☐ Yes ☐ No Date: _____ By: _____

Review date to reassess variance: _____

