Primary Care Transformation in British Columbia:

A New Model to Integrate Nurse Practitioners

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Executive Summary

In *Primary Care Transformation in British Columbia: A New Model to Integrate Nurse Practitioners*, the BC Nurse Practitioner Association (BCNPA) proposes a new primary health care model for B.C. The BCNPA Primary Health Care (PHC) Model builds on the model of both the Patient Medical Care Home and the more Health Authority aligned Primary Care Home that is currently being discussed in the province, but encourages a focus on multidisciplinary teams, shared governance and care that is developed with and “wrapped around” the patient. Incorporated within this model is a nurse practitioner (NP) funding strategy that will place the NP workforce in a strong position to support the Ministry of Health’s (MoH) goal to ensure all citizens have a primary care provider within a revitalized primary health care system.¹

NPs were first introduced into British Columbia’s health care system to increase access to primary care and provide a more seamless patient experience across all levels of health care.² However, 10 years after the first group of NPs began working in the province, a viable long-term funding strategy has yet to be implemented and the profession remains an underutilized resource. This is largely due to funding models that do not recognize NPs as primary care providers with similar outcomes to that of our GP colleagues, organizational structures that constrain the profession’s ability to enact full scope of practice, and funding distributed solely through health authorities, which is not where the majority of primary care is delivered.³ Decades of research have demonstrated that NPs deliver high quality, safe and cost-effective primary health care for patient populations in a variety of settings and regions, yet full implementation has been hampered by a lack of role clarity, territorial rhetoric and resistance to change.⁴

This Discussion Paper outlines the BCNPA PHC Model and includes two NP funding options to ensure that the needs of British Columbians are met, regardless of where they live and how their local health services are structured. Underpinning the BCNPA PHC Model is the inclusion of Nurse Practitioners in either the provincial Alternative Payment Program (APP) or a funding program that is NP specific with similar structure, sustainability and oversight as the APP. This funding program would allow for salaried funding for all NP positions in the province, which would “improve service delivery and patient access to services” and “support or provide stability for sufficient access to care.”⁵ The goal of the BCNPA PHC model is to increase attachment of ‘orphan’ patients or those who are unable to find a primary care provider, while maintaining appropriate access to care for all British Columbians.

The BCNPA PHC Model

BCNPA envisions a two-pronged approach for introducing the new BCNPA PHC Model. Initially, we would like to work with government and stakeholders to begin introducing NPs into existing practices or Patient Medical Care Homes, where NPs would be able to immediately augment the number of patients attached to a practice. This would also respond to the many inquiries BCNPA receives from physicians who are interested in adding one or more NPs to their practice. In the second phase of the BCNPA PHC Model, BCNPA would like to work with government and stakeholders to begin introducing more comprehensive team-based practices in communities throughout B.C., where a team of providers would establish a new practice or clinic based on an interprofessional model that more aligns with the Primary Care Home.
Funding Options:

a) Option A: Health Authority Affiliated NP – This model is already relatively successful across the province, although funding has not been ongoing, and did not provide for adequate infrastructure support.

b) Option B: Non-Health Authority Affiliated NP – This model will place the NP outside of the HA framework where most primary care is delivered, yet position the NP to link back to HA services for continuity of care.

After significant consultation, we believe that we have reached a very reasonable and actionable solution for PHC transformation that will enable full implementation of nurse practitioners while ensuring the MOH can better attain its goal of increased patient attachment across the province. In order to facilitate momentum toward achieving this new model, the BCNPA has five recommendations for government:

1) Boldly move forward with Interprofessional Collaborative Models.
2) Establish an NP working/advisory group to ensure effective utilization of NPs.
3) Establish an Interprofessional Working Group to oversee primary care reform.
4) Increase the number of educational seats for NPs.
5) Lead the discussion on NP role clarity.

B.C. has an unparalleled opportunity to make the changes necessary to ensure patients have better access to the health care they need where and when they need it. Working together with government, stakeholders and health authorities, we believe that British Columbia can develop a “made-in B.C.” solution that will set in place the good intentions intended when NPs were introduced a decade ago. Nurse practitioners are already improving the health outcomes of British Columbians and will have even greater impact as more British Columbians gain access to the care they provide. The BCNPA looks forward to working with government and other stakeholders to establish a new way of providing primary health care in B.C.
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Key Messages

- All British Columbians should have access to a regular, consistent primary care provider.
- NPs are an underutilized primary care provider that can increase access; a key priority of the MoH.
- NPs provide primary health care that has similar outcomes to our GP colleagues, notwithstanding a different educational preparation.
- Primary care should be organized around the needs of the patient, not the service provider.
- Primary health care should focus on wellness rather than illness and quality rather than volume. This will lead to a healthier population in the long term.
- B.C. needs to focus on transformation in primary care delivery that is interprofessional, collaborative, patient-centred and community-based within a relational care framework.
- The discussions about primary care reform and the current envisioning of the Primary Care Home should not occur within the silo of the General Practice Services Committee (GPSC). All health disciplines should be involved in policy development and design of the overall strategy.
- Health Authorities need clear direction to set required organizational structures, which will ensure a standardized approach to NP implementation and practice across all Health Authorities.
- NPs can lead the way in moving primary care from a fee-for-service model to salaried and other effective funding models.
- NPs can lead the way in total system transformation across all levels of health care, with a focus on transitions between sectors.
- BCNPA is proposing a new model for the province (BCNPA PHC Model), which moves away from the fee-for-service/solo provider concept toward salaried or blended-funding primary health care teams. This new model will better meet patient needs and maximize the skills of all providers – right provider, right time, right problem for the right cost.

**Definition:** A Nurse Practitioner (NP) is an advanced practice nurse (APN) with education at the Masters/Doctoral level, that includes advanced nursing education as well as advanced medical skills training (diagnosis of disease/illness, treatment/management, prescribing medications, ordering/interpreting laboratory/diagnostic tests, and initiating referrals to specialists) providing the NP the authority to deliver comprehensive clinical care that blends the practice of medicine with the practice of nursing. NP practice does not require physician supervision. The NP is held to the same standards of care required of nursing, physician and midwifery colleagues.
Introduction

The sustainability of the nurse practitioner (NP) role must be a substantive part of the B.C. Ministry of Health’s (MoH) primary health care strategy. NPs have expertise in primary health care service delivery and are also change agents and system leaders. Numerous studies and patient satisfaction surveys continue to demonstrate that, while NPs have a different educational preparation and approach, they provide care that is equivalent to that of physicians.⁷

As such, the position of the British Columbia Nurse Practitioner Association (BCNPA) is that primary care reform cannot continue without the inclusion of NPs. In Setting Priorities for the B.C. Health System,⁸ the MOH discusses the need for strong interprofessional teams and targeted primary prevention and health promotion activities. This discussion paper outlines how NPs can lead the way in both of these priorities.

Primary Care Transformation in British Columbia: A New Model to Integrate Nurse Practitioners recommends a fresh approach to NP funding and primary health care service delivery. This approach will contribute to the creation of an accessible, sustainable primary health care system that aligns with the work begun by the MoH and other stakeholders around primary care delivery and the visioning of the Patient Medical Home and the Primary Care Home.⁹ ¹⁰ ¹¹ Transforming primary health care will require providers to work differently, let go of adversarial language, and come together to best meet the health care needs of patients.

The BCNPA acknowledges the considerable work that has occurred related to primary care reform as well as the implementation of the NP role in B.C. Since 2005, enormous effort has ensured NPs in B.C. are educated, funded and integrated across the province. However, the BCNPA also recognizes that the current funding model severely limits the full utilization of NPs and is a barrier to placing NP providers in areas of greatest need. After more than a decade and two major waves of NP designated funding, British Columbia needs a robust and thoughtful strategy that fully recognizes the NP as a primary care provider.
Background

The NP role has been the most studied role in health care. Over four decades of evaluation and research have consistently demonstrated that NP care is equivalent to that of our GP colleagues, cost-effective and of high quality. While the educational framework and approach of the NP is different to the traditional medical model, outcomes remain similar, providing choice and alternatives for patients. A recent economic analysis demonstrated that allowing NPs to work autonomously in a variety of clinical settings enables the entire health care system to be reformed. The same author concluded there is consistent evidence that NPs provide care of equal or better quality at a lower cost than comparable services provided by other health care professionals. A recent study from the UK analyzed the outcomes from over 12,000 patients on after hours primary care, including the ordering of diagnostic tests and the use of the emergency department (ED). They found that there were no overall differences in health outcomes, however, the NP group utilized less resources (including prescription use) and had fewer referrals to the ED. This resulted in significant cost savings to the system overall.

In a local context, Sangster-Gormley evaluated the NP role in B.C. and found similar results; patients were satisfied with the care they received from NPs and care was comprehensive, continuous and convenient. Sangster-Gormley further identified three barriers that still need to be addressed: role clarity, legislation and a sustainable funding model to maximize the potential of this provider group. Wong’s research undertaken in B.C. specifically examined clinical sites where NPs work in primary health care settings in partnership with other clinicians and demonstrated the positive impact of the role on access, responsiveness of care and health outcomes. A study done in the Interior Health Authority found that 73 percent of patients were willing to see a Nurse Practitioner for their care and it too concluded that a sustainable funding strategy was the largest barrier to full implementation of the role.

As of February 29, 2016, there were 345 NPs practicing in the province of B.C. Three universities in the province (University of British Columbia, University of Victoria and University of Northern British Columbia) educate up to 15 Family Nurse Practitioners each per year. A 2014 survey of NPs working in B.C. found that many NPs practice in community-based settings where they are the only primary care provider in the practice. Most indicated they experience problems working to full scope of practice due to persisting legislative barriers and organizational structures. Other barriers identified included lack of role clarity, significant unpaid overtime, and lack of physician and administrative support.

NP Attachment

The BCNPA anticipates that the majority of NPs will be situated within Medical/Primary Care Homes that are interdisciplinary with a mix of patients and will be able to have a roster of 800. An NP who works in Vancouver and joins one FFS physician who has a practice of primarily young adults who are well may be able to carry a roster of up to 1,100. However, an NP working on his/her own in a remote community who does all of the house calls, chronic disease management and education in a community with a high level of complexity - both medical and social - may only carry a roster of 600.
BCNPA recognizes that health authority NPs throughout the province are not only providing general primary health care services but also working within specialty contexts for complex, complicated patient populations who are often deemed too specialized for fee-for-service (FFS) general family practices and not well suited for Walk-in Clinic care. Within specialty programs, NPs are improving the continuum of care in areas such as cancer treatment, marginalized women and children’s health and HIV care. In addition, many NPs in B.C. are providing services in acute care settings, (e.g., trauma care, nephrology, gastro-intestinal, cardiac care, etc.) improving acute care patient outcomes, and positively impacting length of stay and patient transitions back to community care.

While the focus of this discussion paper is improving primary health care access, all B.C. NPs are responding to patient needs and filling important gaps in the health care trajectory. Health care is delivered on a continuum, and a robust care delivery model will influence all other levels positively. BCNPA is very supportive of these specialized roles and recognizes that there is also substantive value in these NP roles for patients and Health Authorities across B.C.

The Way Forward

Defining/Clarifying System Challenges

High performing primary care is well recognized as the cornerstone of an efficient health care system with a healthier population. This has been a goal for B.C. and Canada for many decades. It is well-known that B.C., along with the rest of Canada, is facing a crisis in primary care delivery and over the last decade a significant amount of money and effort has been invested to address this crisis. Unfortunately, as Romanow pointed out, “the search for a perfect model for primary care has prevented any meaningful reform at all. Ideal approaches are not always practical in the real world, primarily because they require too many changes at the same time.” Making changes to health care anywhere in Canada is challenging and controversial. Our publicly-funded, universal health care system is held in high regard by all Canadians and speaks to the very heart of who we are as individuals and as a nation. However, B.C. has a “wicked problem” with primary care service delivery, and pride in the system will not be enough to sustain it.

Over 10 years of extensive collaborative effort has gone into attempting to create a more responsive health care system in B.C., with the GP as the cornerstone of care. There has been substantial funding for programs such as “A GP for Me” that have not been effective in meeting the MoH goals of patient attachment to a physician, as fundamental changes in the system did not occur in parallel. At the same time “A GP for Me” was limited to attaching patients to physicians, without consideration of whether or not the same unattached patients could reasonably be attached to an NP. Furthermore, while NPs can certainly help to address the challenge of unattached patients and improved access to care, attachment is not the only marker of a successful and robust primary health care system. Increased access such as same day appointments and the quality of patient encounters, along with better health outcomes, also need to be measured.

Despite this effort, in 2015, approximately 15 percent of British Columbians continued to report not having a family physician. Yet, BCNPA regularly receives concerns from NPs who are unable to find employment in primary care settings. This is especially problematic at a time when more than 60 percent of the population has at least one chronic disease – a number that is expected to rise dramatically over the next decade. In 2018, there will be more people...
in B.C. over the age of 65 than under the age of 18. By 2036, an estimated 1 million new patients will be diagnosed with the top five chronic diseases in B.C. \(^3\)\(^8\) Sadly, too many British Columbians utilize walk-in clinics routinely, which are “inadequate to ensure continuity of care for major or significant time limited health issues and unsuitable for patients living with progressive illness and chronic conditions.”\(^3\)\(^9\) Recent evidence informs us that incentivized care for chronic diseases/conditions, prevention and screening has not improved health outcomes.\(^4\)\(^0\) Old and outdated systems that focus on volume rather than quality are no longer proving effective given demographic changes and a demand for alternatives in an ever-changing virtual environment.

BCNPA regularly receives reports from NPs that a vast knowledge gap about NP scope of practice for both professionals and patients remains. Present funding approaches and organizational structures hinder the flexibility of the NP to respond to changing patient/population needs and limit the exposure of physicians, health professionals and patients to the NP role. The current funding models create barriers to understanding and recognizing the attributes of this role for the patient, the practice, the agency and the system as a whole. The NP is often viewed as a threat, rather than a collaborative health care professional. The intent of the NP role is not to replace but rather to contribute to strengthening and improving existing primary care delivery.

Proposing Innovative Collaborative Solutions

Primary care reform requires a reconfiguration of provision models:

- A transition from silo-based practices to team-based (e.g., interprofessional/multidisciplinary) care models that include patients as partners in service design.
- A transition from a top down approach to grassroots “bottom up” re-envisioning of primary health care.
- A transition from a single provider as the gatekeeper with ownership over the patient’s care to multidisciplinary team based care.

Transformation requires policy makers and clinicians coming together, thinking and working differently, respecting, recognizing and utilizing each other’s expertise.

A shift to relation-based care is foundational to effective interprofessional teams. Rather than a patriarchal approach, relational teams

Nurse practitioners work as consistent, available, skilled facilitators who bridge professions and focus on patient care. The relationships that nurse practitioners develop with other professions, their frequent communication, and the timely engagement of their expertise supports:

1. Smoother patient transitions.
2. Timely and safer patient care.
3. Efficiency of other professionals\(^4\)\(^1\)

[A robust and thriving]… body of literature supports the position that NPs provide care that is safe, effective, patient-centered, timely, efficient, equitable and evidenced based. Furthermore, NP care is comparable in quality to that of their physician colleagues. Patients under the care of NPs have higher patient satisfaction, fewer unnecessary hospital readmissions [cost savings], potentially preventable hospitalizations [cost savings], and fewer unnecessary emergency department visits [cost savings] than patients under the care of physicians.\(^4\)\(^2\)
work to build relationships with patients and within the team that further the understanding about individual and population needs.\textsuperscript{43} The team views the patient/community through multiple lenses versus the single lens that often is one-dimensional and not holistic. Attention to relation-based care can be foundational to building highly effective teams that have a shared vision, purpose and mandate. Care does not rely on a single provider to direct – rather a process exists to ensure formal and informal collaboration.\textsuperscript{44}

B.C. also needs to maximize the efficiencies that can be found within a system that is inclusive of all health care providers such as registered nurses, pharmacists, social workers, counsellors and psychologists. Numerous providers are required to improve the health of a single patient across their life span. A power-shift in family practice governance to a more egalitarian and democratic structure is critical to successful transformation. All health care professionals involved in the delivery of primary health care should work to full scope of practice to maximize efficiencies.

B.C.’s health care system depends on a solid primary health care platform that works well. Our society’s well-being depends on accessible longitudinal primary care with upward referral to specialist care and coordination when needed. Currently, in every region of the province, social and structural challenges exist that create barriers to equitable health care access. When primary health care is not accessible or is ineffective, health worsens, increasing system costs. Currently, many individuals seeking care must rely on walk-in clinics and EDs or seek care very late in the illness.\textsuperscript{45} BCNPA understands primary care as a set of functions, roles and responsibilities rather than a medical discipline, and recognizes that B.C. will require more than basic primary care homes to transform the system.\textsuperscript{46}

Grassroots movements to team based services, both within and outside of HAs, have already begun across the province. Numerous iterations have emerged including integrated primary and community clinics/health centres, team-based primary health care, family health clinics, community health, and/or primary care homes. Supported by patients, these teams are refocusing efforts on patient/person-centred care, looking to improve access to health care services, to offering a choice of appropriate health professionals who can meet patient care needs, and to open the door to community member participation in these processes. These models support collaborative-relational interprofessional care, shared governance and are co-created by the health care recipients.\textsuperscript{47, 48} Models offer the basket of primary health care services including primary care, health prevention/promotion, and partnerships with other service sectors.

**Innovative Models**

The importance of shared governance cannot be overstressed. Scholle and others suggest that to truly be patient-centred, the care team would not necessarily be physician-led, but would allow the leader to be selected by the team – whether a physician, nurse practitioner, social worker, psychologist or others. The patients are “attached” to the team, rather than a single provider. It is essential that future models of care take full advantage of the growing number of NPs working to their full potential and capabilities. The system must move toward primary health care models that promote the holistic care of children/youth, families and adults where each patient has a continuous relationship with a health care professional.\textsuperscript{49} B.C. needs to move toward a model that increases attachment while maintaining appropriate access to the type of care required and promoting longitudinal continuous care.
Patients and clinicians have been clear in their desire for new alternatives and NPs have already proven to be trusted professionals accepted in many communities around the province. BCNPA receives weekly requests from patients looking for alternatives to the traditional physician-led primary care practices. There has also been increasing interest in recent years from physician colleagues in B.C. to work with NPs. BCNPA has received emails from numerous FFS family and specialist practices looking for ways to include NPs as part of their practice groups. Multidisciplinary team-based salaried models are attractive to new graduates as they offer a stable and predictable income, an opportunity to work collaboratively with other health care professionals and offer work/life balance.

The MoH can build on these models and take a leadership role in advocating for a reconfiguration and transformation of the current system through the implementation of interprofessional egalitarian teams. Many NPs and HAs have been innovative within the existing NP funding allocation and there are several models that have developed over the last decade which are proving to be effective.

One B.C. example is the “Responsive, Interdisciplinary, Intersectoral, Community, Health, Education and Research” (RICHER) model currently in place in Vancouver. The RICHER team, a PHSA-BC Children’s Hospital program, has created a successful collaborative team which, working in partnership with community constituents, has implemented a primary health care service, creating links with specialist care that better meets the needs of at risk children, youth and their families.

The RICHER Model

Inherent in this model is the dismantling of the structural and social barriers that limit access to primary health care, subsequently negatively impacting the continuum of care. Building and maintaining trusted relationships with families, patients and the community at large and promoting engagement, clinicians are better able to understand the situational context experienced by the families or patients and co-create a framework for service delivery to meet the unique needs of the population.

The primary goals of the model are to create improved access to primary health care services provided by Nurse Practitioners, to impact barriers to specialist services, to create linkages between primary health care and specialist care, to facilitate access to public health care services and to empower patients to become more active participants in the care of themselves and their family’s health.

Receiving a Health Canada – Innovations award, the model has demonstrated success in placing a beneficial breadth of health care services within an underserved community, increasing patient attachment to longitudinal care, delivering appropriate primary health care specifically targeting vulnerable children and youth (and their families), demonstrating acceptance of the NP as a primary care provider, improving appropriate specialist referrals and facilitating access to specialist services, promoting the advantage of NPs, physicians, RNs and allied health providers working together, building community and patient capacity related to health and well-being and improving clinician knowledge and utilization of non-health services and programs that promote health.
The second example highlights an Alaskan innovation garnering international attention for its innovative approach - the client owned Nuka System of Care.

**The Nuka Model**
Nuka is a system of care undertaken in Anchorage, Alaska, that is receiving attention for demonstrating a significant improvement in positive health outcomes for the population served. Within this model Alaskan indigenous peoples become the “customer-owners” of the health care service.

One of the chief responsibilities of the providers working in this system of care is to establish trusting, accountable, long-term relationships as a way to better understand the context of the customer’s life. The operational principles are based on relationships, high standards of care, community engagement and overall impact on population health.

The governing board is entirely made up of customer-owners who set the direction for the workforce that includes clinicians working in primary care, dentistry, behavioural health, residential care, traditional healing, complementary medicine, health education, plus others identified by the board as necessary.
Primary Health Care – Making it Happen

BCNPA Primary Health Care Model

The GPSC discusses the “Attributes of a Patient Medical Care Home” which outlines core principles that are required for the patient care home. However, the challenge of how to enact them continues to be one that government and stakeholders grapple with.

It is the BCNPA’s position that the Patient Medical Care Home/Primary Care Home does not go far enough toward reforming B.C.’s primary care system. Community or mixed initiatives have greater potential to develop programs that are more responsive to community needs - concepts that have proven to be successful in Ontario. Meaningful and transformative changes in primary care delivery require not only the ability to respond to community need, but to build on their capacity to develop new supportive partnerships. The BCNPA PHC Model will ensure high quality, cost effective care through evaluation of metrics that are not solely based on volume and tasks, but also reflect patient health outcomes and equitable access to care. The new model must be enacted through a government structure that supports collaborative principles such as inclusivity and shared responsibility among team members.

The BCNPA proposes a new model, which represents a shift from a business oriented FFS primary care funded model to a model that supports primary health care realized through a salary based collaborative primary health care team. It is important to recognize the difference between the delivery of primary care and primary health care. The BCNPA supports the latter where the focus is on a holistic framework based on the principles of the World Health Organization. It describes an approach to not only the individual, but also to the population and public health of a community.

Adopting the principles of primary health care, the BCNPA envisions two phases to introduce the new BCNPA PHC Model. Initially, we would like to work with government and stakeholders to begin introducing NPs into existing family practices, where NPs would be able to immediately augment the number of patients attached to a practice. This would also respond to the many inquiries BCNPA receives from physicians who are interested in adding an NP(s) to their practice. In the second phase of the BCNPA PHC Model, BCNPA would like to work with government and stakeholders to support the implementation of full service, community “place-based” interdisciplinary/intersectoral salaried primary health care teams in communities/regions with the greatest need. The basket of services may include primary care, mental/psychosocial health care, health promotion and prevention activities and social/spiritual supports based on the identified needs of the community constituents.
Team members will partner with existing services/sectors to maximize and augment the reach of the team’s services, avoiding service duplication. The collaborative team will offer improved access to care, including longitudinal care and same day service when required. Team composition will vary based on the needs of the community and constituents. The multidisciplinary team will be able work to full capacity providing more efficient primary care service delivery. Working in partnership, the health care team and the community will adopt a shared governance structure that will ensure that the health care team is able to meet the needs of the citizens, and work together to improve population health outcomes.

The BCNPA PHC Model will:

- Be community driven and based.
- Be multidisciplinary with all providers working to full scope.
- Roster patients to the team, rather than to a specific provider.
- Focus on both attachment and equitable access to care.
- Include a shared governance structure inclusive of all health care providers.
- Wrap services around the patient with funding reflective of this.
- Focus on salaried providers creating less of a focus on volume.
- Determine evaluation criteria based on needs of the community and patients.

**Nurse Practitioner Funding**

There are numerous primary care funding models found in the literature. Those most cited include fee-for-service, capitation/population-based health funding and salaried. It is important to note that these funding models have all been evaluated based on a medical model and illness approach, rather than a wellness focused, interdisciplinary approach. This makes it difficult to sift through the outcomes that are applicable to the primary health care model discussed above.

It is important to consider that since the 1970s, research has demonstrated the benefits of integrated care teams and salary based funding models. The landmark RAND Health Insurance Experiment (1971-1986) found that those receiving care in an integrated model had lower rates of hospitalization and received more preventive services resulting in decreased cost of care per person seen. Canadian research has consistently demonstrated that FFS remuneration is often incompatible with the development of multidisciplinary teams in PHC. This synthesis further outlines that governments have put themselves in a difficult
position by making economic incentives the main or often the only mechanism for change. As well, the synthesis reinforces that efforts should also be directed into rewarding excellence and enabling innovators. Funding and remuneration are two components of primary health care that government can aim to modify, and issues related to remuneration can no longer be centred on physician providers only. The focus should be on the function, rather than the educational background of the provider. Moving away from FSS toward salaried interdisciplinary models is one of the core elements of reforming a system of care that no longer meets the needs of British Columbians or is fiscally viable.

Blended funding is often discussed as a successful way to implement interdisciplinary primary health care teams in the community, often with incentives as an add on. The Family Health Teams in Ontario are an example of a blended funding model including FFS, capitation and incentives. When reviewing the literature, the BCNPA examined population based funding models (PBF) including the John Hopkins ACG model, and concluded that these models were difficult to administer and may elevate operating costs overall. This conclusion is supported by Frayne, who states that the mechanisms and operating costs of the John Hopkins PBF model are more complex than traditional models. Therefore, BCNPA has decided to present a salary-based model for the purposes of clarity and ease of administration. If a PBF model for British Columbia NPs is of interest in the future, the BCNPA is more than willing to participate in discussions, but believes this work is beyond the scope of this discussion paper.

The MoH describes the Alternative Payment Program (APP) as a mechanism developed to address situations where FFS physician funding is not able to “maintain, stabilize or improve patients access to medically necessary physician services.” Applications for APP funding must align with the province’s goals of high quality, patient-centered care tailored to meet the specific health needs of the patient, and a sustainable affordable publically funded health system.

The BCNPA recommends either including NP providers in the APP framework as a mechanism to more fully integrate NPs across the primary health care system as it currently exists or developing a funding source that is similar to APP funding in terms of criteria, sustainability and structure. This fresh funding approach, AAP or an NP-APP-like framework would enable salaried NPs to be placed within a HA setting or a FFS office to immediately positively affect access to primary care for underserved populations and would be a first step for other primary care providers to move to salaried compensation as the culture shifts over time. BCNPA recognizes that there may be changes needed to include NP providers in this funding approach. However, this would allow the MoH to demonstrate positive patient outcomes in a non-FFS model, leading the way for true transformation.

Funding for NPs should include salary, benefits and overhead costs, if needed (Appendix A and B). Similar to APP, the benefits of such funding for providers include a “predictable rate of income, reasonable compensation for time-consuming service, allows for compensation for indirect client care and moves away from fee for visit, task or procedure.”

Quality Assurance Framework

With the introduction of any new model, outcomes need to be measured to ensure goals and objectives are being met and there is accountability for dollars spent. The APP application suggests an evaluation plan that could be utilized, however, Appendix C outlines
recommended measures that align with the MoH goals, objectives, and performance measures that could be used as an alternative.

A robust evaluation plan will need to be determined in collaboration with an evaluation specialist depending on the scope of the project. An analysis of the community needs will be required for each application. Outcome criteria will change depending on the makeup of the community. Implementing the BCNPA PHC Model is an excellent opportunity for the MOH to use innovative outcome measurements, such as complexity scores and those that are equity responsive, violence informed and promote safety and trust resulting in better health outcomes for marginalized populations rather than traditional markers. Lessons learned from the NP4BC funding demonstrate that a tailored funding approach must also include enough flexibility to meet the changing needs of the patient population over time.
The Proposed BCNPA PHC Funding Model

The BCNPA PHC Funding Model includes two options for realizing a sustainable NP funding approach in B.C. To date, all NP funding has been delivered within a HA model which was intended to safeguard appropriate professional practice support and administrative supports for the, then, new role. As a result, most NPs in the province are employees of HAs. This model has been successful in increasing attachment for thousands of patients across B.C. However, the majority of primary care does not operate within this model and as a result, NPs are not able to increase access where they are needed most. Consequently, we are proposing two approaches that should provide a) a more robust HA funding mechanism and b) a mechanism that will ensure an increase in primary care attachment.

Option A – HA Affiliated NP

A Health Authority seeking to add new or additional NP staff to meet an identified need in primary care would complete the designated application process for NP provider compensation. Applications would support NP roles that focus on increasing access to primary care. Remuneration would include salary, benefits, overtime, locum relief, administrative support as well as education support. Funding would be attached to the NP position identified in the application process.

This option builds on the success of NP4BC funding while addressing some of the more challenging inconsistencies that arose from the NP4BC funding including variable administrative support, overhead, as well as educational and professional development support. As well, BCNPA recommends revising the funding criteria to allow for flexibility for both the NP and the HA to best meet evolving patient needs.

Funding could be considered for:

- HA that partners with a community FFS primary care practice to add an NP to the provider team.
- HA that partners with the proposed GPSC Primary Medical Home or Primary Care Home that would allow for the inclusion of NP provider(s) to the existing primary care provider team (Appendix D).
- HA that partner with a community organization to develop multidisciplinary teams or NP practice groups to provide primary care for marginalized populations (Appendix E).
- HA multidisciplinary teams or NP practice groups are developed to provide continuity of care between hospital and community or to provide primary care for specialized
populations within acute care facilities (e.g., BCCA – NPs with cancer expertise providing primary care to patients with or recovering from cancer).

**Foundational requirements:**

1. The HA governance structure will include a Department of Nurse Practitioners that allows for a full privileging and credentialing process, including admitting and discharging from the hospital setting.

2. The NP Department Head will be an NP and be situated within the organizational structure of nursing or primary health care and have a direct relationship to the Chief Nursing Officer. This will ensure the strategic alignment of NPs within nursing to promote a strong collective nursing voice and improve implementation strategies. This also fits with the vision of the BC Coalition of Nursing Associations.  

3. A formal relationship to the Department of Medicine will be established to ensure standardized clinical practice.

4. The salary range for an NP is recommended to start at HEABC Level 10. This range is in line with the salary recommended in Appendix B and C determined from a national environmental scan across Canada and will ensure equity in pay between both options. It will also ensure effective recruitment and retention of NPs working for HAs.

5. The Divisions of Family Practice will include NP providers working in primary health care to improve collaboration and interprofessional relationships.

6. Locum coverage will be provided and accounted for in the funding arrangement.

7. NP encounter code and ICD-9 reporting will continue and become part of the ongoing evaluation of the application, augmenting other outcome measurements as required.

8. Existing practices and/or communities must demonstrate practice readiness for the NP provider including an understanding of the role as well as supports available that may include office space, an existing exam room or access to a Medical Office Assistant (MOA). This would be negotiated with each application.

9. An implementation consultant will be encouraged for each application.
Option B – Non-HA Affiliated NP

The BCNPA recognizes that there has been a desire to have HAs become more responsive to primary care access needs. However, the majority of primary care today resides within FFS physician family practices, many not affiliated with the local HA. APP funding or an NP version of the APP model would allow the independent nurse practitioner(s) to work outside of the HA framework to increase access to primary care services across the province in areas where primary care access is an issue. The NP’s expertise with system change and transitions would also allow for a gradual shift toward a more robust approach to the delivery of primary care.

Community groups (e.g., First Nations Health Councils, small rural community boards etc.) or groups of existing FFS primary care providers could apply directly through the NP funding process to add an NP to their structures/programs or health services to improve or create access to primary care, meeting the needs in the community. The NP would become an employee of the entity requesting the funding.

Funding could be considered for:

- An underserved community (urban/rural/remote) seeking NP(s) to provide primary health care service in their community (Appendix F).
- A FFS Family Practice group seeking to add NP(s) to their practice as an additional primary care provider to increase both attachment and access (Appendix G).
- An NP practice group who have identified an underserved population and are seeking to improve service delivery to that population.
- A specialist practice group seeking to add an NP provider to address the primary care needs of the practice population.

Foundational requirements:

1. The Non-HA Affiliated NP will need to be privileged in local hospitals to ensure comprehensive coverage. Therefore, the governance structure of the local HA will also include a Department of Nurse Practitioners that allows for a full privileging and credentialing process, including admitting and discharging from the hospital setting. This will also ensure that the NP has a relationship with the local Department of NPs rather than working in isolation.

2. The practice team or the NP will carry a roster of patients depending on the setting the NP is employed in. An increase in the practice patient roster will become part of the evaluation criteria. The Family Health Teams in Ontario have developed a formula for this.75

3. The suggested salary is $108,000 and may increase depending on years of experience and other factors such as leadership experience and doctoral level education.

4. The NP will become a member of the local Division of Family Practice.

5. Locum coverage will be provided and accounted for in the funding arrangement.

6. NP encounter code and ICD-9 reporting will be required and become part of the ongoing evaluation of the application, augmenting other outcome measurements as required.
7. A community group requesting funding for NP(s) providers will provide additional information related to non-salary infrastructure (e.g., rent, utilities, EMR etc).

8. The MoH will enter a contractual agreement with the employer regarding expectations for implementation of the NP role as well as expected outcomes.

9. Existing practices and/or communities must demonstrate practice readiness for the NP provider including an understanding of the role as well as supports available that may include office space, an existing exam room or access to an MOA. This would be negotiated with each application and a negotiated lump sum will be established.

10. An implementation consultant will be encouraged for each application.

For reference, the BCNPA has developed two tables as appendices that outline the costs of providing a single NP provider to an existing team or an entire team to a community (Appendix A and B). These estimated costs could be applied in either option. Costing estimates could also apply to physician providers with some minor adjustments to salary, the difference of which is outlined in Appendix H.

**Case Example**

A community has 17,000 unattached patients. A group of four NPs with adequate infrastructure and human resources support can take care of approximately 3,200 patients, depending on complexity, for approximately $1,500,000 (Appendix B). Therefore, if the MoH were to implement this model to attach 17,000 patients, they would require five clinics and it would cost the MoH approximately $7,500,000 for the unattached in the community to become attached to a primary care provider. Twenty NPs would need to be hired in total.

Alternatively, 11 FFS Medical Care Homes/Primary Care Practices that are ready to implement an NP into their existing practices could be identified and apply for funding for two NPs per clinic, increasing the roster of the practice by 1,600 depending on complexity and team complement. This would cost approximately $2,970,000 (base salary with no additional costs for overhead x 22 NPs) as the NPs would join existing practices with a team/infrastructure already in place (Appendix A). Once implemented for NPs, with some salary adjustments, this type of funding arrangement could also apply to GPs who want to work in this type of model (Appendix H).

It is important to note that every community and practice will require different amounts of funding depending on existing infrastructure, team complement and location. The tables are estimates and provided for reference and a framework only. Similarly, the number of patients an NP can “attach” will also depend on these factors. An NP who works in Vancouver and joins one FFS physician who has a practice of primarily young adults who are well may be able to carry a roster of up to 1,100. However, an NP working on his/her own in a remote community who does all of the house calls, chronic disease management and education in a community with a high level of complexity - both medical and social - may only carry a roster of 600. The BCNPA anticipates that the majority of NPs will be situated within Medical/Primary Care Homes that are interdisciplinary with a mix of patients and will be able to have a roster of 800.76
Recommendations

1. Boldly Move Forward with Interprofessional Collaborative Models. Collaboration and interprofessionalism are well-represented concepts in MOH policy papers related to health care transformation. Yet across the system, enacting the concepts of team based professional collaboration and partnership remains challenging. Interprofessional education is part of all health care provider education and therefore the BNCPA recommends that the MOH hold each health care professional group accountable for consistently demonstrating these values in all health care discussions and in every practice setting.

2. Establish an NP Working/Advisory Group to Ensure Effective Utilization of NPs. Comprised of experts from government, health authorities, stakeholders and the NP profession, the working group will create a strategy to implement the BCNPA PHC Model and funding strategy outlined in this document. Through our MOU with the BC Coalition of Nursing Associations (BCCNA), BCNPA has access to staff, office space, administrative support and facilities to establish, organize and run this working group with some additional funds for travel and other incidentals. The working group will review the NP funding application, determine any required changes, and establish a mechanism and timeline for moving forward with the new BCNPA PHC Model and both funding options outlined in this paper.

3. Establish an Interprofessional Working Group to Oversee Primary Care Reform. The MoH’s Primary and Community Care Policy Paper identified the need for a review of GPSC and establishing an NP presence on that organizational body. The BCNPA recommends the inclusion of NPs on all joint committees including the Collaborative Services Committee, Shared Care Committee, Rural Services Committee and the Specialist Services Committee. In addition, we recommend the MoH Chief Nursing Advisor sit directly on the GPSC working toward the engagement of other health professionals from across the sector, or the BCNPA recommends the creation of an umbrella interprofessional group that oversees both the work of the GPSC and a new nursing and other health professionals committee. An interprofessional approach would signal a significant change in attitude toward inclusion and teamwork. We all should be working together, rather than in siloes.

4. Look to Increase the Number of Educational Seats for NPs. The BCNPA recommends that the MOH, the Ministry of Advanced Education (AVED) and the three Nursing Schools that educate NPs, work together to increase capacity in each of the nursing schools from 15 NP students/year to 30 NP students per year within the next four years (90 graduates per year). This would increase the number of NPs working in the province to meet the needs of the 200,000 British Columbians without a primary care provider. It would require strong collaboration with AVED, a substantial increase in funding to the universities and a step-wise approach to ensure jobs are in place when NPs graduate, but could be achieved through collaboration and planning amongst stakeholders.

5. Lead the Discussion on NP Role Clarity. Nurse Practitioners have had a presence in the health care system in B.C. for over a decade, yet the role is still not entirely understood in terms of scope and function and is often discussed inaccurately among our colleagues and in the media. The BCNPA is a volunteer association with limited funds to educate both the public and our colleagues about the role and the benefits NPs provide to patients. The time is right for others to work with us and demonstrate leadership in discussing the positive impact NPs make in B.C. to patients.
Summary

It is the BCNPA’s view that Nurse Practitioners are well positioned to help meet the current goals of the MOH: to increase access to primary care, including care for the most vulnerable, in a comprehensive, collaborative and cost-effective manner. We are proposing to place NPs within primary care settings using a salaried funding model to meet the needs of British Columbians. The BCNPA understands that in the current economic climate, the allocation of new funding might be difficult even given the cost savings over the long term. However, we believe that the strategies discussed above can be realized within the existing health care system budgets.

NPs are a valuable resource within the primary health care system and are used widely across Canada and throughout the United States. B.C. has an opportunity to move to the forefront of integration and implementation with a true interprofessional model that is built around the patient. The BCNPA recognizes that it will require concentrated effort on the part of government, NPs and health authorities to fully develop funding models that enable long-term sustainability of the profession, however we feel the timing is right. After more than 10 years, it is more than time for the province to recognize that NPs are a successful and integral part of our health care system, and there is responsibility on all sides to ensure they are a sustainable and growing resource for British Columbians.

It has been well-documented that interdisciplinary care can improve service delivery and make a positive impact on health outcomes. Increasing access to NP care will help government achieve its goal of developing a range of multidisciplinary practices across communities with the capacity to address longitudinal health care needs of older adults with chronic medical conditions, potentially requiring home support, cancer care, and/or palliative care.

Nurse practitioners in British Columbia continue to be underutilized and inaccessible to the many who could benefit from the full basket of primary health care services the role provides. Since 2005, health authorities have employed most nurse practitioners in B.C. – some on stable salaries, others on pilot or short-term funded projects. As a result, many NPs are limited to working with specific populations, and British Columbians, by and large, have had limited exposure to NP care despite facing ongoing challenges in accessing consistent primary care services. Without clear, consistent decision-making and a sustainable approach to funding, B.C. runs the risk of losing NPs to other jurisdictions, leaving behind the numerous ‘unattached’ patients who could otherwise have their primary health care addressed efficiently and effectively by an NP.

We are asking the MOH to be leaders in the transformation of primary care and include NPs in the process. Implementing the proposed BCNPA PHC Model will ensure an increase in access to primary health care that will provide longitudinal positive health care outcomes. Wrapping services around the GP has not been effective to date. BCNPA believes the time is right for the MoH to be unique, bold and innovative, the first province to implement a salary based interdisciplinary primary health team model that is not led by NPs or GPs but by communities and patients.
Glossary of Terms

BCNPA PHC Model

Community PHC is defined as an approach delivered in an identified community/town/ rural area. This approach includes patients as partners in care delivery and has proven to empower patients to take charge of their health and improve health literacy. Providers engage with communities and recipients as equal partners working across health, social and non-governmental sectors to respond to community/population need. The BCNPA PHC Model is community based, based on the principles of primary health care, multidisciplinary, salaried and driven by an egalitarian governance structure. Health care providers provide a basket of services including primary care, mental health care, health promotion/prevention activities, work with public health programs, offer outreach and make efficient use of technology/telemedicine/telehealth all in an effort to provide responsive care.

These approaches are in keeping with the Primary Health Care Charter’s basic philosophy that there is value for the patient and patients as partners.

Interprofessional Collaborative Approaches

Interprofessional collaborative approaches in primary health care are known to improve access to the most commonly needed health and social services. Collaborative practice (CP) occurs when health workers from different professional backgrounds offer comprehensive services working with patients, their families, caregivers and communities to deliver the highest quality of care across settings. Practice includes both clinical and nonclinical health related work, such as diagnosis and treatment, surveillance, health communications, management and service design. Interprofessional collaboration is central to an optimally designed primary health care home and to the provision of high quality, patient centred, coordinated, cost effective and sustainable primary health care, and therefore is a key component of funding and practice models.

Approaches are patient, not provider centred, responsive and flexibly tailored to meet the changing needs of patient panels or populations based on up-to-date needs assessments. Teams or groups can be structured in many ways including a co-located or a centrally located team that responds to health care needs for patients in the primary health care home, in shared clinical spaces, at outside health appointments or in the home or community setting. Appointment structures are flexible and may include telephone, telehealth or virtual appointments with team members, with the aim of providing patient centred care utilizing the correct provider, at the correct time, in the correct place. Care may be provided by one or more team members, to individuals or groups, based on patient need. Leadership and governance supports optimal team functioning and patient focus is non-hierarchical, safe, respectful and inclusive. Leadership responsibilities are shared and rotated.
Patient Centred Framework

Patient centred care is the first of eight priorities outlined in the MoH’s strategic plan, Setting Priorities for the BC Health System. The framework outlines the elements of patient centered care that are built around the individual, rather than the service provider or administration/agency. The MoH intends its Patient Centred Framework to drive policy, service design, training and accountability.87

Population Health

Population health is defined as “an approach that aims to improve the health of the entire population and to reduce health inequities, looking at and acting upon the broad range of factors and conditions that have a strong influence on our health.” Population health approaches recognize that health is a capacity or resource rather than a state more in line with the notion of being able to pursue one’s goals, to acquire skills and education, and to grow.88 This broader notion of health recognizes the range of social, economic and physical environmental factors that contribute to health. The best articulation of this concept of health is “the capacity of people to adapt to, respond to, or control life’s challenges and changes.”89

Primary Care

Is defined as day-to-day health care given by a health care provider. Commonly this provider acts as the first contact and principal point of continuing care for patients within a health care system and coordinates other specialist care that the patient may need (e.g., FFS Family Practice). It is a narrow concept focusing on the provider (usually a family GP) and the individual. Primary care applies to all first point of contact care including Emergency Departments.90

Primary Care Home

The Primary Care Home is described by the GPSC as “patient medical homes (full-service family practices) or networks of patient medical homes linked with health authority and community agency primary care services which form the foundation of a coordinated system of primary and community care within the community. This team-based approach includes other health professionals working together with family doctors, forming networks of care.”91 92

Primary Health Care

Primary health care is a broad concept that in addition to primary care services includes health promotion and disease prevention along with population-level public health functions. It reflects the approach to service provision for a community proposed in the WHO 1978 Alma Ata Declaration.93 Primary health care is focused on improving a patient/family’s capacity to manage their social, emotional, mental and physical health.

Primary care is the element within primary health care that focuses on day-to-day health care services including diagnosis and treatment of illness/injury. Primary health care moves beyond primary care to include services/activities that promote health and mitigate the factors that play a part in health status including income, housing, education and environment.94
Primary health care provides “direct provision of first-contact services (by providers such as family physicians, nurse practitioners, pharmacists and telephone advice lines); and a coordination function to ensures responsiveness to a community of patients, continuity and ease of movement across the system, so that care remains integrated.”

**Primary Medical Care Home**

The GPSC describes a primary care medical home as “a family practice, the place patients feel most comfortable to discuss their personal and health concerns.” The Most Responsible Provider – usually the family doctor but sometimes the nurse practitioner – works collaboratively with a team of health professionals, either within or linked with the practice, to deliver longitudinal, comprehensive and coordinated primary care. The service attributes of the patient medical home are based on the framework and pillars created by the College of Family Physicians of Canada (CFPC).

**Relational Based Care**

Relationship based care is foundational to effective teams, it requires the commitment by all clinical team members to recognize and respect each discipline’s unique scope of practice and contribution to the team and the patient. Team members work to build relationships within the team that furthers understanding about individual patients and population needs. The patient benefits as the team views the patient/community through multiple lenses versus the single lens that often is one-dimensional and often perceived as well intentioned but not holistic. Innovation within the team is promoted. Attention to relational based care can be foundational to building highly effective teams who have a shared vision, purpose and mandate. Care does not rely on a single provider directing care – rather a process exists to ensure formal and informal collaboration exists.

**Shared Governance**

Shared governance is defined as a “professional practice model, founded on the cornerstone principles of partnership, equity, accountability and ownership that form a culturally sensitive and empowering framework, enabling sustainable and accountability-based decisions to support an interdisciplinary design for excellent patient care.” This can be more simply put as “a dynamic staff-leader partnership that promotes collaboration, shared decision making and accountability for improving quality of care, safety and enhancing work life.”
Endnotes


Appendix A – Estimated Budget – Single Full-Time NP

**Nurse Practitioner:** Proposed human resources and infrastructure to support one NP to care for 800 unattached patients - salaries approximated, please see references below table.

<table>
<thead>
<tr>
<th>Human Resources/Salaries &amp; Benefits</th>
<th>Annual Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FTE</td>
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<tr>
<td>Nurse Practitioner</td>
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<tr>
<td>Total</td>
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<tr>
<td>Benefits @ 25%</td>
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<td>Total Salary and Benefits</td>
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<td><strong>Management and Administrative (M &amp; A) Personnel</strong></td>
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<td>Benefits @ 25%</td>
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<tr>
<td>Total M &amp; A Personnel and Benefits</td>
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<td><strong>Total Human Resources</strong></td>
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<tr>
<td><strong>Overhead</strong></td>
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<tr>
<td>Office Overhead @ 4% of Human Resources ($147,188)</td>
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<tr>
<td><strong>General Overhead</strong></td>
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<tr>
<td>Cell Phone/Wireless Handheld/ Telephone Line/Service</td>
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<tr>
<td>Clinical Supplies</td>
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<tr>
<td>Medical Waste</td>
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<tr>
<td>Office Operation and Supplies</td>
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<tr>
<td>Bookkeeping and Banking</td>
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<td>Payroll Service Contract</td>
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<td>Total General Overhead</td>
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<td>Wireless Access/Ongoing Support</td>
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<tr>
<td>Computer and Desk</td>
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<tr>
<td>Total IT</td>
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<tr>
<td><strong>Insurance/Professional Liability</strong></td>
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<tr>
<td>Coverage (if applicable)</td>
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<td><strong>Total Insurance/ Professional Liability</strong></td>
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<tr>
<td><strong>Service Fee</strong></td>
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<td>Travel (For Clinical Purposes Only)</td>
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<td>Professional Development</td>
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<tr>
<td>Implementation/Orientation Costs</td>
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<td>Recruitment</td>
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<tr>
<td>NP Locum Coverage if applicable (0.1 FTE)</td>
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<tr>
<td>On Call Coverage</td>
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<td>Evaluation/QI Activities</td>
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<td>Total Service Fee</td>
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<td><strong>Total Overhead</strong></td>
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<tr>
<td><strong>TOTAL ANNUAL OPERATING BUDGET (HR + Overhead)</strong></td>
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<tr>
<td><strong>Approximate Cost Annually per Patient (@ 800 patients)</strong></td>
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Note: Adapted from “British Columbia’s NPs, Primary Care Providers, Leaders and Partners in Person Centred Care” by Leanne Rowand (2016) “A Nurse Practitioner-Led Clinic in Thunder Bay” by L. D. Thibeault (2011) and from Payscale.com (n.d.). Average Salary for HEABC Employees (2016).

*Some BC NPs may prefer part-time contracts.*
Please Note: ALL COSTING IS ESTIMATED. Proposed NP salary was a) determined based on a national environmental scan following extensive consultation with BC NPs, b) recognizes the function/responsibility/practice of the NP provider c) ensures adequate compensation and pay equity between both options and d) promotes improved recruitment and retention.

This example estimates the funding required for a single NP at the average NP salary to be added to an existing Medical Care Home/Primary Care Home for either Option A or B. Each situation, region, community is unique and may have needs beyond the scope of this example. Line items will require adjusting accordingly and additional items added based on need.
Appendix B – Estimated Budget – Practice Group (4 FTE)

**Primary Health Care Team:** Proposed human resources and infrastructure to support 3,200* unattached patients. Salaries approximated, please see references below table.

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<tr>
<td>Overhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office overhead @ 4% of Human Resources ($1,202,082)</td>
<td></td>
<td></td>
<td></td>
<td>$48,083</td>
</tr>
<tr>
<td>General Overhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellphone/Wireless Handheld/ Telephone Line/Service</td>
<td></td>
<td></td>
<td></td>
<td>$2,400</td>
</tr>
<tr>
<td>Clinical Supplies</td>
<td></td>
<td></td>
<td></td>
<td>$12,000</td>
</tr>
<tr>
<td>Medical Waste</td>
<td></td>
<td></td>
<td></td>
<td>$2,400</td>
</tr>
<tr>
<td>Office Operation and Supplies</td>
<td></td>
<td></td>
<td></td>
<td>$4,800</td>
</tr>
<tr>
<td>Bookkeeping and Banking</td>
<td></td>
<td></td>
<td></td>
<td>$2,400</td>
</tr>
<tr>
<td>Payroll Service Contract</td>
<td></td>
<td></td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>Total General Overhead</strong></td>
<td></td>
<td></td>
<td></td>
<td>$29,000</td>
</tr>
<tr>
<td>Information Technology (IT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMR</td>
<td>$2,703 x 12 months</td>
<td></td>
<td></td>
<td>$32,436</td>
</tr>
<tr>
<td>Wireless Access/Ongoing Support</td>
<td></td>
<td></td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td>Service Desk and Desktop</td>
<td>$391 x 12 months</td>
<td></td>
<td></td>
<td>$4,692</td>
</tr>
<tr>
<td><strong>Total IT</strong></td>
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<td></td>
<td></td>
<td>$42,128</td>
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### Insurance/Professional Liability

<table>
<thead>
<tr>
<th>Coverage</th>
<th>$9,471</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Insurance/Professional Liability</strong></td>
<td><strong>$9,471</strong></td>
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</tbody>
</table>

### Premises

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Duration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Maintenance</td>
<td>$977</td>
<td>12 months</td>
<td>$11,724</td>
</tr>
<tr>
<td>Utilities</td>
<td>$2,036</td>
<td>12 months</td>
<td>$24,432</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>$1,629</td>
<td>12 months</td>
<td>$19,548</td>
</tr>
<tr>
<td>Rent</td>
<td>$4,073</td>
<td>12 months</td>
<td>$48,876</td>
</tr>
<tr>
<td>HST</td>
<td>$1,179</td>
<td>12 months</td>
<td>$14,148</td>
</tr>
<tr>
<td>Cleaning and Garbage Disposal</td>
<td>$1,500</td>
<td>12 months</td>
<td>$18,000</td>
</tr>
<tr>
<td><strong>Total Premises</strong></td>
<td><strong>$136,728</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Service Fees

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit</td>
<td>$6,000</td>
</tr>
<tr>
<td>Legal</td>
<td>$6,000</td>
</tr>
<tr>
<td>Travel (For Clinical Purposes Only)</td>
<td>$1,800</td>
</tr>
<tr>
<td>On Call Coverage</td>
<td>$24,000</td>
</tr>
<tr>
<td>Professional Development</td>
<td>$12,000</td>
</tr>
<tr>
<td>Implementation Consultant</td>
<td>$9,600</td>
</tr>
<tr>
<td>Recruitment</td>
<td>$4,800</td>
</tr>
<tr>
<td>Evaluation/Quality Improvement</td>
<td>$12,000</td>
</tr>
<tr>
<td><strong>Total Service Fees</strong></td>
<td><strong>$76,200</strong></td>
</tr>
</tbody>
</table>

**TOTAL ANNUAL OPERATING BUDGET (HR + Overhead)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Overhead</strong></td>
<td><strong>$341,610</strong></td>
</tr>
</tbody>
</table>

**Approximate Cost Annually per Patient (@ 3,200 patients)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$1,543,692</strong></td>
<td></td>
</tr>
</tbody>
</table>

| **$482** |

---

**Note:** Adapted from “British Columbia’s NPs: Primary Care Providers, Leaders and Partners in Person Centred Care” by Leanne Rowand (2016) “A Nurse Practitioner-Led Clinic in Thunder Bay” by L. D. Thibeault (2011) and from Payscale.com (n.d.). Average Salary for HEABC Employees (2016).

*Some BC NPs may prefer part-time contracts.*

Please Note: ALL COSTING IS ESTIMATED. Proposed NP salary was a) determined based on a national environmental scan following extensive consultation with BC NPs, b) recognizes the function/responsibility/practice of the NP provider c) ensures adequate compensation and pay equity between both options and d) promotes improved recruitment and retention.

This example estimates funding required for a Primary Care Provider practice group based on four FTE NPs at the average NP salary plus overhead/infrastructure costs for either Option A or B. Each setting is unique and may have needs beyond the scope of this example. Line items will require adjusting accordingly and additional items added based on need.
## Appendix C – Quality Assurance Framework

<table>
<thead>
<tr>
<th>MoH Goals</th>
<th>MoH Objectives</th>
<th>MoH Performance Measures</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Support the health and well-being of British Columbians</td>
<td>1.1 Targeted and effective primary prevention and health promotion</td>
<td>1. Healthy Communities</td>
<td>1. Health Outcomes (physiological/emotional measures); WHOQOL (WHO, 2016)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Healthy Schools</td>
<td>2. Health Authority Specific Performance Measures</td>
</tr>
<tr>
<td>2. Deliver a system of responsive and effective health care services across British Columbia</td>
<td>2.1 A provincial system of primary and community care built around interprofessional teams and functions.</td>
<td>1. Access to Full Service Primary Care</td>
<td>1. NP Holistic Caring Instrument (Kinchen, 2015)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Community Mental Health Services</td>
<td>2. Patient Activation Measure (PAM) (Hibbard et al., 2004)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Access to scheduled (Non-Emergency) Surgery</td>
<td>3. Health Authority Specific Performance Measures</td>
</tr>
<tr>
<td></td>
<td>2.2 A renewed role of hospitals in the regional health care continuum with a starting focus on improved surgical services.</td>
<td></td>
<td>4. Health Outcomes (physiological/emotional measures); WHOQOL (WHO, 2016)</td>
</tr>
<tr>
<td></td>
<td>2.3 Sustainable and effective health services in rural and remote areas of the province, including First Nations Communities</td>
<td></td>
<td>5. Improved recruitment and retention of human resources</td>
</tr>
</tbody>
</table>
3. Ensure value for money

| 3.1 A performance management and accountability framework that drives continuous improvement in the health system. |
| 3.2 Focus on cross-system work and collaboration in the areas of health human resource management, IM/IT and technology infrastructure, and approaches to funding. |
| 3.3 Evidence-informed access to clinically effective and cost-effective pharmaceuticals. |

| 1. Primary Care Team Dynamic Survey (Song et al., 2015) |
| 2. LPI (Leadership Challenge, 2016) |
| 3. Primary Care Organizational Climate Questionnaire (Poghosyan et al., 2013) |
| 4. Health Authority Specific Performance Measures |
| 5. Reduced prevalence of polypharmacy and cost to health care system (Morgan et al., 2016) |

Note: Goals and Objectives obtained directly from British Columbia Ministry of Health Service Plan (MoH, 2015c, pp. 7-14); WHOQOL = World Health Organization Quality of Life; LPI = Leadership Practice Inventory.
Appendix D – Option A Case Study: HA Affiliated Single NP

HA Single NP added to a HA Affiliated youth focused mental health substance use program.

**Gap in Care:**
Limited access to youth focused primary care services and weekend care for the approximately 500 at-risk youth known to live in the community of Langley. A local coalition of non-governmental agencies established a “Youth Hub” in an effort to address the socially complex needs of the population, however despite a successful partnership with a local division of family practice (access to the services of a part time FSS GP) it continues to be very challenging to meet the health care needs of this population and many youth continue to be without access to primary/mental health care.

**Funding Request:**
The coalition and local division of family practice are seeking a partnership with the health authority to support adding an HA affiliated NP who, along with the FSS GP, will provide primary care services with the mental health/substance use program, specifically to offer extended hours for youth focused primary care services until 6 pm M-Th and some Saturday hours.

The requesting group will provide office/exam room space, and clinical equipment (already in place), computer, fax machine, printer, phone. In addition, leave (vacation/education) coverage will be provided through the local Division of Family Practice GP.

Staff will be present at the Youth Hub during clinic hours for security and collaboration.

**Identified Underserved population:**
An estimated 500 socially complex, at-risk youth (14-19 years).

**Referral Sources/Partnerships:**
Youth self-referral, community youth service agencies, public/community health, MCFD, team members, community primary health practices and specialists.

**Governance Structure:**
NP will report through the HA Mental Health Substance Use program, with accountability to the NGO and Division of Family Practice.

**Evaluation/Outcomes:**
As per Option A (may include additional metrics as defined by the practice setting team, e.g., access to care).

**Foundational Requirements:**
As per Option A.

**Remuneration:**
As per Appendix A (HA NP working with FSS Division/NGO).

**Budget Request:**
Estimated @ $191,376 (NP hired at starting salary less liability).
Appendix E – Option A Case Study: HA Affiliated Practice Group

Health Authority Agency partners with community non-profit sector seeking to provide improved health care access for an underserved community utilizing a NP practice group – four FTEs.

**Gap in care:**
Existing family practice groups in an urban inner city are unable to increase roster size as these groups are at capacity. Over 2,500 patients (children, youth and families) impacted by poverty are unable to access regular primary care. In addition, three local hospitals (including the requesting HA Agency), serving the area report significant challenges in connecting patients with complex physical and mental health issues to regular primary care on discharge.

**Identified underserved population:**
Inner city community population 2,500 including children, youth, adults and seniors across the life span. Families and clients are primarily of aboriginal/refugee/immigrant ethnicity.

**Referral sources/Partners:**
Community, self-referral, public health, HA services health professionals, community immigrant services, mental health, specialists, urban emergency departments, Ministry of Children and Family Development (MCFD), etc.

**Governance – shared:**
As HA employees the NP will report through the HA structure with accountability to the community non-profit sector.

**Evaluation:**
As per Option A, may include additional metrics as defined by NP, HA and community.

**Foundational Requirements:**
As per Option A.

**Remuneration:**
As per Appendix B.

**Budget Request:**
Estimated @ $1,397,493 (4FTE) (based on four FTE NP starting salary/benefits) less premises costs (provided in-kind by community agency) and liability (covered by health authority).
Appendix F – Option B Case Study: Non-HA Affiliated Single NP

FFS physician Family Practice requesting funds for non-HA Affiliated Nurse Practitioner.

**Gap in care:**
A metro Vancouver FFS Family Practice group (5-GPs) is unable to increase practice provider capacity, despite increasing community demands for increased service. In particular, the practice has identified increasing requests for unattached home-bound frail elderly who face challenges accessing appropriate primary health care services and would benefit from an outreach/home visiting primary care services.

**Identified underserved population:**
Individuals >85 years old, living at home or in assisted living/residential care with complex physical and mental health conditions that result in the inability to attend a traditional primary care office.

**Referral sources:**
Community partners including EDs, seniors’ community centres, home health/home nursing, self-referral or family referral.

**Governance:**
As per practice group

**Evaluation:**
As per Option B and may include additional metrics (e.g., decreased calls to emergency services (police/fire/ambulance etc.).

**Foundational Requirements:**
As per Option B - FFS team will provide leave coverage

**Remuneration:**
As per Appendix A.

**Budget Request:**
Estimated @$186,994 (NP hired at starting salary) and less locum costs-covered by FFS Practice.
Appendix G – Option B Case Study: Non-HA Affiliated Practice Group

First Nations Council requesting 4.0 FTE NPs and a multidisciplinary team to work with the existing First Nations Band Lay Caregiver team for an underserved rural community.

**Gap in care:**
A coastal FN community of approximately 1,700 citizens has been without a Family Doctor for four years and recruitment to date has not been successful. Lay health workers provide basic health/injury care, twice yearly NPs with expertise in women’s health provide a two-day women’s clinic along with some primary care services, and urgent care needs are met with some telehealth technology and a medivac transport to the closest emergency department. The community has an aging population living with increasing incidence of chronic disease, frail seniors and mental health disorders. Weather can be a complicating factor in winter months for accessing acute care and tertiary care centers.

**Identified underserved population:**
Community population 1,700 including children, youth, adults and seniors across the life span. Population is socially complex and area is remote/rural.

**Referral sources:**
Community (self-referral), community agencies, public/community health, mental health, MCFD, HA Acute Care, Medical Specialists etc.

**Governance- Shared:**
The NPs and clinic staff would be employees of the First Nations Health Council board of directors. The clinical team in partnership with the board would set goals and objectives for the clinic and population’s health. Patients would be registered to the clinic. Patients can select a primary NP, who would be the most responsible provider.

**Evaluation:**
As per Option B.

**Foundational Requirements:**
As per Option B.

The community is “practice ready” and willing to provide an existing health clinic space which includes provider office space, internet, landline phones, some medical equipment, exam rooms, minor procedure room, volunteer receptionists and some volunteer programs that are designed to promote and support health.

**Remuneration:**
As per Appendix B.

**Budget Request:**
Estimated @ $1,335,836 (four FTE NP @ starting salary) less costs related to premises, IT, general overhead (covered by requester). This could be adjusted depending on the actual health care providers required.
Appendix H – Salary Cost Comparison

Patient Population: 3,200
800/Family Physician FTE and 800/FT Nurse Practitioner

<table>
<thead>
<tr>
<th>Family Physician (FP)</th>
<th>Nurse Practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFS Only (See below)</td>
<td>Salary</td>
</tr>
<tr>
<td>Family Physician</td>
<td>$275,000 (FTE) *</td>
</tr>
<tr>
<td>Family Physician</td>
<td>$275,000 (FTE) *</td>
</tr>
<tr>
<td>Family Physician</td>
<td>$275,000 (FTE) *</td>
</tr>
<tr>
<td>Family Physician</td>
<td>$275,000 (FTE) *</td>
</tr>
<tr>
<td>Total Human Resources</td>
<td>$1,100,000</td>
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<tr>
<td>Benefits @ 25%</td>
<td>N/A</td>
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<tr>
<td>Total Human Resource</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Cost Comparison 4 FP</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>versus 4 NPs</td>
<td></td>
</tr>
</tbody>
</table>

* Average FFS clinical payments only (does not include other forms of payments such as alternative payment plans, salary or capitation) (CIHI, 2015)

NOTE: Proposed NP salary was a) determined based on a national environmental scan following extensive consultation with BC NPs, b) recognizes the function/responsibility/practice of the NP provider c) ensures adequate compensation and pay equity between both options and d) promotes improved recruitment and retention.
Acknowledgements

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