Evaluation of BC Primary Care Network Nurse Practitioner Service Contract

Evaluation Report

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CATALYST
RESEARCH & DEVELOPMENT INC.

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The evaluation team extends our heartfelt appreciation to the Project Team and BC Ministry of Health for their invaluable knowledge and partnership, as well as to all stakeholders and Nurse Practitioners for sharing their stories. Your collaborative efforts and openness have profoundly enriched this evaluation, fostering a deeper understanding of the project's impact.

We gratefully acknowledge that our Kelowna office is located on traditional lands and unceded territory of the Syilx (Okanagan) peoples.
Our Edmonton office is on traditional lands of the Plains and Wood Cree, Nakota, Saulteaux, Dene and Metis people.
Our work in Zambia is with the Lozi people of Barotseland region (Western Province) and in Lusaka City & Province.

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Context

In recent years, British Columbia's healthcare landscape has undergone a profound transformation towards patient-centered primary care and improved health system efficiency. The Primary Care Network Nurse Practitioner (PCN NP) Contract has been a pivotal initiative in this journey, aiming to expand the role of nurse practitioners (NPs) for more comprehensive healthcare delivery. This contract focuses on offering enduring primary care services, establishing lasting patient-provider connections, and catering to evolving healthcare needs. Aligned with the Quadruple Aim framework, the PCN NP Contract marks a significant step towards enhancing healthcare outcomes and the well-being of providers. This transformation goes beyond surface-level changes and entails a broader reshaping of the primary healthcare system itself. The shift to Primary Care Networks (PCNs) underscores this shift by fostering collaboration among diverse healthcare professionals, including nurse practitioners, to provide holistic care to communities.

This evaluation report assesses the effectiveness of the PCN NP Contract's implementation in BC and its impact on the Quadruple Aim's four pillars: bettering population health, enriching patient experience, curbing healthcare expenses, and enhancing provider well-being. Through rigorous analysis of data, stakeholder input, and evidence-based insights, the report aims to shed light on the contract's influence on healthcare services and outcomes in the region.

Evaluation Purpose

The Ministry of Health was interested in understanding the intended outcomes of the PCN NP contract as well as examining unintended consequences, successes, and challenges to inform the future of NP contracts and compensation. The Ministry engaged Catalyst Research and Development, Inc. to complete the evaluation and the Evaluation Project Team and the Evaluation Oversight Committee guided the evaluation. Their purposes and compositions are outlined in the Evaluation Plan.

This evaluation report delves into the implementation effectiveness of the Nurse Practitioner Contract in BC, as well as its contribution to the four pillars of the Quadruple Aim: improving population health, enhancing patient experience, reducing healthcare costs, and boosting the well-being of healthcare providers. Through a rigorous assessment of data, stakeholder interviews, and evidence-based analyses, this report aims to offer valuable insights into the impact of the contract on healthcare services and outcomes in the region.

Evaluation Methods

A mixed method, participatory **outcome evaluation** was launched to enable the BC Ministry of Health and stakeholders to understand the impact of the PCN NP Service Contract. To gather the necessary data to address the high-level questions and evaluate the effectiveness of the NP contracting model, a variety of tools were employed, both qualitative and quantitative, and

accessing multiple lines of evidence (e.g., NPs [contract and employed], key stakeholders, case study respondents).

For further details on these methods, please consult the Evaluation Plan created for this work. The Plan provides, in detail, the evaluation strategy and mixed methods approach. Alternatively, a quick review of the introduction to the Technical Report accompanying this Summary Evaluation Report will provide information on key evaluation dimensions, as well.

The rigorous evaluation process meticulously analyzed diverse data sources, each examined for unique insights. The technical report dissects and presents each line of evidence distinctly, scrutinizing administrative data, surveys, interviews, and focus groups with HA NPs and PCN Contracted NPs. Specific patterns and themes emerged, forming the basis for informed conclusions and recommendations. This summary report combines these insights for a unified perspective on evaluation questions, distilling key findings and facilitating informed assessment. The summary report harmonizes evidence with expertise, delivering comprehensive results and recommendations to the Ministry. While offering an overview, the report empowers the Ministry to delve into each line of evidence, leveraging insights from the evaluation.

Limitations

The evaluation process encountered the limitations outlined below. Catalyst believes that these limitations do not affect the value of the evidence provided in this report, but readers should keep these in mind as they interpret the findings and generate implications and recommendations.

1. A new version of the contract was launched during the evaluation process: This introduced new variables that affected the validity of the evaluation's results. Most respondents were either not aware of the newly revised contract, were marginally aware, or indicated it was not yet being implemented.

2. High NP contribution compared to other stakeholders: There were high numbers of NP participants relative to stakeholder participants (e.g., employers, policy, and decision makers). Despite best efforts, some stakeholder voices were absent, notably from the Division of Family Practice.

3. NPs tended to express discontent with remuneration regardless of the model: Both contracted and employed NPs tended to be discontented with their remuneration. Both tended to compare with other health professional remuneration models. Interestingly, knowledge and assumptions varied in accuracy and did not consider changes underway. This made it challenging to attribute satisfaction and dissatisfaction solely to the contract.

4. Absence of a control group: Despite the inclusion and comparison to HA employed NPs, throughout the evaluation many contracted NPs also reported HA employment or other blended models. This meant there was not a clean control group to compare to and this contributed to the difficulty in attributing changes in NP attitudes and behaviors to the PCN NP Contract or other factors.

5. Short-term evaluation: The evaluation was conducted in a relatively short period, during a time when other changes were occurring. This limited the ability to capture long-term effects of the PCN NP Contract fully.

6. Contextual factors: The application of the PCN NP Contract varied based on regional, organizational, and clinical contexts, which led to variations in appropriateness and, therefore, effectiveness. It also should be noted the evaluation was occurring within a very complex system of contextual and external influences (e.g., post-COVID realities, healthcare burnout, changing scopes of providers).

7. External influences: Factors beyond the contract, such as changes in healthcare policies or economic conditions, influenced the outcomes observed during the evaluation, making it challenging to separate the PCN NP contract's effects from these external influences.

8. Challenges of applying the Quadruple AIM lens: A more comprehensive evaluation of the NP Model of Care would be needed to understand fully the contribution to Quadruple AIM outcomes, and address several specific issues identified by the Project Team and Oversight Committee. As the scope did not include patients or health outcomes, contributions to patient experience, patient experience and outcomes could not be fully assessed. Physicians and other practitioners' voices were also absent, limiting assessment of practitioner interaction, advanced practice skills (e.g., leadership, program development, research), and influence on sustainability. Finally, the scope did not include data gathering or analysis of costs.

Further exploration to reduce the limitations would be helpful. However, much valuable information was gathered, analyzed, and reported here to assist learning and decision-making so the next steps can be taken to benefit providers, patients, and the health system generally.

Evaluation Findings

This Summary Report offers an overview of the key findings, while the Technical Report and appendices provides a wealth of detailed data and insights obtained from the administrative data review, surveys, interviews, focus groups, and case studies. This reporting structure ensures that decision-makers, stakeholders, and researchers can access both the summarized outcomes and the extensive data supporting the evaluation conclusions and recommendations.

The evaluation results as presented in this Summary Report are organized by evaluation question, allowing for a clear and systematic presentation of the findings. Each evaluation question is thoroughly examined, and the corresponding key evaluation findings are highlighted. By structuring the report in this manner, readers may easily navigate through the evaluation outcomes and gain a comprehensive understanding of the NP contracting model's effectiveness and impact.

To what extent have the intended outcomes of the PCN NP contract been achieved?

The main evaluation question was supported by the following sub-questions that will be discussed through the findings.

- To what extent is the PCN NP contract contributing to increased patient access to primary care? [1]
- To what extent is the contract enabling NPs to contribute to comprehensive, high-quality, person-centred, culturally safe, interdisciplinary, and team-based primary care?
- To what extent is the contract contributing to improved provider experience, including attracting and retaining NPs as hoped, and allowing them to work to their full scope of practice?
- In what ways does the BC NP *contracting policy align with the Quadruple AIM goals* (improved provider experience, improved patient experience, lower costs, better outcomes?

Positive Contributions

Increased Patient Access: The data suggests that the compensation model has led to increased patient access to primary. Contracted NPs report higher satisfaction with compensation, provider experience, and patient outcomes compared to employed NPs.

> "On the whole, [the contract] has been a positive experience. I've been an NP provider for a long time. NPs have been asking for this way of providing services."
> Respondent

Improved Health Outcomes: The compensation model has contributed to key health system outcomes, leading to improved health outcomes for patients, including complex and marginalized patients.

[1] The PCN NP contract template specifies that "the Ministry of Health is committed to **increasing patient access to primary care** and expanding primary care capacity across British Columbia via the implementation of Primary Care Networks and Patient Medical Homes and supporting **comprehensive, high-quality, person-centred, culturally safe, interdisciplinary and team based** primary care services."

Team-Based Care: NPs appreciate team-based care, which has likely contributed to better patient outcomes and experiences.

Recruitment and Retention: The contract model attracts NPs due to higher salaries and perceived benefits, which has likely improved recruitment efforts.

Areas of Concern

Inadequate Recognition and Compensation: NPs express dissatisfaction with the current compensation model, which is perceived as inadequate in recognizing their skills, experience, and responsibilities. This may impact job satisfaction and motivation among NPs.

Undervalued Health Authority NPs: NPs working under the Health Authority (HA) employment model feel undervalued compared to those under the contract model, leading to challenges in recruitment and retention.

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Patient Attachment Issues: The current NP contracts are not effectively enforcing patient attachment, leading to potential disruptions in continuity of care and reduced patient and provider experience.

Complexity-Based Compensation: The compensation model based simply on numbers attached, rather than complexity or experience can result in long wait times and reduced patient and provider experiences.

Challenges with Governance and Support: NPs have faced challenges with PCN governance, lack of support for contracted NPs, and unclear roles of health authorities in governing contracts.

Flexibility and Autonomy: While NPs desire more flexibility and autonomy within the contract model, navigating self-employment as a contract NP poses challenges, including issues with benefits, pension, and incorporation.

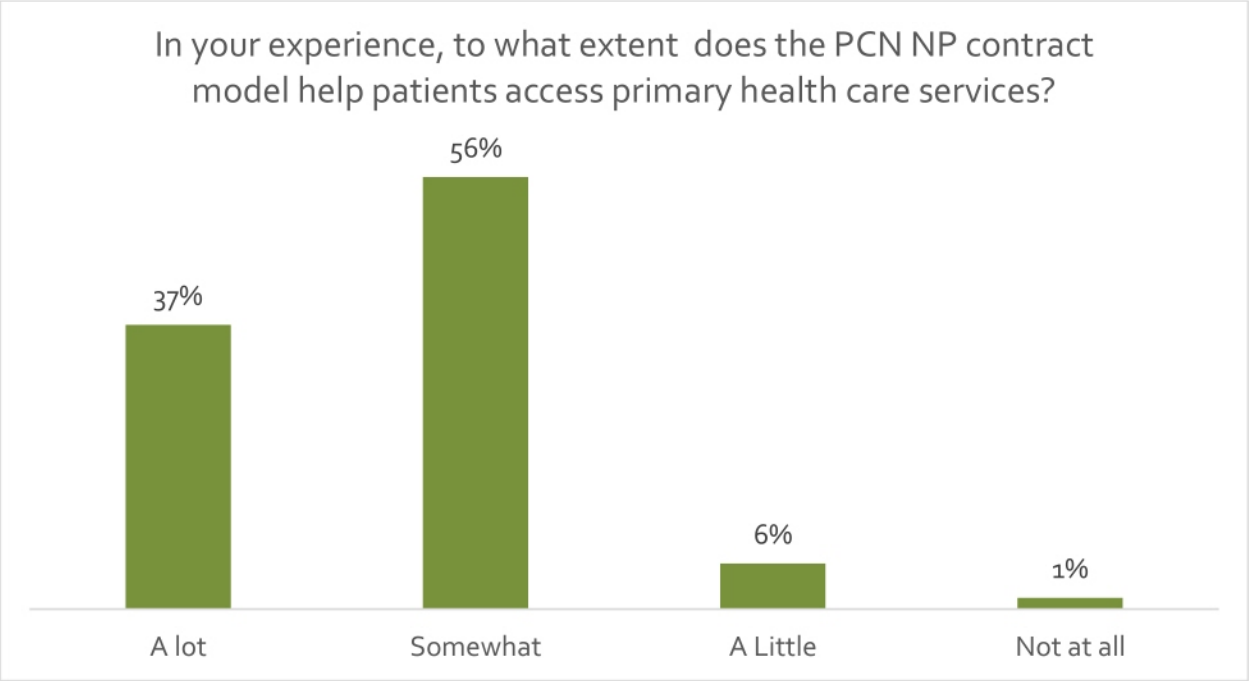
Clarity and Communication: Clearer communication and understanding between NPs and healthcare organizations are needed to improve contract effectiveness and overall care delivery.

To what extent is the PCN NP contract contributing to increased patient access to primary care?

> "The contract is excellent – it is providing access to patients without it and who need it. It is addressing a systemic health disparity and decolonizing health. It's working due to the focus on increasing access and providing health services where they haven't been, before."
>
> Respondent

The extent to which the PCN NP contract is contributing to increased patient access to primary care can vary based on several factors. While the PCN NP contract model has the potential to improve patient access to primary care, its actual impact may be influenced by implementation, regional variations, and challenges faced by NPs in fulfilling their contract obligations.

Stakeholders and NPs were asked about the extent to which the model helps patients access primary health care services. Stakeholders agreed it a lot or somewhat helps patients access primary health care. NP Survey findings include: (otherwise it is unclear which survey this is from)



Based on the comments provided by stakeholders, the PCN NP contract seems to have had a positive impact on improving access to primary health care services, especially for patients who were previously unattached to a provider. The contract model has allowed NPs to offer full scope primary care to all British Columbians, including First Nation communities that have contracted their own NPs to meet their unique needs. The contract model has facilitated the attachment of patients to NPs in various communities, with each NP typically attaching around 1,000 patients, which helps address the shortage of family physicians. This has allowed NPs to establish independent practices, like family physicians, and operate in community-based primary care clinics.

Further, stakeholders in their key informant interviews noted that patient access to healthcare and attachment to a provider appears to be growing and that the contract provides another way to address a health disparity by providing skilled services across the province.

However, there have been some challenges with the contract model. Some NPs, particularly those new to practice, may have lower patient volumes per day, which could impact access for other patients. Additionally, there have been instances where NPs in PCN contracts have not met their panel size targets, leading to slow attachment rates and uncertainty about whether the attachment targets will be achieved. There also appear to be issues with communication and understanding of the role of NPs, leading to some public unawareness of the scope of service they can provide. Furthermore, there have been tensions between family physicians and NPs regarding scope of practice and philosophical beliefs about patient care.

Stakeholders, when asked how things were going with contract implementation, noted that many contracted NPs are new and inexperienced and need supervision in the first years of their practice. In addition, garnering acceptance of the NP role from physicians remains a challenge.

Moreover, while the PCN NP contract has provided additional primary care providers in certain communities, there are still challenges in securing contracts in some regions, and inequities in compensation between providers delivering equivalent services persist.

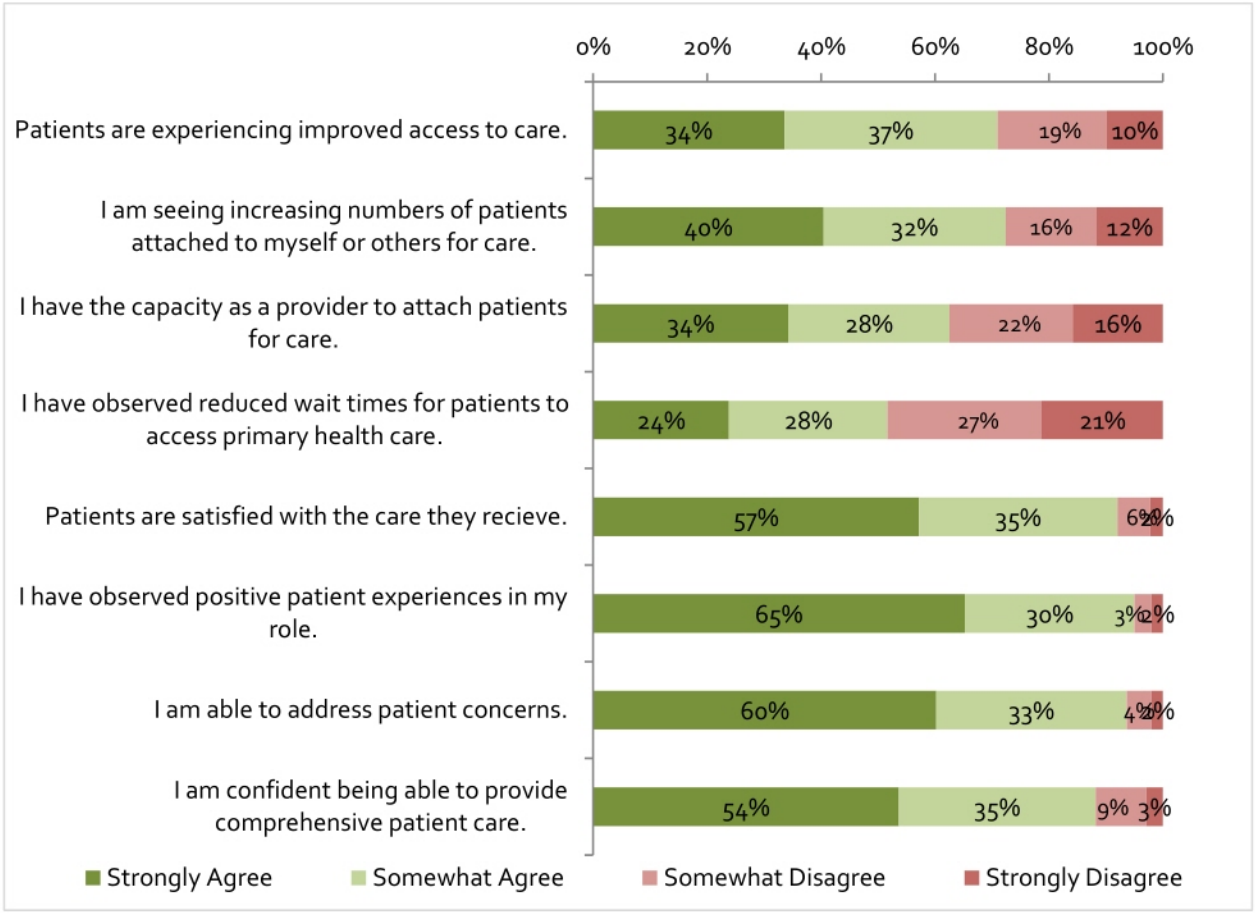
> "New NP grads:
> - are not appropriate independent contractors; hiring them directly into such positions is a terrible disservice to NPs, patients, and care settings
> - few, if any, can deliver optimal care at first; this is especially the case if they are trying to build up their panel numbers as rapidly as possible
> - need mentorship and supervision for at least two years
> - should acquire 2-years' experience with a HA position, first."
>
> Respondents

In some cases, PCN NPs may not be accepting new patients, and there have been reports of contracted NPs focusing on less complex patients to meet targets, potentially leading to inequities in care for vulnerable populations.

Nurse practitioners, when asked about patient access, agreed that patients are experiencing improved access to care (70% agreement), and they have observed reduced wait times for patients to access primary care (58%). They agreed they are also observing increasing numbers of patients attached (72%) and they have capacity as a provider to attach patients for care (62%). Contracted NPs in the focus groups identified they have been able to attach patients, including those who were previously without access to primary care. They also noted that they have been able to provide low barrier access to care, particularly for marginalized populations.

NP's identified challenges with patient attachment related to pressures to attach a high number of patients within a specific timeframe. They commented that there was difficulty in balancing the panel size with the need to provide comprehensive care. Equally, they noted the attachment targets may not be reflective of patient complexity of health needs of the patient population. Some NPs find the attachment goals set by the Ministry of Health to be unrealistic, particularly

when dealing with complex patients. They suggest that patient complexity should be considered when determining panel sizes and compensation.



Nurse Practitioners (NPs) emphasize the significance of considering factors like work type, patient panel complexity, and specialized skills when determining panel size and compensation models. This was illuminated in the case studies. NPs play a crucial role in re-engaging patients who have been disengaged from the healthcare system for extended periods, overcoming barriers through outreach efforts. They are often the sole healthcare providers attaching patients in some clinics. Interestingly, patient attachment can be to the clinic rather than a specific provider. When serving Indigenous populations, patient attachment strategies range from marginal connections utilizing FNHAs and Indigenous health liaisons, to restructuring contracts in alignment with

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Indigenous values and NP services, sometimes even bypassing Health Authority (HA) control due to historical harms.

Overall, while the PCN NP contract has helped in increasing access to primary care services, it is not without its challenges and may require further improvements and coordination among stakeholders to fully realize its potential impact in addressing the primary care access issues.

Some key considerations that emerged through the data analysis as related to increased patient access to primary care:

Attachment Targets: The PCN NP contract's focus on patient attachment targets aims to ensure that NPs are actively accepting and caring for patients, thereby increasing access to primary care services. If NPs are successful in reaching and maintaining their attachment targets, it can lead to improved patient access.

Geographic Distribution: The distribution of PCN NPs across different communities can significantly impact patient access. If PCN NPs are placed strategically in areas with a high demand for primary care services, it can positively impact patient access.

Complexity of Cases: The complexity of patients seen by NPs can affect the number of patients they can effectively manage, thus influencing patient access. If NPs are handling complex cases, their panel sizes may be smaller, potentially limiting the overall impact on patient access.

Locum Support: The availability of locum support for PCN NPs can also impact patient access. Adequate locum coverage can ensure continuity of care when NPs are away, reducing potential access barriers for patients.

Rural and Underserved Areas: In rural and underserved areas, the PCN NP contract may play a crucial role in providing primary care services where there is a shortage of healthcare providers. By attracting NPs to these areas, patient access can be improved.

Recruitment and Retention: The success of the PCN NP contract model in increasing patient access is also dependent on the recruitment and retention of NPs. If the contract model proves attractive to NPs, it can positively impact patient access.

Supportive Infrastructure: The effectiveness of the PCN NP contract in increasing patient access may also be influenced by the supportive infrastructure in place, including interprofessional teams and administrative support. This also includes infrastructure funding.

> "It would be good to have help with billing. The NPs wanted to keep their 3rd party billing but then the HA decided to take this contract piece to add to the NP's overhead funds. They had to sign it over; it wasn't negotiable. Other NPs are experiencing the same thing."
>
> Respondents

Overall, the PCN NP contract has the potential to contribute to increased patient access to primary care, especially if key challenges, such as patient attachment, panel complexity, locum coverage, and recruitment, are effectively addressed. In the current state, stakeholders, and NPs both report increased access to primary health care for patients. Future evaluation efforts should focus on patient voice regarding attachment.

To what extent is the contract enabling NPs to contribute to comprehensive, high-quality, person-centred, culturally safe, interdisciplinary, and team-based primary care (TBC)?

The extent to which the contract is enabling NPs to contribute to comprehensive, high-quality, person-centred, culturally safe, interdisciplinary, and team-based primary care depends on several factors. While the contract model holds the potential for promoting these elements of care, its actual impact may vary based on implementation, support structures, and collaboration among healthcare teams. Respondents across data sources agree that, in general, NPs are team players, as a matter of education, nursing background and character. They already having experience working with physicians and allied health professionals. As nurses, TBC is a focus – it places the patient at the centre. As a result, compensation model choice should not be the determining factor for TBC implementation. The key factor is the setting or environment of the NP's workplace.

Stakeholders were asked about how contracted NPs are able to contribute to team based care and most agreed the model contributed (87%). Based on the comments from stakeholders, the extent to which contracted NPs can contribute to team-based care appears to vary depending on the specific contract and the clinic's setup. Contracted NPs can work within private family physician clinics, which allows them to work more autonomously within their teams. This suggests that they can actively contribute to team-based care when such setups are in place. Some PCN NPs work in multidisciplinary teams, which likely enables them to fully participate in team-based care. Some contracted NPs may have access to allied health and RN resources, facilitating their participation in team-based care, while others may lack these resources.

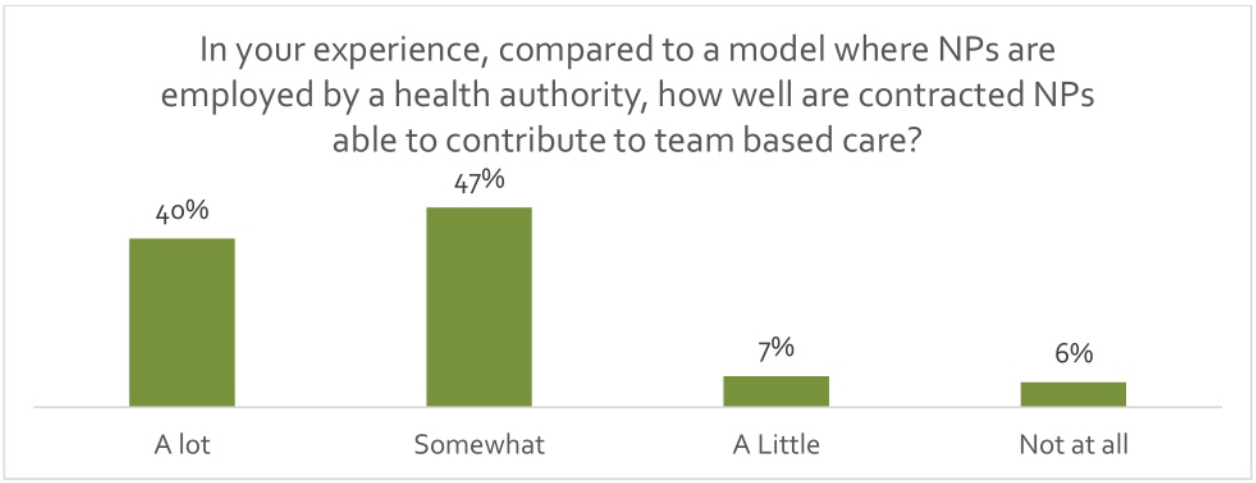
In their key informant interviews, stakeholders identified that the within the PCN the FP role is a critical indicator of TBC success; when NPs practice within PCNs that have FP support for their

work, and the NP's role and scope of practice is accepted, they are readily integrated into the team or participate as co-creators of the team. As well, respondents note TBC works if process/ expectations are standardized in blended clinics with NPs working under both compensation models. NPs working in NP led clinics (NPPCC) affirm readiness to practice TBC. At UPCCs, urgent care is grounded on TBC practice, which ensures NPs a place on the team. Co-located NPs seem to integrate better into the teams than NPs that are working in off-site clinics/ made responsible for outreach in the surrounding area. While HA employed NPs enter established environments in which TBC is the norm and managed/ monitored, contracted NPs begin by setting up their practice within an existing PCN, or one that is not fully established. In these cases either the PCN is new and does not have established links with community allied health professionals, or the NP needs to develop these links.

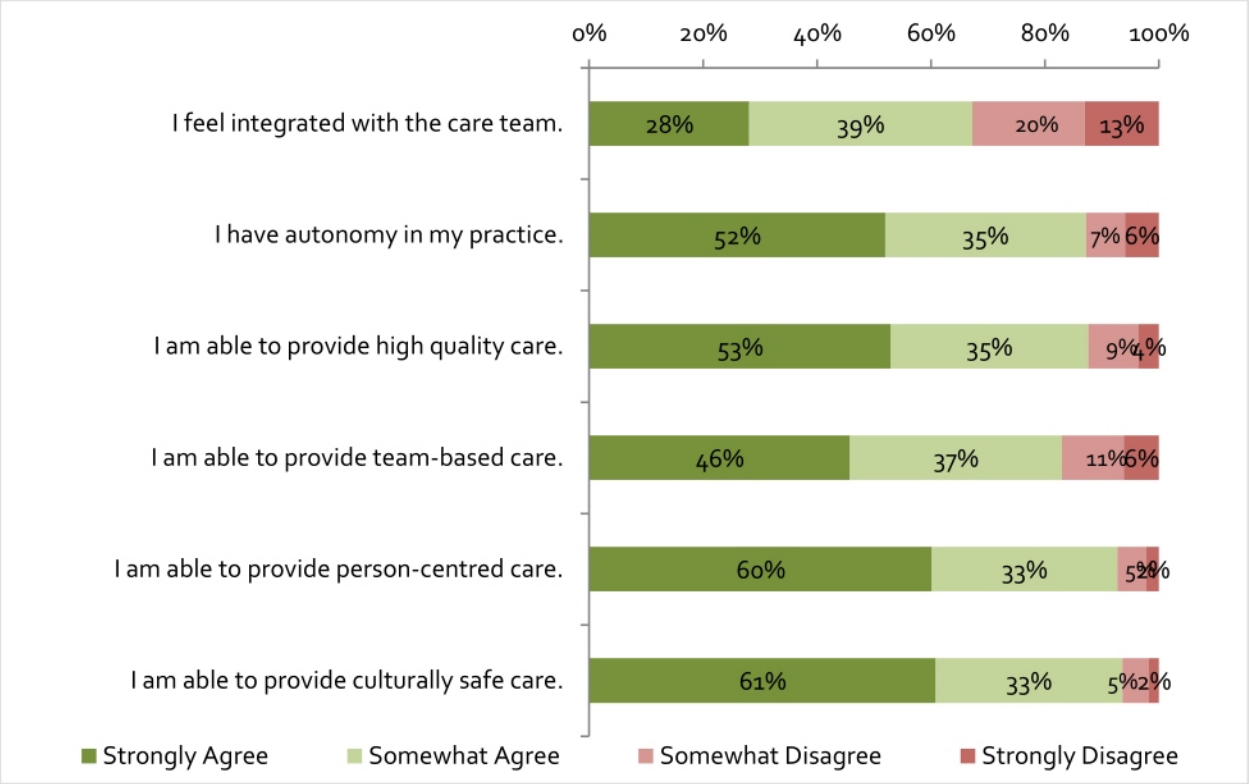
However, there are concerns that not all PCNs have fully developed their team-based care models beyond simply adding a few NPs. Team-based care may not be fully integrated in all PCN settings. In some cases, contracted NPs work alone in clinic rooms without integration into a team. This lack of collaboration can limit their contribution to team-based care. Team-based care may thrive more in the employed Health Authority model due to embedded access and communication among all professional groups. In contrast, some contracted NPs may operate more like referral-based services, which may hinder team-based collaboration. Stakeholders in the key informant interviews largely affirmed that employed NPs enter established TBC in the HA. On the other hand, contracted NPs are setting up their practice and focused on building their panel – and are not necessarily receiving the kind of orientation to the PCN that an employed NP will expect in their healthcare setting, which includes introduction to the team of professionals they can count on in their work. PCNs have not yet established support processes to help the NPs. Self-management is a challenge. As well, the contract depends on NPs setting up their business practice (vs HA employed NPs who enter integrated teams), using a contract largely about attachment, panel size, and pay. This can be a barrier to focusing on integration into a team, which takes time and commitment.

> "Initially, we had bi-weekly staff meetings and that's it. Now, finally, we are invited to the PCN's Steering Committee; initially we were denied access. This committee makes decisions for us, about our everyday work life, but we weren't invited to the table. Everyone who was involved in the clinic- except NPs – were involved."
>
> Respondents

Contracted NPs, as viewed by stakeholders, can contribute to team-based care, especially in PCNs that have well-established team-based care models and access to allied health and other resources (87%). However, the level of team integration and collaboration may vary based on the specific contract and clinic environment.



NPs reported in the survey and through the focus groups that one of the most successful aspects of the NP contract was the building of team-based care. The NP contract model has facilitated the integration of NPs into primary care clinics, allowing for more team-based care approaches. NPs work alongside family physicians, contributing to clinic overhead and providing care to patients. The NP contract model has facilitated the establishment of NP-led clinics, providing opportunities for NPs to develop their own practice and showcase the potential of NPs as primary care providers. When asked, NPs reported they were able to provide high quality care (88% agreement), team-based care (83%), person centred care (93%) and culturally safe care (94%).



Case studies identified clear examples of how NPs work in a variety of clinics providing services to BC patients. They are generally satisfied with their work and observe that TBC is the norm: recognize the various clinic models are beneficial for the various catchment areas; provide an important service for the local community; and are creative in finding ways to make the contract fit their context.

Key considerations that emerged from the data:

Positive Perception of NPs as Team Players: Respondents generally agree that NPs possess the qualities of teamwork due to their educational background, nursing experience, and personal characteristics. They are accustomed to working alongside physicians and allied health professionals.

Patient-Centered Care (TBC) Focus: The central focus for NPs is patient-centered care (TBC), with patients being at the core of their practice. The implementation of TBC is not solely determined by the compensation model but rather by the workplace environment.

Importance of NP Setting/Environment: The success of TBC is largely influenced by the setting or environment in which NPs practice. Factors such as practice models and settings significantly impact the integration and effectiveness of NPs within teams.

PCN and FP Role for TBC Success: The Family Physician (FP) role within Primary Care Networks (PCNs) is identified as critical for TBC success. When NPs work within PCNs with strong FP support and an accepted NP role, they seamlessly integrate into teams and contribute as co-creators.

Standardized Processes for TBC: Standardized processes and expectations, particularly in blended clinics where NPs work under different compensation models, contribute to successful TBC implementation. Urgent Primary Care Clinics (UPCCs) prioritize TBC, facilitating NP integration into teams.

Integration Challenges: NPs working at off-site clinics or handling outreach may face challenges in integrating into teams compared to co-located NPs. Contracted NPs often start in less-established environments and may need to establish links with allied health professionals.

Challenges for Contracted NPs: Contracted NPs face difficulties in setting up their practice within existing PCNs, often lacking the orientation and support available to employed NPs. Self-management and business establishment pose challenges, potentially hindering integration into teams.

Need for Training and Support: NPs, both during their education and post-graduation, require training in establishing and maintaining a TBC practice. Mentoring, monitoring, and capacity building are suggested to enhance NP integration, especially for new NPs.

Barriers in Vacation/Sick Leave Coverage: Differences in coverage processes for vacation, sick leave, and maternity leave emerge between employed NPs (HA) and contract NPs. HA-employed NPs benefit from established systems, while contract NPs need to develop their own solutions.

Attachment and TBC Linkage: Attachment between NPs and patients is linked to the effectiveness of TBC and patient outcomes. The extent of patient benefit and system improvement from NP involvement is a key consideration.

Challenges in Blended Clinics: Blended clinics with both employed and contract NPs face unique challenges, driven by perceived inequities and silos between the two groups. Having NPs from both models involved in decision-making can help address these barriers.

Interdisciplinary Collaboration: The contract's success in fostering interdisciplinary collaboration is pivotal to providing team-based care. NPs should be integrated into interprofessional teams, working alongside physicians, nurses, allied health professionals, and support staff to collectively address patients' needs.

Access to Resources: To deliver high-quality care, NPs should have access to necessary resources, including clinical guidelines, technological tools, and continuing education opportunities. Adequate resources can support NPs in providing evidence-based care.

> "We have been intentionally visible in the community - going to meetings and gatherings to educate the community about both PCNs and the NP role in primary care and to help patients understand our role and a physician's. Perseverance and presence."
>
> Respondents

Supportive Infrastructure: A supportive infrastructure, including administrative support and access to allied health professionals, can enhance NPs' ability to deliver comprehensive care and engage in collaborative teamwork.

In summary, the data highlights the significance of NP characteristics, workplace environments, and support mechanisms in determining the success of TBC implementation. Successful integration into teams, standardization of processes, training, and addressing challenges in different practice settings are crucial for effective TBC and improved patient outcomes.

To what extent is the contract contributing to improved provider experience, including attracting and retaining NPs as hoped, and allowing them to work to their full scope of practice?

Much of the evaluation work was centred on understanding the contractual compensation model from the perspectives of NPs practicing within the model, stakeholders within the health system and comparison to other health authority employed models. This detailed understanding of compensation models was at the core of the Ministry's request to understand the impact of the contract – specifically as related to improving provider experience, attracting, and retaining NPs and allowing them to work to full scope of practice.

The evaluation identified that NPs make choices between different practice models, such as contract-based and employed positions, based on individual circumstances and a range of factors that influence their professional preferences and personal needs. These considerations may include factors such as work-life balance, compensation and benefits, scope of practice, location, professional growth opportunities, and alignment with their values and career aspirations.

For some NPs, contract-based models offer greater autonomy, the potential for higher earnings, and the opportunity to manage their own practice. This model may be appealing to NPs who

seek more flexibility in their work schedules, wish to establish their own patient panels, or have a desire to serve in specific communities or underserved areas. On the other hand, employed positions within health authorities or other organizations can provide NPs with stability, a predictable salary, comprehensive benefits, and administrative support. This option may be preferred by NPs seeking a more structured work environment, access to resources, and opportunities for professional development and specialization. s.22

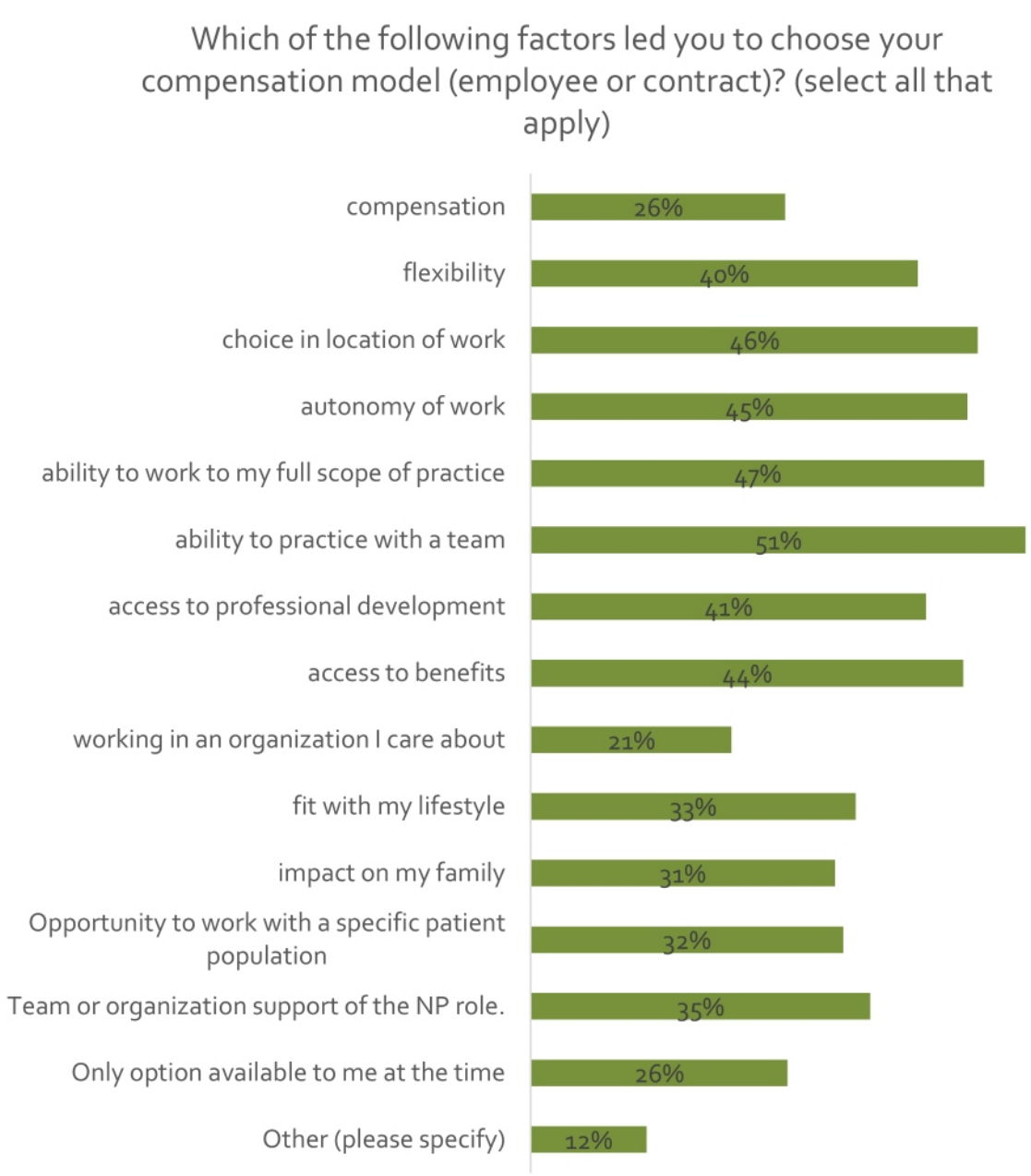
Moreover, the data indicates individual circumstances, such as personal financial obligations, family commitments, and lifestyle preferences, can also significantly impact NPs' choices between contract and employed models. Some NPs prioritize job security and stability, making an employed position a more suitable option for them, while others are willing to take on the responsibilities and risks associated with a contract-based practice to achieve greater independence and control over their professional journey.

Overall, the decision to choose between contract and employed models is a highly individualized one, and NPs noted they carefully weigh the pros and cons of each option to find the best fit for their unique needs and goals. As the healthcare landscape continues to evolve, providing diverse and flexible practice models can help ensure that NPs can thrive in their careers and contribute effectively to meeting the healthcare needs of the communities they serve.

The data collected on compensation models to understand the extent to which the contract is contributing to improved provider experience, attracting, and retaining NPs and allowing them to work full scope was collected from NPs themselves as well as the perceptions of key stakeholders in the health system.

Choosing Compensation Models

NPs reported choosing their specific compensation model based primarily on the ability to practice within a team (51%), work to the full scope of their practice (47%), choose the location of their work (46%), and autonomy in work (45%). Interestingly, **stakeholders perceived NPs choose** their model based on factors of compensation (93%), flexibility (84%), access to benefits (67%) and fit with lifestyle (67%).



Opinions on Contracted Compensation Model

NPs were asked to provide information about what they like about their current compensation model and provided a range of responses based on their individual circumstances. Information was gathered from all NPs and data could be disaggregated to examine those who identified themselves as employees (56%), contracted NPs (29%), or a mix of both (14%).

The information summarized here represents the PCN contracted NP's responses, only. Through their survey, focus groups, key informant interviews and case studies, these respondents choices are summarized into the following themes.[2]

1. **Flexibility:** Many respondents appreciate the flexibility offered by their compensation model. They have the freedom to choose their shifts, set their schedules, and have control over their work-life balance.
2. **Autonomy and Independence:** The compensation model allows for autonomy in practice, giving individuals the independence to make decisions about patient care and clinic policies.
3. **Reliable and Predictable Payments:** The biweekly or regular payments are seen as reliable and predictable, which helps with financial planning.
4. **Incorporation Options:** Some respondents value the ability to incorporate for tax purposes, giving them more control over their finances.
5. **Competitive Salary:** Several respondents mention that the compensation is competitive, particularly for new graduates or in comparison to other NP positions.
6. **Support for Professional Development:** Some respondents appreciate the compensation model's support for funding education and professional development opportunities.
7. **Ability to Retain 3rd Party Billings:** The option to retain 3rd party billings is seen as a benefit, especially for those who handle administrative tasks related to billing.
8. **Ability to Invest and Expense Income:** Some respondents value the opportunity to invest and expense their income as they see fit.
9. **Overhead Coverage:** For some, the compensation model includes coverage for overhead costs, which is seen as a positive aspect.
10. **Full Scope of Practice:** The compensation model allows NPs to practice to their full scope, which is valued by many respondents.
11. **Team-Based Care:** The compensation model facilitates team-based care and collaboration among healthcare professionals.

Stakeholders, when asked to discuss their observations on the contract model's positive influence on NP experience, largely saw the contract model as positive. They identified successes in that the NP profession now offers a new opportunity and a choice; this is the first compensation model that includes NPs managing their own schedule and hours independently; infrastructure budget allowance benefits the clinic - as a result of MOAs hired, supplies and equipment purchases, etc.; PCNs are now positioned to recruit and hire NPs and expand practices, attach new patients, reduce waitlists, etc.; experienced NPs are an asset to the PCN.

[2] It is important to note that opinions and preferences can vary significantly among individuals, and the responses provided here represent a range of viewpoints.

Contract NPs identified the following areas for improvement in their compensation model:

1. **Increased Compensation**: NPs feel that their compensation is inadequate, especially when compared to family physicians who perform similar work. They believe their scope of practice and responsibilities are virtually the same, yet they receive significantly lower pay. They seek higher salaries that reflect the complexity of their patient panels and the level of care they provide.
2. **Equity with Physicians**: NPs want their compensation to be more equitable with family physicians, considering the similar roles and responsibilities they share. They feel that the salary disparity between NPs and physicians is unjust and insulting.
3. **Recognition of Complexity and Experience**: NPs advocate for a contract that considers patient complexity and NP experience levels. They believe experienced NPs should be rewarded with higher pay, new NPs with less.
4. **Benefits and Pension**: NPs desire access to benefits and pension plans be arranged by their association, in order to improve their overall compensation package and financial security.
5. **Overhead Allocation and Control**: NPs want more transparency and control over how their overhead funds are allocated. They also seek better overhead funding to cover clinic expenses, in alignment with cost of living increases.
6. **Incentives for Precepting and Mentorship**: NPs suggest receiving compensation for precepting NP students to promote training and increase the number of NPs in the workforce.
7. **Flexibility in Working Hours**: NPs would like to be compensated for working beyond their contracted hours, especially during evenings, weekends, and holidays.
8. **Locum Coverage**: There is a need for better locum coverage for vacations and sick days to ensure continuity of care and reduce stress for NPs. They look to their association to organize a system for accessing locums.
9. **Adjustment for Inflation**: NPs feel their compensation should be adjusted to keep up with inflation and cost-of-living increases.
10. **Team-Based Care and Allied Health Support**: NPs seek greater support through team-based care and the availability of allied health professionals to assist in patient care.
11. **Better Onboarding and Support for New NPs**: NPs, especially new graduates, desire more support and training when starting their careers, as well as better access to resources, especially relevant to learning business practice.
12. **Standardization of Contracts**: NPs suggest standardizing contracts and ensuring fair compensation regardless of location or funding sources.
13. **Improvement in Work-Life Balance**: NPs call for improvements in work-life balance, particularly with regard to paperwork and administrative burden.
14. **Recognition of NPs as Primary Care Providers**: NPs emphasize that their roles as primary care providers should be recognized and rewarded appropriately.

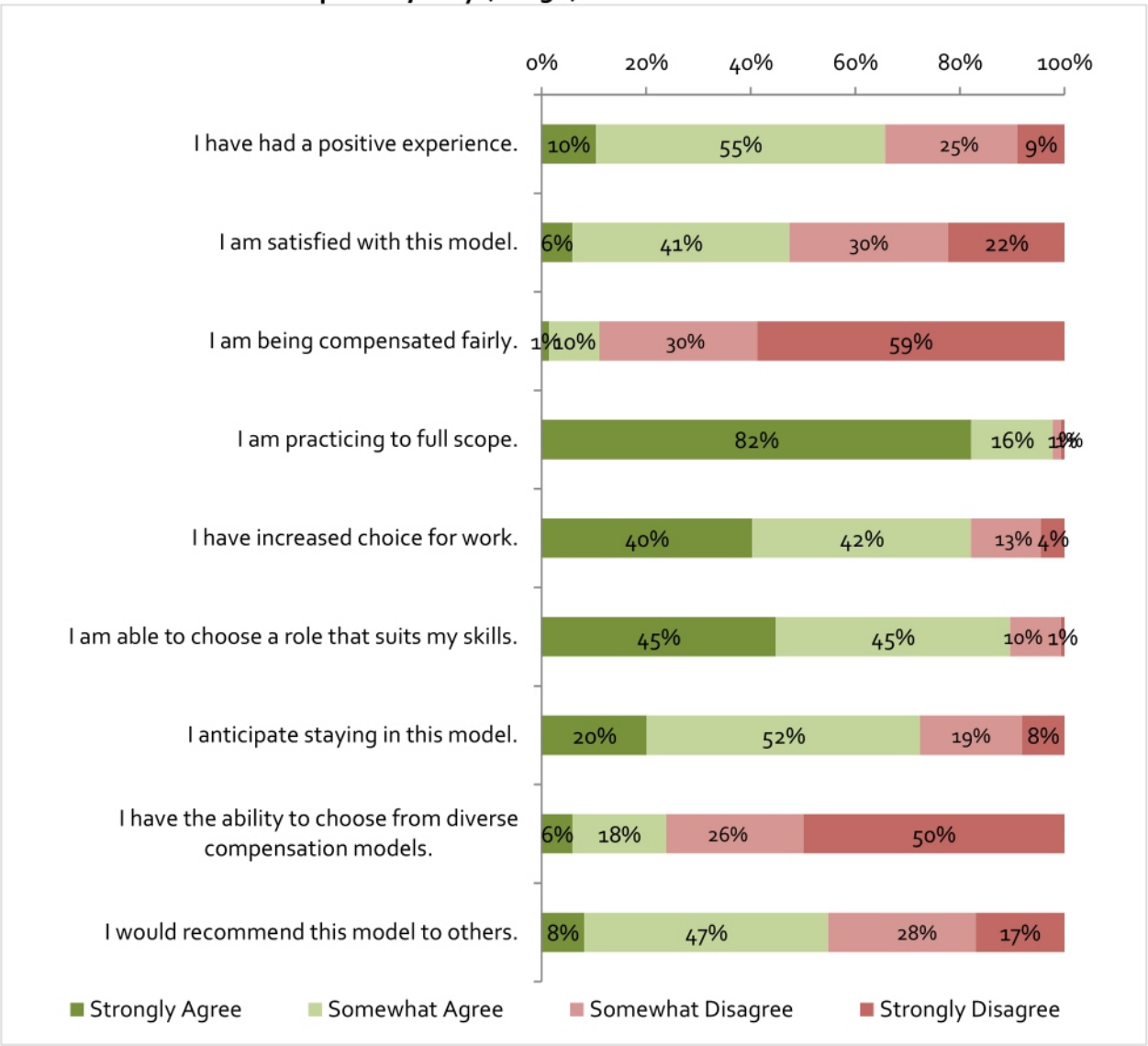
Stakeholders, when asked about the negative impacts on NP experience due to the contract compensation model noted the challenges facing NPs are multifaceted, with a negative impact on their experience. The contract model's financial allure, offering significantly higher starting salaries than HA employment, has led to an exodus of experienced NPs from the HA. The autonomy of the contract model, however, has a shadow side, lacking accountability and oversight, potentially affecting patient outcomes. Bureaucracy and paperwork hinder efficient recruitment and impede patient access. New NPs face a steep learning curve, juggling business aspects, patient attachment, and community networking. Training gaps persist, necessitating education on business management and reporting. The shift towards contract compensation is straining both PCNs and HAs, as NPs increasingly juggle commitments and benefit systems, potentially impacting patient care. Rural and remote communities face inequities in funding and communication, hindering patient access and NP retention. Overhead dollars are deemed insufficient, and alignment with living costs is urged. To enhance NP contributions to the Quadruple Aim, clinical support, accountability, and transparent self-management are essential, as well as accurate tracking of NP outcomes within PCNs. They noted, however, that NPs should have access to more than two compensation models. That NPs should be able to select a workplace and then chose their compensation model.

> "[Many] NPs didn't understand the responsibility of being an independent contractor. . . It's not included in NP education. People go into this without a full understanding of how they will manage the business model. . . It's hard to make an informed decision without a solid understanding of contracts and their implications. . . Physician education socializes them to the business model; they know what this is. NPs still don't quite get it – they need more education to adapt to the contract."
>
> Respondent

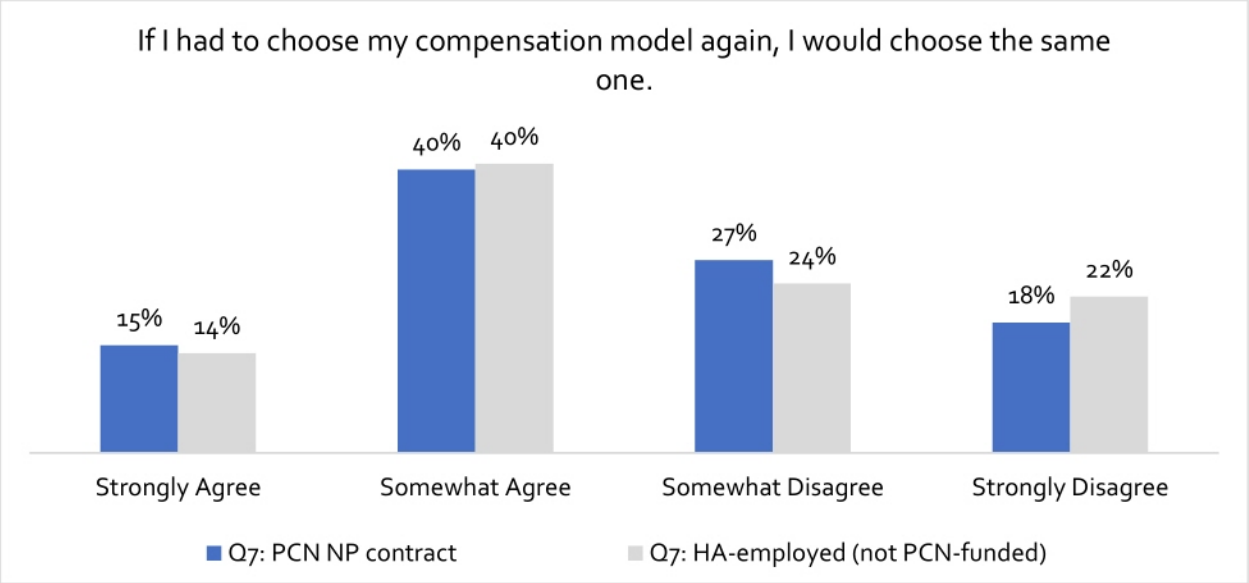
Satisfaction with Model and Scope of Practice

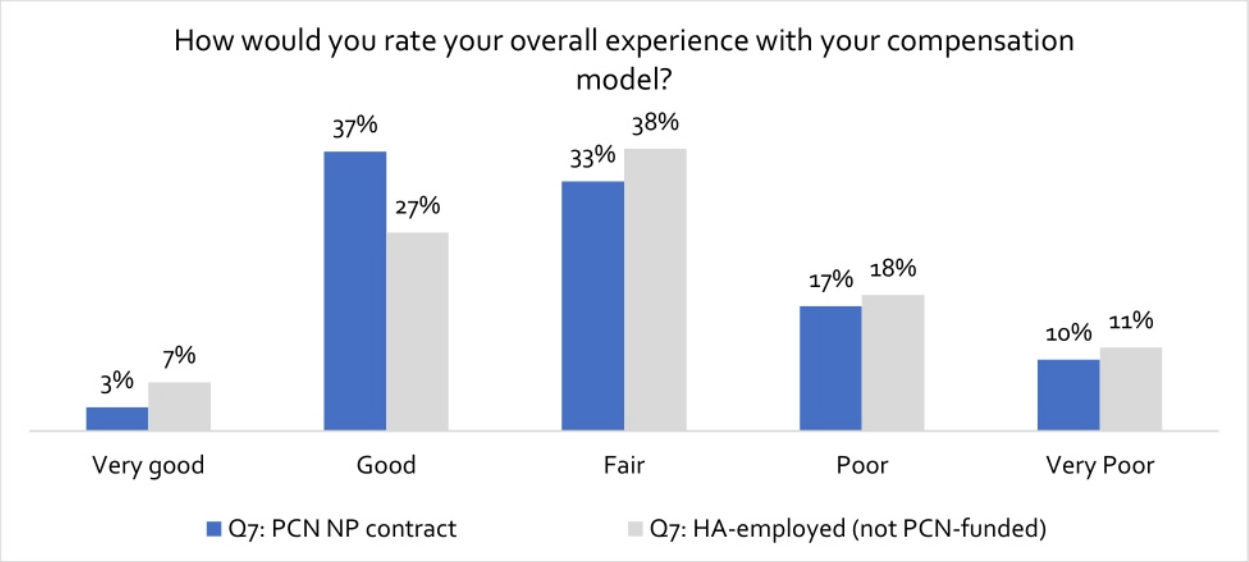
NPs were asked a variety of questions related to satisfaction of their compensation model and reported they are practicing to full scope (98% agreement), they are able to choose a role that suits their skills (90%), they have increased choice for work (82%), and they anticipate staying in the model (72%).

PCN Contracted NP Responses, only (n=136)



NPs were also asked if they had to choose their compensation model again if they would choose the same one and 55% strongly agreed or somewhat agreed they would. It should be noted that NPs overall indicated disagreement and dissatisfaction with compensation models. However, when asked about their experience overall with the compensation model, they noted fair to very good experience.





Stakeholders, when asked what influence the contract has on NPs working to full scope, indicated NPs are all trained to the same standards and are skilled to work to the scope of practice their environment requires (e.g., some clinics/ units require specialized skills which the NPs provide). The compensation model is not a barrier. Once again, it is the environment of the workplace/ practice setting that defines both legitimate (the worksite does not require the skill) and illegitimate (the worksite does not permit the NP to practice the skill) barriers. They identified that in rural and remote settings NPs have ample opportunity to work to full scope due to the reduced number of health providers in the area; FP are key to a workplace in which NPs are encouraged to work to full practice; PCNs more likely to need NPs to work across their skill set (whereas HA settings are often specialized/ nuanced and NPs work with a specific skill set); non-urban settings likely to have NP panels with diversity of patient types, from typically

healthy, to those who have been outside of the health system for decades, to those with MH and addictions challenges – requiring the use of diverse skills; NPs have some choice in where and how they want to work, as a result of the introduction of the contract.

Some challenges stakeholders identified with team-based care included that some urban primary care settings require the NPs to work with complex and marginalized populations with multiple co-morbidities to some extent limiting the scope of work. Other challenges include the need to see if the clinic needs match the NPs expectations, as well as the function of the family practitioners within the clinic setting, to determine if they are amenable to NP practice. Panel size and attachment emerges as a challenge to scope of practice. Once again, an algorithm or formula that considers the time a patient requires, the number of billing codes and visits required, etc. would facilitate NP capacity to provide full scope of skills to this patient.

Recruitment and Retention

In the focus groups, PCN contracted NPs were asked how the current compensation model affects the recruitment and retention of NPs in BC. The data indicated that the current compensation model under the Nurse Practitioner Contract in BC has both positive and negative impacts on nurse practitioner recruitment and retention in the province. While some aspects of the contract attract new NPs and contribute to retention, there are also concerns and challenges that hinder recruitment and retention efforts.

Positive Factors Affecting Recruitment and Retention:

Culture and Work Environment: Participants mention that the culture and work environment established under the contract are attractive and appealing to NPs. The autonomy, flexibility, and supportive clinic structures make it easier to recruit NPs to certain clinics.

Opportunities for Mentorship: The provision of mentorship opportunities can be a valuable incentive for both recruitment and retention. Having experienced NPs mentor new graduates or those transitioning to the contract can help foster a supportive and nurturing environment, attracting new NPs and helping them stay within the contract.

Passion for Primary Care: Some NPs are drawn to the contract and PCNs due to their passion for primary care. The focus on patient-centered care and the ability to practice the way they think it should be done appeals to NPs who are committed to primary care practice.

Educational Opportunities: The emphasis on continuing education and professional growth is seen as an attractive feature for NPs looking to develop their skills and stay up-to-date in their practice.

Negative Factors Affecting Recruitment and Retention:

Limited Compensation Comparability: While some NPs may perceive the contract as a significant raise compared to their previous NP salary, there are concerns about the compensation not being comparable to other healthcare providers, such as physicians. This disparity may hinder recruitment efforts, particularly when NPs are seeking competitive compensation packages.

Lack of Mentorship Compensation: The absence of compensation for mentorship roles is seen as a potential drawback for recruitment and retention. Providing financial incentives for experienced NPs to mentor and train new graduates or those new to the contract could be beneficial.

Stakeholders were also asked about the extent to which the contract supports recruitment and retention and agreed the contract does help. Their comments identified positive and negative contributions to attraction and retention.

Supports NP Recruitment:

Expanded Practice Options: The contract provides NPs with additional practice options beyond being employed by a Health Authority. This expansion of practice options may attract NPs who seek greater autonomy and flexibility in their clinical practice.

Attractive Compensation: The new PCN contracts offer competitive rates, incentives, and increased education funds. These financial benefits may be appealing to newer NPs and recent graduates, encouraging them to consider these contracts.

Opportunity for General Population Primary Care: The contract model allows NPs to work in general population primary care, which aligns with the basis of their masters-level education. This creates opportunities for NPs to practice in the areas they are interested in and passionate about.

Flexibility and Autonomy: NPs appreciate the autonomy and flexibility provided by the contract model, allowing them to have more control over their schedules and choice of work settings.

Professional Development and Support: Contracted NPs feel supported by regional leads through coaching, mentorship, and access to continuing professional development funds.

Opening New Avenues for NPs: The PCN contracts have opened up opportunities for NPs to work in roles they have wanted for a long time, potentially increasing their interest in joining these contracts.

Challenges for NP Recruitment and Retention:

Disparity in Compensation: Some experienced NPs may find the compensation rates for contract positions less attractive compared to Health Authority positions, which may affect their willingness to switch.

Negative Impact on Health Authority Recruitment: Conversely, the PCN contracts have drawn experienced NPs away from Health Authority positions, affecting recruitment and retention efforts in Health Authority teams and causing potential disruption in interdisciplinary teams.

Lack of Benefits and Pension: The contract model does not offer benefits, sick time, vacation, or a pension, which may be important considerations for some NPs when deciding between contract and Health Authority positions.

Complex Panels in Rural Settings: The target-based pay structure and panel size requirements may be unreasonable for rural providers to achieve, resulting in lower pay and potential challenges in recruitment and retention for NPs in these settings.

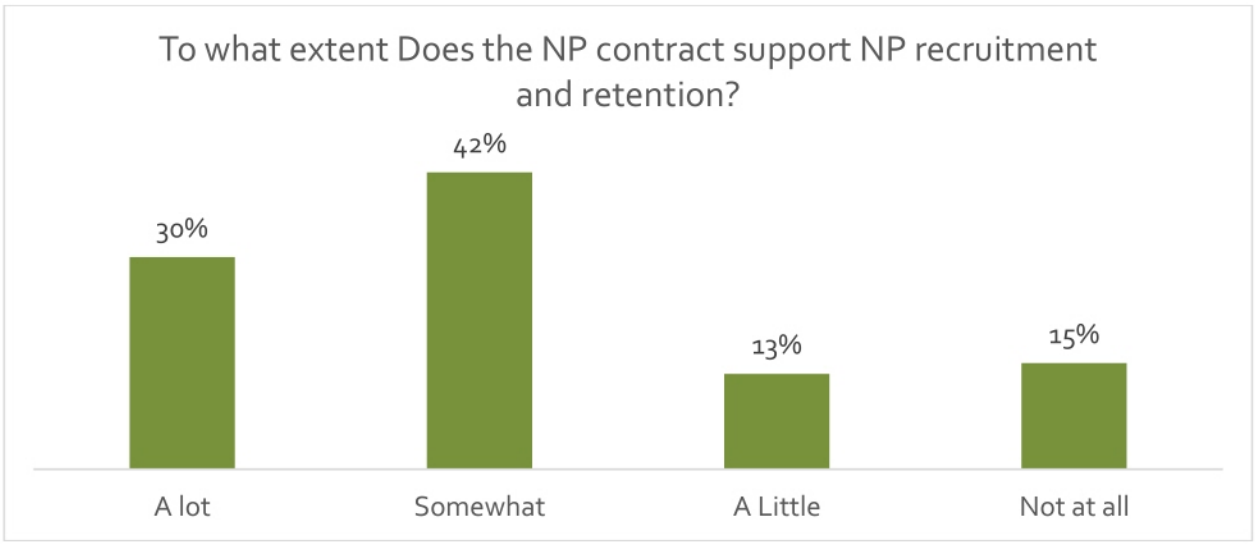
Limited Resources for Overhead: NPs may face challenges as the overhead provided by the contract may not be sufficient to cover actual overhead costs, leading to financial strains and potential dissatisfaction.

Recruitment Barriers from Other Provinces: Licensing issues, such as the requirement for an OSCE (write in full), may serve as a deterrent for NPs from other provinces looking to work in BC under the contract model.

Uncertain Contract Terms and Delays: Delays in finalizing contracts and last-minute changes can create uncertainties for candidates and may cause them to reconsider, impacting recruitment efforts.

Contract sustainability: NPs expressed concern as to the sustainability of the 3-year contracts – will they be renewed? Over the longer term?

As viewed by stakeholders, the PCN contract provides new opportunities and benefits for NPs, but there are still challenges to address in terms of compensation, benefits, panel size, and overhead support to ensure successful recruitment and retention of NPs under this model. To address these challenges, further adjustments and improvements may be needed to make the contract model more attractive and sustainable for NPs across different settings and regions.



The NP contract has both positive and negative impacts on improving provider experience, attracting, and retaining NPs, and allowing them to work to their full scope of practice. The evaluation revealed that NPs make choices between different practice models, such as contract-based and employed positions, based on individual circumstances, including work-life balance, compensation, scope of practice, location, and professional growth opportunities.

Contract-based models offer NPs greater autonomy, the potential for higher earnings, and the opportunity to manage their own practice, which can be appealing to those seeking more flexibility and control over their work. On the other hand, employed positions provide stability, predictable salary, benefits, and administrative support, attracting NPs looking for a more structured work environment and access to resources.

However, there are concerns and challenges related to the contract that hinder recruitment and retention efforts. NPs seek increased compensation to match the complexity of their patient panels and their responsibilities, and they desire equitable pay compared to other healthcare providers, such as family physicians. Lack of benefits, pension, and mentorship compensation are also perceived as drawbacks. Stakeholders also recognize that the contract provides expanded practice options, competitive compensation, flexibility, and opportunities for primary care, supporting NP recruitment. However, there is a disparity in compensation between contract and health authority positions, and the lack of benefits and pension can deter some NPs from choosing the contract. Panel size requirements and overhead support challenges, especially in rural settings, can affect recruitment and retention.

Respondents observed that to improve provider experience and increase attraction and retention of NPs, adjustments to compensation, benefits, panel size, overhead support, and mentorship opportunities should be considered. Standardizing contracts and providing greater flexibility and resources for NPs in the contract model could help address these concerns and create a more attractive and sustainable environment for NPs in primary care. The extent to

which the contract is contributing to improved provider experience, attracting, and retaining NPs, and allowing them to work to their full scope of practice depends on various factors. While the contract model offers potential benefits, its success in achieving these goals can be influenced by several considerations:

Compensation and Incentives: The contract's compensation structure and incentives play a significant role in attracting and retaining NPs. Adequate compensation, benefits, and incentives for rural or underserved areas can make the contract more appealing to NPs, especially new graduates or those considering relocating.

Scope of Practice: To attract and retain NPs, the contract must allow NPs to work to their full scope of practice. Clarity in the scope of practice and autonomy in decision-making empower NPs to provide high-quality care, which enhances their job satisfaction and engagement.

Work-Life Balance: The contract's provisions, such as predictable schedules, paid vacation, and flexible working arrangements, contribute to a better work-life balance, leading to increased job satisfaction and retention of NPs.

Supportive Work Environment: A supportive work environment that values NPs' contributions, fosters interprofessional collaboration, and provides opportunities for professional growth can positively impact NPs' experience and job retention.

Access to Resources: Access to necessary resources, such as administrative support, technological tools, and continuing education, enhances NPs' ability to perform their roles effectively and can positively impact their experience.

Mentorship and Training: Mentorship programs and ongoing training opportunities are essential for new NPs to gain confidence and competence in their roles, thereby supporting their successful integration into the workforce.

Recognition and Appreciation: Recognizing and appreciating NPs' efforts and contributions can significantly boost their job satisfaction and loyalty to the organization or community they serve.

Attachment Targets: The contract's attachment targets, if appropriately set and achievable, can positively influence patient continuity of care and job satisfaction for NPs. Unrealistic or punitive targets, on the other hand, may lead to dissatisfaction.

Feedback Mechanisms: Establishing feedback mechanisms within the contract model allows NPs to voice their concerns and suggestions, leading to improvements and a sense of agency in decision-making.

In what ways does the BC NP contracting policy align with the Quadruple AIM goals (improved provider experience, improved patient experience, lower costs, better outcomes)?

The Quadruple Aim is a healthcare framework that expands upon the traditional Triple Aim (improving patient experience, improving population health, and reducing costs) by adding a fourth dimension: improving provider experience (Sikka, Morath & Leape, 2015). The goal of the Quadruple Aim is to create a more sustainable and effective healthcare system that prioritizes the well-being of both patients and healthcare providers. By focusing on the four interconnected dimensions, the Quadruple Aim aims to achieve better health outcomes, enhance patient experiences, reduce healthcare costs, and improve the overall well-being and satisfaction of healthcare providers.

For an outline of the theoretical alignment of the contract model with Quadruple Aim, please see the evaluation data matrix in the Evaluation Plan or Technical Report documents.

The evaluation utilized its multiple sources of data to ask NPs and stakeholders about the contract model's contribution to Quadruple AIM outcomes.

Stakeholders thought it 'somewhat' aligned with the Quadruple AIM model. They observed:

- **provider experience** may be improved due to the flexibility and autonomy provided with the contract
- **patient experience** may be improved by NPs having more time to spend with their patients, providing a better experience and more holistic care,
- **system impacts of** lower costs by increasing cost-effectiveness as a function of patients receiving the care they need and avoiding multiple visits as well as
- increased **patient access** to a provider which may influence acute care costs to the system, and about better health outcomes, by the nature of the NP role, NPs provide holistic care which may lead to better health outcomes.

> "To a degree the contract has helped with these goals. But the focus on attachment and panel size misses the complex patient; they need intensive help. This could be addressed by the ministry building in a valid, comprehensive way to understand the complexity of NP patient panels. We need to recognize and understand complexity and then apply this to NP panel size requirements."
>
> Respondent

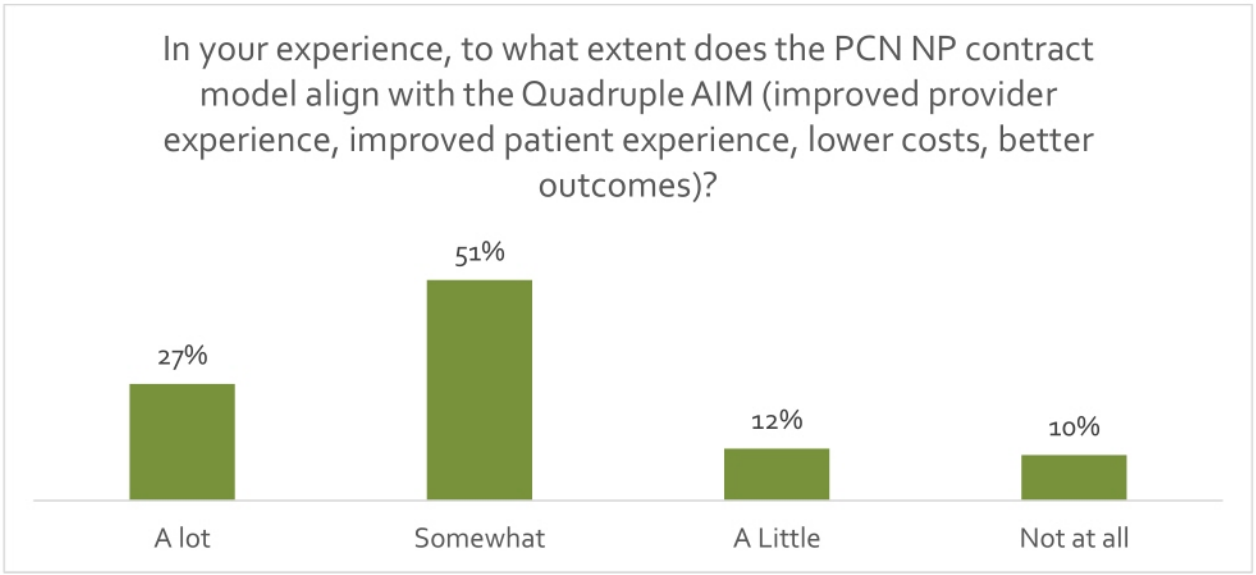
Stakeholders further noted uncertainty and disagreement about the extent to which the PCN contract model aligns with Quadruple AIM, highlighting that there are differences in how the PCN contract model is perceived and experienced and therefore different perceptions of effectiveness.

Stakeholders noted through key informant interviews that the contract compensation model's potential to contribute positively to the four aims is recognized, though challenges persist in monitoring and evaluating patient experience and outcomes within Primary Care Networks (PCNs).

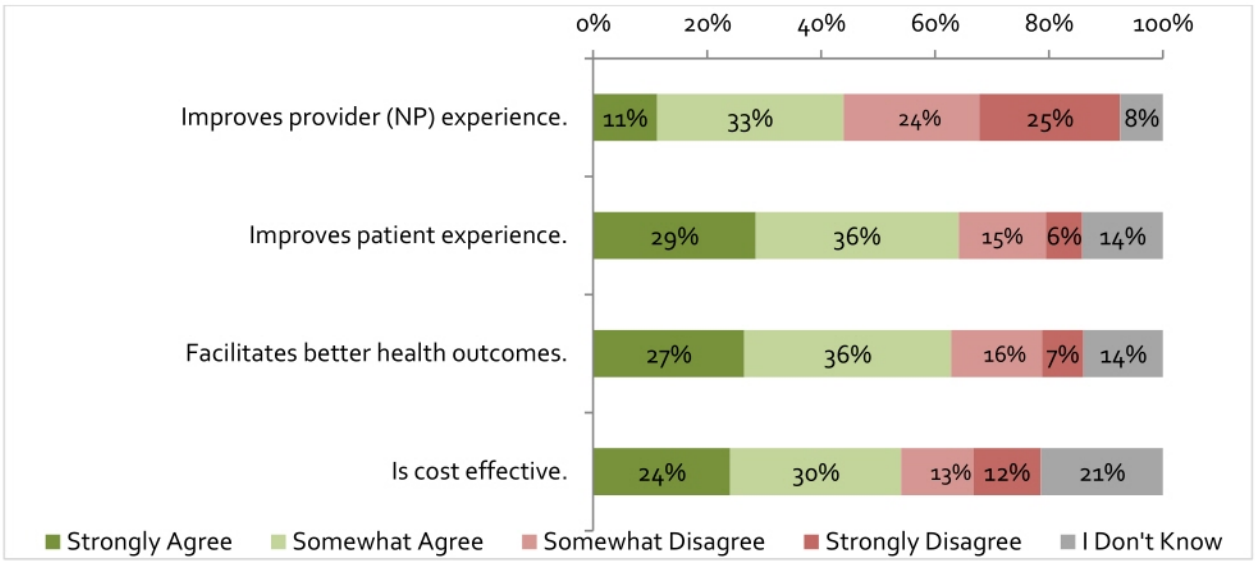
> "Is there improved patient experience? HA has a structure to address this. Contract NPs/ PCNs do not have a system to capture patient experiences with NPs. What are PCNs measuring? What HA's measure is known and linked to continuous improvement."
>
> Respondent

Successes include anticipated cost efficiency, especially in urgent care, and the potential to enhance Indigenous involvement in contract review. Provider experiences vary, with some thriving under the autonomy while others struggle with business aspects. Patient access and attachment appear positive, with anecdotal evidence suggesting NPs are attaching patients, especially complex and marginalized cases. Patient outcomes stand to improve as NPs increase access to healthcare, detecting issues earlier. Challenges encompass accountability gaps, attachment/panel size issues, inadequate locum coverage, and data transparency in PCNs.

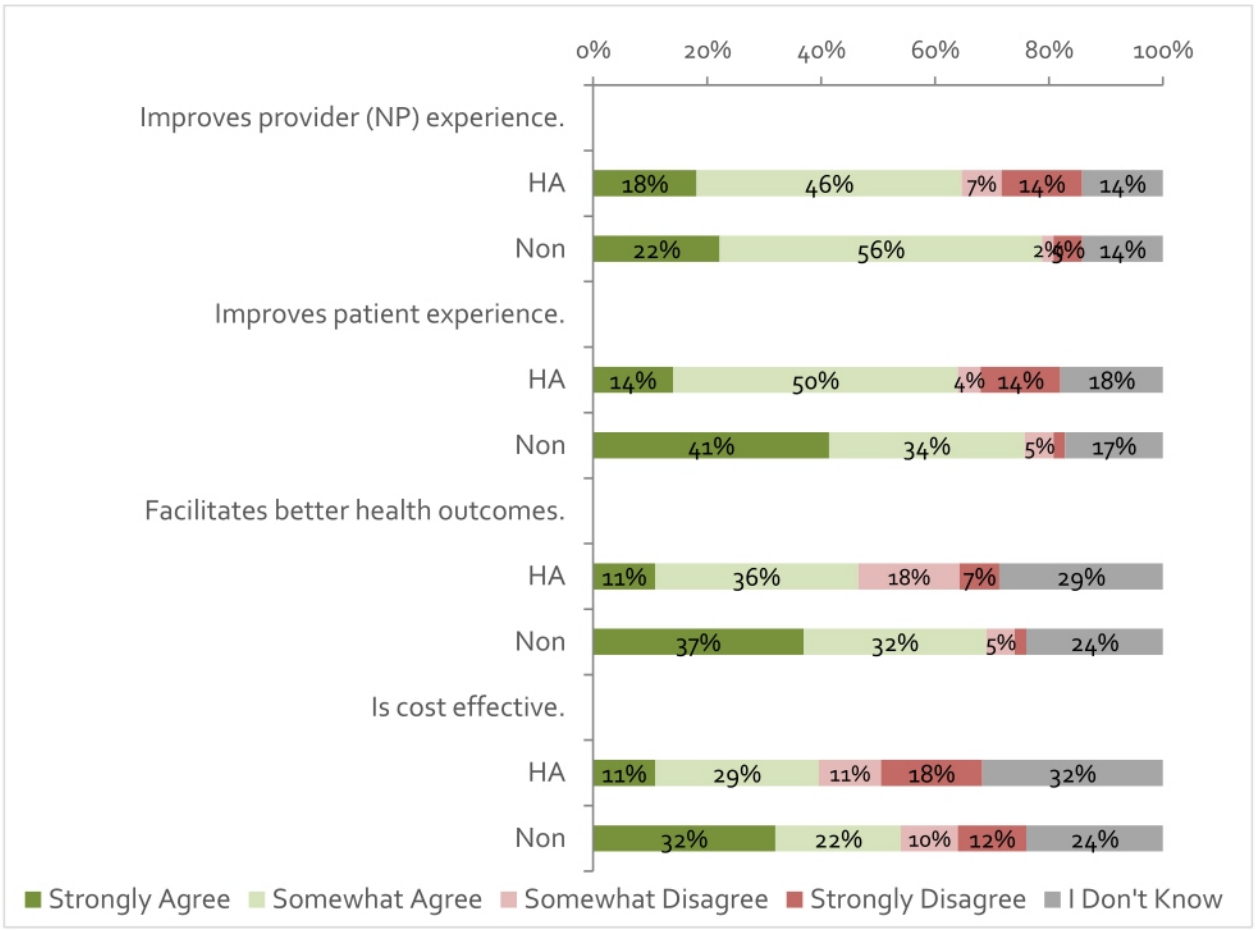
Patient outcomes are threatened by NP migration from Health Authority (HA), complexities in managing diverse patient groups, and lack of structured assessment processes. Addressing these challenges necessitates NP representation in decision-making, comprehensive data collection, and improved locum planning.



Nurse Practitioners through the survey were asked to rate the extent to which they agree their compensation model achieves the quadruple AIM outcomes. Over 50% of NP's overall agreed it facilitates better health outcomes, improves patient experience, and is cost effective. Fewer noted it improves the provider experience.



Interestingly, those NPs who were PCN contracted reported higher levels of agreement with all dimensions of Quadruple AIM than health authority employed NPs.



This finding was further explored through the two focus groups – one with health authority employed NPs and one with PCN contracted NPs. Those who were contracted NPs spoke often of the important role they occupied within their clinical contexts, often with a scope of practice like that of a physician. They described satisfaction with the responsibility, ability to have autonomy over their own schedules and in the comprehensive care they could provide to patients. What did the HA ones say? Something different?

Case study participants and the contexts of their work further highlighted matters of provider experience, noting TBC generally thrives in these clinics, fostering fulfillment and autonomy for NPs. Most NPs operate within their scope, though gaps in business management training are evident. The autonomy granted by the contract is valued, though some NPs feel vulnerable without HA coverage. NPs exhibit interest in NP-led Primary Care Clinics (PCCs), where NPs are observed to retain their positions and recruitment of NPs to new positions is thriving. Achieving work/life balance under the contract structure proves challenging for some.

Patient access and attachment are hindered by attachment targets incongruent with patient realities, particularly for marginalized, complex, or newly engaged patients. While some clinics meet their 3-year attachment goals, others (especially those serving complex patients) find the balance between access and attachment elusive, impacting care quality. Patient preferences for NPs over physicians emerge, particularly among marginalized and vulnerable patients. Attachment strategies range from clinic-based to NP-shared patient care.

> "Concerning system outcomes, the contract model may be cheaper in the long run, considering some of the extras in HA employment – disability management and legal affairs all have behind the scenes costs. There are additional people supporting NPs in the HA employed model. "
>
> Respondent

Patient outcomes are seen as equivalent between employed and contracted NPs, but HA micromanagement can negatively influence contributions. Overall, the contract model's effectiveness varies, with strengths in autonomy and TBC, but challenges persist in funding, Indigenous alignment, communication, and achieving attachment targets.

Overall, the BC NP contracting policy appears to, as reported by participants, align with the Quadruple Aim goals by fostering improved provider experience, enhanced patient experience, cost reduction, and better health outcomes. That said, more evaluation is needed to assess the extent to which the contract model enhances the outcomes of Quadruple AIM, which was outside the scope of this evaluation.

Conclusion

This evaluation aimed to answer key questions about the impact of the PCN NP Contract (at this stage of evolution) and its contributions to the health system. One of the evaluation questions was "How might this evaluation help inform future NP compensation models and contracts, and

future evaluation and research?" Through gathering data from a variety of sources and methods, then triangulating this data, we have distilled recommendations that should provide a strong, balanced base for decisions to advance future NP and system practices and policies.

The consensus of NPs, and some major stakeholders, was that the contract compensation model has largely met its objectives. The evaluation revealed a range of strengths that have contributed to the PCN NP contract's effectiveness, while also highlighting key areas where improvements could further enhance its impact and reduce unintended negative consequences. This report underscores the contract's positive reception and its alignment with the needs of NPs and the broader healthcare system.

At the same time, it is crucial to acknowledge that the evaluation was conducted against the backdrop of a broader context of dissatisfaction (and burnout) among health-related professions regarding remuneration and working conditions. This discontent emphasizes the need to deepen and broaden the examination of compensation models and influences on satisfaction for NPs but also across the healthcare sector. Questions persist about precise roles, scope, and outcomes that NPs contribute to across the Quadruple Aims of the healthcare system. Addressing these questions more fully requires dedicated research and evaluation efforts.

Future research and evaluation initiatives should aim to provide a nuanced understanding of the PCN NP contract model's influence on healthcare delivery, patient outcomes, and system efficiency. This knowledge can then serve as a crucial foundation to inform decision-making, policy formulation, and contract structuring. The recommendations that follow offer a roadmap with 'points of interest' to consider as BC Health shapes future PCN NP contracts to ensure alignment with the healthcare landscape, and optimizing positive, sustainable progress in each of the Quadruple Aims. It is imperative that these efforts lead to more equitable compensation models and improved provider experience, but also more improved access and experience for patients, better patient and population health outcomes, and a health system that is progressively more appropriate, effective, and efficient.

Recommendations

Catalyst distilled the recommendations below from all data gathered and reviewed during our evaluation process. They are presented in alignment with the evaluation questions and findings above. We believe the following deserve consideration as the Ministry evolves NP compensation models, in harmony with models of care and systems in BC. Note that several recommendations relate to more than the one evaluation question or Quadruple Aim.

The recommendations are aligned with Evaluation Question # 1 – to what extent have the intended outcomes of the PCN NP contract been achieved, particularly with regard to: increased patient access to primary care, enabling NPs to contribute to comprehensive, high-quality, person-centred, culturally safe, interdisciplinary and team-based primary care, contributing to improved provider experience, including attracting and retaining NPs as hoped, and allowing them to work to their full scope of practice and in what ways does the BC NP contracting policy align with the Quadruple AIM goals (improved provider experience, improved patient experience, lower costs, better outcomes).

Improving patient access to primary care

Access in General

Ensure high-quality consultation with stakeholders in patient access and care when developing compensation models and incentive for any practitioners in this area. Effective stakeholder consultation must include those who influence, or are influenced by, the change. This means representatives of intended beneficiary populations (patients, Indigenous populations, special populations in urban centres, rural and remote, etc.), as well as those serving the populations (contract and employed NPs, physicians, etc.), and those who manage services.

Adjust the compensation model to reflect major factors influencing access to care. Complexity is challenging but essential to address. Adjustments in panel size and time targets could be made to acknowledge patient complexity, length of time patients have been without access to health practitioners and contextual challenges.

Recognize the challenge of addressing the competing goals of attaching many patients while increasing access and providing quality care for those many patients. These goals are at odds for providers and impact patient access and experience, and NP contribution to outcomes.

Establish monitoring and evaluation systems that include both current compensation models and any others as they emerge. Quality evidence is critical to inform decisions aimed at improving access and care, evolving new models in practice, and long-term system planning.

Develop and monitor a strategy for attaching vulnerable patients, as well as retaining them. This includes a strategy for retaining NPs in primary care (whether HA employed or contracted). It is especially important to prevent vulnerable patients from falling through the cracks when NPs leave for higher-paying roles.

Develop and monitor a strategy to attract NPs to address health care disparities for rural and remote populations. Several recommended making contracts more inclusive of those in rural/ remote areas (i.e., less urban-centric) and supporting development of NP led clinics (see below).

Access for Indigenous populations

s.13; s.16

Contributing to care

Comprehensive, high-quality, and person-centred

Require those applying for NP contract positions to bring considerable experience in full scope of practice, plus competency in running an independent consulting business.

Provide resources for NPs to improve quality of care in settings with special populations and many complex patients.

Explore ways to help non-PCN clinics to compete for NP positions. As noted by non-PCN informants, this could increase accesss, improve quality of care and achieving health outcomes.

Interdisciplinary and team-based care

Clarify expectations regarding team-based care. Some say TBC is automatic for nurses, and part of their culture. Others disagree and provide examples. A possible resource to consider is Doctors of BC practice support program's 7-part *Team-based Care is Part of Quality Improvement*.

Create a strategy and train both NPs and clinic staff in collaborative care team models. When asked about the extent to contracted NPs are involved with collaborative team care, responses ranged from good to non-existent.

Monitor and evaluated TBC to ensure it is happening as planned and achieving desired results.

Improving provider experience

(Re)Create a unifying strategy for attracting and retaining NPs. This "sub-system" strategy would include NPs working as independent contractors as well as Health Authority employees. Many issues to address have been identified through the evaluation process, but an advisory team of stakeholders with knowledge and interest in the above areas would help ensure system-level consideration and, eventually, action. A next step is to more fully understand the dynamics, challenges, and inequities to address.

> "It doesn't make sense that we have NP providers in two different groups, providing the same service to the patient, and with such a huge discrepancy in payment."
>
> Respondent

Act to reduce tension and conflict among practitioners. This means resolving key questions relating to perceived lack of fairness and equity among contract NPs, employed NPs, nurses and physicians. To be successful, this cannot be done by BC Health in isolation, but must involve consultation with these groups.

Create and monitor options to combine compensation models. Several believed this would increase NP impact while addressing the challenges individual NPs and context.

Explore flexibility alongside autonomy for NPs. As already mentioned, rigid panel size requirements may lead to compromising patient care, risking burnout and reducing access to complex patients. Adjusting compensation agreements for complexity (also discussed above) requires evolving a formula and gaining consensus, which will likely also be challenging.

Ensure NP competency to run a business successfully before a contract is signed.

Train to achieve work-wife balance when running a business. Several saw this as key to retaining both contracted and employed NPs, and worth noting as a separate recommendation. NPs need to understand how, as contractors, they must make decisions and self-organize to achieve health promoting balance and ensure self-sustainability and well-being. This includes allocating time and funds for self-care, vacation, learning, and coverage when away. Both pre-service training and in-service support (from college and colleagues) were considered important.

Alignment with the Quadruple Aims

Many recommendations associated with the Quadruple Aims have already been posted in response to the evaluation questions above. Those that have not yet been posted already are included under each of the aims below.

Quadruple Aim #1: Improved patient experience

Act immediately to relieve moral distress and system instability due to NP migration. Alongside long-term retention strategies, acting to reverse losses of Health Authority NPs (to the contract model and other factors) would reverse loss of access to care for many complex and vulnerable patients.

s.22

Quadruple Aim #2: Improved patient outcomes

> "Many of our NP are the only providers supporting the Indigenous communities . . . this is super challenging work – and many patients that require this care do not fit well with in the fee for service model. This is hard work."
>
> Respondent

Incentivize PCN NPs to take on more complex patients and invest the time needed for quality care required to improve patient outcomes. Respondents representing diverse stakeholder views concluded that success required that BC Health shift from a simple "attachment numbers" approach to one that acknowledged complexity and facilitated an "outcome-related" approach.

Consider performance-based salary adjustments based on scheduled performance reviews. This practice is well-developed and considered to be helpful to understand, reflect and encourage professional achievements and contributions. This could address issues and criticisms of contract NPs receiving annual compensation increases without accountability for performance, and align with professional development for learning and improvement.

Quadruple Aim #3: Improved provider experience

Consider increasing NP-led Primary Care Clinics. These are attractive to NPs and may be effective in reducing some work-place tensions. Permit NPPCCs to build their teams by selecting new NPs who fit in well with the setting. Such clinics may be good at fostering autonomous practice and maximizing the NP role in primary care.

> "Clinics led and staffed by NPs build their teams, engage the community and include allied health providers. They have partnered with midwives, clinical counsellors, and others. . . With more funding, NP clinics could attach and provide services for many more patients. They easily recruit NPs who want to work in NP led clinics. These clinics are improving access. We need more providers."
>
> Respondent

Quadruple Aim #4: Improved system outcomes and reduced costs of outcomes

Design for long-term stability, sustainability of the workforce and continuity of care. BC Health should recognize and reward the skills, experience, and responsibilities of all NPs, valuing Health Authority employment and contracting equally. Work to improve NPs perception of fairness and desire to commit to longer-term work as an NP should continue.

Establish regular review and clear accountability structures. This is needed to promote dialogue among major stakeholders (Ministry, health authority, NP, clinic), and identify and address challenges and opportunities for improvement.

Develop and implement comprehensive monitoring and evaluation, including genuine return on investment analysis. This would include areas of monitoring and evaluation already mentioned. It would track progress on most important indicators for each of the Quadruple Aims. I.e., patients' (beneficiaries') experience, patient health outcomes, provider experience and sustainability, and system performance and costs. Including a genuine return on investment analysis would enable systems to demonstrate the value of innovations to individuals and communities that go beyond simple cost avoidance of government systems.