ARTICLE

Parent Satisfaction With Pediatric Nurse Practitioner Care in Specialty Services

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Introduction: This study examined parent satisfaction with care provided to their children by Pediatric Nurse Practitioners (PNPs) in specialty areas at a tertiary care pediatric hospital.
Method: A convenience sample of parents of children cared for by 19 PNPs in different specialty settings completed a confidential survey consisting of demographic information and the Parents' Perception of Satisfaction with Care from the Pediatric Nurse Practitioners Instrument (PPSC-PNP). Data were analyzed using SPSS (IBM, Armonk, NY).
Results: The overall PPSC-PNP mean score was 129.82/140. Mean subscale scores ranged from 27.15 to 28.51/30. The general satisfaction score showed a mean score of 18.31/20. No statistical difference was found in parental satisfaction when scores were analyzed by the child's age, parent participant, or patient setting.
Discussion: These findings indicate that parents are highly satisfied with the care their children receive from PNPs across various subspecialties regardless of the child's age and clinical setting. J Pediatr Health Care. (2022) *XX*, 1−8

KEY WORDS

Pediatric nurse practitioners, parent satisfaction, specialty services

INTRODUCTION

Nurse practitioner (NP) roles are an integral component of today's health care system, affording specialized, advanced practice level care to patients and their families. These roles emerged in the mid-1960s as part of health care reform focused on redesigning the provision of health care to attain sustainable, cost-effective, high-quality care in the context of health care needs (increased rates of survival and chronic illness) (Murphy, 1990). Since the inception of advanced practice nursing (APN) roles, NPs have become recognized contributors to health systems around the world, facilitating access to expert level care, improved patient outcomes, with high patient satisfaction (Burgess, Martin, & Senner, 2011; Canadian Nurses Association 2019; Maier, Aiken, & Busse,

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2017; Newhouse et al., 2011). In Canada, NPs are independent practitioners with graduate-level preparation (Masters or PhD) supporting advanced scopes of practice legislated by regulations that ensure the provision of safe, evidence-based and ethical care (CNA, 2019). NPs are collaborative team members, assuming specialized roles in diverse settings, including primary, acute, and chronic care, and contributing significant value to health care (Gresley-Jones, Green, Wade, & Gillespie, 2015; Maier et al., 2017; Newhouse et al., 2011). Their contributions to multidisciplinary teams lead to improved patient outcomes and satisfaction with care (Adams et al., 2013; Beaulieu-Jones, Croitoru, & Baertschiger, 2020; Borgmeyer, Gyr, Jamerson, & Henry, 2008; Gresley-Jones et al., 2015; McDonnell et al., 2015; Mosquera et al., 2014).

Pediatric nurse practitioner (PNP) roles focus specifically on providing comprehensive health care to infants and children within a framework of patient and family-centered care. PNP roles originated in primary care settings, providing evidence-based health care to healthy infants and children (Murphy, 1990). Today, PNPs' scope of practice encompasses the care of well, acutely ill, medically complex, and chronically ill children from infancy to the transition into adult medicine. These advanced practice roles are critical in providing care that meets the changing health care needs of children, as survival rates and the prevalence of chronic medical conditions continue to grow. The long-term health outcomes and quality of life of children are a key focus of PNP-led care. PNP roles have been studied in relation to the safety, efficiency, and quality of patient outcomes in the provision of expert health care, alongside the key indicators of the patient and parent satisfaction (Newhouse et al., 2011; Swan, Ferguson, Chang, Larson, & Smaldone, 2015). Martyn, Martin, Gutknecht, & Faleer, (2013) stated, "PNP's enhance the quality of care through a patient and family-centered approach with expert child and adolescent health knowledge and skill within a nursing context, providing high quality care to children, adolescents, and their families across all settings."

Research on PNPs roles has shown that clinical competence and skillsets matching patient needs were primary indicators of satisfaction with care (CNA, 2019; Delaney, Bayley, Olszewsky, & Gallagher, 2015; Forgeron & Martin-Misener, 2005; Kinder, 2016; Rejtar, Ranstrom, & Allcox, 2017). More recently, Kinder (2016) extended this finding to suggest that clinical competence has a strong positive relationship with parents' intent to follow health care recommendations.

The scope and fields of practice for NPs have shown substantial growth from their primary care origins (DiCenso et al., 2010; Gagan & Maybee, 2011; Swan et al., 2015). Adult and pediatric NPs continue to be important clinicians in primary care settings and their expanded roles in acute, complex, and specialty care. Numerous studies show evidence of the positive impact on patient outcomes, health care efficiencies, and patient/parent satisfaction with NP care in all settings and in managing acute, chronic, and complex medical conditions. Throughout the literature, the NPs' role in emergency medicine (including trauma care), shows similar outcomes—provision of safe, efficient, and high-quality, comprehensive care with high satisfaction scores (Adams et al., 2013; Fanta et al., 2006; Forgeron & Martin-Misener, 2005; Griffin & McDevitt, 2016; Steiner et al., 2009; Thrasher & Purc-Stephenson, 2008; Varughese, Byczkowski, Wittkugel, Kotagal, & Dean Kurth, 2006). Similar outcomes have been documented in pediatric surgery settings (Beaulieu-Jones et al., 2020; Delaney et al., 2015; Rejtar et al., 2017), while critical care PNPs have demonstrated successful management of complex patients since the early 2000s (Beal & Quinn, 2002; Williams et al., 2020). PNPs within specialty clinical areas such as cardiology and respiratory medicine deliver a high-quality of care as evidenced by reduced length of stay and hospital readmissions, improved access to expert care, and high levels of patient satisfaction (Borgmeyer et al., 2008; Evangelista et al., 2012; Wall et al., 2014). In a growing population of children with medical complexity, the provision of comprehensive care by PNPs has demonstrated improved access to health care and quality of life for these children alongside high rates of caregiver satisfaction with PNP care (Adams et al., 2013; Cady, Kelly, Finkelstein, Looman, & Garwick, 2014; Gresley-Jones et al., 2015; Harris & Samuels, 2015; Mosquera et al., 2014). With increasing numbers of children with high-risk, chronic illness and significant health care needs, care coordination and access to timely, patient-focused, expert care is crucial and often falls within the scope of NPs' practice (Adams et al., 2013; Cady et al., 2014; Ellington, 2013; Harris & Samuels, 2015; Moreno & Peck, 2020).

Improved access to care by APNs in Canada originated with outpost nursing roles in northern Canada in the late 1800s (CNA, 2019). Policy reforms aimed at meeting the needs of isolated populations brought in formal educational programs and recognition of the NP role in the 1970s. Formal legislation and regulation of the NPs' role started in Canada in 1998 and now exists in all provinces and territories (Kaasalainen et al., 2010). In the last 13 years, the supply of NPs in Canada has quadrupled from 1,393 in 2007 to 6,661 in 2020 (Canadian Institute for Health Information [CIHI], 2021). Recent Canadian statistics indicate that 93% of NPs in the province of Alberta work in urban settings, a vast shift from the origins of the role in remote outpost settings. Currently, the NP workforce in Canada is evenly split between hospital and community settings (CIHI, 2021). The current study setting is a tertiary, urban hospital in Alberta, reflecting common NP practice in Canada today.

A large number of studies compare NP-led care to physician care. In Maier et al.'s (2017) working paper, a synthesis of the evidence on APN roles included 37 countries. Ten randomized control trials (RCTs) evaluating the impact of APN roles in acute and chronic conditions consistently showed NPs with specialized, advanced practice training demonstrated higher or equivalent patient satisfaction with the quality of care received as physicians. A decrease in hospital admissions and readmissions was also documented.

Nurse Practitioner care led to higher patient satisfaction related to nurses providing more information, counseling patients, taking more time, and providing more holistic care. Results from other studies aligned with Maier et al.'s (2017) findings (Laurant et al., 2018; McDonnell et al., 2015; Tsiachristas et al., 2015; Wall et al., 2014). Almost all studies compared outcomes of NP-led in comparison to physician-led or resident care aligned with Maier et al.'s (2017) conclusions demonstrating equivocal or superior outcomes (Fanta et al., 2006; Laurant et al., 2018; Martínez-González et al., 2014; McDonnell et al., 2015; Swan et al., 2015; Tsiachristas et al., 2015; Wall et al., 2014). In one systematic review by Newhouse and colleagues encompassing almost two decades of literature, high-quality evidence showed NPs provided high-quality, effective care with high patient satisfaction and patient outcomes similar to and in some ways better than care provided by physicians (Newhouse et al., 2011).

The overwhelming evidence demonstrating consistently high levels of satisfaction with NP-led care throughout the literature is particularly significant in pediatrics and is an important indicator of the quality of care in pediatrics. In work by Kinder (2016), high satisfaction scores and clinical competence had a strong positive relationship with parental intent to adhere to PNP-recommended health care advice, demonstrating the implications for health outcomes of children. Kinder and Allen (2014) identified four characteristics as important factors in determining satisfaction of care by parents in relation to PNP-led care: how providers interact with patients (communication skills), provider knowledge and skills (clinical competence), provider attentiveness (caring behavior), and patient-centered approaches (decisional control). More recently, Kinder's (2016) tool was used to identify parental satisfaction with PNP care in relation to adherence to recommended therapy outcomes. Kinder's (2016) original work involved the development of a valid and reliable tool to assess parental perceptions of care provided by PNPs—the Parents' Perception of Satisfaction with Care from Pediatric Nurse Practitioners Instrument (PPSC-PNP). The PPSC-PNP survey was piloted in primary care settings.

A review of current evidence shows a noticeable gap in the literature using validated tools to capture parental perceptions of PNP care, particularly outside of primary care settings. Although there are studies describing the impact of PNP roles in subspecialty areas, there is limited evidence on how parents perceive the care provided by PNPs assuming diverse clinical roles within inpatient and outpatient settings. Extending our understanding and the evidence on parental perceptions with respect to the satisfaction of PNP care in specialty areas is imperative, as these roles continue to expand to encompass inpatient care, care of medically complex and chronically ill children, and subspecialty areas of practice as is seen in our center.

Purpose

Our study aimed to assess parental satisfaction with PNP care in inpatient and outpatient specialty settings within a pediatric tertiary hospital using the previously validated PPSC-PNP tool.

METHOD

The instrument used in this study to assess parental perceptions of care by PNPs—the Parents' Perception of Satisfaction with Care from Pediatric Nurse Practitioners Instrument (PPSC-PNP), was a newly developed tool by Kinder and Allen (2014). The instrument benchmarked satisfaction with care and quality of care provided by PNPs. It was constructed by an adaptation of three existing instruments measuring the construct of parents' overall satisfaction with the care provided by PNPs and based on Cox's Interactional Model of Client Health Behavior framework measuring patient satisfaction and resulting health care outcomes (Agosta, 2009). The Client Satisfaction Tool (Bear & Bowers, 1998), the Nurse Practitioner Survey (Agosta, 2009), and the Satisfaction with Decision Scale (Holmes-Rovner et al., 1996). Items in the PPSC-PNP were revised to reflect parental perceptions of care provided by PNPs.

The PPSC-PNP measured communication skills, clinical competence, caring behavior, and decisional control. The final instrument consisted of 28 questions on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). An overall satisfaction score ranged from 28 to 140. A higher score indicated greater satisfaction with PNP care received. Scores for the component subscales (communication skills, clinical competence, caring behavior, and decisional control) ranged from 6 to 30, and scores for general satisfaction ranged from 4 to 20. In our study, parents were given the option to score a 0 (not applicable) for any question that did not apply, and these were subsequently eliminated from the data analysis pairwise.

A prospective convenience sample of parents whose children were seen by a PNP at the Stollery Children's Hospital over 8 months was offered the opportunity to complete the survey. Fifty PPSC-PNP instruments per PNP were distributed to parents or legal guardians of children aged 0−16 years who met the study's inclusion criteria. Parents who did not speak or understand English and children who were not in the care of their parents or legal guardian were excluded from the study. The PPSC-PNP instruments were given out by clinic or nursing staff rather than the PNP to minimize any undue pressure on the parent to participate or selection bias. Surveys were completed in the clinic/inpatient setting. Background demographic information was also collected from participants. A total of 1,013 surveys were distributed, whereas 537 surveys were returned, of which 503 met the criteria for inclusion.

Setting

The site for this study was an urban pediatric hospital located in Edmonton, Alberta, Canada. The Stollery Children's Hospital operates 236 beds. This site sees over 300,000 patient visits per year and performs over 12,000 pediatric surgeries (Stollery Children's Hospital Foundation, n.d.). The hospital is a national leader in pediatric organ

TABLE 1. Pediatric nurse practitioners (PNP) subspecialty areas and populations surveyed

Subspecialty area (no. of PNPs)	Practice settings (location in which survey was conducted)	Pediatric patient population served
Cardiology (3)	Inpatient: cardiology unit Outpatient: cardiology clinic	Congenital and acquired heart disease, preoperative and postoperative
Orthopedics (2)	Inpatient: surgical unit Outpatient: fracture clinic, scoliosis clinic, general orthopedic clinics	Trauma, spinal deformities, congenital malformations, neuromuscular conditions
Neurology (2)	Inpatient: telemetry unit, medicine unit Outpatient: epilepsy clinic, neurology clinic, transition clinic, ER seizure clinic, stroke clinic	Seizure disorders, pediatric stroke, neurological disorders, and conditions
Pain services (2)	Inpatient: acute Pain service: surgical units, medical units Outpatient: chronic pain program	Acute pain: postoperative, post-trauma, acute medical conditions (e.g., sickle cell), burns, chronic pain
Neurosurgery (1)	Inpatient: surgical unit Outpatient: neurosurgery clinic, head shape clinic	Neurooncology, brain and spinal cord injuries and conditions, trauma, positional head shape, and craniosynostosis
Urology (1)	Inpatient: surgical unit Outpatient: voiding dysfunction, urology and urodynamics clinics	Voiding dysfunction, urology
Oncology (2)	Inpatient: oncology unit, operating rooms Outpatient: oncology clinics	Oncology, neurooncology
Gastroenterology (1)	Inpatient: gastroenterology unit	Intestinal failure, liver failure, and multivisceral transplant
Diabetes (1)	Outpatient: diabetes clinic, transition clinic	Type 1 and 2 diabetes
Pulmonary hypertension (1)	Inpatient: medical and surgical units Outpatient: pulmonary hypertension clinic	Pulmonary hypertension
Respiratory and sleep medicine (2)	Inpatient (NIV): medical and surgical units Outpatient: Sleep clinics, sleep laboratory, NIV clinics Comprehensive NIV clinics	Sleep disorders Noninvasive ventilation (CPAP/BPAP)
Hematology (1)	Inpatient: Hematology Unit Outpatient: hematology day unit; comprehensive sickle cell clinic	Hemoglobinopathy, Bone marrow failure disorder

Note. *ER, emergency room; NIV, noninvasive ventilation; CPAP, continuous positive airway pressure; BPAP, bilevel positive airway pressure.*

transplantation and pediatric cardiac surgeries. The catchment area encompasses a large geographic area including Northern Alberta, British Columbia, Saskatchewan, Manitoba, Nunavut, Yukon and Northwest Territories. Over 40% of children treated at the Stollery are from outside the Edmonton area.

Ethics

Ethical approval was obtained from the University of Alberta Health Research Ethics Board (Pro00063534).

Data Collection

This study used a convenience sample of parents/guardians of infants and children receiving care from 19 PNPs in various inpatient and outpatient subspecialty settings at the Stollery Children's Hospital. A pilot study of 100 participants was undertaken before the complete research study to determine the feasibility of the data collection methods. No changes were required on the basis of these results, and these surveys were incorporated into the final results. The sample size of $n = 1{,}000$ was chosen to ensure a 95% confidence interval for the mean value on each survey question, with the width of one point (on a Likert scale), assuming the standard deviation between 8 and 8.5 (estimated from Kinder & Allen, 2014). See Table 1 for listing PNP practice settings in which surveys were collected.

Data Analysis

All data were analyzed using SPSS version 26 (IBM, Armonk, NY). Frequency tables and measures of central tendency were determined. Data were examined to identify the existence of any outliers within the subscales. Chi-square analysis was used to compare nominal variables. In contrast, variance analysis was directly entered into SPSS and double-checked by the principal investigator. A secondary person performed a random check on 10% of the data entry, ensuring no input errors were made.

RESULTS

Of 1,013 questionnaires, 537 were completed with a return rate of 53.7%. Of those returned, 34 were excluded as the patient was aged > 17 years and did not meet inclusion criteria, leaving 503 questionnaires in the analysis. Children's ages ranged from 1 month to 16 years, with a mean age of

TABLE 2. Parent Perception of Satisfaction with Care from Pediatric Nurse Practitioners instrument results

Variable	Minimum Score	Maximum Score	Mean Score	Standard Deviation
Overall satisfaction	31	140	129.82	15.95
Component scores of overall satisfaction				
Communication	6	30	28.00	3.87
Clinical competence	6	30	27.84	3.94
Caring behavior	6	30	28.51	3.29
Decisional control	6	30	27.15	5.01
General satisfaction	4	20	18.31	2.67

8.56 years (*SD*, 5.16). The surveys were completed by 80.2% of mothers, 14.6% of fathers, and 5.2% by other legal guardians. Forty-eight percent of the children were seen in an ambulatory clinic, 49.9% in an inpatient unit, and 2.2% in both clinical areas. Sixty-three percent of the children had previously been seen by a PNP, and 89.4% of parents completing the survey were aware that their child was seeing a PNP on the day the questionnaire was completed.

The results of our study are detailed in Table 2. Overall PPSC-PNP satisfaction scores ranged from 31 to 140, with a mean score of 129.82 (*SD*, 15.95). Component subscales: communication scores ranged from 6 to 30, with a mean score of 28.00 (*SD*, 3.87). This indicated that PNPs communicated effectively, understandably, and informatively when providing diagnoses, discussing treatment plans, or talking with the patient and family. Clinical competence scores ranged from 6 to 30, with a mean score of 27.84 (*SD*, 3.94), demonstrating that PNPs provided skillful, knowledgeable, and clinically competent care. Caring behavior scores ranged from 6 to 30, with a mean score of 28.51 (*SD*, 3.29), showing PNPs were approachable and provided care in a respectful, caring, and empathetic manner. Decisional control scores ranged from 6 to 30, with a mean score of 27.15 (*SD*, 5.017), showing parents were informed and included in health care decision making and supported to make the best possible decision for their child. General satisfaction scores ranged from 4 to 20, with a mean score of 18.31 (*SD*, 2.67), showing parents were satisfied with the care provided and time spent with the family during the clinical visit by the PNP.

The overall satisfaction score and the component subscale scores were high, with limited low scores documented. On subanalysis, there were no statistically significant differences in satisfaction scores between inpatient versus outpatient settings, categorical age of a child, or which parent or guardian completed the survey.

DISCUSSION

This is the first study to examine parent perceptions of multiple PNP roles in a wide range of specialty clinical practice settings in one tertiary care hospital. The PNP practices represented in our study include providing acute care, chronic disease management, and routine follow-up across a wide range of ages, medical conditions, and clinical settings/programs (Table 1). Findings from our analyses showed that parents' perceptions of PNP care did not significantly differ on the basis of the child's age, the location of the visit (inpatient vs. outpatient), or who completed the study (mother, father, or legal guardian).

Our results extend Kinder and Allen's (2014) original use of the PPSC-PNP to obtain parent perceptions of PNP care in several ways. As noted, PNPs in our study provided acute and chronic care within inpatient and outpatient clinical settings, in contrast to the work by Kinder (2016), which was exclusively in primary care settings. Despite the uniqueness and breadth of our study population and PNP roles, for the parents who completed the 503 surveys, our findings reflected similar PPSC-PNP scores. Parent responses showed high parent satisfaction scores with PNP care within the component scores of communication, clinical competence, caring behavior, decisional control, and general satisfaction. Kinder's (2016) mean score for overall satisfaction in 91 caregiver participants was 132.47 (*SD*, 12.99). In our larger study, including 503 caregivers, the mean overall satisfaction score was 129.82 (*SD*, 15.95), further quantifying parental perceptions of PNP's contribution to children's quality and value of care. Kinder's (2016) later work incorporated a visual analog score to examine the impact of parent perceptions on their intention to follow health advice provided by PNPs. A positive relationship was identified between PNP clinical competence scores and parents' intent to adhere to a recommended health plan (DiAnna-Kinder, Sherry, & McCormick, 2019). High clinical competence scores found in our study may suggest the potential for PNP care to impact patient outcomes positively. Future examination of the relationship between perceived PNP care and parents' intent to follow health care advice is warranted.

The high satisfaction scores elicited in this study also align with other researchers who have studied parent satisfaction with PNP care, although not using the PPSC-PNP survey tool from Kinder (2016). When using nonstandardized measures to examine parent satisfaction, the ability to assimilate outcomes on the basis of a wide range of PNP roles in diverse contexts is challenging. This limits comparisons and the opportunity to systematically capture descriptions of parental satisfaction to support PNP roles. Our use of the validated PPSC-PNP instrument provided a cohort of parent participants who completed 503 surveys for analysis. Using this tool in future research to study other PNP roles in a variety of clinical settings would potentially allow for the systematic review of findings, thus strengthening the evidence.

Previous studies on PNP roles in acute care settings, such as surgical inpatient and outpatient clinics, specialty programs, and emergency departments, also identify the positive impact PNP roles had on parent (and colleague) experiences alongside improved patient outcomes (Beaulieu-Jones et al., 2020; Fanta et al., 2006; Forgeron & Martin-Misener, 2005; Wall et al., 2014). Evidence from systematic reviews and meta-analyses encompassing over two decades of literature also described the advantages and high parent satisfaction with NP care in acute and chronic conditions (Maier et al., 2017; Newhouse et al., 2011; Tsiachristas et al., 2015). A meta-analysis that included 37 countries synthesized findings from RCTs showing the care provided by NPs (within their scope of practice) lead to higher satisfaction scores than resident and physician care (Maier et al., 2017).

Although our use of a quantitative tool in this study to assess parent satisfaction was not able to capture the words of parents, high scores on parental perceptions of caring behavior and communication skills showed that PNPs provided "expert care in a uniquely caring way." These findings aligned with previous studies that documented increased length of consultations by PNPs with more attentive and transparent communication lead to high parent satisfaction. NPs were often described as using more "holistic" approaches to care (Laurant et al., 2018; Maier et al., 2017; Swan et al., 2015; Wall et al., 2014). A study of compiled data from 7 RCTs found equivocal or improved outcomes in satisfaction with NP care relating to superior care with longer consultations in 10,911 patients presenting to primary care for acute or routine care (Swan et al., 2015).

Within the growing population of children with complex, chronic medical conditions, the literature highlights how the integration of PNP roles contributes to parents' capacity to be involved in health care decisions for their children (decisional control). In our center, a patient and family-centered approach is one of the foundations of PNP care. High mean scores on decisional control in our study reflected parents' perceptions of being participants in the health care decisions for their children. A significant portion of the pediatric population seen by PNPs in our center are children with medical complexity, requiring coordination of care as a key role of the PNP (Adams et al., 2013; Donnelly et al., 2020; Looman et al., 2013; NAPNAP, 2016; Rideout, 2007; Samuels et al., 2017). Cady et al. (2014) used descriptive analysis of a program-specific survey (retrospectively) from 2,628 care episodes over 3 years, highlighting the value-added in the care coordination for children with medical complexity by advanced practice nurses. We believe the data showing high parent satisfaction scores on decisional control in our study reflect parents' sense of the partnership and patient and family-centered care framework from which PNP's practice.

STUDY LIMITATIONS

The current findings are in the context of some study limitations. This was a single-site study, and although our convenience sample comprised parents from a wide range of settings, we did not examine differences between subspecialty areas, practitioners, or medical diagnoses. Not all subspecialty clinical areas were equally represented by parent participants, which may have affected the results. In addition, selection bias may have influenced parents' choice to complete the survey. Additional demographic data such as race, parentage, education and employment, marital status, and purpose of the PNP visit may have expanded the interpretation of our results. Our sample was restricted to English language speaking/reading participants only and therefore cannot be assumed to represent the diversity of cultures and backgrounds of parents as a whole. Clinical outcomes such as hospital admissions/readmissions, length of stay, complications, improved access to care or adherence to health care recommendations were not within the scope of this study.

IMPLICATIONS

This study aimed to use a validated instrument (PPSC-PNP) to gain knowledge on parental perceptions of PNP care throughout a wide range of subspecialty pediatric areas within our institution. Results from 503 parent surveys added to the growing body of literature seeking to understand the perception of PNP roles by parents and present further evidence of the provision of high-quality care experienced by parents which lead to high parent satisfaction with the PNP role. In our study, high parent satisfaction scores found in all components of the PPSC-PNP corroborate scores found in previous research and suggest a relationship to the advanced skills, knowledge, and approach to care that PNPs bring to their scope of practice. PNPs within our center provide expert, evidence-based health care to infants and children, working collaboratively within health care teams and contributing to high-quality patient and family-centered care within a complex medical environment. In previous literature, PNP roles have been shown to have positive implications for the health outcomes of children and their families. The literature suggests that the quality of this relationship with the PNP was most often associated with improved patient outcomes. Our study found that parents perceived that PNPs provided "expert level care within a caring framework." The need to identify parents' perceptions and experience of PNP care related to children's health outcomes is key, as the future uptake of expanded PNP roles will rely on this evidence. Furthermore, qualitative inquiry would offer an opportunity to capture descriptions from parents and extend our understanding of their experience with PNP care using their own narratives.

Understanding parent perceptions is imperative as PNP roles evolve and expand in the growing population of children requiring care. In a time of increasing volume and complexity of children's health care needs, PNP's clinical competence, communication skills, caring behaviors, and decisional control can translate to improved care and outcomes for children and their families. This study supports the ongoing need for PNP roles as part of children's health care teams. There is a need to further understand and

examine the impact of PNP practice within diverse health care settings. The sustainability and expansion of PNP roles will rely on our capacity to substantiate parents' experience of the expert care provided to their child and continue generating evidence for the requisite role of PNPs within health care teams.

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