



ABSTRACT

Introduction: The purpose of this study was to explore the attitudes and beliefs of pediatric nurse practitioners (PNPs) and pediatricians concerning collaborative practice relationships and to explore the themes that emerged to establish a definition of collaborative practice between PNPs and pediatricians as it applies to current practice trends.

Methods: Twenty-four PNP and pediatrician dyads were identified through a random sampling technique from a list of names of certified PNPs obtained from the National Certification Board of Pediatric Nurse Practitioners and Nurses. Questionnaires were mailed to certified PNPs and the collaborating pediatrician. Data were collected and analyzed using both quantitative and qualitative methodology.

Results: All PNPs and pediatricians were board certified and most had 6 or more years experience in a collaborative practice. The qualitative data revealed that open communication and a relationship built on mutual trust and respect, sharing of knowledge, and clinical expertise are essential components of a collaborative practice relationship if the shared goal of excellent patient care is to be achieved. Attitudes of importance in a collaborative practice relationship rated significantly higher by the PNPs included "respect for you as a professional" and "advocate for child health issues."

Conclusion: The data revealed that the words "supervision" and "independence" should be changed to "consultation" when describing a contemporary collaborative practice relationship between a nurse practitioner and physician.

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Attitudes and Beliefs for Effective Pediatric Nurse Practitioner and Physician Collaboration



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A recent study of attitudes toward physician-nurse collaboration found that nurses expressed more positive attitudes toward physician-nurse collaboration than did physicians (Hojat et al., 2001). Hojat et al. suggested that collaborative education was needed for medical and nursing students to improve collaborative practice and ultimately patient care. Setting up a collaborative relationship between pediatric nurse practitioners (PNPs) and pediatricians was an essential component of the first PNP programs established by Dr. Henry Silver and Dr. Loretta Ford in the mid 1960s. Their vision of the PNP role focused on a "collaborative" relationship between the two professions to provide the most comprehensive pediatric care for children (Stone, 1995).

During the past 30 years of PNP-physician collaboration, several positive events promoting the profession have occurred. In 1973 the National Association of Pediatric Nurse Associates and Practitioners (NAPNAP) was formed with a strong association with the American Academy of Pediatrics (AAP). Two years later NAPNAP and AAP collaborated as organizations to form the National Certification Board of Pediatric Nurse Practitioner and

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BOX 1 Survey instruments

Questionnaire items for open-ended responses

- How do you define “collaboration”?
- What are some of the critical components of a collaborative practice?
- What characteristics are “red flags” that a professional will have difficulty with a collaborative practice?
- Describe how “supervision” and “independent practice” apply or do not apply to your practice.
- Is there anything you consider unique to your collaborative practice agreement?

Professional characteristic in collaborative practice rating scale

What professional characteristics are requirements for you to consider in working with your collaborator? (Ratings: Not important, a little important, somewhat important, important, and very important)

Trust

- Respect for you as a professional
- Advocate for children’s health issues
- Board certified in area of practice
- Clinically competent
- “Pitches in” to help you when busy
- Knows when to seek consultation

BOX 2 Collazzi’s methodology

1. Each returned questionnaire was randomly numbered to ensure anonymity of each participant. Dyad questionnaires were numbered sequentially for the comparison of dyad responses.
2. Data for each research question from each participant’s questionnaire were typed verbatim.
3. Each set of typed data was read and re-read by each researcher to acquire a feeling for the words and to make sense of the data.
4. Significant phrases or sentences pertaining to each study question were extracted from the data and formulated into themes.
5. The themes were then organized into categories.
6. After receipt and analysis of 24 PNP questionnaires and 24 matched MD questionnaires, and collation of all data, the researchers determined that no new themes were emerging and data saturation had occurred.
7. The data analysis were done by each researcher and all themes were discussed.
8. The data analyses were done in narratives, which included themes with supportive data, and a conclusion.

Nurses (NCBPNP/N) for the purpose of maintaining high standards of PNP competence (Stone, 1995). However, collaborative practice between PNPs and physicians was not without controversy. In some states, the PNP could provide only services delineated in a collaborative written agreement that articulated specific services to be performed. This practice has led to numerous articles describing “collaborative practice” and has raised many questions regarding what type of PNP-physician relationship is effective (American Academy of Pediatricians [AAP], 1999; Chiarella, 1998; Herman & Ziel, 1999; Minarik & Price, 1999; Taylor-Seehafer, 1998). In the most recent

summary of state-by-state degree of independence for nurse practitioner (NP) scope of practice, excluding prescriptive authority (Pearson, 2003), differences in scope of practice are reported across states. Most states (N = 26) require no statutory or regulatory requirement for the NP to have physician collaboration, direction, or supervision. Physician collaboration is required in the NP scope of practice in 14 states, and six states require physician supervision in the NP scope of practice (Pearson, 2003). However, the literature is scant for the evaluation of PNP-physician collaborative practices (Sebas, 1994).

The model for effective collaboration between PNPs and physicians was de-

scribed as a complementary working relationship rather than a substitutive model (American Nurses Association, 1995). Overlap of the roles (ie, well child care, behavioral counseling, common illness treatment) is important in that children and their families need health promotion/supervision from the PNP as well as the medical depth of knowledge of the pediatrician (Stone, 1995). This collaboration may result in a change of the relative power positions of nurses and physicians (Herman & Ziel, 1999); however, successful collaboration occurs when the PNP and physician practice as co-professionals. It is this co-professional state that equates with success as a collaborative practice.

To date, there are no data on the attitudes and beliefs of PNPs and pediatricians regarding working in a collaborative practice. The objectives of this study were as follows:

1. to determine the attitudes and beliefs of PNPs and pediatricians toward collaboration between PNPs and pediatricians;
2. to determine the factors that are associated with an effective PNP/pediatrician collaborative practice; and
3. to identify the prevailing definition of collaborative practice as it is interpreted and used by PNPs and pediatricians who work in a collaborative practice relationship.

METHODS

Instrumentation: Research Questionnaire

A questionnaire entitled “Collaborative Practice: Pediatric Nurse Practitioners and Pediatricians” was developed for this study with use of standard demographic items and open-ended items based on attitudes and beliefs of collaboration between PNPs and pediatricians reported in previous literature (AAP, 1999; Chiarella, 1998; Herman & Ziel, 1999; Minarik & Price, 1999; Taylor-Seehafer, 1998; Sebas, 1994) (Box 1). Each questionnaire consisted of 20 sociodemographic items and eight qualitative/descriptive items. The open-ended items on the questionnaire ascertained the PNP and pediatrician definition of collaborative practice, the critical components of a collaborative practice, personal characteristics of a professional that may affect a collaborative practice

relationship, and the way the terms “supervision” and “independent practice” apply to their own clinical practice. Participants also were asked to rate professional traits that should be considered to work in a collaborative relationship (Box 1). An expert panel consisting of Board members of the NCBPNP/N and that included three PNPs and two pediatricians reviewed the questionnaire for content validity. Based on their review, minor revisions were incorporated into the final questionnaire. Institutional Review Board approval was obtained from The Johns Hopkins Medical Institutions, Baltimore, Maryland, and from Pace University, Pleasantville, New York, to conduct this study.

Sample Technique

Permission to obtain the names of PNPs was obtained from the NCBPNP/N list of certified PNPs. The list of PNPs was numbered sequentially. By using random digits, 200 PNP names were selected to contact from the list to ensure geographic, gender, and practice type equity of the sample. Each PNP name was assigned an identification number from the table of random digits and then secured. Only the researchers had access to the PNP names and the corresponding identification numbers for the sole purpose of coordinating data collection. The names of the PNPs who participated in this study were not revealed to anyone.

Each PNP was asked to nominate a pediatrician whom she or he worked with in a collaborative practice and who would be willing to complete the pediatrician questionnaire. The identification number assigned to the nominated pediatrician was referenced to the PNP identification number. However, the PNP and pediatrician were asked to complete the questionnaires separately to ensure confidentiality of data, and the PNP and pediatrician questionnaires were kept separate. Likewise, the names of the pediatricians who participated in this study were not revealed to anyone. Upon receipt of completed questionnaires, respondents received a \$5 Starbucks coupon as promised in the consent.

Data were analyzed with use of both quantitative and qualitative analysis techniques. The quantitative data was analyzed with the Statistical Package for Social Science 11.5. The qualitative

TABLE 1 Sociodemographic characteristics by group (PNP or physician)

Characteristics	PNP (%) (N = 34)	Physician (%) (N = 24)
Sex		
Female	34 (100)	9 (37.5)
Male	0	15 (62.5)
Mean age (y) (SD)	49.4 (8.2)	48.5 (9.1)
Ethnicity		
White	32 (94.1)	20 (83.3)
African American	2 (5.9)	1 (4.2)
Other	0	2 (8.3)
Omitted		1 (4.2)
Highest degree		
MD		23 (95.8)
Doctorate in other field	1 (2.9)	1 (4.2)
Associate degree	1 (2.9)	
Bachelor degree	1 (2.9)	
Masters degree in nursing	21 (61.8)	
Doctorate in nursing	2 (5.9)	
Masters in other field	6 (17.6)	
Other (not specified)	2 (5.9)	

TABLE 2 Experiences as PNP or physician

	PNP (%)	Physician* (%)
Years of experience		
1-5	3 (8.8)	1 (4.2)
6-10	15 (44.1)	4 (16.7)
11-15	2 (5.9)	5 (20.8)
16-20	1 (2.9)	5 (20.8)
20+ years	13 (38.2)	9 (37.5)
Years in collaborative practice		
1-5	4 (11.8)	6 (25)
6-10	12 (35.3)	8 (33.4)
11-15	3 (8.8)	5 (20.8)
16-20	2 (5.9)	3 (12.5)
20+	9 (26.5)	2 (8.3)
No collaboration	4 (11.8)	
No. of collaborating physicians or PNPs		
1	6 (17.6)	11 (45.8)
2	5 (14.7)	5 (20.8)
3 or more	19 (55.9)	8 (33.4)

*P < .05.

data were analyzed using Collazzi’s phenomenological methodology (1978) and included eight steps (Box 2).

Sociodemographic characteristics were examined by frequency distributions and summary data distributions were compared by chi-square and t test analysis between the two groups (pediatricians and PNPs) for age, sex, ethnicity, highest degree held, years of experience as a PNP or pediatrician, respectively, and number of years collaborating with a PNP or pediatrician (Tables 1 and 2).

Participants were asked to rate specific attitudes and beliefs about collaborative practice using a Likert scale in which 1 indicated not important and 5 indicated that the attitude or belief was very important. These data were analyzed and compared by chi-square and t test analysis between the two groups (Table 2).

Validity and Reliability for Qualitative Data

In qualitative research, validity refers to “the extent to which the research find-

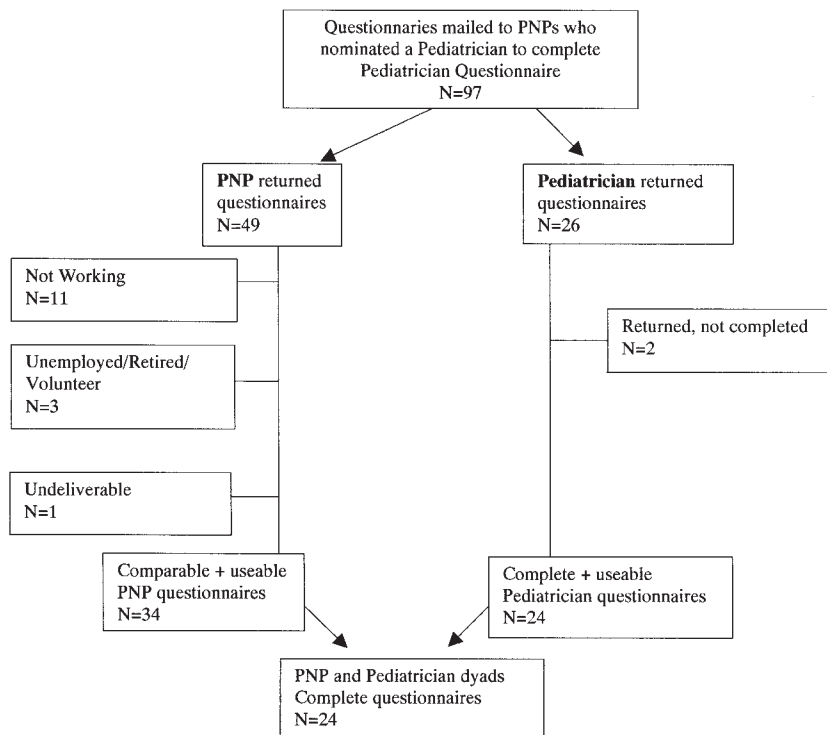


FIGURE Survey response rate for PNPs and pediatricians.

ings represent reality” (Field & Morse, 1985, p. 139). Descriptive and interpretive validity as discussed by Maxwell (1992) are relevant to this research investigation.

Descriptive validity, the foundation upon which qualitative research is built, refers to the report of the researcher during data collection (Maxwell, 1992). Descriptive validity also refers to issues of omission as the researcher presents the data. In this study, all data were collected directly from the participants in their own handwriting and then transcribed verbatim by one researcher and a graduate assistant. The researcher then compared all handwritten entries to the transcribed data for completeness and accuracy. It was determined that no data were omitted from the transcriptions, thus the transcribed data was a valid account of all collected data.

Interpretive validity is achieved when the data reflect the language of the individuals studied by utilizing the words and concepts of the study participants. In this study the researchers utilized the words, concepts, and beliefs of the participants concerning the attitudes and beliefs of PNPs and pediatricians in collaborative practice and not the researchers’

perspective of collaborative practice, thus interpretive validity was achieved.

According to Maxwell (1992), reliability is closely related to descriptive validity. In this study, raw data as well as the transcribed data were available to each researcher. All data were reviewed individually by each researcher, who then identified emerging themes. After the individual review, the researchers agreed on themes that were common in the data, thus controlling for reliability of the data.

RESULTS

Demographic Characteristics

Overall, 49 of 197 (25%) of the PNPs returned completed questionnaires, for which 24 pediatrician questionnaires could be matched; therefore, these PNP and pediatrician questionnaires were used as dyads in this study (Figure). Of the 49 questionnaires returned by PNPs, 34 were considered “useable” in that the PNP was currently practicing in a collaborative practice. However, 10 PNP questionnaires could not be used for the final analysis because the collaborating pediatrician did not complete a questionnaire. All PNPs (N = 34) and pediatricians (N = 24) were board certi-

fied by their respective certifying agencies. Three significant differences were noted between the PNP and pediatrician groups. Significantly more PNPs were women compared with the pediatricians ($P < .001$), and significantly more PNPs reported practicing 10 years or less compared with the pediatricians ($P = .03$). Additionally, significantly more PNPs practiced in ambulatory clinics that were not hospital based or in a hospital inpatient unit compared with the pediatricians ($P = .02$). Forty-four percent of the PNPs had practiced 6 to 10 years and 38.6% had practiced for more than 20 years. Sixteen percent of the pediatricians had practiced for 6 to 10 years and 37.5% had practiced more than 20 years. No significant differences were found between the PNP and pediatrician groups by race, years collaborating with PNP or pediatrician, or type of practice. Fifty-five percent of the PNPs had collaborated with three or more pediatricians, and 33% of the physicians had collaborated with three or more PNPs (Table 2). Therefore, both groups (PNPs and pediatricians) were experienced in their respective fields of practice and had experiences in collaborative practice.

DATA ANALYSIS

I. How do PNPs and Pediatricians Define Collaborative Practice?

Both PNPs and physicians responded to the question, “What is the definition of collaboration?” Four themes emerged from the data from the PNPs and physicians (Box 3). These themes with relevant supporting evidence are:

1. Working together/collegial relationship.

Both PNPs and physicians overwhelmingly responded to the question concerning the definition of collaboration by using the phrase “working together.” Both PNP and physician respondents frequently used the following phrases:

- “Working together professionally... in a mutually respectful and helpful relationship”
- “Working together toward quality (excellence) pediatric patient care”
- “Working together for common goals”

Both the PNPs and physicians viewed mutual respect, the team effort, and the “collaboratorship” in delivery of qual-

ity health care services as an integral component of collaborative practice agreements between PNPs and physicians. Therefore, in order for collaborative practice agreements to be successful in both delivering quality health care to the pediatric client and in meeting the desire to practice collegially of both PNPs and physicians, the initial and ongoing relationship between the PNP and physician must be one that is professionally focused on a goal of working together in an environment that is mutually respectful.

2. Consultation. The theme “consultation” emerged from both the PNP and physician data. Consultation was equally viewed by both the PNPs and physicians as a significant component of a collaborative practice. The PNPs identified a desire to have a pediatrician:

- “Available for consultation, or evaluation...on an as needed basis”
- “To confer with each other”

The data further revealed that the PNP saw the consultation as a reciprocal entity within the practice, not merely one of only seeking physician advice but of also providing valuable information to the care of the clients.

The physicians used the theme of “consultation” in conjunction with working side by side with PNPs:

- “Consulting as needed”
- “PNP sees patients independently but recognizes unusual clinical presentations or unclear diagnoses and seeks consultation”
- “Long-term management plan for chronic illness is decided jointly”
- “PNP works independently seeks consult for cases that are outside the scope of practice.”

The data revealed that consultation between PNPs and physicians also was an integral component of collaborative practice. The data further revealed the desire of PNPs to consult on complex cases with a pediatrician and to establish a plan of care that was best for the pediatric client. The majority of the data from the physicians identified the ability of the PNP to identify when consultation is needed as a critical component of the collaborative process. This identification by the PNP seemed to tie directly into the need of the physician to feel a comfort level with the performance of the PNP in clinical practice.

BOX 3 Themes: Definition of collaborative practice (PNP and physician respondents)

1. Working together/collegial relationship
2. Consultation
3. Shared philosophy/shared goals
4. Complimentary practice styles/comfort level

3. Shared philosophy/shared goals.

Another theme that emerged from both the PNPs and physicians in response to the question concerning the definition of collaboration was sharing. However, the term “sharing” had different meanings for the PNPs and physicians. PNPs used sharing to refer to:

- “Sharing knowledge, expertise, and information”
- “Exchange of ideas”
- “Plans of care, goal of treatment”

In contrast to the PNPs’ view of sharing, the physicians used the term “sharing” to refer to:

- “Sharing the same patients and the same office”

The obvious difference in what “sharing” means to PNPs and physicians in a collaborative practice did not seem to create a conflict within the practice because the majority of the PNP and physician respondents expressed satisfaction with their present collaborative practice. However, these data suggest “sharing of knowledge and exchange of ideas” has not yet reached a level in which physicians completely view the PNP as collegial with respect to the concept of sharing expert knowledge.

4. Complementary practice styles/comfort level.

From the pediatricians’ data emerged the theme of complementary practice styles. This theme focused on the delivery of clinical care to the client. The pediatrician respondents expressed the need to work in a collaborative relationship in which clinical practice styles of the physician and PNP were congruent or complementary. This theme appears to be directly related to the comfort level of the physician in collaborative practice with a PNP.

- “PNPs and pediatricians must have, at least, somewhat similar practice styles and have the ability to communicate person to person with the patient and in the office setting”

- “I am comfortable in this relationship only if involved PNPs and I have similar outlooks and attitudes regarding medical and psychosocial issues and we have to know each other well”
- “We try to approach patient issues from similar point of view and are supportive of the care plan the other has started”
- “Practice should be based on acceptable standards and discussing intelligently the best course should there be differing opinions”

It is interesting that this theme emerged from the physician data but was not detected in the PNP data. One must question whether a commonality in practice styles can be inferred from the initial employment interview prior to beginning a collaborative practice and whether this plays a role in employing a PNP in a collaborative practice. It also may be interesting to investigate the educational practice settings of physicians and PNPs to determine if practice styles are linked to educational preparation or are merely ingrained in the personality of the physician and PNP.

II. What are the Critical Components of a Collaborative Practice?

Two common themes emerged from the PNP and physician data concerning the critical components of a collaborative practice, which included trust and mutual respect and communication. Additionally, the theme of “competence” emerged from the PNP data and the theme of “shared vision” for patient care emerged from the physician data (Box 4).

1. Trust and mutual respect. The majority of the PNP and physician participants identified trust and mutual respect as a critical component of collaborative practice. Supporting evidence for this theme included such phrases as:

BOX 4 Themes: Critical components of collaborative practice (PNP and physician respondents)

1. Trust and mutual respect
2. Communication
3. Shared practice
4. Competence (from PNP data)
5. Similar vision (from physician data)

BOX 5 Themes: Red flags

PNP respondents

1. Lack of respect
2. Territorial/control issues
3. Undesirable attitude/behavior
4. Competence
5. Professionalism

Physician respondents

1. Control/rigid/inflexible
2. Competence in clinical practice
3. Ineffective communication

- “Open, trusting working relationship between NP and MD”
- “Mutual respect, trust for each other”
- “PNP must trust and respect physician”
- “The physician must respect PNP and trust her skills as well as PNP’s perception of her own limitations”

2. Communication. Communication also was a strong theme that emerged from these data from the PNP and physician in describing the critical components of collaborative practice. PNPs used such phrases as:

- Openness
 - Open communication
 - Open dialogue
- The physicians used phrases such as:
- “Timely communication”
 - “Solid communication”
 - “Cooperative relationship—truly a two-way give and take about specifics of patient care”
 - “Open, honest communication and feedback for both parties involved”
 - “Both sides open to suggestions”

3. Competency. PNPs identified competence not only in relation to the competence of the PNP to provide

quality patient care but also referred to the importance of the competence of the physician by using such phrases as:

- “Understanding both parties’ strengths and weaknesses”
- “In the provision of excellence in care delivery”

4. Shared vision. The theme “shared vision” of patient care emerged from the physician data as a critical component of a collaborative practice. A common vision for the goals for patient care in which goals are agreed upon emerged as a strong physician theme.

These data strongly suggest that trust, mutual respect, and communication are the critical components for a successful PNP/physician collaborative practice relationship. Trust and mutual respect were viewed as an essential reciprocal quality, which was intransigently linked to open and honest communication between the two providers. Trust, mutual respect, and communication were related to professional competence of both the PNP and physician as well as a shared vision for providing excellent patient care.

III. Characteristics That Emerged as “Red Flags”

Different themes emerged as “red flags” for PNPs and physicians in collaborative practice, that is, signs that the collaborative practice relationship would not be successful. Five themes emerged from all PNP responses, whereas two themes emerged from the physician data. Ineffective communication emerged as a “red flag” theme for both PNPs and physicians (Box 5).

PNP “red flag” themes were as follows:

1. Lack of respect. Lack of respect emerged as a theme, with several respondents describing a relationship that is subservient, condescending, and lacking in trust.

- “Condescending remarks regarding education or gender”
- “Lack of respect for allied health professionals”
- “DemEANing, disrespectful of PNP”
- “Feeling role of one collaborator is “superior” to the others”

The overall “lack of respect” theme that emerged from the data was that the PNP in the collaborative practice who feels subservient, disrespected, and not listed as part of practice organization raises a red flag and indicates an unsuccessful collaborative practice relationship.

2. Territorial/control issues. The “territorial/control issue” theme emerged as a red flag from the PNP data. Specific responses by the PNPs that supported this theme included such phrases as:

- “Unwilling to share practice issues”
- “Being territorial with regard to patient care”
- “Needing to be in control”
- “Undermining care, changing plan of care without discussing with PNP”
- “Inflexible”

These feelings and/or behaviors within the PNP/physician collaborative practice relationship were identified as red flags and would be detrimental to a successful working relationship.

3. Undesirable attitude/behavior. An “undesirable attitude/behavior” theme emerged from respondents describing a collaborator who in general had a poor attitude not only with the PNP but also with other office and/or clinic staff. Specific attitude/behavior responses indicating a “red flag” included such responses as:

- “Nonapproachable”
- “Abrasive to staff”
- “Negative attitude”
- “Egotistical”

One respondent described a “red flag” as a collaborator who was “forced” into the role by the practice setting. It is clear that this “forced” relationship would be problematic for both the PNP and the physician and that both persons would need to begin the relationship with a discussion of the individual roles and clear collaborative practice guidelines to foster a successful relationship.

4. Competency. One critical theme that emerged from the PNP respondents was a “competency theme”

based on responses addressing a collaborator who remains current with medical trends and is informed about the other collaborator's profession, including educational and certification requirements to maintain PNP licensure. The following phrases were used by PNPs that supported this theme:

- "Collaborator making snap judgments without all of history of information"
- "Not keeping up with current trends in practice"
- "Lack of self-assessment or self-analysis"
- "Not being comfortable with level of competence"

A PNP/physician collaborative relationship in which the physician is unfamiliar with the level of competence of the PNP or in which the physician is not comfortable with the relationship raises a "red flag," and the relationship is most likely set up for failure. Likewise, the PNP must be comfortable with the level of competence of the physician and the willingness of the physician to change practice protocols as new ways to practice emerge.

Physician "red flag" themes were as follows:

1. Control/rigid/inflexible. One strong theme that emerged from the physician data focused on collaborators who were inflexible in their practice as well as other responsibilities. Specifically, the "control/rigid/inflexible" theme was endorsed by responses including the following:

- "'Control freak' who 'micromanages' or nitpicks, and rigid definition of responsibilities."
- "Unwilling to let others see his patients...to share patients...to teach or instruct...to supervise...to work hard...learn new procedures."
- "Overly independent...not open to criticism...never seeks consultation during a patient visit."

This theme suggests that inflexibility in the collaborative practice is a major "red flag" for the physician respondents. Furthermore, such controlling, rigid, and inflexible behaviors, if displayed by a PNP or physician in a collaborative practice, would have a negative impact on the professional relationship.

2. Competence clinical practice. Another strong red flag theme that emerged from the physician data em-

phasized clinical competency and knowing the clinical limits of each profession. Specific responses endorsing the competence clinical practice issues theme included such phrases as "incompetence," "overconfidence," "not knowing one's limits," "not thorough," "superficial," "unwilling to seek continuing medical education," and "unwilling to recognize need for consultation." This theme suggests that problems with collaboration occur when one collaborator does not consult with the other collaborator. These behaviors are obviously destructive to any practice setting and if identified by either the physician or nurse practitioner would require reflection on whether the individual is competent to practice safely in the respective profession.

One common "red flag" theme that emerged in both the PNP and physician data was "ineffective communication." In the PNP data, "ineffective communication" or poor communication skills were red flags to effective collaboration between PNPs and physicians. Ineffective communication was endorsed by specific responses including the following:

- "Poor written and/or verbal communication"
- "Not listening attentively to the presentation regarding the patient"
- "Unwilling to communicate"

Because good communication was identified as such a critical component of a collaborative physician/PNP practice, it is an expected finding that ineffective communication between the two providers would be destructive to the collaborative relationship.

IV. Do "Supervision and/or Independence" Apply to Collaborative Practice?

1. "Consultation" rather than "supervision" or "independence" PNPs and physicians were asked to describe how the words "supervision" and "independent" practice apply to their collaborative practices. The data from the PNPs revealed that the word "supervision" is rarely used within the collaborative practice and actually has little meaning for the PNP. Additionally, the term "supervision" was viewed negatively by several of the PNP respondents. The PNP respondents said:

- "I definitely do not feel 'supervised' in my practice. Supervised would

mean having a physician look over my shoulder, checking my charts, and questioning my management of my patients. This does not happen in my practice."

- "Supervision with my collaborator is something I request rarely or (is) never 'placed' on me."
- "I am not supervised because my collaborator is in a different office. I am the only provider in the office. I have an independent practice, so to speak."
- "Supervision would be interpreted to mean that a collaborating physician would need to be present at the site while an NP is caring for patients, would review the work of an NP, and hopefully offer suggestions/corrective criticism. After an orientation/precepting period we do not operate in this manner at my place of employment."
- "There is no supervision (in our practice). NPs and MDs participate in clinical review of randomly selected charts. Policies and guidelines for practice are developed together. Sometimes NPs take the lead—at other times the MDs do."

Clearly from these data the PNPs did not view the practice role as one that needs or should have "supervision." Other PNPs used the word "supervision" as a synonym to the word "consultation."

• "My collaborating MD allows me to see children, diagnose, treat and teach without being on site except one afternoon a week. I never feel fully supervised by him in that I need to report to him. He is available to help establish treatment plans or provide second opinions when requested."

- "'Supervision' in our practice means that an attending physician is always present or available for consultation. Charting is checked, reviewed and co-signed."
- "'Supervision' is availability for consult and to review patients' charts and plans."
- "The MDs provide supervision and guidance when the PNP requests repeat exam and consultation regarding specific patients."

On the other hand, "independent practice" was defined as "seeking each other's opinion, discussing practice issues as a group, and creating solutions

and providing consistent care.” The PNP respondents consistently used the term “independent practice” as a practice in which the PNP assumes responsibility for patient care, including assessment, diagnosis, and treatment with consultation with the pediatrician on an as-needed basis only. The PNP respondents presented the following data:

- “I like to think of myself as an independent functioning CPNP. I think of the pediatrician I work with that owns the practice as my boss or supervisor, in terms of evaluation, but not in my patient care delivery.”
- “Independent practice is knowing and acknowledging my limitations and sharing that openly with my collaborating physician.”
- “The other PNP and I have an excellent PNP-MD relationship that is collegial—we all ask opinions of each other re: confusing rashes, difficult diagnosis, etc. We practice very independently and the MDs we work with know we will ask them for consent if we need it. We discuss practice issues as a group to create solutions and consistent care.”
- “Independent practice—I make decisions on my own. Responsible for patient and tasks assigned to me. Charts [are] not cosigned by physician.”
- “Independent practice means that I can work independently either by seeing my own roster of patients while the physician sees hers and/or seeing patients while the physician is not in the office or off. I do both.”
- “I do practice independently in the sense that few of my patients are examined/reviewed by a physician. However, our charts are co-signed by a physician. Assessment, diagnosis, and treatment is done independently in most cases.”
- “Independent practice—having a panel of patients the NP is primarily responsible for, with ability for review and consultation with MD.”
- “I practice independently—my collaborating physician is available for consultation and in that sense he is my supervising physician. He does not ‘assign’ me tasks. I see my own patients as well as his patients when he is off one day a week and for vacations. In our state NPs need to have a written work agreement on file with a physician willing to be available for collaboration.”

Interestingly, a few PNPs believed neither “supervision” nor “independent practice” applied to their practice, and two PNPs did not respond to this question.

The pediatricians’ definitions of “supervision” and “independence” vary from the definitions provided by the nurse practitioners even though only PNP/physician dyads were analyzed. PNPs and physicians were asked to complete the surveys separately, so it is interesting that even though both PNPs and physicians viewed their respective practices as successful collaborative practices and one in which open communication is essential, the PNPs and physicians, in the opinion of these researchers, do not agree on the practice definitions for the terms “supervision” and “independence.”

The physicians used the term “independence” more as a dictionary definition while referring to the PNP seeing patients “alone.”

- “Independent practice—without the backup of physician; no consultative/collaborative back up”
- “At solo sites where PNPs are alone”

From the physician data it can be inferred that the PNPs do see patients independently for assessment and management of care but the physician is available for consultation, either on site or by phone. “The NPs do work independently, but I am very available” was a common phrase used by the physicians.

Many of the physician respondents used the term “supervision” to indicate their actual presence at the practice site as well as using the term synonymous with consultation.

- “I supervise my PNP to the extent desired by her (she asks questions, reviews cases with me). I also share care of these patients, so review her notes and treatment in that way.”
- “‘Supervision’ applies to our practice much more than ‘independent practice’ in terms of our PNP. A physician is always available to our PNP as she is never in the office by herself. She does see patients independently but often appropriately seeks consult.”
- “Our PNPs practice independently. They make their own decisions and do not need to consult on all patients. However, they must have their charts signed by a physician (hospital and

MCO policy). There is very little direct supervision of every patient.”

- “The PNPs work independently, however do not have an independent practice. They have agreements, and there is always a pediatrician with whom to consult.”
- “For me ‘supervision’ means that I assure that we have talked about common goals and have established a method for communication that is easy and nonthreatening. Over time, working with anyone, you can see his or her judgment/commitment/dedication, etc. My experience has been one of peers in the working environment of everyday practice (ie, independent practices, that use resources available, if needed)”

Two pediatricians’ views of “supervision” varied significantly from all responding PNPs and physicians; they made the statements that supervision is “under the auspices of physician guidance within realm/scope of expected.” Another physician stated, “I don’t like independent practice nurse practitioners—still ‘captain of the ship.’” These statements may be indicative of the individual PNP/physician collaborative practice relationship that has not developed a successful relationship involving mutual trust or assurance of PNP competence or merely two physicians who have not accepted or become comfortable with the role of the PNP.

One pediatrician believed that neither “supervision” nor “independence” were appropriate terms for collaborative practice by stating, “I don’t agree with the term ‘independent practice’ for NPs and PAs. Supervised is the other extreme and also inappropriate. Collaboration best describes a middle ground that is the correct approach for quality patient care.” Perhaps all the pediatrician respondents are really describing this “middle ground,” because all except for two pediatricians viewed supervision more as consultation and independence as being available for consultation when the acuity of the child warranted such consultation.

V. What Professional Characteristics are Requirements for You to Consider in Working With a Collaborator?

The respondents were asked to rate specific characteristics common to a collaborative practice using a Likert

scale rating of 1 for not important to 5 for very important to the individual and/or the collaborative practice relationship (Table 3).

Characteristics such as “trust,” “clinical competence,” and “knowing when to seek consultation” were rated very important by both the PNP and physician respondents. These quantitative data are consistent with the qualitative data that support the research formulated definition of the contemporary collaborative practice between the PNPs and physicians.

However, it is interesting to note that the attitudes of “respect for you as a professional” and “advocate for child health issues” were rated significantly at a higher level by the PNP group (≤ 0.007 and ≤ 0.002 , respectively), indicating that these attitudes are valued at significantly different levels by the two groups (Table 3).

VI. Research Formulated Definition of Collaborative Practice

A successful collaborative practice relationship between a PNP and a pediatrician is one in which both individuals work as a team in a collegial relationship in an environment in which there is open communication, mutual trust and respect, a sharing of knowledge and clinical expertise with complementary practice styles, and consultation as needed, to meet the shared goal of achieving excellence in patient care.

DISCUSSION

Both the quantitative and qualitative data from the respondents revealed that specific attitudes and beliefs are necessary for an effective PNP/physician collaborative practice relationship. The attitudes and beliefs that prevailed as exemplars of effective PNP/physician collaboration included working together in a collegial relationship, similar philosophy and goals for excellence in patient care, complimentary practice styles, mutual trust and respect, as well as open communication. Whereas both PNPs and pediatricians consider themselves advocates for children’s health, the data revealed that the PNPs value this aspect of their clinical practice at a significantly higher level than do the pediatricians.

Both PNPs and physicians identified “red flag” behaviors, that is, behaviors

TABLE 3 Comparison of attitudes and beliefs of PNPs and physicians

Attitude or belief	PNP	MD	t test
Trust	4.93 (0.25)	4.82 (0.66)	0.39
Respect for you as a professional	4.97 (0.18)	4.65 (0.57)	0.007*
Advocate for children	4.73 (0.45)	4.26 (0.62)	0.002*
Board certification	4.3 (0.79)	3.96 (0.93)	0.13
Clinically competent	4.93 (0.25)	4.91 (0.29)	0.79
Pitches in to help	4.1 (.084)	4.30 (0.82)	0.38
Knows when to seek consultation	4.77 (0.43)	4.91 (0.29)	0.71

*Indicates statistical significance at ≤ 0.05 .

that would not promote an effective PNP/physician collaborative practice relationship. These behaviors, if identified in either a PNP or physician during an interview, would warrant further consideration by both individuals before entering into a collaborative practice relationship. “Red flag” behaviors included lack of respect, territorial and controlling behaviors, and such personal attributes such as being nonapproachable, abrasive, and/or having a negative demeanor. Additional “red flags” included a lack of professional competence, poor communication skills, dishonesty, and behaviors that encourage competition between the PNP and physician for delivery of patient care. These “red flag” behaviors would thwart the development of a successful collaborative practice relationship.

This investigation also addressed the terms “supervision” and “independence” as used in the PNP/physician collaborative practice relationship. Supervision versus independence can be viewed as a controversial issue when applied to NP practice. The data supported the belief that neither term is appropriate for PNP/physician collaborative practice as it exists today. Rather than using the words “supervision” and/or “independence” in referring to NP/physician practice, the term “consultation” should be used, which appropriately describes the current trends, attitudes, and beliefs of individuals in collaborative practice today. Consultation refers not only to the physician being available for patient evaluation but to the reciprocal entity in which the knowledge and experiences of the PNP and physician are shared and valued by both individuals in a collaborative practice agreement. Changing the view from “supervision” and/or “independence” to one of “consultation” is essential for the development of contem-

porary collaborative practice agreements that meet the shared goal of excellence in the delivery of patient care.

IMPLICATIONS

Although our data did not address educational preparation for effective collaborative practice, our results suggest that issues regarding an effective “collaborative practice” should be discussed in both medical and nursing educational programs as well as during ongoing dialogue between PNP and physician professional associations. Dissemination of this information has the possibility of fostering positive NP/physician relationships that result in the common goal of excellence in the delivery of optimal patient care. Hojat et al. (2001) suggested that collaborative education was needed to improve collaborative practice. The data from this investigation support this finding. It is now time to implement strategies in educational programs that will encourage the development of collaborative practices that are based on consultation and collegial relationships.

An unanticipated finding in this study is the strong belief of the PNPs in their role as an advocate for child health issues. Future studies should focus on ways in which NPs are currently advocating for child health issues and ways in which this “voice” can be heard in both private and public health care settings and in the political arena.

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