Appendix C: International literature

Author, Date, Country	Background	Objective	Study design/limitations	Findings	Conclusions
Alpert, Heidi, Goldman, Leon, Kilroy, C., Pike, Adele, "Toward an understanding of collaboration", Nursing Clinics of North America, 1992, 27(1). United States	Primary nurse-physician collaboration still needs to be evolved defined, described, and reproduced systematically.	Describe the development of a model of primary nurse-physician collaboration, and define and describe the concept and practice.	Description of the creation of a model in one hospital. Only looking at one hospital.	Model development: • Positive nurse-physician collaboration is valued and all providers make the effort to develop them. • Nurses and physicians round together daily to establish goals and plans for care. • Patients are admitted to 7 Gryzmish based on their requirements for intensive nursing care as opposed to just based on their medical diagnosis. Nurse/physician views: Major barrier to collaboration is limited knowledge of each other and the scope of each other's practice. Begins with mutual respect and a belief that both are doing their best to provide care. Collaboration cannot be legislated. Outcomes of collaborative care: • Enhanced understanding of collaboration. • Changes in attitudes towards collaboration among providers. • Increased job satisfaction for clinical nurses. • Increased patient functional status on discharge.	Once clear definitions of stages of collaboration and behaviours are established, the researchers will develop tools to measure nurse-physician collaboration and design curriculum in academic and hospital settings to teach the behaviour.
Arcangelo, Virginia, Fitzgerald, Michelle, Carroll, Debra, Plumb, James, "Collaborative care between NPs and primary care physicians", Primary Care, 1996,	Many physicians are not well informed concerning independent, autonomous and collaborative practice with NPs.	Discuss the advantages of collaborative practice, and address practical considerations for implementing a collaborative practice.	Description.	Components necessary for collaboration: • Trust • Knowledge • Shared responsibility • Mutual respect • Communication	Facilitators to collaborative practice: • All providers must want to adopt model. • Determine how NPs will fit into practice. • Spend several day observing day-to-day activities.

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23(1). United States				• Cooperation and coordination • Optimism Types of collaborative practice: • Parallel model: NP sees stable patients and physician sees medically complex patients. • Sequential model: NP performs the intake assessment and the physician is responsible for the diagnosis and management or the reverse in which the physician would screen all of the patients and delegate the care to the physician or NP. • Shared model: NP and physician see an individual patient on an alternating schedule. • Collaborative model: Patient chooses or is assigned to the NP regardless of the complexity of the problem.	• Public relations campaign beginning before the NP starts. • Practice aware of regulations of the NP within the state. • Consider methods of reimbursement. • Decide upon protocols or standing orders if any. • Professional relationship, which complement one another. Benefits of collaborative practice: • Coordinate care • Utilization of several areas of expertise • Partnership • Brainstorming • Fostering of maximum productivity • Effective use of personnel • Retention of personnel • Improved patient outcomes • Increased primary care accessibility • Cost-effective care • Expansion of services provided
Batey, Marjorie, Holland, Jeanne, “Prescribing practices among NPs in adult and family health”, American Journal of Public Health, 1985, 75(3). United States	Research estimates that the health problems of 67 to 90% of people who seek primary care could be managed effectively by NPs.	Describe the prescribing practices of NPs accorded prescriptive privileges by their state licensing regulatory board, whose scope of practice was adult/family health and who were engaged in practice in one of the five western states.	Questionnaires were sent to 401 NPs that have prescriptive authority and 227 were returned and 140 had identified their scope of practice. Logs were collected to identify prescribing practices. A follow-up questionnaire was sent out to record the NP’s degree of confidence for prescribing drugs, in which 89 responded.	Average number of prescriptions per respondent was 79.6 for the 10-day period. Lowest ratio per NP was 66.3, which occurred for practice sites with no MD. 52% of the prescriptions were for non-drug devises, for the remaining prescriptions 12.3% were for over the counter drugs and 87.7% were for legend products. 70% of all prescriptions were given for 5 of the 18 health problem categories. Highest confidence for prescribing	Data examines prescribing at a time when prescribing was a new legal authority for the NPs participating. Prescribing practices similar although lower to physicians.

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				derived from immunization/vaccines, anti-infectives, vitamins and ophthalmics. Referral was reported for 14.3% of all prescriptions.	
Billingsley, Molly, Harper, Doreen, "The extinction of the NP: threat or reality?", Nurse Practitioner, 1982. United States	By identifying issues and confronting them, NPs can transform problems into rallying points that can strengthen the movement.	Address the most serious obstacles, and recommend strategies for survival.	Descriptive method in which problems are discussed and recommendations are offered and reinforced by literature.	Problems include undefined role, multiple entry levels, lack of consensus in name, limited consumer awareness, lack of energy, legal ambiguities, lack of third-party reimbursement, threatened surplus of physicians, and territorial constraints.	Recommendations: 1. Educational curricula emphasize nursing content. 2. Establish nursing as the expert. 3. Identify and describe NP tasks in health care. 4. Identify master's degree level as beginning level of preparation. 5. Select 1 recognizable title. 6. Make consumers aware that nursing/health care is not synonymous with medical care. 7. Organize NPs into a group. 8. Work toward nationally recognized certification process. 9. Pursue third-party reimbursement. 10. Expand scope of clinical sites.
Brown, M., Olshansky, Ellen, "Becoming a primary care NP: challenges of the initial year of practice", Nurse Practitioner, 1998, 23(7). United States	"Limbo to Legitimacy" is a research-based model, which was constructed by the authors, and documented in a prior paper, takes into account new NPs' experiences during their first year in primary care practice.	Describe some of the emotional and professional challenges intrinsic to the first year of practice.	Model was developed from data obtained from a longitudinal, qualitative research study of 35 new NP graduates. Discuss the stages of the Limbo to Legitimacy model, and the implications of the model for new NP graduates.	Stage 1: Laying the foundation • Recuperating from school; take time off • Negotiating the bureaucracy; secure credentials • Looking for a job; apply or create jobs • Worrying; taking time off, licensure and passing certification exam Stage 2: Launching • Feeling real; sense of legitimacy • Getting through the day; constant problem-solving • Battling time; felt guilty about asking questions. • Confronting anxiety; modify environment	Findings from the study collect a table of comforting thoughts for the transition year.

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				Stage 3: Meeting the challenge • Increasing competence; skill-building activities • Gaining confidence; increased naturally as participants became more independent • Acknowledging system problems; financial issues, unsupportive providers and pressure to represent the role positively Stage 4: Broadening the perspective • Developing system savvy; initiate changes • Affirming oneself; hear positive feedback • Upping the ante; place themselves in more demanding situations	
Brunton, Byrle, Beaman, Margaret, "NPs' perceptions of their caring behaviours", Journal of the American Academy of NPs, 2000, 12(11). United States	In order for NPs to develop models of practice they must gain knowledge about the determinants of primary care encounters.	Explore NPs perceptions of their own caring behaviours, the relationship between socio-demographic variables, environmental factors, and NP's perceptions of their caring behaviours.	Random sample survey sent to 200 members of an Illinois NP group. Perceptions of 40 care behaviours were measured using a revised Wolf's Caring Behaviours Inventory.	Ten most common caring behaviours were: appreciating the patient as a human being; showing respect for the patient; being sensitive to the patient; talking with the patient; treating patient information confidentially; treating the patient as an individual, encouraging the patient to call with problems; being honest with the patient; and listening attentively to the patient.	Results indicate the necessity for an instrument to measure NP and client perceptions of NP caring behaviours because it can go unrecognized until the patients and their families miss the behaviour. .
Dontje, K., Sparks, B., Given, B., "Establishing a collaborative practice in a comprehensive breast clinic", Clinical Nurse Specialist, 1996, 10(2). United States	The NP can decrease the anxiety surrounding breast health issues by participating in interdisciplinary practices at breast clinics.	Describe the development of a breast clinic that uses interdisciplinary collaboration.	Description of collaboration model developed at one site and qualitative measurement of patient satisfaction as well as quality assurance measures of chart records.	Model of collaboration: Circular areas for physicians and CNSs overlap creating collaboration and conflict. Goals of practice: • Provide comprehensive breast health care to women. • Reduce anxiety. • Provide education and counselling about prevention, detection,	Clinic is successful based on patient satisfaction, quality assurance, and provider satisfaction.

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				diagnosis, and risk factors. Comprehensive Breast Health Clinic opened to patients in January 1991 with 2 NPs and 1 surgeon. Created guideline for patient visits concerning the initial evaluation, follow-up and consultation, and treatment plan. Problems: • Surgeons were still seeing many women with benign breast concerns that should have been direct to the NP. • Community physicians only referred to the surgeon. • Support staff not knowing where to direct patients. Satisfaction survey of patients indicated that 86% of the 175 women surveyed were very satisfied with their care. Quality insurance measure showed that medical records met the highest level of compliance with required standards.	
Ford, Valarie, Kish, Cheryl, "Family physician perceptions of NPs and physician assistants in a family practice setting", Journal of the American Association of NPs, 1998, 10(4). United States	More physicians are becoming preceptors and this position will impact the educational opportunities provided to the student.	Examine the perceptions of FPs toward NPs and physician assistants.	A convenience sample was used in which equal numbers of faculty and residence staff were randomly selected to comprise a total of 10 participants. Semi-structured interviews were conducted and coded.	Overall acceptance of NPs and physicians assistants as cost-effective providers in the health care system. Approval was conditional on NPs adherence to guidelines and protocols. Physician did not relate diagnostic reasoning to the NP. Faculty cited fewer science courses in NP curriculum and lack of clinical practice as concerns. Physicians had no knowledge of NPs process of credentialing. Concern that if NPs had prescriptive authority and get paid independently they would have independent	Findings indicate that NPs need to educate the health care community about what the NP role brings to the practice. Results reflect the current legislative battle for prescriptive authority.

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				practices. Two physicians felt more comfortable with NPs in traditional roles; case management and home visits.	
Freeman, Marnie, Miller, Carolyn, Ross, Nick, "The impact of individual philosophies of teamwork on multi-professional practice and the implications for education", Journal of Interprofessional Care, 2000, 14(3). United Kingdom	Multi-professional "teamwork" has become the favoured model of practice and is promoted by health organizations.	Explore the issues around professional interaction, which inhibit or facilitate team working and examine the way in which organizational structures and processes impact team function.	Case studies of teams. Information was collected through observation, interviews, and document analysis. Teams: include numerous health care providers in settings including primary care.	Individual philosophies of teamwork: • Directive: assumption of hierarchy, and levels of communication. • Integrative: Commitment to collaborative practice, realize importance of developing role boundaries, equal value assigned to contributions, and wide discussion to develop team understanding. • Elective: System of liaison, which included insularity of practice, attention to role clarity, brevity of communication, and learning was valued from those of equal status of higher status. Results of individual philosophies on teamwork: Shared vision: • Only directive and integrative philosophies identify with a shared vision, and elective see it as threatening. Communication: • Elective and integrative saw discussion as important and lack of communication could affect the patients and directive thought communication was only necessary for their own actions. Role understanding and valuing:	Basic professional education should include the fundamental aspects of teamwork.

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				• Directive and integrative understood others professional roles, while elective had less understanding of other's roles.	
Garland, Neal, Marchione, Joanne, "A framework for analyzing the role of the NP", Advances in Nursing Science, 1982. United States	The NP role is interesting from a sociological perspective because the position attempts to establish a new role within a system that is highly structured and over which physicians hold a high degree of control.	Build on the theoretical work of the NP role by earlier researchers.	Description of levels of NP role analysis through literature.	Levels of analysis: • Societal/institutional level of analysis; social norms which affect the role. • Group/interactional level of analysis; assumes that people interact mainly in terms of status and roles are learned in the process of social interaction. Level in which gender-specific occupations occurs. Jargon assigned by physicians and nurses separately, affect communication. • Individual/psychological level of analysis; personality characteristics affecting the role. Studies at the group level identify poor communication due to social level.	Researchers need to develop a framework that enables them to place their studies within a context that takes into account various levels of analysis. Framework identified in study should aid in identifying types of variables from past research.
Giardino, Angelo, Jones, Rebecca, "Instruments for studying collaboration". In: Siegler, E., Whitney, F., editors. Nurse- Physician Collaboration: Care of Adults and the Elderly, 1994: 171-184. United States	Studies of collaboration must identify how it works to allow the professionals to measure the impact of collaboration on providers, the health care system and patients.	Provide a broad overview of the instruments that researchers have used to record nurse-physician collaboration and measure patient and provider satisfaction.	Literature review.	4 indicators of collaboration: 1. Power-control: • Measure by level of collegiality in interdisciplinary teams and Nurse and Physician Communication Scales. (Feiger, Schmitt) • Tool to measure interaction during clinical problem-solving encounters in an ambulatory setting (Lamb, Napodano). 2. Practice spheres: • Measure professional	Researchers must start to identify collaboration among all members of the interdisciplinary team.

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				perceptions of practice spheres (Davidson). • Health Role Expectation Index to measure relationships among nurses, physicians and patients (Weiss, Davis). 3. Mutual concerns: • Management of Differences Exercise to measures management styles of handling conflict (Thomas, Kilmann). • Collaborative Practice Scales to provide reliability of their instrument (Weiss, Davis) 4. Common goals: • No studies of common patient care goals exist; however conceptual support exists to include this variable. Nurse Satisfaction measures: • Index of Work Satisfaction (Stamps, Piedmonte) • Nurse Job Satisfaction Scale (Torres) Physician Satisfaction measures: • Physician's Perception of the Quality of nursing Care (Ward, Lindeman). Patient Satisfaction measures: • Patient satisfaction based on 8 dimensions (Ware, Stewart). • Patient's Opinion of Nursing Care (Torres).	
Grady, Greta, Wojner, Anne, "Collaborative practice terms: the infrastructure of outcomes management",	Collaboration is more than simply working together, it is accomplished when individuals recognize and respect the synergistic impact	Review the process of collaborative practice team formation, expected pitfalls and barriers to effective	Description.	Collaborative practice teams were formed for each specialty practice area and were responsible for identifying population outcomes and guiding the development of	Collaborative practice teams search for best practice by improving clinical quality and attaining target outcomes.

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AACN, 1996, 7(1). United States	of teamwork on patient outcomes.	collaboration, and the work accomplished by a collaborative practice team.		standardized interdisciplinary processes. Principles: • Change is slow and a time-consuming process. • Change agents should expect the loudest reaction from the group most empowered in the system status quo. • Attitudes towards change are distributed normally, with most group members uncertain about a proposed change. Collaborative practice teams will experience 4 phases of group development: • Forming; inquiry and exploration. • Storming; conflicts of group goals and relationships. • Norming; guidelines and true collaboration. • Performing; individual and group initiative evident.	
Hamric, Ann, Lindebak, Sharon, Jaubert, Steve, Worley, Dana, "Outcomes associated with advanced nursing practice prescriptive authority", Journal of the American Association of NPs, 1998, 10(3). United States	Variations state to state in prescribing authority constrain advanced practice nurses, particularly in primary care settings.	What patient outcomes occurred in response to advanced practice nursing care? To what extent did the collaborating physicians in the study assess the prescriptive practices of advanced practice nurses to be safe, effective, and appropriate in the management of ambulatory care patients? To what extent were patients satisfied with	33 advanced practice nurses participated from 25 different sites. Selection process non-random so may contain biases. Patients were from rural clinics (47%), urban clinics (15%), pediatric clinics (13%) or HIV clinics (9%). Data was collected over a 2-month period and 683 patient outcomes were analyzed. Patient satisfaction data was collected in a Likert format. Physician data was completed after the project and on-site visits were conducted.	18% of the patients had private insurance, 40% were covered by Medicare, 18% paid and 13% received free care. 147 different diagnoses were made and over 90% of the patients required medication. 2,889 prescriptions were written for the 1,708 patients studied. Overall patient outcomes were positive; 59% of the patients improved and 76% of the patients either improved or stabilized due to the advanced practice nurses' treatment. 96% of patients agreed that the treatment from the advanced practice	When advanced practice nurses are given prescriptive authority in a collaborative practice with a physician, they practice safely and consistently within their scope.

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		the care provided by the advanced practice nurses?		nurse helped their problem. Collaborating physicians all felt the advanced practice nurses were beneficial to their patients. Patients had less waiting time (15 min. or less) and were satisfied by he care.	
Herzog, Eric, "The underutilization of NPs in ambulatory care", Nurse Practitioner, 1976. United States	The delegation of services by the physician, though endorsed in theory, was not being practiced.	Illustrate the why NPs are underutilized and identify some approaches taken to alleviate the problem.	Descriptive approach.	Physician felt less efficacious in his work and less satisfied with his organization when the nurse assumed more responsibility. Goals of nurses may differ from physicians. Lack of adequate support and acceptance. Approaches: improving skills of nurses; building the role of educators as links to the delivery system; improving the curriculum; increasing the awareness of physicians and/or administrators; and improving the amount of basic research and evaluation.	Problem needs more attention.
Jones, L., et al., "NPs: leadership behaviours and organizational climate", Journal of Professional Nursing, 1990, 6(6). United States	Most studies have focused on NPs clinical practice as opposed to other roles within organizations.	Examine the relationship of individual perceptions of organizational climate to self-reported leadership behaviours of NPs in clinical practice.	Random sample of 317 NPs from national nursing organizations in which 56% have master's degrees. 37-item questionnaire was employed to measure self-reported leadership behaviours in clinical practice. 5 dimensions were evident during factor analysis: meeting organizational needs, managing resources, perceived leadership competence, task accomplishment, and communication. Organizational climate was measured by a 50-item questionnaire including 9 dimensions: structure, responsibility, reward, risk, warmth, support, standards, conflict, and identity.	Incomplete surveys resulted in 208 subjects. Meeting organizational needs was predicted by risk taking and rewards. Managing resources was predicted by the perceived support of risk taking ad structure. Risk and the perceived standard setting predicted leadership competence. Task accomplishment was predicted by structure, risk, and standards. Communication was predicted by rewards.	The negative association between performance standards to leadership behaviour supports the need for self-direction in NPs. Organizational climate dimensions most associated to leadership behaviours of NPs were risk, structure, reward, and responsibility.
Kane, Rosalie, Kane, Robert, Arnold, Sharon et al., "Geriatric NPs as nursing home	Typically, geriatric NPs in nursing homes have been part of a primary health care team serving one or more	Report a case study of the development of the geriatric NP in the 30 facilities in the	Qualitative study conducted by telephone interviews with 3 respondents from each facility; the geriatric NP, the director of nurses and the administrator.	Efforts for the geriatric NP attenuated for 3 reasons: for administrative or staff nursing roles; spent a large proportion of her time in the	Implementing a new clinical role in a nursing home is difficult even if there is enthusiasm with the idea.

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employees: implementing the role", Gerontologist, 1988, 28(40). United States	facilities rather than direct employees of any nursing home.	experimental group.	Data collected in the summer of 1985 when the 30 geriatric NPs had completed their preceptorship between 1977 and 1984.	independent living component of the facility doing primary care or home-health care; and was less than a full-time employee to begin with. 18 of the 30 worked 40 hours a week. 8 geriatric NPs claimed a relationship with less than three-fourths of the physicians. 23 were free to examine all patients in the facility regardless of the patient's physician of record. More than one-third counselled both residents and families. Most started new programs, 15 focused on bowel and bladder training, and 6 started none at all. Most of the geriatric NPs felt they had a significant effect on the use of acute hospitals. Directors of nursing and administrators were generally satisfied with geriatric NPs, though directors were more enthusiastic. 10 administrators thought that the geriatric NPs were all cost and no revenue. Some directors saw a negative impact on morale because of superior attitudes of the geriatric NP.	
Little, Marilyn, "NP/physician relationships", American Journal of Nursing, 1980. United States	Physicians use certain processes to manage resources and maintain control over the division of labour once NPs enter the agency.	Explore processes of social control and also describe the complimentary strategies used by NPs to gain access to the delivery of health care.	Description of relationships through qualitative interviews. Categories in topics were identified to analyze patterns of working relationships and methods of social control.	Data identified two types of control: structural and personal. Structural controls are institutional policies and procedures that effect the division of labour in the facility. Other providers place personal controls on the NP. Four basic patterns to professional relationships: • Assistant or guest occurs in private practices with high personal control. • Gatekeeper occurs in large bureaucratic	The type and degree of social control and the structural features of the practice setting shape relationships between NPs and MDs.

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				organizations with high structural controls. • Colleague or manager occurs in facilities with low structural and personal controls.	
Lorenz, Alan, Mauksch, Larry, Gawinski, Barbara, "Mental health: models of collaboration", Primary Care, 1999, 26(2). United States	One health provider can handle simple problems; however more complex problems call for more intense collaborative practices.	Briefly review the history and need for collaboration followed by sections on the spirit of collaboration, the spectrum of collaboration, key ingredients for collaboration, and thoughts concerning future collaboration.	Description.	Spirit: attitude and interpersonal process that includes cooperation and a spirit of working together. Spectrum: • Parallel delivery occurs when the division of labour is clear and the problems addressed do not flow into each other in any significant way. • Informal consultation focus on the consultant helping the consultee focus on a certain problem. • Formal consultation relationship with the consultee is more contractual and the consultant may have direct contact with the patient. • Co-provision of care involves sharing professional responsibility for patient care; generally not hierarchical. • Expansion of the health care network. Key Ingredients: • Relationship; mutual respect • Common purpose • Paradigm; sharing the same facilitates collaboration. • Communication; clear • Location of service; co-location advantageous.	Research shows that primary care clinicians do a better job detecting, treating, and referring mental health problems when working in collaboration with multidisciplinary providers.

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				• Business arrangement; method of payment, "all under one roof" (one employer).	
McLain BR. Collaborative practice: a critical theory perspective. Res Nurs Health 1988 Dec;11(6): 391-8. United States			The purpose of this critical theory study was to investigate the observed failure of nurses and physicians to collaborate, and the underlying meaning behind this failure. Using a phenomenological and participatory approach, 18 family nurse practitioners and physicians in joint practice were interviewed separately and together about their practice relationships. Transcribed interviews and data summaries were returned to the participants for review and validation. Emergent themes were analyzed using the critical theory of Jurgen Habermas.	Results demonstrated that distorted communication and nonmeaningful interactions were promoted by both nurses and physicians. Elements identified as contributing to more successful collaborative practices included a willingness to move beyond basic information exchange in nurse/physician interactions, the willingness and ability to challenge distortions and assumptions in the relationship, and a belief system based on critical self-reflection.	
Mark, Debra, Byers, Vicki, Mays, Mary, "Primary care outcomes and provider practice styles", Military Medicine, 2001, 166(10). United States	Evaluation of health must be comprehensive and multidisciplinary to ensure accuracy.	Assess various components of practice styles of primary care providers and how they influence patient outcomes.	Study is conducted in more than one centre measuring correlations for changes in the following variables: patient health status, functional status, information seeking and satisfaction outcomes; while controlling for: symptom severity and co-morbidity as a function of provider practice styles. Adult patients with new conditions were invited to participate and were followed-up six months later. Collection instruments included several questionnaires for providers and patients.	26 physicians, 19 NPs, 13 physician assistants, completed questionnaires and 167 patients completed the follow-up questionnaires from 226 who completed the initial questionnaire. No distinct practice style emerged for the different providers. A moderate positive correlation existed between practice model and information giving and a strong positive correlation between confidence and autonomy. At 6 months, provider type was significant and physicians saw more patients whose health status was worse. Providers with the greatest autonomy were seeing patients the worst functional status. No significant difference in the level of satisfaction among patients who saw different providers.	Equivalent health outcomes resulted from different provider types, working in 9 different clinics, using a range of practice styles. Limitations include: sample size, lack of randomization, and using only military settings.

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Martin, Patricia, Hutchinson, Sally, "NPs and the problems of discounting", Journal of Advanced Nursing, 1999, 29(1). United States	Studies typically address barriers of the profession from the perspectives of scholars and researchers.	Contribute information on the problem of discounting from a NP perspective.	Collection techniques included interviews with 23 NPs, document review and observation of relevant meetings. Triangulation across data ensured reliability and validity.	Social psychological discounting: being undermined, ignored, excluded, blamed, verbally abused, stigmatized, made invisible, and misidentified. Social structural discounting: 1. Organizational settings: Unclear role expectations, inadequate resources, lack of administrative support, lack of preparedness and planning, chain of command issues, financial exploitation, not able to get direct reimbursement. 2. Legislative issues: Limitations on scope of practice and full legal recognition.	Research serves to raise consciousness by increasing awareness of the problematic social psychological and social structural climate of some NPs' practice.
Norsen, Lisa, Opalden, Janice, Quinn, Jill, "Practice model, collaborative practice", Critical Care Nursing Clinics of North America, 1995, 7(1). United States	Core of collaborative practice is defined by the nurse-physician dyad, which is closely related to patient care.	Discuss collaborative practice and describe the characteristics of the advanced practice nurse in collaborative practice.	Description and case study.	Attributes of interdisciplinary team: • Cooperation; emphasize collegial relationships based on equality and shared decision-making. • Assertiveness; individuals support views with confidence. • Responsibility; accept accountability for action. • Communication; sharing information about patient care. • Autonomy; trust from the team and empower each member to practice independently. • Coordination; organization of care components. Structure is conceptualized as a pyramid (starting from bottom): • Scope of advanced practice; defines legal parameters of arrangement. • Standards of advanced practice; reference that	Facilitators of collaboration: • Administrative support • Documentation; integrated medical record. • Interdisciplinary rounds and conferences; review patient progress and plan care. • Joint clinical research; no longer remain distinct and separate.

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				outlines responsibilities. • Practice agreement; outlines aspects of collaborative relationship between the APN and physician. • Protocols for advanced practice; members have the chance to discuss, avoid disagreement, and assure quality.	
Nugent, K., Lambert, V., "The advanced practice nurse in collaborative practice", Nursing Connections, 1996, 9 (1). United States	Interdisciplinary collaborative practice is essential for the success of the health care reform.	Discuss the barriers and facilitators and prepare a model of collaborative practice.	Description.	Facilitators of collaborative practice: • Both providers practice from the uniqueness of their separate disciplines. • Share responsibility and accountability for client care within the scope of their respective practices. • Shared decision-making. • Shared philosophy occurs through mutual understanding of the scope of each other's practice. • Effective communication. • Synergy distinguishes collaboration from other relationships. Barriers to collaborative practice: • Male dominance. • Organizational barriers include educational and economic factors. • Differ in philosophies of care between midwives and physicians. Model for collaborative practice: Figure 1 shows diagram of model. • Common purpose • Professional contribution (diverse) • Collegiality • Client focused practice	Nurses and physicians work best as colleagues when these conditions are present: • Mutual agreement • Equality in status • Shared knowledge base • Respect for complementary skills • Mutual trust for each other's competence • Open communication

Author, Date, Country	Background	Objective	Study design/limitations	Findings	Conclusions
				• Communication (subsumed in other concepts)	
Sherman, Jeremie, Fuller, Sara, Hunter, Sheila, "Perceived barriers to prescriptive practices of advanced practice nurses", Journal of the American Academy of NPs, 1999, 11(2). United States	Prescription is an important part to providing primary health care and can affect access similar to geographic and economic circumstances.	Document the barriers or constraints to prescriptive authority and prescribing practices as perceived by clinical health specialists, clinical nurse midwifes and NPs both with and without prescriptive authority.	Qualitative approach through a correlation survey of the 3 nurse groups. Surveys used the Individual Description Questionnaire and the Practice Description Questionnaire. Barriers were contrasted between those who have prescriptive authority and those who do not.	Response rate was 36% (n=178). 68% of those with prescriptive authority had masters. 50% of the providers with prescriptive authority practiced in OB/GYN settings. 50% of the providers identified their inability to sign for prescription samples as a moderate to severe barrier along with restrictions of state law, payment differential between the providers and MDs, third party reimbursement, and phone pharmacist. 62% in family practices felt protocols restricted practice, while 50% in other settings felt an MD preceptor was the problem. Providers in hospitals felt more barriers than providers in group practices who perceive fewer problems associated with the need for protocols. Rural settings perceived many of the same barriers except acquisition of pharmacology hours was a large barrier in those settings.	Findings confirm that advanced practice nurses still encounter barriers; however now there are barriers to those who have prescriptive authority such as the inability to sign for samples and to telephone prescriptions to pharmacists were not identified as a barrier prior to this research.
Shuler, Pamela, Huebsher, Roxana, "Clarifying NPs' unique contributions: application of the Shuler NP practice model", Journal of the American Academy of NPs, 1998, 10(11). United States	Literature continually indicates that NPs have not identified their unique contributions as health care providers.	Integrate the Shuler model into all NP practices to demonstrate, and identify their unique contributions,	Description of model.	Model characteristics: • Assessment of patients from a holistic perspective. • Development of a mutually agreeable, self-care oriented treatment plans. • Inclusion of disease prevention and health promotion activities in treatment plan. • Consideration of all non-pharmacological treatments including alternative healing	Use of the Shuler NP Practice Model can result in documentation that better reflects the NP/patient interaction.

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				practices. • Functioning within a multidisciplinary team. • Enhancement of the patient's and NP's personal movement towards improved wellness.	
Siegler, Eugenia, Whitney, Fay, Schmitt, Madeline, "Collaborative practice: research questions". In: Siegler, E., Whitney, F., editors. Nurse- Physician Collaboration: Care of Adults and the Elderly, 1994: 193-203. United States	Answering the question of whether collaboration works is necessary to the growth and development of collaborative practice.	Outline some of the methodological barriers inherent in the study of collaboration.	Literature review.	Structure of collaborative practices: 1. Determining the underlying team model: • Dyadic team model; nurse-physician. • Self-contained small group model; fixed group of providers. • Patient care unit model; larger organization. 2. Choosing the collaborators. 3. Targeting the appropriate patient population: • Criteria not universal. • Criteria may vary with type of team model. • Patients who have poor outcome may benefit most. • Exclude patients likely to have positive outcome regardless. Examining the collaborative process: 1. Measuring collaboration: • Choice of measure should be 'sensible' as well as chosen for the specific design of each study. • Measure will reflect underlying team model. 2. Defining the "gold standard" of collaboration: • Define how often providers need to apply criteria for collaboration to be collaborators. 3. Separating the effect of	Although collaboration research is complex, it must be undertaken for collaborative practices to achieve widespread acceptance.

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				collaboration from extraneous factors: • Identify how much of outcome was due to collaboration and how much to other aspects of care. Measuring outcomes of collaboration: • Researchers often limit collaborative efforts measures of collaboration to a few outcomes, when the collaborative team could be affected by many more outcomes. Biases of evaluations of education initiatives: • Selection bias; attitudes of those who elected to take a course in collaboration is not representative. • Grading bias; bias towards positive if instructor asks for feedback. • Information bias; students lost to follow-up. • Contamination bias; examine what concepts peers have picked up.	
Sielgler, Eugenia, Whitney, Fay, "What is collaboration?", Nurse-physician collaboration – Care of adults and the elderly, Chapter 1, 1994. United States	Few definitions of collaborative practice are comprehensive and are narrow in description.	Attempt to explain collaborative practice by focusing on its elements-fundamental requirements that such a practice must fulfill.	Description.	Elements of collaboration: Structure: Hierarchical model: • Unidirectional communication • Limited contact between patient and physician. Collaborative practice model- Type 1: • Bi-directional communication • Places physician at lead and still contains barriers between patient and physician contact. Collaborative practice model- Type 2:	Chapters 5-10 describe examples of collaborative practices.

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				• Patient-centred • All providers work with each other and the patients. • Interdisciplinary. Process: Characteristics need for collaborative practice are: • Cooperation, coordination sharing, compromise, collegiality, interdependence, and mutuality. Outcome: • Important to the "why" of collaborative practice. • Outcomes that measure the effectiveness of collaboration and those that might help define collaboration are specific to the collaborative practice model.	
Sullivan, Eileen, "NPs and reimbursement", Nursing and Health Care, 1992, 13(5). United States	Lack of legislative authority for reimbursement of NPs has been an impediment to their utilization in the health care system.	Examine justifications of NPs by third-party payers using a case analysis format.	Reasons for payment reform outlined by review of literature, and 3 case studies derived from information from NPs.	Why payment reforms are important: 1. Reflect worth of services. 2. Affect willingness and ability of patients to obtain services. 3. Play a major role for salaried workers. 4. Determine ability of some NPs to act independently. 5. Reflect changing attitudes of lawmakers. 6. Policies critical for government's trend setting role. Senate mandating reimbursement for services provided by NPs at 97% of physician payment. Case studies show elderly and poorer populations cannot access health services of NPs because Medicare	Intentions are for the cases to be useful to support changes in patterns of NPs reimbursement.

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				does not reimburse.	
Torn, Allison, McNichol, Elaine, "A qualitative study utilizing a focus group to explore the role and concept of the NP", Journal of Advanced Nursing, 1998, 27. United Kingdom	The study can be separated into two parts. This paper outlines the first section. The second section investigates the potential for transferring the role into other areas of nursing.	Explore the concept of the NP through the clarification of skills, knowledge and qualities encompassed in the role.	Qualitative approach using focus group interviews using 'snowballing' techniques to identify group members. The transcribed interviews are examined for themes, and validity of content was achieved.	Themes: Role recognition- non-recognition was main concern. Features of NP role divided into clinical and consultant. Clinical issues: getting to the root of the problem, had difficulties describing the process that underlies their problem solving skills. Consultant issues: autonomy buried within text, guided more by boundaries than protocols. Nurse/patient relationship: Patient satisfaction, better service when it came to length of time spent with the patient; communication, speaking the way the patients speak; empowering the patient, engaging the patients in decisions about treatments. Doctor-patient relationship: status of doctor impedes relationship with patients, patients apprehensive about taking certain complaints to doctors.	In order to validate the focus group data and establish a degree of correlation validity, the analysis of the focus group was used in the development of a semi-structured questionnaire to be distributed to remaining NPs to initiate stage 2 of the study.
Wright, Stephen, "The role of the nurse: extended or expanded?", Nursing Standard, 1995, 9(33). United Kingdom	Nurses are ideal for role extension because they work in every healthcare setting and have 24-hour contact with patients.	Document recent trends and look at the different concepts of role extension and role expansion and how nursing can adapt these roles to meet patients' needs.	Literature review discussing the role extension or expansion of the NP.	Role extension is coming from the government and medical profession. Argument that nursing offers alternative professional paradigm based on partnership, where patients retains empowerment over their health. Technical instrumental role of NP is built on 'softer' skills of caring. Technical tasks expand nursing role to make care more personal, effective and holistic. Balance shifted when nurses began to assert their autonomy.	'Mega-nurse' roles can be turned into a career structure based on expanding knowledge and skills in patient care.
Zammuto, Raymond, Turner, Irene, Miller, Stephen, Shannon, Iris, Christian, Joseph, "Effect of clinical settings	Most settings in which research has taken place were not representative of the health care delivery system.	Examine whether role implementation could be realized in a typical health care setting.	119 pediatric nurse associates and 72 medical nurse associates and 79 agencies supported the practitioners. 5 classifications of data were collected in questionnaires to analyze, and identify the	Certain types of settings are able to utilize nurse associates more effectively than others. Institutional agencies formalized the role at a significantly faster rate than	Agencies, which formalized and implemented the role at a faster pace, were more likely to retain their NPs than were agencies, which were slower to do so.

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on the utilization of NPs", Nursing Research, 1979, 28(2). United States			cluster of variables best representing role formalization and role implementation.	did non-institutional agencies. The effect of the type of sponsoring agency was not significant. Rate of implementation appears to be more strongly influenced by he structural characteristics of each individual agency than by generic type of agency.	