

Scope of Practice for Registered Nurses in the Extended Class:

A briefing note & high level review of the literature

November 2007

Health Professions Regulatory Advisory Council

Summary of Acronyms Used in Report

<i>APN</i>	<i>Advanced Practice Nurse</i>
<i>CMPA</i>	<i>Canadian Medical Protective Association</i>
<i>CNA</i>	<i>Canadian Nurses Association</i>
<i>CNO</i>	<i>College of Nurses of Ontario</i>
<i>CNS</i>	<i>Clinical Nurse Specialist</i>
<i>CNPI</i>	<i>Canadian Nurse Practitioner Initiative</i>
<i>CNPS</i>	<i>Canadian Nurses Protective Society</i>
<i>CRNA</i>	<i>Certified Registered Nurse Anaesthetist</i>
<i>GP/FP</i>	<i>General Practitioner/ Family Practitioner</i>
<i>HHR</i>	<i>Health Human Resources</i>
<i>NCSBN</i>	<i>National Council of State Boards of Nursing</i>
<i>NP</i>	<i>Nurse Practitioner</i>
<i>PLAR</i>	<i>Prior Learning Assessment Review</i>
<i>PHCNP</i>	<i>Primary Health Care Nurse Practitioner</i>
<i>RCT</i>	<i>Randomized Controlled Trial</i>
<i>RN(EC)</i>	<i>Registered Nurse in the Extended Class</i>

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Introduction

In June 2007, the Minister of Health and Long-Term Care requested that the Health Professions Regulatory Advisory Council (HPRAC):

undertake a review of the scope of practice for registered nurses in the extended class under the Nursing Act, 1991, and include in the review the proposals made by the Council of the College of Nurses of Ontario with respect to controlled acts and the practice of registered nurses in the extended class.

The table in Appendix A provides a summary of the comparison of the controlled acts currently available to NPs within Ontario's existing regulatory framework under the *Regulated Health Professions Act*, the *Nursing Act*, 1991 and supporting regulations, and the changes to those controlled acts proposed by the College of Nurses of Ontario (CNO) to expand NPs' scope of practice.¹

This background document has been developed to provide information for individuals and organizations who wish to participate in the review. The review provides –

- An overview of the extensive literature reviews that were undertaken as part of the work of the Canadian Nurse Practitioner Initiative (CNPI).² Funded by Health Canada's Primary Health Care Transition Fund, the focus of the CNPI project was to develop a national (pan-Canadian) framework to promote the sustained integration of the role of the Nurse Practitioner (NP) in healthcare across Canada.
- A summary of some of the evidence-based documents available on Nurse Practitioners³ in addition to key documents that have emerged in the literature subsequent to the release of the CNPI's final report in 2006.

¹ These changes are outlined in the CNO submission to HPRAC dated August 24, 2007 entitled "Registered Nurse in the Extended Class: Scope of Practice Review."

² The project received \$8.9 million in funding and involved consultations with a broad number (5,000) and cross section of stakeholders. The final report was completed in 2006.

³ The term Nurse Practitioner (NP) is used synonymously with the term Registered Nurse in the Extended Class RN (EC) throughout this report.

Context & Approach

Ontario is currently involved in a transformation of its healthcare system. The changes are designed to help Ontarians stay healthy, to reduce wait times, and to bring about quality improvements in the health system as a vehicle for improving patient care and ensuring sustainability of the healthcare system. Achieving these goals will require the most effective use of all the system's resources including the utilization of healthcare providers across the care continuum. This literature review was undertaken in consideration of this broader context unfolding in Ontario's health system and in recognition of the following:

1. There is a substantial body of literature available on Nurse Practitioners (NPs) including their role, scope of practice, education/training/credentialing, and a range of issues related to their acceptance, efficacy and impact on patient care, inter-professional collaboration and the health system overall.
2. The literature on NPs has been reviewed and analyzed by a number of groups, most notably as part of the review recently undertaken by the Canadian Nurses Association (CNA) as part of the Canadian Nurse Practitioner Initiative (CNPI).⁴ Information arising from this process provides a common reference point for discussions of the scope of practice for NPs in Ontario.⁵

⁴ CNPI envisioned a renewed health system that optimizes the contributions of NP to the health of all Canadians. Nurse practitioners will be recognized and utilized across Canada as essential providers of quality health care. The goal of CNPI was to facilitate sustained integration of the nurse practitioner role in the health system to improve Canadians' access to health services.

⁵ Canadian Nurses Association (2006). *Nurse Practitioners: The Time Is Now*. Final Report of the CNPI. Ottawa.

3. The process undertaken as part of the CNPI project involved an extensive review of the literature.⁶ The literature review was accompanied by a process of consultations with more than 5,000 stakeholders. This process led to consensus on a number of key issues including the development of:
 - a. standard definition for the NP role;
 - b. recommendations for collaborative practice models;
 - c. educational recommendations,
 - d. human resource recruitment, retention and deployment strategies;
 - e. NP core competencies and, a national licensure examination (e.g., acceptance of a common definition, a conceptual framework, etc.)

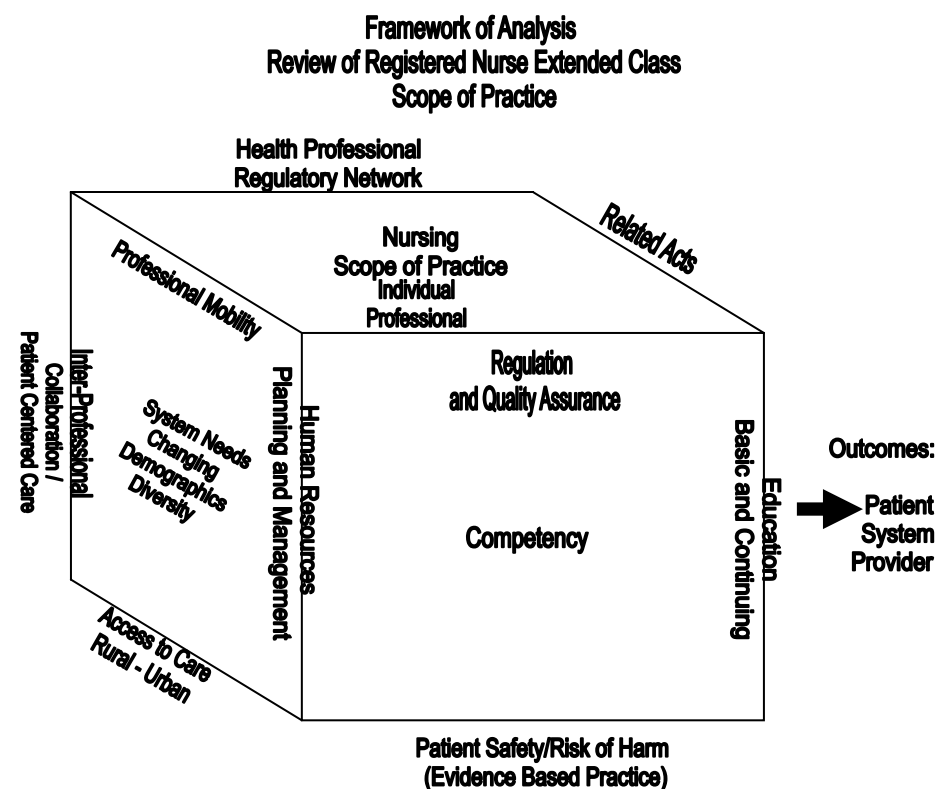
Areas where consensus was achieved through the work of the CNPI should be considered. However, this project focused on the role of the primary health care NP and not on NP roles in acute care or other APN roles. The Minister's referral to HPRAC asks for advice that includes acute care NP roles.

4. The literature on NPs, and previous analyses undertaken of it, has revealed a number of common themes related to both the enablers and barriers impacting on the integration of NPs into the healthcare system. Given that there is broad consensus on enablers/barriers, these should be considered as part of any review/analysis undertaken with regard to scope of practice.
5. In June 2007, the Referral by the Minister of Health and Long-Term Care to HPRAC requested a review of the scope of practice for Registered Nurses in the Extended Class under the *Nursing Act, 1991*, including a review of proposals made by the Council of the College of Nurses of Ontario with respect to controlled acts and the practice of RN (EC) and the recent Regulations passed (August 2007) creating three new acute care specialties under the extended class: NP-Adult, NP-Paediatrics, and NP-Anesthesia.

⁶ In particular, the CNPI mandate included a review of the literature (and the development of recommendations and strategies) related to the following strategic components: Legislation and Regulation; Practice and Evaluation; Health Human Resources Planning; Education; and Change Management, Social Marketing and Strategic Communications.

Purpose & Format of the Paper

Section 1 of this paper summarizes the core findings arising from the literature reviews undertaken as part of the CNPI. This information provides important guideposts for advancing future discussions. Section 2 provides an overview of some of the seminal evidence-based documents available on the role of the NP as well as a summary of recent articles/reports that have emerged subsequent to the CNPI review (i.e., 2005-2007 publications). In order to represent this large body of information, a broad summary statement synthesizing the core messages and quality of information arising from the literature is provided for each major heading of: *System Needs, Competency / Risk of Harm, and Scope of Practice*. [The diagram below summarizes the issues associated with each of these headings and provides an analytical framework for categorizing information for analysis and discussion of relationships among the component parts.] Key references are identified (and annotated) for each of the headings. Finally, in some cases footnotes and website linkages to specific sites direct the reader to additional sources of information that can be consulted as required.



SECTION 1: CNPI - Summary of Key Findings

Background: The Canadian Nurse Practitioner Initiative

The goal of the Canadian Nurse Practitioner Initiative (CNPI) was to facilitate sustained integration of the NP role in the health system to improve Canadians' access to health services.⁷ The mandate included development of recommendations and strategies in five (5) core component areas [see table below].

Initial activities of the CNPI included a review of key reports related to the issue of primary health care and NPs to gain an understanding of the pertinent issues and challenge facing NP practice. These reports served as the 'go forward' point for commissioning of a number of environmental scans/literature reviews related to the major components of the project.

<p style="text-align: center;">CNPI Vision</p> <p>A renewed and strengthened primary health care system that optimizes the contributions of nurse practitioners to the health of all Canadian; and a system in which nurse practitioners are recognized and utilized across Canada as essential providers of quality health care.</p>	<p style="text-align: center;">CNPI Goals</p> <p>To facilitate sustained integration of the NP role in the health system.</p> <p>To develop mechanisms and processes to support the integration and sustainability of the NP role.</p>
<p style="text-align: center;">CNPI Objective</p> <p>To identify the most effective mechanisms and strategies for integrating and sustaining the NP role in primary health care in Canada.</p>	<p style="text-align: center;">Core Components of CNPI Review</p> <ol style="list-style-type: none"> 1. Legislation and Regulation 2. Practice and Evaluation (two separate components) 3. Education 4. Health Human Resources Planning 5. Change Management, Social Marketing and Strategic Communications

The literature reviews commissioned as part of the CNPI project were intended to provide detailed information on evidence in the published and unpublished grey literature on the full range of issues impacting on NP role and scope of practice. All of the literature reviews were extensive and included an analysis and synthesis of both the published and grey literature. In most cases, the reviews included several tiers of analysis, namely:

- Identification of best practices emerging from the literature with respect to each of the key component areas;
- Detailed conclusions regarding experiences to be learned – as well as the strengths and weaknesses of approaches used in other jurisdictions (i.e., United States, United Kingdom, New Zealand, Australia);
- Identification of gaps in processes as well as enablers and barriers to integrating NPs into the healthcare system;
- Identification of emerging opportunities to inform and strengthen implementation and integration of the NP role; and
- Detailed critical success factors for the development of a consistent approach to NP integration.

The methodology included searches in Medline, CINAHL⁸ and combinations of other health and standard search/meta-search engines and library data sources. The searches also included a review of web sites of provincial/territorial, state/territorial, national and international professional/regulatory organizations and their respective governments. In most cases, the scope of the searches included documents from 1995 to 2004/05. In addition, contact with interviewees throughout as part of the consultation process provided access to additional documentation. These consultations – involving a broad range of stakeholders – also helped to address some of the concerns with respect to the potential (or not) of nursing bias in the CNPI report. The technical report accompanying the CNPI's final report included publication of a number of the literature reviews undertaken during the project. Following is an overview of some of the key findings arising from these reviews.

⁷ The CNPI initiative was funded under the Primary Health Care Transition Fund (Health Canada) and although focused largely on the role of the Primary Health Care NP, it included an extensive review of the broad range of research related to NPs including their growing and evolving role in acute care settings.

⁸ The CINAHL database is the authoritative source of information for the professional literature of nursing, allied health, biomedicine, and healthcare.

CNPI: Overview of Literature Reviews

Theme/ Title of Document	Description	# Pages/ Citations
BARRIERS, SUPPORTS & IMPEDIMENTS TO NP PRACTICE Tarrant, F. and Associates (2005). <i>Environmental scan of supports, barriers and impediments to practice</i> . Halifax, NS: Author. [Unpublished discussion paper prepared for the CNPI].	<ul style="list-style-type: none"> ▪ Included a review, analysis and synthesis of the literature relating to legislation, practice economic policy barriers, and enablers. ▪ Provided a synthesis of discussions with key informants to provide further insights related to the analysis of the literature. ▪ Identified opportunities to mitigate ▪ Itemized the barriers and mechanisms to strengthen the enablers for integration and sustainability of the NP role in the healthcare system. 	Pages: 40 Citations: 42
EDUCATION Rutherford, G. (2005). <i>Education Component – Literature Review Report</i> . Ottawa, ON: Discussion paper prepared for the CNPI. Published in the technical report, Section 2, Chapter 4, Appendix B.	<ul style="list-style-type: none"> ▪ The review provided an analysis of the literature as a context for discussions about NP education. ▪ The review identified inconsistencies between NP educational programs in Canada and a need to increase standardization of NP education across the country. It also concluded that governments, policymakers, employers, unions, regulatory bodies, nursing organizations, education providers and other health professionals need to work together to achieve a national, coordinated framework for nurses. 	Pages: 58 Citations: 70+
HEALTH HUMAN RESOURCES PLANNING Tomblin-Murphy Consulting Inc. (date unknown). <i>Health Human Resource Planning/ Modeling Activities for Primary Health Care Nurse Practitioners</i> . Ottawa, ON: Discussion paper prepared for the CNPI. Published in the technical report, Section 2, Chapter 3, Appendix B.	<ul style="list-style-type: none"> ▪ Reviewed and synthesized the literature on health human resource (HHR) planning and modeling activities specific to primary health care nurse practitioners (PHCNP). Included a review of grey and empirical literature findings from international and Canadian jurisdictional and federal governments, professional associations and unions. ▪ Review was guided by a <i>HHR Conceptual Framework</i> developed by O'Brien-Pallas, Tomblin-Murphy, Birch and Baumann (2001). ▪ The literature confirmed that there has been minimal planning for the education, employment and deployment of NPs internationally as well as across Canada. 	Pages: 51 Citations: 75+
LEGISLATION & REGULATION Tarrant, F. & Associates (2005). <i>Literature Review of Nurse Practitioner Legislation & Regulation</i> . Halifax, NS: Discussion paper prepared for the CNPI. Published in the technical report, Section 2, Chapter 1, Appendix A.	<ul style="list-style-type: none"> ▪ This review was undertaken to support development of a legislative framework for NPs in Canada. It included a look at existing legislation and regulation for NPs, family physicians and pharmacists in Canada, Australia, New Zealand, the United Kingdom and the United States. ▪ The approach and methods used in the review were designed to provide detailed information on the elements and components contained in the legislation/regulations for NPs in Canada and the international arena. It was not intended to provide an analysis of the effectiveness of the legislation/regulations. ▪ Results of the review recommended development of a legislative/regulatory framework to support the necessary legislative reform required to implement the framework. ▪ The report included a proposed regulatory framework development process model. 	Pages: 157 Citations: 138+
PRACTICE & EVALUATION Fahey-Walsh, J. (2004). <i>Advanced nursing practice and the primary health care nurse practitioner: Title, scope and role</i> . Ottawa, ON: Discussion paper prepared for the CNPI. Published in the technical report, Section 2, Chapter 2, Appendix B.	<ul style="list-style-type: none"> ▪ This review explored: A description of the definitions and roles of advanced nursing practice; An overview of international and national definitions/descriptions of advanced nursing practice; A review of advanced nursing practice roles in Canada (including the evolution of the CNS and NP role and differences between these roles). ▪ Results of the review identified similarities and differences among jurisdictions respecting primary health care NP title, scope and role. 	Pages: 52 Citations: 88+

<i>Additional literature reviews during the CNPI</i>	
<p>Jones, L. & Way, D. (2004). <i>Delivering Primary Health Care to Canadians: Nurse Practitioners and Physicians in Collaboration</i>. Ottawa, ON: Author. Discussion paper prepared for the CNPI.</p>	<ul style="list-style-type: none"> ▪ Reviewed collaborative models of care delivery and the criteria/qualities of effective working models for primary health care. ▪ Review showed that, although the expectation is that NPs will work collaboratively with all providers, the working relationship with the family physician is of particular importance.
<p>Mayne, D.C. (2005a). <i>Nurse practitioner practice and liability issues</i>. Ottawa, ON: Author. [Unpublished discussion paper prepared for the CNPI. Available at http://www.cnpi.ca/practice_and_evaluation/index.asp]</p>	<ul style="list-style-type: none"> ▪ Clarity respecting medico-legal responsibility, particularly in the areas of liability coverage, adequacy of the coverage, and vicarious liability or indemnification was identified as potential barriers for NP practice. ▪ The literature review discussed these concepts in relation to three practice perspectives: NPs working as employees of hospitals, health regions or healthcare agencies; NPs working as employees in a private or community clinic; and NPs working as independent contractors in collaboration with healthcare professionals in a clinic or healthcare institution.
<p><i>Prior Learning Assessment and Recognition Framework for Nurse Practitioner Education and Regulation in Canada</i>. [Unpublished discussion paper prepared for the CNPI]</p>	<ul style="list-style-type: none"> ▪ Provided an overview of the current state and proposed application of Prior Learning Assessment and Recognition (PLAR) in NP education and regulation across Canada. ▪ Included a proposed PLAR framework for use in the education and regulation of NPs in Canada.

Using the literature reviews as the starting point, the CNPI developed policy recommendations in each of the component areas and developed supporting tools and processes to support the sustained integration of the NP role. The list of deliverables included:

- *Canadian Nurse Practitioner Core Competency Framework*
- *Canadian Nurse Practitioner Examination: Family/All Ages*
- *Change Management, Social Marketing and Strategic Communications recommendations*
- *Competence Assessment Framework for Nurse Practitioners in Canada*
- *Directory of Educational Programs*
- *Education Framework for Nurse Practitioners in Canada*
- *Health Human Resources Planning recommendations*
- *Health Human Resources Planning Simulation Model for Nurse Practitioners in Primary Health Care.*
- *Implementation and Evaluation Toolkit for Nurse Practitioners in Canada*
- *Legislative and Regulatory Framework for Nurse Practitioners in Canada*
- *National NP Education Database*
- *Practice Framework for Nurse Practitioners in Canada*
- *Prior Learning Assessment and Recognition Framework for Nurse Practitioner Education and Regulation in Canada*
- *Framework for Nurse Practitioner Education and Regulation in Canada*

Summary of key findings arising from CNPI literature reviews

Barriers, Supports & Impediments to NP Practice

Tarrant, F. and Associates (2005). *Environmental scan of supports, barriers and impediments to practice*. Halifax, NS: Author. [Unpublished discussion paper prepared for the CNPI].

This review included the development of an analytical framework based on four elements (legislation and regulation; practice; economics; and policy and culture) and identified key enablers and barriers to NP practice from national and international perspectives.

Legislation & Regulation	<i>Legislation and regulation play a role in ensuring the legitimacy and enabling the practice of all health professionals, including NPs. It is intended to serve and protect the public interest and is based on the premise that regulated health professionals deliver higher quality care (Bohnen 1994). While legislation and regulation can enable practice, it can also create significant barriers to health professionals practicing to their full scope.</i>
Practice & Evaluation	<i>There are perceptual and practical barriers to the integration of NP practice into the health system.</i>
Economics (Funding)	<i>The lack of sustainable funding and/or reimbursement models is a barrier to the evolution and integration of NPs. Funding model reform needs to support team care and ensure money follows the patient vs. the provider. Beyond funding model reform, there is a perceived financial risk associated with inter-professional collaboration.</i>
Policy & Culture	<i>Policy issues can enable or detract from the integration and sustainability of the NP role. The challenge is in determining which policy issue(s) offers the greatest impact because resources are scarce. Information gleaned from the literature identifies a number of enabling policy issues, including HHR planning, education requirements for NPs, quality management and outcome performance and funding model reform. HHR plans should address the demand and supply of NPs, adequate and equitable salaries and related benefits, recruitment and retention strategies, and new graduate orientation for entrenchment of the role. For NP sustained integration it is also important to consider an evidence-based plan that allows for variations in practice models based on community needs and adequate resources that enable health authorities to hire NPs.</i>

Education

Rutherford, G. (2005). *Education Component – Literature Review Report*.

- There are inconsistencies between NP educational programs in Canada and a number of areas where increased standardization of NP education can be implemented. The challenge of reaching consensus on these decisions is complicated by the interdependence and complexity of the factors involved.
- Issues to be considered in discussions (across Canada) about education include:
 - Importance of collaborative partnerships between educational programs to support NP programs in transition to standardized exit credentialing and other program changes
 - Agreement on a national philosophy for NP education
 - Integration of core competencies with the development of a guiding framework and curriculum content in a way that supports standardization of NP education programming in Canada
 - Balance between clinical and theoretical content in NP programs
 - Focus on specific content areas that require further emphasis in NP educational programs (e.g., quality control; informatics; interdisciplinary education; research into client outcomes and educational best practices)
 - Amount of clinical experience NP students require before entering an NP program
 - Responsibilities of educational programs and employers re: NP education
 - Appropriate combination of teaching methods for evaluation of clinical skills including interpersonal skills
 - Strategies to facilitate appropriate working relationships between NP educational programs and regulatory bodies to develop consistency in prior learning assessment and recognition (PLAR) processes and re-entry to practice programs

Health Human Resources Planning

Tomblin Murphy Consulting Inc. (date unknown). *Health Human Resource Planning /Modeling Activities for Primary Health Care Nurse Practitioners*

- HHR planning for NPs in most Canadian jurisdictions and other countries is limited by data availability, data quality, and timeliness of data collection. A key challenge for NP planning is the need for information and evidence to support NP HHR related policy. Most of the data available pertaining to NPs is self-reported and accessed through either nursing registries and/or from the Canadian Community Health Survey Supplemental Health Services Access Survey (2002).
- Both NPs and physicians have identified several barriers and facilitators to engaging in collaborative practice including: remuneration issues; clarity of scope of practice; lack of understanding about the definition and nature of collaborative practice.
- Current HHR planning practices – including approaches to determine the appropriate number and deployment of NPs - tend to be intermittent, often based on incorrect assumptions, focusing on single disciplines, and not linked to appropriate analytical models.

Legislation & Regulation

Tarrant, F. & Associates (2005). *Literature Review of Nurse Practitioner Legislation & Regulation*

This review included a review of existing legislation and regulation for NPs, family physicians and pharmacists in Canada, Australia, New Zealand, the UK and the US. The review provided an examination and analysis of the activity in the international jurisdictions related to NP legislation and regulation. Key findings arising from the review were as follows:

- The U.S. *Model Nursing Practice Act* contained a large majority of the components identified in the literature as requisites for a legislative framework. The health professions legislation within Ontario, the Capital Territory of Australia and New Zealand contained all the entry-to-practice requirements that were identified in the analytical framework.
- The literature review identified many enabling legislative practices in addition to those considered to be restrictive to NPs. For example, the Manitoba Pharmacy Act does not allow pharmacists to fill prescriptions ordered by an NP.
- The New Zealand legislation was found to be enabling for NPs in that it is the only legislation to recognize interdisciplinary issues and overlapping scopes of practice. The Capital Territory of Australia legislation was enabling with respect to assuring continuing professional competence in that it is the only legislation that includes all the components of continuing competence.
- The literature sources identified a number of gaps in the legislation, namely:
 - Inconsistency in title and title protection for NPs
 - Lack of recognition of interdisciplinary issues
 - In most jurisdictions, initial and continuing competence is addressed in regulation (not legislation).
- Regulatory enablers are 'somewhat limited' due to the lack of consistency in regulation and the lack of consistency across jurisdictions. Major enablers were identified as:
 - The Pew recommendations for regulatory improvement (i.e., identification of 10 crucial elements necessary for effective health professional regulation)
 - The OECD model for regulatory reform that can be used to facilitate the inclusion of the PEW elements into future legislation/regulation.
 - The National Council of State Boards of Nursing (NCSBN) regulatory evaluation framework that can be utilized during legislation/regulation development to ensure that reform is occurring in a manner that best supports the implementation of NPs while ensuring that the public interest is served.

- Based on findings of the jurisdictional review, Newfoundland and Labrador's regulations were considered to have more enabling components, particularly with respect to the scope of practice for NPs. All other regulations were deficient in at least three of the seven components identified as part of the Pew regulatory framework for the scope of practice element. [Note: this analysis and conclusion was based solely on the presence and/or absence of elements, not their substantive content.]
- Regulations examined were also deficient in entry-to-practice requirements and continuing competence. This was identified as a potentially significant regulatory restrictor. Other potential restrictors were identified as:
 - The lack of regulatory consistency with respect to entry-to-practice, the continuing competence and scope of practice components;
 - Inconsistent approach of regulatory bodies in the use of by laws and regulations across jurisdictions to address entry to practice, continuing competence and scope of practice elements.
- Analysis of the literature identified four best practices in legislation and regulation :
 - Legislation: U.S. *Model Nursing Practice Act* (including its associated administrative rules) which provides a template for NP legislation.
 - Regulatory: Pew Task Force recommendations for health professions
 - Regulatory: Newfoundland and Labrador regulations pertaining to scope of practice
 - Regulatory: OECD regulatory reform model
- Detailed Appendices included as part of the analysis that was undertaken of the literature included:
 - Appendix A: Annotated listing for provincial/territorial NP legislation and regulation
 - Appendix B: Annotated listing for NP international legislation and regulation
 - Appendix C: Search hits by key words and database
 - Appendix D: United States Certification Requirements for NPs and Clinical Nurse Specialists by Organization
 - Appendix E: NP Core Competencies
 - Appendix F: Definitions of Advance Practice Nursing within Canadian Jurisdictions
 - Appendix G: Definitions of Advanced Practice Nursing within International Jurisdictions
 - Appendix H: Summary of Elements by Canadian Jurisdiction

Practice & Evaluation

Fahey-Walsh, J. (2004). *Advanced nursing practice and the primary health care nurse practitioner: Title, scope and role*

The national and international literature identified both similarities and inconsistencies in the definitions used to describe NPs and their practice. International literature demonstrated consistency with core competencies underpinning the advanced practice of NPs – clinical, research, leadership, collaboration and change agent – which are also consistent with the CNA's core competencies for advanced practice nursing (APN). However, differences in NP definitions, including titles and role description, exist.

- While the NP title is used and protected in most of the provinces and territories with NP legislation, two provinces – Manitoba and Ontario – did not use or protect the title (Note: see page 2 for a summary of recent Regulations adding acute care specialties to the extended class).
- Marked similarities also exist with respect to scope and role. For example, all NPs can diagnose, prescribe medications, order treatments and order diagnostic tests. In some provinces NPs also have the authority to dispense medications. However, parameters/boundaries on scope of practice authorities are varied across the country and range from prescriptive lists of drugs and diagnostic tests listed in regulation to more open-ended prescribing authorities such as prescribing from a provincial drug formulary.
- While concepts of NPs practicing autonomously and collaboratively are common across some regions, expectations for collaboration and consultation vary significantly and range from more restrictive models of collaboration and consultation whereby the NPs practice is bound and limited by legal formal practice agreements as specified in legislation, to more open models where the NP drives the amount of collaboration and consultation based on client needs and practitioner knowledge.
- While many similarities exist between primary health care NPs (PHCNP) and RNs, there are differences in two key areas:
 - The PHCNPs possess advanced nursing and related scientific knowledge and additional experience beyond that of most RNs
 - PHCNPs have additional regulatory authority, which gives them the ability to autonomously diagnose, prescribe and treat clients with common chronic or acute episodic health conditions.

Key recommendations arising from the literature review included:

- The need for a consistent definition of the PHCNP;
- The imperative for a consistent advanced nursing practice (ANP) role definition;
- Clarity between the CNS and NP roles;
- A single NP title;
- A clearly articulated NP scope of practice;
- Clarity on the meaning of the words autonomous and collaboration;
- A means of addressing liability issues that have been raised; and
- Appropriate supports within practice settings to optimize the scope of all health care providers.

Jones, L. & Way, D. (2004). *Delivering Primary Health Care to Canadians: Nurse Practitioners and Physicians in Collaboration*. Ottawa, ON: Author. Discussion paper prepared for the CNPI. Available at http://www.cnpi.ca/practice_and_evaluation/index.asp

NPs are expected to work autonomously and in collaboration with patients and as members of interprofessional teams. Although the expectation is that NPs will work collaboratively with all the providers, the literature notes that the working relationship with the FP is of particular significance.

- Lack of understanding of the roles, scopes of practice of the various team members and liability implications are among the key issues raised in discussions regarding what NP autonomous practice and collaboration mean within inter-professional teams. In Canada:
 - Perceptions about the role of NPs and the meaning of collaboration are different;
 - Legislative frameworks governing NP practice and title are varied;
 - The educational preparations of NPs are inconsistent;
 - Professional financial competition between NPs and FPs may obstruct collaboration; and
 - Medico-legal responsibility is unclear in the areas of liability insurance coverage, adequacy of the coverage, and vicarious liability.
- Fee-for-service payment tends to actively discourage physicians from promoting teamwork, as their individual remuneration depends on the number of patients that they see.
- The degree to which practices overlap and to which providers support this overlap can be an indicator of the degree of collaboration. Role clarity is reported as being directly related to peer support and satisfaction of providers; that is, the greater the role clarity, the better the satisfaction of providers.

- Jones and Way (2004) identified 13 collaborative practice models and the following seven elements that are deemed essential for optimum care: cooperation; assertiveness; responsibility/ accountability; autonomy; communication; coordination; and mutual trust and respect.
- The NP and other professionals must be recognized not as physician replacements, but rather for each role's unique combination of skill sets and unique contribution to care. Research shows that teams with the greatest cohesiveness are associated with better clinical outcomes and the highest degree of patient satisfaction.

Mayne, D.C. (2005a). Nurse practitioner practice and liability issues.

Available at http://www.cnpi.ca/practice_and_evaluation/index.asp

- Clarity respecting medico-legal responsibility, particularly in the areas of liability coverage, adequacy of the coverage, and vicarious liability or indemnification was identified as potential barriers for NP practice. This literature review discussed these concepts in relation to three practice perspectives:
 - NPs working as employees of hospitals, health regions or healthcare agencies;
 - NPs working as employees in a private or community clinic; and
 - NPs working as independent contractors in collaboration with healthcare professionals in a clinic or healthcare institution.
- NP liability (in legal terms) means that the NP is legally responsible for his/her own acts or omissions in professional practice. NPs can be held responsible for their practice in a variety of forums. Even if the NP's practice is not negligent, the NP can become entangled in any number of proceedings, as a party or a witness, with possible liability exposure and thereby can incur substantial legal fees defending practice and reputation. Some of the proceedings that can affect the NP include:
 - A professional discipline complaint to the NP's regulatory body
 - A criminal investigation or prosecution
 - A coroner's inquest, and
 - A civil claim for compensation in the form of damages.
- Understanding the appropriate level for NP professional practice and liability protection is approached from a 'risk analysis perspective' drawing on data from the U.S. where there is a requirement to report malpractice payments and adverse actions concerning NPs and other healthcare practitioners.

In Canada, the Canadian Nurses Protective Society (CNPS) raised liability protection limits to \$5 million based on pressure from other healthcare provider groups and governments. NPs are responsible for paying – either personally or through the association/college membership – malpractice liability insurance premiums. To facilitate better understanding of issues related to appropriate liability protection, a significant joint policy statement was issued by the CMPA and the CNPS (2005) which recognizes that each healthcare professional should be 'adequately protected so that neither is held financially responsible for the acts or omissions of another.'

Recommendations arising from this paper included:

- The establishment of a national voluntary database to track claims made against NPs and all payments
- NPs who intend to practice as independent contractors should negotiate funding agreements and collaboration arrangements that contain reasonable limits and indemnity clauses, and
- NPs, in conjunction with associations, should lobby government to cover the costs of professional practice and liability protection as it has done for other professionals in their respective jurisdiction.

SECTION 2: Overview of seminal evidence-based documents & recent literature

There are a large number of documents related to the NP role, its scope, efficacy and impact on: patient care, the health system and inter-professional collaboration. For example, a search using the word “nurse practitioner” on PubMed, yielded over 12,000 citations. Documents represent the full range of theoretical, and research papers in virtually every clinical setting and covering a wide range of clinical problems. Practice contexts include a wide variety of patient populations, in every developmental stage, and span primary care, acute care, critical care, community care, long term care, rehabilitation, and palliative care. Settings include urban, rural and remote practice in most of the developed countries, with a heavy emphasis on the UK, USA, Canada, Australia and New Zealand.

In order to adequately represent this large body of information, in a format that can be utilized by a diverse stakeholder audience, this section provides a broad summary of the literature for each major heading of: *System Needs; Competency/Risk of Harm; and Scope of Practice* as referenced in the ‘cube’ diagram in the introduction of this document. Beneath each overview section, a table summarizes a limited number of seminal references, and more recent citations that have not been included in systematic reviews.

Because HPRAC assess the ‘risk of harm’ in its review of health professions’ regulation in Ontario as part of its commitment to public protection, sources selected for detailed review under the *Competency/Risk of Harm* heading will be primarily selected from systematic reviews, meta-analyses, and randomized controlled clinical trials (RCTs). This approach is taken for the following reasons:

- These criteria will not duplicate existing extensive literature reviews;
- The analysis limits the number of individual papers for consideration to those likely to have the greatest relevance and impact;
- These research methodologies are widely recognized as the gold standard for evidence-based practice and health policy decision-making;
- The approach can help focus the debate on safety/risk of harm;

The documents cited in the following tables are presented in alphabetical order and not in order of importance. Recognizing that this approach will not be exhaustive, in some cases footnotes will direct the reader to additional sources of information that can be consulted as required.

Evidence-Based Documents

Randomized controlled trials (RCT) are the most rigorous way of determining whether a cause-effect relation exists between treatment and outcome and for assessing the cost effectiveness of a treatment. They have several important features:

- Random allocation to intervention groups;
- Patients and trialists should remain unaware of which treatment was given until the study is completed (although such double blind studies are not always feasible or appropriate);
- All intervention groups are treated identically except for the experimental treatment;
- Patients are normally analysed within the group to which they were allocated, irrespective of whether they experienced the intended intervention (intention to treat analysis);
- The analysis is focused on estimating the size of the difference in predefined outcomes between intervention groups. [BMJ 1998;316:201 (17 January)]

Systematic reviews attempt to bring the same level of rigour to reviewing research evidence as should be used in producing that research evidence in the first place. High-quality systematic reviews take great care to find all relevant studies published and unpublished, assess each study, synthesize the findings from individual studies in an unbiased way and present a balanced and impartial summary of the findings with due consideration of any flaws in the evidence.

www.evidence-based-medicine.co.uk

Meta-analysis is a statistical technique for amalgamating, summarizing, and reviewing previous quantitative research. By using meta-analysis, a wide variety of questions can be investigated, as long as a reasonable body of primary research studies exist. Selected parts of the reported results of primary studies are entered into a database, and this "meta-data" is "meta-analyzed", in similar ways to working with other data - descriptively and then inferentially to test certain hypotheses. <http://wilderdom.com/research/meta-analysis.html>

Summary of Selected Documents on System Needs

- Historically, NP roles were initiated and evolved to address gaps in health services. For example, early NP funding initiatives focused on placing RN(EC) positions in rural, remote and under-served communities, and the decline in resident availability for neonatal intensive care units led to the introduction of neonatal NPs. (CNO submission to HPRAC, August 2007).
- There is a range of research confirming the roles played by NPs in a range of care environments and across the care continuum. Many studies have looked at the role of NPs in settings where there are shortages or delays for people seeking services, such as primary care, geriatric care, care of individuals with chronic diseases (e.g., diabetes, heart failure), and in rural and remote settings or within marginalized populations.
- In 2004 Health Canada approved funding for the CNA proposal for *“Helping to Sustain Canada’s Health System: Nurse Practitioners in Primary Health Care”*. This resulted in the establishment of the CNPI . This project confirmed, among other things, that NPs provide one answer to meeting current and future needs with respect to workforce and skill shortages. Both in Canada and other countries, the NP role has been introduced to complement and improve access to health services, not simply as a replacement/substitute for other providers.

The following table provides brief summaries of seminal documents as well as recent publications related to the role of NPs in addressing system needs.

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
Brooten, D. et al. (2005). APN-Physician collaboration in caring for women with high-risk pregnancies <i>J. of Nsg Scholarship</i> . 37:2, 178-184	Descriptive study with secondary analysis of data from a previous RCT (clinical trial) Analysis of episodes of communication and shared decision-making recorded in nurses' log	Jackson Memorial Health System, Miami, Florida, USA High-risk women Pre-natal care delivered in homes by APNs with review by MDs and other team members	APN –physician collaborations focussed on monitoring women’s physical and emotional status and discussing new physical findings. These collaborations were important in the original trial’s successful pregnancy and infant outcomes and also demonstrated savings in healthcare expenditures.	Secondary data analysis Specific patient population
CIHI /CNA (2006) <i>The Regulation and Supply of Nurse Practitioners in Canada: 2006 Update</i> Ottawa: CIHI/CNA	The second research/ statistical report published by CIHI to provide contextual information on the history, roles and regulation of the nurse practitioner (NP) profession in Canada including a statistical profile of the licensed NP workforce.	Purpose of the report was to provide contextual information on the history, roles and current regulation of the NP profession in Canada Includes a definition and history of NPs in Canada; a current summary of provincial and territorial legislation and regulation of the NP role within the nursing profession (updated March	As of March 2006, 12 Canadian provinces and territories had NP legislation and regulations in place or in progress. NPs in each of these jurisdictions can autonomously perform the following: Diagnose a disease, disorder or condition; Order and interpret diagnostic and screening tests; and Prescribe medication. Legislation in many jurisdictions enables NPs to perform other functions as well.	The reports helps fill existing knowledge gaps about the NP workforce, and thereby help to improve health HHR planning and policy making in Canada.

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Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
		2006); updated national statistics on the supply, education and employment patterns of the NP workforce (2003-05).	<p>In 2005, there were a total of 1,026 licensed NPs registered in the jurisdictions of Newfoundland & Labrador, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, BC, the NWT and Nunavut. [PEI and the Yukon Territory did not have separate NP designation for the 2005 registration year.] For Quebec, NP legislation and regulations came into effect late in 2005 and thus no data were available at the time of the publication.</p> <p>Rates of full-time employment are substantially higher for NPs than for other RNs. In 2005, more than 75% (75.9%) of licensed NPs with employment worked full-time compared to of 51% - 54% for the RN workforce.</p> <p>When self-identifying their current position at the time of registration, more than three-quarters (76.8%) of licensed NPs indicated "NP". The remaining 23% self-identified their primary role as <i>manager</i> (2.9%), <i>staff nurse/ community health nurse</i> (8.9%), <i>instructor/ professor/ educator</i> (3.5%) and <i>other positions/not stated</i> (7.9%).</p>	
Canadian Nurses Association (2004). <i>The Canadian Nurse Practitioner Initiative</i> .	Policy/research report and discussion document	CNPI funded by Health Canada at a cost of \$8.9 million. Project took place from 2004-06 with a mandate to develop a framework for the integration and sustainability of the PHCNP role in Canada's health system. The work was informed by 5 working groups. Goal was to achieve a national consensus on key issues.	<p>The work of the CNPI resulted in the following products:</p> <ul style="list-style-type: none"> - Implementation and evaluation toolkit - Legislative and regulatory framework - Practice framework - HHR planning simulation model - Education framework 	<p>Project focussed on the role of the primary health care NP (funded as part of the Primary Health Care Transition Fund)</p> <p>and</p> <p>Was directed to achieving a national accord on the definition, role, scope of practice, educational preparation etc, for NPs as well as identification of barriers and enablers for implementation of the role.</p>
Canadian Nurses Association (June 2006). <i>Nurse Practitioners: The Time is Now</i> . Ottawa.	Final report/ Policy report with recommendations	Provides an overview of the work of the CNPI. Includes a Technical Report containing: Component Area Reports; Literature Reviews; Discussion Papers, <i>The Way Forward Plan</i> and Reference	The Framework provides the roadmap for governments, regulatory organizations, employers, educators, unions, and professional organizations in Canada to move the NP agenda forward. Identifies the interdependent building blocks necessary to	See above

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
Health Council of Canada (2005). <i>An environmental scan of current views on health human resources in Canada: identified problems, proposed solutions and gap analysis</i> . Prepared for the National Health Human Resources Summit by Fadi El-Jardali and Cathy Fooks.	Summary of proceedings from a June 23, 2005 think tank - <i>The National Health Human Resources Summit</i> (June 23, 2005) - sponsored by the Health Council of Canada.	On June 23, 2005, the Health Council of Canada brought together over 120 key players in health care to address what the Council believes is the most pressing challenge facing our health care system – health human resources.	sustain the NP role. Summarizes the findings of the environmental scan and discussions arising from the think tank. Includes a review of identified problems, proposed solutions and gap analysis related to: education and training; scopes of practice; workplace practices. There is a need for more rigorous evaluation research to understand why innovations succeed or fail and how they affect patient outcomes in the long term. Such research requires better data collection, timely analysis, and common definitions so that outcomes from activities in different jurisdictions can be more easily compared. Based on current commitments on funding and reform, a number of specific targets to be achieved within two to five years are identified.	Not focused on NPs in particular but identifies high level policy priorities and directions for addressing HHR issues in Canada.
IBM Business Consulting Services (2005). <i>Report on the integration of primary health care nurse practitioners into the province of Ontario</i> .	IBM Business Consulting Services was contracted to conduct the study by the Ontario Ministry of Health and Long-Term Care in June 2002. The study was overseen by a steering committee, which included representation from key nursing and medical associations as well as ministry program areas.	The primary focus of the study was on Primary Health Care NP Integration Study was to determine how best to integrate primary health care NPs into Ontario's health care system and specifically into various practice settings. Key questions to be answered by the study were: What barriers must be overcome and what facilitators must be encouraged to further integrate NPs into specific practice settings? What can be learned about the practice models in which NPs function; specifically, which models do not work well and why and which models work best to support integration of NPs?	Sets out 29 recommendations related to the following themes: - Shared Vision and Role Alignment - NP Role Clarity - Team Dynamics - Resources - NP Scope of Practice - System Integration of the NP	Considered to be an important document for integration of the role Report focused only on role of PCNP Literature review was limited to papers focused on barriers and facilitators to implementation (i.e. did not examine competency/risk of harm)
Ministry of Health and Long-Term Care and the Ministry of Training Colleges and Universities (2005). <i>Laying the foundation for change – A progress report on Ontario's</i>	Government of Ontario policy/ vision report	This progress report (developed jointly by the MOHLTC and MTCU) responds to the September 2004 commitment at the federal/provincial/ territorial First Ministers' Meeting on the <i>Future of Health Care</i> where all jurisdictions agreed to the following:	Describes the key HHR initiatives underway in Ontario, identifies targets and progress in meeting those targets. Confirms a number of key policy components important to consider in discussions concerning NPs.	Many of the targets identified in the report were established to be achieved by 2006/07

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
<i>health human resources initiatives.</i>		<ul style="list-style-type: none"> - Accelerate initiatives to ensure an adequate supply and appropriate mix of health care providers; - Foster closer collaboration among health, post-secondary education and labour market sectors; and, - Produce public plans, including targets for the education, recruitment and retention of professionals. 		
Pew Health Professions Commission (1997). <i>Considering the future of healthcare workforce regulation.</i> http://www.futurehealth.ucsf.edu/pdf_files/futwkreg.pdf	Policy Report	In 1994, the Pew Health Professions Commission assembled a task force on health care workforce regulation in response to the changing health care system.	Identifies the following issues as “crucial elements needed to serve the public’s interest: <ol style="list-style-type: none"> 1. Regulatory terms and language 2. Entry-to-practice requirements 3. Professional titles and scopes of practice 4. Professional boards and their functions 5. Information for the public about practitioners and regulation 6. Collecting data on the health care workforce 7. Assuring continuing professional competence 8. Filing complaints against practitioners and the disciplinary system 9. Evaluating regulatory effectiveness in protecting the public, and 10. The various organizations and context impacting professional regulation.(p. 4) These elements proposed as “the 10 recommendations for regulatory improvement.”	Broad framework for health professional regulation
Sanmartin, C, Ross N. (2006). Experiencing difficulties accessing first contact health services in Canada. <i>Healthcare Policy.</i> 1:2; 103-117	Analytical analysis of factors associated with difficulties accessing first contact health care services	Uses population-based data from two national health surveys (the Health Services Access Survey and the Canadian Community Health Survey) to identify respondents who required first-contact services for themselves or a family member in 1993.	15% of Canadians reported difficult accessing routine care; 23%reported difficulties with immediate care. Physician/service availability was the chief reason cited for difficulties accessing routine care, while for urgent care, it was long wait times. Women, younger respondents and residents of eastern	Focus of study looked at access to physician services

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
			<p>Canada and Quebec were consistently more likely to report difficulties.</p> <p>Canadians without a family doctor were more than twice as likely to report difficulties accessing routine care compared to those who had a regular doctor. New immigrants were almost two and a half times more likely to report difficulties accessing immediate care.</p>	
<p>Sidani, S., Irvine, D., DiCenso, A. (2000). Implementation of the primary care nurse practitioner role in Ontario. <i>Canadian Journal of Nursing Leadership</i>, 13 (3):13-19.</p>	<p>Survey/questionnaire of NPs certified by the College of Nurses of Ontario as Extended Class.</p>	<p>Examines the implementation of the NP in primary care settings</p> <p>The questionnaire inquired about the NPs professional characteristics, employment settings, scope of practice, practice pattern, and satisfaction with their role.</p>	<p>Survey findings revealed that the majority of the 166 respondents working as NPs were Baccalaureate prepared; have been in the role for a relatively short period of time; were employed in community health centres; and were able to practice to their full potential, within the expanded scope of practice.</p> <p>NPs saw patients who are primarily healthy or presenting with acute minor illness and provided care with an emphasis on wellness.</p>	
<p>Thompson T & Dykeman M. (2007). Nurse practitioners in Canadian heart failure clinics: evidence to support their presence on health care teams. <i>Nursing Research</i>. 20:2, 80-93</p>	<p>Literature review with 53 citations outlining the incidence, prevalence and impact of CHF on Canadians and the health system; descriptions of models for CHF care, including the use of the APN (NP)</p>	<p>International literature</p>	<p>Most Canadians with CHF receive care from their family MD primarily; literature recommends team approach to achieve better outcomes.</p> <p>Scope of APN (NP) is highlighted as potentially useful to Canadian context: monitoring; patient education; medication management & support to improve overall care and to reduce costs of care associated with frequent hospitalizations. Improvement in quality of life is mentioned.</p>	<p>Heavy emphasis placed on five studies to make case for increased NP role on the clinic team. Of these, only one is a RCT (single site, n = 169); 2 are retrospective chart reviews (small samples); one quasi-experimental study with n = 1,192; and one review of outcomes within convenience sample of n = 15 .</p>
<p>Eitner, SL et al. (2006). An alternative approach to reducing the costs of patient care? A controlled trial of the multi-disciplinary doctor-nurse practitioner, <i>Medical Decision Making</i>, 26, 9 – 17.</p>	<p>Descriptive study comparing two medical units with introduction of a NP and a hospitalist MD on one unit.</p> <p>Outcome measures: Cost savings - patients' service costs and HR costs.</p> <p>N = 1207 patients (581 intervention and 626 usual care)</p>	<p>University of California, Los Angeles, USA General in-patient medical floor NPs had no admitting or independent order writing; followed evidence-based, disease specific pathways developed by the hospitalist</p> <p>NP worked on the unit from 7:30 am to 4:00 pm, 5 days per week.</p> <p>Attended daily Multi-disciplinary Rounds.</p>	<p>Estimated costs savings of \$2165 per patient</p>	<p>Underutilization of the NP role</p> <p>Intervention not operating at full capacity for much of the study period</p> <p>Other MDs provided care on the unit</p> <p>Multi-disciplinary rounds and care pathways are confounding factors</p> <p>Used patient self-report of utilization post</p>

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
				discharge Focus on costs in absence of outcomes data for patients Short timeframe hospitalization plus 4 month follow up

Summary of Selected Documents on Competency/Risk of Harm

- Most studies of the impact of NPs on patients, the system and providers have been prospective, observational studies, with small samples that lack the required power to adequately measure clinical effect. Heterogeneity of data and methods among the reported RCTs has precluded standard meta-analyses techniques that might lend greater collective power to the data. That said, the few strong clinical trials and systematic reviews that have been carried-out demonstrate strong directional agreement within and between descriptive and observational studies and RCTs. Generally, the studies that have been done can be summarized as follows:
 - NPs provide substitutive care to patients that achieves equitable outcomes to that provided by physicians on most measures (no difference)
 - Patients express greater satisfaction with NP care because they spend more time with patients and demonstrate strong communication skills
 - Patients who receive care from NPs demonstrate greater compliance with medication/treatment regimens
 - In some groups of patients, there is reported improvement in self-perceived quality of life
 - In practices with NPs, MDs can expand their patient roster and provide care to larger numbers of patients
 - NP-MD collaboration enhances patient care
 - There is scant, if any, evidence of harm in the literature despite the degree of scrutiny of NP practice that has been carried out
- Most of the strong evidence supports NP roles in primary care; acute care NP practice is less well researched. Studies have focussed on comparison of NPs with MDs in providing substitutive medical care. This limits evaluation of the impact of the advanced practice nursing role on patients, providers and the system.
- According to Bryant-Lukosius and Dicenso (2004), new healthcare provider roles can be likened to the introduction of new therapies and should be evaluated in similar ways to evaluate the safety, effectiveness and economic efficiency of the role. This assertion argues for the use of RCTs as the desired approach to evaluate the NP role; however, the number of such studies is relatively small.
- A 'Mythbuster' publication published by the CHSRF concluded that based on information in the literature, NPs can provide care that is safe, effective and comparable to physicians in a wide range of situations and circumstances (CHSRF, 2002). In particular, the literature emphasizes: the role and contribution NPs can make to resolving key health care delivery issues (e.g., access, wait times, efficiency and effectiveness of systems and costs); and the insufficient/minimal planning that has been undertaken for the education, employment and deployment of NPs internationally and in the various jurisdictions in Canada.

The following table provides brief summaries of seminal documents as well as recent publications related to issues concerning competency/risk of harm associated with NPs.

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
Bryant-Lukosius D & DiCenso A. (2004). A framework for the introduction and evaluation of advanced practice nursing roles. <i>J of Advanced Nursing</i> . 48(5); 530-540.	Theoretical paper outlining a framework for introduction & evaluation of the NP role. "PEPPA" model includes the following components: participatory, evidence-based, patient focused process for guiding the development, implementation and evaluation of advanced practice nursing. Participatory action research methodology is foundational to this approach (i.e., more equitable distribution of power among research participants and the researcher). It blends two existing frameworks.	Canadian authors Built on the approach used by Spitzer et. al for the Burlington Trial in the 1970s.	New healthcare provider roles can be likened to the introduction of new therapies and should be evaluated in similar ways to evaluate the safety, effectiveness and economic efficiency of the role. The impact of the role should be evaluated for impact on quality of care, patient acceptance and satisfaction, provider satisfaction, and monitor the long term performance. It includes evaluation of educational programs to prepare NPs.	Comprehensive model which may be seen as too complex and too broad. May be seen as focused on "soft" outcomes but does include standard quantitative evaluation approaches. Has been adopted for a number of studies – particularly useful for implementation of the role.
Canadian Health Services Research Foundation. <i>Mythbusters</i> .2002. www.chsrf.ca	Review of international literature with 14 citations including systematic reviews and randomized clinical trials	International (UK, USA, and Canada)	For minor injuries and illnesses, people who see a NP tend to do as well as those who see a MD; six months following care by an NP, patients are just as healthy as those who had been seen by a MD Efficacy and safety is demonstrated in patient populations with chronic illness such as hypertension, Parkinsons', obesity, depression, diabetes, and asthma. Patients with hypertension respond better than those cared for by MDs. Nurses ask more questions and spend more time with patients; have better communication skills. Barriers to effective utilization include funding mechanisms and payment models.	Secondary analysis of primary sources. Brief document designed for knowledge translation purposes.
Canadian Nurses Association (2005). <i>Canadian Nurse Practitioner Core Competency Framework</i> .	Policy/research review Competencies further validated by a survey asking NPs, educators, employers, physicians, RNs and other stakeholders to identifying competencies required for safe and effective practice of entry-level NPs in Canada.	Provincial/territorial regulatory authorities participated in all phases of identifying, developing and validating the core competencies expected of the entry-level NP.	Outlines core competencies for NPs related to: - Health assessment and diagnosis - Health care management and therapeutic intervention - Health promotion and prevention of illness, injury and complications	Identifies entry level competencies for NPs

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<p>Cooper, MA et al. (2002). Evaluating emergency nurse practitioner services: A randomized controlled trial. <i>J Advanced Nursing</i>, 40 (6), 721-30</p>	<p>RCT designed to develop and evaluate tools to compare minor injury care provided in an ER by NPs and Senior House Officers (SHOs) (Emergency physicians).</p> <p>Instruments developed and tested for this study designed to measure patient satisfaction, clinical documentation audit, recovery time, level of symptoms, time off work or unplanned follow up, as well as missed injuries.</p>	<p>Glasgow Royal Infirmary Accident & Emergency Department, Scotland, UK</p> <p>Partially blinded randomization – sequentially numbered, sealed envelopes containing the randomized assignments to NP or SHO care.</p> <p>Convenience sample of 199 patients assigned to either the SHO (n = 100) or the NP (n = 99) over a two month period during December and January.</p> <p>NPs (n = 8) and SHOs (n = 12) participated</p> <p>NPs had to seek advice from senior medical staff for diagnosis, treatment and X-Ray interpretation.</p>	<p>- Professional role and responsibility Competencies and validation data enable the description of the essential components of a Canadian NP Examination (CNPE).</p> <p>Average waiting time to see a SHO was significantly longer than time to see an NP (70.1 minutes compared to 48.6 minutes, p < 0.001)</p> <p>No significant difference in total consultation time, including time for treatment when X-rayed patients were excluded</p> <p>No difference across the two groups in: numbers of X-rays requested across the two groups; admitted patients; referrals to follow up clinics; appropriateness of referral; clinical management</p> <p>Two cases treated by NP assessed to be “partially unsatisfactory” (splint application to toe and lack of application of a sling for a ligament injury to thumb).</p> <p>1 missed injury in each group plus 1 in person who withdrew from the study</p> <p>Patient satisfaction: NPs easier to talk to; given information on prevention, given sufficient information on injury.</p>	<p>Short time frame (2 months); small sample size with insufficient power</p> <p>Lacked statistical power to measure differences across providers in missed injuries. Investigators estimate that a sample of 769 patients in each arm would be required to detect a 2% difference in missed injury rates.</p>
<p>Horrocks S et al. (2002). Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. <i>British Medical Journal</i>; 324(7231); 819-823.</p>	<p>Systematic Review of the literature comparing primary care provided by NPs and MDs 119 studies initially retrieved; 34 heterogenous studies selected; 11 of them RCTs; others observational studies.</p> <p>Focus on minor, ER, single visit events</p> <p>Applied sensitivity analysis to determine impact of</p>	<p>International literature – focus on UK, USA, and Australia.</p>	<p>No significant differences reported in 5 RCTs in patient satisfaction (3 in UK and 2 in the USA)</p> <p>7 RCTs reported on health status, heterogeneity precluded meta-analysis but comparison yielded no significant differences</p> <p>Process Measures: NPs undertook significantly more investigations than MDs and had longer consultations.</p>	<p>Most studies have insufficient power to discern differences.</p> <p>Ambiguity re term NP.</p> <p>Studies included nurses who were not identified as NPs if they provided first point of contact, made initial assessment and managed patients autonomously.</p>

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
	<p>inclusion and/or exclusion of studies where inclusion of "ambiguous" studies was debatable.</p> <p>Outcomes: patient satisfaction, health status, health service costs, or process of care measures (e.g. referrals, admissions, measures of quality of care)</p> <p>Included grey literature as well as published literature from major data bases and Cochrane databases. Study quality assessed using Cochrane criteria (Cochrane Effective Practice and Organization of Care Group). Data analysis accounted for heterogeneity of the studies.</p>		<p>Quality of Care: 6 RCTs reported results. Heterogeneity of measures precluded quantitative analysis. NPs gave more information, scored better on communication, offered more advice on self-care and management, made more complete records; NPs as accurate as MDs in ordering and interpreting Xrays.</p> <p>"[NPs] can provide care that leads to increased patient satisfaction and similar health outcomes when compared with care from a doctor. [NPs] seemed to provide a quality of care that is at least as good, and in some ways better, than doctors." (p.821)</p>	<p>Review limited by quality of the available studies: few recent RCTs, larger number of observational studies – generally of poor quality.</p> <p>Conclusions, therefore based largely on the RCTs. Most recent RCTs of high quality.</p> <p>Consistent direction of effect between different studies and between the RCTs and the observational studies gives greater credence to results.</p>
<p>Kinnersley P et al. (2000). Randomized controlled trial of NP versus GP care for patients requesting 'same day' consultations in primary care. <i>British Medical Journal</i>, 320(7241): 1043-1048.</p>	<p>RCT designed to assess differences in care between NPs and GPs for patients seeking same day care in a primary care setting.</p> <p>Block randomization to particular day or within day appointment to either NP or GP.</p> <p>Sample size calculation to achieve 90% power at significance level of 5%)</p>	<p>10 general practices in south Wales and south west England, UK.</p> <p>Primary outcomes: patient satisfaction, resolution of symptoms and concerns at 2 weeks and 4 weeks Secondary outcomes: care in the consultation (length of consultation, information provided, prescriptions, investigations, referrals, follow-up consultation, patient intention for dealing with future similar illnesses);</p> <p>Consultation satisfaction questionnaire administered post visit, at 2 and 4 weeks</p>	<p>No notable or significant differences between the NP and GP care.</p> <p>No significant difference in prescribing patterns (NPs had to get MD signature) No significant differences in investigational tests ordered or referrals to secondary care. NP consultations longer and NPs more likely to advise return visit Significantly more patients who saw a NP reported had been given information about the cause of their illness, how to relieve symptoms, what to do if problem persisted, likely duration of symptoms, and how to reduce reoccurrence. Patients who saw NP generally more satisfied with care</p>	<p>Psychometric properties of the survey instrument not reported.</p> <p>Short time frame (4 weeks).</p> <p>Small number of NPs involved in the study (n= 6, some of whom worked in more than one practice).</p> <p>MD signature on NP prescriptions likely a confounding factor in assessing NP prescribing intent.</p>
Laurant, M et al. (2004)	Systematic review of the literature obtained from	Studies were included if nurses	No appreciative differences were found	Cochrane review abstract and plain language

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
<p>Substitution of doctors by nurses in primary care. The Cochrane Database of Systematic Reviews, 2004, Issue 4. Art #: CD001271.DOI:10.1002/12651858.CD001271. pub2 www.cochrane.org/reviews/en/ab001271 accessed Sept. 19, 2007</p>	<p>1966 to 2002 from the following databases: Medline, Cinahl, Bids, Embase, Social Science Citation Index, British Nursing Index, HMIC, EPOC Register, and Cochrane Controlled Trial Register.</p> <p>4253 articles screened; 25 articles, related to 16 studies were selected for review.</p>	<p>were compared to MDs providing a similar primary health care service.</p> <p>Meta-analysis was applied to outcomes for which there was adequate reporting of intervention effects from at least 3 RCTs. Semi-qualitative methods used for other outcomes.</p>	<p>between MD and nurses in health outcomes for patients, processes of care, resource utilization or cost.</p> <p>Patient satisfaction higher with nurse-led care; nurses provided longer consultations and gave more information.</p> <p>"Findings suggest that appropriately trained nurses can produce as high quality care as primary care doctors and achieve as good health outcomes for patients."</p>	<p>summary.</p> <p>Authors caution that "only one study was powered to assess equivalence of care, many studies had methodological limitations, and patient follow-up was generally 12 months or less."</p>
<p>Lenz et al. (2004). Primary care outcomes in patients treated by nurse practitioners or physicians: Two year follow up. <i>Medical Care Research and Review</i>, 61(3), 332-351</p>	<p>Phase II follow up to Mundinger MO et al 2000 (see below)</p> <p>N = 406 patients who were initially recruited and randomly assigned to either the NP or the MD primary care practice (from potential sample of 1,316 enrolled in Phase I) and who did not receive primary care from any other medical centre affiliated practice during a two year follow-up period.</p>	<p>Urban academic medical centre affiliated primary care practices in New York City, USA. Primarily Hispanic neighbourhood.</p> <p>Demographics and baseline SF-36 scores completed.</p> <p>Physiological data related to diagnoses of asthma, diabetes, hypertension collected.</p> <p>Health services utilization data collected.</p> <p>49% of patients had one or more of the targeted chronic diseases. No difference across the patient panels randomly assigned to the NP or the MD practices; no differences in the scope of practice for each provider.</p> <p>Comparison of those who received treatment external to the practice during the study follow up</p>	<p>Those who stayed with the study practices were less likely to be diabetic and had lower mental health scores compared to those who sought care from other practices.</p> <p>Those who stayed were more likely to be hypertensive, on Medicaid and to be older and female.</p> <p>Chi sq. tests assessed the patient panel lost to follow up across the NP and MD practices – no significant differences emerged in demographics or in health status.</p> <p>No significant differences across patients who received care from a NP or a MD in health status at two years, or in physiological parameters.</p> <p>No difference in patient satisfaction with care in past 12 months</p> <p>Patients who received care from NP had lower primary care utilization than those cared for by MD (1.76 visits compared to 2.50 visits, power of .68). When differences in insurance status was introduced in the analysis, this difference was reduced.</p> <p>No difference across the two groups in specialist or ER utilization or in hospitalization.</p>	<p>Limiting analysis to only those patients who did not receive care from another practice during the two-year follow up period negatively affected the statistical power for some variables and introduced an element of selection bias.</p> <p>Those who sought care elsewhere might have provided different outcome measures; however, this is a transient population.</p> <p>Ethnic sub-population of patients.</p> <p>Reduced statistical power may have resulted in finding of no statistically significant differences.</p> <p>However, the sample of n = 406 was able to yield a power of .80 and alpha of .05 to detect a 2 point difference in the SF-36.</p>

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		period and those who remained exclusive was carried out.		
Li, S., Kenward, K. (2006). <i>A National Survey on Elements of Nursing Education</i> . Prepared for the National Council of State Boards of Nursing (NCSBN)	U.S. National Survey Specific aims: - To describe the elements of nursing education, perceived adequacy of preparation of practice, transition activities and practice characteristics of newly licensed nurse graduates; - Examine the relationship between perceived adequacy of preparation for practice and difficulty with client care assignments; - Identify the elements of nursing education that lead to better preparation of new nurse graduates.	Gathered information on elements of nursing education leading to best possible preparation of new nursing graduates.	Based on new nurse graduates' perceptions, education programs were successful in preparing the majority of new nurses to perform many nursing functions. Some nurses felt they needed to be better prepared in providing direct care and administering medications to groups of clients, delegating tasks to other personnel, supervising care by others, and knowing when and how to call a physician. Conclusion: To improve graduates' perceived adequacy of preparation, it is important to teach use of information technology and evidence-based practice, integrate pathophysiology and critical thinking through the curriculum, teach specialty knowledge as independent courses, use faculty who teach didactic course to also teach clinical practicum, increase faculty availability to students and promote quality faculty students interactions.	Findings of significant components of preparation consistent with Institute of Medicine's competencies for health care professionals. Both emphasize the importance of the use of IT and evidence-based practice by health care professionals and call for more interdisciplinary opportunities to prepare students to work effectively within a health care team. By design, this study was limited to new nurse graduates' perception of preparedness for practice. Self perception is only one aspect of assessing adequacy of preparation of nursing students for practice. More research is needed to assess educational preparation from a variety of perspectives including employers.
Mitchell-DiCenso, A., Guyatt, G., Marrin, M., Goeree, R., Willan, A., Southwell, D., Hewson, S., Paes, B., Rosenbaum, P., Hunsberger, M., Baumann, A. (1996). A controlled trial of nurse practitioners in neonatal intensive care. <i>Pediatrics</i> . 98 (6):1143-1148.	RCT designed to compare a neonatal NP team with a paediatric resident team in the delivery of neonatal intensive care Patients stratified into 4 groups -daytime outborn – (calls for transport from another hospital) - daytime inborn (admission anticipated before delivery) -daytime inborn (admission not anticipated before delivery) -all calls between 4 pm and 8 am when the NPs were	McMaster University Medical Centre, Hamilton ON Master's prepared NPs 1 year (1991-1992) 33 bed tertiary level NICU (critically ill neonates) NPs provided care during the day, 7 days per week.	No significant differences in outcomes across the two groups Mortality – no significant difference (ns) (p = .40) Complications- ns, (p = .67) Length of stay – slightly longer in NP group but statistically ns (p = .42) Patient satisfaction – ns (p = .67) Long term follow up (age adjusted 8 months) ns (p = .17) Medical and family costs – ns; infants assigned to the PR group had slightly more diagnostic tests and procedures performed but	Randomization suspended periodically when the groups became imbalanced in numbers PRs providing care during nights is a potential design contaminant; however, this is a real life model of care Measures of complications and neonatal processes of care not validated Sample size has insufficient power to detect differences in some measures with low prevalence

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	<p>not on duty</p> <p>Neonates within the strata were randomly assigned to the NP team or to the paediatric resident (PR) team using a predetermined list generated by a random numbers table so that for every 4 consecutive patients randomized with a stratum, 2 patients were allocated to each group.</p> <p>Multiple births randomized as a unit but only the first born was included in the analysis. In the event of readmission, the patient was assigned to the original randomized caregiver group.</p> <p>N = 821 randomized for the study; PR = 407 and NP = 414 Of these 604 parents (97%) agreed to participate in the study.</p> <p>No important differences in the characteristics of neonates assigned across the two study groups.</p> <p>Outcome measures included: mortality, neonatal complications, process of care, parent satisfaction with care, long term follow up, costs, medical expenses, family expenses.</p>	<p>Paediatric residents provided care from 4 pm to 8 am. Each team supervised by 1 neonatal trainee and 1 neonatologist.</p> <p>NPs assumed primary responsibility for transporting outborn infants or attending the delivery, and developed the plan & managed care for the infants assigned to them. At daily rounds, consultation with the neonatology staff took place but NPs carried out further care without ongoing consultation. When unusual or unexpected changes occurred, the NP consulted and the team revised management plan according to their assessments. Emergency management was handled initially by the NP and then the neonatology team was contacted ASAP. PRs provided night coverage.</p>	<p>the difference was not statistically significant</p> <p>Conclusion: Wider use of NPs in neonatal ICUs yields a similar standard of care processes, parent satisfaction, and patient outcomes with delivery of NICU care by physician residents.</p>	
<p>Munding MO et al. (2000). Primary care outcomes in patients treated by nurse practitioners or physicians: a randomized trial. <i>JAMA</i>; 283(1); 59-68.</p>	<p>RCT designed to compare outcomes for patients randomly assigned to NP or MD for follow up and ongoing care after an ER visit.</p> <p>N = 1,316 enrolled and randomized to MD (n =510) or to NP (n = 806).</p> <p>Outcome measures: health status (SF-36), patient satisfaction, physiologic test results for asthma, diabetes and hypertension at 6 months, and health service utilization at 1 year</p>	<p>Conducted in five community – based primary care practice clinics in New York City – all associated with 1 urban academic hospital (1 clinic established with NPs only)</p> <p>Established equivalence of practice and of patient panel for both study groups (NP and MD) NPs had same authority to</p>	<p>No significant differences in patients' health status at 6 months (p = .92). Physiological tests for diabetes (p = .82) or asthma (p = .77) were not different. For patients with hypertension, diastolic BP rates were lower for the NP group (p = .04). No significant differences in health services utilization after 6 months or after 1 year. No differences in patient satisfaction following initial appointment. Rating at 6 months differed for 1 of 4 dimensions measures (provider</p>	<p>Time frame short (6 months) because population highly transient but 1 year post enrolment health services utilization was assessed. (see Phase II study by Lenz et al. 2004 above)</p> <p>Population represented sub-population of primarily Hispanic/ Puerto Rican Medicaid clients – may affect generalizability NP practice newly established; Uses a traditional medical model of primary care – diminished evaluation of impact of NP model</p>

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		<p>prescribe, consult, refer, & admit patients as MD</p> <p>Sample size estimate calculated to achieve adequate power to detect a difference of 5 points of the 100 item SF-36 Medical Outcomes instrument on all scales when comparing 2 groups with repeated measures. (considered to be clinically and socially relevant difference to SF-36 interpretation) Assumed alpha of .05, 2 tailed t-test, power of 80% Due to # lost to follow up, a post hoc power analysis was carried out which demonstrated adequate statistical power</p>	<p>attributes) with MDs rated higher (p = .05)</p> <p>Conclusion: When NPs have the same authority, responsibility, productivity and administrative requirements and patient population as primary care MDs, patient outcomes are comparable in an ambulatory care setting.</p>	
<p>Mynors-Wallis LM et al. (2000). Randomized controlled trial of problem solving treatment, antidepressant medication, and combined treatment for major depression in primary care. <i>British Medical Journal</i>; 320(7226); 26-30.</p>	<p>RCT with 4 treatment arms for major depression:</p> <ul style="list-style-type: none"> - problem solving treatment by GP - problem solving treatment by nurse - anti-depressant medication given by GP - combined medication by GP and problem solving treatment by nurse <p>Sample size estimate to achieve power of .90 at 5% significance based on comparisons of 2 groups at a time</p>	<p>Oxfordshire, UK</p> <p>Patients recruited from 24 general practices</p> <p>Patients with score of 13 or more on the Hamilton rating scale (17 item scale) Aged 18-65 years; Major depression but not severe enough for admission to hospital</p>	<p>Depressive disorders are common in primary care (about 5% for both major and minor depression) Problem solving treatment (PST) is an effective treatment for depressive disorders in primary care PST can be delivered by suitably trained MDs or nurses; there was no difference in outcome between those treated by the MD and those treated by the nurse. Combination of PST and anti-depressant medication is no more effective than either treatment alone. PST is most likely to benefit patients who have a depressive disorder of moderate severity and who wish to participate in an active psychological treatment. MDs may not have time to carry out PST and this can be carried out by the practice nurse.</p>	<p>Not clear whether the practice nurse in this study is a NP or a RN with additional training in PST Economic analysis not included Short time frame (12 weeks for intervention) plus 1 year follow up No standardized approach to care during follow up period.</p>

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<p>National Council of State Boards of Nursing (NCSBN). Advanced Practice Registered Nurses (APRN) <i>APRN Vision Paper Update and Outcomes from the NCSBN Sponsored Member Board Summit</i>, Summit held Feb. 26, 2007, Chicago, IL</p>	<p>Presentation given at a recent Summit providing a report on 2006-07 developments including:</p> <ul style="list-style-type: none"> - NCSBN NP/CNS role delineation study - NACNS and ANCC Committee meeting individually with stakeholder groups - Known areas of agreement - Areas for further discussion 	<p>USA Context</p> <p>2000: NCSBN Board appointed a special Advanced Practice Task Force to examine the regulatory sufficiency of advanced practice certif. exams; Task Force undertook a retrospective evaluation of the current review process and made recommendations to assure consistency in certification to support the boards in protecting the public.</p> <p>2002: NCSBN Board approved criteria for the certif. programs and for the accrediting agencies developed by the Advanced Practice Task Force.</p> <p>2002: Task Force developed a <i>Position Paper on the Regulation of Advanced Practice</i></p>	<p>NCSBN recommends the use of APRN certification examinations as a basis for licensure decisions. (See <i>Using Nurse Practitioner Certification for State Nursing Regulation: A Historical Perspective</i>).</p> <p>Reasons presented for a Common APRN Model:</p> <ul style="list-style-type: none"> - Lack of common definitions related to APRN roles - Proliferation of specialties and sub-specialties (e.g., palliative care NP, forensic NP, homeland security NP) - Lack of common legal recognition across jurisdictions: less than 30 states recognize or title protect CNS; not all states license/ authorize CRNA same as NP - Lack of standardization in programs leading to APRN preparation (Initial accreditation/approval necessary; Blended programs with variable clinical hours; Inconsistent Master's Essentials compliance; Programs graduating students that cannot be licensed.) 	<p>USA regulatory context for APN is significantly different to Canadian context. See Jurisdiction Review attached.</p>
<p>Pioro, MH et al. (2001). Outcomes-based trial of an in-patient nurse practitioner service for general medical patients. <i>J of Evaluation in Clinical Practice</i>, 7(1), 21-33.</p>	<p>RCT comparing resource use and outcomes of general medical patients receiving care from a NP or traditional house staff medical care.</p> <p>NPs admitted patients on weekdays; the unit had a board certified internist for the medical director and house staff provided after hours coverage and emergency coverage.</p> <p>Computer generated randomization of ward assignments when both NP and MD managed beds were available.</p>	<p>Cleveland University Hospitals in affiliation with Case Western Reserve University in Ohio, USA</p> <p>947 bed private, non-profit teaching hospital</p> <p>Study took place over 18 months n = 104 patients to NP ward and n = 277 patients to MD ward Total of 381 randomized</p>	<p>NP and house-staff had similar outcomes for resource utilization, costs related to ancillary services, and rates of consultation. No difference detected in rates of complications/adverse events, death or discharge destination. More NP patients received home care services. Functional status and health status (SF-36) improved over course of admission and these changed similarly in both groups. Patient assessments of care were similar.</p>	<p>Significant cross-over of patients occurred after randomization d/t MD request, NP request, "misc reasons", or bed unavailability which could affect equivalence of patient panels but these were assessed post hoc as similar (p >0.1)</p> <p>Power to detect differences between the two groups was low in some endpoints.</p> <p>Non-blinded study.</p>

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			Conclusion: Findings suggest that care provided by NPs, supported by attending doctors is associated with similar resource use and similar outcomes as care delivered by house staff.	
Rich ER, Jordan ME, Taylor C.J. (2001) Assessing successful entry into nurse practitioner practice: a literature review. <i>JNY State Nurses Assoc.</i> Fall Winter; 32(2):14-8	Literature review	Compares successful entry of NP program graduates from various backgrounds into NP practice. Reviews research studies that examine successful entry into NP practice by RNs as well as by non-nurse college graduates with no prior nursing experience.	Educational background and experience as a RN, socialization into practice, transition into NP practice, and evaluation measures of successful NP practice are the key factors that have an impact on successful entry of NP program grads into practice. Conclusion: There is a need for further work on assessment of successful entry into NP practice.	USA Context
Seale, C, Anderson, E & Kinnersley, P (2006). Treatment advice in primary care: a comparative study of nurse practitioners and general practitioners. <i>J of Advanced Nursing</i> , 54(5), 534-541.	Descriptive, mixed methods study of content of talk about treatments by NPs and MDs in general practice (GPs) to determine if this content might be related to client satisfaction with care Analysis of transcripts from audiotaped consultations. Total of 55 consultations recorded: 22 GP and 33 NP. From this pool, 18 matched pairs of NPs and GPs where patients sought same day appointments and demonstrated similar/comparable gender, age and presenting complaint. Case studies of 6 paired consultations were studied in depth using content analysis. Quantitative analysis of: types of treatments offered and number of utterances in 5 different categories: treatment proposed; how to treat; cost of treatment; side effects; all treatment talk.	UK setting in 1998 Nine GP practices	Statistically significant difference in content of "talk". NP content concerned treatments, how to use the treatments, discussion of side effects more than GPs. NPs recommended a greater number of treatments and demonstrated greater concern about the acceptability and cost of treatments to patients. NPs offer more holistic care and provide more information to patients – this may be related to the longer consultation time and greater satisfaction levels with care reported by other investigators. GP talk focused more on gathering information relevant to diagnosing and treating the immediate presenting problem. Conclusion: Both types of providers may benefit from seeing detailed illustrations of the different approaches.	Small sample; largely qualitative design with selected quantitative analysis Generalizability not established.
Sidani, S et al. (2006). Processes of care: comparisons between nurse practitioners and	Cross-sectional comparative design in which 31 acute care NPs and 10 physician residents completed a study questionnaire designed to assess performance	Eight (8) acute care hospitals in 2 cities in southern Ontario, Canada Primarily academic/ teaching	Both ACNPs and PRs spent the majority of their time in clinical practice functions. ACNPs engaged more in management tasks (p =	Convenience sample of ACNPs and PRs with unequal groups.

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<p>physician residents in acute care. <i>Can J of Nurs Leadership</i> 19(1): 69-85.</p>	<p>of role functions, provision of comprehensive care & coordination of services. Used framework for evaluating the role of the acute care NP by Sidani & Irvine (1999)</p> <p>Provision of “comprehensive care” is operationalized as: patient participation in care; patient counseling; and patient education.</p> <p>“Coordination of care” is conceptualized as: conscious activity of synchronizing & harmonizing efforts so that they meet objectives.</p> <p>Patients who had received care from the ACNP (n = 320) and those who received care from the PR (n = 46) completed a questionnaire 1 week following discharge.</p> <p>ACNPs (n = 38) and PRs (n = 10) participated.</p> <p>Processes of care were measured using an activity list developed by Sidani et al. (2000), that included 52 activities divided into in 8 categories (that also reflected the 4 components of the ACNP role) The first 5 activities reflected the functions that overlapped with the PR role. A separate version was prepared for patients.</p>	<p>hospitals where ACNPs were employed</p> <p>Convenience sample of ACNPs, PRs and patients who met study eligibility criteria</p> <p>Patients included “high-volume conditions in medicine and surgery; were divided into 2 groups: those who received care primarily from the ACNP and those who received care from the PR.</p>	<p>.000) and informal coordination (p = .030) than PRs. PRs engaged in more formal coordination activities (p = .033) than ACNPs. ACNPs encouraged more patient participation in care and more patient education than PRs.</p> <p>No statistically significant difference in time spent in counseling patients, although ACNP mean score was slightly higher. ACNPs reported more time spent in encouraging patient participation in care (p = .050) and in patient education (p = .030).</p> <p>Patients who received care from ACNPs reported higher levels of care coordination (p = .000) participation in care (p = .000), counseling (p = .000) and education (p = .000) than patients who received care from PRs.</p> <p>These reflect differences in processes of care that could influence quality and cost outcomes.</p>	<p>Quality and cost outcomes not assessed. Primarily descriptive study.</p>
<p>Spitzer WO et al. (1974). The Burlington randomized trial of the nurse practitioner. <i>New England Journal of Medicine</i>; 290(5): 251-256.</p>	<p>RCT in which two nurses with additional education took care of 67% of patient visits in a suburban family practice (2 MDs) for one year.</p> <p>“Families” were the unit of randomization. Equally divided between the 2 MDs and the 2 NPs. Random allocation in a 2:1 ratio (MD to NP) as the case load for the NP was believed to be half that of the MD.</p> <p>N = 1058 families (2796 individuals) allocated to the 2</p>	<p>Conducted in Burlington, ON, Canada in one family practice</p>	<p>Innovations in health care can be assessed using a RCT.</p> <p>NPs can provide first contact primary care as safely and effectively, with as much patient satisfaction, as a family MD.</p> <p>Standard outcome measures of patient health status and satisfaction found that there was no difference between those patients who received care from the MD and those who received care from the nurses.</p>	<p>Historical paper; single site, small numbers</p> <p>Educational preparation of the NPs differs considerably from current context; however, still considered to be a methodologically strong study that established a framework for NP evaluation in primary care</p> <p>Foundational to the PEPPA Framework developed and tested by DiCenso (see above)</p>

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	<p>MDs and n = 540 families (1529 individuals) allocated to the 2 NPs.</p> <p>Sample sub-group termed "Interview cohort": N = 817 patients with 296 in experimental group (NP care) and 521 in the conventional care group (MD and conventional office nurse) selected for administration of surveys.</p> <p>No significant differences in health status at baseline across the 2 groups.</p> <p>Study period one year between July 1971 to July 1972. Before and after measures.</p> <p>Outcomes: Measured paired comparisons of change in health status and medical utilization, clinician activities, and practice activities.</p>		<p>Size of practice was able to expand to admit 1000 additional families</p> <p>No differences in physical functional capacity, social or emotional function across two groups.</p> <p>Conclusion: Quality of care given to both groups similar –Provider satisfaction high; not financially profitable because of reimbursement model for MDs.</p>	
<p>Venning P et al. (2000). Randomized controlled trial comparing cost effectiveness of general practitioners and nurse practitioners in primary care. <i>British Medical Journal</i>, 320(7241); 1048-1053.</p>	<p>Randomized controlled trial to compare process, outcomes and costs of care of GPs and NPs as first point of contact in primary care.</p> <p>For patients requesting same day appointment.</p> <p>NPs work as part of the team along side GPs. NPs had to get prescriptions signed by the GP. Patients were accustomed to seeing NPs in the practice; each NP had been seeing patients as first point of contact for at least 2 years</p>	<p>20 general practices in England and Wales, UK</p> <p>N = 1292 patients randomized to see either a GP or a NP if they requested a same day appointment and when they arrived at the practice.</p> <p>Coded block randomization: receptionist and patient blinded to allocation; code broken at start of appointment.</p> <p>GPs = 651 patients</p> <p>NPs = 641 patients</p>	<p>Commonest presenting problem was upper respiratory infection.</p> <p>NPs spent mean of 11.57 minutes face to face per patient; GPs spent mean of 7.28 minutes.</p> <p>NPs issued fewer prescriptions (had to get them signed by MD) but difference was not statistically significant.</p> <p>NPs demonstrated similar prescribing behaviour to the GPs.</p> <p>NPs ordered more tests; NPs were more likely to ask patients to return.</p> <p>NP consulted with MD for 81 cases and referred to MD for 26 cases.</p> <p>Patients significantly more satisfied with NP visit. No difference in health status after 2 weeks.</p> <p>Clinical care and health service costs of NPs and GPs were similar; based on actual costs (real salaries, NHS formulary costs, costs for</p>	<p>Convenience sample of patients.</p> <p>Unable to calculate power required for cost analysis before study because of lack of evidence from other UK studies</p> <p>Did not report post hoc power calculations.</p> <p>MD signature on NP prescriptions likely a confounding factor in assessing NP prescribing intent.</p>

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			investigations and referrals). NPs costs were 12.5% lower than GPs but difference not statistically significant	
Way D, Jones L, Baskerville B & Busing N. (2001). Primary health care services provided by nurse practitioners and family physicians in shared practice. <i>Canadian Medical Association Journal</i> , 165(9), 1210-14.	Pilot study of an outreach intervention to improve structured collaborative practice between NPs and FPs Objective of the study was to determine what primary health care services are provided to patients by NPs and FPs working in the same rural practice setting.	Practice study: Baseline data from two rural Ontario primary care practices	For the practices in this study NPs were underutilized with regard to curative and rehabilitative care. Referral patterns indicated little evidence of bidirectional referral (a measure of shared care). Explanations for the findings include medico-legal issues related to shared responsibility, lack of interdisciplinary education and lack of familiarity with the scope of NP practice.	Descriptive study

Summary of Selected Documents on NP Scope of Practice

- There is little in the Canadian literature concerning scope of practice issues (IBM Consulting, 2005). However, the literature confirms that role ambiguity and lack of understanding of the NP role (by the public and health care providers) are perceived as significant barriers to effective implementation of the role.
- NP practice is described as different from medical care. Both medicine and nursing have independent professional scopes of practice. The medical scope of practice is broad for the profession. Within that, individual physicians have an individual scope of practice defined by their competency. For example, all may legally prescribe any approved drug but all limit their prescribing to their individual knowledge and area of practice. The controlled acts for both medicine and nursing represent a small component of the entire scope of practice. Physicians have authorization to perform all controlled acts.
- Medicine and nursing have overlapping scopes. The general class nurse (RN) practices within the overlap in an interdependent way for controlled acts (e.g., carrying out medical orders for the patient when the patient can not perform the function or by medical directive for groups of patients. The NP carries out some of these overlap functions independently and some interdependently (by medical direction (for groups of patients) or by physician order (for individual patients).
- The scope of practice for NPs varies within Canadian jurisdictions and between countries. In addition, roles differ between type of NPs (e.g., Primary Health Care NP and the Acute Care NP) and in response to geography and access to care.

The following table provides brief summaries of documents as well as recent publications related to the NP scope of practice.

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Bourgeault, GM. (2006). Collaborative health care teams in Canada and the USA: Confronting the structural embeddedness of medical dominance. <i>Health Sociology Review</i> . Dec 2006. Vol. 15: 5, 481-495	Analysis based on documentary and interview data from key stakeholders influential in various collaborative care initiatives.	The paper undertakes a critical analysis of the factors promoting and impeding collaborative care models of primary and mental health care in Canada and the USA.	Develop a conceptual model of the various levels of influence, focusing in particular on the macro (regulatory/funding) and meso (institutional) factors. The comparative policy and institutional analysis reveals the similarities and differences in the influences of the broader contexts in Canada and the USA, and the different ways that the structural embeddedness of medical dominance impinges upon and reacts to recent policy changes regarding collaborative health care teams. The impact of this embeddedness on access to care is illustrated.	
Canadian Health Services Research Foundation. (2005). <i>A systematic approach to maximizing nursing scopes of practice</i> . Prepared by Besner, J, Doran, D et al.	Policy/research review including literature searches	Purpose of this study was to elicit nurses' (licensed practical nurses, registered nurses, and registered psychiatric nurses) perceptions of the extent to which they are able to work to full scope and to identify perceived barriers and facilitators to optimizing their roles.	Provides a summary of key implications for decision makers: Regulatory bodies must work together to harmonize existing competency frameworks and consult with each other in the future development of their respective regulatory documents. Regulatory bodies and unions representing the three categories of nurses must work together to help their respective members become	Includes broad recommendations

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		<p>The study was conducted in three health regions - Calgary Health Region and Capital Health in Alberta , and Saskatoon Health Region in Saskatchewan.</p>	<p>more informed about their own and their colleagues' roles in the health system.</p> <p>Policy makers must address the role ambiguity that currently exists across the health professions. A clear understanding of professional roles and contributions is essential to appropriate health human resources planning, including planning for the right number and type of education seats.</p> <p>Employers and managers must engage health professionals in discussion of distinct and shared responsibilities among team members to promote effective collaborative practice, improve role clarity, and enhance quality of care. Continuing education of the current workforce will be an important strategy in moving toward more effective teamwork in healthcare.</p> <p>Educators have an important role to play in preparing future health professionals for collaborative practice. It will require they have, and are able to transmit, accurate knowledge to their students about the roles and responsibilities of nurses and other providers in the health system.</p> <p>Employers, regulatory bodies, educators, practitioners, unions, and policy makers must engage in dialogue about strategies for improving the utilization of all health professionals.</p> <p>Employers and managers must employ effective change management strategies when introducing new staff mix models.</p> <p>Healthcare organizations, policy makers, and agencies responsible for monitoring and reporting on health system performance must collaborate in addressing the current inadequacy of databases that allow linkage of unit or program level staff mix and contextual data to patient, provider, and system outcomes.</p>	
<p>Dunn, L. (1997). A literature review of advanced clinical nursing practice in the United States of America. <i>Journal of Advanced Nursing</i>, 25, 814-19.</p>	<p>A literature review of advanced clinical nursing practice in the United States of America.</p>		<p>Advanced nursing practice in the U.S. has evolved over the past decades in two related but distinct directions: the NP and the CNS. The evolution of these roles has unfolded in response to social demands for increased access to affordable, quality primary health care, and the need for specialized nursing care requirements of increasingly complex patients. Evidence supports the need for an advanced practice role for both the CNS and the NP; much of the knowledge, skills and</p>	

Authors, Title and publication	Type of Document or Study	Context	Main Findings/Recommendations	Limitations
			<p>competencies are shared depending on the clinical situation. Successes and failures associated with the development of the roles; literature suggests it may be time to take the best attributes of the two roles and merge them under the term 'advanced nurse practitioner'.</p>	
<p>Gould O.N. et al. (2007). Nurse practitioners in Canada: Beginnings, benefits and barriers. <i>J. American Academy of Nurse Practitioners</i>. 19;165-171</p>	<p>Qualitative study of NP perceptions and experiences following 1 year of practice in newly regulated context (New Brunswick).</p>	<p>45 minute semi-structured interviews with 7 of the 9 NPs in the province at the time</p>	<p>Three (3) main themes of importance: A nursing philosophy and approach to care was clearly different than that of medical care</p> <p>Difficulties and barriers to establishing the NP role described</p> <p>NPs described feelings of "pioneering" the new role</p> <p>NPs need to be accepted by both the public and other health professionals in order to work effectively to reduce health care costs and to improve access to care</p>	<p>Small sample</p>
<p>Villeneuve M & Macdonald J (2006). <i>Toward 2020 : Visions and Voices for Nursing</i>, Canadian Nurses Association, http://www.cna-nurses.ca/CNA/documents/pdf/publications/Toward-2020-e.pdf</p>	<p>Futures study Results of extensive literature review and multi-stakeholder interview process designed to elicit views of what the health care system and nursing practice will be like in the year 2020 in Canada. Project funded by Health Canada, Office of Nursing Policy and carried out by the C.N.A.</p>	<p>Canadian Context Key informants included persons from various backgrounds including politics, ethics, health care management, as well as nurses.</p>	<p>"We're in a new place; we're not on the edge of the old place. We're not pushing the envelope; we're in a totally new envelope. So the rules have changed. Every fundamental premise of the old way of thinking no longer applies." [<i>Sister Elizabeth Davis Chair, Canadian Health Services Research Foundation, 2005</i>]</p> <p>Generated six scenarios for maximizing nursing's contribution to the health of Canadians. These describe the health care system and education, regulation and roles, scope and practice settings for nurses</p> <p>"Education, job design and responsibilities must change as the country moves from a traditional acute-care, illness-treatment model of health care, to one that will focus on keeping people well, with both care and support for maintaining health delivered in the community. Making that happen will mean breaking down divisions within nursing, and barriers between it and other professions." <i>Executive Summary</i></p>	

Additional sources/links:

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CONCLUDING REMARKS

Section 1 of this paper summarized the core findings arising from the literature reviews undertaken as part of the CNPI. Section 2 provided an overview of some of the seminal evidence-based documents available on the role of the NP as well as a summary of recent articles/reports that have emerged subsequent to the CNPI review (i.e., 2005-2007 publications). In order to represent this large body of information, articles were reviewed under the following headings: *System Needs, Competency / Risk of Harm, and Scope of Practice*. Together, the information in this paper provides a foundation to support discussions concerning enhancements to NP scope of practice in Ontario.

Appendix A: Current versus Proposed Regulatory Framework for NPs in Ontario

	Controlled Acts under the Regulatory Framework (Current)	Controlled Acts under the Regulatory Framework (Proposed)
General	<p>NPs, like all other RNs and RPNs registered with the CNO, are currently authorized to perform any of the controlled acts set out below (subject to the terms, conditions and limitations imposed on a certificate of registration) if:⁹</p> <ul style="list-style-type: none"> • They are ordered to perform the procedure by another regulated health professional who is authorized to perform the procedure e.g., a physician); or • Regulations under the <i>Nursing Act, 1991</i> permit them to do so and they meet the requirements set out in the regulations. <p>These controlled acts are as follows:</p> <ol style="list-style-type: none"> 1. Performing a prescribed procedure below the dermis or a mucous membrane. 2. Administering a substance by injection or inhalation. 3. Putting an instrument, hand or finger, <ol style="list-style-type: none"> i. beyond the external ear canal, ii. beyond the point in the nasal passages where they normally narrow, iii. beyond the larynx, iv. beyond the opening of the urethra, v. beyond the labia majora, vi. beyond the anal verge, or vii. into an artificial opening into the body. 	<p>In general terms, the objective of the CNO's proposed changes to current provisions of the <i>Nursing Act, 1991</i> and regulations (as summarized below) is to provide NPs with the authority to autonomously perform:</p> <ul style="list-style-type: none"> • Those controlled acts to which NPs already have access under the current legislative framework; and • Certain additional controlled acts to which NPs do not have access under the current legislative framework.

⁹ *Nursing Act, 1991*, s.4 and 5(1).

<p>Communicating a diagnosis</p>	<p>NPs may autonomously communicate to a patient or to his or her representative a diagnosis made by the NP identifying, as the cause of the patient's symptoms, a disease or disorder that can be identified from,</p> <ul style="list-style-type: none"> i. the patient's health history, ii. the findings of a comprehensive health examination, or iii. the results of any laboratory tests or other tests and investigations that the member is authorized to order or perform.¹⁰ <p>An NP is not authorized to communicate a diagnosis under paragraph 1 unless he or she has complied with the prescribed standards of practice respecting consultation with members of other health professions.¹¹</p> <p>The prescribed standards of practice are those set out in the CNO publication, "Standards of Practice for Registered Nurses who hold an extended class certificate of registration", as that publication exists and is amended by the CNO from time to time.¹²</p>	<p>CNO seeks removal of limitations on communicating a diagnosis.</p> <p>The proposed revised controlled act, to be included in the <i>Nursing Act, 1991</i>, would read: "Communicating a diagnosis identifying a disease or disorder as the cause of a person's symptoms."</p> <p>CNO also seeks removal of limitations on the type of laboratory and diagnostic tests (i.e., x-rays, ultrasounds) that NPs¹³ are permitted to order. These limitations are found in legislation other than the <i>Nursing Act, 1991</i> and regulations under that Act and would have to be addressed accordingly.</p> <p>CNO seeks removal of the requirement that NPs comply with prescribed standards of practice respecting consultation with members of other health professions.</p> <p>CNO proposes that the regulation pertaining to prescribed standards of practice be revised as set out in the section below, "Standards of Practice".</p>
<p>Forms of Energy</p>	<p>NPs may autonomously order the application of a form of energy prescribed by the regulations under this Act.¹⁴</p> <p>The regulations prescribe: the application of sound-waves for diagnostic ultrasound of the abdomen, pelvis and breast.¹⁵</p>	<p>CNO seeks a new controlled act, to be included in the <i>Nursing Act, 1991</i>, to allow NPs to also apply (and not just order) a form of energy prescribed by regulation.</p> <p>The proposed revised controlled act, to be included in the <i>Nursing Act, 1991</i>, would read: "Applying or ordering the application of a form of energy prescribed by the regulations under [the <i>Nursing Act, 1991</i>]."</p> <p>The proposed forms of energy to be prescribed by regulation are:</p> <p>Forms of energy that NPs may <i>apply</i>:</p> <ol style="list-style-type: none"> 1) Electricity for: <ul style="list-style-type: none"> • Cardiac pacemaker therapy;

10 *Nursing Act, 1991*, S.O. 1991, c.32, as amended, s.5.1(1) paragraph 1

11 *Nursing Act, 1991*, s.5.1(2)

12 O.Reg.275/94, as amended, s.20

13 The acronym "NPs" (meaning "nurse practitioners") is used to refer to registered nurses in the extended class, within the meaning of the *Nursing Act, 1991* and regulations under that Act (also referred to as "RN(ECs)").

14 *Nursing Act, 1991*, as amended, s.5.1(1) paragraph 2

15 O.Reg.275/94, as amended, s.18

		<ul style="list-style-type: none"> • Cardioversion; • Defibrillation; • Electrocoagulation; • Fulguration; or • Transcutaneous cardiac pacing. <p>2) Soundwaves for diagnostic ultrasound.</p> <p>Forms of energy that NPs may <i>order</i> another provider to apply:</p> <p>1) Electricity for:</p> <ul style="list-style-type: none"> • Cardiac pacemaker therapy; • Cardioversion; • Defibrillation; • Electrocoagulation; • Electromyography; • Fulguration; • Nerve conduction studies • Transcutaneous cardiac pacing. <p>2) Electromagnetism for magnetic resonance imaging.</p> <p>3) Soundwaves for diagnostic ultrasound.</p>
<p>Procedures</p>	<p>NPs may autonomously perform any of the following procedures if they meet prescribed conditions as set out below:¹⁶</p> <p>1. With respect to the care of a wound below the dermis or below the surface of a mucous membrane, any of the following procedures:</p> <ul style="list-style-type: none"> i. cleansing, ii. soaking, iii. irrigating, iv. probing, 	<p>CNO proposes that the <i>Nursing Act, 1991</i> authorize NPs to autonomously perform the following controlled acts:</p> <p>“Performing a procedure on tissue below the dermis or below the surface of a mucous membrane.</p> <p>Putting an instrument, hand or finger,</p> <ul style="list-style-type: none"> i. beyond the external ear canal, ii. beyond the point in the nasal passages where they normally narrow, iii. beyond the larynx, iv. beyond the opening of the urethra,

¹⁶ O.Reg.275/94, as amended, s.17

¹⁷ O.Reg.275/94, as amended, s.15(5)

¹⁸ O.Reg.275/94, as amended, s.15(2) and (4); this authority is also extended to RNs who are not NPs

<p>v. debriding, vi. packing, vii. dressing, viii. suturing, except below the fascia and except in cases in which there may be underlying damage.</p> <p>2. Venipuncture to establish peripheral intravenous access.</p> <p>3. Venipuncture to obtain a blood sample for a test set out in Appendix C of Regulation 682, R.R.O. 1990 (Laboratories) made under the <i>Laboratory and Specimen Collection Centre Licensing Act</i> (Ontario).</p> <p>4. A procedure that, for the purpose of assessing or treating an individual or assisting an individual with health management activities, requires putting an instrument,</p> <ul style="list-style-type: none"> i. beyond the point in the individual's nasal passages where they normally narrow, ii. beyond the individual's larynx, or iii. beyond the opening of the individual's urethra. <p>5. A procedure that, for the purpose of assessing or treating an individual, assisting an individual with health management activities or making a diagnosis with respect to an individual, requires putting an instrument or finger,</p> <ul style="list-style-type: none"> i. beyond the individual's anal verge, or ii. into an artificial opening into the individual's body. <p>6. A procedure that, for the purpose of assessing or treating an individual, assisting an individual with health management activities or making a diagnosis with respect to an individual, requires putting an instrument, hand or finger beyond the individual's labia majora.</p> <p>The prescribed conditions are:¹⁷</p> <ol style="list-style-type: none"> 1. The registered nurse has the knowledge, skill and judgment to perform the procedure safely, effectively and ethically. 2. The registered nurse has the knowledge, skill and judgment to determine whether the individual's 	<p>v. beyond the labia majora, vi. beyond the anal verge, or vii. into an artificial opening into the body.”</p> <p>This change would render the existing provision relating to procedures, which is set out in the regulations and not as broad in scope, unnecessary.</p> <p>Another implication of the CNO's proposed changes would be to remove the requirement for NPs to meet these currently prescribed conditions. Instead, adherence to standards of practice would be addressed as discussed below in the section, “Standards of practice”.</p>
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<p>condition warrants performance of the procedure.</p> <p>3. The registered nurse determines that the individual's condition warrants performance of the procedure, having considered,</p> <ul style="list-style-type: none"> i. the known risks and benefits to the individual of performing the procedure, ii. the predictability of the outcome of performing the procedure, iii. the safeguards and resources available in the circumstances to safely manage the outcome of performing the procedure, and iv. other relevant factors specific to the situation. <p>4. The registered nurse accepts accountability for determining that the individual's condition warrants performance of the procedure.</p> <p>"Any member" of the College (i.e., a registered practical nurse, registered nurse or NP) is authorized to perform any of the following procedures if the procedure is ordered by an NP:¹⁸</p> <p>1. With respect to the care of a wound below the dermis or below a mucous membrane, any of the following procedures:</p> <ul style="list-style-type: none"> i. cleansing, ii. soaking, iii. irrigating, iv. probing, v. debriding, vi. packing, vii. dressing. <p>2. Venipuncture to establish peripheral intravenous access and maintain patency, using a solution of normal saline (0.9 per cent), in circumstances in which,</p> <ul style="list-style-type: none"> i. the individual requires medical attention, and ii. delaying venipuncture is likely to be harmful to the individual. <p>3. A procedure that, for the purpose of assisting an individual with health management activities, requires</p>	<p>With access to the broad controlled acts set out in the <i>Nursing Act, 1991</i> as proposed above, the CNO proposes that NPs would then have clear authority to order another member of the College (i.e., a registered practical nurse, registered nurse or NP) to perform any controlled act which the member is authorized to perform.</p>
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	<p>putting an instrument,</p> <p>i. beyond the point in the individual's nasal passages where they normally narrow, ii. beyond the individual's larynx, or iii. beyond the opening of the individual's urethra.</p> <p>4. A procedure that, for the purpose of assessing an individual or assisting an individual with health management activities, requires putting an instrument or finger,</p> <p>i. beyond the individual's anal verge, or ii. into an artificial opening into the individual's body.</p> <p>5. A procedure that, for the purpose of assessing an individual or assisting an individual with health management activities, requires putting an instrument, hand or finger beyond the individual's labia majora.</p>	
Setting and Casting	NPs do not currently have access to this controlled act.	<p>CNO seeks a new controlled act to allow NPs to set or cast a fracture of a bone or dislocation of a joint.</p> <p>The proposed new controlled act, to be included in the <i>Nursing Act, 1991</i>, would read: "Setting or casting a fracture of a bone or a dislocation of a joint."</p>
Drugs	<p>NPs may autonomously prescribe a drug designated in the regulations.¹⁹</p> <p>The regulations prescribe: immunizing agents as listed in Schedule 2 to O.Reg. 275/94; drugs as listed in Schedule 3 to O.Reg. 275/94, to be prescribed by NPs only in accordance with the circumstances as listed (i.e., for some of the drugs listed, NPs are authorized to order only renewals or in emergency circumstances); and any drug that may be lawfully purchased without prescription.²⁰</p>	<p>CNO seeks removal of the requirement that NPs be limited to prescribing drugs, or categories of drugs, designated in regulations.</p> <p>CNO seeks a new controlled act to allow NPs to dispense, sell or compound a drug.</p> <p>The proposed revised controlled act would read: "Prescribing, dispensing, selling or compounding a new drug."</p>
Administering, by injection or inhalation	NPs may autonomously administer, by injection or inhalation, a drug that the member may prescribe as set out above. ²¹	<p>CNO seeks removal of the requirement that NPs be limited to administering, by injection or inhalation, drugs, or categories of drugs, designated in regulations.</p> <p>The proposed revised controlled act would read: "Administering a substance by injection or inhalation."</p>

¹⁹ *Nursing Act, 1991*, as amended, s.5.1(1) paragraph 3

²⁰ O.Reg.275/94, as amended, s.19

²¹ *Nursing Act, 1991*, as amended, s.5.1(1) paragraph 4

<p>Standards of Practice</p>	<p>As noted in the section above, “Communicating a diagnosis”, an NP is not authorized to communicate a diagnosis under paragraph 1 unless he or she has complied with the prescribed standards of practice respecting consultation with members of other health professions.²²</p> <p>The prescribed standards of practice are those set out in the CNO publication, “Standards of Practice for Registered Nurses who hold an extended class certificate of registration”, as that publication exists and is amended by the CNO from time to time.²³</p>	<p>CNO proposes that the regulations²⁴ be revised to provide that:</p> <ul style="list-style-type: none"> • The CNO document, “Practice Standard: Performance of Controlled Acts by Nurse Practitioners” as published by the CNO (as of a specified date) be prescribed as a standard of practice for the profession; • The CNO ensure that document is circulated to NPs and available to the public upon request; and • Each NP who performs controlled acts ensure that the standards set out in that document are complied with.
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²² *Nursing Act, 1991*, s.5.1(2)

²³ O.Reg.275/94, as amended, s.20

²⁴ O.Reg.275/94, as amended, s.20