

**ADVANCED PRACTICE NURSING ROLES:
A PROPOSED FRAMEWORK FOR EVALUATION –
PEPPA PLUS TOOLKIT**

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**Denise Bryant-Lukosius RN PhD
Associate Professor, School of Nursing McMaster University**

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TABLE 1 - EXAMPLES OF EVALUATION OBJECTIVES, STRUCTURES, PROCESSES, AND OUTCOMES BY STAGE OF ROLE DEVELOPMENT

INTRODUCTION STAGE			
Evaluation Objective	Structures	Processes	Outcomes
Determine healthcare needs that can be met by APN roles in varied practice settings and models of care.	Jurisdictional contexts Patient/family health and healthcare needs Factors leading to met/unmet health needs Perceived priorities	Healthcare experiences, practices and models of care delivery	N/A
Promote APN role clarity and a good match between healthcare needs and the APN role.	Perceptions of APN roles APN role competencies, knowledge, and skills APN role job description	Stakeholder engagement in APN role design and planning APN role services and interventions	Consensus on priority APN role goals and outcomes Consistency of APN role job description with goals and expected outcomes Stakeholder awareness and understanding of APN roles
IMPLEMENTATION STAGE			
Evaluation Objective	Structures	Processes	Outcomes
Ensure appropriate structures are in place to support effective APN role implementation	Healthcare policies, funding, legislation and regulation APN role standards/competencies Education programs and curricula	Participation in APN role education and mentorship	Access to and satisfaction with APN role education programs Advanced practice nurse competence and confidence
Understand the impact of APN roles	Advanced practice nurse characteristics	Patient, family, advanced practice nurse and HCP experiences Dose of APN role interactions	Satisfaction with APN role Integration of APN role in the HCT Achieve expected APN role outcomes
Promote optimal use and implementation of APN roles	Supply of APNs to meet current demands Barriers/facilitators to achieving expected APN role outcomes	APN role practice patterns and deployment Use of APN services	APN role acceptance Advanced practice nurse satisfaction/retention Effective use of advanced practice nurse knowledge, skills, and SOP for all APN role competencies
LONG-TERM SUSTAINABILITY STAGE			
Evaluation Objective	Structures	Processes	Outcomes
Demonstrate the long-term benefits and impact of APN roles	Type, number and characteristics of APN role innovations and productivity	Advanced practice nurse leadership to develop/ implement new policies and practices. Advanced practice nurse involvement in health system improvement	Patient and HCP behaviors Continuity/coordination of care Quality of care Health service use, healthcare costs, and cost-benefits
Ensure APN roles meet long-term healthcare needs	Healthcare trends Vision of the APN role Barriers to APN role integration. Supply of APNs to meet future needs	APN role evolution and needs for modification Dissemination/use of research evidence to make decisions about APN roles	Integration of APN roles into the healthcare system APN role outcomes are sustained over time

APN=Advanced Practice Nursing, APNs=Advanced Practice Nurses, HCP=Healthcare Provider, HCT=Healthcare Team; N/A=Not Applicable, SOP=Scope of Practice

TABLE 2 - Template Examples of Information Needs and Evaluation Questions for Each Stage of APN Role Development

STAGE OF APN ROLE DEVELOPMENT - INTRODUCTION					
Evaluation Objectives	Structures	Processes	OUTCOMES		
			Short-Term < 2 years	Intermediate 2 to 3 years	Long-Term 4 to 5 years
To determine patient, family, healthcare provider, team, organization, and health system needs that can be met by APN roles in varied practice settings and models of care delivery.	<p>In relation to specific jurisdictional contexts (e.g., healthcare team, program, organization, region, country) what patient populations have significant unmet health needs (e.g., incidence, prevalence, acuity, morbidity, mortality) requiring new approaches to care delivery?</p> <p>What are stakeholder perceptions of priority patient populations for the introduction of APN roles?</p> <p>What factors (e.g., patient, human resource, care delivery, economic, quality of care) contribute to unmet patient health needs, poor access to care and/or inappropriate or avoidable use of healthcare services?</p> <p>What patient populations would benefit the most from the introduction of new models of care delivery that include an advanced practice nurse? Why?</p>	<p>What are patient and family experiences in current models of care?</p> <p>What are healthcare provider experiences in current models of care?</p> <p>What new care practices and models of care delivery are required to address priority unmet patient health needs?</p>	NA	NA	NA
To promote APN role clarity among stakeholders by ensuring a good match between identified needs and the type of APN role, role competencies and scope of practice.	<p>What is the awareness, understanding, and perception of APN roles among stakeholders (e.g., patient, healthcare providers, managers, policy makers)?</p> <p>What knowledge, skills, competencies and scope of practice do APNs require to meet role demands and expectations?</p> <p>Which type(s) of APN roles are best suited to address priority unmet patient health needs?</p> <p>What is the specific job description for the advanced practice nurse?</p>	<p>What interventions are needed to improve stakeholder awareness and understanding of APN roles?</p> <p>To what extent have APNs and other stakeholders been involved in designing and planning of APN roles?</p> <p>What is the package of APN role services and interventions that should be provided and how should they be delivered within new models of care?</p>	Is progress being made to improve stakeholder awareness, understanding and perceptions of APN roles?	<p>What is the level of stakeholder consensus on priority APN role goals and outcomes?</p> <p>What proportion of APNs have a written job description that is consistent with role expectations and national APN standards?</p>	

STAGE OF APN ROLE DEVELOPMENT - IMPLEMENTATION

STAGE OF APN ROLE DEVELOPMENT - IMPLEMENTATION					
Evaluation Objectives	Structures	Processes	OUTCOMES		
			Short-Term < 2 years	Intermediate 2 to 3 years	Long-Term 4 to 5 years
To ensure that appropriate professional, educational, organizational and healthcare system policies, funding and resources are in place to support the implementation of varied APN roles in different practice settings and models of care delivery.	<p>What policies (funding, legislation, regulation, credentialing, practice, organizational) and resources are needed to implement APN roles?</p> <p>What are the national standards and competencies for APN?</p> <p>What curriculum requirements (e.g., admission requirements, clinical supervision, clinical hours) are necessary to develop APNs with entry-to-practice knowledge, skills, and competencies?</p> <p>What are the most effective strategies (e.g., OSCE, peer review, tests, interview) for evaluating clinical competency in APN education programs?</p> <p>What structures (guidelines, accreditation, surveillance authority) are needed to evaluate and monitor the consistency and quality of APN role education programs?</p> <p>What are the most effective strategies for providing continuing education to ensure ongoing advanced practice nurse clinical competency?</p> <p>What mechanisms need to be put in place to assess and monitor advanced practice nurse clinical competency following graduation?</p>	<p>What proportion of APNs meet national requirements for education and/or credentialing of the role?</p> <p>How many APNs participate in mentorship or communities of practice to support their professional and role development?</p> <p>What changes need to be made to existing graduate nursing programs and curricula to meet the rising demand for APN role education?</p>	<p>How many new APN graduates are there each year?</p> <p>How satisfied are APNs with their graduate APN role education programs?</p> <p>Is there sufficient access to APN role education programs for prospective students?</p> <p>Are there sufficient numbers of appropriately educated and experienced faculty to teach in APN education programs?</p> <p>How satisfied are employers with advanced practice nurse readiness for practice upon graduation?</p>	<p>Do APNs have the competence and confidence to implement their roles?</p>	<p>Are there sufficient numbers of qualified APNs to meet healthcare system demands for the role?</p> <p>How effective have guidelines and accreditations processes been for ensuring the consistency and quality of APN role education programs?</p> <p>How well are APNs maintaining clinical competency following graduation?</p>
	<p>What are stakeholder perceptions of the appropriate organizational structures for APN role supervision, reporting and support?</p>	<p>What are advanced practice nurse experiences related to administrative support and resources</p>	<p>To what extent do APNs feel well supported (by their team, supervisor, organization) in the implementation of their roles?</p>	<p>What is the advanced practice nurse retention rate?</p>	

		necessary to implement their role?			
	<p>What evidence-based guidelines and resources are available to inform APN practice?</p> <p>What are the gaps in advanced practice nurse use of evidence-based practices for a specific patient population ?</p>	<p>How do APNs utilize evidenced-based tools and resources to support their practice?</p> <p>How do APNs support the uptake of evidence-based practice (e.g., clinical pathways and guidelines)?</p>	<p>What is the effectiveness of knowledge translation interventions for improving advanced practice nurse use of evidence-based practices?</p>	<p>Is uptake of evidence-based practices improved among healthcare teams and organizations with compared to without an APN role?</p>	<p>Compared to usual care, does the addition of an advanced practice nurse to the model of care improve the consistency and quality of evidence-based care for specific patient populations.</p>
<p>To improve understanding about how APN roles impact on patient, family, healthcare provider, team, organization, and health system outcomes.</p>	<p>Are there differences in how novice and expert APNs implement their roles?</p> <p>What is the impact of different education models/curricula on APN role implementation?</p> <p>What is the impact of different patient factors (e.g., acuity, complexity, age) on APN role implementation?</p> <p>What is the impact of workplace conditions (e.g., team makeup, organizational culture, geographic location) on APN role implementation?</p> <p>How do regulatory policies (or lack of) impact on APN role implementation?</p> <p>What is the impact of reimbursement policies and systems (e.g., DRGs) on APN role implementation?</p>	<p>What are patient, family and healthcare provider experiences and perceptions of APN roles and their impact on outcomes?</p> <p>What is the relationship between the type, frequency and intensity of advanced practice nurse interactions with patients, families, healthcare providers, teams and decision-makers and expected role outcomes?</p>	<p>How satisfied are patients and families with the APN role?</p> <p>How satisfied are healthcare providers and other stakeholders with the APN role?</p> <p>To what extent are APNs engaged as members of the healthcare team?</p> <p>How and to what extent have APN roles improved access, coordination and continuity of care?</p>	<p>To what extent are APNs making progress in achieving expected role outcomes?</p> <p>What is the impact of the APN role on inter-disciplinary team function and collaboration?</p> <p>What is the impact (e.g., morale, job satisfaction, quality of care, recruitment, retention) of APN roles on nurses at the point-of-care?</p> <p>To what extent are APNs meeting patient and family health needs, improving health outcomes and,</p>	<p>How effective have APNs been in achieving identified role outcomes?</p> <p>Compared to usual care, does the addition of APN roles to teams or new models of care delivery lead to better outcomes for specific patient populations?</p>

				enhancing the quality of patient/family healthcare experiences?	
To promote optimal utilization and implementation of APN roles and achievement of expected outcomes by monitoring trends in practice patterns including deployment, retention, role activities, and barriers and facilitators to role implementation.	<p>Is the number of APNs and types of APN roles sufficient to meet current healthcare system needs?</p> <p>What are barriers and facilitators to achieving expected APN role outcomes?</p> <p>How do advanced practice nurse salaries and benefits compare across jurisdictions?</p>	<p>Where have APNs been deployed?</p> <p>What types of health (patient, family, population) and healthcare system needs do APNs address?</p> <p>What types of services and interventions do APNs provide?</p> <p>How do patients and families access APN services?</p> <p>Are revisions to the current ways APNs deliver care required to meet expected outcomes?</p>	What is the level of stakeholder understanding and acceptance of the APN role?	How satisfied are APNs with their role?	<p>What is the advanced practice nurse retention rate?</p> <p>Are APNs fully implementing their knowledge, skills and scope of practice in all role dimensions (clinical practice, education, leadership, research/evidence-based practice)</p>

STAGE OF APN ROLE DEVELOPMENT - LONG TERM SUSTAINABILITY

STAGE OF APN ROLE DEVELOPMENT - LONG TERM SUSTAINABILITY					
Evaluation Objectives	Structures	Processes	OUTCOMES		
			Short-Term < 2 years	Intermediate 2 to 3 years	Long-Term 4 to 5 years
To demonstrate the long-term benefits and impact of APNs for healthcare consumers, providers, organizations and the overall healthcare systems.	What innovations have APNs developed and introduced for the benefit of the healthcare system?	<p>To what extent has transfer of role functions from one healthcare provider to the APN role been achieved?</p> <p>What types of innovative models of care have been developed through the implementation of APN roles?</p> <p>How are APNs involved in influencing and developing policies to improve patient, organization and health system outcomes?</p> <p>What new policies have been put in place as a result of APN leadership?</p> <p>How do APN roles impact on quality of care?</p>	<p>Do APN roles improve access, continuity and coordination of care?</p> <p>What is the impact of APN roles on patient, family and/or healthcare provider knowledge and skills?</p>	<p>Do improved patient health behaviors lead to better health outcomes and more appropriate use of healthcare services?</p> <p>What is the impact of APN role on healthcare provider use of best practices?</p>	<p>What is the cost-benefit of APN roles?</p> <p>What are the value added contributions of APN roles in the healthcare system?</p> <p>What is the effectiveness of APN roles for improving quality of care compared to teams/models of care without an APN role?</p>
To ensure APNs meet the long-term needs of the healthcare system by identifying ongoing needs for role revision and support.	<p>What is the extent (e.g., numbers) and characteristics (e.g., topic, research) of publications about APN roles?</p> <p>What are stakeholder perceptions of priority research questions to be addressed to support the long-term sustainability of APN roles?</p> <p>What are the barriers/facilitators (e.g., education, regulation, economic, societal, policy) to the integration of APN roles in the health care system?</p> <p>What healthcare trends (population health needs, economics, care practices) are/or may impact on the long-term sustainability of APN roles?</p> <p>To what extent do stakeholders share a common vision of APN roles and outcomes?</p> <p>Is the number of APNs and type of APN roles sufficient to meet future healthcare system needs?</p>	<p>What are best ways of disseminating research evidence about APN roles to healthcare decision and policy-makers?</p> <p>What types of evidence do healthcare administrators and policy makers use to make decisions about the use of APN roles?</p> <p>Are revisions to the current ways APNs deliver care required to address new and/or anticipated needs?</p> <p>How have APN roles developed over time?</p> <p>In specific settings, what is the appropriate panel size or roster (ratio of number of patients to advanced practice nurse) for different patient populations?</p>		<p>What is the impact of research evidence about APN roles on healthcare administrator and policy makers and their decisions about the use of these roles?</p>	<p>To what extent are APN roles integrated within the healthcare system?</p> <p>Are APN role outcomes sustained over time?</p>

APN=Advanced Practice Nursing; NA=Not applicable; OSCE=Objective Structured Clinical Examination

TABLE 3 - EVALUATION PLAN TEMPLATE

STAGE OF APN ROLE DEVELOPMENT:			
Evaluation Aim:			
Evaluation Question:			
Evaluation Approach or Design:			
Evaluation Dimension	Data Sources	Data Collection Measures	Timing of Data Collection
STRUCTURES			
Type of APN role, job description and requirements :			
Advanced practice nurse:			
Patient:			
Healthcare providers, team and model of care:			
Organization (culture, policies, leadership etc.):			
Healthcare System (e.g., legislation, regulation, funding):			
Other:			
PROCESSES			
APN Role Activities:			
<i>Clinical practice</i>			
<i>Education, expert coaching and guidance</i>			
<i>Ethical decision-making</i>			
<i>Consultation and collaboration</i>			
<i>Evidence-based practice and research</i>			
<i>Clinical and Professional Leadership</i>			
Other:			
OUTCOMES (patient, advanced practice nurse, healthcare team/provider, organization, health system)			
Short-term:			
Intermediate-term:			
Long-term:			

TABLE 4 - CASE SCENARIO WITH VERTICAL AND HORIZONTAL INTEGRATION OF PEPPA PLUS CONCEPTS

APN Role Introduction Stage

Paula is the Director of Clinical Services for a large community hospital. An annual review of the hospital's emergency department (ED) services found a significant increase in the number of patients seen with Type II Diabetes. A needs assessment was planned to further examine this change in health service utilization.

STAGE OF APN ROLE DEVELOPMENT:	Introduction					
Evaluation Aim:	To identify and describe contributing factors and solutions for reducing unnecessary ED visits by patients with Type II Diabetes.					
Evaluation Approach or Design:	Needs assessment employing qualitative and quantitative data collection methods.					
Evaluation Question	Structures	Processes	Outcomes	Data Sources	Data Collection Measures	Timing of Data Collection
1. What are the demographic characteristics and health needs of patients with Type II Diabetes who sought care in the ED in the past year?	Patient age, gender, co-morbidity, presenting complaint(s), discharge diagnosis(es), diabetes treatment, family physician, diabetes physician, geographic location, and living situation	Discharge orders and referrals	# of ED visits and hospitalizations # of patient deaths	Hospital administrative data and patient health records	Identify all patients who presented to the ED	1-year period
2. What are patient, family, and health care provider perceptions of met/unmet patient health needs, strengths/gaps in care delivery, and solutions for preventing unnecessary visits to the ED for patients with Type II Diabetes?	Perceptions of need, service strengths and gaps, and possible solutions Barriers/facilitators to accessing relevant services Events leading up to ED visits	How and what types of services patients use	Met/unmet health needs Other negative consequences of gaps in care	Patients, family, members, family physician, ED staff, and diabetes specialist providers	In-depth interviews and focus groups	2 to 3 months
3. What resources and clinical expertise are required to implement recommended solutions?	Advanced practice nurse, other providers, and administrative staff Funding, reimbursement, and referral policies Clinical practice guidelines					

APN Role Implementation Stage

The needs assessment disclosed that, patients with Type II Diabetes who were the most frequent and repeat users of ED services, were over the age of 65 years, on insulin and had other chronic conditions (e.g., hypertension, COPD, arthritis). The most frequent health concerns that brought patients to the ED were hypoglycemia, urinary tract and wound infections and pain due to peripheral neuropathy. Factors contributing to ED use were: the patient's poor physical health and vision impairment, lack of patient knowledge and self-care abilities to adjust insulin doses, lack of social support (lived alone), and limited access to a family physician or homecare support. Through engagement and strategic planning with stakeholders (patients, diabetes specialists, family physicians) a new service delivery model and comprehensive plan was established to improve the quality of care and outcomes for older patients with Type II Diabetes. An APN role was felt to be best suited for this plan because of the need for enhanced clinical expertise in diabetes and complex chronic disease management for older adults. Strong leadership, consultation and change management skills were also necessary to implement other education and evidence-based practice aspects of the plan.

The primary goal of the APN role and new model of care is to reduce unnecessary ED visits for older adults with Type II Diabetes through *i) high risk screening, assessment, and early intervention; ii) patient self-management support; iii) routine monitoring and management of health concerns; and iv) coordination of care and referral to relevant home, social support and community services.*

Expected outcomes include improved patient self-care, improved glycemic control, and reduced ED visits. In the new care delivery model, patients over 65 years of age with a diagnosis of Type II Diabetes will be referred to the advance practice nurse by the specialist, family physician or emergency department staff for an initial assessment and consult visit. Patients deemed high risk for poor health outcomes (e.g., frail, one or more chronic conditions, uncontrolled blood sugars, psychosocial and self-management support needs) will also receive care coordination and regular telephone, clinic or home visit follow-up. Other aspects of the APN role include development and implementation of public education and outreach visits in the community (homes for the aged, seniors centres, family practice offices) to increase awareness of this service among patients and providers and to optimize patient self-care in the prevention and management of diabetes. The APN role will also involve the development and evaluation of new referral policies and evidence-based practices for this patient population within the organization.

STAGE OF APN ROLE DEVELOPMENT:		Implementation				
Evaluation Aim:		To evaluate the implementation, impact and need to further enhance the introduction of an APN role and new care delivery processes (risk assessment, referral mechanisms) for older (>65 years) community-living adults with Type II Diabetes.				
Evaluation Approach or Design:		Formative evaluation using qualitative and quantitative data collection methods including comparisons of baseline and post-implementation outcomes.				
Evaluation Question	Structures	Processes	Outcomes	Data Sources	Data Collection Measures	Timing of Data Collection
1. How satisfied are	Advanced practice nurse	Timeliness and appropriateness	Satisfaction	Patients, family	Question-	1 yr post

patients, family members and healthcare providers with the APN role and new service delivery model?	knowledge, communication and technical skills, experience, and personal qualities Services: screening, assessment, self-management support, monitoring, care coordination, referral processes	of care Access to relevant resources		member, healthcare providers (community, ED)	naire	implement-ation
2. What are stakeholder perceptions of how the APN role impacted health outcomes and quality of care?	Advanced practice nurse knowledge, communication and technical skills, experience, personal qualities	Care delivery processes Advanced practice nurse assessment of patients with varied risk factors for poor health Advanced practice nurse interactions with patients and other stakeholders Types of advanced practice nurse interventions	Experiences related to: change in health behaviors, patient health, patient and provider satisfaction, and quality of care	Advanced practice nurse, patient, family members, healthcare providers	In-depth interviews	1 yr post implementation
3. What was the effectiveness of public education and outreach community visits for increasing the number of appropriate patient referrals to the APN role over time?	Use of adult learning and community development principles in developing education and outreach materials Characteristics of patients referred that meet criteria (e.g., > 65 years with Type II Diabetes)	Timing, number, location and types of community settings where education and outreach took place	Satisfaction with education or outreach experience # of appropriate referrals	Patients, family member and community provider participants Appointment schedule and patient intake or consult records.	Questionnaire Spreadsheet	At the end of each session Monthly
4. To what extent did the new service delivery model and APN role increase patient access to care as measured by APN role referral wait times and community health service use?	Advanced practice nurse work hours and appointment schedule Types of community health services, appointment schedules and service hours Referral mechanisms	# of referrals to advanced practice nurse # and types of patient referrals to community services	Time from referral to advanced practice nurse consult # of patients using community services	Appointment schedule Referral records Patient	Spreadsheet Self-report questionnaire	Monthly Baseline at first consult and 1 year

5. To what extent did the APN role lead to improved patient perceptions of their self-care abilities and fewer incidents of hypoglycemia and improved Hb1AC levels compared to baseline measures?			Perceptions of self-care abilities # of patients with glucose < 4 mmol/L with or without symptoms of low blood sugar HBA1C	Patient Patient health records	Standardized tool Data extraction form	Baseline at first consult and 1 year 1 year pre and post
6. Are their differences in patient perceptions of self-care and glycemic control (Hb1AC, hypoglycemic events), and ED use or hospitalization rates for those deemed high risk and received ongoing advanced practice nurse follow-up, compared to lower risk patients who received an initial assessment and consultation alone?	Patient characteristics: age, number of chronic conditions, frailty, uncontrolled blood sugars, psychosocial support needs	# of low and high risk patients seen by advanced practice nurse # of advanced practice nurse visits per low and high risk patients	Perceptions of self-care abilities # of ED visits # of hospital admissions	Patient intake or consult records Advanced practice nurse appointment schedule Patient	Data extraction tool Standardized tool	1 year post
7. Compared to the previous two years, did the introduction of a new service delivery model and APN role reduce the number of ED visits, hospitalizations, and 30 day readmission rates?			# of ED visits # of hospital admissions # of hospital readmissions within 30 days	Health records	Data extraction tool	2 years pre and 1 year post

APN Role Long-Term Sustainability

The APN role for diabetes care has been implemented over the past 3 years. Formative evaluation results indicate that the necessary structures are in place and that the role and model of care structures are well developed and functioning at an optimal level. However, questions remain about the overall benefit and long-term sustainability of this innovative model.

STAGE OF APN ROLE DEVELOPMENT:		Long-Term Sustainability				
Evaluation Aim:		To inform decisions about maintaining and/or expanding the APN role and model of care to other jurisdictions.				
Evaluation Approach or Design:		Several evaluation designs, including a randomized controlled trial, were considered. Since the APN role was already in place, economic modeling was selected as the best approach. The modeling used existing administrative data to compare health outcomes (glycemic control) as measured by HbA1C, mortality rates), health service use, and costs from an organizational perspective for patients who did and did not receive the new model of care.				
Evaluation Question	Structures	Processes	Outcomes	Data Sources	Data Collection Measures	Timing of Data Collection
1. What is the cost-effectiveness of an APN role and model of care delivery for older adults, over the age of 65 years with Type II Diabetes?	<p>Patients who saw the advanced practice nurse and historical matched control group</p> <p>Patient characteristics - gender, age, # of chronic conditions, frailty, uncontrolled blood sugars, psychosocial support</p>		<p>HbA1C</p> <p>Number of patient deaths</p> <p># of ED visits, # of hospital admissions, hospital length of stay, 30 day readmission rates</p> <p># of advanced practice nurse visits to patients and for community outreach</p> <p>Costs per unit of health service use (e.g., cost per visit, LOS, ED visit, etc.)</p> <p>Costs of service development and implementation (advanced practice nurse salary, clerical support, training etc.)</p>	Health records	Structured questionnaire	1 year beginning in year 4

APN=Advanced Practice Nursing; ED=Emergency Department; #=number

GLOSSARY OF TERMS

Advanced practice nursing (APN) role	Nursing roles that meet requirements for advanced practice.
Advanced practice nurse	A registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A Master's degree is recommended for entry level (ICN, 2008).
Credentialing	A process undertaken to assure protection and safety of the public by confirming an advanced practice nurse has met pre-determined requirements for practice. It is a core component of self-regulation in nursing where members of the profession set standards of practice and establish a minimum requirement for entry, ongoing professional development, endorsement and/or recognition (Australian College of Mental Health Nurses, 2015; Styles & Affara, 1997 cited in ICN, 2009)
Clinical nurse specialist (CNS)	One type of advanced practice nurse. Typically, CNSs are master's prepared and have in-depth expertise and experience in a specialized area of practice (e.g., pediatrics, oncology, mental health).
Ethical decision-making	A core competency of APN roles as defined by Hamric et al., 2013. It refers to the knowledge, skills and behaviors for addressing ethical dilemmas, managing situations causing moral distress, creating ethical practice environments and promoting social justice in the healthcare system.
Formative Evaluation	One type of evaluation conducted during the development and implementation of a program in which the primary purpose is to provide information for program or role implementation improvement (from Bryant-Lukosius, 2009, p. 313).

Legislation	National or other jurisdictional (e.g., state, province, canton) laws that define nursing and its scope of practice.
Nurse practitioner (NP)	One type of advanced practice nurse. Typically, NPs are master's prepared and have an expanded scope of practice that permits diagnosing, prescribing, treating, referring and admitting/discharging patients from hospital.
Organizational policies	Institutional protocols, guidelines and rules for standardizing practices or how care is organized and delivered.
Outcomes	Are the results or consequences of both APN role structures and processes. The impact of an APN role or extent to which expected outcomes are achieved is directly influenced by APN role supports and resources (structures) and how the APN role is implemented (processes). Outcomes can be assessed from the perspectives of patients, health providers, organizations and/or healthcare systems, depending on the dimension, service or activity of the APN role that is of interest (from Bryant-Lukosius, 2009, p. 315).
Practice policies	Agreed upon protocols, standards and guidelines for clinical practice. May include evidence-based policies such as clinical practice guidelines.
Processes	Refers to how the APN role is enacted or what the advanced practice nurse does in the role and how various activities are implemented across all role dimensions (e.g., clinical practice, education, research, organizational leadership and professional development) (from Bryant-Lukosius, 2009, p. 316).
Quality of care	The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (IOM, 2001). There are seven aims for high quality health care related to safety, effectiveness, patient-centredness, timeliness, efficiency and equity (IOM, 2001).

Regulation	All of those legitimate and appropriate means - governmental, professional, private, and individual whereby order, identity, consistency, and control are brought to the profession. The profession and its members are defined; the scope of practice is determined; standards of education and of ethical and competent practice are set; and systems of accountability are established through these means (ICN, 2005).
Scope of practice	A term used by licensing boards for various professions that defines the procedures, actions, and processes that are permitted for the licensed individual. The scope of practice is limited to that which the law allows for specific education and experience, and specific demonstrated competency (from Bryant-Lukosius, 2009, p. 316).
Stages of APN role development	Includes role introduction, implementation and long-term sustainability.
Stakeholder	A person or group that may have vested interests, values and perceived levels of power in relation to the current model of care and introduction of an APN role. Stakeholders may influence or be influenced by the introduction of an APN role (from Bryant-Lukosius, 2009, p. 317).
Structures	Include physical and practical resources and characteristics of the APN, the patient population and the work environment that can influence how APN roles are developed and implemented. The work environment includes factors such as organizational structure and culture; societal demands and expectations for nursing and healthcare services; workforce practice trends and economic issues within the broader healthcare system; government funding, healthcare policies and legislation; practice, research, education, political, regulatory and credentialing issues within the nursing profession; and education, role development and social supports specific to APN (from Bryant-Lukosius, 2009, p. 317).

Summative Evaluation

A type of evaluation designed to present conclusions about the merit or worth of a specific program, healthcare provider role or intervention and to make recommendations about whether the program should be retained, altered, or eliminated (from Bryant-Lukosius, 2009, p. 317).

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