CHSRF/CIHR Chair Program in
Advanced Practice Nursing

Integration of Advanced Practice Nurses Into Health Care Systems

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Advanced Practice Nurse

- Registered nurse
- Graduate nursing degree
- Expert clinician with advanced clinical decision-making skills and a high level of autonomy
- Expanded scope of practice
- Formal credentialing process

Competencies

- Clinical
- Education
- Research
- Leadership
- Consultation and Collaboration

Types of Advanced Practice Nurses in Canada

- Clinical Nurse Specialist (CNS)
- Nurse Practitioner (NP)

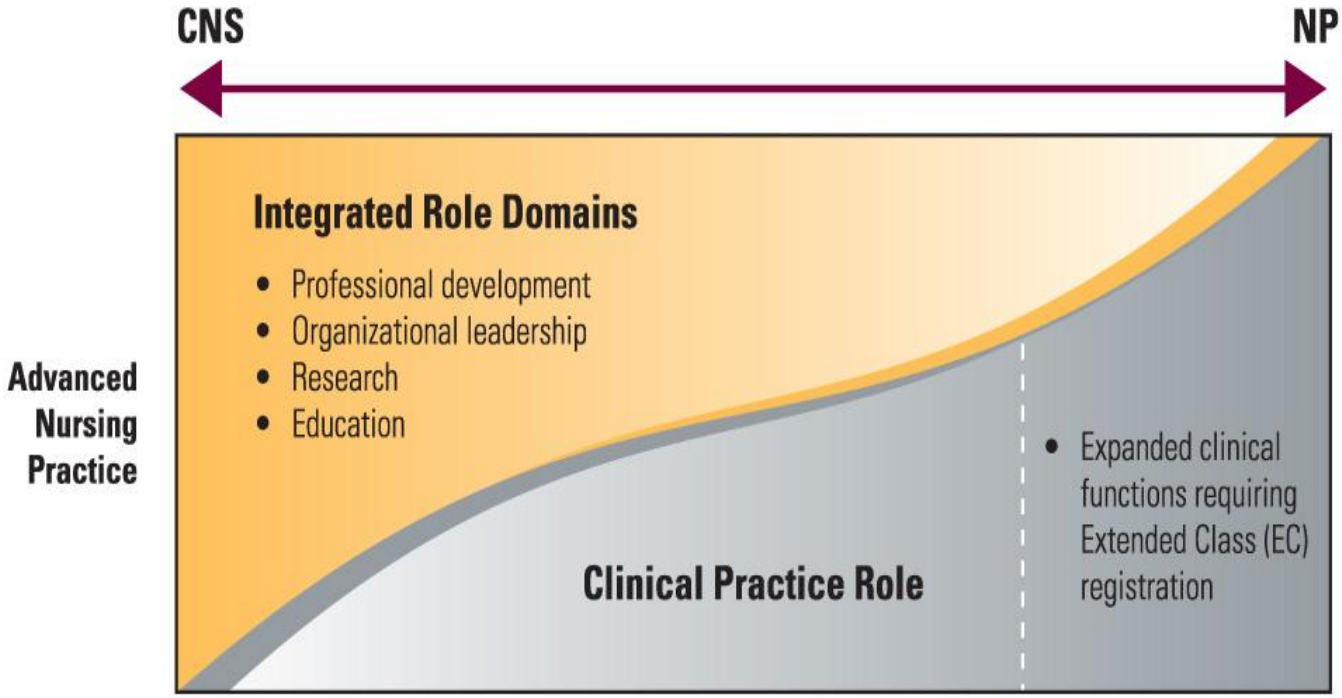
Nurse Practitioners

- Involved in health promotion, disease prevention and acute and chronic illness management
- Diagnose
- Order and interpret diagnostic tests
- Prescribe medications
- Perform specific procedures within their legislated scope of practice

Clinical Nurse Specialists

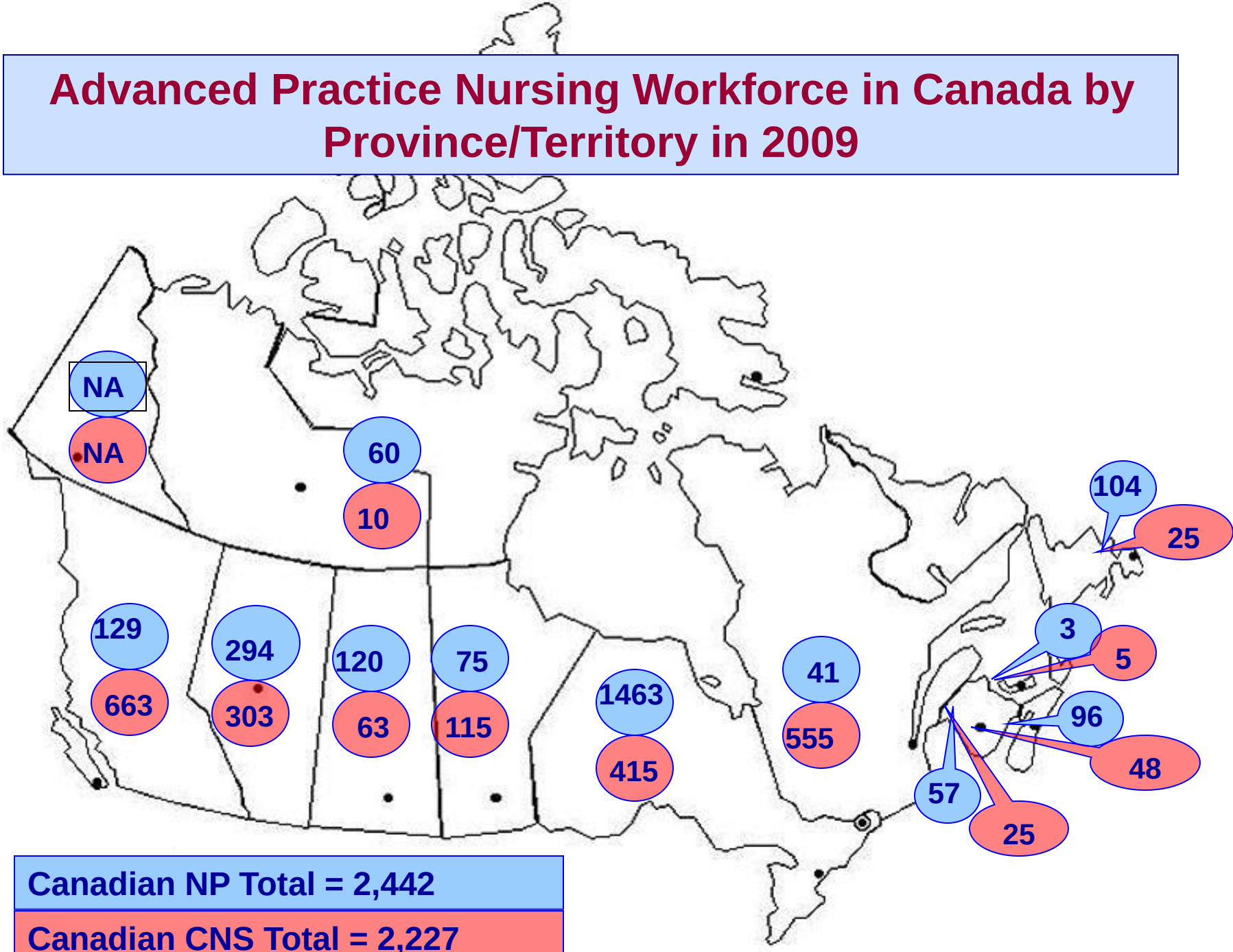
- Contribute to development of nursing knowledge and evidence-based practice and facilitate system change
- Address complex health care issues for patients, families, other disciplines, administrators, and policy makers
- Specialize in specific area of practice that may be defined in terms of a population, a setting, a disease or medical subspecialty, type of care, or type of problem

Continuum of APN Roles



Bryant-Lukosius, D. (2004 & 2008). *The continuum of advanced practice nursing roles.* Unpublished document.

Advanced Practice Nursing Workforce in Canada by Province/Territory in 2009



Canadian NP Total = 2,442

Canadian CNS Total = 2,227

Source: Regulated Nursing Database, Canadian Institute for Health Information

Deployment

NP roles

- 40+ year history in Canada
- Drivers for NPs in Primary Health Care: Canadian Nurse Practitioner Initiative (CNPI) and emphasis on interprofessional primary health care delivery
- Drivers for NPs in acute care settings: physician shortages
- Education programs, research and development of NP practice

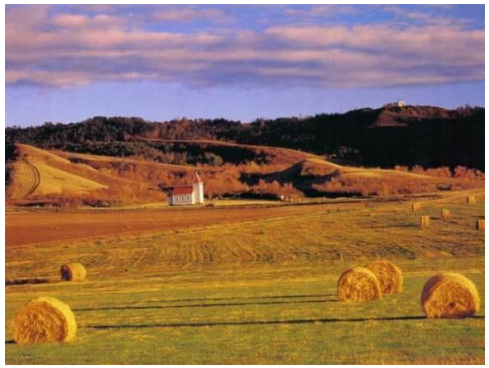
Deployment

Types of NPs:

NP-Specialty (Adult, Paediatrics, Neonatal)

NP-Primary Health Care (Family or All-Ages NP)

NP-Anesthesia Care



Deployment

NP roles

- Legislation exists in all 13 provinces/territories
- Numbers increasing quickly across Canada
- Regulatory mechanisms to support expanded scope of practice
- Increased integration across various types of practice settings
- Introduction of NP-led clinics in areas of physician shortages
- 77% of Canadians would be comfortable seeing an NP (2009 poll)

Regulatory Issues for NPs

- Additional licensing examination
- Activities vary by province although moving to standardize regulation across provinces
- Prescribe drugs (open vs restricted lists) but not controlled drugs
- Order diagnostic tests and x-rays
- Refer to specialists
- Admit and discharge from hospital
- Sometimes require medical directives

Deployment

CNS roles

- 40+ year history in Canada
- Less understanding and awareness especially of clinical role
- Limited access to CNS-specific graduate education programs
- No additional license as practice falls within the scope of practice of the registered nurse
- Lack of credentialing and role titling makes it difficult to accurately assess employment trends

Deployment

CNS roles

- Number of CNSs declining especially in British Columbia and Ontario
- Some pockets of higher deployment, but nationally stagnant growth in role development or use
- Lack of a national voice or vision for the role in the Canadian health care system
- Little CNS-focused research in Canada

Effectiveness of APNs

Numerous randomized controlled trials (RCTs) and systematic reviews have shown that APNs are effective, safe practitioners who can positively influence patient, provider and health system outcomes:

Specialty NPs:	18 RCTs (11 since 2000)
Primary Health Care NPs:	28 RCTs (18 since 2000)
Clinical Nurse Specialists:	32 RCTs (20 since 2000)

Outcomes

Patient:	Provider:	Health System:
▪ Health status ▪ Quality of life ▪ Quality of care ▪ Satisfaction	Satisfaction	Cost Length of stay

Specialty NPs (18 RCTs)
US: 10, UK: 6; AU: 1, CA: 1

	Health Status	Quality of Life	Quality of Care	Patient Satis-faction	Provider Satis-faction	Cost	Length of Stay
Improvement	5			5	1	2	2
Decline							1
No difference	7	1	7	2	1	2	2

Primary Health Care NPs (28 RCTs) US: 15, UK: 8; NE: 2, CA: 3

	Health Status	Quality of Life	Quality of Care	Patient Satis-faction	Provider Satis-faction	Cost	Length of Stay
Improvement	7			6		2	1
Decline						1	
No difference	15	2	2	5	1	1	

CNSs (32 RCTs)
US: 16, UK: 11, CA: 2, Other: 3

	Health Status	Quality of Life	Quality of Care	Patient Satis-faction	Provider Satis-faction	Cost	Length of Stay
Improvement	15	5	2	4		9	5
Decline							
No difference	8	4		3	1	4	1

Recent Systematic Review

Newhouse RP et al. (2011)

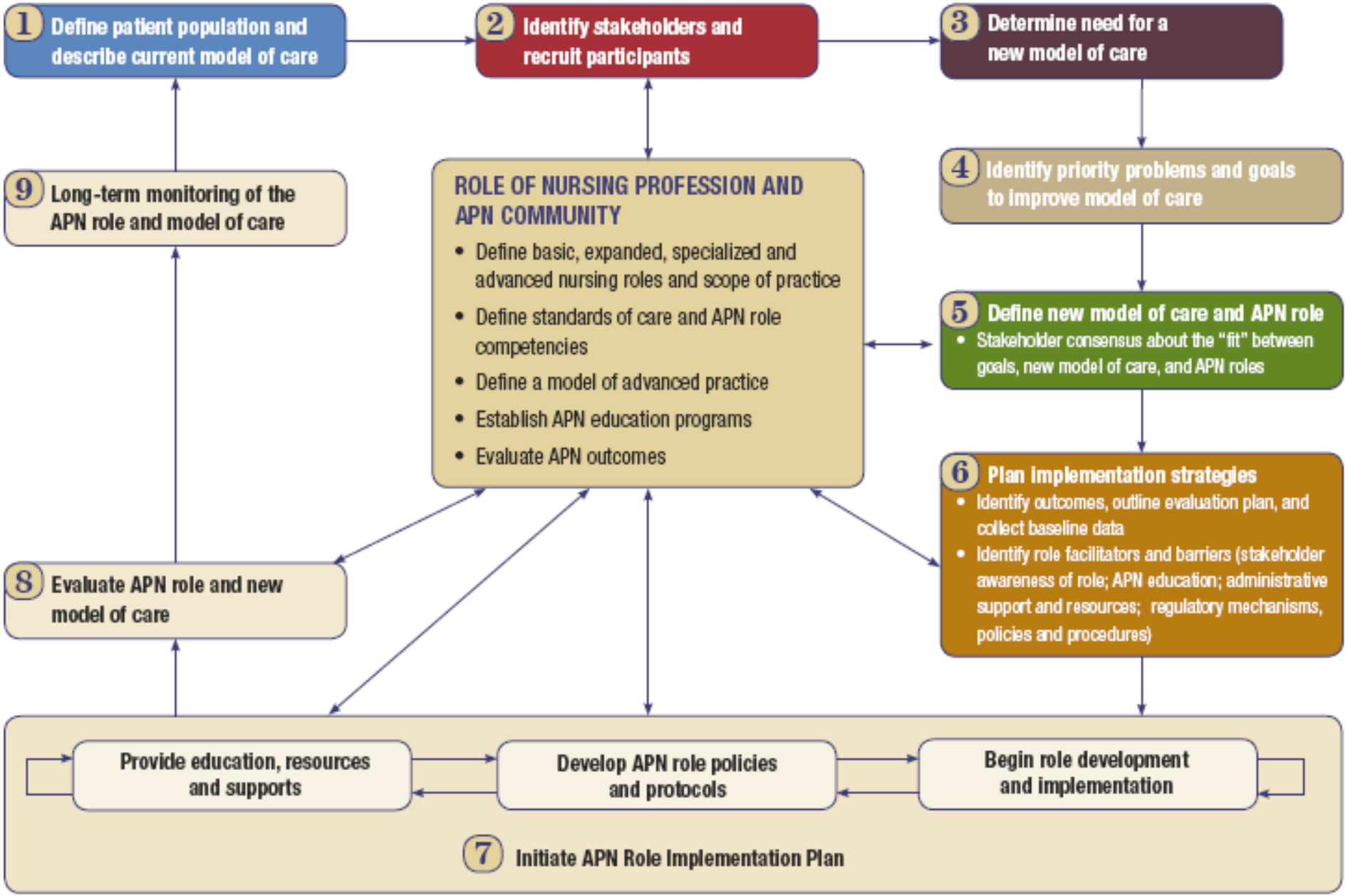
Advanced Practice Nurse Outcomes 1990-2008: A Systematic Review NURSING ECONOMIC$/September-October 2011/Vol. 29/No. 5/pp.1-22.

- Published studies conducted in US between 1990 and 2008
- 14 randomized controlled trials of NPs (12 high quality): NP outcomes similar to comparison groups
- 4 randomized controlled trials of CNSs (all high quality): CNSs in acute care reduce length of stay and cost of care for hospitalized patients.

General Facilitators to APN Role Integration

- Systematic patient-focused planning to guide role development including early stakeholder involvement
  - Use of framework: **P**articipatory, **E**vidence-Based, **P**atient-Focused **P**rocess for **A**PN Role Development, Implementation and Evaluation (PEPPA)
- Clearly defined roles
- Public and health provider awareness and acceptance

The PEPPA Framework



From: Bryant-Lukosius, D., & DiCenso, A. (2004). A framework for the introduction and evaluation of advanced practice nursing roles. Journal of Advanced Nursing, 48(5), 530-540.

Replacement or Complementary Role

- Physician replacement role is supported when there is a physician shortage but less so when there are adequate numbers of physicians (leading to waves of NP role implementation and NP role vulnerability)

- Complementary role is unrelated to number of physicians and instead focuses on where NPs can add value (e.g., disease prevention and health promotion, chronic disease management, mental health, long-term care, emergency departments) – may be more costly in short-term

Primary Health Care NPs – Facilitators and Challenges

Facilitators:

- Government legislation and regulation
- Government funding for NP positions
- Emphasis on interprofessional collaboration facilitated by a shift away from fee-for-service physician reimbursement

Challenges:

- Working out relationship between two autonomous clinicians (NPs and physicians) with substantial overlap in scope of practice
- Inconsistencies in educational preparation across Canada
- Lack of rigorous studies to examine cost-effectiveness of role

Specialty NPs – Facilitators and Challenges

Facilitators:

- Support from medical and nursing administrators within hospitals
- Support from physician colleagues who appreciate help with heavy patient care demands

Challenges:

- Difficulty implementing non-clinical dimensions of the role
- Limitations to scope of practice due to hospital restrictions on NPs' autonomous ordering and prescribing
- Inconsistent team acceptance
- Funding of role

CNSs – Facilitators and Challenges

Facilitators:

- Support of health administrators
- Increased emphasis on promoting evidence-based practice

Challenges:

- Lack of a common vision and understanding of the CNS role
- Limited access to CNS-specific graduate education programs
- Lack of title protection or credentialing

Continuing Challenges

- Professional interests/monopolies
- Absence of a health human resource strategy
- Interprofessional collaboration

Professional Interests

- Professional interests/monopolies
- Baerlocher and Detsky (2009) describe ‘turf battles’ between and within professions when they compete to perform the same task.
- Reliance on self-governing professional bodies to determine appropriate work boundaries is problematic as they may have no reason to cooperate with one another.
- Requires successful negotiation that keeps the public’s rather than the profession’s interest in mind.

(Baerlocher, M. and A. Detsky. 2009. “Professional Monopolies in Medicine.” *JAMA* 301(8): 858-60.)

Absence of a Health Human Resource Strategy

- Results in knee-jerk reactions
- In Ontario, shortage of physicians has led to dramatic increase in number of medical students being trained and introduction of physician assistants
- Team-based care has made family medicine more attractive increasing the number of medical students who choose family medicine
- What will the future hold when there are sufficient numbers of physicians?

Interprofessional Collaboration (IPC)

- In 2004, the prime minister and premiers of Canada set an objective that 50% of Canadians would have 24/7 access to multidisciplinary primary healthcare teams by 2011
- Requires a culture shift among team members
- Learning in silos does not facilitate interprofessional collaboration – need shift to interprofessional education

Recommendations

- Ensure that introduction of new healthcare providers or roles is based on a patient-focused systematic assessment of need
- Establish a national multidisciplinary task force involving key stakeholder groups to facilitate the implementation of APN roles (conduct stakeholder analysis)
- Define role based on patient needs
- Create a vision statement that articulates the value-added role of APNs across settings

Recommendations

- Consider how roles can be integrated into current models of care (e.g., fee-for-service physician payment)
- Consider advanced practice nursing as part of health human resources planning based strategically on population healthcare needs
- Protect funding support for APN positions and education to ensure stability and sustainability
- Develop standardized legislation that facilitates added scope of practice (or in case of CNS, credentialing process that facilitate title protection)

Recommendations

- Develop standard educational program across the country (consider general vs specialty based)
- Include components that address inter-professionalism in undergraduate and post-graduate health professional training programs
- Evaluate the value-added of the new roles
- Develop a communications strategy for the public, policy makers and health providers about APN roles

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Go to **npnow.ca** and tell your government that you want more health-care options, that you want more nurse practitioners in your area.

Nurse Practitioners it's about time!

CANADIAN NURSES ASSOCIATION

“Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it”

A.A. Milne 1926

Illustration E.H.Shepard 192614