Nurses in advanced roles in primary care: policy levers for implementation

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Rationale / Background

• Chronic care triggers service delivery re-design
• Shift from hospital to primary care, budgetary pressures
• Primary care providers: more, new time-intense skill sets
• Solo-practices to team-based care, geographical imbalances or shortages of GPs
• Better educated nursing workforce

International study, mapping of countries, reform trends, policy environment, enablers, barriers
Methods

- **International study on task-shifting and -reallocation between physician and nursing profession**
  - Expert survey in 36 countries with 93 experts (response rate 85.3%)
  - Australia, Canada, New Zealand, U.S.
  - Europe (all 28 Member States), Norway, Switzerland, Iceland and Turkey

- **Literature review**
  - Comprehensive literature review, additional countries (e.g. Israel)
  - Overview of systematic reviews – effectiveness & costs
Definitions of nurses in advanced roles

• Multitude of definitions, boundaries not always clear cut

• Focus on:

  • **NP/APN**: according to the ICN, “A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice[...]. A Master’s degree is recommended for entry level”

  • **Nurses in advanced/extended roles**: “Nurses working in advanced roles beyond the traditional registered nurses’ (RN) scope of practice, after additional training”

• -> Titles, scope of practice, education

Nurses in advanced roles: titles, scopes of practice, education

<table>
<thead>
<tr>
<th>Nurses in advanced roles?</th>
<th>NP/APN</th>
<th>Titles</th>
<th>Scopes of Practice (SoP)</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Nurse Practitioner (NP, Advanced NP, or similar)</td>
<td>Advanced SoP: high level of advanced clinical practice</td>
<td>Master</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical Nurse Specialist, others</td>
<td>Advanced SoP</td>
<td>Master or other postgraduate education</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>Various titles, e.g. family nurse, diabetes nurse, reference nurse, other</td>
<td>Some elements of advanced SoP, but not at NP/APN level</td>
<td>Additional training/education beyond RN</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Registered Nurse, professional nurse</td>
<td>‘Traditional’ SoP</td>
<td>RN education</td>
</tr>
</tbody>
</table>
Reform trend 1: Many OECD countries are implementing NP/APN roles

<table>
<thead>
<tr>
<th>Countries</th>
<th>NP/APN education</th>
<th>Advanced clinical Scope of Practice (primary care)</th>
</tr>
</thead>
</table>
| Established: NP/APN with advanced levels of clinical practice | Australia, Finland, New Zealand, United Kingdom, United States | Yes | Authorised to perform all of the following activities:  
• Prescribing medications  
• Diagnosis & health assessment  
• Ordering tests & exams  
• Treatment decisions  
• Panel of patients  
• Referrals  
• First point of contact |
| Emerging: (few) NP/APN education programs, but practice not at advanced level | Austria, Croatia, Cyprus, France, Germany, Iceland, Israel, Lithuania, Norway, Spain, Sweden, Switzerland | Emerging | Limited level of advanced practice, at least one of the seven clinical activities |
| Other extended nursing roles, but education / practice not at NP/APN level | Czech Republic, Portugal, Malta, Estonia, Latvia, Slovenia, Luxembourg, Belgium, Poland | No | Limited level of advanced practice, at least one of the seven clinical activities |
Nurse Practitioners, years of existence, total number and % of registered nurses in selected OECD countries, 2015*

<table>
<thead>
<tr>
<th>Country (Name/title of NP/APN)</th>
<th>Year introduced</th>
<th>Total number of NPs</th>
<th>Activity status of NPs</th>
<th>NP% of all RNs</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (NP)</td>
<td>1965</td>
<td>174,943</td>
<td>Professionally Active</td>
<td>5.6%</td>
</tr>
<tr>
<td>Canada (NP)</td>
<td>1967</td>
<td>4,090</td>
<td>Practising/employed</td>
<td>1.4%</td>
</tr>
<tr>
<td>United Kingdom (England, N. Ireland, Scotland, Wales) (Advanced NP, NP)</td>
<td>1983</td>
<td>n/a</td>
<td>n/a</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands (Nurse specialist)</td>
<td>1997</td>
<td>2,749</td>
<td>Registered</td>
<td>1.5%</td>
</tr>
<tr>
<td>Australia (NP)</td>
<td>2000</td>
<td>1,214</td>
<td>Registered</td>
<td>0.5%</td>
</tr>
<tr>
<td>New Zealand (NP)</td>
<td>2001</td>
<td>142</td>
<td>Practising</td>
<td>0.3%</td>
</tr>
<tr>
<td>Ireland (Advanced NP)</td>
<td>2001</td>
<td>141</td>
<td>Professionally Active</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Source: forthcoming
Reform trend 2: Nurse prescribing a common workforce reform in OECD countries

- As of 2015, total of 14 countries, of which newly adopted (2010-2015):
  - Cyprus
  - Estonia
  - Finland
  - Netherlands
  - Poland
  - Spain

- Nurse prescribing expanded (or removed regulatory barriers to prescribing practice) (2010-2015):
  - Australia
  - Canada
  - Ireland
  - New Zealand
  - United Kingdom
  - United States
The 'who’ and 'what’ of nurse prescribing

<table>
<thead>
<tr>
<th>‘who’- restricted to specific, regulated nursing sub-groups/titles</th>
<th>All registered nurses meeting the requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘what’ - Full prescribing authority</td>
<td>Limited prescribing authority</td>
</tr>
<tr>
<td>Australia (NP)</td>
<td>Australia (scheduled medicines RN)</td>
</tr>
<tr>
<td>Canada (NP)</td>
<td>Cyprus (Master’s level APN)</td>
</tr>
<tr>
<td>Netherlands (Nurse Specialist)</td>
<td>Netherlands (diabetes, lung, oncology nurses with Bachelor)</td>
</tr>
<tr>
<td>New Zealand (NP)</td>
<td>Ireland (Registered Nurse Prescriber)</td>
</tr>
<tr>
<td>U.S. (NP, other APRN)</td>
<td>UK (Independent Prescribers)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full prescribing authority</th>
<th>Limited prescribing authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada (emerging)</td>
<td>Denmark</td>
</tr>
<tr>
<td>UK (Supplementary Prescribers)</td>
<td>Estonia^</td>
</tr>
<tr>
<td>Finland</td>
<td>Poland^ (Master &amp; Bachelor)</td>
</tr>
<tr>
<td>Spain^</td>
<td>Sweden</td>
</tr>
<tr>
<td>New Zealand^</td>
<td></td>
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^=laws adopted in 2015, implementation in progress
Policy levers for implementation

- Regulation and governance
- Payment policies
Role of regulation

**National level regulation**
- If **up-to-date** regulation -> can act as driver for nurse role advancement
- If **outdated** -> barrier to nurse role advancement, implications: informal practice, inefficient use of workforce

**Decentralized regulation**
- Pace of change varies -> uneven levels advanced practice and implementation
- Time- and resource-consuming to change, can impact on role clarity

**No regulation / at discretion of providers and settings**
- Implications: large variations in advanced practice, limited role clarity, complexity of malpractice handling, limited data availability
Different regulatory approaches

• ‘Experimental law’ linked to evaluation (Netherlands, California)

• Self-regulation -> delegation to nursing regulatory body (e.g. New Zealand, Australia)

• Harmonization in decentralized country context (U.S.) or change of locus: from state to federal level (Australia)

• Non-regulated roles: Employer-based mechanisms, e.g. collaborative arrangements (UK), protocols
Role of payment policies and reimbursement rates

• Reimbursement for advanced clinical activities -> major determining factor

• Level of reimbursement (FFS):
  • **Australia**: 2010, Nurse Practitioners gained access to Medicare reimbursement scheme, reimbursement at lower levels than GPs
  • **U.S.**: state-dependent and payer-dependent, „incident-to-billing“

• Salaried positions: availability of funding
  • **Canada**: Challenge of securing new or redistributed money from existing health budgets

• Role of financial incentives and disincentives (Estonia, Lithuania)
<table>
<thead>
<tr>
<th>Country</th>
<th>Reimbursement for specific services by insurer</th>
<th>NP fee</th>
<th>GP fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Medicare: scheduled fee for consultations</td>
<td>NP (85% of scheduled NP fee): AUS $8.20 (Item 82200)</td>
<td>GP fee (100% of scheduled GP fee): AUS $16.95 (Item 3)</td>
</tr>
<tr>
<td></td>
<td>• Brief consultation, short patient history, limited examination</td>
<td>• AUS $17.85 (Item 82205)</td>
<td>• AUS $37.05 (Item 23)</td>
</tr>
<tr>
<td></td>
<td>• <strong>Standard consultation</strong> lasting less than 20 minutes</td>
<td>• AUS $33.80 (Item 82210)</td>
<td>• AUS $71.70 (Item 36)</td>
</tr>
<tr>
<td></td>
<td>• Consultation lasting at least 20 minutes duration</td>
<td>• AUS $49.80 (Item 82215)</td>
<td>• AUS $105.55 (Item 44)</td>
</tr>
<tr>
<td></td>
<td>• Consultation lasting at least 40 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>Medicare</td>
<td>85% of physician fee or 100% for “incident-to-billing” under physician name</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Medicaid (U.S. state-specific)</td>
<td>75-100% of physician fee depending on state</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Private health insurers</td>
<td>From not recognised to 100%</td>
<td>100%</td>
</tr>
</tbody>
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Estonia and Lithuania: financial (dis-)incentives

**Estonia**
- **Financial penalty** introduced in 2009 (20%, 0.8 capitation rate) to family doctors if not employing at least one family nurse
- **99% of practices** in Estonia employed at least one family health nurse in 2011
- **Financial incentive** introduced in 2013: bonus if family doctors employ two family nurses.
- As of 2014, **27% of family physicians** employed a second family nurse offering a minimum number of independent practice hours

**Lithuania**
- Similar finance instruments introduced (financial incentives and dis-incentives)
- Majority of family doctors employ at least one primary care nurse

(Estonian Health Insurance Fund, 2013, 2014, Lai et al., 2013)
Conclusions

• Many policy reforms, often at early stages

• Implications on health systems, teams, payers, regulators, patients

• Country level: Policy environment
  • Regulation: without official authorisation, nurses cannot practice in advanced roles legally and officially
  • Payment policies: levels of reimbursement with implications on costs and uptake in practice

• International level
  • Data: include NP (other APN) in international workforce databases
  • Definitions: more granular, with minimum levels of advanced practice and education (curricula)?
  • Policy lessons: enhance cross-country evaluations of policy options for implementation
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Thank you for your attention!
Appendix. Nurses in advanced roles: effectiveness and costs

- **Effectiveness** – 10 systematic reviews:
  - Patient satisfaction – **improved**
  - Hospital (re-)admission – **reduced**
  - Quality of care (*chronic care, e.g. HbA1c, blood pressure, BMI, secondary prevention*) – **equivalent or improved**
  - Mortality – **reduced or no effect**

- **Costs** – 6 systematic reviews:
  - **Inconclusive** results – some RCTs showed cost savings, others no differences
  - Cost savings largely attributed to lower salary costs
  - Longer consultations: lower productivity, better adherence to protocols or more person-centred care?