

SUPPLEMENTARY FILE 2: Macro-, Meso-, and Micro-Level Policy Interventions for Improving Advanced Practice Nurse Integration

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Table S2.1: Macro-Level Policy Categories and Interventions

Policy Category	Interventions
Regulation	<ul style="list-style-type: none"> • Clearly define the APN role across systems. • Define APN scope of practice that includes autonomous practice. • Differentiate the APN discipline.
Economic Incentives	<ul style="list-style-type: none"> • Reimbursement and salaries for APN care at a professional rate. • Provide economic incentives for organizations to recruit and retain APNs and promote positive work environment. • Subsidize costs of sending nurses for APN education (e.g., time off payments). • Incentivize organizations for APN contributions to the system and patient care.
Stakeholder Cooperation	<ul style="list-style-type: none"> • Coordinate APN integration efforts with national interprofessional groups. • Promoting APN self-regulation on parity with other professions. • Work with health professional, hospital, and care organization stakeholder groups when creating a national plan for integrating APNs. • Communicate APN scope of practice to relevant stakeholders and partners.
Education and Workforce Development	<ul style="list-style-type: none"> • Align and monitor the number of APNs educated in accordance with workforce position availability and population needs across specialties. • Create and fund more positions for APNs. • Transition into standardized competency-based education. • Fund transition to practice programs. • Incentivize preceptorship programs. • Subsidize universities to open APN degree programs. • Establish APN program curricula based on existing international evidence. • Train faculty with relevant education according to the International Council of Nurses (2024) Global Strategic Plan.
Marketing	<ul style="list-style-type: none"> • Initiate an advertising campaign to inform the public of the new APN role. • Begin an information campaign on the APN role targeted at health professional colleagues. • Expose high school and college students to the APN role and career mobility. • Differentiating APNs from other healthcare services in marketing campaigns.
Research	<ul style="list-style-type: none"> • Establish international cohesion through research so that there can be a gold standard understanding of the APN role. • Conduct research on APN-linked health system and patient outcomes (access utilization quality and cost). • Evaluate the current utilization of APNs across the systems and sectors including health and academic settings. • Synergize research efforts between international, national and regional levels.

Table S2.1 Caption: The macro level refers to the national, jurisdictional, regional, or international level. APN=advanced practice nurse

Table S2.2: Meso-Level Policy Categories and Interventions

Policy Category	Interventions
Organizational Guidelines	<ul style="list-style-type: none">• Clearly define the APN role in both clinical and leadership domains.• Clearly describe APN scope of practice within the organization.• Create an organizational care model that includes APNs and recognizes full scope of APN care.• Promote equitable APN involvement in leadership, shared decision making and policy making.
Infrastructure Development & Resource Allocation	<ul style="list-style-type: none">• Outline a formal plan for APN integration.• Integrate APNs across all settings.• Consider establishing APN leadership and reporting structures.• Provide adequate support staff and resources to APNs.• Establish a leadership group for constant policy development for the APN role with representation from all organizational stakeholder groups.• Clearly define APN pay schedules and salary structures in parity with other health care professionals.• Systematically assess APN integration progress, communicate findings internally & update policies accordingly.• Assure data and technology infrastructure to APNs that promotes full access.• Develop onboarding programs and ongoing support for APNs.• Include role title, degrees, & certifications after APN names.• Create data infrastructure clearly attributing APN services to patient and system outcomes.• Encourage evidence-based practices to promote recruitment and retention.
Interprofessional Leadership Engagement	<ul style="list-style-type: none">• Host interprofessional workshops and seminars with all providers.• Promote interprofessional decision making.• Promote interprofessional educational experiences.
Organizational Messaging	<ul style="list-style-type: none">• Communicate the APN role, education/training, and scope of practice to clinicians throughout the integration process.• Disseminate messaging supportive of APNs to the organization's employees.• Allocate time to educate organizational leaders on APN care benefits.
Research	<ul style="list-style-type: none">• Establish international cohesion through research so that there can be a gold standard understanding of the APN role.• Conduct research on APN-linked health system and patient outcomes (access utilization quality and cost).• Evaluate the current utilization of APNs across the systems and sectors including health and academic settings.• Synergize research efforts between international, national and regional levels.

Table S2.2 Caption: The meso level refers to the care organization level, such as a hospital, hospital system, or healthcare maintenance organization. APN=advanced practice nurse.

Table S2.3: Micro-Level Policy Categories and Interventions

Policy Category	Interventions
Interprofessional Experience & Exposure	<ul style="list-style-type: none">• Demonstrate APN holistic care and value to the care team.• Assure infrastructure that health care team members are aware of APN value and holistic care methods.
Team Communication	<ul style="list-style-type: none">• Institute regular care team meetings to promote consistent communication.• Educate care teams on interprofessional communication skills.
Work Environment	<ul style="list-style-type: none">• Encourage appropriate mentoring relationships within the care team.• Provide administrative support including infrastructure, resources and professional skill development.• Ensure that patients and families are aware of the APN role.
Research Opportunities	<ul style="list-style-type: none">• Promote APN-led quality improvement research.• Encourage implementation of evidence-based practice.• Advocate for constant evaluation of current clinical practices.

Table S2.3 Caption: The micro level refers to the care team in a clinic or unit at the point-of-care.