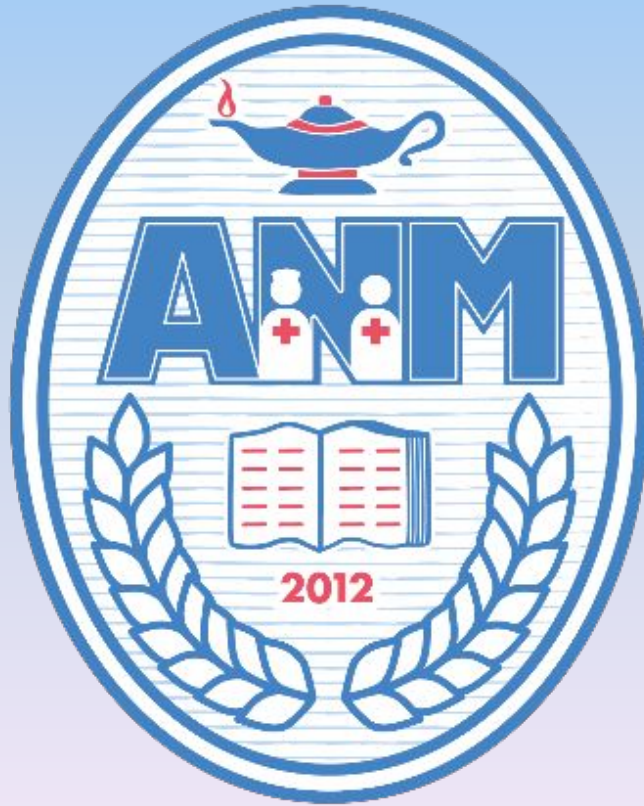
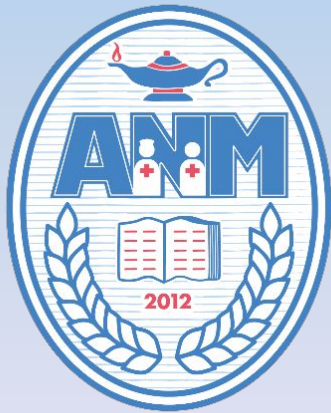


Advanced Practice Nursing: Opportunity & Challenge



- Professor Chair Sek Ying
- Immediate Past President, Hong Kong Academy of Nursing & Midwifery

Declaration of Interest



- No conflict of interest!

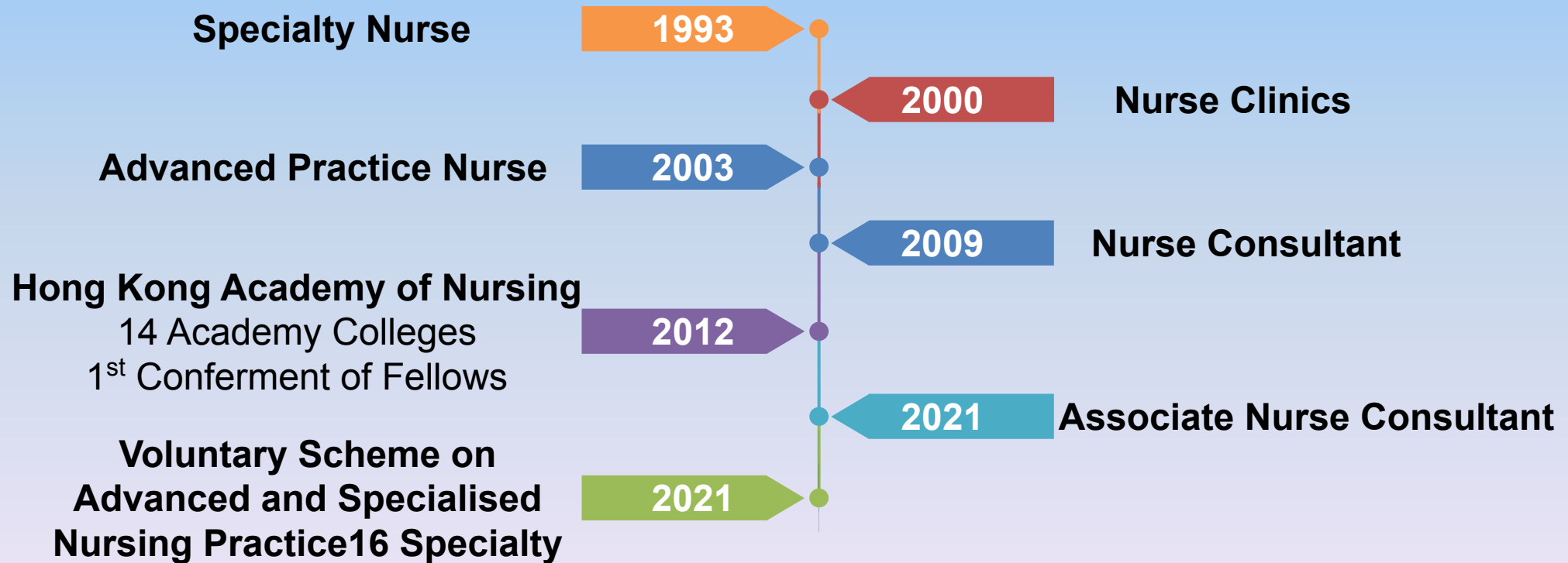
Need for specialty nursing

- Complexity of nursing care
- Highly specialized knowledge & skills
- Better collaboration with healthcare team
- High quality care for public good
- Matching international standards

Specialty Nursing & Advanced Practice Nursing

Specialist Nurse	Advanced Practice Nurse (APN)
<ul style="list-style-type: none">• Holds a current license as a generalist nurse, and has successfully completed an education programme that meets the prescribed standard for specialist nursing practice.• The specialist nurse is authorized to function within a defined scope of practice in a specified field of nursing.	<ul style="list-style-type: none">• Has acquired, through additional education, the expert knowledge base, complex decision-making skills and clinical competencies for expanded nursing practice, the characteristics of which are shaped by the context in which they are <u>credentialed</u> to practice.• The Clinical Nurse Specialist and Nurse Practitioner are two types of APNs most frequently identified internationally.

Specialty Nursing development in Hong Kong



Voluntary Scheme on Advanced and Specialised Nursing Practice – Hong Kong Nursing Council

A currently employed registered nurse (“RN”) in Hong Kong meeting the following criteria should be eligible to apply for recognition as an APN with the Council:

- a) obtained a post-RN registration Clinical Master in Nursing / Health Science in the related specialty;
- OR
- b) obtained a post-RN registration Master degree in health related stream AND completed the Post-registration Certificate Course (“PRCC”) / Hospital Authority’s Specialty Nurse Recognition Scheme Certificate / recognised in-service training for at least 80 hours;
- OR
- c) a Fellow of the Hong Kong Academy of Nursing (“HKAN”) or equivalent;

*Recognised in-service training should be **specialty training** with **structured content** and **clear learning outcomes**, and have **interaction** as well as **assessment components**.*

AND

- d) possessed six years of full time post-registration nursing experience immediately prior to his/her application in which at least the most recent four years must be serving in the related specialty area

(Nursing Council of Hong Kong, 2021)

**Pathway to
Membership and
Fellowship in Specialty
Nursing**
(with effect from May 2021)

Fellow Member of the HKANM

- 18. Recommended by **2** Fellows of the Academy College of the related specialty
- 17. Passed the assessment stipulated by the Academy College of the related specialty

- 16. Completed the self-declaration of criminal conviction or professional misconduct*
- 15. Demonstrated significant contributions to nursing practice or service development
- 14. Achieved **60** CNE points within the recent **3**-year cycle, with **45** points relating to the specialty
- 13. Completed the clinical log-book
- 12. Completed additional **250** hours of guided clinical practice
- 11. Accumulated **5** years of experience working in the specialty in recent **7** years
- 10. Passed the Certification Examination offered by the Academy College of the related specialty
- 9. Being an Ordinary Member of the HKANM and the Academy College of the related specialty
- 8. Possessed RN/RM registration in Hong Kong with a valid practising certificate

Ordinary Member of HKANM and Academy College of the related specialty

- 7. Completed the self-declaration of criminal conviction or professional misconduct*
- 6. Showed satisfactory performance at admission interview conducted by the related Academy College
- 5. Completed **250** hours of [#]guided clinical practice at any clinical practice site recognized by the related Academy College
 - [#]Guided clinical practice includes:
 - i) Experiential learning with mentor guidance at local clinical specialty departments;
 - ii) Practicum at work/non-work places with mentors from local clinical specialty departments under university/tertiary institution programs
 - iii) Practicum at work/non-work places with mentors from local clinical specialty departments under the HA PRCC Program (only the part to be recognized by the related Academy College)
- 4. Completed **500** theoretical hours in advanced practice certification program, with a minimum of **300** hours at postgraduate level and the remaining hours being recognized by the related Academy College
- 3. Obtained a master's or higher degree in Nursing or healthcare related discipline after RN/RM registration
- 2. Accumulated **4** years of experience working in the specialty in recent **6** years
- 1. Completed RN/RM registration in Hong Kong with a valid practising certificate

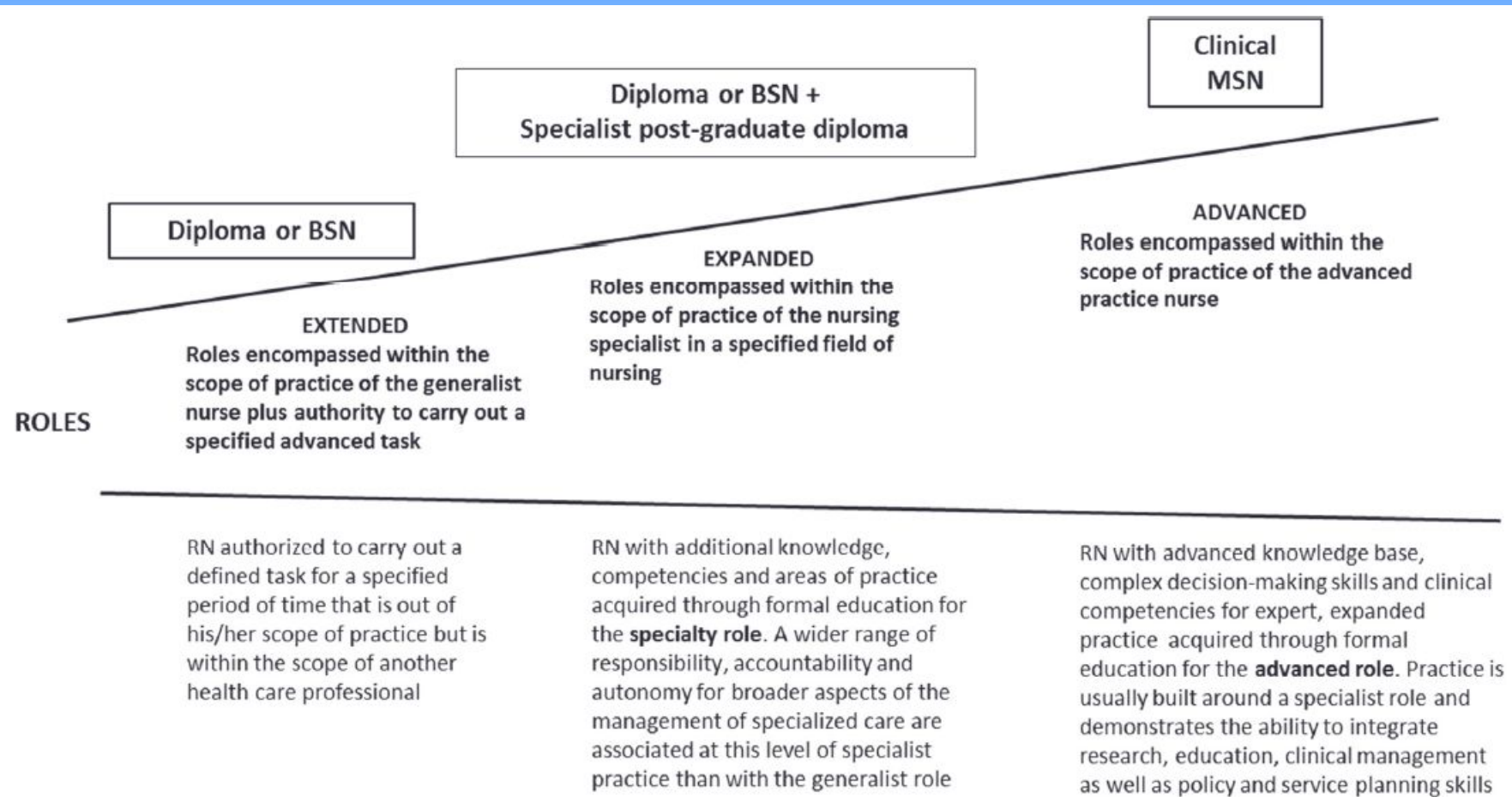


Fig. 2. Continuum of nursing specialist practice

BSN: Bachelor of Science in Nursing, MSN: Master of Science in Nursing, RN: registered nurse

(**World Health Organization**. Regional Office for the Eastern Mediterranean. (2020). A regional guide to the development of nursing specialist practice. World Health Organization. Regional Office for the Eastern Mediterranean. <https://apps.who.int/iris/handle/10665/348128>. License: CC BY-NC-SA 3.0 IGO)

Levels of Nursing Specialist Practice

Level of specialization

- **Extended**-- Registered Nurse
- **Expanded** -- Registered Nurse Specialist
- **Advanced** -- Registered Advanced Practice Nurse

(WHO, 2020)

Requirements to Practice as a CNS

This progression provides recognition of the foundation of specialized clinical expertise based on the foundation of a generalist nursing education.

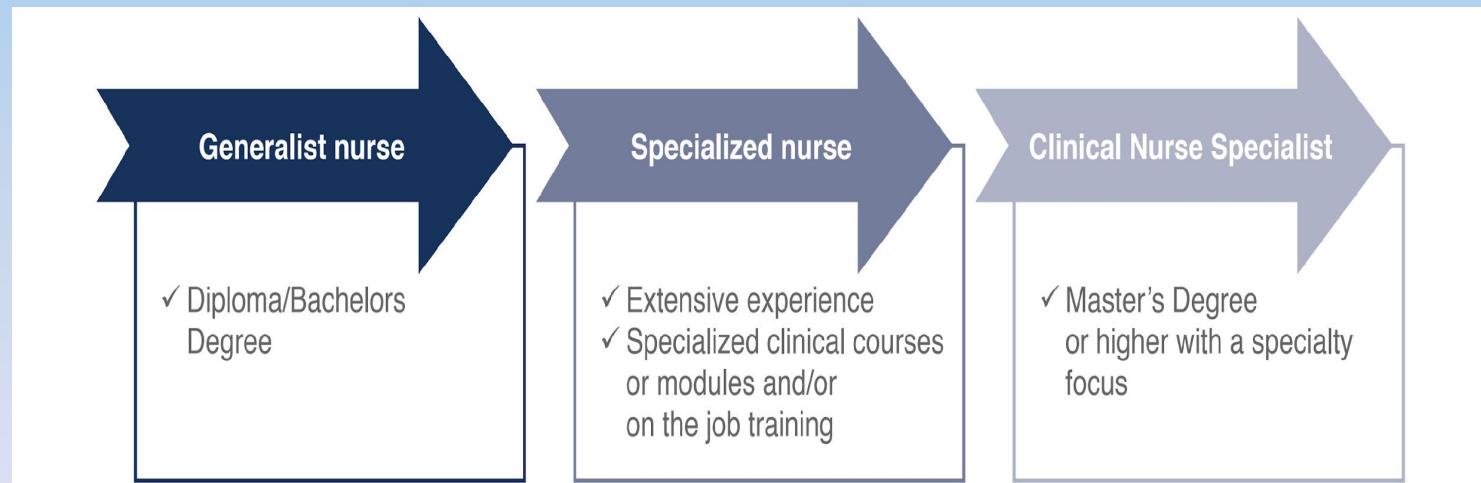


Figure 8. Progression from Generalist Nurse to Clinical Nurse Specialist

The Clinical Nurse Specialist and Nurse Practitioner are **two types** of APNs **most frequently identified internationally**

(International Council of Nurses, 2020)

Worldwide Reasons for Developing ANP

Examples by countries	US	Australia	Singapore	England	Japan	Poland	Hong Kong
Physician shortage	√	√		√	√	√	
Quality/continuity of care improvement	√		√	√	√	√	
Limited access to healthcare, especially primary care	√	√		√	√	√	
Health cost-containment pressure	√			√	√	√	
Healthcare needs shift		√		√	√	√	
Demand for professional development		√	√	√	√		
Retaining nurses in clinical practice			√				

(Kleinpell et al., 2022; Parker & Hill, 2017; Schober, 2016; Xu et al., 2022)

Highlights of activities covering 00:00-23:59 on 02 Jan 2020 are set out below:
二〇二〇年一月二日 0 時 0 分 至 23 時 59 分 的重點數據如下：

Cluster 醫院聯網	Hospital 醫院	No. of A&E first attendances 急症室首次 求診人次	No. of inpatient admissions to Med via A&E 經急症室入內科人次	Medical inpatient bed occupancy rate at midnight 內科住院病床 於午夜時的佔用率	Paediatrics inpatient bed occupancy rate at midnight 兒科住院病床 於午夜時的佔用率
HA Overall 醫院管理局公立急症室		*6191	#998	114%	72%
Hong Kong East 港島東	Panama Yende Nethercole Eastern Hospital 東區尤德夫人那打素醫院	418	92	112%	78%
	Ranchoee & Tang Shan Kin Hospitals 律政治及鄧肇堅醫院	198	36	95%	—
Hong Kong West 港島西	Queen Mary Hospital 瑪嘉烈醫院	358	78	111%	64%
Kowloon Central 九龍中	Kwong Wah Hospital 廣華醫院	295	71	112%	61%
	Queen Elizabeth Hospital 伊利沙伯醫院	606	70	116%	80%
Kowloon East 九龍東	Tseung K 德輔道中				
	United Ch 基信街				
Kowloon West 九龍西	Camas M 明				
	North L 北大				
	Princess M 瑪利				
	Yau C 仁				
New Territories East 新界東	Alice Ho Min Lin 何敏賢				
	North D 元				
New Territories West 新界西	Prince of 威爾斯				
	Pok C 博				
	Tai Sau 天秀				

Note: Above figures are provisional and subject to further updates.
註：上述為臨時數字，日後可能有作更新。



From CSD
(audited)

1990	2,274	85,557	2.66
1995	18,370	183,158	10.03
1997	24,040	194,360	12.37
			
			12.12
			12.12
			11.66
			11.22
			11.76
			11.90
			11.78



Rate

Hong Kong
Inflation Rate

inflation	8.60%	7.50%	8.20%	8.80%
Hong Kong Inflation Rate	2.88%	1.57%	1.88%	2% (Sep)

[https://www.healthbureau.gov.hk/en/press_and_publications/otherinfo/210500_amendments_mro/index.html#:~:text=Over%20the%20years%2C%20Hong%20Kong,\(2.5\)%2C%20the%20United%20States](https://www.healthbureau.gov.hk/en/press_and_publications/otherinfo/210500_amendments_mro/index.html#:~:text=Over%20the%20years%2C%20Hong%20Kong,(2.5)%2C%20the%20United%20States)

Census and Statistics Department: https://www.censtatd.gov.hk/en/web_table.html?id=194&download_excel=1#

Types of activities of APN

Two broad types of activities of APN can be distinguished:

- **A substitution of tasks (extended role):** certain tasks formerly carried out by doctors
- **A supplementation of tasks (new ± extended role):** new services not previously provided doctors

Example: Neuroscience Acute Care Nurse Practitioner in US

Clinical procedures

- Intubations
- Arterial lines
- Central lines
- Lumbar puncture/drains
- CSF manipulation
- Cranial monitoring device placement and removal
- Shunt reprogramming

Susan Yeager, WFCCN International Congress, 2016

TABLE 1. Baseline Characteristics of Patients and the Performance of Both Groups Regarding Insertion of Arterial Catheters

Arterial Catheters	Advanced Practice Provider	Medical Resident	p
Total numbers	478	355	
Radial artery, <i>n</i> (%)	317 (66)	265 (74)	0.017
Brachial artery, <i>n</i> (%)	73 (15)	41 (12)	0.14
Femoral artery, <i>n</i> (%)	88 (18)	51 (14)	0.14
Diversion to other sites than radial artery, <i>n</i> (%)	161 (34)	92 (26)	0.048
Systolic blood pressure (mm Hg), median (IQR)	110 (90–125)	110 (90–130)	0.04
Vasopressor use, <i>n</i> (%)	158 (33)	93 (26)	0.035
Ultrasound use, <i>n</i> (%)	53 (11)	60 (17)	0.02
Palpability, <i>n</i> (%)	346 (72)	293 (82)	< 0.001
No. of attempts before success, median (IQR)	1.30 (1.0–1.82)	1.53 (1.0–2.27)	< 0.0001
Success rate at first attempt, <i>n</i> (%)	340 (71)	200 (54)	< 0.0001
Complication rate, <i>n</i> (%)	36 (7.5)	40 (11)	0.09
Acute obstruction arterial vessel, <i>n</i> (%)	0 (0)	1 (< 1)	NA
Hematoma, <i>n</i> (%)	25 (5)	30 (8)	0.91
Bleeding, <i>n</i> (%)	0 (0)	2 (< 1)	NA
Other, <i>n</i> (%)	11 (2)	7 (2)	NA
Need for direct supervision, <i>n</i> (%)	12 (2.5)	77 (22)	< 0.001

IQR = interquartile range, NA = not assessed because of low numbers.

Reference:

Kreeftenberg, H. G., Aarts, J. T., Bindels, A., van der Meer, N., & van der Voort, P. (2020). Procedures performed by advanced practice providers compared with medical residents in the ICU: A prospective observational study. *Critical Care Explorations*, 2(4), e0101. <https://doi.org/10.1097/CCE.0000000000000101>

TABLE 2. Baseline Characteristics of Patients and the Performance of Both Groups Regarding Insertion of Central Venous Catheters

Central Venous Catheters	Advanced Practice Provider	Medical Resident	p
No. of catheters	247	177	
Femoral vein, <i>n</i> (%)	165 (67)	110 (62)	0.38
Subclavian vein, <i>n</i> (%)	30 (12)	15 (9)	0.30
Jugular vein, <i>n</i> (%)	52 (21)	52 (29)	0.06
Overall			
Ultrasound, <i>n</i> (%)	137 (56)	117 (66)	0.035
No. of attempts before success, median (IQR)	1.20 (1.0–1.71)	1.33 (1.0–1.86)	< 0.005
Success rate at first attempt, <i>n</i> (%)	200 (81)	123 (70)	< 0.005
Total complication rate, <i>n</i> (%)	15 (6)	12 (7)	1.0
Arterial punctures, <i>n</i> (%)	7 (3)	5 (3)	1.0
Major complication rate, <i>n</i> (%)	2 (1)	2 (1)	NA
Pneumothorax	1	1	NA
Bleeding	0	1	NA
Hematoma	0	3	NA
Arrhythmia + reanimation	0	1	NA
Catheter wrong route	1	0	NA
Other	2	2	NA
Supervision, <i>n</i> (%)	38 (15)	95 (54)	< 0.001
Providing supervision, <i>n</i> (%)	47 (19)	9 (5)	< 0.001
Femoral venous access, <i>n</i> (%)			
No. of catheters	165	110	–
Ultrasound	86 (52)	69 (63)	0.11
Success rate at first attempt	130 (79)	75 (68)	0.05
Arterial punctures	7 (4)	3 (3)	0.74
Major complication rate	0 (0)	1 (1)	–
Subclavian venous access, <i>n</i> (%)			
No. of catheters	30	15	–
Ultrasound	2 (6.7)	3 (6.7)	–
Success rate at first attempt	25 (83)	8 (53)	0.07
Arterial punctures	0 (0)	0 (0)	NA
Major complication rate	1 (3)	1 (7)	NA
Jugular venous access, <i>n</i> (%)			
No. of catheters	52	52	–
Ultrasound	49 (94)	47 (90)	0.71
Success rate at first attempt	45 (87)	40 (77)	0.31
Arterial punctures	1 (2)	2 (4)	NA
Major complication rate	1 (2)	1 (2)	NA

IQR = interquartile range, NA = not assessed because of low numbers.

TABLE 3. Baseline Characteristics of Patients and the Performance of Both Groups Regarding Intubations

Intubations	Advanced Practice Provider	Medical Resident	p
No. of intubations	143	115	—
Video laryngoscope, <i>n</i> (%)	101 (71)	78 (68)	0.73
Direct laryngoscope, <i>n</i> (%)	38 (27)	35 (30)	0.49
Video laryngoscope with gum-elastic bougie, <i>n</i> (%)	4 (3)	2 (2)	NA
Supervision, <i>n</i> (%)	91 (73)	115 (100)	< 0.0001
Provided supervision, <i>n</i> (%)	14 (10)	0 (0)	0.01
Cormack-Lehane > 1, <i>n</i> (%)	44 (31)	33 (30)	0.82
Emergency intubation, <i>n</i> (%)	128 (91)	94 (82)	0.07
Nurse satisfaction teamwork, median (IQR)	4.85 (4.34–5.0)	4.73 (4.22–5.0)	0.02
Complication rate, <i>n</i> (%)	13 (9)	12 (10)	0.88
Complications, <i>n</i> (%)			
Aspiration	1 (< 1)	1 (< 1)	NA
Esophageal intubation	4 (3)	1 (< 1)	NA
Hemodynamic collapse	2 (1)	0 (0)	NA
> 1 attempt	6 (4)	8 (7)	NA
Dislocation of the tube	0	1 (< 1)	NA

IQR = interquartile range, NA = not assessed because of low numbers.

Reference:

Kreeftenberg, H. G., Aarts, J. T., Bindels, A., van der Meer, N., & van der Voort, P. (2020). Procedures performed by advanced practice providers compared with medical residents in the ICU: A prospective observational study. *Critical Care Explorations*, 2(4), e0101. <https://doi.org/10.1097/CCE.0000000000000101>

TABLE 4. Characteristics of Other Procedures

	Advanced Practice Provider	Medical Resident	p
Pleural drainage			
No. of procedures	10	7	—
Interhospital transport			
No. of procedures	66	54	—
Electrical cardioversion			
No. of procedures	15	14	—
No. of supervised procedures, <i>n</i> (%)	4 (27)	11 (79)	0.059
Changing tracheostomy cannulas			
No. of procedures	4	2	—

Supplementation (new ± extended role)

- Universal health coverage
- ↑ efficiency of health, resources distribution & cost-effectiveness of care \Rightarrow ↓ healthcare costs
 - Nurse Clinic
 - Private business- entrepreneur
 - New model of care

Voluntary Scheme on Advanced & Specialized Nursing Practice: **Approved applicants = 3931** as at March 2024

	Australia	New Zealand	UK	Singapore	USA	Canada
Nurse practitioners	Over 2250 Australian College of Nurse Practitioners . (2024).	702 Nursing council of New Zealand. (2023).			more than 385,000 in 2022 (American Association of Nurse Practitioners, 2024)	7,400 in 2021 (Canadian Nurses Association, 2021)
Advanced Nurse Practitioners			3,100 William Palmer, S. J., Louella Vaughan. (2023).			
Advanced Practice Nurses				314 (Singapore Nursing Board)		
Clinical Nurse Specialist	Information updated in April 2024				Almost 90,000 in 2022 (Pamela Moss, 2022)	

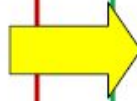
Singapore – Advanced Practice Nurse

Number of Advanced Practice Nurse	321 (2022) from Singapore Nursing Board
Requirement	<ul style="list-style-type: none">• Clinically focused Master level nursing (MN) programme comprising of at least 500 hours of supervised clinical practicum• <u>Advanced practice-oriented modules</u> including: Advanced Health/Physical Assessment; Advanced Physiology & Pathophysiology ; Advanced Pharmacology• Passed MN OSCE• One year of supervised clinical practice to allow consolidation of knowledge, skills and practice expected of an APN
Specialties	Four specialties: <ul style="list-style-type: none">• Acute• Medical/ surgical care• Community• Mental health

Application Process for Certification as an APN

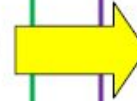
- **Educational Requirement**
- Clinically focused Master level nursing programme comprising of at least 500 hours of supervised clinical practicum
- Adv practice oriented modules including:
 - Advanced Health/Physical Assessment
 - Advanced Physiology & Pathophysiology
 - Advanced Pharmacology
- **Apply**
- Within one year of conferment of Master's degree
- Define area of clinical practice & have a named clinical supervisor
- Apply online and upload the following certified true copies of required forms
 - Identification,
 - Academic transcripts & certificates
- Curriculum vitae
- Request for verification of original transcripts of nursing education from nursing universities & *verification of Registration*
- Pay applicable fees

Application for
Certification



- One year of supervised clinical practice to allow for consolidation of knowledge, skills and practice expected of the APN
- Key Features include
 - Minimum 1280 hours (32 weeks)
Clinical hours in direct patient care at the advanced level
 - Approved clinical areas in the specialty area concerned that allows for complete spectrum of practice in that specialty
 - Named Clinical Supervisor who should be a medical specialist (or an expert APN)
 - Formative Assessment
 - Mini CEX
 - Chart Stimulated Recall
 - Journal Club Teaching
 - Clinical Logs

Internship on
Provisional
Certification



- Applicant submits portfolio consist of
 - completed formative assessment
 - Recommendations from clinical supervisor, Clinical Head-of-Department and Director of Nursing
- Applicant apply for certification examination
- Applicant will be given full certification when she/he pass the certification examination

End of Internship

Opportunities

- New Development in ANP
 - Like Nurse Practitioner type title
 - Not only have extended & expanded roles but also have ADVANCED role
 - New category of salary & ranking
 - Social recognition
 - Recruitment & retention
- ↑ accessibility, affordability & continuity of care
- Contribution to the cost-containment in a heavily subsidized healthcare system

Challenges

- Blurred definitions between specialty nursing & advanced practice nursing
- Scope of practice will have to be agreed by nurses, other healthcare professions, public and the government
- Development of the ANP program
- Objective criteria for program accreditation to be developed
- Competency assessments
- Regulation & registration: collaborative efforts of government, public and nurses

THANK YOU!