

# Past forward your ICU: Adding nurse practitioners to the critical care team

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Past → current





REVIEW

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## Caring for the critically ill patients over 80: a narrative review



Bertrand Guidet<sup>1,2,3\*</sup>, Helene Vallet<sup>3,4</sup>, Jacques Boddaert<sup>2,4</sup>, Dylan W. de Lange<sup>5</sup>, Alessandro Morandi<sup>6,7</sup>,  
Guillaume Leblanc<sup>8,9</sup>, Antonio Artigas<sup>10</sup> and Hans Flaatten<sup>11,12</sup>

RESEARCH

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## Ten-year trends in intensive care admissions for respiratory infections in the elderly




Lucile Laporte<sup>1,2</sup>, Coralie Hermetet<sup>1,3,4</sup>, Youenn Jouan<sup>1,2,5</sup>, Christophe Gaborit<sup>3,4</sup>, Emmanuelle Rouve<sup>2</sup>,  
Kimberly M. Shea<sup>6</sup>, Mustapha Si-Tahar<sup>1,5</sup>, Pierre-François Dequin<sup>1,2,5</sup>, Leslie Grammatico-Guillon<sup>1,3†</sup>  
and Antoine Guillon<sup>1,2,5\*†</sup>

ORIGINAL

## Association of frailty with short-term outcomes, organ support and resource use in critically ill patients



Fernando G. Zampieri<sup>1,18</sup>, Theodore J. Iwashyna<sup>2,3</sup>, Elizabeth M. Viglianti<sup>2</sup>, Leandro U. Taniguchi<sup>4,5</sup>,  
William N. Viana<sup>6</sup>, Roberto Costa<sup>7</sup>, Thiago D. Corrêa<sup>8</sup>, Carlos Eduardo N. Moreira<sup>9</sup>, Marcelo O. Maia<sup>10</sup>,  
Giulliana M. Morales<sup>11</sup>, Thiago Lisboa<sup>12</sup>, Marcus A. Ferez<sup>13</sup>, Carlos Eduardo F. Freitas<sup>14</sup>, Clayton B. de Carvalho<sup>15</sup>,  
Bruno F. Mazza<sup>16</sup>, Mariza F. A. Lima<sup>17</sup>, Grazielle V. Ramos<sup>11</sup>, Aline R. Silva<sup>11</sup>, Fernando A. Bozza<sup>11,19</sup>,  
Jorge I. F. Salluh<sup>11</sup>, Marcio Soares<sup>11\*</sup>  and for the ORCHESTRA Study Investigators

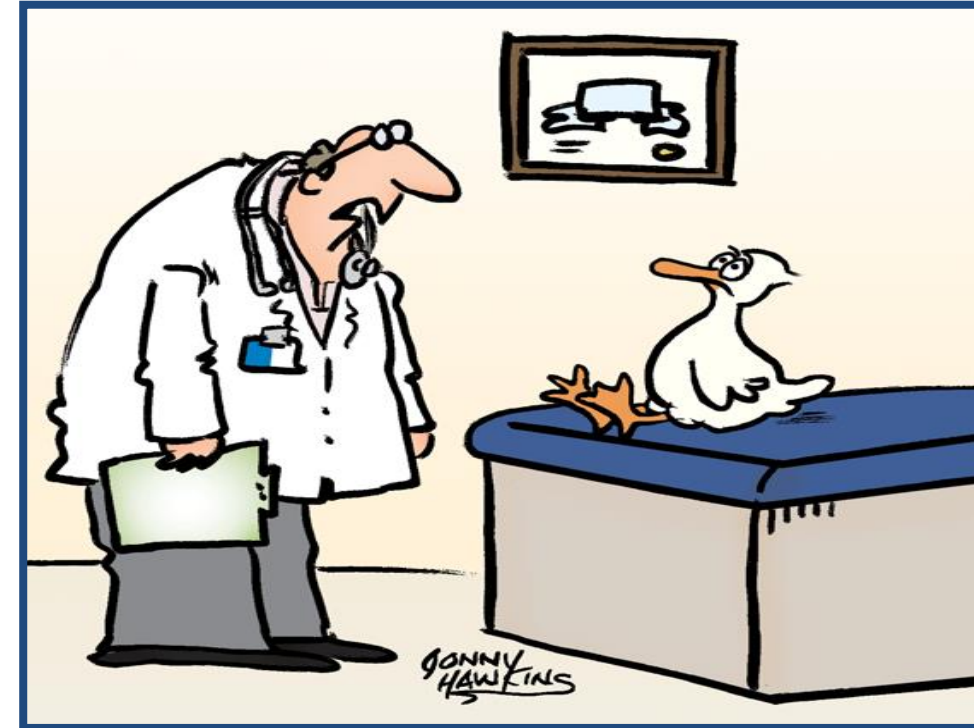
# Single organ specialists

Eurohealth incorporating Euro Observer — Vol.19 | No.2

24 Eurohealth INTERNATIONAL

## RECONFIGURING HEALTH PROFESSIONALISM TOWARDS ADDRESSING MULTIMORBIDITY

By: Thomas Ploch



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### Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study

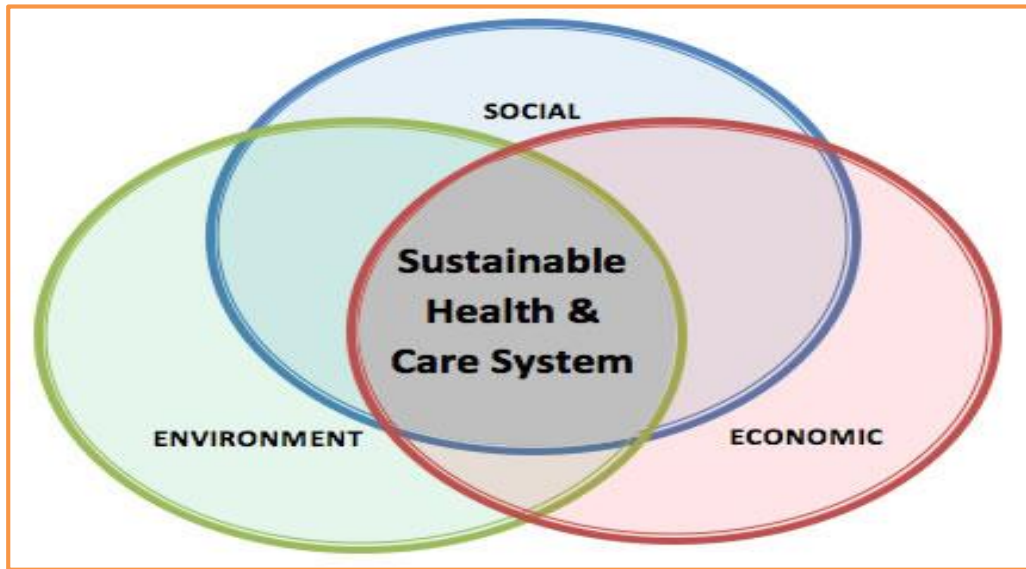
*Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie*

Lancet 2012; 380:37-33



# ICU without Wall

*Triage, ICU Admission and Early Warning System*



# Gaps in service delivery

- Bed capacity issues
- Workload issues
  - Staffing
  - Untimely ward medical reviews
  - Lack of appropriate end of life or limitations of treatment discussions





ELSEVIER

ORIGINAL ARTICLE

# The role of critical care nurses

Alison M. Pirret

# ICCN

www.elsevierhealth.com/journals/iccn

The Netherlands Journal of Medicine

ORIGINAL ARTICLE

## An alternative ICU staffing model: implementation of the non-physician provider

H.G. Kreeftenberg<sup>1,2\*</sup>, J.T. Aarts<sup>1</sup>, A. de Bie<sup>1</sup>, A.J.G.H. Bindels<sup>1,2</sup>, A.N. Roos<sup>1,2</sup>, P.H.J. van der Voort<sup>3,4</sup>



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journal homepage: [www.elsevier.com/locate/ICCN](http://www.elsevier.com/locate/ICCN)

ORIGINAL ARTICLE

## The effectiveness of a patient at risk team comprised of predominantly experienced nurses: A before and after study

Alison M. Pirret<sup>a,b,\*</sup>, Susan F. Takerei<sup>a</sup>

Contents lists available at ScienceDirect

## Intensive and Critical Care Nursing

journal homepage: [www.elsevier.com/locate/ICCN](http://www.elsevier.com/locate/ICCN)



ELSEVIER



## Staff perceptions of a patient at risk team: A survey design

Tania Wood<sup>a,\*</sup>, Alison Pirret<sup>b,c</sup>, Susan Takerei<sup>a</sup>, Joanne Harford<sup>a</sup>

<sup>a</sup> Patient at Risk Team, Critical Care Complex, Middlemore Hospital, New Zealand

<sup>b</sup> Nurse Practitioner, Critical Care Complex Middlemore Hospital, New Zealand

<sup>c</sup> School of Nursing, Massey University, New Zealand



# Nurse Practitioners (NPs): working with you for good health



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# Critical Care Perspective

## The Use of Nonphysician Providers in Adult Intensive Care Units

Hayley B. Gershengorn<sup>1</sup>, Mary P. Johnson<sup>2</sup>, and Phillip Factor<sup>1</sup>

- Physician Assistants & Nurse Practitioners
  - Consistent presence
  - Improved communication & teamwork
  - Chosen setting - interested & engaged
  - No difference in:
    - Duration mechanical ventilation
    - ICU LOS
    - ICU mortality
    - Unplanned readmission to ICU

# A Comparison of Usage and Outcomes Between Nurse Practitioner and Resident-Staffed Medical ICUs

Rachel Scherzer, MSN, RN, ACNP-BC<sup>1</sup>; Marie P. Dennis, PhD, EdM<sup>1</sup>;  
Beth Ann Swan, PhD, CRNP, FAAN<sup>1</sup>; Mani S. Kavuru, MD<sup>2</sup>; David A. Oxman, MD, FACP<sup>2</sup>

Crit Care Med, 2017, 45(2), e132-137

- 1157 admissions
- NP staffed medical ICU – older, ↑ severity of illness
- No difference in mortality
- NPs provided safe and effective ICU care

# Addition of Acute Care Nurse Practitioners to Medical and Surgical Rapid Response Teams: A Pilot Project

ARTICLE *in* CRITICAL CARE NURSE 34(1):51-9 · FEBRUARY 2014 v

- Provide immediate diagnoses & treatment
- ↑ collaboration with primary team
- Quicker transfer to ICU

## Evaluating a new rapid response team: NP-led versus intensivist-led comparisons.

*Scherr K, Wilson DM, Wagner J, Haughian M. AACN Adv Crit Care. 2012;23:32-42.*

- No difference in :

Cardiac arrests

&

Unplanned ICU admission


- Focus on basic problems, education & support

REVIEW

Open Access



## The impact of the advanced practice nursing role on quality of care, clinical outcomes, patient satisfaction, and cost in the emergency and critical care settings: a systematic review

Brigitte Fong Yeong Woo<sup>1\*</sup> , Jasmine Xin Yu Lee<sup>2</sup> and Wilson Wai San Tam<sup>1</sup>

- Comparable LOS
- Comparable mortality
- Improved patient satisfaction
- Improved care co-ordination & continuity of care
- Cost savings



Contents lists available at ScienceDirect

International Journal of Nursing Studies

journal homepage: [www.elsevier.com/ijns](http://www.elsevier.com/ijns)



Nurse practitioners versus doctors diagnostic reasoning  
in a complex case presentation to an acute tertiary hospital:  
A comparative study



Alison M. Pirret<sup>a,b,\*</sup>, Stephen J. Neville<sup>a</sup>, Steven J. La Grow<sup>c</sup>

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<sup>b</sup> Critical Care Complex, Middlemore Hospital, Auckland, New Zealand

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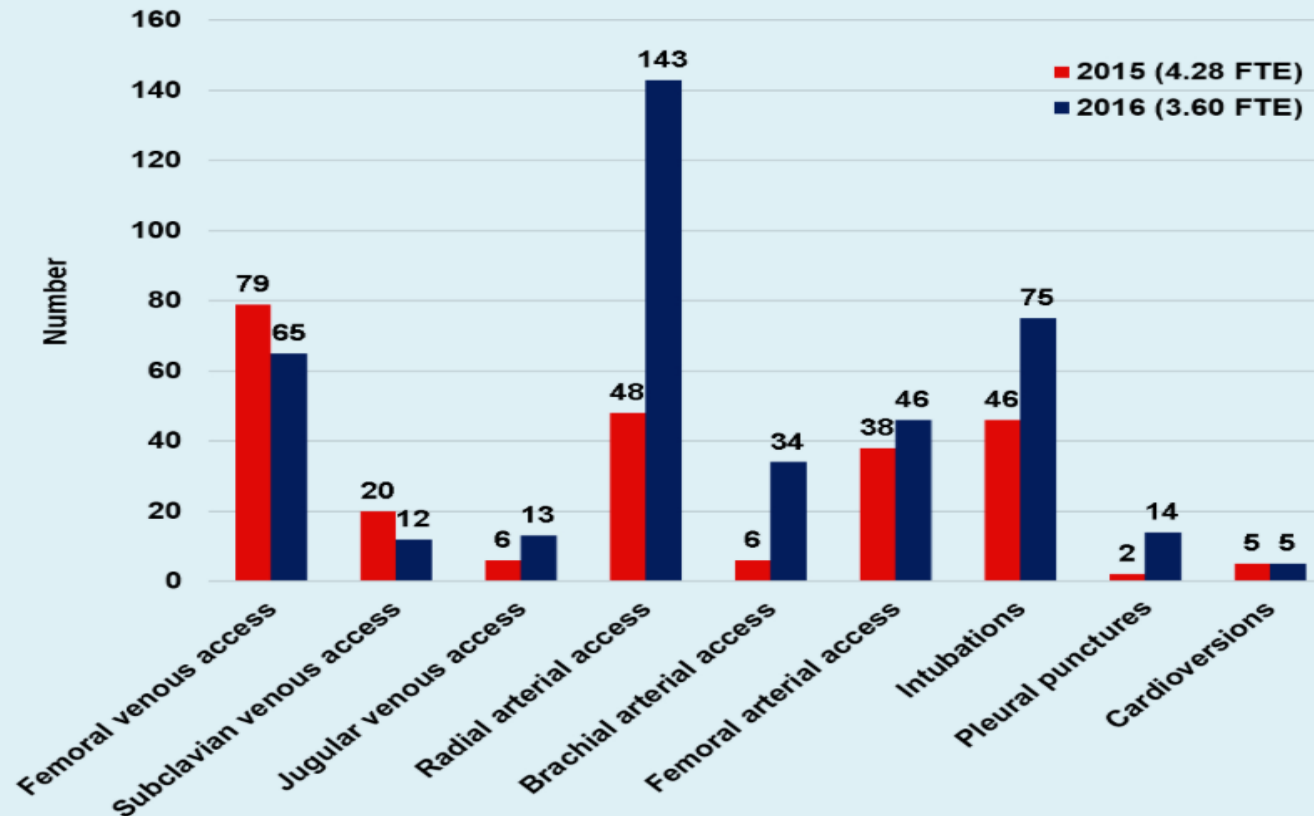
- NPs comparable to registrars in diagnostic accuracy
- NPs communicated more with medical specialists

# An alternative ICU staffing model: implementation of the non-physician provider

H.G. Kreeftenberg<sup>1,2\*</sup>, J.T. Aarts<sup>1</sup>, A. de Bie<sup>1</sup>, A.J.G.H. Bindels<sup>1,2</sup>, A.N. Roos<sup>1,2</sup>, P.H.J. van der Voort<sup>3,4</sup>

2018 May;76(4):176-183

Figure 1. Graph: invasive procedures by NPs and PAs in 2015-2016





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journal homepage: [www.JournalofSurgicalResearch.com](http://www.JournalofSurgicalResearch.com)

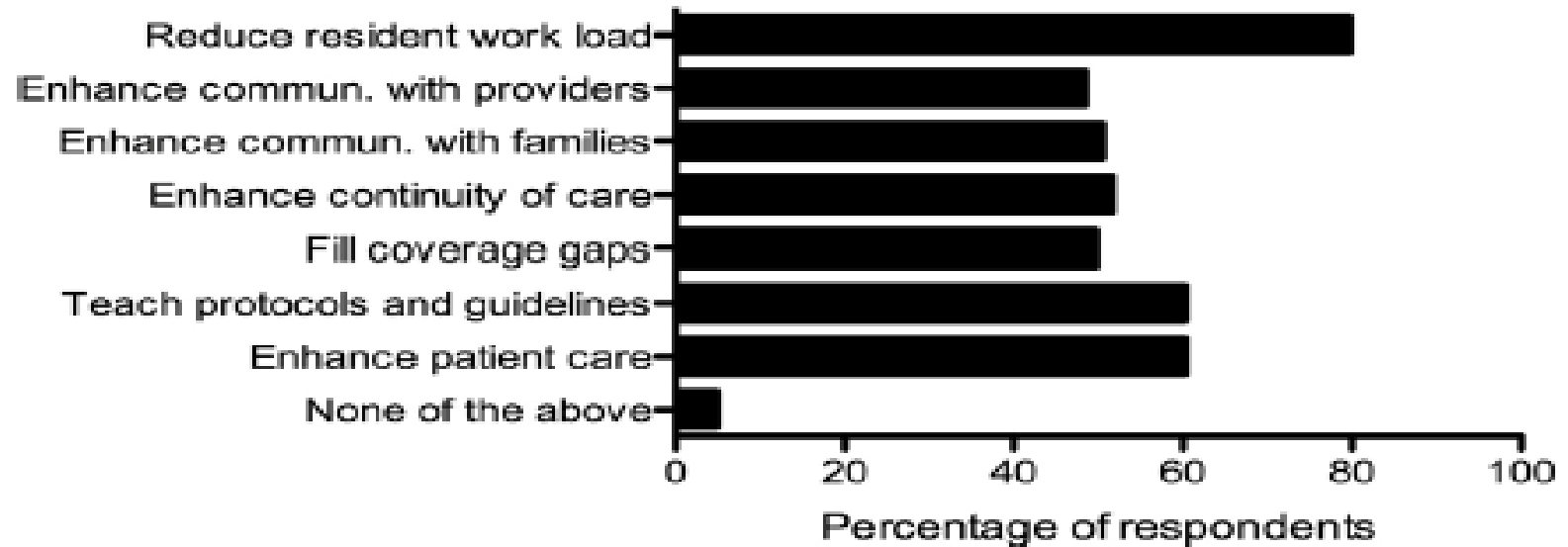


Association for Academic Surgery

## Impact of advanced practice providers (nurse practitioners and physician assistants) on surgical residents' critical care experience



Steven A. Kahn, MD,<sup>a,\*</sup> Sarah A. Davis, ACNP,<sup>b</sup> Caroline T. Banes, ACNP,<sup>b</sup>  
Bradley M. Dennis, MD,<sup>a</sup> Addison K. May, MD,<sup>a</sup>  
and Oliver D. Gunter, MD, MPH<sup>a</sup>



# HOW TO BECOME AN ACUTE CARE NURSE PRACTITIONER

LEARN MORE ABOUT HOW YOU CAN HAVE A REWARDING CAREER AS AN ACUTE CARE NURSE PRACTITIONER.

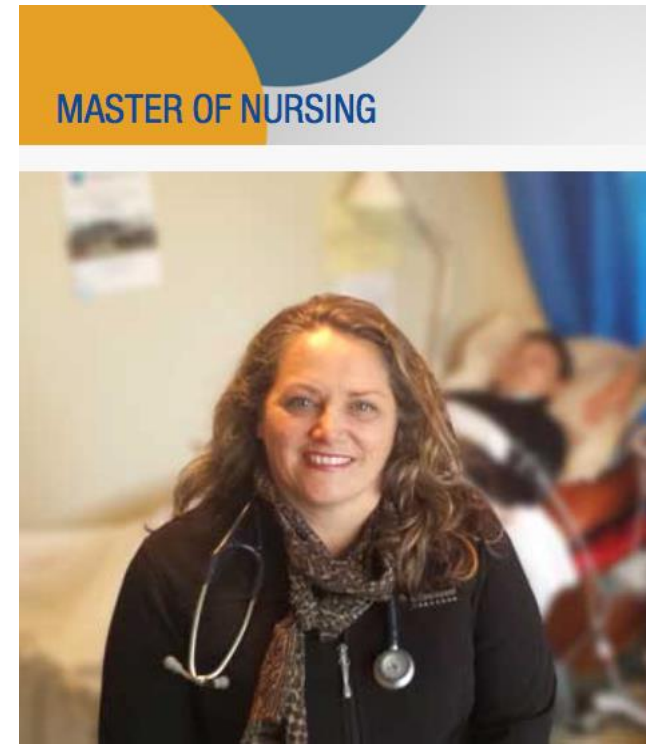


# Scope of Practice

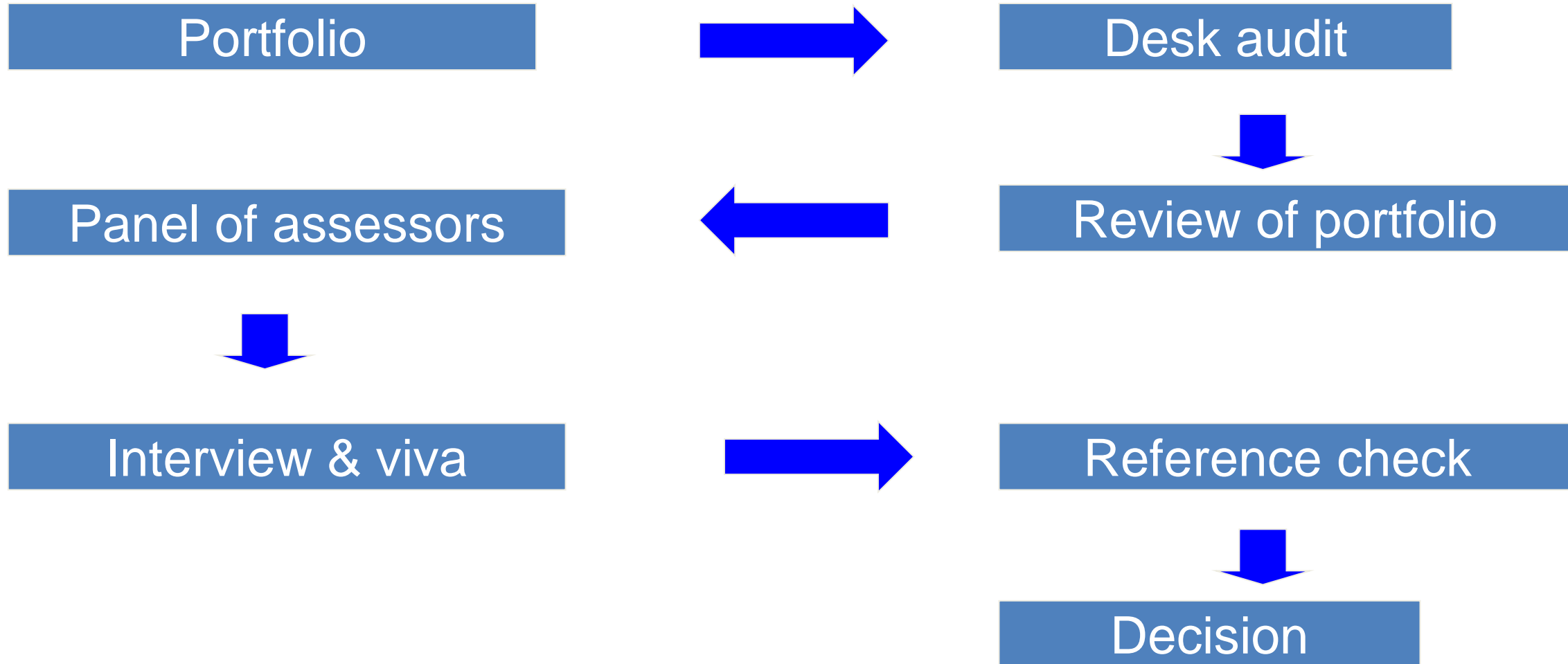
- Title legally protected
- Advanced assessment, identifies diagnoses/problems, performs and interprets diagnostic tests
- Works autonomously and in teams
- Admitting and discharging from hospital and other healthcare settings
- Clinical leaders influencing health service delivery

# Education preparation

- Masters degree
- Compulsory papers
  - Pathophysiology
  - Assessment
  - Pharmacology
  - Prescribing practicum
- HWNZ NP training programme



# NCNZ application process





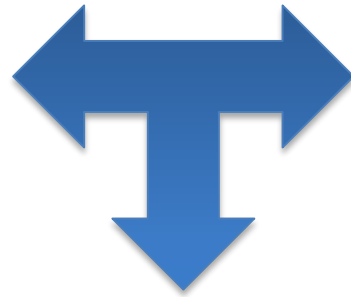
# What could your ICU workforce look like?

## Registrars

- Variable
- Short rotation
- High resource demands
- Necessary

## Nurse Practitioners

- Experienced
- Enthusiastic
- Consistent
- Skilled at
  - Care coordination
  - Communication



# Past forward your ICU

***“Continuous pooling of knowledge and experience by medical and nursing staff increases efficiency, leads to improved methods of treatment, and better facilities.”***

*Dr Matt Spence*

# Conclusion

- What could ICU team roles & responsibilities look like in the future?
- How could ICU service delivery be both effective & affordable?
- Could a nurse practitioner improve service delivery?

