

RESEARCH AGENDA

for Australasian Paramedicine



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50  **Years** Australasian College of **Paramedicine**®

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OVERVIEW

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1 PARAMEDICINE RESEARCH AND THE NEED FOR AN AUSTRALASIAN AGENDA

Paramedics play an integral role in the delivery of mostly unscheduled healthcare for patients across the spectrum of acuity and in various settings. Whilst paramedics continue to fulfil their traditional role of providing care and referral for those with urgent or life-threatening illness or injury, models of care have progressed, paramedic capabilities have expanded, and the role of paramedics continues to diversify.^{1,2} Besides working in ambulance services, paramedics increasingly work in other clinical settings and in non-clinical roles. Over the past few decades, paramedicine practice has become more professionalised. Together with a strong professional college, the transition from vocational to tertiary education, and professional regulation, the development of a discipline-specific body of evidence is a key element of the professionalisation of paramedicine.³

Indeed, the evolution in paramedic practice has been paralleled by a significant growth in paramedicine research capacity and activity. A strong academic culture in Australasia emerging from its tertiary-based paramedicine education pathways positions it well amongst the leading regions for paramedicine research.⁴ The absence of a research agenda, however, presents a risk of research activities lacking direction and collaboration, being scattered and potentially duplicated, and being ill-supported by resources. A research agenda provides direction and priorities, can draw researchers together, promotes collaboration, discussion and resource sharing, and facilitates efficiency from the research resources available and impact of the research outputs.⁵



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2 OBJECTIVES AND APPROACH OF THE PROJECT

With the aim to create and prioritise consensus-based items forming an Australasian paramedicine agenda, the objectives of this project were:

1. To conduct a survey of Australian and New Zealand paramedicine industry to identify research priorities, and the barriers and enablers to achieving these.
2. To conduct a consensus study to create the Research Agenda for Australasian Paramedicine.

3 RESEARCH ETHICS APPROVAL

This research project was approved by the Human Research Ethics Committee of Western Sydney University (Approval Number H14650).

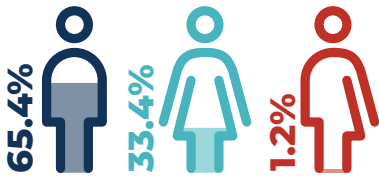
4 BARRIERS AND ENABLERS TO PARAMEDICINE RESEARCH IN AUSTRALASIA

When developing a national research agenda, it is essential to also identify barriers and enablers to conducting the prioritised research and implementing the findings. As such, the first phase of this project utilised a cross-sectional survey of Australian and Aotearoa New Zealand paramedicine stakeholders to establish a preliminary list of research agenda items and to inquire about perceived barriers and enablers of conducting paramedicine research.

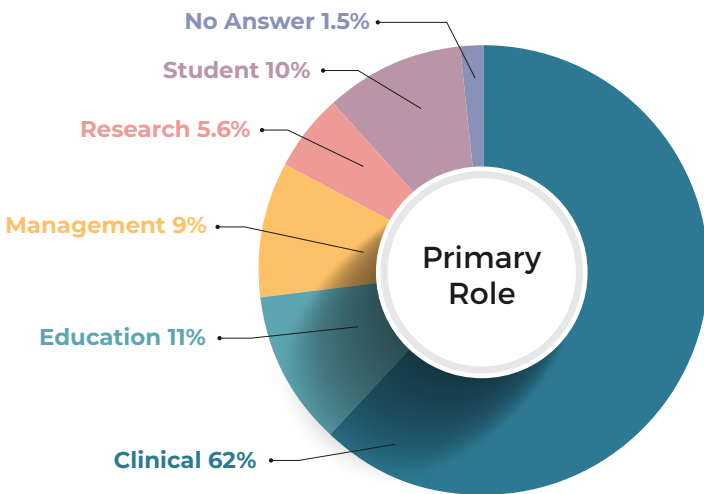
Of the 341 people who participated, 223 (65.4%) were male and 114 (33.4%) were female.⁶ The participants worked in various roles and in all geographical regions of Australasia (see figures below).

Participants provided comments on perceived barriers and enablers which were qualitatively analysed by the research team to generate thematic categories. Analysis resulted in identification of three themes for both barriers and enablers.⁶ Barriers were categorised into ‘systems’, ‘processes’, and ‘human’. There is a disconnect between stakeholders and the provision of resources such as funding, time, training, roles and data which form significant barriers to conducting paramedicine research.⁶ In the right ‘work conditions’, ‘work profile’, and ‘workplace’, participants felt that paramedics have the necessary ability and capacity to lead and undertake paramedicine research.⁶

GENDER DISTRIBUTION OF SURVEY PARTICIPANTS



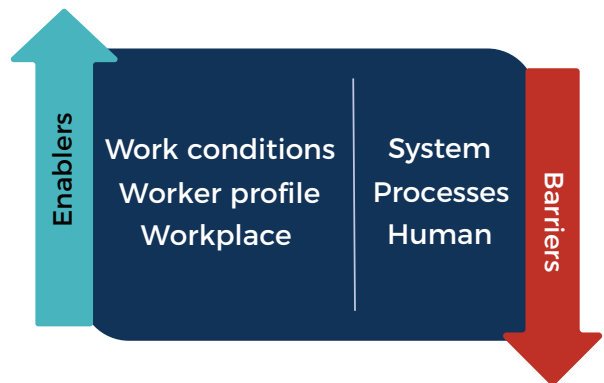
PRIMARY ROLE



LOCATION

Australian Capital Territory	1.2%
New South Wales	27.3%
Northern Territory	1.8%
Queensland	26.3%
South Australia	6.2%
Tasmania	2.9%
Victoria	18.7%
Western Australia	6.5%
Aotearoa New Zealand (Nth Island)	5.6%
Aotearoa New Zealand (Sth Island)	3.5%

BARRIERS AND ENABLERS TO CONDUCTING PARAMEDICINE RESEARCH IN AUSTRALASIA



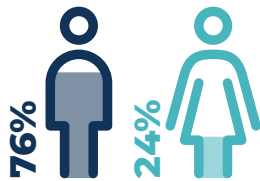


5 RESEARCH AGENDA ITEMS AND PRIORITIES FOR AUSTRALASIAN PARAMEDICINE

Following thematic analysis of the research agenda items collected in Phase 1, a provisional agenda consisting of 109 perceived research priorities was created for submission to Phase 2. Next a three-round consensus process was conducted with key paramedicine profession stakeholders to generate a research agenda.

Of the 63 key paramedicine profession stakeholders who participated, 15 (24%) were female and 48 (76%) were male. Similar to phase 1, they worked in various roles and in all geographical regions of Australasia (see figures below).

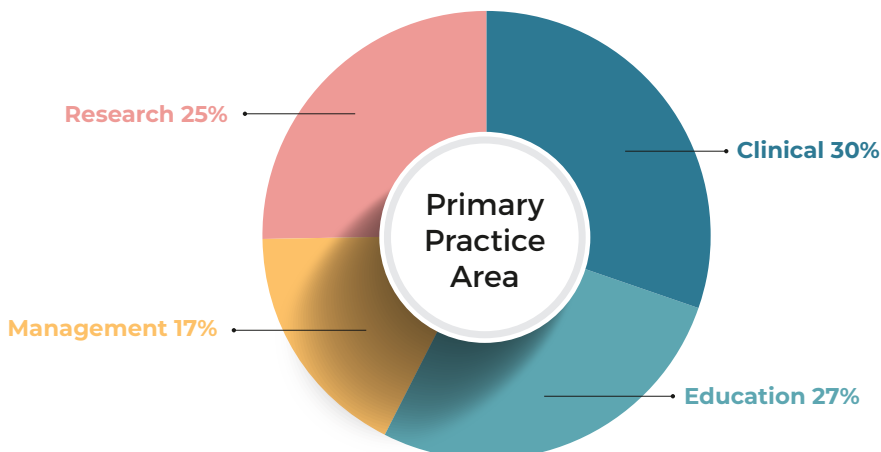
GENDER DISTRIBUTION OF SURVEY PARTICIPANTS



LOCATION

Australian Capital Territory	2%	New South Wales	16%
Northern Territory	2%	Queensland	35%
South Australia	8%	Tasmania	3%
Victoria	21%	Western Australia	8%
Aotearoa New Zealand (Nth Island)	2%	Aotearoa New Zealand (Sth Island)	5%

PRIMARY PRACTICE AREA



RESEARCH AGENDA

for Australasian Paramedicine



EXPANDED ROLES AND PRACTICE SETTINGS

- Paramedics role in broader healthcare system
- New and emerging roles for paramedics
- Paramedics in primary healthcare
- Specialisation scope and value (Paramedic Practitioner)
- Specialisation scope and value (Community Paramedic)
- Specialisation scope and value (Extended Care)



SAFETY AND QUALITY

- Patient safety
- Clinical reasoning processes and models
- Human factors
- Clinical leadership
- Error management and prevention
- Medication safety



SYSTEMS AND PROCESSES

- Systems improvement
- Appropriateness of emergency ambulance utilisation
- Health economics of paramedic care models
- Ambulance dispatch (response prioritisation)
- Clinical practice guideline development
- Value-based care in paramedicine



WORKPLACE CULTURE AND WELLNESS

- Workplace culture in ambulance service organisations
- Burnout in paramedics
- Workplace safety



CLINICAL PATHWAYS AND MODELS OF CARE

- Pathway/model of care (mental health)
- Pathway/model of care (integrated care)
- Pathway/model of care (rural)
- Pathway/model of care (treat and refer)
- Pathway/model of care (palliative)
- Pathway/model of care (geriatrics)
- Pathway/model of care (frequent user)
- Patient handover and transfer of care
- Pathway/model of care (paediatric)
- Pathway/model of care (sepsis)



EDUCATION AND TRAINING

- Tertiary education curriculum
- Preparedness for entry to practice
- Clinical placement structure and assessment
- Preceptor preparedness for supervision
- Simulation pedagogy and practice
- Feedback mechanisms for paramedics

Using a systematic consensus process (Delphi method), participants achieved agreement that 37 of the 109 research agenda items should be included in the Research Agenda for Australasian Paramedicine. These items can be clustered into six areas of research: 'Safety & Quality', 'Systems & Processes', 'Expanded Roles and Practice Settings', 'Education & Training', 'Workplace Culture & Wellness', and 'Clinical Pathways & Models of Care'.

6 SUMMARY

Research is essential to ensure that paramedics provide the best possible patient care and to facilitate the continued development of paramedicine profession. The development of the Research Agenda for Australasian Paramedicine provides meaningful direction for more coordinated, collaborative, and efficient paramedicine research activities in Australia and Aotearoa New Zealand. It does not represent a strict assignment for paramedicine researchers but a consensus-based guide and focus point to stimulate discussion, a catalyst for collaboration, and an evidence-based rationale for resources.

For more information on how the College supports paramedicine research, visit <https://paramedics.org/research>

7 REFERENCES

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