

Australasian College of Paramedicine

Clinical practice guidelines in Australia and Aotearoa New Zealand: A reflection and call to action

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The College acknowledges Aboriginal and Torres Strait Islander peoples as the traditional custodians of the land and sea in which we live and work, we recognise their continuing connection to land, sea and culture and pay our respects to Elders past, present and future.

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Project team

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1. **SONJA MARIA**
Associate Professor, Charles Sturt University;
Chair, Clinical Practice Guidelines Group,
Australasian College of Paramedicine
2. **PROFESSOR ZACHARY MUNN**
Director, Health Evidence Synthesis,
Recommendations and Impact (HESRI) Director,
Adelaide GRADE Centre School of Public Health,
The University of Adelaide
3. **MICHELLE THOMSON**
Paramedic / Quality Improvement Development
Officer, SA Ambulance Service
4. **ADAM MOON**
Senior Manager, Clinical Practice, Clinical
Capability, Safety and Quality, NSW Ambulance
5. **JAMES OSWALD**
Clinical Practice Development Specialist, Clinical
Practice Guideline Team, Medical Directorate,
Ambulance Victoria
6. **JOEL BALLARD**
Clinical Practice Guideline Team, Medical
Directorate, Ambulance Victoria
7. **TIM SCHMIDTKE**
Senior Manager, Clinical and Professional Practice,
Ambulance Tasmania
8. **FRASER WATSON**
Extended Care Paramedic Clinical Lead,
Hato Hone St John, Aotearoa New Zealand
9. **ANTHONY GROVES**
Ambulance Manager, Clinical Governance;
Intensive Care Paramedic, ACT Ambulance Service
10. **MATT WILKINSON-STOKES**
Paramedic and Researcher; PhD Candidate,
University of Melbourne; contributor to previous
projects on paramedic clinical practice guidelines
in Australia and Aotearoa New Zealand
11. **ADAM STEVENSON**
Critical Care Paramedic, National Ambulance
Sector Clinical Working Group, Wellington Free
Ambulance
12. **LACHLAN PARKER ASM**
Director, Clinical Policy Governance, Office of the
Medical Director | Office of the Commissioner,
Queensland Ambulance Service
13. **BRENDAN SCHULTZ**
Clinical Policy and Governance Officer, Office of the
Medical Director, Queensland Ambulance Service

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1. Introduction

This commissioned report is a call to action to improve paramedic clinical practice guidelines (CPG). By shedding light on the existing challenges and proposing actionable recommendations, it seeks to empower interest-holders to elevate the standards of paramedic clinical practice. Through collaborative efforts, this report aims to chart a path towards a cohesive and effective framework for CPG development, ultimately enhancing patient care across Australia and Aotearoa New Zealand.

High-quality, trustworthy, and evidence-based CPGs are essential for delivering effective and safe healthcare. In Australia, the National Health and Medical Research Council (NHMRC) underscores this importance as the leading organisation for guideline development and approval. The NHMRC advocates for CPGs that promote health, prevent harm, encourage best practices, reduce waste, and that are based on review of applicable evidence in a transparent development process.¹ Similarly, the US Institute of Medicine defines CPGs as systematically developed statements aimed at optimising patient care through evidence-based assessments of health benefits and risks.² Trustworthy CPGs not only improve patient outcomes and healthcare quality, but also enable informed decision-making, which is particularly crucial amid escalating healthcare costs and disparities.^{3,4}

In the out-of-hospital setting, CPGs have become indispensable. Initially evolving from basic ambulance protocols, modern paramedic guidelines now offer comprehensive frameworks for clinical assessment and management across diverse scenarios.^{5,6} The professionalisation of paramedicine and its integration into the wider healthcare system - marked by the establishment of registration standards and the transition to university-based education - has further elevated the need for rigorously developed evidence-based guidelines.⁷⁻⁹ Despite this progress, the methodologies that inform paramedicine-specific guidelines remain inconsistent and opaque, even with considerable effort and dedication.

In order to align with international standards, such as those established by the NHMRC, paramedic CPGs must meet rigorous criteria. These include relevance, transparency, stakeholder involvement, conflict-of-interest management, prioritisation of outcomes, evidence-based decision-making, and actionable recommendations. At this stage, it is unlikely that any paramedicine guidelines would be eligible for NHMRC approval due to needing to meet all their requirements.

The Australasian College of Paramedicine (the College) recognised the urgent need to address these issues and, in 2020, established a Clinical Practice Guidelines Working Group, bringing together academic experts and entities, including jurisdictional ambulance services, developing local guidelines. This group aimed to investigate and improve the state of CPG development in paramedicine across Australia and Aotearoa New Zealand.¹⁰ Findings from this initiative revealed variability in development processes, a lack of formal training in guideline methodologies, and concerns about the quality and trustworthiness of paramedic CPGs.⁶ Previous research has also highlighted a disconnect between current practices and the standards required for NHMRC accreditation.¹¹⁻¹³

2. Call to Action:

Recommendations and Implications for Practice and Future Research

This section outlines key recommendations to guide interest-holders¹⁴ - healthcare providers, policymakers, academic institutions, and researchers - in transforming how Australian and Aotearoa New Zealand paramedicine CPGs are developed and implemented. These actionable steps aim to establish a more cohesive and effective framework, fostering collaboration and evidence-based practices across the paramedicine sector.

A. Encourage Inter-Organisational Collaboration

Entities developing local guidelines often develop CPGs independently, leading to duplication of efforts and inconsistencies in clinical practice.

> Recommendation:

Encourage inter-organisational collaboration to standardise guidelines and share resources. Establishing a centralised framework, such as a shared database, can facilitate knowledge exchange.

> Rationale:

Collaboration allows services to pool expertise, reduce resource waste, and adopt unified methodologies, such as GRADE (Grading of Recommendations, Assessment, Development, and Evaluation).

> Implications for Practice:

Standardised CPGs across practice settings will improve care equity, optimise resource use, and ensure consistency in paramedic practice.

B. Enhance Project Management and Evidence Synthesis Methods

- Development of CPGs in paramedicine is often hindered by fragmented and inconsistent processes. Implementing structured project management frameworks that support clear evidence synthesis and its translation into actionable recommendations is crucial for ensuring transparency, consistency, and timely updates.

> Recommendation:

Entities developing CPGs should adopt robust project management methodologies tailored to CPG development. This includes clear workflows, defined roles, and measurable milestones to guide development teams.

> Rationale:

Structured project management reduces inefficiencies, addresses resource constraints, and improves guideline reliability.

> Implications for Practice:

A systematic approach to project management will enhance the quality of CPGs, ensuring they are actionable and aligned with current clinical needs.

C. Build Expertise in Evidence Evaluation

High-quality CPGs rely on rigorous evidence evaluation. Current variability in methodological expertise among guideline developers undermines the reliability and applicability of guidelines.

> Recommendation:

Entities developing CPGs must prioritise training programs to enhance skills in evidence synthesis and guideline development. Collaborative opportunities with academic institutions could support this goal.

> Rationale:

Equipping developers with evidence-appraisal skills ensures guidelines are grounded in the best available research.

> Implications for Practice:

Improved capability in evidence evaluation will increase confidence in CPGs and support their integration into paramedic practice.

D. Prioritise CPG Development as a Critical Function

For many entities, where it has been determined that local guideline development is necessary, CPG development is not treated as a core function. Without adequate funding and resource allocation, it remains undervalued and inconsistently executed.

> Recommendation:

Entities developing CPGs must elevate CPG development as a strategic priority, supported by dedicated funding and regular resource reviews.

> Rationale:

Recognising CPG development as a critical function will ensure consistent updates and alignment with evolving clinical practices.

> Implications for Practice:

This shift will enable entities to produce relevant, evidence-based guidelines that improve patient outcomes and enhance the professional standing of paramedicine.

E. Expand Research on CPG Development and Implementation

Research on CPG development processes and their impact on clinical practice remains limited, highlighting the need for a stronger evidence base to guide future improvements.

> Recommendation:

Interest-holders should prioritise research into the effectiveness of guideline development methodologies, implementation strategies, design, use, accessibility, and paramedic autonomy in applying CPGs in the paramedicine context.

> Rationale:

Expanded research will provide critical insights into the strengths and weaknesses of current practices, enabling targeted improvements. A robust research framework will ensure guidelines remain evidence-based and adaptable to evolving healthcare needs.

> Future Research Areas:

- The relationship between CPG development and patient outcomes.
- The effectiveness of evidence translation and training programs for guideline implementation.
- Policy and organisational factors influencing CPG adoption.

3. Conclusion

The current state of CPG development in Australian and Aotearoa New Zealand healthcare providers presents significant challenges that demand immediate attention. Variability in processes, inconsistent evidence-evaluation methodologies, and inadequate prioritisation of CPG development have created barriers to delivering high-quality, evidence-based paramedic care. These systemic issues risk undermining patient outcomes, paramedic decision-making, and the credibility of the profession.

This report calls for decisive action from all interest-holders - healthcare providers, paramedic employers, policymakers, researchers, and educational institutions. By adopting structured project management frameworks, investing in evidence-evaluation expertise, encouraging inter-organisation collaboration, and prioritising CPG development as a core function, we can overcome these barriers and create a unified approach to guideline development. Research must also play a critical role, providing insights into the effectiveness of implementation strategies and their impact on paramedic practice and patient care.

Transforming CPG development processes will not only enhance the quality and consistency of guidelines, but also strengthen the professional identity of paramedicine. By acting now, interest-holders can ensure that paramedics are equipped with the tools and knowledge they need to deliver safe, effective, and evidence-based care, regardless of the challenges they face.

This is a pivotal moment for paramedicine. Through collaboration, investment, and a shared commitment to excellence, we can establish a robust foundation for CPG development that benefits patients, practitioners, and the broader healthcare systems across Australasia.

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Contact information:

Jemma Altmeier

Advocacy and Government Relations Manager
Australasian College of Paramedicine

Jemma.altmeier@paramedics.org

www.paramedics.org

     @ACParamedicine

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Australasian College of Paramedicine
Level 3, 478 George Street,
Sydney NSW 2000

Phone: AUS 1300 730 450 ext.5 | NZ 0800 730 450
www.paramedics.org