**Submission No 25**

# INQUIRY INTO IMPACT OF AMBULANCE RAMPING AND ACCESS BLOCK ON THE OPERATION OF HOSPITAL EMERGENCY DEPARTMENTS IN NEW SOUTH WALES

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**Portfolio Committee No. 2 - Health**
**New South Wales Legislative Council**

# Deadly delay:

## observations on ambulance ramping and the delivery of sustainable health services in New South Wales

**September 2022**

**Ray Bange OAM**

“Paramedics today … deliver treatments that would only have been done by doctors 10 years ago…’’

Transforming urgent and emergency care services in England
Sir Bruce Keogh, NHS England Medical Director - November 2013

# Executive Summary

The present situation of New South Wales patients being subjected to ‘healthcare in the hallway’ and ramped ambulances outside hospitals is unacceptable. It violates the objectives of focusing on the needs of the patient and delivering the right care – right place – right time. It is destructive of community trust and endangers the health and wellbeing of those working in the health system.

The remedies are multifactorial and involve systemic issues well beyond the New South Wales Ambulance Service and individual hospitals. They involve fundamental consideration of the social determinants of health; the realities of patient presentations across their life journey; and the adequacy of resources and patterns of patient flow outside the hospital system.

Investment in primary healthcare is seen as a crucial factor in prevention and early management of care – particularly in the case of the chronic conditions that are already the major healthcare burden on an ageing society, and that are projected to increase. Minimising the barriers to access will encourage early and appropriate patient engagement with the healthcare system.

The combination of community programs, telehealth, and in-person visits to provide care in the home is likely to moderate these barriers. The author advocates the philosophy of ‘taking healthcare to the patient’ together with better mobilisation of the existing paramedicine workforce to increase the available practitioner resources in fulfilling that goal.

Alternative care pathways must be explored, and hospital wards opened and staffed to facilitate patient flow and treatment beyond the Emergency Department. Consistent approaches, informed by evidence and medical expertise, must be adopted in the release of patients to increased community services including longer term and palliative care.

The submission recommendations cover (inter alia):

a. Formal recognition of paramedicine as a key stakeholder group within the health workforce, including the incorporation of paramedicine in workforce data collection and planning;

b. Appointment of a Chief Paramedic Officer;

c. Legislative review to ensure a contemporary framework for all paramedic service providers;

d. Removal of unnecessary impediments to practice for paramedics to facilitate their effective engagement in hospital settings and within primary and other care facilities;

e. Expansion of Community Paramedic roles, allowing patients to be comprehensively assessed, treated, or referred from their own homes;

f. Ensuring equitable access to financial incentives and support for paramedics;

g. Expanding the use of Extended Care Paramedics within the NSW Ambulance Service;

h. Facilitating the creation of Paramedic Practitioner roles, with access to MBS/PBS provider programs, referral pathways, prescribing rights, electronic and other health records, and other elements of independent practice, to allow appropriately trained paramedics to directly support local communities at a primary care level; and,

i. Providing toolkits and other resources to Workforce Agencies, GP clinics and other healthcare agencies and providers to advise them on how best to use the available Allied Health Practitioner and paramedicine workforce.

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# The author

The author of this submission is Adjunct Associate Professor Ray Bange OAM, and this submission is made in a personal capacity. An independent researcher and policy advisor, he was for several years an assessor of scholarships under the former Nursing & Allied Health Scholarship and Support Scheme administered by Services for Australian Rural and Remote Allied Health.

Professor Bange is an Executive Committee member of the Australian Health Care Reform Alliance and the recipient of an Order of Australia Medal for contributions to paramedicine, education, and the community.

# An overview

Ambulance ramping and bed block in New South Wales (NSW) continues to be widely reported, with significant media coverage and questions in parliament. Delayed patient entry to hospital Emergency Departments (EDs) remains a topic of great public concern.

This is understandable, as the NSW Ambulance Service (NSWAS) is often the first point of access to care for those experiencing an acute or life-threatening health concern and is widely used as a social and health safety net for those unable to access other care within the community.

On 26 July 2022, the Portfolio Committee 2 - Health of the NSW Legislative Council self-referred an Inquiry into the impact of ambulance ramping and access block on the operation of hospital emergency departments in New South Wales.[1]

The terms of reference for the Inquiry are outlined in *Appendix A*.

Notwithstanding the Inquiry terms of reference refer to several issues, the author has interpreted the Inquiry objectives from the fundamental viewpoint that public policy must be to deliver high-quality health services to the NSW population across all stages of life.

Ambulance ramping is not confined to NSW but is occurring across Australia with increasing regularity. The Australasian College for Emergency Medicine (ACEM)[2] has said:

> *"…This crisis is caused by systemic issues and pressures that have been growing for years. These issues are causing sick and seriously injured patients to face major delays in being admitted to hospital inpatient beds or other healthcare services following their initial treatment and assessment in EDs."*
>
> *"This is not a new problem. Presentation numbers have continued to climb steadily for the past decade, and systems are failing to meet that ongoing demand. This has been predictable and should have been planned for."*
>
> *"The current crisis is not caused by patients presenting to EDs who 'should have seen their GPs instead', as such patients require relatively few ED resources and do not require admission to hospital. Overwhelmingly, the dangerous bottlenecks EDs are experiencing are because of system-wide resourcing, staffing and procedural issues leading to delays for our sickest patients needing admission to hospital."*
>
> *"This is a dangerous situation which increases the likelihood of worse patient outcomes, including death."*
>
> *"These are complex problems, requiring some complex solutions. Part of the solution is ensuring there are enough properly resourced and staffed inpatient beds. However, the whole system must be taken into account. This should include a focus on workforce sustainability and extending out-of-office hours access to other hospital services and specialties, including advanced diagnostics."*

[1] Media Release, Portfolio Committee 2 – Health, Legislative Council, NSW Parliament, 27 July 2022. https://bit.ly/3D7qKc3

[2] Media Release, Australasian College for Emergency Medicine, 17 May 2021. https://bit.ly/3AW4Ndq

The author agrees that a whole-of-system approach[3] is needed to overcome ED crowding, the high incidence of ambulance ramping and consequential potential harm to both patients and personnel.

NSW is already moving to provide funds for NSWAS[4] but a singular focus on NSWAS may not address the root cause/s of delayed assessment and treatment of patients - which may arise from deficiencies elsewhere within the health system.

The current Inquiry is also being conducted in the context of unprecedented changes in health service delivery occasioned by the COVID-19 pandemic and wide-ranging policy developments at a national level, including the implementation of the National Primary Health Care 10 Year Plan.

The 10-Year Plan is intended to set a vision to guide future primary health care, as part of the Australian Government's Long Term National Health Plan. Under this Plan, there is a commitment to implement a health system that is more person-centred, integrated, efficient and equitable at local and regional levels.

While those high-level national policy goals are laudable objectives, their execution will depend not only on accessible physical facilities and infrastructure but also on the availability of adequate health workforces and innovative means of service delivery.

Disappointingly, the national objectives pay little attention to the contributions and importance of the paramedicine workforce or the jurisdictional ambulance service sector as a significant portal for entry of patients to the health system.

The (past) separation of federal/state policy and funding roles is perceived as impeding innovations such as suitable funding models for a range of telehealth and primary health care services inclusive of medical and allied health practitioners, pharmacists, nursing, mental health services and better support for rural and remote communities – including effective ambulance services.*

This submission does not cover all the terms of reference but places an emphasis on the capacity of paramedic services* and paramedicine to meet overall community needs and potentially reduce the incidence of delayed treatment. The key matters covered embrace workforce issues and the integration and coordination of services and include measures considered likely to improve patient flow and minimise ramping and delay.

The submission highlights the flexibility and capacity of paramedics to work independently or in multidisciplinary teams in public and private practice and health settings other than NSWAS. It emphasises the impediments to paramedic practice and explores the ways by which paramedicine might be mobilised better to deliver optimal care within the community.

# A system under extreme pressure

The health system is facing significant public health challenges, including an ageing population and an ageing health workforce. Changes in disease patterns, including a growing level of chronic disease and multi-morbidity, are driving demands for more complex and longer-term care.

The unfilled demand for human and physical resources and the pressures on healthcare are amply evidenced by indicators such as long wait times for medical treatment and elective surgery, bed block in hospitals and ramping of ambulances.

In October 2021, the extent of ambulance ramping across Australian jurisdictions was highlighted as one symptom of a multi-factorial health system failure.[5]

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[3] Paul Atkinson, Ken McGeorge, Grant Innes, *Saving emergency medicine: is less more?* Canadian Journal of Emergency Medicine, 16 November 2021. (2022) 24:9–11. https://doi.org/10.1007/s43678-021-00237-1

[4] Danuta Kozaki, *NSW to get almost 2,000 more paramedics to improve response times, staff shortages, ABC News, 7 June 2022.* https://t.co/pAUD2WtlMh

[5] Malcolm Boyle, *Bad for patients, bad for paramedics: ambulance ramping is a symptom of a health system in distress*, The Conversation, 11 October 2021. https://bit.ly/33QhWIa

• Throughout this submission the terms ambulance services and paramedic services are used interchangeably

That expert view suggested that until there is sufficient federal funding for aged care beds, improved NDIS processes and funding to allow GPs and allied health workers to manage patients in the community, patients and paramedics will continue to be put at risk.

Ramping with delayed definitive care harms patients and applies stress on ambulance and hospital staff. Paramedics, nurses and medical practitioners in EDs within NSW and across Australia have expressed deep concerns at the potential for patient harm and excessive workloads and fatigue leading to burnout, travel accidents and staff retention issues.

In December 2021, the Queensland Audit Office released a report that questioned whether the workload of the state's public health employees was "unsustainably high". The Audit Office identified the increasing demand for services, even before the added challenges of the coronavirus pandemic.

In South Australia, the South Australian Salaried Medical Officers Association (SASMOA) which represents doctors who work in salaried positions in hospitals and community health services has been active in identifying concerns and vocal in its advocacy for better resources and care.[6, 7]

Concerns raised by SASMOA about premature discharge being directed by non-clinicians, resulted in a union survey about the pressure to discharge patients from hospital and received 250 responses. The survey results indicate that practitioners hold great concern for the welfare of patients from the pressure to discharge and thereby free up hospital beds.

One part of the solution would be the provision of more beds and more staff resources. That option doesn't cater for the daily flow of patients through the system with appropriate exit to suitable home settings or community services such as mental or long term and palliative care.

On a positive note, the uptake of telehealth for mental health services during the pandemic has revealed that the pandemic accelerated the adoption of telehealth by clinicians and that maintaining telehealth mental health care has the potential to improve access.

# Long term and sustainable community health

At a macro scale, governments have a responsibility to look at improving community health and wellbeing. Population level health outcomes involve more than advanced medical interventions and are significantly influenced by economic and social policies and by preventive and primary care.

The dire staffing situations imposed by the COVID-19 pandemic create the danger that short term responses may be adopted, whereas stability and growth are needed for funding and infrastructure including human resources.

In the long term, climate change is widely recognised as posing the greatest threat to human health. The effects of global warming will exacerbate inequities in health experiences and outcomes. The pandemic represents a turning point and provides an opportunity to do things differently.[8]

Achieving a sustainable health system thus necessarily requires consideration of climate change as a determinant of health and attention to patient needs at each level of the health system.

There is growing acceptance that the health of the population is strongly impacted by policies spanning the social and economic environments, commonly referred to as the Social Determinants of Health (SDOH).[9] The influence of the SDOH on longer-term emotional and physical health has been well established by Marmot and other researchers.[10]

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[6] *SASMOA Discharge Survey*, South Australian Salaried Medical Officers Association, June 2021. https://bit.ly/3qn62hH

[7] Roy Eccleston, Sarah Reed, *Sick and Tired: Medical Emergency*, SA Weekend Magazine, 17 April 2021.

[8] Bange R, *Lancet Countdown on health and climate change,* AHCRA, Facebook, 24 October 2021. https://bit.ly/33GLKHv

[9] Social determinants of health - the social and economic factors and conditions in which people are born, grow, live, work, and age, that are known to be the most powerful determinants of population health. World Health Organisation, https://bit.ly/3eUnNyF

[10] Sir Michael Marmot, *Fair Society, Healthy Lives, The Marmot Review* www.ucl.ac.uk/marmotreview The Marmot Review, February 2010 ISBN 978–0–9564870–0–1 https://bit.ly/2z8U5PS

These aspects were recognised in the *Sustainable Health Review* by the Western Australian Government[11] which developed eight enduring strategies and 30 recommendations, seeking to drive a cultural shift from a predominantly reactive, acute, hospital-based system – to one with a strong focus on prevention, equity, early child health, end of life care, and seamless access to services at home and in the community using technology and innovation.

Long term sustainability must acknowledge that the health system extends beyond hospitals and advanced medical interventions and that the operations of NSWAS are interwoven with primary care and a range of other health and social care services.

# A conceptual model

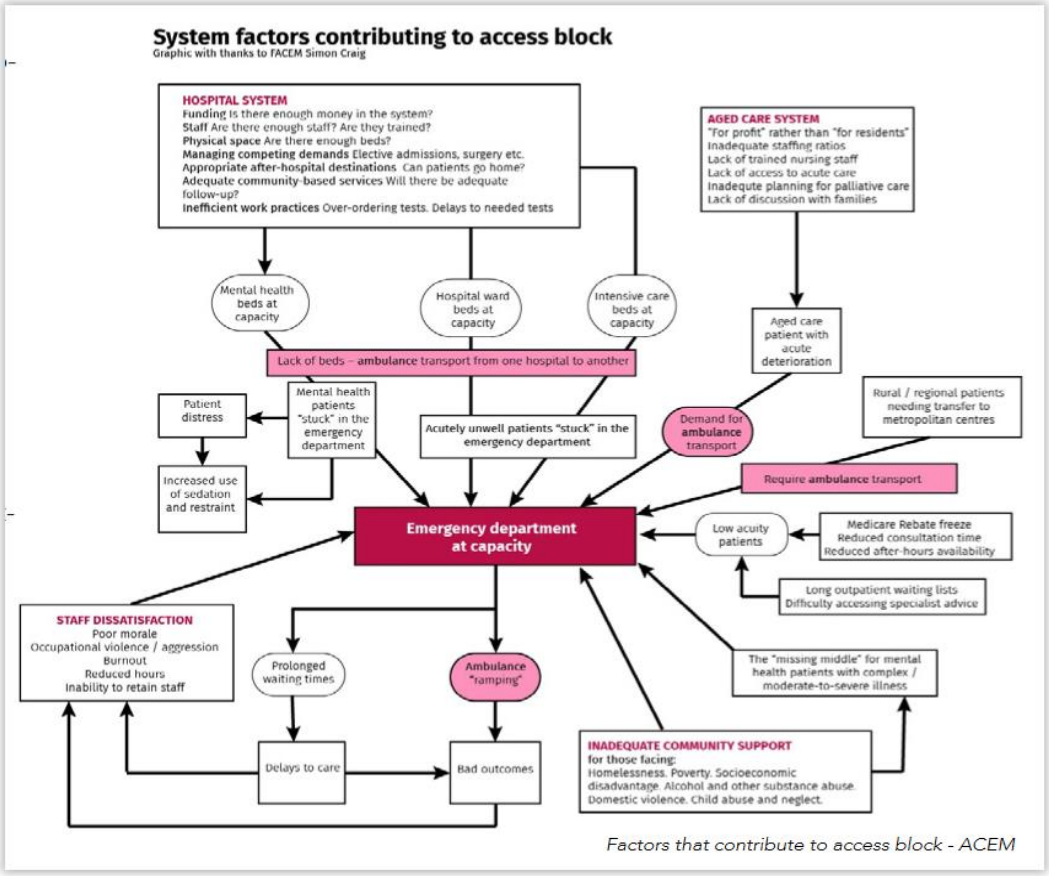
The (ACEM) has prepared a Position Statement which unequivocally states that: *"…within 30 minutes of arriving at an ED, 100% of patients should have their handover completed"*.

Moreover, it is the view of the ACEM that ramping: "*… should not be allowed to occur. Where it does, it is an indicator of health system dysfunction that compromises patient care and increases the risk of adverse health outcomes".*

ACEM's position is that a whole-of-system response is needed to address overcrowding and access block, including an investment in more hospital beds.

> *"We could add 100 new ambulances to the road and, if we have not also invested in improvements across the wider healthcare system – particularly more hospital beds and specialised mental health beds, with staff – we could simply have 100 more ambulances ramped outside hospitals."*

ACEM has prepared a system flow chart showing system factors contributing to access block.




[11] Sustainable Health Review (2019). *Sustainable Health Review: Final Report to the Western Australian Government,* Department of Health, Western Australia. https://bit.ly/3pksiIF

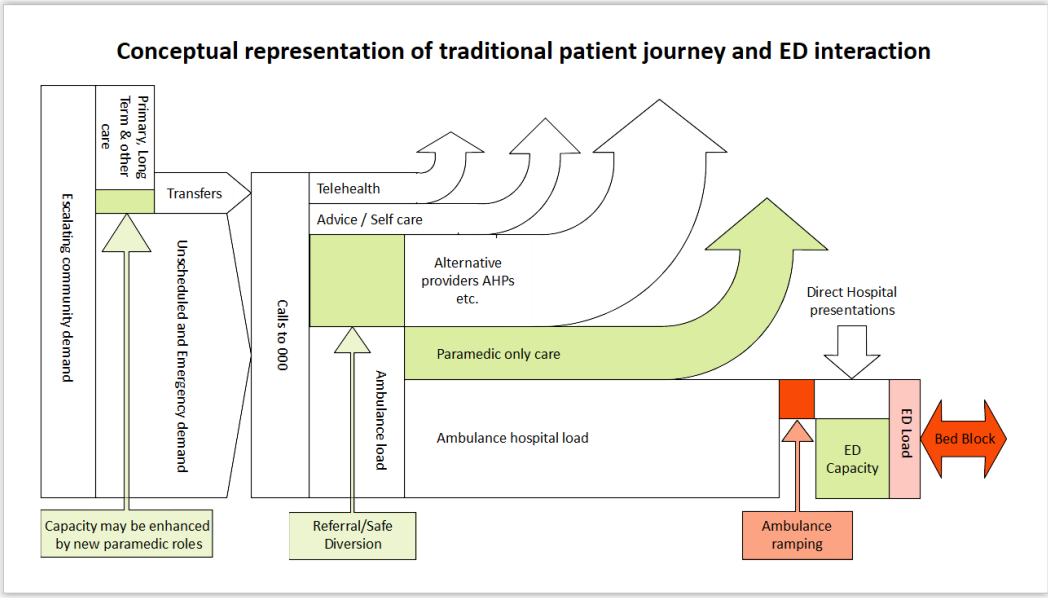
The traditional model of hospital triage and ED operations may no longer be fit for purpose. Triage in various forms and at different stages of the patient journey may stream patients according to need or infection risk, and in some cases redirect appropriate patients to other services.[12]

As well as patient flow, the pandemic has shown how ED infrastructure needs to be modified to improve safety with separation of patients, individual rooms, and airborne infection control.

Front-of-house process redesign may include direct-to-team referral models (clinic or ward) to bypass the trauma centre. Accessibility is important, and extended hours clinical services are needed including a minor injuries unit, linked to the ED for walk-in, booked, new and follow-up patients. There has been implementation of virtual care and Hospital in the Home models.

A simplified conceptual framework of the current model of patient journeys and their involvement with key aspects of care is shown below. The author draws attention to how the capacity of the ED can be overwhelmed by a lack of hospital beds which is then reflected in ambulance ramping.

Judicious deployment of paramedics may enhance service capacity across the spectrum of health from primary care through to the hospital / ED environment and in later long term/senior and palliative care (external services not shown).




Within the ED there is an acute shortage of ED nurses. There is an urgent need to attract, support and retain nurses in the ED as well as medical practitioners.[13]

# Emergency Departments and hospital systems

The NSW health system is in crisis and crowding in EDs with ‘hallway medicine’ and ambulance ramping are symptoms of that distress. Bed capacity and flow in the hospital system are crucial factors and numerous hospitals report that they are operating at unsustainable levels of demand.

If beds are not available, patients cannot transfer out of the ED or more patients admitted to the ED. Recent times have seen the initiation of escalation protocols, advising patients not to call 000, to avoid hospitals if possible and avail of primary care or general practice. This denial of care is unacceptable in the long term and more sustainable approaches must be adopted that also consider the fundamental issues of the SDOH (page 8).

[12] Anna Macdonald, *Virtual triage service to roll out across Victoria*, The Mandarin, 26 April 2022. https://bit.ly/3x4YZ09

[13] Lauren Day, *Fears of mass exodus of hospital workers as doctors and nurses face burnout*, ABC News, 6 June 2022. https://ab.co/3L7rGiO

Adequate staffing is a consistently reported problem in sourcing ED practitioners and engaging medical practitioners and Allied health Practitioners (AHPs) in rural and regional areas. Currently, staffing within hospitals is at risk with significant absences through sickness, isolation, early retirement and resignations.

Knock-on effects from patient offload delays can reduce capacity and result in longer ambulance response times. These factors all impact patient safety - ranging from pressure injuries to cross-infection risks. The impact on staff wellbeing across the system is debilitating.

Comprehensive submissions by others will outline medical and nursing staff requirements and provide more details of operations within the EDs and hospital wards. They are expected to emphasise the importance of patient flow, including triage, treatment and discharge protocols.

> *"In the short to medium term, increasing the healthcare workforce, bed capacity, resourcing primary care and general practice and the provision of alternative care pathways with additional diagnostic facilities in the community could ease the burden on our emergency departments.*
>
> *But we also need to cast the net wider and earlier in the form of public health interventions at population level. Addressing the social determinants of health and initiating policies which will improve health outcomes will have an impact on hospital crowding in the long term."*

*Dr Niamh Cummins,*[14]
*Lecturer in Public Health, School of Medicine,*
*University of Limerick*

Many solutions have been proposed in earlier Inquiries, but the recommendations commonly focus on medical practitioners, nurses, and midwives (as one might expect). Consideration of the human resources available from AHPs is (generally) limited.

Paramedic roles and workforce matters (if covered) tend to be examined through the lens of an ambulance service rather than as nationally registered health professionals able to work within hospital and other clinical environments. Seldom discussed is the important role of Patient Transport Services or Non-Emergency Patient Transport.

Workforce planning that doesn't acknowledge and take advantage of paramedics to work in public and private health facilities and multidisciplinary practice is baffling.

With paramedicine an independently registered health profession, the recognition of private paramedic service providers requires resolution, along with the accreditation of private providers and their use as a surge resource (like in the UK).

Health inequity and delay are harming NSW patients every day. That must stop. Patient-centred, sustainable, system-wide solutions are required that treat not just the immediate realities of ED crowding and ambulance ramping but the underlying causes. Among the available solutions should be the better mobilisation of the paramedicine profession across the health domain.

This submission places a focus on four main themes:

a. A brief assessment of NSWAS capacity and overview of the paramedicine workforce;
b. Moderation of demand through primary and community care with wider use of paramedics;
c. Measures to reduce transport and ED presentations via alternative pathways of care; and,
d. Ways in which the health workforce resources can be enhanced by directly mobilising paramedicine e.g., in hospital EDs and other settings.

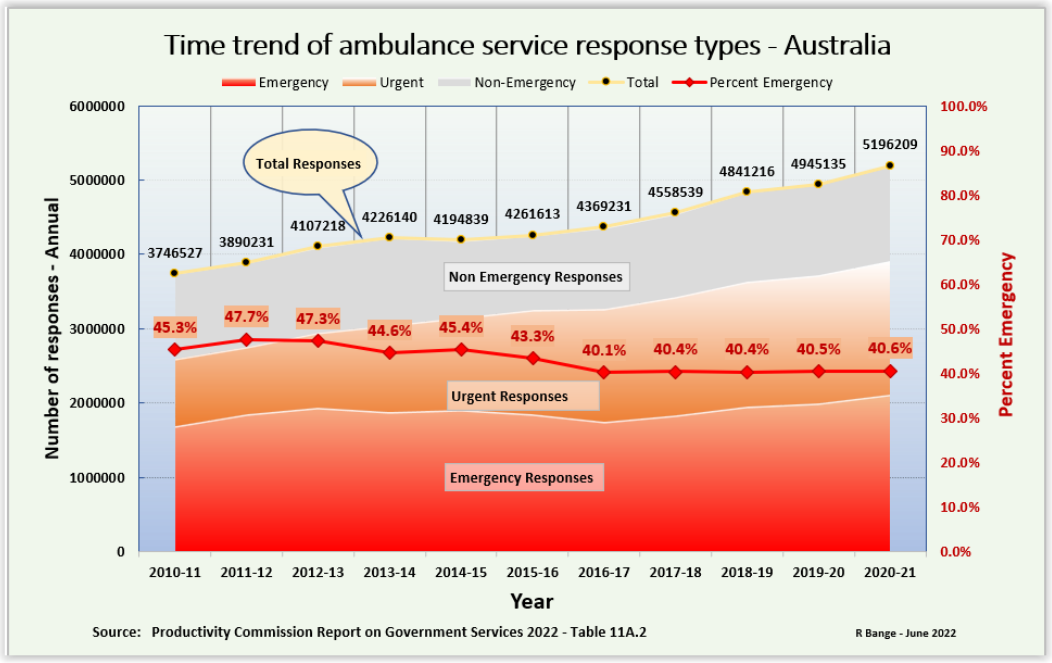
[14] Niamh Cummings, *The trolley crisis in Irish hospitals has not gone away*, Raidió Teilifís Éireann, 20 January 2022. https://bit.ly/3IqwsVS

# NSW Ambulance Service (NSWAS)

NSW has a single public ambulance service (NSWAS) that spans the whole state. NSWAS is staffed by registered health professionals who are overwhelmingly drawn from the paramedicine profession but with a substantial number of medical, nursing and other health professionals.

The role that ambulance services are playing in meeting the needs of the community has been changing over many years, and the public perception of emergency response is often distorted.

Across Australia, the time trend of ambulance service responses[15] shows that most patient attendances are not emergency cases demanding a 'lights and sirens' response.




Australia-wide, about 40% of responses are currently classified as an emergency with a growing number of responses classified as urgent and non-emergency. The total number of responses has been increasing steadily and these demand trends have been well-telegraphed.

In February 2017, the UK Association of Ambulance Chief Executives (AACE) launched a joint consensus statement committing the National Health Service (NHS) ambulance trusts to increased collaboration in supporting improved health and wellbeing.[16]

NHS England's Medical Director, Professor Sir Bruce Keogh at the time said:

> "*The vision for the Ambulance Service: '2020 and beyond' includes an increasing role in prevention and health promotion. This consensus statement reflects the evolving role of the Ambulance Service as a mobile healthcare provider using the richness of expertise residing in its workforce."*

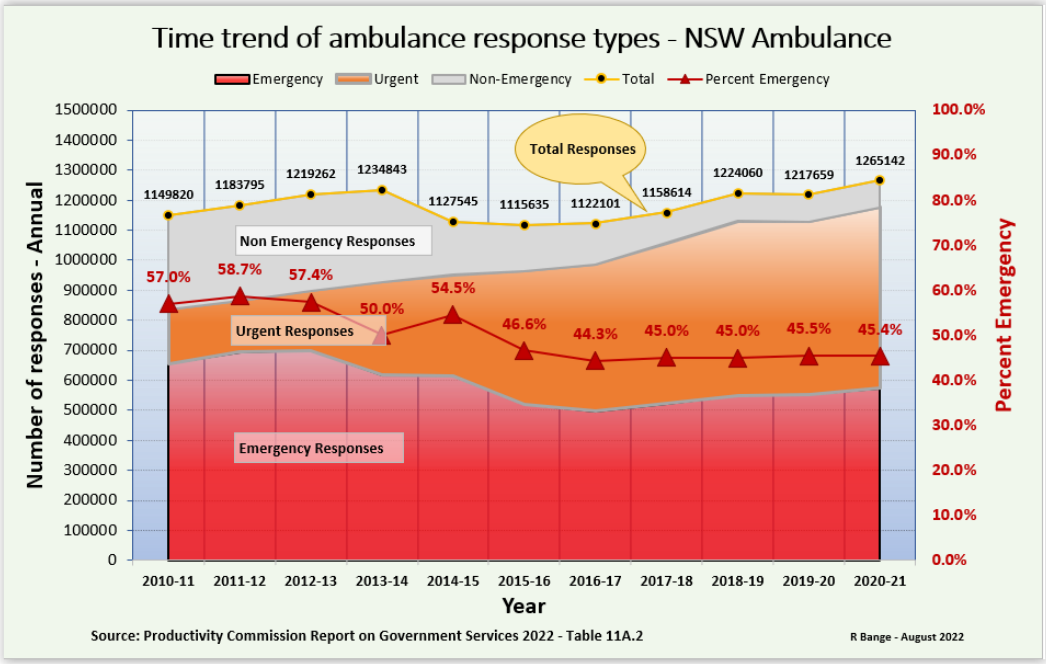
[15] Productivity Commission, *Report on Government Services (ROGS),* Australian Government, Canberra, 28 January 2022. https://bit.ly/3ev0ONm

[16] Association of Ambulance Chief Executives, *Working together with ambulance services to improve public health and wellbeing, Consensus Statement*, 7 February 2017. https://bit.ly/3v3mraJ

The AACE has now published a *Discussion Paper: Developing a Public Health Approach within the Ambulance Sector*.[17] The AACE paper outlines the importance of public health and prevention within the ambulance sector, and ways this public health approach can be progressed.

Overall, Australian ambulance services are providing an increasingly vital public health service along similar lines to the service commitments of UK ambulance services. In some jurisdictions, this expansion of care is being implemented using various models of community paramedicine.[18]

The picture is much the same for NSWAS, although the percentage of emergency cases at around 50% is higher than for other Australian jurisdictions. The greater percentage is a function of classification as well as reflecting demand and availability of alternative service pathways.




Perceptions of NSWAS need to go beyond that of a pre-hospital emergency care provider operating in a silo. The future of health service delivery needs an appropriately funded paramedic (aka ambulance) service that is widely distributed across the state and positioned to respond to population-based health initiatives. It should provide appropriate health promotion and prevention and community-based health management services aligned with the SDOH and community needs.

The author proposes that NSW embrace the concept of NSWAS providing broader healthcare responses through the delivery of out-of-hospital care in diverse situations (whether in the field, a healthcare facility or at home) and under conditions at times of unscheduled emergency.

While this scope of service may be delivered administratively, it is recommended that the broader remit of NSWAS be enshrined in relevant (amended) legislation.

At the same time, legislative amendments might be considered that better recognise paramedicine as an independent health workforce[19] and acknowledge competent and accredited private providers that employ registered paramedics, nurses, and medical practitioners.

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[17] Association of Ambulance Chief Executives, *Discussion Paper: Developing a Public Health Approach within the Ambulance Sector*, May 2021. https://bit.ly/3yppjkw

[18] Katie N. Dainty et al, *Home Visit-Based Community Paramedicine and Its Potential Role in Improving Patient-Centered Primary Care: A Grounded Theory Study and Framework*, Health Services Research, October 2018. https://doi.org/10.1111/1475-6773.12855 https://bit.ly/3ypAz0o

[19] Bange R, *Tasmanian Health Legislation (Miscellaneous Amendments) Bill 2022*, The Paramedic Observer, 7 May 2020. https://bit.ly/3eqnPAV

# The importance of prevention

One of the key lessons from longitudinal healthcare studies is the role of prevention in helping people live longer in good health. Prevention is also effective in reducing the burden on other health and social care resources including hospital EDs.

Good prevention practices can identify developing health issues and provide suitable interventions before those issues develop into a major or urgent care episode. Good prevention can reduce the need for conveyance and presentation to EDs.

In addition to recognising the wider role of paramedic services as part of a health and care system with the capacity to moderate demand, the UK has seen growing use of paramedics as individual practitioners within primary care as well as in hospitals and other facilities.

Ambulance services compete with other public and private sector employers to engage paramedics. As of 1 September 2021, there were 1016 Registered Paramedics with Independent Prescribing status in the UK.[20]

It is surprising that Australian governments have been so slow in utilising the existing paramedicine workforce, including those in NSW outside the NSWAS.

The important message is that supporting a broader NSWAS role is not enough, and the NSW government should also take steps to expand the health workforce by facilitating the use of independently registered paramedics more widely throughout the health domain.[21]

Wider engagement of paramedics across the health sector will increase the available health workforce resources and diversity. Mobilisation of the paramedicine cohort also holds the prospect of enhanced interagency and rotational work with hospitals and other agencies[22, 23] including GP practices, urgent care centres, mental health, and palliative services.

The pandemic has shown that much can be achieved given the right policy settings. We currently have an opportunity to build a better health and economic system that recognises the SDOH and incorporates a prevention-oriented strategy.

These principles align with national policies that envisage the growth of integrated out-of-hospital care to cater for an aging population and increasing incidence of chronic conditions that are seen as preventable, with the burden particularly acute in rural and remote areas.

In the words of the former Medical Director of one of the largest (geographical) ambulance services in the world:

> *"It's past time that we stopped conceiving of paramedics as two people who turn up in an emergency ambulance and take you to hospital - and started viewing paramedicine as the art of bringing good medicine to tough situations, wherever that arises."*
>
> Dr Paul Bailey,
> Medical Director,
> St John Ambulance (WA) 8 September 2021

[20] Health and care professions council, *Registrant snapshot. 1 September 2021. https://bit.ly/3Aiz0m6*

[21] Behnam Schofield et al, *Exploring how paramedics are deployed in general practice and the perceived benefits and drawbacks: a mixed-methods scoping study,* Bagpipe, Royal College of General Practitioners, 13 May 2020. https://bit.ly/3DwRkcz

[22] Australian Health Care Reform Alliance, *Health Workforce Policy Position Paper*, 28 June 2016. http://bit.ly/292oxB3

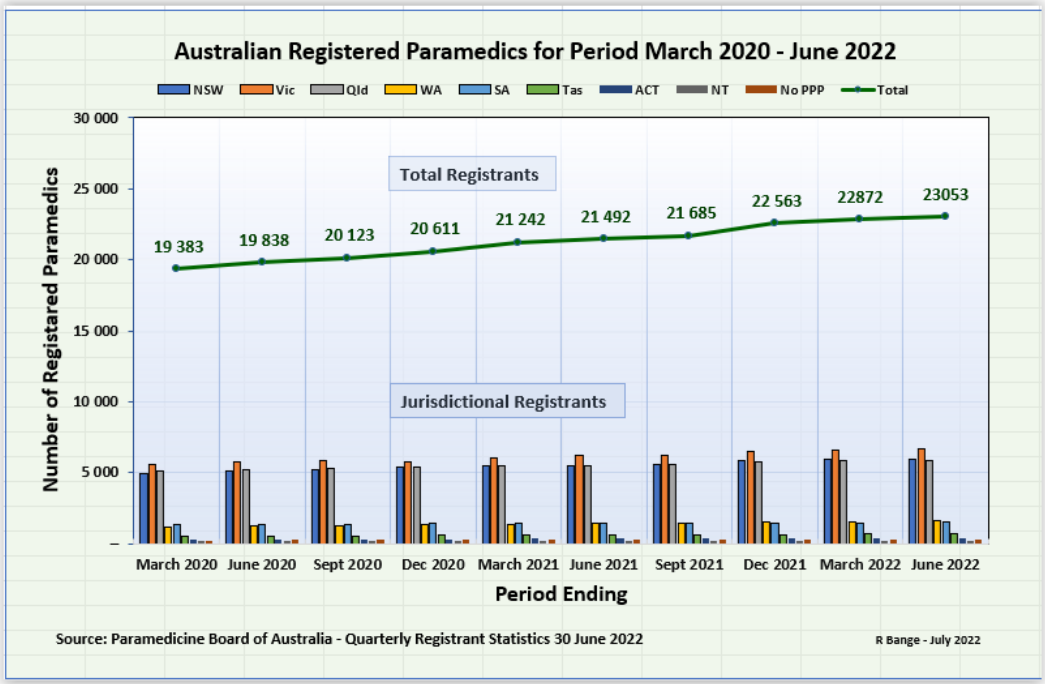
[23] Gardiner F W, Bishop L, de Graaf B, Campbell J A, Gale L, Quinlan F. (2020). *Equitable patient access to primary healthcare in Australia*. Canberra, The Royal Flying Doctor Service of Australia. https://bit.ly/3qtsNxk

# The paramedicine cohort

One of the key issues in seamless delivery of good care is the availability of practitioners. In recent times, the critical shortage of staff has seen exceptional steps taken to use students and non-clinical staff to ensure services and facilities remain operational.

The pervasive image of paramedics is one of the practitioners working alongside medical practitioners in ambulance services and search and rescue operations. That emergency care role is extremely valuable, but as registered health professionals, paramedics may also be engaged across the spectrum of healthcare in other community and primary healthcare roles.

The most reliable and accessible workforce data on paramedicine are the statistics from the Australian Health Practitioner Regulation Agency (Ahpra) and the related Paramedicine Board of Australia (PBA) publication of the latest quarterly summary of registrants.




Operational data for ambulance services are provided in the annual Report on Government Services (ROGS) published by the Australian Productivity Commission. ROGS statistics only cover the subset of paramedics employed by government-funded public ambulance services. It does not include military medics and those working for other government services.

It omits the contributions from private aeromedical and land-based service providers and individual practitioners in other settings – ranging from medical clinics and hospitals to industrial sites.

Estimates prepared from PBA statistics and the ROGS 2022 report indicate that about one-third of registered paramedics do not work for jurisdictional ambulance services. Based on the PBA's most recent statistical summary showing Australia had 23503 paramedics at the end of June 2022, up to 6900 (30%) of paramedics potentially work outside the ambulance service sector.

Only estimates are available because ambulance services do not transparently report the number of registered paramedics they employ. The COVID-19 pandemic has distorted recent recruitment patterns and the number of paramedics employed by Australian ambulance services is likely to see a substantial increase in 2022/23 staffing because of recent boosts in health funding.[24]

[24] Danuta Kazaki, *NSW Premier commits to public sector pay rise and $3,000 appreciation payment*, ABC News, 7 June 2022. https://ab.co/3RA7YP2

Significantly, the number of Australian paramedicine graduates annually substantially exceeds the previous pattern of recruitment from the jurisdictional ambulance services. With annual graduation rates now exceeding 2,500, the author estimates that more than 1000 graduates annually may not gain immediate employment within the public ambulance service sector.

These graduates will add to the substantial body of registrants available to practice elsewhere across health - provided obsolete role perceptions change and unwarranted administrative and regulatory impediments are removed - many of which are a hangover from a bygone era.

The Ahpra data is a limited dataset with little published data on rurality or practice settings. Activity-level data is not collected through the Medical Benefits Scheme and the AIHW has little involvement in data collection and reporting. More comprehensive data on paramedics and AHPs is essential in health workforce planning.

Notwithstanding the paucity of data, at a time when well-documented shortages exist across the health workforce, the paramedicine workforce should be mobilised as a cohort of independent registered health practitioners so that the community can benefit from their expertise.

The Australian and NSW Governments should facilitate the engagement of paramedics across public and private health settings as well as employing them for their complex NSWAS roles.

# Enhancing primary care and general practice

Primary care remains the most immediate source of health services for most people. One outcome of the difficulty in accessing primary care is that the first interaction with the health system for older people is often for an acute episode, such as a stroke, heart attack or major fall, which typically results in a call to the 24/7/365 ambulance service.

Primary health care services and health care in the home can help in preventing such acute events and thus play a part in reducing the demand for hospital services which then form part of the patient flow and ramping scenario.

In NSW there has been a concentration of clinical resources in metropolitan areas. In rural areas, local GP appointments may not be feasible due to a paucity of practitioners and GP services report being overwhelmed - with extended appointment times.[25] Workforce shortages broadly correlate with higher rates of chronic disease, potentially preventable hospitalisations, and shorter lives.

Typical GP services have consisted of medical practitioners, nursing, and administrative staff. Many practices have been slow or unable to take advantage of the enhanced practice options available from an expert AHP workforce and interdisciplinary practice. AHPs can play a key part in supporting primary care and in the prevention, management, and treatment of chronic disease.[26]

Paramedicine also is often missing from documentation and reports as a stakeholder health or allied health profession.[27] That omission may result from a lack of awareness of the education and capabilities of paramedics, given the dearth of paramedics working in health policy areas.

Better data on the AHP workforce is needed, but there is general agreement that there is a widening gap in health workforce distribution between rural and metropolitan regions. Although the demand for specific practitioners may vary across regions, there are consistent calls for health professionals able to work in teams and provide the medical infrastructure within the community.

For rural communities, there is little support for people with severe mental illness and consequently limited consultation with potential service consumers. Telehealth developments during the pandemic have served to identify gaps in digital access and the inability of disadvantaged people with mental health issues to even be online, let alone access online appointments.

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[25] Legislative Council, *Health outcomes and access to health and hospital services in rural, regional and remote New South Wales*, Portfolio Committee 2 – Health, NSW Parliament Report 57, May 2022. https://bit.ly/3FpSUyi ISBN 978-1-922543-55-4

[26] ibid

[27] Bange R*, ICYMI- An unfortunate omission*, The Paramedic Observer, Facebook, 7 September 2022. https://bit.ly/3x3wdwM

Often overlooked in strategy documents and plans are the jurisdictional ambulance services or privately engaged paramedics who are important patient contact points, especially for smaller communities and in industrial settings. The evidence from ROGS (pp 11-12) is that ambulance services provide much more than emergency response and that the care they deliver warrants national funding. This omission is particularly evident in national policy discussions – with the federal and state roles leaving funding and service gaps to be filled by jurisdictions.

Similarly, the role of AHPs in primary health is not always well defined or appreciated.[28] Incentives to increase the attractiveness of rural and regional areas are sometimes piecemeal and focus on specific elements of the health system rather than based on an integrated approach. A potential outcome is the inadequate integration of allied health staff into local clinical teams to enhance the viability of smaller rural GP and allied health practices.

While the former Australian government plan to remove the university debt of doctors and nurse practitioners from January 2022 (subject to conditions), that proposal[29] did not sufficiently acknowledge that AHPs are essential in providing the framework for multidisciplinary care.

More recently, there has been a growing focus on allied health with the release of the National Rural Health Commissioner's (NRHC) report on the Improvement of Access, Quality and Distribution of Allied Health Services in Regional, Rural and Remote Australia.[30]

A disconcerting feature of the NRHC report was the specific exclusion of the paramedicine workforce as an available allied health workforce.[31]

In conjunction with the recognition of paramedicine as a discrete professional workforce for planning purposes, there should be direct recognition for reimbursement of medical services delivered by a paramedic.

The lack of support or funding of paramedics at a national level contrasts with other AHPs that have established reimbursement schemes and Medicare numbers. Unlike these practitioners, there is no recognition for a paramedic to directly sign off service items for payment.

Faced with funding and regulatory barriers, private paramedicine providers in Australia have been (generally) limited to aeromedical, event and industrial sector contract services. Two outliers are the St John private charitable bodies in Western Australia and the Northern Territory which are engaged by the respective governments to deliver public ambulance services.

To facilitate the development of broader community care initiatives, funding models need review, including the fee-for-service model, to recognise the cost of servicing patient groups.

Innovative solutions are required to improve access to allied health care and integration of this workforce sector with primary care networks, hospital and health services, aged care services, disability services, and other community services.

Funding is needed for health education, increasing health literacy and health promotion and workforce policies to accommodate the growth of public, not for profit and private service capacity.

These matters need to be pursued at both State and the Commonwealth levels.

[28] Hal Swerissen, Stephen Duckett (2018), *Mapping primary care in Australia*, Grattan Institute. https://bit.ly/3slftzA

[29] Stephanie Dalzell, Claudia Long, *Government to lure doctors and nurses to rural, regional and remote areas by slashing university debt*, ABC News, 7 December 2021. https://ab.co/3phcm9H

[30] National Rural Health Commissioner, *Report for the Minister for Regional Health, Regional Communications and Local Government on the Improvement of Access, Quality and Distribution of Allied Health Services in Regional, Rural and Remote Australia, June 2020,* Australian Government. https://bit.ly/3qc5zxn

[31] Ibid (page 47)

# Allied Health support programs

The preceding discussion has outlined the increasing demand for health services driven by an aging population and greater prevalence of chronic diseases. Other factors that influence patient inflow include the use of EDs for non-urgent attendances in the absence of alternative care pathways in primary care and general practice.

Registered Nurses, Nurse Practitioners and Paramedics may be the most qualified local health professionals available in rural areas to cater for unscheduled and acute care events. They are also the professionals most likely to be able to complement the patient care available from a GP clinic leading to a reduction in preventable hospitalisations.

To provide better services there is a need for strategies aimed at attracting and retaining AHPs in rural areas just as much or even more than for medical practitioners and nurses. For sustainability, AHPs need practice support, effective career paths, and professional development support.

The Australian Department of Health provides funding for several incentive and support programs including the Health Workforce Scholarship Program (HWSP) administered by the NSW Rural Doctors Network (RDN) which is a not-for-profit, non-Government Rural Workforce Agency (RWA).[32] The RDN also provides grants to eligible health care professionals under the Rural Health Workforce Relocation Support Grants.

RDN is a member of the Rural Workforce Agency Network (RWAN) comprising seven jurisdictional RWAs, which was formed in 2017 to administer Australian Government remote and rural health workforce programs. The objectives include the provision of a structured approach to strategic and operational opportunities and challenges and to address workforce shortages.

The HWSP provides two types of grants. Scholarships for formal post graduate university programs, and bursaries that are individual grants for professional development and travel expenses in priority locations or for priority topics. In addition to demonstrating alignment with key needs, applicants must demonstrate how the education they propose will contribute to meeting local community needs.

Examination of the RDN website does not disclose any recent publication of needs assessment or the consultation process undertaken to incorporate consideration of allied health. While there is an Indigenous engagement strategy and agreements with Aboriginal Health and Medical Research Council of NSW and Indigenous Allied Health Australia, the broader engagement with AHPs (including governance level involvement) is not immediately evident.

The RDN list of eligible professions for the HWSP (see Guidelines)[33] nominates several AHPs but omits paramedicine - which is also missing from the Guidelines for the Commonwealth-funded Workforce Incentive Program – Practice Stream (WIP). [34]

The WIP is another program of support for rural practices administered by Services Australia. This is intended to support general practices to engage nurses, Aboriginal and Torres Strait Islander Health Workers, and AHPs in multidisciplinary and team-based primary health care.

A paramedic looking for support to work with a GP or clinic would not be encouraged to apply for a relocation grant given the otherwise thorough listing of eligible professions.

While paramedics have applied for and been successful in gaining grants in some states, the listing of AHPs should be reviewed to ensure national inclusivity and to encourage applications.

[32] NSW Rural Doctors Network. https://www.nswrdn.com.au/site/aboutus#Our%20history

[33] NSW Rural Doctors Network, *Health Workforce Scholarship Program Guidelines - 1 September 2022, https://bit.ly/3xd4Dxe*

[34] Department of Health, *Workforce Incentive Program Guidelines*, Australian Government, Canberra, 1 January 2020. https://bit.ly/35cdX9p

Similarly, a General Practice proposing to engage a paramedic under the WIP to meet an identified practice need would be dissuaded from even applying because paramedicine does not appear in the listing of eligible professions.[35]

The author's assessment of past RWAN performance, based on readily accessible published materials, is that the consortium consists of seven independent agencies that do not demonstrate particularly good cross jurisdictional engagement or liaison with professional stakeholders other than the medical profession.

Community engagement is not significant and there is a dearth of recent published data on allied health. There is minimal mention of paramedicine and little evidence of meaningful engagement with the paramedicine profession through representative Colleges.

The author is also sceptical about the validity of needs identification which is based on nominated professional groups when so many professions are listed. The author suggests that artificial barriers to applications should not be raised based on 'eligibility' of professions other than by nominating a broad category of (say) AHPs.

Broad national priorities may be set by nomination of professional groups but real needs for multidisciplinary practice are founded on local conditions[36] and that will be identified by the nature of applications. The number and quality of applications will help to shape the future of healthcare.

Among the observations in the 2020 KPMG evaluation report[37] was that RWA engagement with allied health was in its infancy. KPMG stressed the importance of the health workforce needs analysis and mention was made of enhanced scopes of practice for AHPs.

Extended scopes of practice would align with the role of a community paramedic or paramedic practitioner. Pilot studies in Australia and increasing practice overseas have found substantial benefits in the use of community paramedics and the engagement of paramedics in primary care.

This enhanced scope of practice may be recognised through regulatory mechanisms (i.e. through formal qualifications) on the reasonable assumption that the use of such practitioners will enhance access to more comprehensive health services.

Paramedics working for NSWAS across the state already are engaged in managing mental health, chronic conditions, end of life/palliative care and multi-disciplinary team-based care, so there is no doubt that paramedics hold or could obtain the requisite qualifications or competencies to work in primary care and GP practices – noting that upskilling is also a principal objective of the HWSP.[38]

A transparent Workforce Needs Assessment based on functional activities is important for several purposes and should not discriminate in providing support for those NSW paramedics not working for government.

The author opines that allied health must be given greater prominence in the governance structure and transparently reported workforce needs analysis and that paramedicine representatives be included in consultations.

[35] Services Australia, *Workforce Incentive Program Practice Stream,* Department of Health and Aged Care, Australian Government. https://bit.ly/3xf12P1

[36] NHS England, *AHPs in Primary Care Networks,* https://bit.ly/3eGOgSY

[37] KPMG, *Review of the Rural Health Workforce Support Activity Final Report*, Department of Health, https://bit.ly/3smQGLv

[38] NSW Rural Doctors Network*, Health workforce upskilled to vaccinate with HWSP funding*, 1 September 2021. https://bit.ly/3rKUeFm

# Facilitating the engagement of paramedicine

Paramedics working for NSWAS are already engaged in a variety of health and care activities in addition to applying their expertise in emergency response, trauma care and resuscitation. Within the ambulance services, Extended Care Paramedics (ECPs) are paramedic specialists whose expertise embraces additional medications and skills.

Judicious expansion of this role has the potential to reduce the number of ED presentations. This pattern of care and practice activities has been demonstrated nationally and internationally by effective diversion and referral programs with ECPs increasingly recognised as frontline healthcare practitioners. Pilot projects funded by the former Health Workforce Australia[39] have also shown the benefits of community and extended paramedic care.

A further example of the employment of paramedics across health can be seen in England, where GP practices work together with the community, mental health, social care, pharmacy, hospital, and voluntary services in their local areas in groups of practices known as Primary Care Networks (PCNs). The PCNs are analogous to the Australian Primary Health Network.

PCNs build on existing primary care services and enable the provision of personalised and more integrated health and social care for people close to home. Over 99% of GP practices in England are part of a PCN, who sign up to the Network Contract Directed Enhanced Service which details their core requirements and entitlements.

An important component of the GP contract agreement is the *Additional Roles Reimbursement Scheme* (ARRS) to enable each PCN to add various AHPs to make up the multidisciplinary workforce they need (see earlier 'real needs' p 18). PCNs can decide the distribution of roles required and can engage community-based partners if they do not directly engage a practitioner.

An important feature of the ARRS arrangement is the 100% reimbursement to create additional capacity across nominated primary care roles. By 2024, first contact community paramedics are expected to have become an integral part of the core general practice model throughout England. Australia lags badly by comparison.

An underlying feature of the ARRS is the general recognition of AHPs as a valuable part of the primary care team - while the specific inclusion of community paramedics acknowledges the role of paramedicine in primary care and multidisciplinary teams.

> *"Paramedics have so many complementary skills and in primary care, there are many areas where paramedics can complement the rest of the primary care team, not least acute care, but also, domiciliary visiting and follow up to the same that may well enable patients to stay in their own home rather than be admitted to hospital. In addition, this framework offers an opportunity for paramedics to develop their skills and develop more sustainable careers."*
>
> Professor Simon Gregory,
> Director of Education and Quality,
> Health Education England

This practice regime is consistent with current moves towards supporting an aging population and caring for increasingly complex patients with chronic conditions by providing care close to home and keeping more people out of hospitals (and EDs). The WIP is similar but is not supported by an effective capabilities framework to assist in implementation by GP practices.

[39] Bange R, *Policy Position: Health Workforce,* Australian Health Care Reform Alliance, December 2017. https://bit.ly/3AvLGpQ

By contrast, Health Education England commissioned a Paramedic (Specialist in Primary and Urgent Care) core capabilities framework to support those paramedics working in primary and urgent care. It also provides advice to practitioner groups on the role of paramedics and their integration into general practice at suitable practitioner NHS pay band levels.[40]

The framework enables health services to specify minimum standards for clinical employment and placement; it sets out clear expectations about what paramedic specialists can do, recognising that these practitioners must be adaptable and not constrained by restrictive protocols.

The author is unaware of any such national framework or advice currently available in Australia.

To facilitate the wider mobilisation of paramedics in primary care settings, NSW might collaborate in the development of nationally agreed materials to support the wider engagement of paramedics as independent health professionals across a variety of practice and community settings.

National consistency is desirable, with a task force approach suggested and consultation with all jurisdictions to ensure articulation at a national level. However, NSW might begin with unilateral action to remove unnecessary barriers to practice that are locally (jurisdictionally) based.

The development of such materials also might form a suitable workforce development project for the RDN, or preferably, the wider RWAN consortium working in conjunction with the relevant professional bodies for paramedicine and the Australian College of Rural and Remote Medicine,[41] Allied Health Professions Australia,[42] Services for Australian Rural and Remote Allied Health and the Office of the National Rural Health Commissioner.

# Lessons from others – avoiding unnecessary conveyance

The pressures on the health and care system manifested by long wait times and ambulance ramping are signs that systemic changes are needed. One of the first issues to acknowledge is that the ED is the wrong place for many patients.

> *"Excessive and inappropriate use of emergency departments increases system cost, decreases care quality and creates chaotic unpleasant work environments that burn out staff. EDs are designed for 1–6-h encounters. Emergency teams are trained and equipped for acute problems and life-limb threats.*
>
> *We are not psychiatrists, surgeons, geriatricians or GPs. We do not provide high-quality inpatient care, mental health intervention, chronic disease management, rehabilitation services, or primary and preventive health care. Leaving frail or acutely ill patients on hard narrow stretchers in noisy crowded rooms where the lights never go out, without privacy, sleep, or bathroom access while they wait hours or days for a hospital bed is not acceptable anywhere else in the healthcare system. Why is it acceptable here? "*
>
> Paul Atkinson · Ken McGeorge · Grant Innes,
> Canadian Journal of Emergency Medicine (2022)[43]

An avoidable conveyance occurs when a patient, whose health and social care needs can be met in a community setting or close to home is conveyed to a hospital unnecessarily.

[40] NHS, *Experienced paramedic roles including advanced, community and primary and specialist* . https://bit.ly/3qMiKql

[41] Media release, *Rural Generalists and Paramedic Practitioners join forces to strengthen healthcare needs in rural and remote communities,* Australian College of Rural and Remote Medicine, 18 January 2022. https://bit.ly/33kEm4t

[42] Allied health Professions Australia, *Members*. https://ahpa.com.au/our-members/

[43] Paul Atkinson, Ken McGeorge, Grant Innes, *Saving emergency medicine: is less more?* Canadian Journal of Emergency Medicine, 16 November 2021. (2022) 24:9–11. https://doi.org/10.1007/s43678-021-00237-1

Much of the early work on avoiding conveyance stems from the landmark 2013 *study Transforming urgent and emergency care services in England*[44] which identified the vital role of general practice and other community care services.

> *ED crowding adversely affects every measure of quality and safety for patients of all ages, and for staff; and creates a 'negative spiral of inefficiency'. The main causes of ED crowding include surges in demand and lack of access to beds in the hospital system due to poor patient flow and high hospital occupancy rates. These can result in the physical and functional capacity of the ED (especially staffing and numbers of cubicles) and internal processes and responsiveness of other services being exceeded. Performance against the 4-hour standard is a useful proxy measure of crowding.*
>
> End of Phase 1 Report (p 35),
> Transforming urgent and emergency care services in England,
> Urgent and Emergency Care Review

The report called for a dramatic increase in the proportion of care delivered closer to home.

> *"We know that 40% of patients attending A&E are discharged requiring no treatment at all; there were over 1m avoidable hospital admissions last year, and up to 50% of 999 calls requiring an ambulance to be dispatched could be managed at the scene."*
>
> Sir Bruce Keogh,
> National Medical Director, NHS England

The recognition that changes were needed to ambulance response standards resulted in the largest clinical ambulance service trials in the world - aimed at increasing operational efficiency whilst maintaining a clear focus on the clinical need of patients.

Notably, time-based perceptions of response dominate much performance monitoring and media reporting of ambulance services in Australia. The indicators for the ROGS report have been slow to evolve to include more health-related measures and only recently has ambulance service performance been reported under the Health Services category.

Lord Carter's later report of September 2018[45] highlighted that tackling avoidable conveyances to hospitals supports the delivery of care closer to home, reduces unnecessary pressures on EDs and hospital wards, and could release significant capacity in the acute care sector.

Lord Carter stressed the need for ambulance services to take advantage of digital innovation and technology with the introduction of greater access to patient data and connectivity with other NHS services, and that ambulance crews should be given access to patient information digitally, expanding their ability to make informed decisions on the scene and potentially allowing them to reduce the number of patients taken to hospital.

In January 2019, the NHS introduced the NHS Long Term Plan (LTP) which set out the aspirations for pre-hospital urgent care. This included the national rollout of Urgent Treatment Centres working alongside other parts of the urgent care network and encompassing primary care, community pharmacists, ambulance, and other community-based services to provide a locally accessible and convenient alternative to EDs for patients who do not need to attend hospital but can be treated by clinicians at home or in the most appropriate setting outside the hospital whenever it is safe.

The author welcomes the recent commitment of the federal government to establish 50 urgent care clinics around Australia[46] and the Victorian and New South Wales Governments' decision to each establish 25 urgent care services in partnership with GPs to ease demand on EDs.

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[44] NHS England Urgent and Emergency Care Review Team, *Transforming urgent and emergency care services in England Urgent and Emergency Care Review End of Phase 1 Report*, NHS England, November 2013. https://bit.ly/3qE9l42

[45] Lord Carter of Coles, *Operational productivity and performance in English NHS Ambulance Trusts: Unwarranted variations*, September 2018. https://bit.ly/3InKF69

[46] Stephen Duckett, *Labor's urgent care centres are a step in the right direction – but not a panacea*, The Conversation, 13 April 2022. https://bit.ly/3L8mhbg

In 2019, the Avoidable Conveyance Steering Group published the *'Planning to Safely Reduce Avoidable Conveyance'* report[47] which aimed to build on the evidence and provide examples where initiatives are already working well and are being monitored and evaluated.

The UK Association of Ambulance Chief Executives is collating examples of good practice.[48] Their repository includes innovations introduced rapidly during the response to the COVID-19 pandemic which may warrant further evaluation to assess their benefits in the long term.


The curation of examples is an ongoing process and is subject to change. One of the recent additions is the outline of the London Ambulance Service decision to integrate the role of Advanced Paramedic Practitioners in Urgent Care into the Service's standard operational model.

There is a wealth of information available in the repository which may be searched across several categories including by Service and by topics - such as Access to Health Care Practitioners, Care Homes, Care Pathways, Falls and Frailty, Mental Health, Workforce and Multi-Disciplinary Teams.

Ambulance services in Australia have undertaken reviews of their response models but at a jurisdictional level and not as a national strategy. This is to be expected as there is no recognised funding provided for ambulance services at a commonwealth level.

To implement revised response models, the Australian services have also employed ECPs who hold additional skills in low acuity patient assessment and treatment in the field that can reduce the number of ED presentations.

An important factor in non-conveyance is the availability of clinically suitable referral pathways - this is a matter of particular significance for those living in rural regions where those resources are in short supply, GP clinics may be closed and out-of-hours medical practitioners unavailable.

[47] Kyle McNeely, *Planning to Safely Reduce Avoidable Conveyance*, NHS England and NHS Improvement, 22 July 2019. https://bit.ly/3rukXpE

[48] Association of Ambulance Chief Executives, *Safely Reducing Avoidable Conveyance Programme*. https://bit.ly/3i6PrdT

It is also a reason for the wider deployment of paramedics into less populous regions so their advanced skills can support the efforts of volunteers. Indeed, because of the absence of other resources, the author proposes that the regional areas should be serviced by the most highly skilled and competent paramedics available – making the need for continuing professional development, suitable career paths and practice support all the more important.

Both in the UK and Australia, there has been acknowledgement of the need for greater collaboration and integration between the ambulance sector and the wider health service. This relationship needs to go beyond the creation of service dashboards.

For example, more effective linking of routine ambulance-sourced data with ED attendance, hospital admission and mortality data would allow comparison of the safety and appropriateness of non-conveyance rates. For activities that rely so intimately on timely, accurate and comprehensive information collection and processing, the networking of data in health is surprisingly inadequate.

Sheffield University's *Understanding Variation in Ambulance Service Non-Conveyance Rates: A Mixed Methods Study* concluded that variation in non-conveyance rates between ambulance services in England could be reduced by addressing variation in the types of paramedics attending calls, variation in the use of advanced paramedics and variation in perceptions of the risk associated with non-conveyance within ambulance service management.

Research and evaluation work has shown the implications for the staffing profile of an ambulance service; for example, the development and education of paramedic specialists, the use of ECPs and other professionals such as Mental Health Nurses and Occupational Therapists.[49,50]

Australian ambulance services continue to seek alternative pathways to hospital EDs and to collaborate with partners across the health system to achieve performance improvement and capacity. This work has led to several initiatives, including expansion of clinical telephone assessment service and health navigation service with paramedic telehealth clinicians, in support of streaming patients to alternative care pathways.

South Australia has explored the use of Priority Care Centres; Hospital Avoidance and Supported Discharge Service; National Home Doctor Service; Geriatrician Pathway (SAHLN, CAHLN, NAHLN); My Home Hospital; Urgent Mental Health Care Centre; Exceptionally Complex Service Needs Crisis Support; and Metro Referral Unit / Respite.

These efforts must continue, and effective solutions implemented permanently.

The COVID-19 pandemic has demonstrated how information technology and other technological innovations are increasingly important in terms of access to and quality of care. These developments will see new approaches in telehealth, diagnostics, patient monitoring and treatment that need to be implemented permanently and will require significant investment.

NSWAS cannot achieve the necessary improvements in isolation, and safe reduction in avoidable conveyance requires a whole of system approach in delivering suitable options for patients when a hospital is not the optimal care pathway.

[49] Mental health Commission of NSW, *Mental Health Acute Assessment Team.* https://bit.ly/3RVhAUk

[50] Hon Jeremy Rockliff, *Delivering rapid response for Tasmanians needing mental health support*, Minister for Mental Health and Wellbeing, Media Release, Tasmanian Government, 25 January 2022. https://bit.ly/3U1qH7x

# Exploring some anomalies of the forgotten profession

Despite most Australians being cared for at some time by a paramedic, there is a surprising lack of understanding of the education and skillsets of contemporary paramedics. This unawareness extends to health professionals, policy advisors and workforce planners. While longer-established professions like nursing are universally recognised as having a role in healthcare, there has been little formal acknowledgement of the clinical interventions for which paramedics are qualified.

Paramedics hold exceptional skills as evidenced by those working in the private sector, ambulance services, universities and other research and clinical roles. They routinely take complex patient histories, undertake detailed physical examinations and ECGs, and perform differential diagnoses of patient conditions as an integral part of their practice. Paramedics increasingly are using point of care ultrasound.

Paramedics initiate and monitor advanced clinical interventions and administer multiple medications, including highly restricted agents. They deal with patients having chronic health conditions and those in aged and palliative care as well as those presenting with mental health problems and drugs of addiction.

There is a need to update GPs and other health professionals on the capabilities of paramedics through suitable practice literacy and service integration materials. While this might be best done at a national level, action can be taken immediately at a state level.

***Funding barriers -*** Existing funding and regulatory arrangements also constrain engagement in flexible models of care; limit the capacity for team-based care, and present financial and professional barriers to practice. These impediments may be unintentional, and they span both state and national issues with cascading implications. The lack of paramedicine coverage by the RDN for professional development under the HWSP is likely an example of passive indifference.

Department of Veterans' Affairs (DVA) arrangements for the provision of care to DVA clients are based on the Medicare Benefits Schedule (MBS). Thus, when it comes to health care services, payments are based on delivery by a health care professional registered with Medicare, which currently precludes paramedics. If MBS arrangements changed to enable community paramedics to claim for health care services, DVA arrangements would be updated accordingly.

***Vaccination -*** Another example of outdated regulatory limitations can be seen with the issue of vaccination (and highlighted by the COVID-19 pandemic). In 2020 the author proposed that existing legislative and regulatory provisions on vaccination in all jurisdictions be reviewed and that steps be taken to facilitate paramedics becoming authorised vaccinators - subject to the same training and certification requirements as nurses and medical practitioners.

There are few cost implications as this would simply mean removing existing impediments to training and practice to enable paramedics to become vaccinators if they wished. As it happens, some dual-qualified practitioners (paramedicine/medicine, paramedicine/nursing) have held the requisite vaccination certification via their alternate practitioner registration.

Despite the obvious benefits, governments were slow to respond. Paradoxically, paramedics initially were deployed to support vaccinators by being available to exercise higher-level care and restricted medications in the rare event of an adverse reaction.

Victoria was among the first jurisdictions to promulgate emergency orders to authorise paramedics to administer the COVID-19 vaccine/s. The Pharmacy Guild of Australia has also offered access to their vaccination training programs via the Australasian College of Paramedic Practitioners.

Only recently have jurisdictions moved to facilitate the administration of vaccines by paramedics as well as several other categories of health care workers – but usually only in the form of special and time-limited regulatory orders rather than enduring general recognition as vaccinators. The key issue is that different jurisdictions have had embedded restrictions under their various guidelines covering vaccination that inhibited paramedics from even undertaking the minor training needed.

***ANZSCO Classification -*** Poor or misleading occupational classifications can slant job descriptions, skew position vacancies and advertisements, as well as distort workforce statistics.

The current categorisation of paramedics in the Australian and New Zealand Standard Classification of Occupations (ANZSCO) as Health and Welfare Support Workers under UNIT GROUP 4111 Ambulance Officers is anomalous. This categorisation does not reflect the role of contemporary paramedics and there are also several errors in the descriptors.[51]

The NSW government should seek an amendment to the classification of paramedics by the Australian Bureau of Statistics. This should ensure a classification that properly reflects the education and role of paramedics as independent Level 1 Health Professionals.

There should be no association of the title with an ambulance service or the generic term of Ambulance Officer. Under the National Law, the term paramedic is a protected title for an independent practitioner and is not conditional on working for any specific employer.

A more relevant classification would be a new MINOR GROUP 255 Paramedics within Major Group 2 Professionals| SUB-MAJOR GROUP 25 Health Professionals. This would align paramedics with their Ahpra registered colleagues. The classification taxonomy would then be:

Major Group 2 Professionals

SUB-MAJOR GROUP 25 Health Professionals

MINOR GROUP 251 Health Diagnostic and Promotion Professionals

MINOR GROUP 252 Health Therapy Professionals

MINOR GROUP 253 Medical Practitioners

MINOR GROUP 254 Midwifery and Nursing Professionals

MINOR GROUP 255 Paramedics

In the interim, the NSW Department of Health might review workforce documentation and position descriptions to ensure they reflect contemporary professional descriptions for paramedics.

***Other -*** Other practice restrictions on paramedic practice are unchanged from past decades – and their existence reflects the situation of paramedicine often being forgotten when it comes to workforce and practice considerations since national registration.[52]

The Commonwealth omission arises presumably because the Australian government doesn't (generally) employ or fund paramedics or ambulance services, while the states and territories previously were only accustomed to dealing with paramedicine through the lens of an ambulance service and related legislation.

That situation should have changed more than three years ago when paramedicine became a nationally registered health profession under the National Registration and Accreditation Scheme. More positive action is warranted to recognise paramedicine and ensure the practitioners are used within the mainstream of health.

Among the outcomes from the lack of formal government recognition of paramedicine are:

- The absence of comprehensive workforce planning profiles and data;
- The omission of paramedicine from lists of health professions recognised by Governments and other bodies for scholarships - and other practice support and payment mechanisms;
- Employers remain appreciably unaware of the skillsets of contemporary paramedics and the opportunities to engage them in multidisciplinary practice;

[51] Bange R, *The ANZSCO Anomalies*, The Paramedic Observer, Facebook, 23 August 2022. https://bit.ly/3qpM05r

[52] Bange R, *The forgotten health profession revisited,* The Paramedic Observer, Facebook, 14 December 2021. - https://bit.ly/31Zke6Z

- Limiting available workforce resources in job specifications through work descriptors unrelated to the functional job roles – and which are within the paramedic skillset; and,
- Regulations for the handling of medications and use of scheduled medications are restrictive and the provisions to carry, store, and administer a scheduled medicine (generally) are not currently available to paramedics working outside ambulance services.

The diversity of regulations surrounding the supply, carriage and administration of restricted drugs is a significant impediment to practice that affects paramedicine and other professions. While paramedics routinely administer restricted medications under the ambit of ambulance services, their authority is constrained, and action is needed to address this issue.

# A seat at the table – a Chief Paramedic Officer (CPO)

We need better ways to make decisions about healthcare and strategies that are multidisciplinary, multi-professional and genuinely inclusive. We particularly need to ensure that the right people, including representatives of key stakeholder populations and communities, are at the table. That extends to finding ways to engage with consumers, carers, and the broader community – especially around questions of resource allocation, values, and setting health system priorities.

The pandemic response has shown that health systems can adapt in flexible ways when under pressure and that some long-held practices could change for the better. We need to implement decision-making models that allow this to continue. We need to do much better at engaging with, and empowering, people who are culturally and linguistically diverse.

Paramedicine is one of the stakeholder groups that should be engaged in decision-making and advisory roles. A strong commitment to clinical practice has meant that few paramedics have chosen to work within the policy areas of jurisdictional health agencies. Along with other AHPs, there are few practitioners in senior roles to inform policy discussions from a first-hand basis.[53]

Embedded perceptions of role mean that paramedic engagement in health is limited not so much by the capabilities of practitioners, but by issues such as public and professional awareness. To overcome such perceptions requires leadership at a senior level such as that able to be provided by a Chief Paramedic Officer (CPO) as a member of the peak policy team within NSW Health. That recommendation builds on the successful Victorian and UK experience.

In 2017, Victoria created a CPO[54] position as one of the four Chief Clinical Officers of Safer Care Victoria.[55] The CPO works alongside a Chief Medical Officer, a Chief Nurse and Midwifery Officer and a Chief Allied Health Officer. The Victorian experience has shown the value of an expert clinician who can bring insights from paramedic practice.

Paramedicine stands apart from other AHPs because of the complex operation of NSWAS as a government agency separate from the individual practice of paramedics with other service providers and employers such as GP clinics, urgent care centres, hospitals, mental health, aged care and palliative care providers and commercial enterprises. NSWAS does not represent paramedicine other than as an employer.

The CPO is envisaged as the principal advisor on quality and safety matters relating to paramedicine informed by direct clinical and operational experience. As part of the peak leadership team, the incumbent would provide advice on a diverse range of issues with a focus on the unique issues of paramedic service delivery. Other matters may include workforce planning and liaison in association with professional groups, the RDN, educational institutions, professional bodies, and practitioners and service providers across the community.

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[53] Rosalie. A. Boyce & Paul. T. Jackway (2016), *Allied Health Leaders: Australian Public Sector Health Boards and Top Management Teams*. October 2016, Melbourne, Australia (pp.58). https://bit.ly/2Knm3Oa

[54] Bange R, *Chief Paramedic Officer*, The Paramedic Observer, 3 March 2017. http://bit.ly/2qqfcN5

[55] Safer Care Victoria is Victoria's lead agency for improving quality and safety in Victorian healthcare. It supports health services to monitor performance, guide best practice, and help them identify and respond to areas where they can improve.

# Reforming the health landscape

While extensive engagement of paramedics throughout health is well-recognised in the UK, wider deployment has been slow to develop in Australia.

The author's overriding message is that there needs to be more effective use of the paramedicine workforce across all health and care settings including hospitals and in primary care. This should supplement the expansion of their advanced practice roles in NSWAS to limit unnecessary conveyance.

Among the mechanisms to achieve those objectives might be:

- Establishment of a national task force to facilitate independent paramedic practice;
- Access to MBS and NPS schedules for appropriately credentialled paramedics;
- Eligibility of paramedics for better rural and remote student and practitioner support;
- Preparation and distribution of AHP/paramedicine-related employment materials;
- Appointment of a Chief Paramedic Officer at both jurisdictional and national levels; and,
- Enhanced provider performance reporting and better longitudinal patient journey data.

The author acknowledges that legislative and other changes would be needed to implement all these recommendations which span both jurisdictional and national responsibilities. For example, the introduction of advanced practice models of care and the use of paramedics in general practice, urgent care and hospital settings (among others) will be impacted by the various state Drugs Poisons and Controlled Substances regulations for the handling of medications.

On the other hand, the registration of paramedics is a national issue spanning all practice settings, and recommendations on innovative funding of multidisciplinary practice and urgent care centres may embrace a national commitment as well as jurisdictional commitments.

The days of home visits by GPs are disappearing, even in rural regions, with time, distance and economics making those practices increasingly difficult. At the same time, there is an acceptance that patient-centred care that is close to, or in-home, reaps significant benefits for older patients with chronic health conditions.

The overarching objective in care should be the provision of the right care – right place – right time, focusing on the needs of the patient. To this end, the author supports the underlying philosophy of 'taking healthcare to the patient' and broadening the remit of NSWAS.

Community Paramedics can monitor chronically ill patients and screen for developing conditions and deterioration; and they can lead acute home visiting services requiring effective triage and access to electronic patient records, underpinned by robust clinical governance.[56,57]

Paramedics working within primary care in the UK and internationally (and in pilot studies and embryonic developments in Australia) have shown that they possess the knowledge, leadership and complex skills needed for home visiting as well as patient engagement in clinic operations. An increasing number of UK paramedics are qualified as independent prescribers.

Australia has proportionately more paramedics than other jurisdictions and is a world leader in paramedic research and education. We should grasp the opportunity to use these practitioners effectively and provide career progression within health.

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[56] Burns J, *Paramedic-led acute home visiting services in primary care,* Journal of Paramedic Practice VOL. 13, NO. 6, 8 June 2021. https://doi.org/10.12968/jpar.2021.13.6.238

[57] Shannon, B., Eaton, G., Lanos, C., Leyenaar, M., Nolan, M., Bowles, K.-A., Williams, B., O'Meara, P., Wingrove, G., Heffern, J., & Batt, A. (2022). The development of community paramedicine; a restricted review. Health & Social Care in the Community, 00, 1– 15. https://doi.org/10.1111/hsc.13985

The author proposes that NSW set a lead by adopting policies that engage paramedicine in primary care services including online, video, and face-to-face consultations.

The question is how better engagement of paramedicine might be achieved, given the complexity of health funding arrangements, the current Commonwealth/State responsibilities and gaps in funding arrangements, and lack of paramedicine recognition in many policy documents and regulations.

That objective may be achieved in part by removing unnecessary barriers to practice and mobilising the paramedicine workforce to increase the capacity of the GP cohort in primary care - thus enabling care closer to home and reducing unnecessary presentations to hospitals.

More directly, NSW should actively engage paramedics within the public health and hospital system beyond the present valuable but limited role of employment within the ambulance service.

Australia is fortunate that it has such a significant and well-educated cohort of paramedics whose expertise may be employed in such roles.

# Recommendations

The pandemic has underscored the importance of collaborative decision-making and action as well as the structural barriers that impede cooperation, flexibility and sharing of critical resources. It has highlighted the importance of central coordination and leadership and clarity of communication as well as the crucial role of the public health system.

The vulnerabilities and inequalities within the population have been starkly revealed and we have scrambled to respond in the absence of a body like Health Workforce Australia, with its national focus and longitudinal, multidisciplinary approach to workforce planning.

A federal agency dedicated to health reform and collaborative action and communication would be welcome to work with established bodies like Safer Care Victoria, the NSW Agency for Clinical Innovation, and the Australian Commission on Quality and Safety in Health Care.[58]

The following recommendations are made for the Committee consideration and further action.

## Recommendation 1 - Recognition of paramedicine as a discrete health workforce

That the NSW government and other jurisdictions, including the Commonwealth, formally recognise paramedicine as part of the available health workforce for statistical, policy, planning and employment purposes.

This commitment should see paramedicine identified in policy and media documents as a discrete professional health workforce – aligned with Allied Health – and with paramedicine engaged as one of the recognised stakeholder groups in deliberations on health policy and primary care strategy at state, territory, and national levels.

## Recommendation 2 - Mobilisation of paramedicine across the health domain

That to ensure effective workforce mobilisation and long-term sustainability, the deployment policy for paramedicine should include eligibility for practice support, scholarships and incentive programs intended to foster rural and remote practice on a basis no less significant than that for other AHPs.

This policy might see financial incentives and support for NSWAS (public sector) paramedics upskilling in low-acuity specialties and accepting roles in rural locations.

[58] Bange R, *The Challenge of Equity*, Australian Health Care Reform Alliance, Facebook, 12 December 2021. https://bit.ly/3tWI3Ie

Particular attention should be made to engage the Rural Doctors Workforce Agency to ensure the inclusion of paramedicine as an eligible allied health profession for various support programs, and in Workforce Needs Assessment including multidisciplinary engagement in primary care.

To facilitate paramedic engagement in primary care, NSW should seek enhancement of the Australian Government Workforce Incentive Program - Practice Stream (WIP) with the specific inclusion of paramedicine as an eligible AHP.

The scheme itself should be reviewed to simplify the conditions of use and enable long term engagement and reimbursement of costs for the employment of AHPs. The experience of the UK Additional Roles Reimbursement Scheme should be considered in this review.

## Recommendation 3 - Identify and remove unnecessary impediments to practice

That a multi-jurisdictional task force be established to explore the impediments to practice by registered paramedics at both jurisdictional and national levels; to enable access to MBS/PBS provider programs, referral pathways, prescribing rights, access to electronic and other health records, and other elements of independent practice.

In the immediate short to medium term, NSW Health should examine unwarranted barriers to practice at the jurisdictional level and ensure the incorporation of paramedicine within workforce studies undertaken by the state and associated RDN activities.

## Recommendation 4 - Harmonisation of drugs and poisons regulations

That the NSW government take action to implement a national approach to drugs and poisons regulations, through the development of model legislation or consistent legislation in all jurisdictions that aligns with MBBS and national regulation of the health workforce, to reduce impediments, prevent duplication or overlap of unnecessary legislative barriers to workforce flexibility.

## Recommendation 5 – Develop a framework for paramedics in primary care

That action be taken to develop a national information dissemination program regarding the use of paramedics in multidisciplinary practice settings in both the public and private sectors. These materials should embrace employer groups, professional associations, the Australian Institute of Health and Welfare; the Australian Bureau of Statistics: and the Productivity Commission.

NSW should engage with the Commonwealth in distributing these materials, including toolkits, that identify paramedicine as a health profession whose members can work across a wide variety of practice and community settings. Engagement should take place with the RDN to ensure paramedicine is considered an eligible profession for scholarship and practice support.

These practice guidelines on the paramedic integration into general practice, primary and other care settings might draw on the experience and materials developed in the UK for Clinical Commissioning Groups and the UK College of Paramedics.

## Recommendation 6 - Engagement of paramedics in practice environments

That NSW Health explore how to use paramedics more widely, within the health domain and on an ongoing basis, to supplement workforce needs in hospitals, clinics and other health and care settings including longer-term senior citizen and aged care, palliative care and mental health care.

As an interim step, workforce planning could develop practice information and incentives to assist NSW primary healthcare providers in transitioning their workplaces to optimise the use of paramedics.

## Recommendation 7 - Appointment of a Chief Paramedic Officer

That to ensure adequate consideration of paramedicine and potentially improve the quality and diversity of decisions, the NSW government appoint a Chief Paramedic Officer as part of the peak leadership team within the health and social welfare domains and as an ex-officio member of key coordination bodies.

This appointment should fulfil a similar role to that undertaken by the CPO in Victoria and stand apart from the operational role of the Commissioner for the New South Wales Ambulance Service.

The CPO role may encompass high-level advice and strategic clinical leadership on professional issues in the integration and delivery of paramedic services across the spectrum of health, including any contracted service provider(s); and include workforce planning issues in association with other professional groups, educational institutions, professional bodies, and practitioners and service providers in the private sector.

If a Chief Paramedic Officer is not appointed, then the role of the Chief Allied Health Officer, or equivalent, should incorporate specific references to paramedicine with the substantive position made open to paramedics.

## Recommendation 8 - Review of NSWAS related legislation

That a review of relevant NSW legislation be undertaken from the perspective of legislation that retains regulatory rigour, but which empowers NSWAS as a collaborative provider of healthcare services with the capacity to provide emergency and unscheduled response in out-of-hospital settings.

The legislation covering the provision of NSWAS and external paramedic-related care should enable registered practitioners and other personnel to collaborate with and undertake exchange and interchange engagements with NSWAS and for the mobilisation and engagement of external accredited health service providers as supplementary resources.

Explicit reference should be made to collaboration with institutions of higher learning (universities) with affirmative statements that foster appropriate sharing of human and physical resources, performance data and other clinical and operational matters (as appropriate). Support for research activities should be included within the nominated objectives for the service.

## Recommendation 9 - National public and private service accreditation

That in addition to relevant legislative provisions, NSWAS and NSW Health take appropriate action at state and national levels to implement a regime of accreditation and licensing of all paramedic service providers that complement the role of NSWAS and registered status of paramedics.

Accreditation standards should include mandatory equipment, staffing, clinical governance, performance standards and transparency of public reporting including injury statistics related to mental health.

Where relevant, this accreditation should extend to any subsidiary patient transport functions

## Recommendation 10 - Funding of NSWAS

That the NSW government make representations to have the provision of public ambulance services recognised and funded as an essential service through a base stream of national funding.

## Recommendation 11 - Provision of extended services

That NSWAS and NSW Health facilitate the provision of out of hospital care by community paramedics and extended care paramedics holding prescribing rights. The efficacy of community paramedicine is well established, and this service role should be made permanent for selected locations and not limited to aperiodic trials and unpredictable funding.

## Recommendation 12 - Support for paramedic practitioner roles

That the Committee recommend the adoption of Paramedic Practitioner roles within primary care community and other health centres in identified areas of need. That support might extend to permanent adoption and funding of Community Paramedicine programs through stand-alone practitioner engagement or by supplementing existing community and nurse practitioner initiatives.

## Recommendation 13- Support for development of paramedic education programs

That additional support be provided for the development of university programs of education for Extended Care Paramedic and Advanced Paramedic Practitioner cohorts including their educational and practice foundations, with the greater use of these paramedics having a scope of practice enabling advanced assessment, interventions and prescribing of medications.

That in undertaking any new proposals of response models to enhance patient care while also reducing the need for conveyance to EDs, NSWAS direct attention to the options outlined in the Association of Ambulance Chief Executives, *Safely Reducing Avoidable Conveyance Programme*.

## Recommendation 14 - Support for better data and outcome reporting

That NSWAS work with NSW Health, other jurisdictions and the Council of Ambulance Authorities in preparing national performance datasets such as the Report on Government Services (ROGS) with appropriate performance indicators that reflect health outcomes and contemporary response models designed to enhance patient care while also reducing the need for conveyance.

In addition, ROGS and similar reports should report the number of employed registered paramedics as well as other registered practitioners and the gender, ethnic and cultural diversity of the paramedic service workforce.

# Abbreviations / Definitions

The following abbreviations and definitions are used in this submission.

| | |
|---|---|
| **ACEM** | Australasian College for Emergency Medicine |
| **AHP** | Allied Health Profession/Professional |
| **Aphra** | Australian Health Practitioner Regulation Agency |
| **ARRS** | Additional Roles Reimbursement Scheme (UK) |
| **ECG** | Electrocardiogram |
| **ECP** | Extended Care Paramedic/s |
| **ED(s)** | Emergency Department(s) |
| **GP** | General Practitioner |
| **HWA** | Health Workforce Australia (now closed) |
| **LTP** | NHS Long Term Plan |
| **NDIS** | National Disability Insurance Scheme |
| **NHS** | National Health Service (UK) |
| **NSW** | New South Wales |
| **PBA** | Paramedicine Board of Australia |
| **PCN** | Primary Care Network (UK) |
| **ROGS** | Report on Government Services (Productivity Commission) |
| **RDN** | Rural Doctors Network (NSW) |
| **RWA** | Rural Workforce Agency |
| **RWAN** | Rural Workforce Agency Network |
| **SASMOA** | South Australian Salaried Medical Officers Association |
| **SDOH** | Social Determinants of Health |
| **UK** | United Kingdom |
| **WIP** | Australian Government Workforce Incentive Program - Practice Stream |

**Paramedic -** A professional health care practitioner whose education and competencies empower the individual to provide a wide range of patient-centred care and medical procedures in diverse settings including out of hospital scheduled and unscheduled care situations. In Australia, the term paramedic is a protected title and may be used only by those practitioners registered under the Health Practitioner Regulation National Law.

**Extended Care Paramedic** – a title commonly used to describe a paramedic who has undergone additional training in low acuity patient assessment and treatment.

**Community Paramedic** – a broad term used to describe any paramedic, working outside the standard ambulance service framework, who has undergone additional training in low acuity patient assessment and treatment. Such paramedics may work in conjunction with primary care providers such as GP clinics or Emergency Departments and other health settings.

**Paramedic Practitioner** – a paramedic who has undergone additional training (e.g. a Master's Degree) and who has been granted an autonomous scope of practice, including the right to prescribe medications and work independently.

# Appendix A - Inquiry Terms of Reference

**Inquiry into the impact of ambulance ramping and access block on the operation of hospital emergency departments in New South Wales**

TERMS OF REFERENCE

1. That Portfolio Committee No. 2 - Health inquire into and report on the impact that ambulance ramping and access block is having on the operation of hospital emergency departments in New South Wales, and in particular:

a) the causes of ambulance ramping, access block and emergency department delays;

b) the effects that ambulance ramping and access block has on the ability and capacity of emergency departments to perform their function;

c) the impact that access to GPs and primary health care services has on emergency department presentations and delays;

d) the impact that availability and access to aged care and disability services has on emergency department presentations and delays;

e) how ambulance ramping and access block impacts on patients, paramedics, emergency department and other hospital staff;

f) the effectiveness of current measures being undertaken by NSW Health to address ambulance ramping, access block and emergency department delays;

g) drawing on other Australian and overseas jurisdictions, possible strategies, initiatives and actions that NSW Health should consider to address the impact of ambulance ramping,

h) access block and emergency department delays; and any other related matters.

The terms of reference for the inquiry were self-referred by the committee on 26 July 2022.