GAA/RUR 54b

Rural Health Services Inquiry
Government Administration A Sub-Committee
Legislative Council Sessional Committee
Parliament of Tasmania

Supplementary Submission to the Rural Health Services Inquiry:

Meeting the healthcare needs of rural Tasmanians

August 2021

Registered Paramedic - A professional health care practitioner registered under the National Registration and Accreditation Scheme and whose education and competencies empower the individual to provide a wide range of patient-centered care and medical procedures in diverse settings including out of hospital scheduled and unscheduled care situations.

Extended Care Paramedic – a title used to describe a paramedic who has undergone additional training in low acuity patient assessment and treatment and who is employed by Ambulance Tasmania.

Community Paramedic – a broad term used to describe any paramedic, working outside the traditional or 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 in Emergency Departments and in other health settings.

Paramedic Practitioner – a paramedic who has undergone additional training and been granted an autonomous scope of practice, including the right to prescribe medications and work independently of a paramedic (aka ambulance) service.

Paramedic Service – A provider of health care and related services using paramedics as the principal practitioner resources (public entities are commonly known as ambulance services).

Executive Summary

On 21 December 2020, the Tasmanian Legislative Council Government Administration Committee 'A' resolved to undertake an inquiry into rural health services in Tasmania (Inquiry).

The author made a submission to the Inquiry in March 2021 which outlined how the paramedicine profession might enhance the health of the community through three key means: their role working within the public Ambulance service, their engagement with other healthcare providers, and as individual paramedic practitioners.

With the prorogation of Parliament for the Tasmanian State election the Inquiry activity ceased. Given the time between the original submission and the reactivation of the Inquiry this supplementary submission updates several areas to better inform the Inquiry.

External developments include the continued development of the Commonwealth's Primary Health Care 10 Year Plan as part of its Long Term National Health Plan[1] which commits the Federal Government to reforming the health system to be more person-centred, integrated, and equitable.

Investment in primary healthcare is seen as a crucial factor in prevention and early management of care – particularly in the case of the increasing chronic conditions that are already the major healthcare burden on an ageing society.

The original recommendations include the need for revision of the regulatory framework covering Ambulance Tasmania (ATas), formal recognition of paramedicine as a key stakeholder group within the health workforce and appointment of a Chief Paramedic Officer.

The principal additional comments in this supplementary submission are:

a) updating of the paramedicine practitioner statistics;

b) more detailed analysis of Ambulance Tasmania operations and staffing profiles; and,

c) more extensive coverage of evidence-based measures available for the avoidance of conveyance of patients to Emergency Departments of hospitals.

The overarching objective in care should be the provision of 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'.

That objective may be achieved in part by removing unnecessary barriers to paramedic practice and mobilising the paramedicine workforce to increase the resources available to paramedic (aka ambulance) services, hospital Emergency Departments and within primary care facilities.

Those actions, along with the creation of Paramedic Practitioner roles, should allow appropriately credentialled paramedics to better care for local rural communities.

[1] *Australia's Long Term National Health Plan*, Department of Health, Australian Government, August 2019. https://bit.ly/3cVEQzf

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About the author

The author of this supplementary submission is Adjunct Associate Professor Ray Bange OAM, and the submission is made in a personal capacity. Further details of Professor Bange's background are provided in *Appendix A* of the original March submission.

Associate Professor Bange holds Honorary Fellowships from two Australasian professional bodies for his contributions to paramedicine and appointments as Adjunct Associate Professor from the University of the Sunshine Coast and the Central Queensland University. An Executive Committee member of the Australian Health Care Reform Alliance, he is the recipient of an Order of Australia Medal for contributions to paramedicine, education, and the community.

Background to this supplementary submission

On 21 December 2020, the Tasmanian Legislative Council Government Administration Committee 'A' resolved to undertake an inquiry into rural health services in Tasmania (Inquiry). The Terms of Reference of the Inquiry are to inquire into and report on health outcomes and access to community health and hospital services for Tasmanians living in rural and remote Tasmania.

The author's submission of March 2021 outlined how community health might be improved through mobilisation of the paramedicine profession via the medium of the traditional public Ambulance* (aka Paramedic) service, through engagement with private healthcare providers and as individual practitioners. The recommendations of the March 2021 submission are reproduced in *Appendix A*.

With the prorogation of Parliament for the Tasmanian State election the Inquiry activity ceased. Given the time between the original submission and the reactivation of the Inquiry on 29 June, this supplementary submission updates the earlier paper to better inform the Inquiry.

The principal additional comments relate to the latest available paramedicine statistics, a more detailed analysis of Ambulance Tasmania (ATas) operations and staffing profiles, some expansion of the case for mobilisation of paramedics within primary care and further examples of measures used to achieve the avoidance of conveyance of patients to Emergency Departments (EDs) of hospitals.

A challenging scenario remains for rural Tasmania

Tasmania's health system is facing significant challenges, including an ageing population and an ageing health workforce. Changes in disease patterns, including a growing incidence of chronic and complex diseases, are driving demands for less fragmented and long-term care. Health budgets are coming under pressure as the cost of care rises, putting additional stress on the health system.[2]

The present Inquiry reflects public concern at the increasing extent to which patient care is seen to be affected by unacceptable delays in responding to patient needs.

Those delays are evidenced in various ways, including long wait times for surgery and the bottlenecks that arise between the current ambulance service caseloads and receiving hospitals' capacity, giving rise to highly visible ambulance ramping.[3] Tasmania is not alone in being impacted by such events, which are being widely reported elsewhere.[4, 5]

*The terms paramedic services and ambulance services may be used interchangeably in this submission based on context.

[2] Australian Institute of Health and Welfare, *Australia's Health 2020*, https://www.aihw.gov.au/reports-data/australias-health

[3] AMA (WA) Blog, *The longest night: my experience of ambulance ramping,* Australian Medical Association (WA), 11 March 2021. https://bit.ly/3hZLjft

[4] Hayes P, *Calls for whole-of-system approach to ease ambulance ramping crisis,* News GP, Royal Australian College of General Practitioners, 16 April 2021. https://bit.ly/3BLNefR

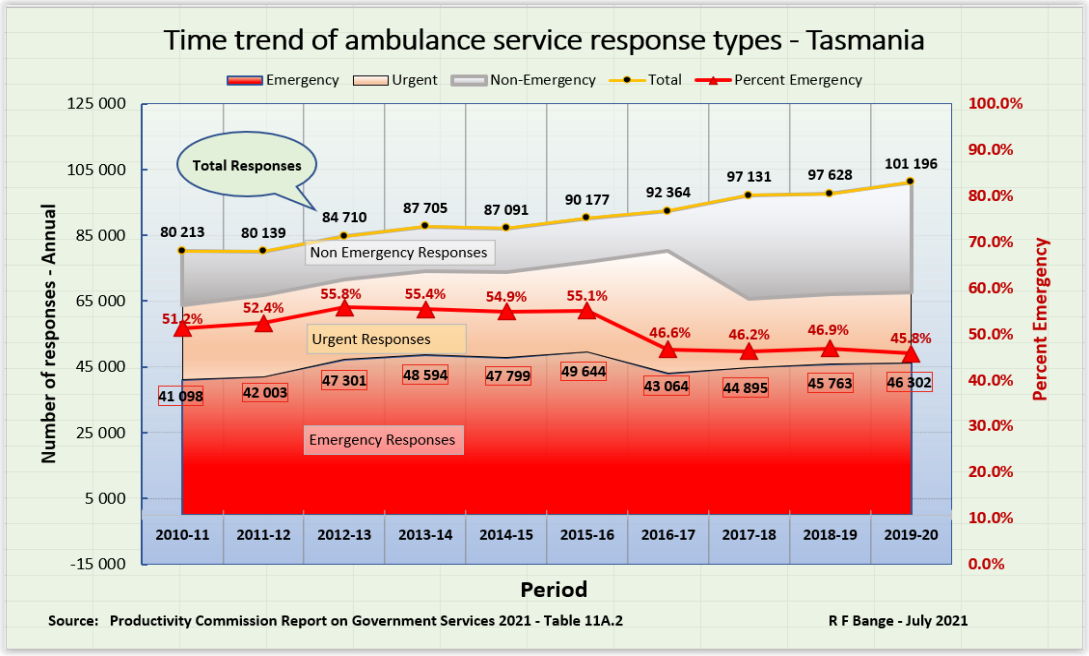
[5] Sawyer S, *Government demands for arbitrary performance targets are contributing to ambulance delays, paramedic exhaustion*, The Conversation, 29 April 2021. https://bit.ly/3ryTKBy

Community integrated healthcare

In health policy development there is increasing recognition of the importance of healthcare that is closer to the community, and which ensures the right care, right place, and right time. Those basic principles align with national policies that envisage the growth of integrated community-based care that caters for an aging population and increasing incidence of chronic conditions that are largely preventable, with the burden of care particularly acute in rural and remote areas.[6, 7]

Paramedics are best known for their role working for jurisdictional ambulance services. That dominant image often leads to confusion about the role of a paramedic - which may be independent of a service. Like a nurse or a physician or other Allied Health Practitioner (AHP), paramedics hold competencies enabling them to work across a variety of practice settings, and one-quarter to one-third of paramedics are estimated to work outside of a state ambulance service.

Also contrary to strongly held perceptions, is that most patient attendances by ambulance services are not acute emergency cases demanding a 'lights and sirens' response as shown by the time trend of ATas responses[8] below. This reveals a steady increase in the overall number of responses and a firm trendline of growth with significant non-emergency responses.



The percentage of emergency responses has been declining, and emergencies now comprise less than half the service's workload with the proportion of calls classified as emergency in Tasmania only 45.8% in 2019/2020. For the same period, the national average was 40.5%, with the lowest percentage 30.6% for Western Australia and the highest 51.2% for South Australia.[9]

Contributing factors to the non-emergency demand include: increasing numbers of people living with frailty and/or comorbid conditions; an increasing number of mental health-driven issues; the absence of primary care services; and the way that patients choose to seek help.

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

[7] 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

[8] Productivity Commission, *Report on Government Services (ROGS),* Australian Government, Canberra, 28 January 2021. https://bit.ly/2KUC4zw

[9] Ibid

In addition to identifying the changes in the nature and scale of overall demand, this chart demonstrates the changing character of clinical practice within ATas, with an increasing proportion of work being associated with low acuity health and care presentations including chronic health conditions, mental health, and palliative care prominent among the changing caseloads.

This pattern of responses aligns with the views expressed in the author's March 2021 submission[10] which highlighted several areas of increasing demand. These included:

- Mental health (page 7);
- Long term, aged and palliative care (page 8); and,
- Chronic conditions and healthcare in the home (page 10).

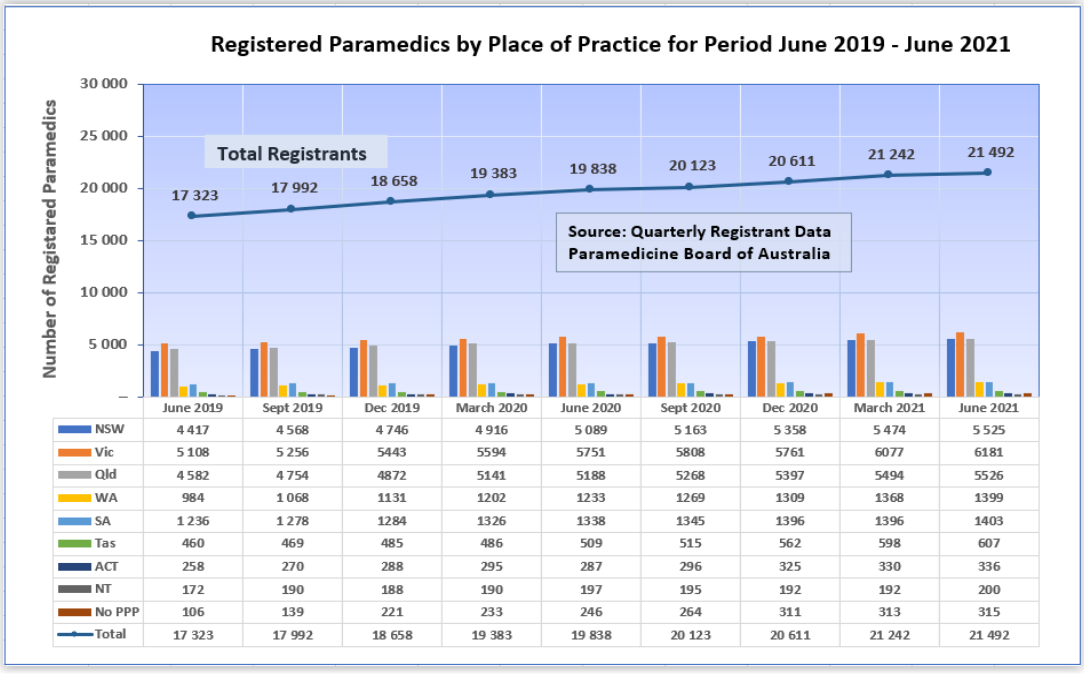
As part of the health system, ambulance services must continue evolving to meet changing community demands. Along with national strategies for primary care, there should be a shift towards prevention and early intervention with coordinated community support through the primary health care setting, including the provision of integrated services close to home.

Perceptions of the ambulance service role need to extend beyond their being merely a pre-hospital care provider operating in a silo and transporting patients requiring emergency care.[11]

Policymakers should embrace the concept of the jurisdictional ambulance service as a vital part of health infrastructure, bringing care to the patient and not just the patient to care.[12] This care may occur in-situ, at a healthcare facility or at home - and at times under unscheduled (emergency) conditions.

The paramedicine cohort revisited

The March submission provided a snapshot of the paramedicine workforce. The practitioner numbers have been updated with the Paramedicine Board of Australia's statistical summary for 30 June 2021 showing Australia now has a substantial workforce of 21,492 registered paramedics.[13]



	June 2019	Sept 2019	Dec 2019	March 2020	June 2020	Sept 2020	Dec 2020	March 2021	June 2021
NSW	4 417	4 568	4 746	4 916	5 089	5 163	5 358	5 474	5 525
Vic	5 108	5 256	5443	5594	5751	5808	5761	6077	6181
Qld	4 582	4 754	4872	5141	5188	5268	5397	5494	5526
WA	984	1 068	1131	1202	1233	1269	1309	1368	1399
SA	1 236	1 278	1284	1326	1338	1345	1396	1396	1403
Tas	460	469	485	486	509	515	562	598	607
ACT	258	270	288	295	287	296	325	330	336
NT	172	190	188	190	197	195	192	192	200
No PPP	106	139	221	233	246	264	311	313	315
Total	17 323	17 992	18 658	19 383	19 838	20 123	20 611	21 242	21 492

[10] Bange R, *Meeting the healthcare needs of rural Tasmanians*, Submission to Rural Health Services Inquiry, Government Administration A Sub Committee, Legislative Council Sessional Committee, March 2021. https://bit.ly/3f91hmf
[11] NSW Ambulance, *NSW Ambulance Vision and Strategic Plan 2021-2026*, March 2021. https://bit.ly/37AAJpn
[12] Conor Deasy, Kieran Henry, Cathal O'Donnell, Robert Morton, *Bringing care to the patient, not just the patient to care – A Changing Ambulance Service, Irish Medical Times, 6 August 2021.* https://bit.ly/3jIDJ8D
[13] Paramedicine Board of Australia, *Registrant Data Table - June 2021.* https://bit.ly/2XNcocb

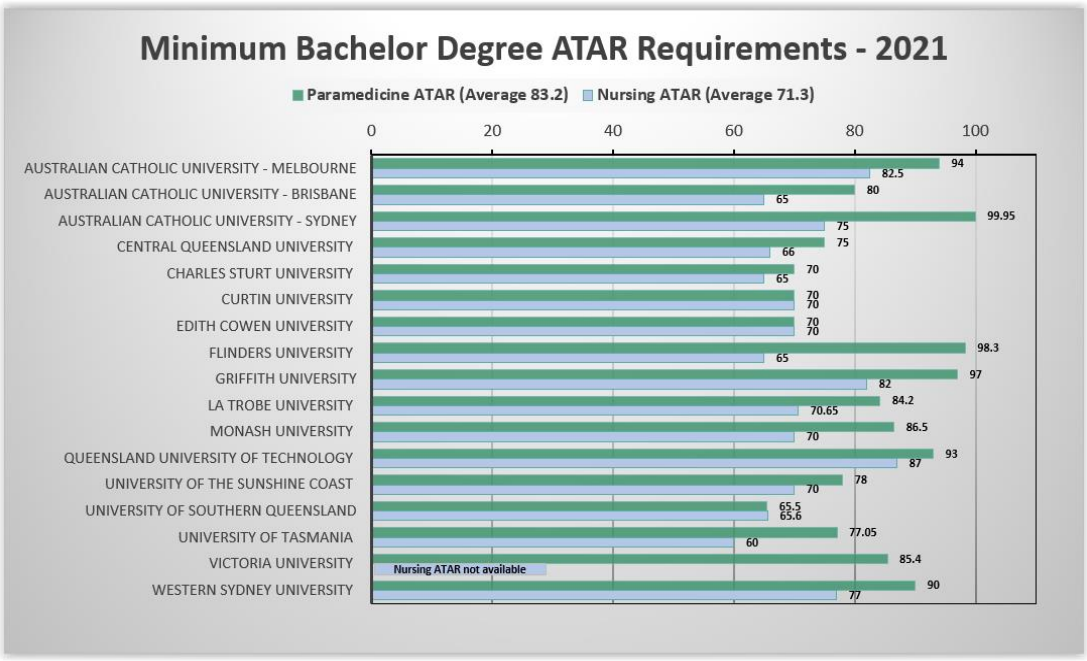
Matching data for June 2020 from the regulatory Paramedicine Board statistics and the annual Report on Government Services (ROGS) published by the Australian Productivity Commission[14] indicate that about 28% of paramedics do not work for jurisdictional ambulance services.

Based on the 607 registered paramedics in Tasmania on 30 June 2021, (of which 598 hold 'practicing' registration), the number of registered paramedics employed by Ambulance Tasmania (ATas) might be expected to be about 430-450, with the remainder working in health or some other related capacity outside the state agency.

With recent recruitment activities, the current number of paramedics employed by ATas is believed to be higher, indicating a lower proportion of paramedics are engaged in the wider health workforce outside of ATas than elsewhere across Australia. This presents a potential opportunity to expand the use of the paramedic workforce into private roles outside ATas.

Analysis of the profession shows a sustainable workforce leading to long-term viability, subject to continued employability of practitioners throughout the health workforce.

Paramedicine is a popular program of university study and the number of graduates annually in Australia substantially exceeds the current demand from the traditional ambulance services. The relative course popularity can be seen in the ATAR scores for those universities providing nursing and paramedicine courses. For this subset of enrolments, the paramedicine ATAR is consistently higher.

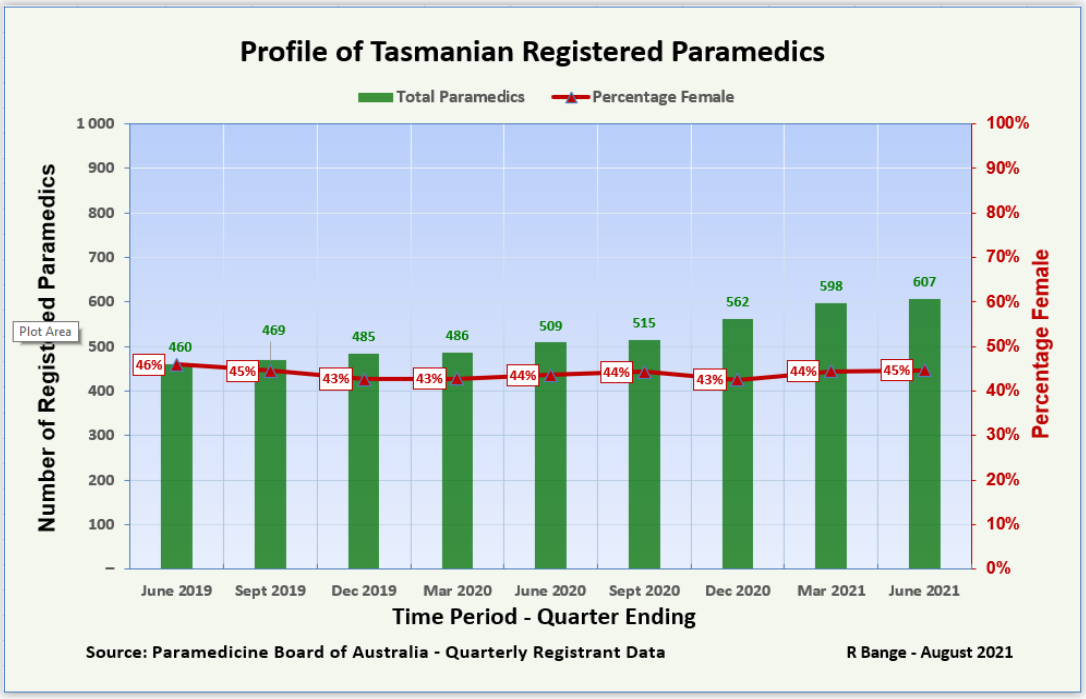


Along with service-related changes, paramedicine has evolved at breakneck speed in recent decades with contemporary practitioners holding advanced practice skillsets. They are tertiary educated, registered health practitioners and perform advanced clinical interventions with a high degree of autonomy. Australia also leads the world in paramedicine research activity. [15]

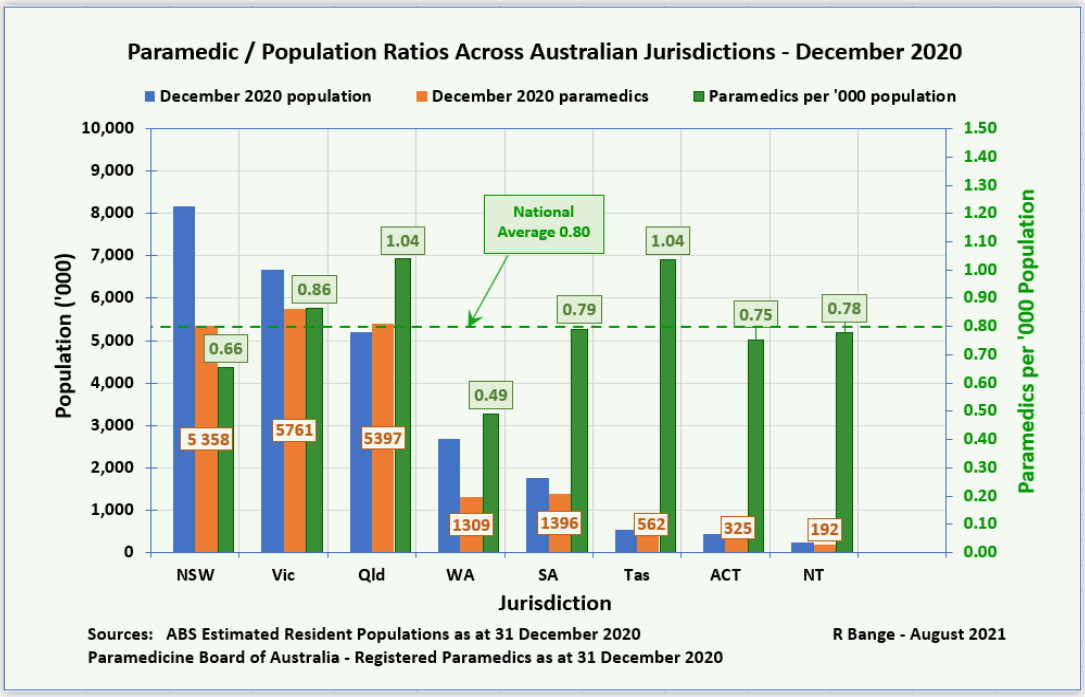
Full advantage thus should be taken of these practice and workforce developments including deployment strategies that better use the capabilities of registered paramedics and thereby deliver improved patient care across the health domain at low levels of risk.

[14] Bange R, *Report on Government Services (ROGS) 2021*, The Paramedic Observer, Facebook, 1 February 2021. https://bit.ly/32xgCWD

[15] Monash University, *Paramedicine Research Activities*. https://bit.ly/2VGiufR



Examining the average population density of registered paramedics across Australia, the ratio of practitioners per thousand population varies from a low of 0.49 in Western Australia to a high of 1.04 for Tasmania and Queensland. The national average is 0.80.

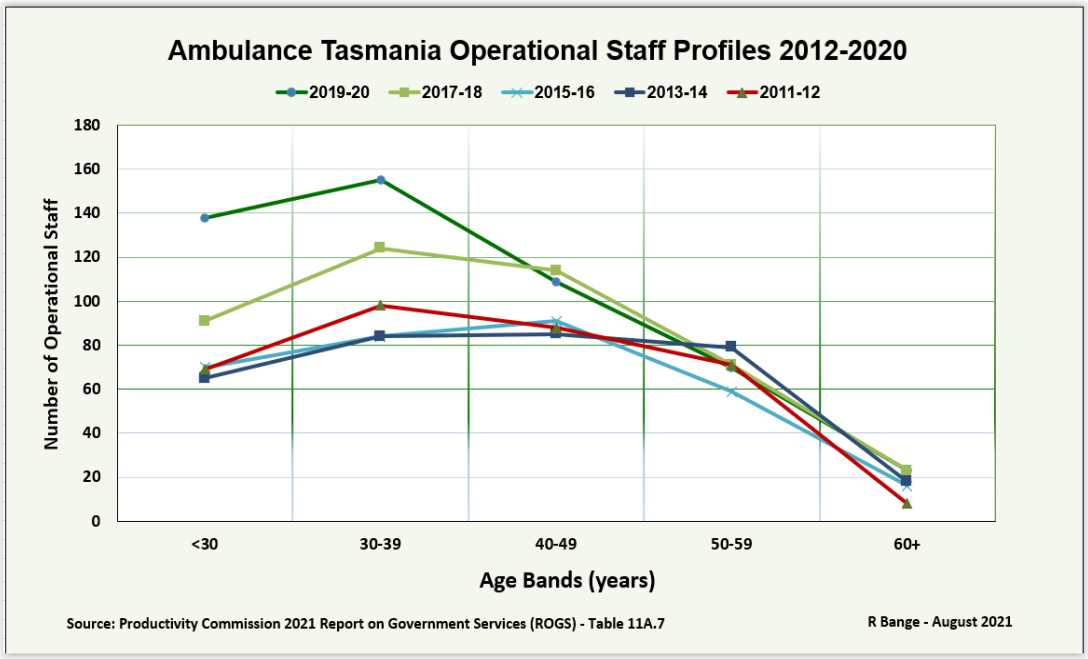


This compares with a national average density for nurses and midwives of about 16.30 per thousand population. In Tasmania, the ratio for nursing and midwifery is 18.54 per thousand population.

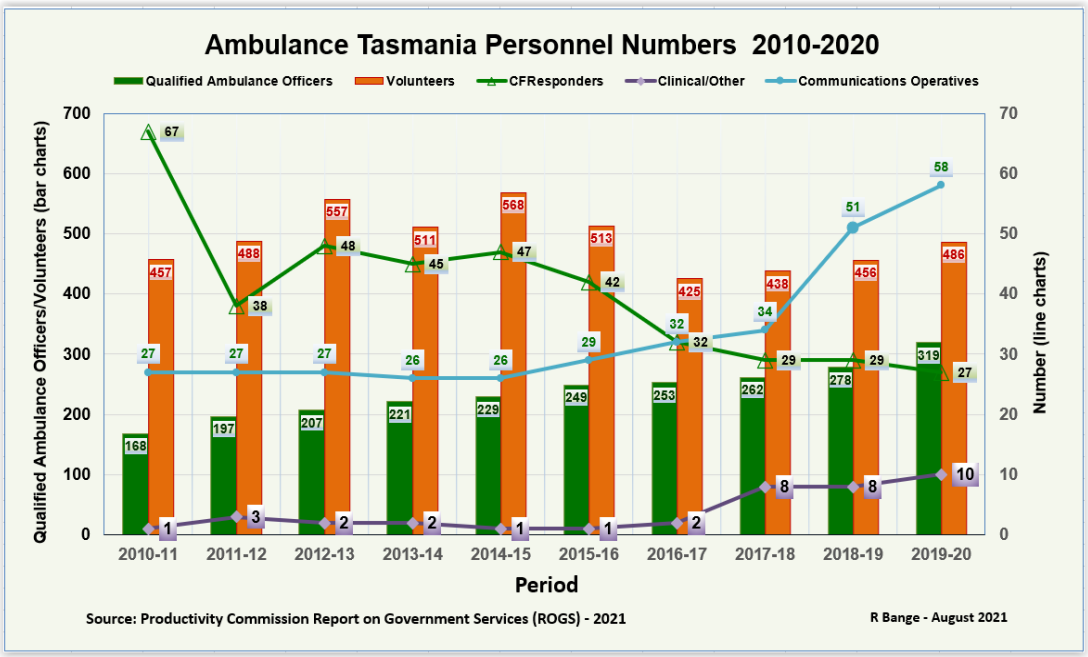
The raw figures don't give the full picture, and rurality, access issues, population distribution and other confounding factors apply. For example, the author would expect the paramedic staffing ratio for Tasmania to be considerably higher than the ACT which is essentially a metropolitan setting.

The Ambulance Tasmania personnel profile

An examination of the ATas operational staffing profile shows an increasingly younger workforce as the service has increased its recent recruitment activities with the engagement of university graduates and experienced paramedics.



A longitudinal view of ATas staffing categories reflects the recruitment activity since 2017-18, although the reported Qualified Ambulance Officers staff in ROGS (319) appears to be fewer than expected based on the number of registered paramedics in Tasmania (598) for the 2019-20 period.



Annual reports by the jurisdictional ambulance services remain limited in their reporting of diversity and practitioner profiles. The number of registered paramedics employed by ambulance services has not been reported and diversity analysis is limited to basic gender data which does not fully reflect the impact of cultural and ethnic diversity on healthcare outcomes.

The author believes ambulance services should in future report the number of registered paramedics employed - reflecting the change in the regulatory framework for paramedics. This reporting might be considered part of an accreditation process *(Recommendation 6 - March submission)*.

The principles of cultural safety and inclusion are well articulated and embedded in the Australian health practitioner regulatory framework and from an organisational viewpoint, reporting diversity would be consistent with those principles. An enhanced focus on diversity also may assist in preventing discrimination, bullying, harassment, and abuse – and help create a better organisational culture and service empathy that benefits patients and staff alike.[16]

Greater transparency might include more extensive reporting of practitioner profiles together with ethnic, disability and gender diversity, as part of the sector commitment to inclusiveness.[17] That enhanced reporting might be included in Annual Reports and summarised in the ROGS report.

Supplementary Recommendation A

That the Ambulance Tasmania commitment to diversity and inclusiveness be transparently reported through more detailed performance reporting of staff profiles including registered practitioner numbers, ethnic and disability status, and broad gender staff and position classifications.

The Tasmanian Government through the Department of Health and Ambulance Tasmania might take steps to engage other jurisdictions and the Australian Productivity Commission with a view to incorporating these measures in the annual ROGS report (see Supplementary Recommendation C).

Learning from others – avoiding conveyance

The pressures on the health and care system manifested by long wait times and ambulance ramping are signs that systemic changes are needed. In addition to providing better service resources and funding, the author's March submission recommended that measures are needed to foster the integration of services.

The submission also proposed mobilising the skills of paramedics in reducing the load on emergency care centres and increasing the engagement of paramedics with community-based care systems.

Brief mention was made of the evidence available from the UK including examples of good practice for safely reducing ambulance conveyance to Emergency Departments (EDs). 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 hospital unnecessarily.

Much of the work on avoiding conveyance stems from the landmark 2013 study *Transforming urgent and emergency care services in England*[18] which identified the vital role of general practice and other community primary care services in providing care to patients. The report called for a dramatic rise in the proportion of urgent 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*

[16] Bange R, *Ambulance Victoria Review*, The Paramedic Observer, Facebook, 9 December 2020. https://bit.ly/37BMPyA
[17] Bange R, *Benchmarking Diversity,* The Paramedic Observer, Facebook, 5 November 2020. https://bit.ly/3o5qzTB
[18] 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/3xON9Fv

The review proposed a series of changes to improve urgent and emergency care including:

- A significantly enhanced NHS 111 call service with access to patient records, offering advice from a range of clinicians, appointment booking or call back by GPs and others, or a transfer to 999 emergency services if necessary;
- Faster and consistent same day, everyday access to primary care and community services for people with urgent care needs. Improved 999 call services able to handle more cases 'at scene', with support from GP advice;
- Two levels of hospital-based emergency centre, with standard centres and a tier of major emergency centres having consistent senior clinical staffing and specialist capability; and,
- Reduction in the array of confusing services by co-locating community-based urgent care services in facilities uniformly called urgent care centres.

The General Practitioners Committee (GPC) of the British Medical Association agreed with the need for more clinicians to be involved in dealing with acute and subacute calls so that patients are not only directed to the right service, but are given appropriate advice and if possible, treatment through a single contact.

> *'Thirdly, we must provide highly responsive urgent care services outside of hospital so people no longer choose to queue in A&E. This will mean providing faster and consistent same-day, every-day access to general practitioners, primary care and community services such as local mental health teams and community nurses for patients with urgent care needs.*
>
> *It will also mean harnessing the skills, experience and accessibility of a range of healthcare professionals including community pharmacists and ambulance paramedics. By extending paramedic training and skills, and supporting them with GPs and specialists, we will develop our 999 ambulances into mobile urgent treatment services capable of dealing with more people at scene, and avoiding unnecessary journeys to hospital…'*
>
> *Transforming urgent and emergency care services in England*[19]
> *End of Phase 1 Report (page 8)*

The GPC called for the NHS 111 call service to be integrated with the see and treat elements of the urgent care service.

> *'We need a commitment from NHS England to reverse the fall in the proportion of funding spent on general practice so that both practices and out-of-hours organisations can start to take on additional staff to meet these growing demands. Expecting the current number of GPs to work harder and longer will simply lead to more GP burnout.'*
>
> *Dr Richard Vautrey*
> *Deputy Chair*
> *General Practitioners Committee*

The recognition that major changes were needed to ambulance response standards dating from 1974 resulted in the largest clinical ambulance service trials in the world.

The Ambulance Response Programme (ARP) was established in 2015 as one of the initiatives aimed at increasing operational efficiency whilst maintaining a clear focus on the clinical need of patients.

The key objectives were:

[19] Ibid.

- Prioritising the sickest patients, to ensure they receive the fastest response;
- Driving clinically and operationally efficient behaviours, so the patient gets the response they need first time and in a clinically appropriate timeframe; and,
- Putting an end to unacceptably long waits by ensuring that resources are distributed more equitably amongst all patients.

The ARP tested a new operating model and new set of targets. In summary, the new system:

- Changed the dispatch model of the ambulance service, giving staff slightly more time to identify patients' needs and allowing quicker identification of urgent conditions;
- Introduced new target response times which cover every single patient, not just those in immediate need. For the most urgent patients the mean response time is collected in addition to the 90th percentile, so every response is counted; and,
- Changed the rules around what "stops the clock", so targets could only be met by doing the right thing for the patient rather than meeting an arbitrary time measure.

Sheffield University was engaged to undertake an evaluation. The research team noted that time-based standards have been used for many years as a key performance measure for ambulance services, despite a lack of evidence that these measures resulted in good clinical care.

Their evaluation was that the evidence supported the changes as providing benefits that allowed services to better manage their available resources - which is increasingly important as demand continues to rise or in conditions of limited resources or extended accessibility. On 13 July 2017 NHS England announced a new set of performance targets for ambulance services in England.

This move was the biggest change in ambulance operating practice for 40 years and required significant effort to implement. It involved not only the technical challenges required to support new call triage and dispatch processes but also the organisational challenges of new working practices for staff, wholesale review of fleet configurations and staff rostering.

The Sheffield study also saw a need to replace at least some operational process indicators with better and more patient-focussed clinical outcome measures. It's notable that the indicators for the ROGS report have been slow to evolve and only recently has ambulance service performance been reported under the Health Services category – having previously been combined with Fire services.

Lord Carter's later report[20] of September 2018 highlighted that tackling avoidable conveyances to hospital, particularly for older people, supports delivery of care closer to home, reduces unnecessary pressures on Accident and Emergency (A&E) departments and hospital wards, and could release significant capacity in the acute care sector. The benefits he foresaw included reduced costs for ambulance services and the wider healthcare system.

Lord Carter stressed the need for ambulance services to take advantage of digital innovation and technology when providing care: 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.

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.

[20] Lord Carter of Coles, *Operational productivity and performance in English NHS Ambulance Trusts: Unwarranted variations*, September 2018. https://www.england.nhs.uk/wp-

Lord Carter also found that technology and innovation – such as the introduction of digital ambulances with greater access to patient data and connectivity with other NHS services – will be crucial to reducing conveyance rates.

> *"New technology is not adopted rapidly across the service and this, plus the weakness identified in the control centre infrastructure, must be addressed. Ambulance services need to plan for tomorrow's service today and develop robust plans to rapidly improve the resilience of the infrastructure."*
>
> *Lord Carter of Coles*
> *September 2018*
> *The digital ambulance service*
> *Operational productivity and performance in English NHS Ambulance Trusts*

An important factor in non-conveyance is the availability of clinically suitable referral pathways in some areas - which may contribute to differences in the percentage of patients being transferred to hospitals. This is a matter of particular significance for Tasmanians living in rural regions.

Ambulance services cannot achieve these improvements in isolation, and safe reduction in avoidable conveyance requires a whole of system approach to deliver the improvements that will provide suitable options for patients when a hospital is not the optimal care pathway.

In January 2019, the NHS rolled out 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 encompassing primary care, community pharmacists, ambulance and other community-based services to provide a locally accessible and convenient alternative to A&E for patients who do not need to attend hospital.

The LTP places ambulance services at the heart of the Urgent and Emergency Care system. It commits to implementing Lord Carter's recommendations so patients can be treated by clinicians at home or in the most appropriate setting outside the hospital whenever it is safe.

In response to these reports, the joint NHS England and NHS Improvement Ambulance Improvement Programme Board commissioned an Avoidable Conveyance Steering Group and in July 2019, they published the *'Planning to Safely Reduce Avoidable Conveyance'* report which aimed to build on the evidence and provide examples where initiatives are already working well and are being monitored and evaluated.[21, 22]

The key enablers outlined in this valuable document were:

- Identifying the initiatives that have the greatest impact for helping people who have fallen; and care home residents;
- Addressing the needs of people experiencing Mental Health crisis by facilitating access to Mental Health services and professionals;
- Enabling front-line paramedics to have immediate access to additional clinical advice; and,
- Ensuring the right skill mix in ambulance services to ensure the right response to the patient.

The pillars to support a safe reduction in conveyance are shown graphically below.

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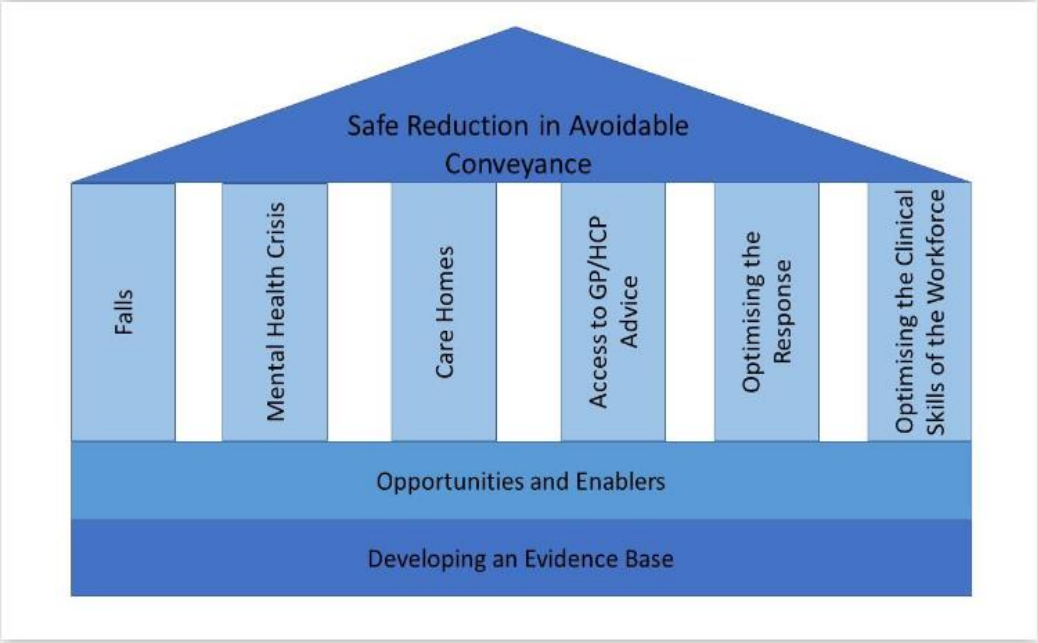
[21] Kyle McNeely, *Planning to Safely Reduce Avoidable Conveyance*, NHS England and NHS Improvement, 22 July 2019. https://bit.ly/37qqFz9

[22] Association of Ambulance Chief Executives, *Safely Reducing Avoidable Conveyance Programmes*, https://bit.ly/38HtSLE



The UK Association of Ambulance Chief Executives is collating examples of good practice.[23] Their repository includes innovations introduced quickly during the response to the COVID-19 pandemic which may warrant further evaluation to assess their benefits in the long term.

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.

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

The curation of examples is an ongoing process and 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 operational model as standard business.[24]

Ambulance services in Australia have undertaken reviews of their response models but at a jurisdictional level and not as a national strategy. To implement revised response models, ambulance services have also employed Extended Care Paramedics (ECPs) who hold additional skills in low acuity patient assessment and treatment that can reduce the number of ED presentations. While ATas has a small number of ECPs, there is no formal external training qualification required.

Significantly, both in the UK and in Australia, there has been acknowledgement of the need for greater collaboration and integration between the ambulance sector and the wider health service.[25]

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 their 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.

Another important outcome of the Sheffield University study was the review of the operational performance and Ambulance Quality Indicators, with a revised set of measures aligned to the new call categories. These indicators reflect more meaningful and transparent reporting of response time performance for all 999 calls, not just the most urgent.

Sheffield University's *Understanding Variation in Ambulance Service Non-Conveyance Rates: A Mixed Methods Study*[26] 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 how advanced paramedics are used and variation in perceptions of the risk associated with non-conveyance within ambulance service management.

These outcomes and a further study from Sheffield University[27] have implications for the staffing profile of an ambulance service, for example, the use of ECPs *(Recommendation 10 – March submission)* and other professionals such as Mental Health Nurses and Occupational Therapists[28] in developing alternative responses to safely reduce conveyance.

Supplementary Recommendation B

That in proposing any new studies of response models to enhance patient care while also reducing the need for conveyance to Emergency Departments, the Inquiry consider directing attention to the options outlined in the Association of Ambulance Chief Executives, Safely Reducing Avoidable Conveyance Programme (Recommendation 9 – March submission).

[24] London Ambulance Service, *Advanced Paramedic Practitioners – Urgent Care*, Safely Reducing Avoidable Conveyance Programme, Association of Ambulance Chief Executives, 13 April 2021. https://bit.ly/3fJVh35
[25] NSW Ambulance, *NSW Ambulance Vision and Strategic Plan 2021-2026*, March 2021. https://bit.ly/37AAJpn
[26] O'Cathain et al, *Understanding Variation in Ambulance Service Non-Conveyance Rates: A Mixed Methods Study*, Sheffield University, May 2018. https://bit.ly/2VD97gy
[27] Coster J, O'Cathain A, Turner J, *Outcomes for Patients Who Contact the Emergency Ambulance Service and Are Not Transported to the Emergency Department: A Data Linkage Study, DOI:10.1080/10903127.2018.1549628.* https://bit.ly/3CC62i3
[28] North East Ambulance Service, *Falls Rapid Response Service (FRRS), Safely Reducing Avoidable Conveyance Programme, Association of Ambulance Chief Executives, 13 April 2021https://bit.ly/3yxzdAf*

Supplementary Recommendation C

That Ambulance Tasmania continue to work with the Tasmanian Department of Health, other jurisdiction 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 contemporary response models designed to enhance patient care while also reducing the need for conveyance to emergency departments.

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 (see also Supplementary Recommendation A).

Service integration and practitioner engagement

The author has outlined (page 5) how the objective of achieving an integrated healthcare system in future needs to go beyond the perception of the public ambulance service as simply a pre-hospital emergency care provider with a transportation focus.

Over the past two decades, paramedic services internationally have created pilot integrated healthcare and community paramedicine programs. However, despite highly successful pilots and some notable exceptions, the omission of the critical role of paramedic services is a striking aspect of much health care policy across jurisdictions. That situation needs to change.

Paramedics working within ambulance services, independently, or as paramedic practitioners in hospitals and GP clinics offer the prospect of improved community care by extending the health and care roles of paramedics to much more than stabilising and transporting patients to an ED.

The report of the UK parliamentary Public Accounts Committee[29, 30] found there were serious issues with the integration of ambulance services into Sustainability and Transformation Plans including how local plans will fit around national objectives to connect emergency care services. Importantly, the Committee recognised that ambulance services are inherently reliant on the rest of the health system to deliver new care models and services.

The author believes a similar situation applies to Tasmania and that structural arrangements are needed at senior policy levels that can facilitate the integration of the paramedicine workforce into the health and care system alongside other AHP, nursing, and medical cohorts.

Among the transformational factors in delivering integrated healthcare will be the implementation of electronic health records and access to patient data in all out-of-hospital settings. Electronic data collection can be a powerful tool in monitoring patient indicators for chronic care, for patient handover purposes, for research, systemic analysis and in areas of auditing and quality assurance.

For ambulance and paramedic services generally, electronic data should enable rapid retrieval of patient records and transmission of data while in situ or in transit to definitive facilities.

Supplementary Recommendation D

That the Tasmanian Ambulance and Paramedic Services legislation (Recommendations 3 to 7 – March submission) provide for the implementation of electronic data collection, storage and dissemination/sharing (with appropriate security safeguards) that will facilitate the seamless delivery of patient care across the health system (Recommendations 12, 13 – March submission).

[29] UK Parliament House of Commons, Committee of Public Accounts, *NHS Ambulance Services, 25 April 2017*, http://bit.ly/2rdpqzx

[30] Ibid *Conclusions and recommendations*, http://bit.ly/2rdtqQq

Paramedics in preventive and primary care

Primary health care is the cornerstone of health and prevention. There is strong evidence that effective primary care can reduce the need for specialist services or the need for hospital admission.

Past funding arrangements have favoured acute care to the detriment of primary health care. Complex funding and regulatory arrangements constrain flexibility in terms of employment, scope of practice and flexible models of care; limit the capacity for team-based care; and present financial and professional barriers to health professionals - especially for those in rural and regional Australia.

The option of increasing the available professional workforce by mobilising the underutilised paramedicine workforce has been inhibited by existing impediments to practice, many of which are a hangover from a bygone era. Ingrained perceptions of past roles should not detract from the scope of contemporary paramedic practice or the clinical interventions undertaken by today's registered paramedics.

An example of outdated limitations can be taken from the public health issue of vaccination arising from the COVID-19 pandemic. In 2020 the author proposed that existing legislative and regulatory restraints in all jurisdictions be reviewed in relation to paramedics administering vaccinations, and for steps to be taken to enable registered paramedics to become authorised vaccinators - subject to the same training and certification requirements as registered nurses and medical practitioners.

As it happens, some dual-qualified (e.g., paramedicine/medicine, paramedicine/nursing) registered practitioners obtained or held the requisite vaccination certification via their alternate registration. In Victoria, emergency orders were promulgated to authorise paramedics in response to COVID-19.

There are nominal cost impacts in taking this action as it simply involves removing existing impediments to training and practice to enable paramedics to become vaccinators if they wished. By way of information the Pharmacy Guild of Australia has offered access to their vaccination training programs to registered paramedics.

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 adverse reactions.

Only recently have jurisdictions moved to facilitate the administration of vaccines by paramedics as well as several other categories of health care worker – but usually only in the form of special and time-limited regulatory orders rather than enduring recognition of eligibility *(Appendix C).*

The key issue is that different jurisdictions have had restrictions under their various regulations covering vaccination that prevented paramedics from even undertaking the minor training needed. Other practice restrictions are unchanged from years ago – and their existence reflects the outcome of paramedicine often being forgotten when it comes to workforce and practice considerations.

Although Australian paramedics already are working across a wide variety of health and care settings, greater flexibility is needed to facilitate their wider engagement in community and primary practice roles, which remains far less well developed than in the UK and elsewhere as indicated in *Appendix B.* Our communities are poorly served by not using paramedics more effectively like that.

Supplementary Recommendation E

That in advance of more general consideration of removing impediments to paramedic practice (Recommendation 19 - March submission) the Tasmanian government move without delay to ensure open access to training of registered paramedics as vaccinators with enduring application, on a similar basis to the provisions available to registered nurse vaccinators and medical practitioners.

Abbreviations / Definitions

The following abbreviations and definitions are used in this submission.

A&E	Accident and Emergency (UK - equates to Australian ED)
AHP	Allied Health Practitioner
ATas	Ambulance Tasmania
ECP	Extended Care Paramedic(s)
ED	Emergency Department
GPC	General Practice Council (British Medical Association - UK)
Inquiry	Parliamentary inquiry into rural health services in Tasmania
LTP	NHS Long Term Plan
NEPT	Non-Emergency Patient Transport
NHS	National Health Service (UK)
ROGS	Report on Government Services (Productivity Commission)
UK	United Kingdom

Appendix A – Summary of March 2021 Submission Recommendations

Recommendation 1

That the state of Tasmania formally adopt a 'health in all policies' approach based on the principle of sustainable development. This strategy should be aimed at improving the economic, social, environmental, and cultural well-being of all Tasmanians by implementing policies and taking action designed to achieve long term wellbeing goals.

To assist in the development of this approach, the work undertaken by the governments of New Zealand and Wales might be considered, including the Statutory guidance on the Well-being of Future Generations (Wales) Act 2015 and related documents and reports.

Recommendation 2

That the state of Tasmania work with other jurisdictions including the Commonwealth in adopting a national approach to policy development and assessment that reflects the 'health in all policies' approach including transparent reporting and monitoring mechanisms.

Recommendation 3

That a review of the Tasmanian Ambulance Service Act be undertaken, with drafting of the Act provisions from the perspective of legislation that retains regulatory rigour, but which empowers Ambulance Tasmania as a collaborative provider of healthcare services with the capacity to provide emergency and unscheduled response in out-of-hospital paramedic-led settings.

Recommendation 4

Functions which are covered in more relevant legislation (such as practitioner registration, complaints management and fitness to practice) should not form part of provider-specific legislation for Ambulance Tasmania. Drafting of legislation also should ensure there are no impediments to implementation of presumptive recognition of Post-Traumatic Stress Disorder as a work-related injury.

Recommendation 5

That Ambulance Tasmania remain as Tasmania's primary out-of-hospital emergency and unscheduled care and transport provider. The revised Act (Recommendation 3) should reflect this objective.

Recommendation 6

In addition to relevant legislative enabling provisions, Ambulance Tasmania and the Tasmanian Department of Health should take appropriate action at state and national levels to implement a regime of accreditation and licensing of all ambulance (paramedic) service providers that complements the registered status of paramedics. Accreditation standards should include mandatory equipment, staffing, clinical governance, performance standards and transparency of public reporting.

Where relevant, this accreditation should extend to any subsidiary NEPT functions.

Recommendation 7

The legislation covering the provision of out-of-hospital paramedic related care should include the capacity for registered practitioners and other personnel to collaborate with and undertake exchange and interchange engagements with Ambulance Tasmania, and for the mobilisation and engagement of external accredited health service providers as supplementary resources.

Recommendation 8

That the government of Tasmania provide ambulance service funding at a suitably greater than national average per capita level and make representations to have the provision of ambulance services funded through a base stream of national funding.

Recommendation 9

That the Government of Tasmania take immediate steps to examine the implementation of the recommendations of the 2017 Review of Ambulance Tasmania Clinical and Operational Services and the Tasmanian Audit Office performance audit of Tasmania's four major hospitals in the delivery of Emergency Department services.

This monitoring study should be conducted in association with a review of UK ambulance service practices to minimise avoidable conveyance, with a view to actioning the recommended changes of the Tasmanian Reviews as soon as feasible.

Recommendation 10

That Ambulance Tasmania place a focus on developing the Extended Care Paramedic cohort including the educational and practice foundations and expand the use of Extended Care Paramedics along with the adoption of a scope of practice with contemporary advanced interventions and medications.

Recommendation 11

The revised Ambulance Tasmania legislation should provide for objectives that facilitate the provision of care by registered community paramedics and extended care paramedics holding prescribing rights - whether employed by ATas, other entities, or as independent practitioners.

Recommendation 12

The revised Ambulance Tasmania legislation should provide for the implementation of electronic data collection, storage and dissemination/sharing (with appropriate security safeguards) that will facilitate the seamless delivery of patient care.

Recommendation 13

The Tasmanian legislation should facilitate better recognition of the scope of out-of-hospital care. The record of patient outcomes should encompass the full patient journey through the capture and sharing of health-related patient outcome data well beyond the current details of transport and response times provided by the Productivity Commission ROGS.

Tasmanian and national legislation should facilitate the integration of data and reporting between the Productivity Commission and the Australian Institute of Health and Welfare[31] to better inform overall healthcare policy and representations should be made to achieve this.

Recommendation 14

The revised Ambulance Tasmania legislation should be framed to facilitate collaborative engagement 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). Explicit reference to supporting research activities should be included within the nominated objectives for the service.

[31] Australian Institute of Health and Welfare, http://www.aihw.gov.au/capability-statement/ accessed 09/03/2021.

Recommendation 15

The legislation underpinning the role of Ambulance Tasmania should incorporate significant elements that facilitate the engagement of the public and other entities e.g., universities, other service providers. That engagement should be meaningful and localised to the extent that it aligns with the structural models for healthcare networks.

Recommendation 16

That the Tasmanian Government appoint a Chief Paramedic Officer as part of the senior policy management structure within the health and social welfare domains. The role may encompass high-level strategic advice on professional issues in the integration and delivery of paramedic services; and include workforce planning in association with other professional groups, educational institutions, professional bodies, and practitioners and service providers in the private sector.

Recommendation 17

It is suggested that the terms 'Ambulance Service' and 'pre-hospital' (and variants) be replaced by 'Paramedic Service' and 'out-of-hospital' (and variants) to better reflect the reality of delivered care and to enhance the active involvement of the service and the registered paramedicine cohort in the design and implementation of health policy, trauma care, illness and injury prevention programs.

Recommendation 18

That the Inquiry recommendations draw attention to paramedicine as a significant component of the Australian health workforce and recommend the formal inclusion of paramedicine as a component of the national health workforce for relevant data collection across the full range of national workforce statistics including education and employment, for planning and development purposes alongside other health professions.

Recommendation 19

That a task force be established to explore the impediments to practice as individual health professionals by registered paramedics at jurisdictional and national levels, with a view to enabling access to MBS/PBS provider programs, referral pathways, prescribing rights, electronic and other health records, and other elements of independent practice.

Recommendation 20

That the paramedicine workforce be eligible for support and incentive programs intended to foster rural and remote practice including national provisions for internship training, scholarship support for undergraduate and advanced degree courses, doctoral and post-doctoral research funding and other aspects of national policy related to rural and remote health care delivery.

Recommendation 21

That without delay, Tasmania collaborate with other jurisdictions and the Commonwealth in preparing and distributing materials, including toolkits, that identify paramedicine as a health profession able to provide health care services across a wide variety of practice and community settings.

These employer and practice guidelines on the role of paramedics and their integration into general practice, primary and other care settings (e.g., hospitals, clinics) might draw on the experience and materials developed in the UK for Clinical Commissioning Groups and the UK College of Paramedics.

Recommendation 22

That the Tasmanian government take proactive steps to consider the use of paramedics to meet workforce needs in metropolitan and rural hospital Emergency Departments. With rural hospitals under pressure in having medical practitioners available to attend, paramedics can play a significant role in urgent and emergency presentations and priority might be placed on staffing them with paramedics who can complement existing resources with their acute care expertise.

Recommendation 23

That as an interim step, Tasmania provide information and incentives to primary healthcare providers, such as hospitals, GP clinics and community care services, to assist providers in transitioning into use of the paramedic workforce.

Recommendation 24

That Tasmania pilot Community Paramedicine programs in rural and remote regions including the introduction of key performance indicators related to primary health screening for rural ATas paramedics and/or supplementing existing community nurse initiatives with community paramedic support.

Recommendation 25

That Tasmania review and implement piloting of Paramedic Practitioner roles.

Recommendation 26

That Tasmania provide financial incentives to paramedics upskilling in low-acuity specialties and accepting roles in rural and remote locations.

Recommendation 27

That Tasmania engage with other jurisdictions and the Commonwealth Government with a view to ensuring that paramedicine is included within the programs of incentives and support for rural and remote practice on an equivalent basis to the support for Allied Health Practitioners.

Appendix B – Paramedic Practice Regimes on Prince Edward Island

Paramedic Association
Prince Edward Island

June 26, 2021

Good day. Recent public conversations have begun surrounding the profession of paramedicine and its training/educational foundations. I would like to take this opportunity to expound on this topic and hopefully clear up any misconceptions that may exist.

Paramedicine was born in conflict. The history of our profession can be traced back as far as the battlefields of Western Europe in the 18th century and the 'ambulance volantes', or 'flying ambulances', of the Napoleonic conflict. However, the roles paramedics play are no longer rigidly restricted to the ambulance setting alone, and involve more medicines, procedures, and responsibilities within the current scope of practice than ever before. The days of paramedics being considered simply 'ambulance drivers' have ended.

We applaud the recent Health PEI decision to utilize the paramedic profession within the Prince County Hospital by introducing Advanced Care Paramedics (ACPs) to the emergency department, and moving forward we hope that paramedics can do increasingly more to help provide quality care to our already taxed health system. This decision adds to the growing number of non-traditional settings in which paramedics are working here on PEI: Community Paramedics in Mobile Integrated Health (MIH) units; ACPs in the Western Hospital's Collaborative Emergency Centre (CEC); and paramedics of all levels in COVID testing clinics/units. The Department of Health and Wellness is soon to implement Mobile Mental Health Crisis units which will also involve paramedics in yet another non-traditional role.

While these may seem new, paramedics have been engaged in such roles in other provinces and countries for many years. Paramedics have been working in the emergency department setting for some time. Nova Scotia has been successfully utilizing emergency department paramedics at the Dartmouth General Hospital, the QEII, and many other rural centres for many years.

Paramedics and nurses have been working in close collaboration across Canada for decades in hospitals, clinics, flight services and remote locations. Partnering these two distinct health professions allows for the integration of both unique skill sets, producing an even stronger health care capacity than either profession could offer individually. As the professional voice of paramedicine in this province, we look forward to any opportunities through which paramedics can contribute to the health of Islanders.

It is true that a paramedic's initial training is focused specifically on the pre-hospital setting, but where our profession truly excels is in our versatility. Our care

PARAMEDIC ASSOCIATION OF PEI, 40 ENMAN CR, CHARLOTTETOWN, PE C1E1E6, PARAMEDICSOFPEI@GMAIL.COM

setting changes with every call, and because of that, paramedics have become adept at handling dynamic situations, new technologies, modern pharmacologies, and practice at the highest standards of patient care.

A Primary Care Paramedic (PCP) must successfully accomplish 840 hours of clinical and ambulance practicums, during a two-year educational program, in order to qualify for graduation. The PCP curriculum, such as that offered locally through Holland College, contains courses in Pharmacology, Diagnostics, and Pathophysiology. Primary Care Paramedic students also undertake clinical rotations in the emergency department, intensive care, operating room, mental health, and obstetrics, before finishing a 500 hour practicum on the ambulance.

To achieve the title of Advanced Care Paramedic (ACP), a PCP must complete an additional year of Advanced Pharmacology, Airway Management, Cardiology, Trauma and Critical Care management courses, in addition to 700 combined hours of clinical and ambulance rotations in the previously mentioned areas. Aside from the hurdles of program completion, paramedics at both levels must also complete national licensing exams prior to beginning work.

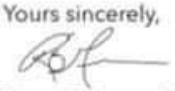
When a paramedic has completed their programs they may also choose to enrol in the two-year Bachelor of Science (Paramedicine) degree program offered through the University of PEI. The shift from a traditionally vocational to university-based education has resulted in paramedicine taking on a new professionalism.

Following graduation and licensing, a paramedic may choose to continue their education with specialized training in flight, tactical, geriatric, pediatric, educational, remote wilderness, as well as community, primary, and critical care environments.

Paramedics on PEI (PCPs, ICPs, & ACPs) have a particularly robust scope of practice and are frequently called upon to care for sick and critically ill patients for several hours during ambulance transfers to larger tertiary hospitals in other Atlantic provinces.

I hope this brief introduction to our profession has been informative and enlightening. Should you have any questions regarding anything you've read here or would simply like to know more about paramedicine here on PEI, please do not hesitate to contact us. We're always glad to discuss what we do and how we make an impact in the lives of everyday Islanders.

Yours sincerely,



Ryan O'Meara, MEd, ACP, CD
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Paramedic Association of Prince Edward Island

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Appendix C - Vaccination Matrix from Op COVID SHIELD*

Annex B – Workforce

Table 1: Registered workforce ability to administer COVID vaccinations in Commonwealth/Private clinics

		Medical practitioner	Nurse practitioner	Authorised Nurse Immuniser[#]	Registered nurse	Enrolled nurse	Midwife	Aboriginal & Torres Strait Islander Health Practitioner	Aboriginal Health Worker	Pharmacist immuniser	Pharmacist	Dentist	Paramedic	Students
Australian Capital Territory	Administer	✓	✓	✓	✓	✓	✓	x	x	✓	✓	x	x	x
	Conditions	Unrestricted	Unrestricted	Unrestricted	Written direction	Written direction	Written order	N/A	N/A	Written direction	Written order	N/A	N/A	N/A
New South Wales	Administer	✓	✓	✓	✓	x	x	x	x	x	x	x	x	x
	Conditions	Unrestricted	Unrestricted	Unrestricted	Written direction	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Northern Territory	Administer	✓	✓	✓	✓	✓	x	✓	x	✓	x	x	x	x
	Conditions	Unrestricted	Unrestricted	Unrestricted	Written order	Supervision and written order	N/A	Authorised immuniser[%] - Unrestricted	N/A	Unrestricted	N/A	N/A	N/A	N/A
								Supervision and written order						
Queensland	Administer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓+
	Conditions	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Supervision of an immunisation professional**	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Paramed 3/ECP or 4	Under personal supervision of an immunisation professional**
South Australia	Administer	✓	✓	✓	✓	✓	x	✓	x	✓	x	x	✓	x
	Conditions	Unrestricted	Unrestricted	Unrestricted	Written order	Supervision or direction	N/A	Supervision or direction	N/A	Unrestricted	N/A	N/A	S4 licence	N/A
Tasmania	Administer	✓	✓	✓	✓	✓	x	✓	✓	✓	x	x	✓	✓
	Conditions	Unrestricted	Unrestricted	Unrestricted	Supervision and written direction	Supervision and written direction	N/A	Supervision and written direction	Supervision and written direction	Unrestricted	N/A	N/A	Supervision and written order	Supervision and written order
Victoria	Administer	✓	✓	✓	✓	✓	✓	✓	x	✓	✓	x	✓	✓+
	Conditions	Unrestricted	Unrestricted	Unrestricted^	Supervision	Supervision	Supervision	Supervision	N/A	Unrestricted^	Supervision	N/A	Supervision	Supervision
Western Australia	Administer	✓	✓	✓	✓	✓	x	✓	✓	✓	x	x	x	x
	Conditions	Unrestricted	Unrestricted	Under direction given by a prescriber; or circumstances identified by SASA[#]	Under direction given by a prescriber; or circumstances identified by SASA[#]	Under direction given by a prescriber; or circumstances identified by SASA[#], (The SASA[#] requires supervision or direction)	N/A	Under direction from a prescriber in circumstances identified by regulations or under SASA[#] (there is not a SASA[#])	Under direction from a prescriber in circumstances identified by regulations or under SASA[#] (there is not a SASA[#])	Under direction from a prescriber or SASA[#] (there is a SASA[#] in place)	N/A	N/A	Under direction from a prescriber or under SASA[#] (there is not a SASA[#])	N/A

*__Op COVID SHIELD__ is the National COVID-19 Vaccine Campaign Plan of Australia - 3 August 2021 https://bit.ly/3iyNyXJ