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

Submission to the
Rural Health Services Inquiry:

Meeting the healthcare needs of rural Tasmanians

March 2021

Registered Paramedic - A professional health care practitioner 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. In Australia, paramedic is a protected title and may be used only by those practitioners registered under the Health Practitioner Regulation National Law.

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

One of the dangers inherent in inquiries and reviews is the consideration of the status quo and workforce groups and professions in terms of their traditional perceived roles rather than examining the options available to foster innovation and fill gaps in care.

While many areas of the economy have undergone reform and significant workforce changes over the past 30 years, the health sector has been slow to respond, and many structural elements reflect the practices of a bygone era.

Key among these is the investment in centralised tertiary facilities (major, full-service hospitals) and the relative loss of primary healthcare (including GP clinics, community services, and social preventive health programs). While large-scale facilities enable the aggregation of resources and may excel in the management of complex conditions, they are ill-equipped to prevent and manage the development of ill-health and disease.

The evidence is that service interfaces may also create bottlenecks in patient flow and care.

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.

The overarching objective in care should be the provision of right care – right place – right time, focusing on the needs of the patient, rather than professional or institutional structures.

The author suggests that removing barriers to accessing healthcare (such as travel times, limited GP appointments, and uncertain costs) will encourage early and appropriate patient engagement with the healthcare system. The combination of community programs, telehealth, and in-person visits to provide healthcare in the home is likely to minimise these barriers.

To encourage early assessment and provide patient-centred care, the author advocates the philosophy of 'taking healthcare to the patient'. In this regard appropriate mobilisation of the paramedicine workforce is proposed to increase practitioner resources in rural regions.
The submission recommendations cover:

a) Revision of the legislation and regulatory framework covering Ambulance Tasmania;
b) Recognising paramedics as a key stakeholder group within the health workforce;
c) Formally incorporating the role of paramedics in workforce planning;
d) Appointment of a Chief Paramedic Officer – as was established in Victoria in 2017;
e) Expanding the use of Extended Care Paramedics in Ambulance Tasmania - reflecting contemporary practice in interstate and New Zealand services;
f) Supporting the creation of Community Paramedic roles, allowing patients to be comprehensively assessed, treated, or referred from their own home;
g) Removing unnecessary impediments to practice for paramedics to facilitate their engagement in hospital Emergency Departments and within primary care facilities;
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 service local rural communities as a primary service provider;
i) Providing toolkits and incentives to hospitals, GP clinics and other primary healthcare providers to advise them on how best to use the available paramedic workforce; and
j) Providing financial incentives / support for paramedics working in rural practice.

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About the author

The author of this submission is Adjunct Associate Professor Ray Bange OAM, and the submission is made in a personal capacity. Acknowledgement is made of the valuable assistance provided by members of the community and health professionals, and particularly that provided by Registered Paramedic Matt Wilkinson-Stokes.

Professor Bange holds Honorary Fellowships from the Australasian professional bodies for his contributions to paramedicine. His policy expertise and abiding interest in healthcare is reflected in his role as an Executive Committee member of the Australian Health Care Reform Alliance. For more background see *Appendix A*.

The inputs gained from his relationship with patients and advocacy groups, service providers, individual health practitioners and professional societies have provided him with deep insights into the importance of quality and service standards in healthcare and the impact of equity and accessibility of care on patients.

The scope of the inquiry and this 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 Terms of Reference are reproduced in *Appendix B.*

This submission does not attempt to cover the full scope of the Inquiry. It addresses some system issues and the mobilisation of paramedics and their current and potential roles in healthcare delivery. This may be through the medium of public Ambulance services, private healthcare providers and as individual practitioners within the health and care system.

Of note is that paramedic-related policies likely to have an impact on health outcomes span both state and national jurisdictions. The direct implementation of healthcare services in general is a state and private provider responsibility, but the broad issues of regulation of therapeutic goods,[1] healthcare funding, reimbursement of patients and consumers and the regulation and oversight of healthcare practitioners[2] are national issues.

While acknowledging the past separation of jurisdictional responsibilities for different aspects of health and care, the recommendations do not shy away from proposing changes that cross jurisdictional boundaries and engage national policies.

The Covid-19 pandemic has shown how resolute action must embody collaboration, and the long-term health of Tasmanians will be intimately linked to national commitments for change regardless of the governments involved.

[1] Australian Government, Department of Health, Therapeutic Goods Administration, https://www.tga.gov.au/node/3824
[2] Australian Health Practitioner Regulation Agency, https://www.ahpra.gov.au/About-Ahpra/What-We-Do.aspx

Healthcare in the context of government policies

Australia's health system is facing significant challenges, including an ageing population and an ageing health workforce. Changes in disease patterns, including a growing level of chronic disease, are driving demands for more complex and long-term care. Health budgets are coming under pressure as the cost of care rises, putting additional stress on the health system and exacerbated by the access challenges of rural and remote care in sparsely populated regions.[3]

Developments in information technology and other emerging technologies 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 require a flexible and well-educated health workforce while concurrently displacing some existing practices.

In seeking sustained quality care, it is not enough to propose simplistic solutions such as 'ensure more rapid response' or 'employ more practitioners' (however necessary that objective may be). What is important is to use current and future available workforce resources in the most effective manner to provide the right care, at the right time, and in the right place.

Improving community health must look at health outcomes from a fundamental perspective which may involve social policies and prevention activities. Important but less well recognised is that the overall health of the population is significantly impacted by policies spanning the social and economic environments, commonly referred to as the Social Determinants of Health (SDOH).[4] To this might be added the inverse care law, which states that the lower on the social gradient an individual is, the less likely they are to use medical services.[5]

Dahlgren & Whitehead – 1991

[3] Australian Institute of Health and Welfare, *Australia's Health 2020*, https://www.aihw.gov.au/reports-data/australias-health accessed 11/03/2021

[4] 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.

[5] Friel, S. (2016). *"Social determinants – how class and wealth affect our health",* The Conversation, 1 September 2016. https://bit.ly/2OveN8G accessed 04/03/2021.

The influence of the SDOH on longer-term emotional and physical health outcomes has been well established by Marmot and other researchers.[6, 7]

Hemmingway[8] suggests that socioeconomic adversity is a key upstream catalyst that sets the stage for critical midstream risk factors such as family strain and dysfunction, offspring insecurity, stress, emotional turmoil, low self-esteem, and poor mental health. These characteristics can be discerned across our rural and remote communities.

Midstream risk factors and disturbances in the social environment appear to play a critical role in weight gain and obesity, eventually leading to behaviours such as junk food self-medication and subtle addiction – with these sociologic factors having a causal relationship to obesity through psychosocial pathways.

The SDOH thus are not only important in achieving physical health, but also key factors in the emotional and mental states that can lead to alcohol abuse and other forms of addiction.

The power of the SDOH must not be underestimated compared to the power of healthcare to counteract them. Yet decades of research on the underlying causes of ill health, many pedigreed reports, and the voices of public health advocacy have done little to change the underinvestment in policies that foster wellbeing.

Wales[9] and New Zealand[10] have begun to address these issues with their 'Wellbeing' budget approaches, while the UK's Office for National Statistics has published a 'Health Index' as a new tool to measure a broad variety of health outcomes and risk factors over time.[11]

The purpose of outlining these factors is to emphasise the complex interactions and influence of policies outside the immediately perceived health domain that affect the overall health of our communities and especially people living in rural and remote regions.

Policies relating to physical and mental health and wellbeing thus should be considered alongside other economic and social welfare policies that will have a major impact on groups that are disadvantaged by location. Long term, the impact of these external policies can overshadow the health of communities more than a hospital or health service.

Tasmania has an Environmental Management and Pollution Control Act whose Section 74 provides for an assessment of the impact of a proposed activity on public health. However, the author suggests this environmentally-focussed legislation is not sufficiently robust to cater for the full range of social determinants and their potential health impacts.

What is required is a firm commitment to a *'Health in All Policies'* approach that identifies the ways in which decisions across all major policy areas affect health, and in turn, how improved health can support the goals of those sectors. It is a strategy that can be adopted by the state but is equally applicable to all jurisdictions including the Commonwealth.

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[6] 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 accessed 30/07/2019

[7] Australian Broadcasting Commission 2016 Boyer Lectures, *Fair Australia: Social Justice and the Health Gap*, Australian Broadcasting Commission, September 2016, https://ab.co/2KuUWkD accessed 06/08/2019

[8] Erik Hemmingway, *Early Childhood Obesity Risk Factors: Socioeconomic Adversity, Family Dysfunction, Offspring Distress, and Junk Food Self-Medication*, https://doi.org/10.1007/s13679-018-0310-2, accessed 03/08/2019.

[9] Richard Owen, *Wales is leading the world with its new public health law*, Croakey 1 June 2017. http://bit.ly/2vZPKiW accessed 04/03/2021.

[10] Michael Minstrom, *New Zealand's Wellbeing Budget Invests in Population Health,* The Milbank Quarterly, December 2019 https://bit.ly/3rkHR1k accessed /03/2021.

[11] Australian Health Care Reform Alliance, *The Health Index*, 4 December 2020. https://bit.ly/3i372Sl accessed 04/03/2021.

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.

Meeting the healthcare needs of rural Tasmanians

The healthcare needs of rural and remote Tasmanians are not unique in Australia, which is noted for its sparsely distributed population and concentrated population centres. Many of the deficiencies in equity and access to services have been identified by professional bodies, extensive national and jurisdictional reviews and Royal Commissions.

Symptoms of disadvantage and daily distress caused by lack of services are often hidden and not necessarily widely reported. This belies the substantial impacts on those affected, which can be seen in the poorer health outcomes reported for rural populations.

Some deficiencies are universal across the health system and affect both metropolitan and rural areas. However, rural communities may be disproportionately affected because of access limitations including service or practitioner distribution, cost and travel times. The parlous situation in Tasmania has been well outlined by the former president of the Australian College of Rural and Remote Medicine.[12]

Data from the Australian Institute of Health and Welfare (AIHW) supported by research by the Royal Flying Doctor Service,[13] the Grattan Institute[14] and the Royal Australian College of General Practitioners confirm the disparities in health outcomes between different regions. The evidence is that health outcomes for rural Australians have not been consistently improving over time but have been stagnating or declining in comparative terms.

Rather than attempt a summary listing of deficiencies, the author draws attention to recent studies by key national and jurisdictional bodies which amply describe the range of issues to be considered – along with some potential solutions.

[12] Pashen D, *A Tasmanian devil of a problem: sounding a health alarm for rural and remote communities*, Croakey, 15 March 2021. https://bit.ly/2OU8jAA accessed 16/03/2021.
[13] 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 accessed 07/03/2021.
[14] Duckett, S. and K. Griffiths, 2016, *Perils of place: identifying hotspots of health inequalities*, Grattan Institute, July 2016. ISBN: 978-1-925015-89-8 accessed 12/03/2021

Mental health

The recent report of the Royal Commission into Victoria's Mental Health System[15] and the Mental Health Report[95] of the Productivity Commission[16] highlight the need for more effective and equitable mental health care and support across Australia. The findings of these reports should be examined through the lens of the present Inquiry.

The author is personally aware of the debilitating prevalence of mental distress in rural and regional areas and how the issues identified in these reports apply to rural communities.

Among the Royal Commission's observations are the impact of stigma attached to mental health and the importance of care through:

a) Equitable access to services;

b) The need to strengthen the available workforce;

c) Holistic/joined up services able to provide person-centred care;

d) Access to appropriate services and better integration of services;

e) Improved care for people in crisis;

f) Support beyond the individual person for families and carers; and,

g) Better support for younger people.

Common themes are that 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.

Importantly, reference is made to the SDOH including housing and the role of GPs and community health services supported by mental health specialists.

The Australasian College for Emergency Medicine (ACEM) has released a report '*Nowhere Else to Go'*[17] which analyses why Australia's health system is failing to meet the urgent needs of people presenting to and placing unsustainable pressure on hospital emergency departments for mental health care.

> *"While there is much that emergency physicians and other emergency department staff can do to improve the experience for people seeking help in a mental health crisis, they cannot do it alone. ACEM will advocate for governments to invest in alternative models of emergency mental health care and divert some people to more appropriate crisis services, whilst ensuring that emergency departments provide high-quality care for the cohort of patients who need us."*
>
> *Foreword - Nowhere Else to Go - September 2020*
> *Australasian College for Emergency Medicine*

[15] State of Victoria, *Royal Commission into Victoria's Mental Health System, Final Report, Summary and recommendations,* Parl Paper No. 202, Session 2018–21 (document 1 of 6). https://rcvmhs.vic.gov.au/ accessed 06/03/2021.
[16] Productivity Commission 2020, *Mental Health, Report no. 95*, Canberra https://bit.ly/3sVAvSk accessed 06/03/2021.
[17] Duggan M, Harris B, Chislett WK & Calder R. 2020. *Nowhere else to go: Why Australia's health system results in people with mental illness getting 'stuck' in emergency departments.* Mitchell Institute Commissioned report 2020, Victoria University. ISBN 978-0-6488001-1-8 https://bit.ly/3iGs2Ng accessed 06/03/2021.

In the immediate future, the COVID-19 pandemic will add to the increasingly complex mental health issues. The clear message is that action is needed to build and sustain a functioning, integrated mental health system across the whole spectrum of care.

Paramedics are often the first clinicians to deal with community presentations of mental distress and several ambulance services already have implemented special measures to cater for the growing workload of mental health cases.[18, 19]

The Victorian Royal Commission report is more explicit about the ambulance service role:

> *Recommendation 10*
>
> *2. support Ambulance Victoria, Victoria Police and the Emergency Services Telecommunications Authority to work together to revise current protocols and practices such that, wherever possible and safe:*
>
> > *a. Triple Zero (000) calls concerning mental health crises are diverted to Ambulance Victoria rather than Victoria Police; and*
> >
> > *b. responses to mental health crises requiring the attendance of both ambulance and police are led by paramedics (with support from mental health clinicians where required).*
>
> *Recommendation 10 - February 2021*
> *Royal Commission into Victoria's Mental Health System*

Rural and remote areas experience a unique combination of factors that affect the availability and accessibility of mental health services and the ACEM recommendations propose that the Sixth National Mental Health Plan should be accompanied by a fully funded rural mental health strategy that addresses the severe inequities in access.

Although the ACEM report does not mention the role of paramedics as potentially significant elements in the patient journey, the report sees investment in rural mental health workforce development as essential, including staff capabilities, skill mix and role diversification, including the use of community paramedics and paramedic practitioners.

This recognition of the need for alternate pathways of care reinforces the roles that ambulance services and paramedic clinicians can play and calls for action on mental health should ensure meaningful engagement of the paramedicine profession.

Long term, aged and palliative care

The final report of the Royal Commission into Aged Care Quality and Safety[20] contained 148 recommendations covering the range of issues facing the sector; from how to regulate it to how to fund it and how to ensure its workforce is equipped to adequately provide the necessary care. The findings of the final report can be encapsulated in the simple statement that: *"Substandard care and abuse pervades the Australian aged care system."*

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[18] The Paramedic Observer, *Victorian Mental Health Support Trial extended*, Facebook, 4 October 2019. https://bit.ly/3noX3ZE accessed 06/03/2021.
[19] The Paramedic Observer, *New support for mental health emergencies*, Facebook17 March 2020. https://bit.ly/2GvX2m4 accessed 06/03/2021.
[20] Royal Commission into Aged Care Quality and Safety, *Care, Dignity and Respect*, Final Report, Royal Commission into Aged Care Quality and Safety, March 2021. https://bit.ly/3eAeNze accessed 12/03/2021.

The final report also placed a good deal of emphasis on information, data, and technology, including the adoption of digital technology and the My Health Record – recommending that every approved provider of aged care deliver personal or clinical care using a digital care management system, including an electronic medication management system.

There are also calls for an increase in support for telehealth in residential aged care and for assistive technologies in home care.

Beyond the immediate concerns for patient care, key issues are for proper documentation at clinical handover particularly between residential aged care and hospitals.

It is disconcerting that nearly nine years after the Personally Controlled Electronic Health Record (PCEHR) System went live, only recently did the Australian Digital Health Agency's aged care advisory group meet to discuss how to begin the process. Like other aspects of aged care, information technology needs have been neglected for too long.

Tasmania has an aging population with 19.4% of the population over the age of 65 in the 2016 census. With a population of about 115,000, the North West region in 2019 had 10 Residential Aged Care Facilities (RACF) and several respite or in-home services. However, the region has lacked after hours medical services other than the North West Regional Hospital or Mersey Community Hospital Emergency Departments (EDs).

The result is that patients seen by Ambulance Tasmania (ATas) who require advanced assessment or treatment are taken to these hospital Emergency Department (ED) facilities. Demands on EDs in the North West are 1.6 times greater[21] [22] than the national average.

ATas has significant engagement with RACF and palliative care patients from the viewpoint of responses to minor injuries to more major matters such as falls and life-threatening emergencies. Low acuity presentations place demand on ambulance resources which impact response times and the capacity to attend to high acuity cases.

Both cohorts of patients might benefit from alternative health service models as they are most likely patients who would prefer not to go to hospital to get the care they need.

Significant research has been undertaken into the expanded scope of practice of paramedics and the role they could play in rural health service delivery. Thompson et al identified that paramedics in the rural environment are the most underutilised health resource,[23] while O'Meara et al identified the expanded scope of practice for rural paramedics as showing promise particularly when integrated into the other rural health services.[24]

The wider use of Extended Care Paramedics (ECPs) could fill an important role between patients and hospitals - with the capacity to assess, treat and liaise with GPs and other services to keep low acuity patients at home and reduce demands on the ED.

[21] Allen P, Cheek C, Foster S, Ruigrok M, Wilson D, Shires L. *Low acuity and general practice-type presentations to emergency departments: A rural perspective.* Emergency Medicine Australasia [Internet]. 2015 [cited 2018 Oct 2];(2):113.

[22] Cheek C, Allen P, Shires L, Parry D, Ruigrok M. *Low-acuity presentations to regional emergency departments: What is the issue?* Emergency Medicine Australasia [Internet]. 2016 [cited 2018 Oct 2];(2):145

[23] Thompson C, Williams K, Morris D, Lago L, Kobel C, Quinsey K, Eckermann S, Andersen P and Masso M (2014), *HWA Expanded Scopes of Practice Program Evaluation: Extending the Role of Paramedics Sub-Project Final Report*, Centre for Health Service Development, Australian Health Services Research Institute, University of Wollongong.

[24] O'Meara P, Tourle V, Stirling C, Walker J, Pedler D. *Extending the paramedic role in rural Australia: A story of flexibility and innovation*. Rural and Remote Health

They could be further supported by community paramedics in rural areas including a primary health and screening function in addition to their core duties of maintaining an emergency response capability; or paramedic practitioners working in community centres, primary care, and hospitals who could follow up and care for these patients assessed by ECPs.

Private advice (to be verified) is that there have been / are two trained ECPs in the North West region that work on metro stations and are not being used as rural ECPs. Additionally, as discussed below, they have not been granted any additional skillsets beyond other paramedic roles which lags comparable services interstate or in New Zealand.

Community paramedicine and healthcare in the home

No one service solution is likely to work for all rural Tasmanians, be it bespoke community paramedicine or Hospital in the Home. The concept of Hospital in the Home has existed overseas for many years and a recent example from Scotland[25] is insightful.

Older adults with frailty are the single biggest users of hospital beds and the fastest growing demographic in Scotland. Older people presenting at an ED are more likely to take longer to triage, treat and place. Similar patterns of care apply in jurisdictions like Tasmania.

Older people in the acute setting present greater levels of complexity, have more health conditions, more medications, and more agencies involved in their care than any other group. They are the highest users of bed days and an increase in the aged population will affect bed day rates significantly in the future. To manage the demographic pressures and provide a better experience for individuals, safe effective alternatives are needed.

Author Dr Patricia Cantley provides a link to a Healthcare Improvement Scotland publication[26] on 'Hospital at Home Guiding principles for service development'. Although she writes about the service in Midlothian the story might be replicated across other jurisdictions.

For other examples of healthcare in the home, look no further than the award-winning community paramedicine program in South Australia[27] and the latest developments in Ontario[28] where the Ministry of Health and Long-Term Care issued a 'Community Paramedicine Framework for Planning, Implementation and Evaluation' in July 2017. [29] The framework provides an evaluation structure on which to build a service fit for purpose for a local region.

Proactive engagement of paramedics for screening for heart disease and diabetes and early referral in geriatric assessment are other aspects of care that could improve patient outcomes and reduce ED presentations. Screening via community blood pressure and blood glucose level checks are easily within the current skillset of a paramedic[30] and could form part of the community-based clinical outreach program of the ambulance service.

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[25] Cantley P., *Hospital at Home,* Wordpress Blog December 2020. https://bit.ly/38oQGyS accessed 08/03/2021

[26] Healthcare Improvement Scotland 2020*, Hospital at Home Guiding principles for service development*, January 2020, https://bit.ly/2WzukoQ accessed 08/03/2021.

[27] Bange R., [@ParamedProf], *Congratulations to the Community Paramedics Program team at Ceduna*, 23 November 2019. https://bit.ly/3dUJV9F accessed 09/03/2021.

[28] Dainty K, Bianca Seaton M, Drennan I, Morrison L, *Home Visit-Based Community Paramedicine and Its Potential Role in Improving Patient-Centered Primary Care: A Grounded Theory Study and Framework,* Health Services Research, Vol53, Issue 5, October 2018 (3455-3470). https://doi.org/10.1111/1475-6773.12855

[29] Ontario Ministry of Health and Long Term Care, *Community ParamedicineFramework for Planning, Implementation and Evaluation*, Home and Community Care Branch, July 2017. https://bit.ly/2KCIMZ1 accessed 08/03/2021

[30] Eyles H, (2018) *Australian Paramedics in remote communities can immediately address select social determinants of health and implement meaningful primary health screening for isolated Australian residents,* The Rural Health and Collaborative Research Symposium, Hobart. https://bit.ly/3eq9UJa accessed 09/03/2021.

A common theme in these examples is that policymakers must resolve the complexities of long-term sustainable funding to deliver this proactive patient-centred care close to home rather than reactive responses.

Another example of ambulance service and paramedic engagement in community-based care is the Health Canada '*Action Plan on Palliative Care'*[31] which builds on the '*Framework on Palliative Care in Canada'.* The Action Plan aims to improve the quality of life for people living with life-limiting illness and enhance access and health care system performance.

Building the capacity to provide palliative care is a feature of a compassionate comprehensive health system, especially for underserved populations, and the author drew attention to palliative care needs in a recent submission[32] to the National Rural Health Commissioner.

For paramedics, it represents a growing area of practice with an aging population and increasing incidence of chronic diseases. It raises the question of having paramedics adequately trained in providing palliative and end-of-life care.[33]

In Canada, palliative care initiatives include funding for training of more than 5,000 paramedics in six Canadian provinces. In British Columbia this training is being done under the title of '*Learning Essential Approach to Palliative Care'*[34] paramedic program, or LEAP, and provides the skills and resources to care for patients with life-limiting or life-threatening illnesses.

Canadian paramedics and grief experts have collaborated to develop several '*MyGriefToolbox'* modules[35] that cover the psychosocial aspects of palliative care and the core clinical skills to address the grief experienced by families and confronted by paramedics in daily practice.

Research and pilot studies have shown that when paramedics provide care and support to a person with an advanced illness, the experience of the patient and family is vastly improved.

The melding of paramedicine and palliative care recognises the difference that paramedics' skills can make at the most difficult time of life. It requires clinical skills in complex symptom management and enhanced capacity in sensitive support for the patient and family. The author proposes that it should become part of the Tasmanian model of care.

[31] Government of Canada*, Action Plan on Palliative Care*, Health Canada, 20 August 2019. ISBN: 978-0-660-31796-0 https://bit.ly/2L1AV6F accessed 09/03/2021.
[32] Bange R., *Options for Commonwealth Government Policy Reform and Investment*, Submission to the Office of the National Rural Health Commissioner, August 2019. https://bit.ly/30AtgDj accessed 09/03/2021.
[33] Bange R., *Paramedics and palliative care*, The Paramedic Observer, Facebook, 31 January 2019. https://bit.ly/2m0pH8n accessed 09/03/2021.
[34] Karen Edwards, *New palliative care training for paramedics gaining momentum B.C. Interior*, Kamloop News, 29 August 2019. https://bit.ly/2ktHCUo accessed 09/03/2021.
[35] Canadian Virtual Hospice, *MyGrief Toolbox.ca* https://grieftoolbox.ca/? accessed 09/03/2021.

Addressing ambulance (paramedic) services

Amending the Ambulance Services Act

ATas operates under the Ambulance Services Act 1982 which was last updated in June 2019, in part to take account of the registration of paramedics under the Australian Health Practitioners Regulation Act. The legislation also addresses Non-Emergency Patient Transport (NEPT).

Overall, the Act is highly prescriptive with the governance structure and delivery of contemporary paramedic services couched in historic ambulance-centric terms. This includes the definition of a paramedic. Defining a registered health practitioner within an Act governing a service provider is considered inappropriate and does not apply to other registered professionals such as Allied Health Practitioners (AHPs), nurses and medical practitioners.

Under the National Registration and Accreditation Scheme (NRAS) there should be no doubt as to the qualifications or competency of registered practitioners. Nationally determined definitions set by the regulatory Boards administered by the Australian Health Practitioners Regulation Agency (AHPRA) are used generally across a variety of other Acts and paramedics should be treated in the same manner.

Consideration should be given to removing redundant components of the Act given the independent national registration of paramedics. This review may also include other legislation governing Tasmania's emergency services organisations, which may have cross-impacts on the delivery of ambulance services (e.g., scene control, powers of entry etc.).

Among the significant changes in out-of-hospital and emergency care are the advances in evidence-based medical practices, new imaging and diagnostic technology, sweeping changes in information technology and communications, changes in educational pathways to paramedic practice and health practitioner regulatory reform with the introduction of the NRAS.

The sum of these changes means that the Tasmanian Ambulance Services Act should be reviewed from the perspective of legislation that envisages ATas not as a monopolistic and stand-alone service feeding patients into a hospital system, but as one part of an integrated health network providing health services for the community – where the patient journey may begin with the social and living environment, health literacy and preventive care, and end with after care in various forms – including long term care and palliative care.

That proposed legal drafting distinction is intentional, with the objective being a governance model that respects the contributions from a workforce of registered paramedics working alongside volunteers, medical practitioners, nurses, and AHPs.

A review of the Ambulance Services Act 1982 would provide an opportunity to better reflect the role of ambulance services and the independent role of registered paramedics. Revision should ensure compliance with any relevant National Safety and Quality Health Service (NSQHS) Standards, particularly those around clinical governance frameworks, while the ambulance service itself should be formally accredited under a national Standard.

From that collaborative perspective comes several other insights, including the importance of embedding paramedic expertise into the health policy and advisory framework.

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.

Ambulance Tasmania as the primary public EMS provider

ATas currently provides all of Tasmania's emergency pre-hospital transport and care (commonly referred to as emergency medical services or EMS). It interacts with all aspects of the health system, from primary and acute health services to aged care. Operating across the public and private sectors, it fulfils an important role in community care while also being a key component of the state's disaster response and medical retrieval systems. The extent of ATas operations across the state is shown in *Appendix 3.*

The government policy of delivering coordinated out-of-hospital unscheduled and emergency care through a single jurisdictional service agency has several benefits including efficiencies in procurement, optimisation of fleet operations and physical locations, aggregation of training and other resources, and clarity of role that inspires public confidence.

No coherent set of reasons is seen to warrant deviation from the strategy of a single primary service provider for public out-of-hospital emergency care within the state.

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.

Service standards and accreditation

It should not be assumed that public ambulance services are beyond reproach and can operate without suitable monitoring and review. In England, all ambulance services are regulated by the Care Quality Commission (CQC).

The CQC mandate requires all providers (including private and voluntary) to register, to meet certain standards of quality, and to submit to inspection of those standards. Organisations not meeting the standards can be sanctioned, or have their registration removed, preventing them from offering any medical services.

The absence of independent accreditation and licensing of providers in Australia militates against mandatory and transparent reporting that would provide more definitive patient and service data and bring a greater awareness of the risks and actual harm that occurs.

Further evidence of the need for service accreditation is the fact that paramedics have the highest rates of occupational fatalities and injury in Australia and accreditation should provide assessment of safety and other reporting provisions.[36]

The author proposes that all paramedic (aka. ambulance) service providers in Australia should be subject to minimum standards of performance and operate under an independent accreditation and quality assurance regime. For patient safety, this accreditation should extend to subsidiary services including NEPT roles, with minimum equipment, staff qualifications, and clinical standards on the same basis for both public and private sector providers.

A summary examination of the Tasmanian Commercial Non-Emergency Patient Transport Protocols shows a low level of formal qualification requirements, limited scope of practice and minimal engagement with ATas. The Ambulance Service (Non-emergency Patient Transport) Regulations 2019 also contains some anomalous features.

The definition of an Approved Health Professional is limited to a registered medical practitioner, a registered nurse division 1, an ATas paramedic in the ATas State Communications Centre, an ambulance paramedic or registered nurse working for an approved ambulance service telephone referral service, who has triaged the patient to NEPT transport according to medically approved triage guidelines. There is no recognition of a registered paramedic outside the ATas umbrella.

Accreditation is a well-established quality assurance process across many fields of healthcare. Various hospital services are accredited, private NEPT providers are licensed, and diagnostic services and university course programs are accredited.

Accreditation is feasible, and in February 2018, the Australian Council on Healthcare Standards awarded the South Australian Ambulance Service accreditation under the NSQHS Standards, making it the first ambulance service in Australia to receive this recognition.

The Australian Commission on Safety and Quality in Health Care is commencing work to contextualise the NSQHS Standards for ambulance health services. An Ambulance Health Services Working Group is presently being established to provide clinical advice and expertise in the development of a NSQHS Standards User Guide and supporting resources.

The Ambulance Health Services Working Group will:

a) Map the NSQHS Standards applicability to ambulance health services;
b) Develop an NSQHS Standards User Guide for ambulance health services;
c) Develop a monitoring tool for services implementing the NSQHS Standards; and,
d) Identify additional fact sheets, advisories and resources to support implementation of the NSQHS Standards.

[36] Maguire BJ, O'Meara P, Brightwell R, O'Neill BJ, FitzGerald G. *Occupational injury risk among Australian paramedics: an analysis of national data.* Medical Journal of Australia. 2014;200(8):477- 480.

The completion of this work should provide a Standard that enables assessment and accreditation of ambulance services nationally.

The author is not aware of any national developments to prepare a similar contextualisation for NEPT services, although related work has been underway in Victoria. For clarity, minimum or higher standards than those that apply to external NEPT providers should also apply to NEPT services provided by an ambulance service (e.g,. ATas).

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.

Embracing collaboration

The Australian health system is a complex amalgam of many service providers operating in conjunction with major hospital facilities, clinics and supporting infrastructure. Commonly overlooked are the resources of research bodies, universities, and the Australian Defence Force, which have been activated during the current COVID-19 pandemic.

There is increasing recognition that healthcare is a team effort that benefits from a multi-disciplinary approach. Paramedics are well-positioned to be part of such teams in primary as well as higher acuity care.

Australia has yet to realise the full benefits of mobilising paramedics and private sector services other than for NEPT and event support roles. In the UK, the private sector makes a substantial contribution to out-of-hospital care with the provision of surge capacity and supplementary mainstream contracted services. This is possible because of the system of service provider regulation under the CQC[37] and the use of registered paramedics.

The current ambulance and NEPT legislation and practice protocols inhibit this level of development in Tasmania. The author suggests the legislative framework instead should facilitate the use of these external resources when needed.

Thus, while having specific provisions empowering ATas for its primary role, the Act also should be flexible enough to allow for changes in service delivery models and to provide for the engagement of private and military resources in the event of natural disasters and extraordinary events (like cataclysmic fire) or emergency relief activities.

Disaster preparedness requires professionals who have worked together to develop the mechanisms for seamless operational management. To facilitate interoperability, legislation also should make explicit provision for fractional/sessional appointments of registered practitioners and for the operational and clinical accreditation of service providers generally.

[37] Car Quality Commission, *The independent regulator of health and social care in England*, https://www.cqc.org.uk/about-us accessed 04/03/2021.

The goals of service integration will only be met if ATas and its paramedics interact with other agencies such as public health and social services; embrace partnerships that foster disaster planning; collaborate in sharing research, data and development resources; engage in joint practice through drills/simulations etc.; as well as working closely with hospitals.

Recommendation 7

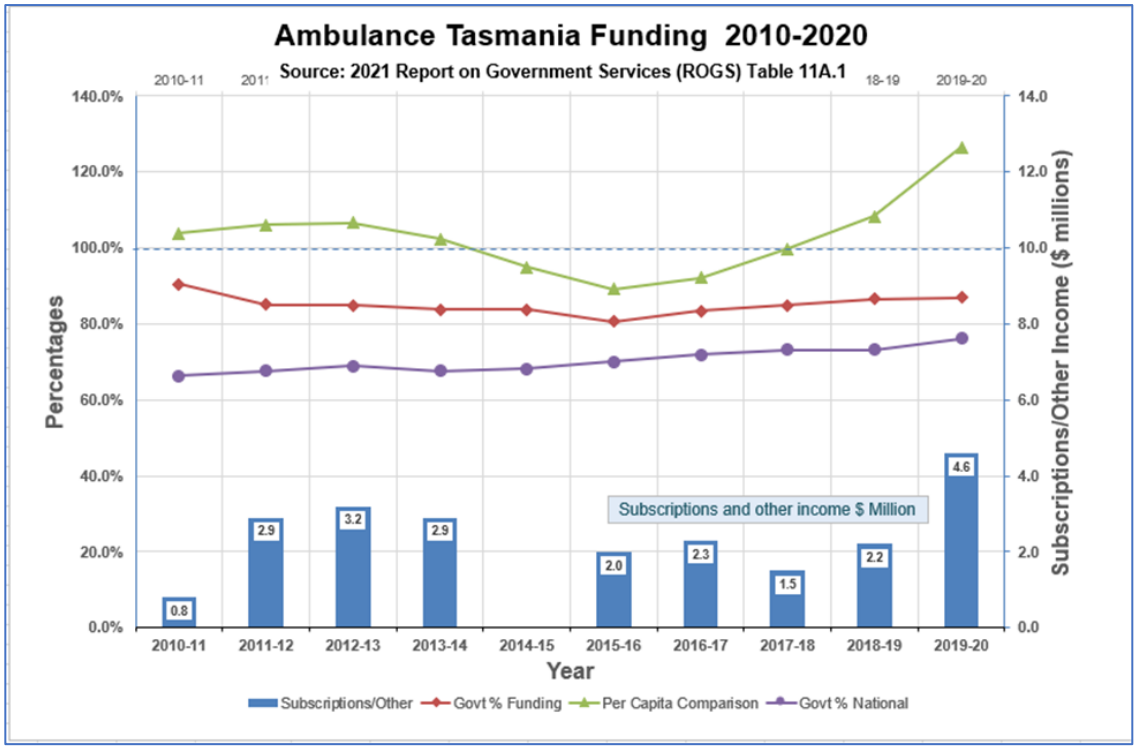
The legislation covering the provision of out-of-hospital paramedic related care should include the capacity for registered practitioners and other personnel to collaborate with and undertake exchange and interchange engagements with Ambulance Tasmania, and for the mobilisation and engagement of external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

Ambulance resources and funding

There is no doubt that funding and resource constraints play a pivotal role in determining the level and efficacy of ambulance service delivery. Currently there is no uniform approach to funding of out of hospital emergency medical care in Australia, with a variety of direct state or territory revenues, subscription schemes, insurance, fundraising activities, and user charges.

The limited recognition of the role and funding of ambulance services as an integral component of the national health system in recent studies of health is cause for concern. The ambulance service interactions with hospitals, clinics and other facilities should be a seamless integrated process for optimal care.

The omission of these services from the policy spectrum (and the lack of engagement of paramedics across the health sector) raises the strong likelihood that national health policies and associated funding arrangements will not be given adequate attention.



Analysis of the Productivity Commission's 2021 Report on Government Services (ROGS) for Ambulance Services shows the income for ATas over the past decade. The percentage of overall funding by the Tasmanian Government was declining from 2010 until 2016, albeit greater than the Australian average. The per capita income was also lower than average from 2014 to 2018 which would have impacted investment and staffing during that period.

Since 2015-16 the percentage of government funding has increased along with an increase in the overall per capita income. Per capita income for 2019-20 was greater than the national average, as would be expected for the small and widely dispersed population of Tasmania.

Data from ROGS needs to be used with caution because of the differences across jurisdictions in the geography, personnel mix, and system type for capturing data. Factors that can impact on state-wide performance include the dispersion of the population, topography, road/transport infrastructure and traffic densities, crewing configurations, response systems and processes, travel distances, land area, and population size and density.

The variability of funding systems is perceived to be an outcome of the federal jurisdictional system and the past omission of these services from consideration as part of the Australian health and care system. ROGS Part E Chapter 11 reporting for the ambulance sector was only placed under Health in 2017 and was previously under the Emergency Management category.

It is difficult to see any reason why ambulance services should remain outside the shared funding arrangements for health between the Commonwealth and the states and territories given that any significant policy change covering the delivery of health care at a community level is likely to have an impact on ambulance service operations and budgets.

Noting that these services are not presently covered by Medicare, the myriad of funding arrangements for healthcare under various guises should be reviewed and harmonised under consistent funding principles including universal access and equity. Emergency events hold no respect for jurisdictional boundaries and ambulance service funding ultimately should be supported at a national level with base funding provided by the Commonwealth.

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.

Access block and ambulance ramping

Access block and ambulance ramping at hospitals is a widely reported and highly visible indication of patients being delayed treatment and placed at risk. It is an interruption to patient flow at a key interface of care with an increased likelihood of adverse health outcomes.

Ambulance ramping provides a KPI of the prevalence of access block and ED overcrowding. When inpatient hospital services are unable to meet demand, patients remain in the ED, which reduces the capacity of the hospital to accept new patients. Ambulance ramping also means that paramedic teams are not available for other services which effectively decreases the available health resources within the wider community.

Ramping has other far-reaching impacts. Tasmanian paramedics disclose that ambulance ramping is causing them widespread psychological injury and warn that if nothing is done to address their concerns the consequences could be catastrophic.[38]

The impacts of ramping and other stressors has been highlighted in the past and were outlined to the Senate Inquiry into the high rates of mental health conditions experienced by first responders, emergency workers & volunteers at its Hobart public hearing.[39, 40]

The author has independently sought verification of current developments, and the anecdotal evidence is that excessive delays have significantly heightened the stress levels on paramedics and the level of tension between paramedics and other members of the health team (nurses, physicians, other personnel). That situation has worsened under the COVID-19 pandemic.

The Australasian College for Emergency Medicine (ACEM) believes that ambulance ramping, and its related policies and protocols, should not be allowed to occur.[41] Where it does occur, it is an indicator of systemic health care dysfunction that reduces patient safety and increases the risk of adverse health outcomes.

The Tasmanian branch of the Australian Medical Association also has joined the call for action.[42] Concern has been expressed at underfunded mental health services, drug and alcohol services, palliative care and other primary health and community services, resulting in patients presenting to hospitals who might be cared for within the community.

The difficulties facing ATas in meeting community expectations have been the subject of past review – including the 2017 Review of Ambulance Tasmania Clinical and Operational Services.[43] Among the subsequent recommendations were:

a) Development of a secondary triage model for Tasmania;
b) Establishment of formalised referral and patient management partnerships between Ambulance Tasmania and other key primary and community health services;
c) Expansion of the current model for Extended Care Paramedics (ECPs) into urban fringe and/or rural communities based on a spatial analysis of need, and improvement of the ECP coordination capacity;
d) Clear role delineation, as far as is reasonably practicable, of ECPs, First Intervention Vehicles and Intensive Care Paramedics;
e) Development of a plan for Ambulance Tasmania to partner with a tertiary education institution to support the ongoing development of ICP and ECP models in Tasmania;
f) Development of patient management plans for frequent users of ambulance services;
g) Further development of a joint Ambulance Tasmania, Tasmanian Health Service and private emergency department approach to improve the management of risk associated with the flow of patients into EDs.

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[38] ABC News, *Ambulance ramping causing 'undeniable psychological injury' to Tasmanian paramedics*, 1 May 2019. https://ab.co/2ZNCl4I accessed 08/03/2021.
[39] Dunlevie, James, *Inquiry into mental health of emergency service workers hears of 'the bucket',* ABC News 31 July 2018 https://ab.co/2v9OfNX accessed 08/03/2021.
[40] Senate Education and Employment References Committee, *Official Hansard transcript*, 31 July 2018. https://bit.ly/2DIdv2b
[41] Australasian College for Emergency Medicine*, Position Statement -Ambulance Ramping*, June 2019 https://bit.ly/2LiDxPK accessed 08/03/2021.
[42] AMA Tasmania Media Release, *Auditor General's Report Confirms Crisis Across All Tasmania's Major Hospitals*, 28 May 2019. https://bit.ly/3l0bCC5 accessed 08/03/2021.
[43] Tasmanian Government, *Review of Ambulance Tasmania Clinical and Operational Services Final Report*, Department of Health and Human Services, May 2017. https://bit.ly/2GTyKzY accessed 08/03/2021.

These recommendations came from extensive consultation with key stakeholders and interstate ambulance services. The full recommendations of this review are at *Appendix D*.

There is ample evidence that the strategies outlined in the 2017 review will reduce the demand for ambulance services and EDs. What is less evident is the extent to which they have been implemented, given that ATas currently still has only six ECPs and one ECP team leader.

More recently, the Tasmanian Audit Office conducted a performance audit[44] of Tasmania's four major hospitals in the delivery of ED services. Among the key observations were that Tasmania has some unique characteristics that heighten the challenges of meeting demand.

These include an older and more dependent population with lower rates of health literacy and a significant burden of chronic disease. The limited scope of private ED services across the State also adds to demand by reducing bypass options for already busy public hospitals.

These access challenges are compounded by the growing complexity of presentations and by the limited number of bulk billing Tasmanian GPs and few ECPs, community paramedics, and paramedic practitioners able to provide alternative care interventions.

Collectively, these factors have contributed to the significant growth in demand for inpatient beds. The growth in demand for emergency care is expected to continue, particularly from higher complexity patients, meaning limited scope for diverting workloads to primary and alternate care pathways and consequently the pressure on hospitals is likely to increase.

Considerable evidence is available from the UK including examples of good practice for safely reducing ambulance conveyance to EDs. The '*Safely Reducing Avoidable Conveyance Programme'* has shared models of response and alternative care pathways. Examples are available where initiatives are already working well and are being monitored and evaluated.[45]

In March 2021, patients continue to be adversely affected by sometimes egregious ambulance ramping across the hospitals of the state. From duty of care and workplace health and safety perspectives, the government cannot allow that situation to continue.

Along with potential patient harm, there is the risk of injury to paramedics and other health professionals who are being affected by the present conditions that are conducive to Post-Traumatic Stress Injury / Post-Traumatic Stress Disorder (PTSI/PTSD) or worse.[46]

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.

[44] Tasmania Audit Office, *Performance of Tasmania's four major hospitals in the delivery of Emergency Department services*, Report of the Auditor-General No. 11 of 2018-19, May 2019 https://bit.ly/38pbbfD

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

[46] Wilson A, Whiteley C, *Ambulance Tasmania paramedic Damian Crump's lengthy coronial inquest begins*, The Mercury, Hobart 15 March 2021.

Expanding the role of Extended Care Paramedics

Data from ROGS shows that paramedics are commonly engaged in less urgent or low acuity patient presentations. Of the total 83,947 incidents handled by ATas in 2019-2020, only 34,596 were considered emergency incidents. This shows that, contrary to popular belief, paramedics working for ambulance services are engaged in a wide variety of health and care activities in addition to applying their expertise in emergency response, trauma care and resuscitation.

Within the ambulance services the 'low acuity' specialists are commonly known as ECPs.[47] These ECP roles currently exist in the eight Australian jurisdictions, but ATas is one of only two services that apparently don't enable additional skills or medications.

By judicious expansion of this existing role, ATas might position itself to respond appropriately to the low acuity calls that come through 000 calls in rural and remote areas and reduce the number of ED presentations.

The ATas ECP program has been developed around an internal program but many other jurisdictions require formal study – such as a Graduate Certificate in Enhanced Assessment and Clinical Reasoning, Graduate Certificate in Community and Primary Healthcare, or a Postgraduate Diploma – and enable a scope of practice with additional medications and skills.[48]

St John Ambulance ECPs in New Zealand carry 45 additional medications and provide additional skills ranging from routine quadriplegic care, mild pneumonia management, palliative care, renal colic care, and urinary tract infection management to cellulitis treatment.[49]

Relevant accredited[50] university educational programs are available including from Deakin Medicine in an articulated format that qualifies paramedics at Community Paramedic/ECP (Graduate Certificate), Primary Care Paramedic (Graduate Diploma), Paramedic Practitioner (Master) and Consultant Paramedic Practitioner (Doctor) levels.

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.

[47] Matt Wilkinson-Stokes, *A taxonomy of Australian and New Zealand paramedic clinical roles*, Australasian Journal of Paramedicine: 2021;18. https://doi.org/10.33151/ajp.18.880 accessed 10/03/2021.
[48] See, for example, the entirely unique guidelines for Extended Care Paramedics in New Zealand, or similar roles in the Australian Capital Territory, New South Wales, Queensland, South Australia, and others.
[49] St John Ambulance New Zealand, *Extended Care Paramedic Clinical Procedures and Guidelines 2020*, https://tinyurl.com/rr95s932 accessed 10/03/2021.
[50] Australasian College of Paramedic Practitioners, *ACPP Accredited Programs: Seamless Followship and College Recognition as a Paramedic Practitioner*. Australasian College of Paramedic Practitioners. https://bit.ly/3vk6T2Z accessed 13/03/2021.

Community integrated healthcare

A common theme in past reviews is to recognise the importance of healthcare that is close to the community and which ensures right care, right patient, and right time. 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 is seen to be preventable, with the burden particularly acute in rural and remote areas.[51, 52]

Most patient attendances by ATas are not acute cases demanding a 'lights and sirens' response. and the objective of achieving an integrated healthcare system needs to go beyond the perception of ATas as a pre-hospital emergency care provider operating in a silo.

Policymakers should embrace the concept of ATas as the principal public agency facilitating the role of paramedics in the provision of 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.

This pattern of care and practice activities has been demonstrated by effective diversion and referral programs nationally and internationally. ECPs are increasingly becoming first line healthcare providers and the Australian Productivity Commission has recommended using ECPs to deliver efficient health care. Pilot projects funded by the former Health Workforce Australia[53] have also shown the benefits of community and extended paramedic care.

More recently the future of healthcare delivery is envisaged as having a greater emphasis on primary care with the release of the draft National Preventive Health Strategy. Achieving the goals of this strategy will require the engagement of all elements of the health workforce in integrated healthcare and embody optimal pathways of out-of-hospital care[54, 55] including community paramedics and ECPs holding prescribing rights.

Among the transformational factors in delivering integrated healthcare will be the full implementation of electronic health records and access to patient data in out-of-hospital and clinic 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 services, electronic health records should enable rapid retrieval of records and transmission of data while en-route to definitive facilities. Fully integrated electronic health holds the promise of facilitating clinical feedback to the paramedic, ATas, the patient's GP and/or specialist physician and other services, thus enabling a seamless delivery of care.

In 1996 the United States National Highway Traffic Safety Administration, in partnership with the Health Resources and Services Administration, published the Emergency Medical Services Agenda for the Future which has provided aspirational guidance for more than a generation.

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[51] Australian Health Care Reform Alliance, *Health Workforce Policy Position Paper*, 28 June 2016. http://bit.ly/292oxB3 accessed 08/03/2021.

[52] 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 accessed 08/03/2021.

[53] Thompson C, Williams K, Morris D, Lago L, Kobel C; Quinsey K, Eckermann S, Andersen P, Masso M, *HWA Expanded Scopes of Practice program evaluation:,Extending the Role of Paramedics sub-project: final report,* (2014). Australian Health Services Research Institute. 376. https://ro.uow.edu.au/ahsri/376

[54] http://www.health.gov.au/internet/main/publishing.nsf/Content/PHN-Background accessed 03/01/2017.

[55] New Zealand Government, *Minister Peter Dunne opening address,* 18 November 2016. http://bit.ly/2gmHSAU accessed 08/03/2021.

The EMS Agenda included the following vision statement which broadly parallels several observations made in this submission viz:

> *"Emergency medical services (EMS) of the future will be community-based health management that is fully integrated with the overall health care system. It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring. This new entity will be developed from redistribution of existing health care resources and will be integrated with other health care providers and public health and public safety agencies. It will improve community health and result in more appropriate use of acute health care resources. EMS will remain the public's emergency medical safety net."*

The author suggests these views on integrated healthcare remain just as relevant today as they were in 1996, and the principles should apply to the role of ATas in the same way that they are being pursued with success in other jurisdictions like the UK, Canada and the U.S..

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.

Terminology and reporting

Along with a shift in emphasis from 'emergency' and 'transport' roles there is a need for changes in terminology that better recognise the functional dimensions of healthcare provided by ATas personnel - be they physicians, paramedics, nurses or volunteers.

As the core practitioners working within ATas paramedics need to be working with hospitals, public officials, and other health and AHPs in both conventional western and indigenous health settings. This engagement will be fostered by using appropriate language and performance measures with a health outcome focus.

The annual *Report on Government Services (ROGS)*[56] prepared by the Productivity Commission provides information on government-funded ambulance services. However, ROGS excludes military medics and does not provide data on private sector services not funded by governments. While detail is available on physical assets and aspects such as ambulance response times, only recently has better data been provided on clinical outcomes.

[56] Productivity Commission, *Report on Government Services (ROGS)*, Australian Government, Canberra, 28 January 2021. https://bit.ly/2KUC4zw accessed 08/03/2021.

For example, ROGS underestimates the number of paramedics and the contributions they make in protecting the health of Australians. The terminology in ROGS referring to ambulance incidents and services also tends to conflate the roles of the paramedic and an ambulance (vehicle or service). Reporting of ATas operations beyond internal documentation and ROGS appears to be primarily through the Tasmanian Department of Health Annual Report.[57]

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[58] to better inform overall healthcare policy and representations should be made to achieve this.

Research and education

Australia leads the world in its embrace of tertiary level qualifications for paramedics. This applies not only to the basic qualification level for registration but also to the extent that paramedics hold multiple degrees and graduate qualifications including doctoral degrees.

These professional practitioners and researchers are creating new bodies of work that are advancing paramedicine from within. The adoption of higher educational standards and recognition of paramedicine[59] as a field of research will future-proof the profession and Australian service providers in the face of innovation and a burgeoning evidence base.

Australian paramedics will remain international leaders in paramedicine if these trends continue and provided there is adequate support for continuing professional development (CPD) especially for practitioners in rural and remote areas. Like nurses, physicians and AHPs there are challenges in ensuring access to CPD and maintaining competency in the regions.

Funding for medical-related research in Australia is dominated by established clinical and hospital networks and big-target projects[60] albeit the recent $40 million funding award for the Stroke Golden Hour Project to develop lightweight brain scanning has aeromedical and ambulance service ramifications. Alongside research into best practices for patient care, Australian ambulance services need to engage in rigorous research[61] on ways to limit the occupational risks that face paramedics and their patients every day.

[57] Government of Tasmania, *Department of Health Annual Report 2019, 20* October 2020. https://bit.ly/3bv3xCz accessed 09/03/2021.

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

[59] Bange,R. *ANZSRC Review - Final Classifications to include Paramedicine*, The Paramedic Observer, Facebook, 1 July 2020. https://bit.ly/3t9z5nx accessed 08/03/2021.

[60] Bange R., *The Stroke Golden Hour Project*, The Paramedic Observer, Facebook, 1 March 2021. https://bit.ly/3quAd3b accessed 09/03/2021.

[61] Maguire BJ. *EMS occupational safety issues, implications, and remedy*. In: Keebler J LE, Misasi P, eds. The Ergonomics and Human Factors of Prehospital Emergency Care: CRC Press; 2016.

Paramedic education within the university sector enhances opportunities for research and development work. Universities hold expertise in education both for face-to-face learning and in distance education which is important in supporting rural and remote practice.

University collaboration can provide access to advanced teaching and simulation facilities and engagement with the best available practitioners in many fields including clinical medicine and epidemiology, engineering, human factors, social and population welfare. It also provides opportunities for developing a systems-based approach to information sharing with a national database of research activity, standardised data collection methodologies and the collation and reporting of outcomes that are important aspects in advancing best practice.

For several reasons (facilities, aggregated and cross-disciplinary expertise, publication and dissemination of outcomes) the optimal approach is seen to be a partnership between service agencies and universities. Joint and shared facilities also promise economies of scale and access to additional human and physical resources should help to fulfil the important task of ensuring continuing education and professional development.

Ideally, paramedic educators and researchers would also have the opportunity for joint and sessional appointments to universities and paramedic services in a similar manner to the roles undertaken by medical practitioners and other professions.

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.

Public engagement and governance

There is growing recognition and evidence that consumers should be meaningfully involved in decision-making about their health care and treatment, along with engagement in broader health policy, planning and service delivery. This participation:

a) Positively influences an individual's health outcomes if they are given quality information and are actively involved in decisions;

b) Improves quality and safety by helping to design services that meet consumer needs;

c) Provides feedback to drive service improvement; and,

d) Enhances accountability by openly and transparently reporting on performance to consumers.

The implementation of consumer participation in healthcare is relatively recent and can be a challenging process. This engagement is seen as increasingly important as new national accreditation standards are implemented, with significantly higher expectations and evidence requirements for consumer participation.

Ambulance services are consistently reported by researchers as not being as open and transparent as many would expect of a public service in sharing their performance from transparent data. They can take a more proactive role in educating the public about safety, health and injury prevention given the level of trust they hold within the community and daily interaction with other health professionals and a wide cross-section of the community.

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.[62]

Chief Paramedic Officer

While ambulance services have operated for many years in one form or another, out-of-hospital and professional paramedic care as we know it today is a relatively recent development. A consequence of the pace of change is that many policymakers and health professionals are unaware of the contemporary education and practice regimes of paramedics.

Paramedics have quickly become a large, registered, tertiary-educated workforce with advanced medical skills. The rate of change has been extraordinary, as noted by Sir Bruce Keogh nearly a decade ago:

> *"Paramedics today … deliver treatments that would only have been done by doctors ten years ago…''*
>
> *Sir Bruce Keogh, NHS England Medical Director - November 2013*

Rapid change has meant that few paramedics have chosen or gravitated to work within the policy areas of jurisdictional and national health agencies and the number of practitioners in senior roles has not reached critical mass sufficient to have a visible impact.[63]

Since most paramedics work principally with state and territory ambulance services, the likelihood of national policy being informed by direct practitioner input at a federal level is low.

In 2017 Victoria created a Chief Paramedic Officer (CPO) role, who is one of the four Chief Clinical Officers of Safer Care Victoria[64] and works alongside a Chief Medical Officer, a Chief Nurse and Midwifery Officer and a Chief Allied Health Officer.

The Victorian experience has been strongly positive, showing the value of an expert clinician who can bring insights from paramedic practice that can foster the integration of paramedicine within health.

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[62] Australian Government, Department of Health, Primary Health Networks, https://bit.ly/3cxdqyT accessed 12/03/2021.
[63] 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 accessed 01/03/2021.
[64] 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.

A similar role is considered desirable to cater for the engagement envisaged for paramedics across the spectrum of service delivery in Tasmania. It should help inform overall policy including issues involving both public and private practitioners.

This may include workforce planning matters and liaison in association with other professional groups, educational institutions, professional bodies, and practitioners and service providers in the private sector (also see later).

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.

Renaming an icon

Terminology is important[65] and recognition of the functional activities performed in delivering pre-hospital and out-of-hospital care on site (along with the important communication and transportation dimension) has grown internationally. In many jurisdictions the public and private service entities have renamed themselves to *Paramedic Services* (or similar) to better reflect the broader health care dimensions of their activities.[66, 67]

Many former ambulance services have rebadged to include reference to paramedic care. While no focus studies have been undertaken by the author, renaming may have a subtle impact in diminishing the proportion of trivial calls received by 'personalising' the service role beyond that of transport.

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.

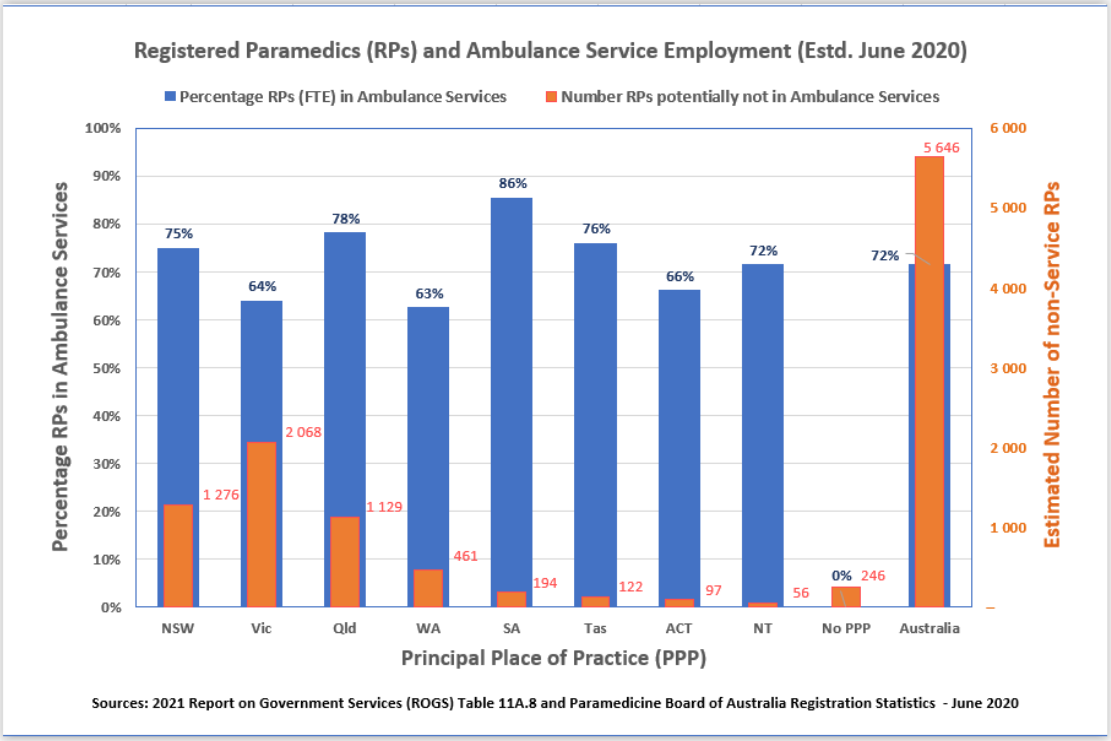
[65] Bange R, *Terminology is important*, The Paramedic Observer, 12 July 2015. on.fb.me/1PC0vXh accessed 12/03/2021.
[66] Toronto Paramedic Services, bit.ly/1SagNMe accessed 13/03/2021.
[67] Paramedical Services, bit.ly/1SCJEu5 accessed 13/03/2021.

Mobilising the available paramedic workforce

A sustainable workforce

There is a common misconception that paramedics work exclusively for ambulance services. This is not the case and analysis by the author indicates an estimated 28% of registered paramedics nationally (or well over 5500) work outside the jurisdictional ambulance services.

One must distinguish between the service role and the practitioner role - which may be independent of a service – just as a nurse or a physician or AHP may work across a variety of settings or employment arrangements. While an ambulance service provides the clinical and infrastructure support, registered paramedics and other personnel perform the functional aspects of triage and healthcare interventions.

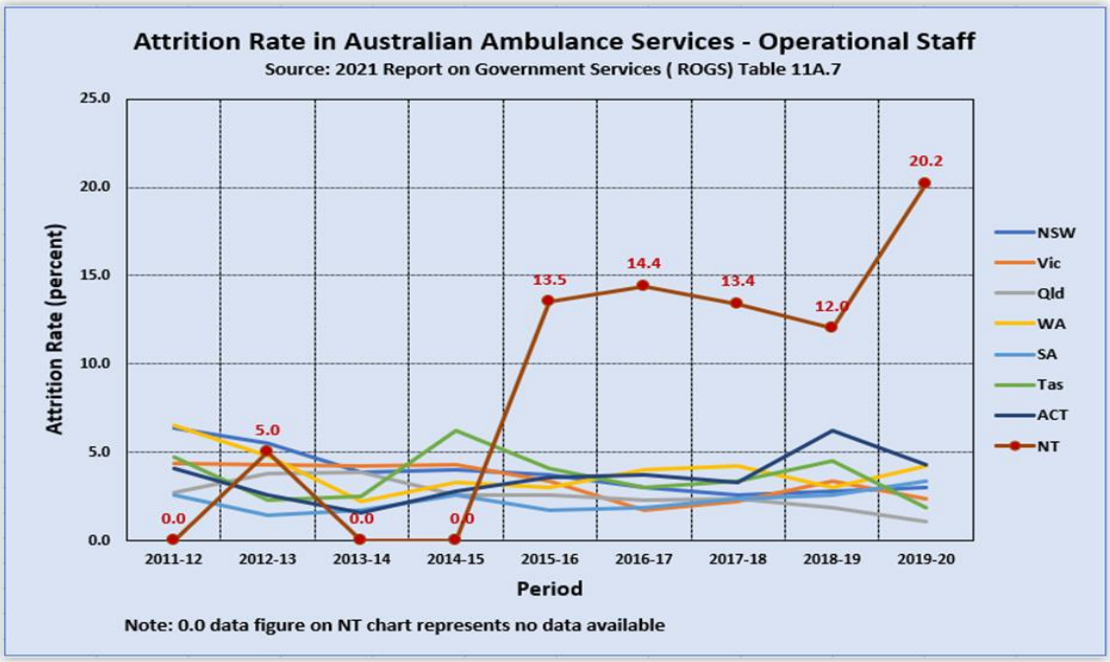


Data from the Paramedicine Board of Australia shows 562 registered paramedics in Tasmania as at 31 December 2020, of which 553 hold ‘practising’ registration. The author previously estimated from ROGS (June 2020) that about 387 paramedics were employed by ATas with the remainder working outside the state service.

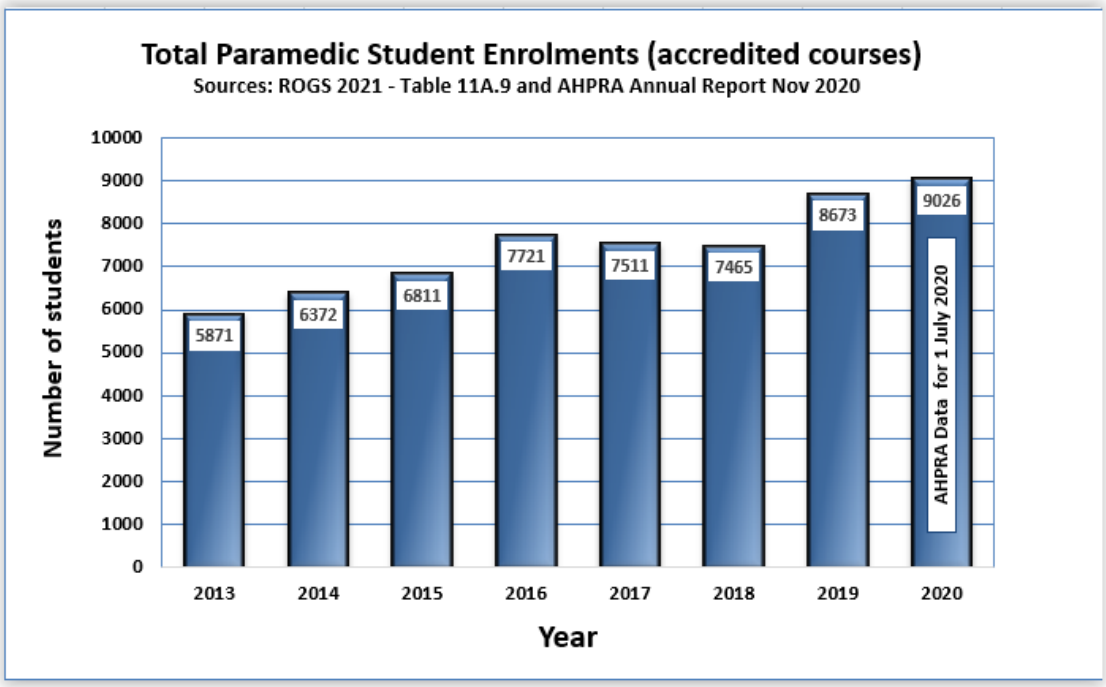
Significant recruitment has been undertaken in recent times, and with a current ATas establishment of 504 FTE registered paramedics the percentage of registered paramedics working in Tasmania outside ATas in 2021-22 may be lower than the national average which the author has estimated to be about 28%.

Current data on those registered paramedics not employed by ATas is not readily available. However, it can be reasonably assumed that the majority continue to work in healthcare and related roles requiring registration.

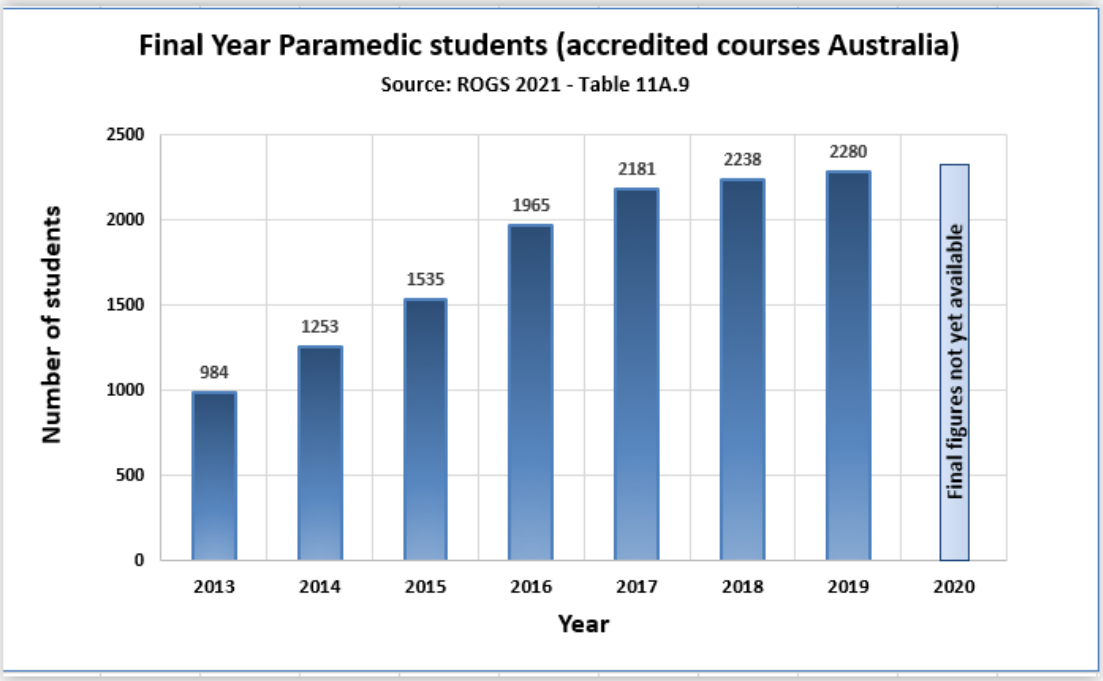
Despite the challenging work demands of ambulance services, national data show a low attrition rate for operational staff (average 2.7%) except for the Northern Territory (20.2%) (ROGS Table 11A.7).



ROGS reports 174 paramedicine students enrolled in the University of Tasmania for 2019, 87 of whom are in their final year of study. While ATas recruitment activities have expanded with the recruitment of experienced practitioners from interstate and overseas, ATas is likely to recruit less than half of the Tasmanian graduating cohort, leaving anywhere from 40-60 Tasmanian graduates available to work elsewhere in health.



An important aspect from a policy perspective is the sustainability of the workforce. The national picture shows university enrolments for paramedicine growing firmly with 2280 enrolments in the final year for 2019 (ROGS Table 11A.9). There is no doubt as to the viability of the paramedicine course programs, subject to continued employability of graduates and practitioners within the health workforce.



Based on current trends, the author anticipates there will be around 2500 graduate paramedics annually entering the workforce and seeking employment. Unlike other healthcare professions such as nursing[68, 69] where a deficit of graduates is forecast, this number is projected to be significantly more than the annual demand from public ambulance services and will add to the existing surplus of paramedics available for deployment elsewhere within health.

Ignoring the potential use of paramedics across other areas of demand – and especially the rural and remote health sector – would be an inefficient use of available resources.

Not taking advantage of the expert paramedicine workforce has other ramifications. One outcome is the ongoing loss of highly skilled practitioners through the international recruitment of Australian graduates who are recognised as being among the best in the world.

As more paramedics move to work in primary and other health care settings in the UK, hundreds of Australians are being recruited annually by NHS Ambulance Service Trusts. London Ambulance Service alone is home for more than 500 Australasian paramedics - with significant recruitment activities continuing.[70]

[68] Australian Government, *HealthWorkforce, Australia's Future Health Workforce – Nurses: Detailed Report*, https://bit.ly/3lig0N3 accessed 13/03/2021.
[69] Luke Housego and Elouise Fowler, *Nurses could get a job five times over, but it doesn't mean more pay,* Financial Review, 21 October 2019. https://bit.ly/2OXDsD2 accessed 15/03/2021.
[70] London Ambulance Service NHS Trust, *Wife of Australian Prime Minister meets Australian paramedics working at London Ambulance Service*, 12 June 2019. https://tinyurl.com/ux2xv9ey accessed 10/03/2021.

The forgotten health profession

It is a matter of record that paramedicine is frequently omitted from the list of health professions recognised by the Commonwealth Government, state governments and other bodies. A consequence of that omission is the relative absence of paramedicine from many health planning and policy considerations and informed debate in Australian health policy.

The dearth of policy treatment and lack of recognition of paramedics resulted in the author coining the phrase *'the forgotten health profession'* and the publication of a widely shared article in the on-line newsletter Crikey.[71]

Gaps in data collection remain, and the 2018 AIHW report on Australia's Health notes the absence of national data for ambulance, aeromedical, allied health or state-funded community health services.[72] To this might be added paramedicine, which should be included as part of the national health workforce for statistical, policy, planning and development purposes.

Box 1.6.1: Gaps in primary health care data

Primary health care and hospital services each account for more than one-third of health expenditure in Australia but compared with the volume of hospital information that exists, there is a surprising lack of primary health care data. Medicare services data provide some insight into variation in use of primary health care (mostly general practice) across Australia, but do not include information about why patients visit health professionals, their diagnosis, the treatment or care they received, test results or referrals for further care. There is currently no national data that allows assessment of the appropriateness, cost-effectiveness, safety, quality and accessibility of primary health care. The cessation of the Bettering the Evaluation and Care of Health survey (which collected data on general practice visits including patient demographics, types of problems being managed and the type of care provided from 1998 to 2015–16) has enlarged the primary health care data gap. Additionally, there are no comprehensive, national data for ambulance, aeromedical, allied health or state-funded community health services.

There have been developments to improve the completeness and utility of primary health care data, including a commitment to develop a national primary care data set. Making electronic health information available for secondary use will support improved primary health care data but is not a total solution.

Source: Australian Institute of Health and Welfare, *Australia's Health 2018*.

Reforming data collection and reporting to include paramedicine (or any other professional cohort) within the health workforce requires action at both state and Commonwealth levels.

State legislation and regulatory directives have been slow to react and recognise the transition of paramedic education to university degree programs more than two decades ago; or to acknowledge the registration of paramedics under the AHPRA framework and changes in the employment landscape and funding of paramedic education and research.

To understand how that situation arose, one must appreciate that paramedicine was born from

[71] Bange R F, *Paramedics forgotten in our health care debate*, Crikey, 30 June 2009. https://bit.ly/2Albp7i accessed 04/08/2019
[72] Australian Institute of Health and Welfare, *Australia's health 2018,* Australia's health series no. 16. AUS 221. Canberra: AIHW Australian Government. https://bit.ly/2Rhuz3l accessed 07/08/2019

political arrangements where ambulance services were a jurisdictional responsibility. Thirty years ago, paramedics were trained through in-house programs of vocational study while data collection in health paid scant attention to out-of-hospital ambulance related outcomes.

The author has raised the need for better longitudinal data collection and analysis with the Australian Institute of Health and Welfare (AIHW) but more significant action is indicated. There is a need for data that takes account of healthcare that begins with the patient and not at the hospital or clinic door.

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.

Paramedics in preventive and primary care

The National Preventive Health Strategy[73] has been designed to complement the Australian Government's Primary Health Care 10-Year Plan[74] which will set a vision and path to guide future primary health care reform.

As outlined by the Strategy, early and effective contact with primary health care can result in better health outcomes. Primary health care can assist in prevention and early diagnosis and management of chronic conditions which 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. The arrangements constrain flexibility in terms of employment, scope of practice and models of care; limit the capacity for team-based care; and present financial and professional barriers to health professionals who work in rural and regional Australia.

It is crucial that funding models provide the flexibility to make it easier for rural physicians, nurses and midwives, dentists, pharmacists and other AHPs to deliver primary health care across the gamut of health including aged care, disability services and palliative care.

Innovations might include a range of alternative funding models including modified fee-for-service; incentive programs; activity-based funding and bundled payments; capitation; blended funding; or pooled funding.

[73] Australian Government Department of Health, *Draft National Preventive Health Strategy*, 5 March 2021. https://bit.ly/2OUVQMT accessed 13/03/2021.
[74] Australian Government Department of Health, *Australia's Long Term National Health Plan*, https://bit.ly/3cvwa1K accessed 13/03/2021.

Another strong option is to foster the effective mobilisation of the paramedicine workforce to work in primary care and other settings within health by removing existing impediments to practice, many of which are a hangover from a bygone era. Ingrained perceptions of role should not detract from the scope of contemporary paramedic practice or the clinical interventions taken by registered paramedics.

When dealing with the adequacy of available health and care resources, the criteria for professional engagement might be based on the:

a) Size of the professional cohort;

b) Education and competencies in different practice environments;

c) Capacity of practitioners to meet patient and community needs;

d) Extent to which the practitioners may work across rural and remote areas; and,

e) Long term sustainability of the professional cohort.

The paramedic workforce amply meets these criteria and is moreover noted for holding high public trust. Tasmania and other jurisdictions (with support from the Commonwealth) thus should ensure the use of registered paramedics both within and outside the medium of the traditional public ambulance service (ATas).

Although Australian paramedics already are working across a wide variety of health and care settings, their engagement in community and general practice roles is less well developed than in the UK, where paramedics increasingly work in primary and urgent care settings, either via direct employment or on rotation from ambulance services. Appropriately educated paramedics are now also prescribing medications.[75]

To foster practice development, Health Education England commissioned a Paramedic (Specialist in Primary and Urgent Care) core capabilities framework[76] to support those paramedics working in primary and urgent care. It also provides advice to potential users and practitioner groups on the role of paramedics and their integration into general practice.[77,78]

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 protocols or prescriptions for practice.

These resources include background on the current education and regulatory framework for paramedics, employment and supervision, tools to help guide appraisal, career and salary progression, and recommendations for continuing professional development to meet paramedic registration requirements. The capabilities statement supports the development and planning of the workforce to meet local population needs.

[75] The Paramedic Observer, *Welsh Ambulance Service welcomes first prescribing paramedics,* Facebook, 12 July 2019. https://bit.ly/2yOk6VL accessed 08/08/2019

[76] Skills for Health, *Paramedic Specialist in Primary and Urgent Care Core Capabilities Framework,* National health Service/College of Paramedics, March 2019. https://bit.ly/2Ko1ylJ accessed 08/08/2019

[77] Employers' Guide for Paramedics in Primary and Urgent Care

[78] A Guide for General Practice Employing a Paramedic, 2nd edition

This growth of practice regime is consistent with the move towards supporting an aging population and caring for increasingly complex patients with chronic conditions by being treated and managed within their own home.

The framework has been warmly welcomed by health leaders and other health professions:

> *"Paramedics have unique capabilities which allow patients to receive the right care, at the right time - whether in a hospital, a primary care setting or in their own home. I am therefore delighted to support the launch of this framework. This will ensure the ongoing development of paramedic practice, and the transformation of services for the benefit of patients and the public. Using this framework, paramedics will be supported to continue to develop competencies and capabilities across a wide range of areas, including core clinical skills, communication, person centered care, public health and leadership."*
>
> *Suzanne Rastrick, Chief Allied Health Professions Officer, NHS United Kingdom*

> *"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*

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

With the recent changes to COAG - and the unknown future status of the former Health Council and the Australian Health Ministers' Advisory Council - the author proposes that the Inquiry might address the mechanisms needed to implement this goal. While Tasmania should begin with unilateral action to remove barriers to practice, a taskforce approach in consultation with other jurisdictions is suggested to ensure articulation at a national level.

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.

Enhancing community paramedicine

While expansion of ECP roles in ATas should be a valuable adjunct to enhance patient care, it is only part of the picture in meeting the aspects of health that may not involve 000 calls but may benefit from the monitoring, assessment and identification of patients that may require further treatment and appropriate referrals.

Patients often avoid contact with the healthcare system due to inconvenience with travel and appointments, uncertainty about what will happen, and fears about unexpected costs.

These latter barriers can be partially removed by the use of Community Paramedics and Paramedic Practitioners – low acuity specialists working outside the emergency regime of ATas who provide home visits to rural citizens in a role analogous to a visiting nurse.

Community Paramedic programs are alternatives to traditional ambulance response and aim to address overburdened hospitals and fragmented primary care. They are highly diverse and specific (tailored) to the local context and cover activities such as supporting transitions from the ED (e.g., hospital to home), assessing and referring patients to community-based programs, and providing direct preventive care and chronic disease management support.

Some countries have begun expanding Community Paramedic roles to include authority to practice independently, prescribe medications, bill for services, and maintain other elements of autonomous practice. These Paramedic Practitioner roles are perceived as the logical next step in professional development but need support to become established.

There is a vast body of evidence internationally that supports the effectiveness of community paramedicine programs in reducing the level of emergency calls, improving chronic disease management, and enhancing access to other pathways of community-based care.[79,80]

The wide variety of community paramedicine activities can be seen by examples such as the Canadian Renfrew County Paramedics program;[81] the UK agreement to formally support the role of community paramedics;[82] plans for community paramedicine in Hawaii;[83] Mobile Integrated Health system in Alberta;[84] and the evaluation of community paramedicine in Ontario.[85] An international group sharing ideas to integrate rural service providers into rural health care is the International Roundtable on Community Paramedicine (IRCP).[86]

In Australia, several pilot projects were sponsored by the former Health Workforce Australia along with an independent evaluation.[87] The evidence was that paramedics can provide a range of care that is highly beneficial and cost-effective at a community level – a finding in common with almost every study internationally.

Community paramedicine is consistent with the move towards supporting an aging population and caring for increasingly complex patients with chronic conditions by being treated and managed within their own home. The related development of independently practicing paramedics, known as 'Paramedic Practitioners' is also likely to be of great benefit in reducing the burden on GP clinics and other primary healthcare facilities.

The inclusion of community paramedicine fits well in the context of an integrated healthcare system[88] although its absence is common in many jurisdictions, including Tasmania. It's time that Tasmania took advantage of that option to deliver better care.

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.

[79] Leyenaar MS, McLeod B, Penhearow S, Strum R, Brydges M, Mercier E, Brousseau AA, Besserer F, Agarwal G, Tavares W, Costa AP., *What do community paramedics assess? An environmental scan and content analysis of patient assessment in community paramedicine,* CJEM. 2019 Nov;21(6):766-775. doi: 10.1017/cem.2019.379. PMID: 31366416

[80] Rural Health Information Hub, https://bit.ly/3cAakdk accessed 15/03/2021.

[81] Bange R, *A focus on Renfrew County paramedics*, The Paramedic Observer, Facebook 29 July 2019. https://bit.ly/38FLeIZ accessed 15/03/2021.

[82] Bange R., *NHS Agreement formally supports role for community paramedics*, The Paramedic Observer, Facebook 6 February 2019. https://bit.ly/3cx3DZJ accessed 15/03/2021.

[83] Eleni Avendano, *State Aims to Reduce Unnecessary ER Visits By Empowering Paramedics*, Hawaii News, Honolulu Civil Beat 26 July 2019. https://bit.ly/3eGx9yA accessed 15/03/2021.

[84] Alberta Health Services, *EMS Mobile Integrated Healthcare: Community Paramedicine*, https://bit.ly/3lklU0o accessed 15/03/2021.

[85] Bange R., *Community paramedicine evaluated in Ontario,* The Paramedic Observer, Facebook 14 May 2019, https://bit.ly/3rSYiCc accessed 15/03/2021.

[86] International Roundtable on Community Paramedicine, http://www.ircp.info/ accessed 15/03/2021.

[87] Thompson C, Williams K, Morris D, Lago L, Kobel C, Quinsey K, Eckermann S, Andersen P, Masso M, *HWA Expanded Scopes of Practice program evaluation: Extending the Role of Paramedics sub-project: final report* (Australian Health Service Research Institute, Wollongong, Australia, 2014). https://bit.ly/2OULY5U accessed 15/03/2021.

[88] Amy Coopes, *Picking up the pace on the journey to integrated health care: a preview of #CPHCE19*, Croakey 13 August 2019. https://bit.ly/3rQKfxd accessed 15/03/2021.

Recommendation 25

That Tasmania review and implement piloting of Paramedic Practitioner roles.

Incentives and support for rural practice

The challenges of practice in regional and remote areas have exercised governments and professions for many years, with various incentives to practice being provided to attract and retain medical practitioners, nurses and AHPs.

As noted elsewhere, little recognition has been made of paramedicine, although for a period, paramedics were considered for scholarship support under the ambit of the former Nursing and Allied Health Scholarship and Support Scheme[89] administered by Services for Rural and Remote Allied Health (SARRAH) and funded by the Commonwealth Government.

All levels of government need to recognise that arrangements to foster rural and remote practice and maintain competency are just as important for paramedics as for other health practitioners. Among the more important incentives is support for continuing professional development.

While many AHPs benefit from incentives to foster rural and regional practice this is notably absent in the field of paramedicine. This is an inexplicable omission given that these AHP students and practitioners commonly attended the same university classes and may work alongside paramedics in multidisciplinary practice in regional centres.

At the least, the paramedicine workforce should be eligible for support and incentive programs provided to AHPs, including funding for the development of rural generalist pathways to practice, provisions for internship training, scholarships for continuing professional development, undergraduate and advanced degree courses, dedicated research funding, and other mechanisms to foster rural and remote health care.

Along with these changes should be consideration of long-term funding to enable the introduction of embedded community paramedicine programs in rural and remote areas that are supplementary to the traditional funding for emergency response.

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.

[89] Services for Rural and Remote Allied Health, *Nursing and Allied Health Scholarship and Support Scheme (NAHSSS),* https://bit.ly/3eCgbS9 accessed 14/03/2021

Abbreviations / Definitions

The following abbreviations and definitions are used in this submission.

ACEM	Australasian College for Emergency Medicine
ACPP	Australasian College of Paramedic Practitioners
AHP	Allied Health Practitioner
AHPRA	Australian Health Practitioner Regulation Agency
ATas	Ambulance Tasmania
CERTS	Community Emergency Response Teams
CQC	Care Quality Commission (UK)
DOH	Department of Health
ECP	Extended Care Paramedic(s)
ED	Emergency Department
HWA	Health Workforce Australia (now closed)
Inquiry	Parliamentary inquiry into rural health services in Tasmania
KPI	Key Performance Indicator(s)
National Law	Health Practitioner Regulation National Law Act
NEPT	Non-Emergency Patient Transport
NHS	National Health Service (UK)
NRAS	National Registration and Accreditation Scheme
NSQHS	National Safety and Quality Health Service Standards
PCEHR	Personally Controlled Electronic Health Record
PTSI/PTSD	Post-Traumatic Stress Injury/Disorder
ROGS	Report on Government Services (Productivity Commission)
UK	United Kingdom

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

Community Paramedic – a broad term used to describe any paramedic, working outside the standard Ambulance Tasmania 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 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.

Appendix A – About the lead author

The lead author of this submission is Adjunct Associate Professor Ray Bange OAM, and the submission is made in a personal capacity.

In a career spanning more than 50 years, Associate Professor Bange has held senior positions within academia, government, and private industry as well as representative positions on professional bodies, quality assurance and accreditation agencies.

Ray worked for several years with Services for Rural and Remote Allied Health (SARRAH) as an expert assessor of scholarship programs providing support for rural and remote allied health practitioners through the Nursing and Allied Health Scholarship and Support Scheme.

He has also collaborated with the National Rural Health Alliance on workforce issues.

From 2007 to 2015 he was the Principal Policy Advisor to Paramedics Australasia in the development of proposals for the registration of paramedics. He has also worked closely with the paramedicine profession on other regulatory matters and mental health issues affecting first responders in both Australia and New Zealand.

His significant work in the field of paramedicine has been recognised by bestowal of Honorary Fellowship from related professional bodies and Adjunct Associate Professorial appointments from the Central Queensland University and the University of the Sunshine Coast.

His policy expertise and abiding interest in healthcare delivery, quality and equity standards has also seen him engaged as an Executive Committee member of the Australian Health Care Reform Alliance and as a member of the Health Advisory Committee of the Perth-based international Talisium health group.

He is the curator of two professional Facebook information and communication channels with a combined following of over 6000 persons. These channels provide informed comment and feedback on health and care issues.

The input gained from his close relationship with patients and advocacy groups, community bodies, service providers, individual health practitioners and professional societies has provided him with deep insights into the importance of quality and service standards in healthcare delivery.

These insights have reinforced the need for equity and accessibility of healthcare across regional areas and the mobilisation of paramedics along with other health care professionals in providing seamless interaction that contributes to national health and well-being.

Acknowledgement is made of the valuable assistance provided by members of the paramedicine profession, particularly that provided by Registered Paramedic Matt Wilkinson-Stokes.

Appendix B – Inquiry Terms of Reference

On 21 December 2020, Government Administration Committee 'A' resolved to commence an inquiry into rural health services in Tasmania with the following terms of reference:

To inquire into and report on health outcomes and access to community health and hospital services for Tasmanians living in rural and remote Tasmania, with particular regard to:

1. *Health outcomes, including comparative health outcomes;*
2. *Availability and timeliness of health services including:*
    a. *Ambulance services;*
    b. *Primary care, allied health and general practice services;*
    c. *Non-GP specialist medical services;*
    d. *Hospital services;*
    e. *Maternity, maternal and child health services;*
    f. *Pain management services;*
    g. *Palliative care services;*
    h. *Pharmacy services;*
    i. *Dental services;*
    j. *Patient transport services;*
    k. *'After hours' health care;*
    l. *Indigenous and culturally and linguistically diverse (CALD) communities; and*
    m. *Other.*
3. *Barriers to access to:*
    a. *Ambulance services;*
    b. *Primary care, allied health and general practice services;*
    c. *Non-GP specialist medical services;*
    d. *Hospital services;*
    e. *Maternity, maternal and child health services;*
    f. *Pain management services;*
    g. *Palliative care services;*
    h. *Pharmacy services;*
    i. *Dental services;*
    j. *Patient transport services;*
    k. *'After hours' health care;*
    l. *Indigenous and culturally and linguistically diverse (CALD) communities; and*
    m. *Other.*
4. *Planning systems, projections and outcomes measures used to determine provision of community health and hospital services;*
5. *Staffing of community health and hospital services;*
6. *Capital and recurrent health expenditure;*
7. *Referral to tertiary care including:*
    a. *Adequacy of referral pathways;*
    b. *Out-of-pocket expenses;*
    c. *Wait-times; and*
    d. *Health outcome impact of delays accessing care.*
8. *Availability, functionality and use of telehealth services; and*
9. *Any other matters incidental thereto.*

*Regional centres: defined as Modified Monash Model 2 (i.e., outside greater Hobart and greater Launceston)

Appendix C – Ambulance Tasmania

Ambulance Tasmania operates from 54 locations across the State. These include:

a) Metropolitan/urban stations staffed by paramedics;

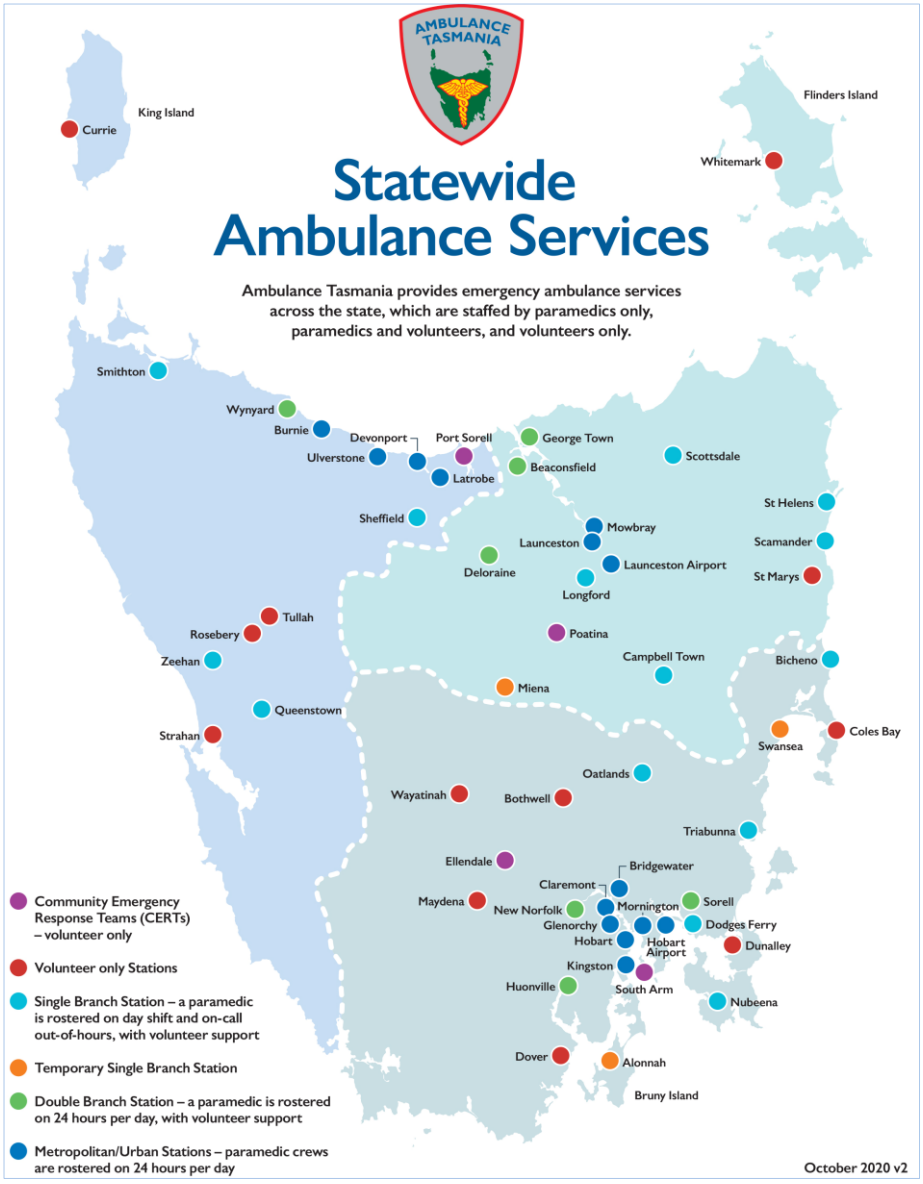
b) Seven double branch stations which are staffed by paramedics who provide 24 hour per day rostered coverage, supported by volunteers;

c) 14 single branch stations which are staffed by a paramedic who is rostered on for the day shift and is available on-call out-of-hours, supported by volunteers;

d) Three temporary single branch stations;

e) Volunteer-only stations; and,

f) Four Community Emergency Response Teams (CERTS).[90]



[90] Ambulance Tasmania, Community Emergency Response Teams (CERTS), https://bit.ly/3sXcw5m

Appendix D – Review of Ambulance Tasmania - Recommendations

The long-term future for Tasmanian ambulance services outlined in the Review is to transform the service model from an emergency responder to all needs to becoming a coordinator of patient access to urgent care for an unexpected health event. This will require a complete system redesign; a transition from a system that focuses on the question 'why do you need an ambulance and how urgently?' to a system that is capable of asking the question 'what service do you need?' and to facilitate the delivery of that service to the patient.

The recommendations were:

Short Term Demand Pressures

1. That the capacity of emergency ambulance services is increased, particularly in Launceston and Hobart, to allow for AT to develop and implement strategies to reduce demand, increase the sustainability of ambulance services and deliver better outcomes for both patients and the health system.

Secondary Triage and Partnerships

2. That AT develops, as a priority and with collaboration and support from Ambulance Victoria, a secondary triaging service.

3. That AT commences discussions with healthdirect to identify an appropriate model for supporting secondary triage and guiding patients along pathways to care outside of the acute health system.

4. That AT engages with primary and community health services to build strong relationships and support alternative pathways to care.

Extended Care Paramedics and Urgent Care Centres

5. That AT continues to expand the use of ECPs, focussing on urban fringe and rural communities based on a spatial analysis of need.

6. That AT investigates opportunities to include an ECP in dispatch to direct ECP resources to appropriate patients and provide broader operational support for paramedics and volunteers.

7. That AT clearly delineates the role of ECPs, First Intervention Vehicles and Intensive Care Paramedics and separates the functions as far as is reasonably possible from an operational and resourcing perspective.

8. That AT further considers the appointment of ECPs based on skills and experience relevant to the position as opposed to requiring an ECP applicant to be a qualified ICP.

9. The State monitors the impact of urgent care centres in Western Australia on demand for emergency departments.

Extended Care Paramedic and Intensive Care Paramedic Training

10. That AT develops a plan to partner with an appropriate professional training body (potentially an appropriate tertiary institution) for ECP and ICP training.

Appendix D (continued)

Patient Management Plans

11. That AT works with acute, primary and community health services to develop patient management plans for frequent users of ambulance services.

Ambulance Tasmania and Emergency Department Interface

12. That Ambulance Arrivals Boards are introduced into emergency departments and Hospital Patient Tracking Boards into Ambulance dispatch.

13. That AT and the Tasmania Health System work to identify a threshold of unacceptable risk associated with ambulances being held at emergency departments.

14. That AT considers requiring paramedics to take blood samples prior to the arrival at the emergency department and provides ECPs with in-field blood diagnostic tools.

Non-Emergency Patient Transport Service

15. That a protocol for the referral of patients to NEPT services for transport be developed by AT.

16. That the Department continues to build on the existing regulatory framework for Non-emergency Patient Transport Services, including considering further:

a. Targeted regulation of services provided for major events;

b. Once paramedic registration is introduced, the merits of allowing any NEPT services to apply for a broader scope of practice based on approved clinical governance, clinical practice guidelines and training/skills maintenance arrangements; and,

c. Support in case of a disaster, emergency events or excessive demand.

AT Organisation Structure

17. That AT reviews its organisation structure, particularly in relation to frontline tactical and clinical management, to include greater depth and shared accountability for operational coordination, clinical governance and professional development of operational staff.

18. That DHHS (including AT) identify an appropriate model for corporate support services to reduce single person dependencies in AT.