Australasian College
for Emergency Medicine

34 Jeffcott Street West Melbourne Victoria 3003, Australia
+61 3 9320 0444 | admin@acem.org.au | ABN 76 009 090 715

Our Healthcare Future submission

February 2021

The Australasian College for Emergency Medicine (ACEM, The College) welcomes the opportunity to provide its submission to this review, which has been prepared in consultation with our Tasmanian members. As the peak body for emergency medicine, ACEM has a vital interest in ensuring the highest standards of emergency medical care for all patients. ACEM is responsible for the training and ongoing education of emergency physicians and the advancement of professional standards in emergency medicine (EM) in Australia and New Zealand.

Reform Initiative 1 – Consultation questions:

1. **How can we target better our current investment as well as future investments in health to ensure a sustainable and balanced mix of services is delivered across the whole of the health system to provide right care in the right place at the right time?**

   There are many issues that our members cite as causing negative patient outcomes in Tasmanian emergency departments (EDs). Many of these can be distilled down to a state-wide lack of resources, whether that be a lack of beds for inpatients, a severely understaffed ED, a medical record system that is not integrated with the rest of the hospital, or an absence of out-of-hours mental health services.

   Through the rest of our submission we go in to detail about our concerns and the ways in which we believe the Tasmanian Health Service can change to better suit the needs of patients. Our recommendations can broadly be summed up in the following points:

   i. Reduce access block in Tasmanian EDs

      a) Increase hospital and alternative care capacity (beyond the Urgent Care Centre (UCC) model), including increases in physical inpatient bed capacity of public hospitals.

      b) Extend inpatient, GP and community mental health services outside of "business hours".

      c) Increase inpatient staff specialists and/or senior decision makers working after hours and on weekends to ensure inpatient beds are made available in a timely and clinically appropriate fashion.

   ii. Improve information technology systems in Tasmanian EDs

      a) Roll out Medtasker to all Tasmanian EDs and other medical services.

      b) Provide training to senior decision makers working in the ED on how to use data effectively to better improve patient care.

iii. Build a healthcare workforce for today and the future

a) Introduce an effective workforce strategy in Tasmanian care-giving facilities that takes in to account the demands of the population.

b) Increase the number of EM specialist positions in EDs in Tasmania and attract high quality specialists to those positions.

Since 2011 patients have been presenting to Tasmanian EDs at a rate that outpaces population growth, with a greater proportion of ED patients requiring hospital admission. These patients are also waiting longer in the ED for a hospital bed due to in-hospital services lacking the capacity needed to meet patient demand from the ED. This hospital admission bottleneck contributes significantly to the ED workload and has repeatedly been shown to result in poorer patient health outcomes. Tasmanian patients requiring admission to hospital from the ED have experienced the longest waits across Australia. In 2018-19, it took over 22 hours for most (90 per cent) admitted patients to depart Tasmanian EDs (in comparison, the national average was just over 11 hours).[1] Findings were worse for ED patients experiencing a mental health crisis, with most (90 per cent) of this patient group waiting for over 30 hours to depart the ED. Again, this was by far the longest length of stay seen across Australia.[2]

Tasmania also had the greatest proportion of admitted ED patients experiencing access block (whereby patients become stuck in the ED for more than eight hours because of a lack of inpatient beds or services to be transferred to the next stage in their care). In 2018-19, 39 per cent of admitted patients experienced access block, with 22 per cent of these accessed blocked patients (4,508 patients in total, equivalent to 12 patients per day) waiting more than 24 hours for admission into hospital.[3]

ACEM's own research supports these findings. Specifically, two 'point-in-time' access block snapshot surveys undertaken across Australian EDs in June and September 2019 showed that:

- In June 2019, Launceston General Hospital (LGH) had 17 access-blocked patients out of 30 (57 per cent) being treated, with 11 of these patients waiting over 24 hours. RHH had 13 access-blocked patients out of 26 (50 per cent) being treated, with six of these patients waiting over 24 hours. Of the 124 EDs across Australia and New Zealand that provided data for these surveys, these findings made LGH and RHH the worst and second worst performing EDs, respectively, across Australia.

- In September 2019 the situation at RHH had deteriorated markedly from June, with 20 access-blocked patients out of 35 (57 per cent) awaiting treatment, and seven patients staying more than 24 hours.

- In June 2019, the number of admitted patients waiting for an inpatient bed accounted for 62 per cent and 60 per cent of the ED workload at RHH and LGH, respectively. In September 2019, the number of admitted patients waiting for an inpatient bed accounted for 71 per cent and 54 per cent of the ED workload at RHH and LGH, respectively.

Across both surveys, RHH and LGH accounted for 29 per cent of all access block within the Australian hospitals that responded, despite making up less than 2 per cent of the hospitals that responded to the surveys. Dangerously high levels of access block across LGH and RHH has remained a consistent issue, and staff at North West Regional Hospital (NWRH) are now reporting that access block is becoming a significant issue for their EDs as well. This has been an ongoing trend – Tasmania has consistently been among the worst performers in ACEM's access block surveys each year they have been undertaken.

New snapshot data (from November 2020) will be available shortly and ACEM is happy to make this available to the Department of Health.

How can we make better use of resources outside of the ED and major public hospital settings to reduce the demand on EDs?[1]

For over a decade, long waits and access block within the ED have been associated with poor patient outcomes, including: longer hospital stays; increased errors in care; and increased use of restrictive practices when patients are violent or behaviourally disturbed in a way that places themselves or others at risk. Access block now also presents an additional risk of exposure to COVID-19.[4] Furthermore, new research has shown that access block leads to an increased likelihood of dying while in hospital. Specifically, new patients presenting to an ED have a 10% relative increase in mortality when more than 10% of current patients waiting for admission were experiencing access block.[5] As stated above, UCCs will not reduce demand on the ED, overcrowding or access block issues.

There are no shortcuts in addressing ED overcrowding and access block. Whole-of-hospital solutions urgently are needed, with a massive increase into the hospital system.

Where external resources may be useful is in the improved provision of acute mental healthcare. Again, there are no shortcuts, and this will require additional resources rather than the repurposing of already stretched existing resources. In our 2020 report "Nowhere Else to Go", we advocate that in Tasmania, and indeed across Australia, there must be an increase in the funding and staffing of community mental health services.[6] The report confirmed that patients presenting to EDs for mental health care routinely experience excessive and unreasonably long waits often in inappropriate, and at times unsafe environments. It is a constant challenge for ED staff to find a safe path for patients such as admission to an inpatient bed, or home with appropriate community supports in place.

Our report made a number of recommendations, including:

- State and territory governments should explore innovative diversion or alternative mental health care models in communities with high levels of mental health patient presentations to EDs.
- Additional funding and resources must also be provided for non-hospital alternatives depending on local needs. These include step-up/step-down services, short stay units, and hospital in the home.
- All government-funded mental health services must operate as flexible after-hours services as a condition of receiving funding.
- All government-funded mental health services should be required to expand their operating hours to provide flexible after-hours services as a condition of receiving funding.

Better funding of alternative mental health care outside of the hospital will facilitate an increase to access for psychology and counselling services for people with mental health conditions and psychological distress. These are patients that regularly present at the ED, adding significant demand to the workload of the ED. On a similar note, funding and bed numbers for Drug and Alcohol services must also be increased - there is currently a significant gap in service provision in Tasmania, and particularly outside of Hobart.

4. **The UCC Feasibility Report 2019 identifies UCCs as a feasible service model for Tasmania. Are there other barriers and opportunities for implementing a model of urgent care in Tasmania not identified by the study?**

The College is aware that UCCs are being considered by the Tasmanian Government as a means to help address overcrowding and access block issues facing Tasmanian EDs and hospitals. The College acknowledges that access to UCCs – which aim to provide patients with immediate, non-life-threatening health issues with alternatives to visiting EDs – would be welcomed in communities where it has been difficult to access urgent GP appointments.

[1] To limit the number of questions that we asked our members this more general question that covers Reform Initiative 1 questions two and three with a more specific focus on emergency medicine.

However, 'GP-type' patients with minor ailments are not the primary cause of overcrowded and access blocked EDs – seriously sick or injured patients requiring hospital admission are. The length of stay for ED patients has been proved to not be related to the number of arrivals in the ED (including GP-type presentations), with admitted patients being those that experience the longest length of stays.[7] GP-type patients typically take up less time and resources than other patients and therefore contribute proportionally less to demand for ED services. As they are not admitted to the hospital and rarely require trolleys or extended stays for tests, they do not contribute significantly to access block or overcrowding in EDs. Our internal research suggests that, if anything, an increased number of GP-type patients is associated with a *reduction* in ED length of stay for patients requiring hospital admission.

Urgent care models have been trialled in a number of jurisdictions and while they are able to treat low acuity presentations away from EDs, EDs remain access blocked due to the number of presentations requiring admission.[8] UCCs on their own will not solve the many issues hospitals and EDs are currently facing, so the Government must consider additional measures.

EDs are struggling to function in Tasmania due to a major shortage of hospital beds and an increased number of patients requiring admission. Between 2011-12 and 2018-19 the number of patients requiring admission (per 1000 population) increased by 75 per cent, yet the number of available beds (per 1000 population) only increased by 17 per cent.[9,10] Patients referred on to the ED from a UCC will not reduce this problem. Given the difficulties in recruiting staff to remote areas of the state, we are also concerned that any new UCC facilities will find it challenging to recruit and train staff. GP facilities that already exist would not only find it easier to recruit staff in an expansion of their services, but also to train them appropriately.

5. How can we make better use of telehealth, so people can receive care closer to home, and what are the barriers preventing utilisation of telehealth?

Telehealth has the potential to reduce ED admissions and ACEM is currently considering evidence to develop a position on this. As such, we cannot give detailed advice in answer to this question. It is vital to stress though that telehealth is meant to augment care and not replace it, and that telehealth services must be staffed, resourced and remunerated appropriately and not add to the daily work of the ED physician. As healthcare staffing is already stretched in Tasmania, such services would also need to be cautious to avoid draining in-person services of needed staff.

6. How can we make better use of our District Hospitals to enable maximum utilisation of beds in these facilities as a step-down from public hospitals and a step-up from the community to improve patient flow in acute hospitals and care in the community?

In order to reduce demand on the ED it is vital that district hospitals are better utilised. One such way of doing this would be through discharge planning meetings to routinely screen all inpatients in public hospitals for transfer to these sites. This would free up more beds in public hospitals, lessening the impact of access block and reducing pressure on the ED. The transfer process would need to take into account that there may be a need to bring the patient back to the public hospital, in circumstances such as deterioration or clinical review; however, these patients need not go through the ED again.

We are aware that a lack of transport – both for patients and their families – is an issue that is currently preventing transfers from public hospitals to district hospitals. Providing more resources that can transfer all varieties of patients – including complex cases – will make more efficient use of beds across the Tasmanian hospital system.

The number of sub-acute services that district hospitals provide should be increased, such as rehabilitative and recovery clinics, physiotherapy and speech therapy. In tandem with this, effort should be put in to increasing community awareness and knowledge of district hospitals and the services that they provide, particularly for sub-acute care. While these facilities may be further away from their home than public hospitals, they are more appropriate locations to receive care. This will lessen the blocking of acute hospital beds in public hospitals and ease the stress on the ED.

7. **How can we improve integration across all parts of our health system and its key interfaces (e.g. primary health, mental health, disability services, aged care and acute care)? What should be our priorities for integration?**

   A key method to improve integration is for better information and communication technology (ICT) across the Tasmanian Health Service. This point is expanded on below. Better ICT systems lead to better communications, which in turn lead to better outcomes for patients through more effective links between the ED and community services, such as mental health care. For example, digital medical records should be made available not just to all hospital services, but to all medical services in Tasmania, including GP facilities. This is already happening in North West Tasmania in palliative care, community nursing and mental health services.

Reform Initiative 2 – Consultation questions:

2. **What digitisation opportunities should be prioritised in a Health ICT Plan 2020- 2030 and why?**

   The Department of Premier and Cabinet's Review of the Tasmanian State Service has identified Tasmania as the poorest of all Australian jurisdictions for 'digital readiness', with the obsolescence of its current digital systems on the horizon.[11]

   There is no environment where this is so pronounced as the ED. EDs in Tasmania use a digital medical record system (TrakED) that is not integrated with the digital medical record system that the rest of the hospital system uses, causing inefficiencies. ED staff need to log into a different digital record system to access time-sensitive information from pathology and imaging services. In addition:

   - Many inpatient teams are unable to use TrakED to access ED notes, requiring ED staff to print out ED notes before a patient is transferred to a ward.

   - TrakED has limited functionality to provide real-time statistics to assist in management of flow within the ED, such as the average length of stay and presentations per hour. The Tasmanian Health Service's analytical system HEART does provide a useful dashboard for ED flow, but only Heads of Departments and a select few others have access. This makes it difficult to measure access block and other markers of access to emergency care. Better data, evidence and reporting is essential to improving emergency care and outcomes.

   We welcome the start of the roll out of Medtasker at the RHH, but as yet the introduction of this tool has not begun in LGH, NWRH or Mersey Community Hospital (MCH). A Health ICT Plan 2020-2030 must consider opportunities to improve hospital ICT systems to ensure better integration between the ED and other hospital and community ICT systems, and better data access for senior decision makers working in the ED to enable reporting on emergency care flow, access and outcomes.

   At present, many medical notes are handwritten due to the poor-quality systems that are currently in place. Hospitals and community health services must increase digital note-taking and record keeping, as well as removing any kind of reliance on fax machines.

Reform Initiative 3a – Consultation questions:

4. **What are the key factors that should be considered in the development of modern health facilities in a community setting – e.g. location, proximity to other community services?**

   Better funding for health services in metropolitan and rural areas outside of the hospital will improve access for patients without life-threatening conditions to the care that they need. This includes de-hospitalisation and increased community-based primary health services. This will be more convenient for patients and likely more economical to run.

Our members have also expressed concerns about the condition of public hospital buildings in Tasmania. The hospital buildings, at MCH in particular, are poorly designed without a long-term future in mind and contain asbestos. The wards also reflect an outdated model of care. While we agree with the ethos that modern health facilities need to be developed in a community setting, the public hospital facilities that already exist must also be modernised before they are no longer fit for purpose.

We request that the Tasmanian Government considers investing in increasing the size of and services offered at either the MCH or the North West Regional Hospital, with the consolidation of hospital services at one site, rather than trying to spread them thinly across the two sites. Large numbers of staff are travelling between these hospitals to provide duplicate services - this is a waste of time, money, and resources.

A larger facility would be able to care for more patients with proportionally less staff overall, while also being big enough to attract more staff and have a sufficient case-load to engage specialties and offer care not currently available in the North West. A centralised North West hospital would decrease duplication of services and improve potential for recruitment and retention of specialist staff. An additional benefit for patients and their families would be a decrease in the need for multiple ambulance transfers between hospitals – at present patients often present from the community to MCH, before being transferred to NWRH, then to LGH, and sometimes then back to MCH for rehabilitative services.

Reform Initiative 3b – Consultation questions:

1. **How should the Health Workforce 2040 strategy be further refined to guide and inform the development of a strong and sustainable professional workforce to meet the current and future health needs of Tasmanians?**

   Across Tasmania, our members report that inadequate staffing, geographic maldistribution and an overreliance on locum staffing are all issues challenging their EDs:

   - Inadequate staffing in EDs, which particularly impacts the level of care that the workforce can provide to Tasmanian patients in the ED. Beyond the negative impact on patient outcomes, understaffed EDs also affect emergency physician wellbeing through high levels of burn out, professional isolation and moral injury. Tasmanian EDs struggle to attract emergency medicine specialists and trainees. According to ACEM's 2019 Annual Site Census, 50 per cent of Tasmanian respondents reported having unfilled FACEM trainee FTE that they had been trying to fill for 6 months or more, and 100 per cent reported having unfilled FACEM FTE that they had been trying to fill for 6 months or more.[12] This is a dangerous level of understaffing that falls below the expected standard of an emergency medicine workforce as set out in ACEM guidelines.[13]

   - Geographic maldistribution of the emergency medicine workforce, resulting in inequitable access to emergency care in rural, regional and remote locations (compared with metropolitan locations). This has a particular impact on Aboriginal people who are more likely to present to EDs located in regional areas as opposed to metropolitan areas. For patients this might look like:

     - not having a usual GP or place of care, and needing to go to an ED because no GP is available when needed;
     - delayed diagnosis, transfer and treatment;
     - difficulties in self-managing chronic conditions;
     - needing to travel long distances and undergo lengthy stays away from home to access health services; and
     - compromised continuing recovery after returning home creating a "vicious cycle of increasing ill health".

- An over-reliance on short-term/locum staffing, particularly in regional, rural and remote areas. The Tasmanian ED FACEM (Fellow of ACEM) workforce is more likely than the ED FACEM workforce in any other Australian jurisdiction to work part-time. The North West of Tasmania in particular has an overreliance on locum staffing, and the inability of locums to travel into Tasmania due to COVID-19 restrictions has caused immense challenges for EDs, resulting in reduced hours of operation in order to maintain safe staffing levels. Without clinical leads permanently driving ED care, regional areas will receive poorer care than those in metropolitan areas and drive increased presentations to metropolitan EDs. Reliance on a locum-only workforce also impacts on the quality of care available to local communities in regional areas.

- While locum doctors provide high quality care, they lack the local knowledge and connection to the area to integrate the work of the ED with other local services and implement systems and processes that improve care and outcomes for patients. ED management must ensure that long-term locum staff are appointed by interview rather than just by resume. Many locums have arrived to find the job is not what they expected, have been found to have inadequate experience and / or training for the position, or to be a poor match for the ED itself.

Noting the existing workforce shortfalls and the inability of the health system to adequately meet the needs of Tasmanians, we are particularly concerned that Tasmania will not be able to meet increasing healthcare needs as the population simultaneously grows and ages. ACEM is currently working with our membership to develop long-term strategies to address workforce challenges. To address the above concerns, we believe the Department of Health must immediately implement a workforce strategy that takes the following points in to consideration:

- There are enough FACEMs and non-FACEM senior decision makers in relation to current service needs, to enable quality care for patients. All patients should have senior medical input into their diagnostic and management plan; FACEM involvement is optimal.

- There are enough FACEMs and non-FACEM senior decision makers in relation to current service needs, to make the workforce sustainable. The pressure currently placed on some emergency physicians due to insufficient numbers to provide clinical supervision and support on the "shop floor", is detrimental to the health, wellbeing, and longevity of emergency physicians and contributes to the increasing interest of emergency physicians in reducing hours to work part-time or moving to alternative non-frontline clinical roles including academic or research roles.

- There are the right number and combination of FACEMs, FACEM trainees, non-FACEM specialists and other medical practitioners in relation to future service needs across the entirety of both of our countries. Specifically, in relation to the FACEM workforce, we want to ensure there are enough physicians to meet service needs, but not so many that there is an oversupply. An oversupply reduces FACEM employment prospects and can lead to sometimes unsatisfactory part-time or piecemeal careers. This has a flow on effect that reduces the attractiveness of the profession.

- There is the right balance of trainees and FACEMs to enable a quality training experience to be delivered.

6. How do we support Tasmanians to access the education and training they need to be part of the State's future workforce?

It is clear that Tasmania is not attracting enough specialist trainees and needs to do more to appeal to these trainees who are considering where in Australia they will train. Tasmania must develop strategies to not only retain Tasmanian trainees and medical students, but also attract trainees from other Australian jurisdictions. Better recruitment and retention of medical specialists in all fields, not just EM, will improve the training of junior doctors and allow more specialist training to be undertaken in Tasmania – particularly in psychiatry, obstetrics, and subspecialties such as endocrinology, rheumatology, and urology. Access to rural generalist training programs should also be improved.

The Tasmanian Government must also make remuneration for EM specialists equitable to that of their mainland colleagues. The current level of pay is one of the key barriers preventing trainees becoming part of the Tasmanian workforce. Due to the current workforce shortage there are many trainees that are getting burned out through working too hard, creating a repeating pattern of losing trainees to the mainland and increasing the workload for the next set of trainees.

Greater investment in improving research facilities in Tasmania will be an additional method to not only making Tasmania more appealing to mainland Trainees and EM specialists, but also to bolster the education and training facilities in Tasmania. Increasing the number of accredited EDs in Tasmania will have the same effect.

Reform Initiative 3c – Consultation questions:

1. **How could a State-wide Clinical Senate assist in providing advice to guide health planning in Tasmania?**

   Clinical Senates exist in other Australian jurisdictions, such as Queensland, South Australia and Western Australia and have helped the policy makers in those states canvass healthcare professionals. We welcome the proposal of a Tasmanian Clinical Senate and would be willing to provide assistance in designing such a body. We believe that junior doctors and medical students should also be able to provide input to a Clinical Senate as a way of making their voices heard, but also fostering our future healthcare leaders.

   In New South Wales the Ministry of Health established an ED Community of Practice as part of the response to the COVID-19 pandemic. Our members were very positive about the Community of Practice, which helped them in information sharing and helped policy makers have rapid access to information on the ground. In the Victorian outbreak, ACEM established a Community of Practice that was much appreciated by members. Policy makers in Tasmania may be assisted in health planning by the establishment of similar networks in the state.

2. **How can we better engage meaningfully and effectively with consumers and other key stakeholders in health service planning, delivery and quality improvement?**

   Health literacy in Tasmania is the second poorest in Australia[14] after the Northern Territory, which can lead to anxiety about symptoms and inappropriate use of the health system, particularly use of the ED as their only option and thus contact with the health system. The ED works more effectively when patients present to the appropriate facility, but we understand that often, particularly in areas of socioeconomic disadvantage, the ED may be the only option for many patients. Better communication with communities about the facilities available at district hospitals is needed, particularly if these services are increased. We also recommend that when the mental health service is redesigned, consumers must have the ability to directly input into the planning process.

If you require any further information about any of the above issues or if you have any questions about ACEM or our work, please do not hesitate to contact Nicola Ballenden, Executive Director Policy and Strategic Partnerships (nicola.ballenden@acem.org.au); +61 3 9320 0444).

[1] Australian Institute of Health and Welfare. Emergency department care [Internet]. Canberra: Australian Institute of Health and Welfare, 2020 [cited 1 December 2020]. Available from: https://www.aihw.gov.au/reports-data/myhospitals/sectors/emergency-department-care

[2] Australian Institute of Health and Welfare. Mental health services in Australia [Internet]. Canberra: Australian Institute of Health and Welfare, 2020 [cited 1 December 2020]. Available from: https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia

[3] Australian Institute of Health and Welfare. National non-admitted patient emergency department care database 2018-19 Data. Canberra ACT: AIHW; 2020. [Internal report]

[4] Australasian College of Emergency Medicine (2020) The New Normal ED - Living with COVID-19. Melbourne: ACEM. Available from https://acem.org.au/Content-Sources/Advancing-Emergency-Medicine/COVID-19/Resources/Clinical-Guidelines/The-New-Normal-ED-%E2%80%93-Living-with-COVID-19

[5] Jones PG, van der Werf B. Emergency department crowding and mortality for patients presenting to emergency departments in New Zealand. Emergency Medicine Australia. 2020 Dec 10. DOI: 10.1111/1742-6723.13699. Online ahead of print.

[6] Duggan M, Harris B, Chislett WK & Calder R. Nowhere else to go: Why Australia's health system results in people with mental illness getting 'stuck' in emergency departments. [Online] Mitchell Institute Commissioned report 2020, Victoria University. 2020 [cited 7 December 2020]. Available at https://acem.org.au/getmedia/5ad5d20e-778c-4a2e-b76a-a7283799f60c/Nowhere-else-to-go-report_final_September-2020

[7] Pryce A, Unwin M, Kinsman L, McCann D. Delayed flow is a risk to patient safety: A mixed method analysis of emergency department patient flow. Int Emerg Nurs. 2020 Dec 24;54:100956. doi: 10.1016/j.ienj.2020.100956. Epub ahead of print. PMID: 33360361.

[8] Richardson D, Mountain D. Myths versus facts in emergency department overcrowding and hospital access block. Med J Aust 2009; 190 (7): 369-374. || doi: 10.5694/j.1326-5377.2009.tb02451.x

[9] Australian Institute of Health and Welfare. Emergency department care 2018-19: Australian hospital statistics. Canberra ACT: AIHW; 2020. Available from: https://www.aihw.gov.au/reports-data/myhospitals/sectors/emergency-department-care

[10] Australian Institute of Health and Welfare. Hospital performance: time patients spent in emergency departments in 2011-12. Canberra: AIHW; 2012. Available from: https://www.aihw.gov.au/reports/hospitals/hospital-performance-time-in-emergency-2011-12/formats

[11] Watt I, Review of the Tasmanian State Service Interim Report. [Online] Hobart: Department of Premier and Cabinet; 2020 [cited 14 December 2020]. Available from: http://www.dpac.tas.gov.au/__data/assets/pdf_file/0010/562591/Interim_Report_-_FINAL.pdf

[12] ACEM. 2019 Annual Site Census Report. 2019. [Online] Melbourne, Australia. Cited 4 December 2020. Available from: https://acem.org.au/getmedia/3d61e78f-cf25-4ab2-b7df-b94a3a64e3f8/2019_Annual_Site_Census_Report

[13] ACEM. Guidelines on Constructing and Retaining a Senior Emergency Medicine Workforce. 2015. [Online] Melbourne, Australia. Cited 13 January 2021. Available from: https://acem.org.au/getmedia/3dc2b00e-f91d-470d-bd2e-6092b9b8deb6/G23_V02_Constructing_Senior_EM_Workforce_Nov-15.aspx

[14] Australian Bureau of Statistics. Health Literacy, Australia. 2008. ABS cat. no. 4233.0, ABS, Canberra. Available from: https://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/73ED158C6B14BB5ECA2574720011AB83/$File/42330_2006.pdf