



WITNESS STATEMENT OF PROFESSOR GEORGE BRAITBERG

I, Professor George Braitberg AM, OStJ, Executive Director of Strategy, Quality and Improvement, at the Royal Melbourne Hospital (**RMH**), of 300 Grattan St, Parkville VIC 3050, say as follows:

- 1 I am authorised by the RMH and Melbourne Health to make this statement on their behalf.
- 2 I make this statement on the basis of my own knowledge, save where otherwise stated. Where I make statements based on information provided by others, I believe such information to be true.

BACKGROUND

Qualifications and experience

- 3 I have the following qualifications:
 - (a) Bachelor of Medicine, Bachelor of Surgery, University of Melbourne (1981);
 - (b) Graduate Diploma in Epidemiology and Biostatistics, University of Melbourne (2004);
 - (c) Master of Bioethics, Monash University (2014); and
 - (d) Master of Health Services Management, Monash University (2017).
- 4 I currently hold the following positions:
 - (a) Executive Director of Quality, Strategy and Improvement, RMH;
 - (b) Professor of Emergency Medicine, University of Melbourne;
 - (c) Deputy Director and Head of Emergency Medicine Program, Centre for Integrated Critical Care, University of Melbourne; and
 - (d) Adjunct Professor Health Services Unit School of Public Health and Preventive Medicine, Monash University.
- 5 I have extensive experience working in a number of public health systems within Australia, in particular the areas of emergency medicine, governance, strategy and performance and medical administration. I also have experience working in the United States of America and Vietnam and advising on matters relating to emergency medicine in Israel.

Please note that the information presented in this witness statement responds to matters requested by the Royal Commission.

6 Attached to this statement and marked 'GB-1' is a copy of my Curriculum Vitae.

Current role and your responsibilities

7 As the Executive Director, Strategy, Quality and Improvement of RMH, my responsibilities include:

- (a) clinical governance and community engagement;
- (b) business intelligence;
- (c) strategy and planning; and
- (d) guidance.

8 My role is to ensure that the systems of care that are provided at Melbourne Health are safe, timely effective and person centred. I am responsible for monitoring the performance of the organisation, ensuring there is a focus on continuous improvement while managing clinical risk as required within our clinical governance framework. The role is responsible for preparing the organisation for accreditation and working with the CEO and Executive team, in setting the strategic plan for the Board to review and endorse. The use of business intelligence to assist in achieving these outcomes is an integral part of the role. As a member of the Executive I contribute to the operational and governance activities and advise the CEO and the Board accordingly.

FUTURE NEEDS

Future trends or changes that may alter either the community's need for mental health services or the provision of services

Change in patient profile

9 The first trend is the number of patients presenting with chronic issues in addition to their mental health issues. When I first started as an emergency physician, I cannot recall seeing the complexity of presentations that are now seen in the Emergency Department. Rather than presenting with acute behavioural issues related to a single mental health issue alone, increasingly we see patients presenting with a dual or triple diagnosis, i.e. with an additional organic illness, a social vulnerability and/or substance related issues. For example, individuals experiencing mental health issues may present with alcohol or drug issues, homelessness, etc.

10 The RMH conducted a study in relation to 'Code Grey' calls within the hospital¹. The study was conducted between August 2016 and March 2017 Code grey calls are coordinated

¹ Gerdtz M. Yap CYL, Daniel C, Knott JC, Kelly and Braitberg G. Prevalence of Illicit Substance Use Among Patients Presenting to the Emergency Department with Acute Behavioural

emergency responses to situations of verbal or physical aggression. The study in question found that 40% of the patients involved in code grey calls also tested positive for methamphetamines. The study was conducted on patients who had a code grey called in the ED, not just mental health. However of the 229 patients studied, 60 were under some type of treatment order.

- 11 In addition, there are an increased number of patients who are currently presenting to public hospital who are experiencing homelessness. In my opinion, this lack of social and family support is particularly detrimental to individuals with mental health issues as it is important that the individual has support regarding their treatment and discharge plan.
- 12 This change in patient needs places an additional requirement on mental health workers to understand these additional issues, how they may affect the individual's mental health issues and how all of the individual's needs can be managed contemporaneously. Hence there is a need to work collaboratively with social workers, drug and alcohol workers, psychologists and other clinicians to provide the holistic care this cohort of patients require. For patients with these mixed vulnerabilities it can be difficult for mental health workers to assess whether they would receive the best care in a community or therapeutic hospital setting.
- 13 In addition to ensuring patients are in the appropriate therapeutic environment and ensuring they are receiving continuous care, there are changes which will be required to the nature of mental health services as well. For example, organisations providing mental health services need to prioritise a team based approach to patient care, developing and adhering to collaborative guidelines and ensuring that all staff are aware of the role they play in providing treatment in such crisis situations. Integrated treatment by teams skilled in mental health, social services, alcohol and other drug related issues as well as organic disease, would provide the best clinical outcomes, or at the very least be able to mitigate the risk of not addressing a component of complex care needs.

Additional community based care

- 14 I consider another trend to be the movement towards more community based care or other alternative treatments as opposed to treatment within traditional hospital settings. It is now generally accepted that treatment within traditional hospital settings does not result in better patient outcomes. As a result there is an increased demand for community based care for those individuals with mental health issues.
- 15 Serious consideration will need to be given to the needs of the patients within the community setting and what support community based care will need to provide. For

Disturbance: Rapid Point-of-Care Saliva Screening. Emergency Medicine Australasia. 2020. DOI:10.1111/1742-6723.13441.

example, many crisis presentations for mental health support occur after hours; if community based care was the appropriate care option, such care would need to be available during those hours. Alternatively, if treatment in a therapeutic hospital setting was the only option, consideration should be given to the community based support which would allow the hospital to safely discharge a patient with mental health issues outside of regular business hours. This would ensure there was access to inpatient beds at the right time for those that need them, rather than spend excess time waiting in the Emergency Department until a bed becomes available.

- 16 As our understanding of mental health issues has advanced there is greater understanding that the settings in which mental health issues are treated are of upmost importance. In response to this understanding, the RMH has created its behavioural assessment unit (**BAU**) to take mental health patients out of the emergency department setting into a calmer and quieter environment. This has involved relocating psychiatrists, drug and alcohol clinicians, social workers and mental health workers into that unit. While the integration of various streams has been beneficial in operating in patients with mental health issues, there are still limitations on the unit as it is a refit of existing space and the physical environment is not ideal. I consider the BAU could benefit from having additional natural light and outdoor spaces. The unit was a proof of concept and has contributed to the strategic investment by the Department of Health and Human Services into setting up crisis hubs in six hospitals across the state.
- 17 Different models of care, such as the BAU, are required to move patients out of the Emergency Department environment and may assist in reducing the need for patients to be hospitalised. Properly resourced they may be able to place a greater focus on overall wellbeing and better link the Emergency Department with community care and promote better patient follow up. As we now understand that a person's physical and mental deterioration often coincide, providing additional support resources in both the hospital and community should make a significant difference to these patients.

Developing different models of care

- 18 I think the current approach to dealing with individuals who are experiencing a mental health crisis can be quite punitive. Often restrictive practices are required when a patient presents in crisis (to protect themselves and others). Some of these presentations may be avoided if the mental health system prioritises programs targeted at wellbeing, proactively minimising the frequency of presentations with a mental health crisis. If additional and appropriately resourced community based care is available, presentation to hospital can be a last resort for these individuals rather than a first step.

- 19 For example, it is not uncommon for an individual to arrive in an Emergency Department with the police under a section 351 order.² From there they are placed into an isolation room and may be sedated in order to address their crisis immediately. Sometimes the individual can be in the Emergency Department for between 12 – 18 hours while observation and assessments are undertaken. As the focus in is on crisis containment in the Emergency Department, it is possible at the end of that period to discover that the patient has not received their regular scheduled medication and as a result the patient is now sometimes up to 18 hours behind in their therapeutic regime.
- 20 A new model of care must be developed where such patients with mental health issues receive ongoing care by trained staff addressing both acute and maintenance needs throughout their period of care. Emergency Departments are not orientated to providing, non-urgent maintenance care. Moving the patients from the Emergency Department to a safe and therapeutic environment should be a priority. Providing such ongoing care takes significant time and resources.

Use of technology

- 21 The use of technology to monitor an individual's general wellbeing is a change which would benefit Victoria's mental health system. I think there are three primary changes which, if adopted, would drive better in outcomes for patients experiencing a mental health crisis:
- (a) tracking a patient's general wellbeing, as there is clear evidence that deterioration of a patient's physical wellbeing will coincide with a deterioration of their mental state;^{3,4}
 - (b) implementing better data linkages across organisations such as hospitals, general practitioners, the Department of Justice and Community Safety (**DJCS**) and so on, to provide medical staff with a better overall picture of a patient's current mental and physical health; and
 - (c) providing better communication pathways between the hospital, community health and the patient.
- 22 In relation to data linkages, the introduction of electronic medical records in health services will assist in intra-hospital communication. However, this does not provide a data sharing solution between health services, or between health services and the community.

² *Mental Health Act 2014 (Vic) s 351*

³ Mental Health Commission of NSW (2016). *Physical health and mental wellbeing: evidence guide*, Sydney, Mental Health Commission of NSW © 2016 State of New South Wales ISBN: 978-0-9923065-8-8

⁴ The Royal Australian and New Zealand College of Psychiatrists. *Keeping Body and Mind Together: Improving the physical health and life expectancy of people with serious mental illness*. Copyright 2015

For example, systems such as the Pharmaceutical Benefits Scheme (**PBS**), the Medicare Benefits Schedule (**MBS**), and DJCS records could also be linked to allow for the individual's overall mental health to be appropriately assessed in light of all circumstances, and not just treated as a single episode of care.

- 23 As part of the introduction of the electronic medical record, Epic, at Melbourne Health, we will be introducing a portal called the Health Hub. The Health Hub will allow medical practitioners and patients to access their records securely and document any changes to their treatment plan, review their admissions to hospital, pathology results and upcoming appointments, and facilitate correspondence between medical practitioners. This is a great advancement in communication with patients; however I think it could be extended to provide an even better overall picture for medical professionals, and in particular mental health workers.

Potential impacts on different groups of Victorians

- 24 Accessing up to date records to monitor the health and psychosocial needs of patients and enhanced communication capability, if successfully implemented and supported, would provide better support to Victorians who are experiencing mental health issues along with alcohol or drug issues or homelessness and, I believe, deliver better outcomes as a result.

Preparing for and responding to these trends and to support ongoing systems transformation

- 25 Changes will need to be made to the workforce, the physical environment in which patients are treated and the resources dedicated to mental health.
- 26 I think the major support required will be sufficient resources; in particular, resources which are:
- (a) dedicated to preventing people developing an acute crisis requiring hospitalisation;
 - (b) creating community support which is able to deal with the various issues which are prevalent in the community such as housing, drug and alcohol issues, etc; and
 - (c) creating multidisciplinary skilled teams in the hospital setting to manage the comprehensive needs of the patient from time of presentation to discharge.
- 27 The change in these resources from those previously provided shows the general changes to the approach to mental health in Victoria. Until recently, support workers for different areas such as housing, drugs and alcohol and mental health have been siloed

in their approach, whereas there has been a recent push to better integrate each of those disciplines in order to achieve the best outcomes for patients.

- 28 In order to prepare clinicians and workers for this change in approach, care needs to be taken that their skill set is broad enough to work in conjunction with other specialists. For example, when I was training, I do not recall seeing as many patients with psychosocial complex needs associated with their acute mental health related crisis. Where there is good social and family support and no concomitant drug or alcohol problem, the condition can be treated by a mental health clinician alone, but as noted, this is not the common scenario seen in Emergency Departments and hence there is a need to have an integrated multidisciplinary team approach. Such integrated approaches are becoming more common.
- 29 This approach is much more 'person-centred' and overall much more beneficial to the individual.

CHARACTERISTICS AND NEEDS OF PEOPLE EXPERIENCING MENTAL HEALTH CRISES

Situations where a person is likely to need a crisis response from mental health, emergency services personnel or other medical professionals

- 30 I think a crisis response occurs when the patient is thought to be unsafe in their current environment. This may be secondary to evolution of illness, or precipitated by factors that may be psychological, social or substance related, or a "cry for help" where the patient feels they have not been able to access a clinician at the time they need it. For example, if a patient has been working with a crisis assessment and treatment team (**CATT**) for a number of days and still feels they are "out of control" or require more intensive support.

Common characteristics of people in these situations

- 31 With respect to those who may not be able to access the care they need in a timely way, it may be related to the time taken to respond or the availability of the type of care required.

Common needs that may be met by other service providers

- 32 Mental health needs are increasingly needed to be provided in combination with other health care needs, as described above.
- 33 As a result, service providers need to be aware of the specific requirements of individuals with mental health issues. For example, they should understand the importance and impact of the individual's medication, be aware of the individual's social needs, and they

should be able to identify triggers to allow them to escalate or transfer care between mental and physical health providers as required. This requires service providers to have a reasonable awareness of other specialities. For example, there should be a general knowledge and awareness of the physical needs by mental health clinicians and the mental health needs by non-mental health clinicians.

- 34 In addition, individuals with mental health needs have a range of non-health needs during crisis situations which also need to be met. For example, it needs to be ensured that all the social determinants of health are met such as having a secure home, having some form of income, ensuring the individual is not isolated and they have access to education and support networks. These needs are usually met by other service providers outside of the medical and mental health teams.

ROLE OF MENTAL HEALTH TELEPHONE TRIAGE SERVICES

Strengths and limitations of current helpline services

- 35 I have not been personally involved in mental health helpline services. I was previously involved in the Ambulance Victoria telephone service and helpline services more generally. This relates to work done on the ambulance dispatch grid and call referral service, but not necessarily related to mental health calls.
- 36 Despite my limited knowledge of the current helpline services, I consider it of great importance that people can access a clinician at any time if they have concerns about their wellbeing and needs. It is usually more convenient for both the individual, and the emergency department of a hospital, if these questions can be discussed through a telephone call rather than having to physically present to hospital.
- 37 There are limitations on helpline services, however, as by their nature they need to err on the side of caution. For example, if a patient calls a helpline service with a question regarding increasing their medication, due to the limited knowledge of the person answering the call, their response will need to be conservative to ensure no harm comes to the patient calling.
- 38 I consider that these helpline services are filling a much needed gap, however they may be less required if face to face or other care was provided within the community on a 24 hour, 7 day per week basis.
- 39 Despite this, I still consider there is a role for such helpline services in the future but it needs to be buttressed by better community care and support. Having those two resources working in parallel will assist hospitals, as fewer people will be presenting to hospital for mental health support.

The role of helplines in the mental health system of the future and changes needed to allow them perform that role

- 40 I think the major change required to allow helpline services to perform their role well is to ensure they have access to appropriate data. There is insufficient data linkages across mental health supports in Victoria. For example, if a patient attends various hospitals across the Melbourne CBD for assistance in relation to mental health issues, the information for each visit cannot be seen by all clinicians.
- 41 This results in every presentation being treated as a single episode rather than a continuous story. This limitation encourages episode based care and limiting the ability of the clinician to make a full assessment of the individual based.
- 42 While the Client Management Interface (**CMI**) exists in relation to patients with mental health issues, if a patient presents for a reason other than of their mental health issues, that presentation may not be recorded, and therefore available, on CMI. The Safe Scripts program provides some assistance with data linkages as clinicians are able to at least check where the patient has sought medication. SafeScript is a clinical tool that provides access to a patient's prescription history for high risk medicines to enable safer clinical decisions. From 1 April 2020 it is mandatory for hospital pharmacists to check SafeScript when supplying monitored medicines to patients for use outside of hospital (such as on discharge or out-patients). SafeScript assists clinicians with identifying high-risk circumstances but does not prevent clinicians from prescribing or dispensing a medicine they believe is clinically necessary.⁵
- 43 True data linkages are required to ensure that helpline services can act in a truly helpful manner, rather than always needing to act conservatively as a result of lack of information. As discussed at paragraphs 22 and 23, I think that all patient information, such as from the MBS, PBS and the DJCS needs to be accessible to allow the patient's mental health issues to be treated as a whole with any other issues they may be experiencing.
- 44 While there may be concerns regarding privacy of information, I think that people are generally open to sharing such information with their medical team as the data is being accessed for the right reasons, such as improving the health and wellbeing of the individual and improving their quality of care.
- 45 As an example, there is a model being used in Chicago, USA which I find particularly interesting and highlights what I have emphasised above; data linkage, communication

⁵ Safe Scripts. <https://www2.health.vic.gov.au/public-health/drugs-and-poisons/safescript/hospital-health-professionals>

and the need to address mental and physical health needs.⁶ This model involves having kiosks in homeless shelters which allow individuals to have baseline psychological and medical information taken as part of their use of the homeless shelter. This baseline medical information includes data such as blood pressure, blood sugar levels etc. This can then be monitored over time. The information populates the patient's electronic medical record so that it can then be utilised by the individual's physical and mental health teams to enhance the individual's overall wellbeing. As mentioned above, there is clear alignment between deterioration to a patient's physical and mental wellbeing, so it is important to address both.

ROLE OF CRISIS OUTREACH TEAMS

The role of crisis outreach teams in the mental health system of the future

- 46 I was the head of the Emergency Department at Austin Hospital when the CATT program was developed. My idea of the CATT team was that they would act as the community crisis arm for people experiencing a mental health crisis and that they would also follow up with the individual after discharge, so the hospital mental health teams could be sure that the individual's discharge back to the community was safe.
- 47 Since mental health has been deinstitutionalised, appropriate community support for those individuals who are experiencing a mental health crisis is required. I consider CATT to be a vital part of that support.
- 48 It is important that crisis outreach services, such as the CATT model, have the ability and skills to comprehensively assess people within the community, and also ensure there is timely review after the patient has been discharged.
- 49 To ensure timely review is able to take place, crisis teams need to have sufficient resources to cover all the requirements of the patient's ongoing care in a timely way. For example, 'business hours' only make up 33% of the week, with the majority of mental health services required after these hours. As a result crisis outreach services need to be available after hours to provide support at the right time.
- 50 There also needs to be an improved continuity of care plan between hospitals, emergency departments and crisis outreach services, general practitioners and other community health care providers. There are limited links between emergency departments and crisis outreach services. To ensure as many people as possible are kept out of hospitals and institutions, we need clear pathways for communication and continuity of care planning and delivery.

⁶ Rush Electronic Health Record Now Can Connect with High Stations. <https://www.rush.edu/news/press-releases/rush-electronic-health-record-now-can-connect-high-stations>

Location of the crisis function

- 51 Historically, CATT teams have always been linked to the Emergency Departments of major hospitals. If, however, the idea of the CATT was expanded to a 24 hour, 7 day per week model it would make most sense to locate those crisis functions within Ambulance Victoria as it operates on a similar model. CATT teams should provide assessment and care in people's homes when safe and appropriate to do so. If this is not possible assessment in a secure environment such as a police station or an Emergency Department may be required.

EMERGENCY DEPARTMENT RESPONSES

The types of mental health crises best treated in an emergency department

- 52 An Emergency Department is an appropriate setting for a person in a mental health crisis only where that person is not safe in the community by virtue of being a risk to themselves or others. While the Emergency Department teams will always attempt to deal with a mental health crisis in the least restrictive way, if those interventions fail then escalating physical or chemical restraints (and the expertise to safely use them) are available for use if required.
- 53 An Emergency Department is not a therapeutic environment for any patient, let alone a patient suffering from a mental health crisis. The duration of Emergency Department care for such individuals therefore should be as brief as possible before the patient is moved to the next place of care.
- 54 As Emergency Departments have a duty to ensure such patients do not abscond, they will possibly have someone watching them at all times. The physical area of Emergency Departments is designed to ensure maximum efficiency, have flexible physical design and create the easiest clinical setting for clinical staff. They are bright and noisy. They do not have adequate natural light or access to outdoors and fresh air. To maximise flexibility many of the treatment spaces are curtained rather than have solid walls, hence privacy and security can be limited. In my opinion, once the need for assessment and immediate intervention has passed, Emergency Departments are not appropriate settings for mental health patients awaiting further care.
- 55 It is for these reasons that the BAU was created at the RMH. It allows patients suffering a mental health crisis to be moved out of the Emergency Department, but also allows continued monitoring of their physical and mental state until they are well enough to move on. This also allows ongoing observation if the emergency team has started a patient on a particular drug and the patient needs to be observed for any side effects or reactions. It also allows monitoring capacity for those who have taken an overdose, are affected by alcohol or other drugs.

56 For patients who are also affected by drugs, we can usually discharge them from the behavioural assessment unit after approximately 9 hours. For those who are still experiencing a mental health crisis after that time, we can arrange to have them admitted to a multi-day bed within the RMH. Our aim remains to always take them out of the Emergency Department setting as soon as possible.

Resources available in Victorian emergency departments to respond to people experiencing mental health crises

57 The best system is one where patients, staff and equipment are kept safe – often this means that emergency departments have designated behavioural assessment rooms (**BARS**) within the Emergency Department which are designed to have no ligature points, soft walls and minimal and soft furniture with monitoring equipment secured behind a wall – all these measures are designed to minimise the opportunity for someone in an agitated or disturbed state to cause self-harm. In addition, there are some Emergency Departments that have implemented an area such as the BAU to move patients out of the main Emergency Department as soon as practicable for the reasons outlined above. These measures are similar across states and jurisdictions.

58 Additionally Victoria is introducing the crisis hub model across six hospitals.

59 In other states and jurisdictions, they have Psychiatric Emergency Care Centres (**PECCs**); wards specifically designed for people presenting to the Emergency Department with acute mental health illness who may have a length of stay of to 72 hours. They are closed wards devoid of ligature points and have lockable single bedrooms.

60 In contrast the BAU is open; it has four cubicles and two single rooms that are not locked. The two cubicles nearest to, and opposite, the nurses' station are used for patients who have taken overdoses or need close observation and monitoring following sedation. An interview room with a second point of egress is in the unit.

The frequency with which emergency department security staff are required to respond to people experiencing a mental health crisis

61 Firstly, I acknowledge how respectful and caring the security team are in responding to people experiencing a mental health crisis at the RMH. As part of a clinically lead team they support the least restrictive approach taken.

62 In my experience, the RMH Emergency Department deals with 30 code grey calls per day. A significant number of these calls are to patients affected by drugs at the time of presenting to the Emergency Department.

63 The RMH is now actively increasing the number of 'planned' code greys. This is a result of wanting to ensure we are providing the best care to our patients while also not risking the safety of other patients and our staff. In a 'planned' code grey, we plan to have security personnel present during times where we consider such support will likely be required. For example, if we have to tell a patient that they have to be admitted and we are concerned about an adverse response, having security personnel present provides a physical deterrent. This method is working well and the RMH aims to increase the proportion of 'planned' code greys rather than reactive code greys taking place.

a. *The impact of the use of alcohol and other drugs (including methamphetamine) by patients in the emergency department on the capacity of health services to provide an appropriate and therapeutic mental health response*

64 The increased use of alcohol and other drugs has had a significant effect on Emergency Departments and staff members. The main effects that we have seen at the RMH are:

- (a) an increased workload;
- (b) increased stress on staff; and
- (c) increased violence and aggression from patients.

65 Emergency Departments are also increasingly required to provide a safe place to observe patients while they wait for effects of the drugs and/or alcohol to wear off.

66 While the increased use of drugs and alcohol are having an effect on Emergency Departments, it should be noted that Emergency Departments are not ideal environments for people suffering a mental health crisis while under the influence of stimulants, due to the physical characteristics of Emergency Departments as discussed above. As Emergency Departments are also mostly focused on acting as a 'triage' type service, rather than providing ongoing therapy for patients, often patients experiencing a mental health crisis will not receive their regular medications nor will they be kept to their regular routine. This can create a safety issue for the patient when they are moved to the next place of care and creates additional workload for Emergency Department staff.

67 Emergency Departments in Victoria are funded to have specialist drug and alcohol workers on hand to assist with the issues being raised by those patients presenting under the influence of drugs and alcohol. I am not sure whether all Emergency Departments have the staff to fulfil this specialist role.

68 Emergency Departments have a pivotal role in assessment, management and referral of patients with acute behavioural disturbance and mental health crisis. However, once this care is no longer required, adequate support must be provided, either in the hospital or

community setting so that patients can be moved to their next place of care in a safe, timely effective and person centred way.

BEST PRACTICE RESPONSE

- 69 I think the RMH's BAU is a great innovation in mental health crisis response. The key feature of this unit is bringing together expertise to support the patient's mental health needs in conjunction with their psychosocial and general health needs.
- 70 The other benefit to the behavioural assessment unit is that the patient is still under the care of one key person who will co-ordinate the various specialist supports.
- 71 Expanding such collaborative, multi-disciplinary care models allows all the patient's needs to be addressed comprehensively and prioritises their general wellbeing rather than focusing only on one aspect of care. An example of a condition which needs interdisciplinary input for success is in the care of patients with an eating disorder. These patients require general and mental health assistance to achieve better outcomes.
- 72 Co-design and embedding patients with lived experiences into an integrated team is essential to meet the goal of person centredness. Patients with lived experience, consumers and carers, provide a "real world" perspective that may not be apparent to a treating team.
- 73 I have not undertaken any research as to what is being undertaken in an international setting, however I imagine it would be prioritising similar collaborative approaches.

POLICE

Role of police in an 'ideal' mental health system

- 74 There are a number of patients who are brought into Emergency Departments by police under section 351 orders.
- 75 In my experience over the last 30 years, Victoria Police have become more sensitive to and understanding of the needs of mental health patient. The conversations with police officers are usually about supporting the patient, rather than the conversations I recall from the past where police were angry about the inconvenience of having to transfer a patient to hospital (this is my subjective recall over many years of practice).
- 76 Like any crisis situation, the role of the police is to take control and contain the situation to avoid harm to other members of the community, including other services such as paramedics.

77 I do not think the role of police needs to change. There will always be situations where a police presence is required to bring people into the health system. Of course, de-escalation should always be practiced in the first instance but I think it is appropriate to have the police lead situations where there is a risk to the community, patients or health care workers.

a. *The role of police in attending a mental health crisis as back-up for ambulance or other health workers*

78 I think that the police play a key role in providing back-up to ambulance and other health care workers. Safety of the healthcare worker is of paramount importance and healthcare workers should not put themselves in harm's way. This is often a difficult situation as it may result in moral conflict between the need to care for a patient in crisis and protect oneself from harm.

79 This is partially a result of health care workers being more aware of their rights regarding workplace safety and the zero tolerance policy regarding occupational violence. At the RMH we ensure that all staff members are aware of the policy and are aware that the police can be contacted in order to enforce it at any time.

80 I have also witnessed police officers be a great support system for paramedics when violent or aggressive patients need to be transferred to hospital.

Strategies for reducing the need for police involvement in mental health crises

81 There are a number of patients who are brought into Emergency Departments under section 351 orders.

82 To reduce police involvement in mental health crises, the mental health system in Victoria needs to have a greater focus on overall wellness and earlier detection of people experiencing mental health crises.

83 There have been a number of situations where people have been on a deteriorating pathway and opportunities to intervene have been missed. I think prioritising those situations would have a great effect on the number of crises for which police involvement is required.

a. *Examples of successful models, either in Victoria or in other jurisdictions*

84 In order to reduce the involvement of police in mental health crises, community based programs such as the Police, Ambulance and Clinical Early Response (**PACER**) program, which address the patient's issues within the community, should be given additional resources and funding. Such programs would allow an expert to assess the

patient in the community, de-escalate the situation and bring the patient into hospital (if necessary) without the involvement of police.

- 85 I am not aware of any jurisdictions which do not have any police involvement in mental health crises, especially because they are usually the organisation who is called when there is someone whom the community deems to be acting strangely.

AMBULANCE

Circumstances when people experiencing a mental health crisis should be transported to hospital by ambulance

- 86 People experiencing a mental health crisis will need to be transported to hospital by ambulance where the skill set of a paramedic is required.
- 87 In the case of a section 351 order, having a paramedic as part of the transfer team is usually much more therapeutic than only having police involvement.
- 88 The other situation is where family members or concerned people have called for the patient to be transferred to the hospital and the patient has not agreed to attend. In my experience, the paramedics will usually be able to convince a patient to attend hospital.
- 89 Overall, my experience of ambulances transferring patients to hospital are in situations where they are providing a 'safety net' for those people who may not make the right choice for themselves.

Current strategies for reducing the need for ambulance call outs

- 90 Overall, if we want to manage people experiencing mental health issues within the community and reduce the need for ambulance involvement, we need to give people the tools, such as accessing information and co-ordinating care in the community.
- 91 For example, telephone triage systems are a single point of contact for the patient which is simple and allows for the dispatch of mental health workers, nurses or paramedics as required. When additional resources are given to community care the result is that only the most severe cases of mental health crisis are presented to hospital for admission.
- 92 Such remote assessments are becoming more common across various disciplines. The use of telehealth consultations opens up the possibility of having the system more responsive to the needs of the patient and their families/carers. For example, the RMH is involved in a youth onset dementia trial, where, rather than have people attend the hospital for an appointment, the appointment is undertaken via telehealth. Similar steps

could be taken in other disciplines of mental health space, to improve access to specialist care.

COLLABORATION BETWEEN POLICE AND EMERGENCY SERVICES

- 93 I believe there is good cooperation between emergency services in response to a mental health crisis.
- 94 At the RMH we have a good relationship with the Victoria Police liaison team. We also have access to representative police officers who we know we can contact with concerns. Overall, I think the process between the RMH and Victoria Police has improved over time. This may be a result of the demographic of patients who are admitted to the RMH; for example, we receive a higher number of drug and alcohol affected individuals, and a lower number of older people, for treatment. This increased contact with Victoria Police may have progressed the relationship between the two organisations as we work quite closely with one another.

INTERSECTION BETWEEN MENTAL HEALTH AND PHYSICAL HEALTH

- 95 While I think it is an advantage to integrate services which may assist in treating individuals with mental health issues, I think there is an additional training and education piece which should be prioritised to ensure that emergency doctors and nurses are not deskilled as a result of integrating such services. Conversely, it should also be emphasised that psychiatrists and other mental health workers need to retain basic physical assessment skills. This approach provides a risk mitigation strategy, particularly by promoting earlier escalation in clinical deterioration.
- 96 Since mental health teams have been introduced to Emergency Departments, I have observed a degree of deskilling amongst emergency and general hospital clinicians in being able to:
- (a) assess mental health needs;
 - (b) understand when mental health issues need to be escalated; and
 - (c) identify the early steps which can be taken to avoid intervention.
- 97 To support such inter-disciplinary skill sets across clinicians, hospitals need to implement clearer guidelines and support better multidisciplinary education programs.

QUALITY AND SAFETY

Best practice regulatory approaches to safety and quality in health service delivery

98 I consider the best practice approach to be the implementation of a clear clinical governance framework. This involves ensuring that the service is performing well in relation to each of the specific domains of:

- (a) leadership;
- (b) best clinical practice;
- (c) consumer participation, including around physical spaces;
- (d) workforce education; and
- (e) risk management.

These domains combine to provide safe, timely effective person centred care.

99 Health services usually have good systems to identify risk and monitor clinical incidents. It is easier to “count” a key performance indicator (**KPI**) based upon time; time to triage, time to the catheter lab for an acute myocardial infarct. However designing key KPIs that define effective care are much more difficult. This is an issue even at the RMH. It is difficult to define, let alone measure effectiveness. I think the way to ensure that health services are effective is to benchmark outcomes against other services. Further discussion of what these patient related outcome and experience measures are needs to occur.

100 Historically, hospitals have not monitored mental health indicators in the same way they have monitored non mental health indicators. Mental health KPIs, when measured, are usually focused on areas such as restrictive practice but not on effective care.

Information on quality and safety standards, incidents or other data is provided by the RMH to governing bodies

101 At the RMH we monitor our quality data at local, divisional, executive and board levels, using the eight national standards as the base. In addition, we have added to our organisational suite KPIs that are of interest to craft groups and often kept in registries. Sometimes organisational KPIs only consider whole of hospital service delivery. We wanted to include local and speciality measures that clinicians feel demonstrate safe timely and effective person centred care at an individual patient level – for example, time from arrival with an acute myocardial infarction to the catheter lab or time of arrival of a stroke patient to have an endovascular clot retrieval procedure performed. This data is monitored at different levels of the organisation and improvement projects are identified where applicable. Monitoring clinical risk and effectiveness of care are paramount to good governance, and necessary to ensure the organisation has general oversight and

awareness of what is taking place within the hospital. These measures underpin our improvement process. Identifying the right measure, establishing a best practice target and designing the process to achieve the target is the basis of a continuous improvement framework that supports a solid governance approach.

- 102 Melbourne Health has been recently accredited (09/2019) by the Australian Commission on Safety and Quality in Health Care (**ACSQHC**). The accreditors assessed the organisation including our mental health service against the eight national standards. Pleasingly the organisation met all of the standard requirements and received a special mention in Standard 2; Partnering with Consumers. This process, carried out over five days by 18 accreditors, was thorough and reassured the organisation that our quality and safety systems were robust.
- 103 Recently Melbourne Health has integrated the mental health service into its Divisional structure. In so doing the executive, quality and operations activity of North West Mental Health Service is aligned and monitored with the rest of Melbourne Health.
- 104 This change means that the quality of care provided by our mental health service has more accountability to my position as the Executive Director of Quality, Strategy and Improvement and reinforces that mental health is as important as any other clinical care stream within the hospital. I consider this approach supports de-stigmatisation of mental health issues within the organisation and will assist in elevating our focus on partnering with patients, families and consumers. In these areas our North West Mental Health Service excels.

Strengthening existing standards, regulatory frameworks or independent oversight mechanisms to improve the quality and safety of mental health services?

Data linkage

- 105 As discussed at paragraphs 22 and 23, I think that Victoria's mental health system would significantly benefit from the implementation of an expansive data linkage system.

Key performance indicators

- 106 I consider that in order to improve the quality and safety of mental health services at the RMH a better suite of KPIs need to be developed. This is in addition to the critical changes which need to be implemented around the KPI of effectiveness. I cannot provide the exact KPIs but believe they should be benchmarked and focussed on patient outcomes.

PHYSICAL INFRASTRUCTURE

a. *The ideal physical environment*

- 107 In my experience the factors which make an ideal physical environment are:
- (a) the ability to separate male and female patients;
 - (b) the inclusion of common areas;
 - (c) seclusion rooms which are as pleasant as possible;
 - (d) seclusion rooms where patients need observation (and/or monitoring) should have appropriate equipment which is behind locked doors to ensure it is accessible to staff but not patients who may self-harm;
 - (e) having access to outdoor areas as appropriate;
 - (f) allowing as much natural light into the physical environment as possible;
 - (g) having aesthetic environments; and
 - (h) be co-designed with mental health patients and consumers.
- 108 In order to ensure the physical environment is as optimal as possible, co-design is vital. This also provides patients with mental health issues a level of involvement and empowerment over their own treatment space.
- 109 A physical environment which is the opposite of the one described, does not create a healing, restorative, respectful or safe space for people experiencing a crisis. In some respects, that environment is very similar to an emergency department setting.

b. *Impact of particular design features*

- 110 I believe that environments such as Emergency Departments, with constant bright lights and without any natural light, have a significantly negative impact on those experiencing a mental health crisis. A lack of natural light disrupts an individual's circadian rhythm and is counterintuitive to their treatment goals.
- 111 Closed doors should be avoided where possible when dealing with a patient experiencing a mental health crisis, however due to the layout of Emergency Department cubicles, this may be necessary. Additionally, Emergency Department cubicles are arranged in rows with limited lines of vision. Prolonged stays in the Emergency Department with limited movement may escalate behaviours associated with a mental health crisis.
- 112 While Emergency Departments are places where immediate issues can be addressed, keeping patients experiencing a mental crisis there for longer periods of time can be

detrimental. If a patient does need to be admitted, this should be facilitated as soon as possible, and lengthy stays in the Emergency Department be avoided.

113 This is why a patient with mental health issues should be moved out of the Emergency Department as soon as possible.

114 The positive impacts which come from having an environment which is supportive of recovery are simply better outcomes for patient. Emergency Departments are not designed for long term care. Due to the set-up of Emergency Departments and the focus on 'triaging' patients, the orientation of a clinician in an Emergency Department is on a pathway to the next patient; the next person in the queue becomes the focus. I do not believe this is conducive to better outcomes for those patients with mental health issues.

WORKFORCE

a. *Multi-disciplinary care*

115 Multidisciplinary care is facilitated by having those disciplines co-located to ensure the best outcomes. As a result of being co-located, those disciplines are able to have impromptu professional conversations which are of vital importance when an integrated approach is being taken to a patient's care. Once such services are geographically spread out you lose the ability to effectively implement such an integrated approach.

b. *Consumer-focused care*

116 People present at an Emergency Department because they are in crisis and need assistance. As health care workers we should not be judging those needs by our own frame of reference. Most health care workers have a stable home life, whereas those presenting with mental health issues do not always have those same social determinants. As a result, it needs to be impressed onto health care workers that it is not fair to impose their opinions and values onto patients.

117 The role of a mental health worker, and even health care workers more generally, is to not judge the patient but instead simply work out how we can provide them with the assistance they need.

118 At the RMH, we impress this upon our staff by starting every meeting with a patient story. We video patients, families and carers to hear their perspective of the care they received while a patient at the RMH. This shows our staff that their perspective of patient care is not necessarily the same as the patient's perspective and also emphasises the need to leave their judgments at the front door. This kind of attitude is being taught more frequently at universities; however, it needs to be an ongoing education piece for all health care workers.

c. *Family-centred care*

119 In order to provide a therapeutic environment for people experiencing a mental health crisis we need to ensure that their family and social network are our collaborators. The family of a patient has a particularly influential role, especially in being able to send a patient home to a safe and secure environment.

120 While it is often preferable for families to be involved, mental health clinicians need to ensure that we respect the autonomy of the patient and have them agree to have their family involved in such treatment plans.

d. *Recovery-oriented practice*

121 As health professionals, we need to ensure that all patients are aware of the importance of their overall wellbeing. This can play a large role in responding to their social determinants to allow us to provide care that maximise their wellbeing.

122 It should also be ensured that mental health treatment is not being provided in a siloed way. Enhanced community care would be beneficial as it would allow us to track the wellbeing of patients and have reassurance that there is a professional assessment being undertaken which will not only assess general wellbeing but will also be able to pick up their mental health needs at an early stage.

COVID

The emerging changes in health service delivery as a consequence of COVID-19

123 The changes to health care delivery that I have observed as a result of COVID-19 are as follows.

Telehealth

124 I have observed an increased use of telehealth. Up to 50% of outpatient visits are currently via telehealth and not face to face. This is a dramatic increase from the 10-15% previously achieved.

125 As with our Youth Onset Dementia Program I believe for the right person a telehealth consultation is advantageous:

- (a) it can be done from the patient's own home;
- (b) there is less wasted time waiting;
- (c) the level of anxiety may be reduced as the consultation is carried out in familiar surroundings; and

- (d) it promotes care at home with specialist teams such as the CATT team to be able to participate in conference with the psychiatrist or have the consultation in the presence of the patient's GP, carer, or other significant person.

Esprit de corps

- 126 This has been a fascinating time of clinical teams coming together and working out ways to deliver care in adverse circumstances. Development of models of care, rapid clinical guidelines, engagement of different craft groups and specialities and respect and trust across craft groups has never been higher. There has been an amazing amount of productive engagement as people come together to prepare "for battle".

Decrease in Emergency Department attendances including mental health

- 127 For patients leaving the RMH Emergency Department leaving with a mental health diagnosis (ICD10 F codes excluding Dementia and Delirium) and Tox diagnoses defined by International Classification of Diseases 10th edition (ICD 10) coding categories of F10 and T36–T65. According to this review there has been a 10% reduction in March and 20% reduction in April. Overall Emergency Department presentations were down 20-40% in March/April so these numbers are in proportion to general Emergency Department reduction.
- 128 This observation has been noted across other Emergency Departments in Australia and internationally. The concern is how COVID-19 is impacting on usual care. Does this mean that patients are self-caring more, are more resilient, are coping better? Or does this mean that there is delay to care and unintended consequences of a health system that has been singularly focussed on preparing for unprecedented demand in critical illness? What is the impact on morbidity and mortality in this group and will there be rectification on the "other side of the curve"?
- 129 While there is a place and a need for workers to sit and plan together, in my experience appropriate use of technology such as Zoom and Webex can improve efficiency and assist in time management.

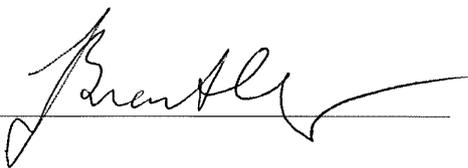
Other impacts

- 130 There has also been community goodwill towards healthcare workers during this period.

Long term impact on approaches to service delivery

- 131 As noted above, telehealth can be an advantage in mental health service delivery. If patients have successfully managed their conditions via self-care, then this should be continued and built into the management plan.

132 Maintaining our focus on working together should be carried forward for the benefit of all our patients.

sign here ▶ 

print name GEORGE BRAITBERG

date 19-5-2020.



**Royal Commission into
Victoria's Mental Health System**



ATTACHMENT GB-1

This is the attachment marked 'GB-1' referred to in the witness statement of Professor George Braitberg dated 19 May 2020.

Professor George Braitberg

CURRICULUM VITAE

George Braitberg AM OSTJ
MBBS, FACEM, FRACMA, FACMT
MBioethics MHLthSrvMt Grad Dip Epi Biostats.
Executive Director of Quality, Strategy and Improvement
Royal Melbourne Hospital
Professor of Emergency Medicine University of Melbourne
Deputy Director and Head of Emergency Medicine Program, Centre for Integrated
Critical Care, University of Melbourne
Adjunct Professor, Health Services Unit
School of Public Health and Preventive Medicine, Monash University

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Professor George Braitberg

TERTIARY EDUCATION	1971-1981,	University of Melbourne/ Austin Hospital
RESIDENCY	1982-1988	
	PGY 1	Western General Hospital
	PGY2 and 3	Prince Henry's Hospital
	PGY4	Bethesda Hospital, Rehabilitation Registrar
	PGY5 and 6	Alfred Hospital, Emergency Medicine Registrar
	PGY 7	Prince Henry's Hospital, Emergency Medicine Registrar.
FELLOWSHIP		
	1988	Australasian College for Emergency Medicine
	1997, 2010	American Board of Emergency Medicine
	2000	American Board of Emergency Medicine, Medical Toxicology Sub Boards
	2005	Elected Fellow of the American College of Medical Toxicology
	2017	Royal Australasian College of Medical Administrators
POSITIONS HELD	1989-1991	Director of Emergency Medicine, Moorabbin Campus, Monash Medical Centre.
	1991-1993	Deputy Director, Emergency Medicine, Consultant Medical Toxicologist St. Vincent's Hospital, Melbourne.
	1993-1995	Medical Toxicology Fellow, Good Samaritan Regional Medical Center, Phoenix, Arizona.
	1995-1996	Deputy Director, Emergency Medicine, St. Vincent's Hospital, Melbourne.
	February to April 2004,	Visiting Scholar, Vietnam Poison Centre, Bach Mai Hospital Hanoi Vietnam
	1996-2007	Director of Emergency Medicine Department of Emergency Medicine Austin Health Studley Road, Heidelberg. Victoria 3084 Co Director Medical Toxicology Service Austin Health
	2007-2014	Professor of Emergency Medicine Monash University Director of Emergency Medicine Southern Health
	January 2012	Program Medical Director Emergency Medicine and Ambulatory and Community Care

Professor George Braitberg

May 2014- Dec 2017
 Professor of Emergency Medicine, Faculty of
 Medicine, Royal Melbourne Hospital
 Director of Emergency Medicine, Royal Melbourne
 Hospital
 Professor of Emergency Medicine
 University of Melbourne

July 2017 – Dec 2017
 Senior Medical Advisor Safer Care Victoria
 (secondment from Melbourne Health)

December 2017
 Elected to Fellowship of the Royal Australasian
 College of Medical Administrators

May 2018
 Appointed Deputy Director and Head of Emergency
 Medicine Program, Centre for Integrated Critical
 Care, University of Melbourne

CURRENT POSITION

Executive Director of Quality, Strategy and
 Improvement, Royal Melbourne Hospital

Professor of Emergency Medicine
 University of Melbourne

Deputy Director and Head of Emergency Medicine
 Program, Centre for Integrated Critical Care,
 University of Melbourne

Adjunct Professor Health Services Unit School of
 Public Health and Preventive Medicine, Monash
 University (reappointed for a further 5 years in 2019)

DEGREES HELD December 1981
 Bachelor Medicine, Bachelor Surgery, University of
 Melbourne (MB.BS)

April 2004
 Graduate Diploma in Epidemiology and
 Biostatistics, University of Melbourne (Grad Dip
 Biostats Clin Epi)

December 2014
 Master of Bioethics, Monash University (MBEthics)

June 2017
 Master of Health Services Management, Monash
 University (MHIthServMt)

Professor George Braitberg

AWARDS

December 2009 Tom Hamilton Oration, Australasian College for
Emergency Medicine

December 2018 ACEM Service Award

HONOURS

January 2018 Member of the Order of Australia (AM)

October 2019 Officer of the Order of St John

Professor George Braitberg

CONCURRENT POSITIONS

Governance, Strategy and Performance

Current

- Executive Director of Quality, Strategy and Improvement, Royal Melbourne Hospital
 - Directorates:
 - Clinical Governance and Community Engagement
 - Business Intelligence
 - Strategy and Planning
 - Guidance
- Director, Board of St Johns Ambulance (Vic) (appointed May 2015)
- Board member Israeli Institute of Emergency Medicine Research (appointed February 2016)
- Medical Advisor, Ambulance Victoria (appointed March, 2016)
- Member Australian Institute of Company Directors (July 2016)
- Director, Australasian College for Emergency Medicine Foundation (appointed February 2017)
- Member, Victorian Clinical Council (appointed March 2017)
- Member, Boards Ministerial Advisory Committee (appointed March 2017)
- Melbourne Health:
 - Executive Member
 - Executive Committee Melbourne Health
 - Clinical Governance and Improvement Committee
 - Clinical Quality Safety and Improvement Committee
 - Medication Safety Committee
 - Clinical Ethics
 - Patient Flow Committee
 - Patient Safety Committee
 - Expert Advisory Group EMR implementation

Past

- Senior Medical Advisor Safer Care Victoria (appointed June 2017)
- Director Board Barwon Health Victoria (appointed July 2016 -2018). Chair Quality Committee July 2017-2018
- Director, Board of Ambulance Victoria (appointed July 2008, reappointed July 2013 and retired December 2014)
- Chair, Quality, Performance and Innovation Committee, Ambulance Victoria (July 2011 to December 2104)
- Member and Inaugural Chair, Steering Committee, Emergency Care Improvement and Innovation Clinical Network (2007-2014)
- Member Victorian Quality Council (2003-2006)
- Member Postgraduate Medical Council of Victoria, Accreditation Subcommittee (2015- February 2016)

Medical Toxicology

- Honorary Toxicologist, Austin Toxicology Service, Austin Health Medical Consultant to the Victorian Poisons Information Centre.

Professor George Braitberg

- Section editor, (Toxicology and Pharmacology) Emergency Medicine Australasia
- Reviewer, Emergency Medicine and Toxicology, Medical Journal of Australia, Australian Family Physician, International Journal of Medical Toxicology.
- Fellow by election to the American College of Medical Toxicology (since September 2005)
- Advanced Hazardous Life Support Regional Director, Australasia (since 2001)
- Editor for TOXINZ database, developed jointly with the University of Otago and the New Zealand National Poisons Centre.

Emergency Medicine

Current

- Council Member, Council of Advocacy, Practice and Partnerships Australasian College for Emergency Medicine
- Board Member, Victorian Faculty, Australasian College for Emergency Medicine
- Member ACEM Research Committee
- Member, Primary Examination Committee, Australasian College for Emergency Medicine
- Member, Senior Court of Examiners, Australasian College for Emergency Medicine
- Member of the Emergency Medicine Clinical Trials Network (EMCTN)
- Member of Panel of Accreditors, Australasian College for Emergency Medicine
- Member, Specialist International Medical Graduates (SIMG) Assessment Panel, Australasian College for Emergency Medicine
- Member Quality and Patient Safety Committee Australasian College for Emergency Medicine
- Member, Mentoring Reference Group, Australasian College for Emergency Medicine
- Reviewer for Emergency Medicine Australasia, Emergency Medicine Open Journal, Australian Family Physician, Medical Journal Australia, Family Physician, Emergency Nursing Australia.

Past

- Immediate past Chair of Peer Review Examiners, Australasian College for Emergency Medicine
- Censor for Victoria, Australasian College for Emergency Medicine (retired November 2006 after 11 years)
- Member, Expert Advisory Panel - Review of published evidence on the use of thrombolytic therapy in acute ischemic stroke for the Australasian College for Emergency Medicine, (work completed and published August 2016)
- Member of the International Emergency Medicine Committee for the Australasian College for Emergency Medicine
- Member Australasian College for Emergency Medicine Foundation (till 2019)

Medical Administration

Current

- Member, Board of Censors, Royal Australasian College of Medical Administration (RACMA)

Professor George Braitberg

- Member, RACMA Assessment Panels for the comparability assessment of Specialist International Medical Graduate (SIMG)
- Member, RACMA Curriculum Steering Committee
- Member, RACMA Court of Examiners
- Senior Advisor. Implementation Science unit for Master of Health Services Management Monash University (MPH5237)

Health Review and Improvement

Current

- Victorian Stroke Telemedicine Steering Committee and the Research and Evaluation subcommittee (2013, current)
- Member Victorian Agency for Health Information Clinical Measurement and Reporting Committee
- Member Safer Care Victoria Data Linkage Governance Committee
- Member Victorian Hospital Association Voluntary Assisted Dying Clinical Governance Committee

Past

- Member Expert Panel on Aircraft Cabin Air Quality (EPAAQ) Australian Government Civil Aviation Safety Authority, (2008- 2010)
- Carbon Monoxide Panel. Evaluation of the State Emergency Response to Elevated CO levels (Department of Health Victoria (2014, current)
- Member, National Heart Foundation Research Expert Advisory Panel

Digital Transformation in Health

- Member, Victorian Agency for Health Information Clinical Measurement and Reporting Committee (appointed March 2017)
- Member Artificial Intelligence in Medicine Surgery and Healthcare (AMSAH) December 2018
- Clinical Information Sharing Advisory Group (CISAG) appointed February 2019
- Safer Care Victoria Data Linkage Governance Group appointed February 2019

Community Involvement

- Medical Director Chevra Hatzolah, Melbourne, Volunteer First Responder organisation (1999 - 2019).
- Guide, Jewish Holocaust Museum and Research Centre (current)

Current Academic Appointment

Professor of Emergency Medicine, Department of Medicine, Melbourne University

Melbourne University

- Professor of Emergency Medicine, Faculty of Medicine, Royal Melbourne Hospital
- Head and Academic Lead for Emergency Medicine, Centre for Integrated Critical Care Medicine, University of Melbourne (established May 2018)
- Mentor 2019 Melbourne School of Population and Global Health
- Course Facilitator of Specialist Certificate in Disaster and Terror Medicine/Health Management

Professor George Braitberg

Other Educational Activities

- Honorary lecturer First Part FRACP course Victoria
- Lecturer CBR Course, Department of Human Services, Victoria
- Invited lecturer on Medical Toxicology to resident and registrar group in both rural and metropolitan hospitals
- Lecturer to Critical Care Nursing Course in emergency medicine and medical toxicology.
- Examiner medical students, University of Melbourne and Monash University
- Past MD Candidates
 - Dr. James Malcolm Hendrie, in his study entitled, “An Experience in Adverse Events Detection in an Emergency Department: Incidence, Nature and Outcome of Events.” Produced two peer reviewed publications.
 - Dr Dianna Egarton-Warburton, in her study examining the management of nausea and vomiting in the Emergency Department. Produced two peer reviewed publications

Memberships

- The Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists
- American Academy of Clinical Toxicology
- Fellow of the American College of Medical Toxicology (by election 2005)
- Member Australian Institute of Company Directors (July 2016)

International Activities

- Currently co-author of the Israeli Emergency Medicine curriculum which was approved as the only Government endorsed training program for emergency physicians in Israel
- Advisor to the Israeli Ministry of Health Steering Committee on “Improving the patient experience in Emergency Departments,” (a \$US6M funded project over 3 years)
- Member of the Israeli Institute of Emergency Medicine Research

Presentations

Please note a list of presentations has not been included but can be supplied on request.

Publications

Abstracts

List provided on request

Peer reviewed Research Studies

1. Chan BC, Grudins A, Whyte IA, Dawson AH, Braitberg G, Duggan GG. Serotonin Syndrome resulting from drug interactions. MJA 1998;169:523-525
2. Braitberg G and Vanderpyl MMJ. Treatment of cyanide poisoning in Australasia. Emergency Medicine. 2000;12,232-240

Professor George Braitberg

3. Lee V, Kerr FJ, Braitberg G, Louis WJ, O'Callaghan C, Frauman AJ, Mashford. The impact of a Toxicology Service on a Metropolitan Teaching Hospital. *Emergency Medicine*. 2001; 13:33-38.
4. Parkin DJ, Ibrahim K, Dauer RJ, Braitberg G. Prothrombin Activation in Eastern Tiger Snake bite. *Pathology*. 2002;34(2):162-166
5. Richardson JR, Braitberg G and Yeoh M. Multidisciplinary assessment at Triage—A New Way Forward. *Emergency Medicine Australia* (2004) 16,41-46
6. Yeoh M and Braitberg G. Carbon Monoxide and Cyanide Poisoning in Fire Related Deaths in Victoria, Australia. *J Tox Clin Tox* 2004;42(6):855 – 863
7. Oakley E, Crellin D, Barty N, Braitberg G Young S. Improving emergency care for children: A model of collaboration between emergency departments. *Emergency Medicine Australasia* 2004;16, 417–424
8. Oakley E. Braitberg G. Processes and impediments in moving patients from the emergency department: Pilot study. *Emergency Medicine Australasia*. 2005;17(3):266-73
9. Taylor DMcD, Robinson J, MacLeod D, Braitberg G. Pilot study of therapeutic errors reported to the Victorian Poisons Information Centre. *Journal of Pharmacy Practice and Research*. 2006;36(2):1-4
10. Ho BCH, Bellomo R, McGain F, Jones D, Naka T, Wan L, Braitberg G. The Incidence and Outcome of Septic Shock Patients in the Absence of Early-Goal Directed Therapy. *Crit Care* 2006; 10:3:80
11. Hendrie J, Sammartino L, Silvapulle MJ, Braitberg G. Experience in adverse events detection in an emergency department: Incidence and outcome of events. *Emergency Medicine Australasia* 2007;19(1):16-24
12. Taylor SE. Braitberg G, Lugt J. Multifaceted education initiative minimizes pethidine prescribing in the emergency department. *Emergency Medicine Australasia*. 2007;19(1):25-30
13. Hendrie J, Sammartino L, Silvapulle MJ, Braitberg G. Experience in adverse events detection in an emergency department: Nature of events. *Emergency Medicine Australasia*. 2007;19(1):9-15
14. Chan T, Braitberg G, Elbaum D and Taylor D. Hatzolah First Responder Service – To Save a Life. *MJA* 2007;186:639-642
15. Swaminathan A, Martin R, Gamon S, Aboltins C, Athan E, Braitberg G, et al. Personal protective equipment and antiviral drug use during hospitalization for suspected avian or pandemic influenza. *Emerg Infect Dis*. 2007;13(10):1541-1547
16. Taylor D, Robinson J, MacLeod D, MacBean C and Braitberg G. Therapeutic errors among children in the community setting: nature, causes and outcomes. *Journal of Paediatrics and Child Health*. 2009;46:1-6
17. Rajasagaram U, Taylor D, Braitberg G, Pearsell JP, Capp BA. Paediatric pain assessment: Differences between triage nurse, child and parent. *Journal of Paediatrics and Child Health*. 2009;45:199–203.
18. Taylor DM, Robinson J, MacLeod D, MacBean CE, Braitberg G. Therapeutic errors involving adults in the community setting: nature, causes and outcomes. *Aust N Z J Public Health*. 2009 Aug;33(4):388-94
19. Adam W, Hutchison AW, Malaiapan Y, Jarvie I, Barger B, Watkins E, Braitberg G, Kambourakis T, Cameron JD and Meredith IT. Prehospital 12-Lead ECG to Triage ST-Elevation Myocardial Infarction and Emergency Department Activation of the Infarct Team Significantly Improves Door-to-Balloon Times Ambulance Victoria and MonashHEART Acute Myocardial Infarction (MonAMI) 12-Lead ECG Project. *Circ Cardiovasc Intervent*. 2009;2:528-534

Professor George Braitberg

20. Craig S, Braitberg G, Nicolas C, White G, Egerton-Warburton D. Assessment and feedback in emergency medicine training: Views of Australasian emergency trainees *Emerg Med Aust.* 2010;22:537-547
21. Nasis A, Meredith IT, Nerlekar N, Cameron JD, MBBS, Antonis PR, Mottram PM, Leung MC, Troupis, Crossett M, Kambourakis AG, Braitberg G, Hoffmann U and Seneviratne SK. Acute Chest Pain Investigation: Utility of Cardiac CT Angiography in Guiding Troponin Measurement. *Radiology.* 2011;259(3):
22. Morphet J, Innes K, Braitberg G and Mosley I. The Role of Nurses in Improving Outcomes of Acute Stroke Patients. . *Australas Emerg Nurs J.* 2011;14, S14
23. Marmor GO, Braitberg G, Nicolas CM. Medication Prescribing, Surveillance and Safety in Australasian Emergency Departments. *J Pharm Pract Res* 2011; 41:113-117
24. Bell L, Stargatt R, Bosanac P, Castle D, Braitberg G, Coventry N. Child and adolescent mental health problems and substance use presentations to an emergency department. *Australas Psychiatry.* 2011 Dec; 19(6):521-5.
25. Meek R, Braitberg G, Nicolas C and Kwok G. Effect on emergency department efficiency of an accelerated diagnostic pathway for the evaluation of chest pain. *Emergency Medicine Australasia.* 2012;24, 285–293
26. Mosley I, Morphet J, Innes K, Braitberg G Triage assessments and the activation of rapid care protocols for acute stroke patients. *Australas Emerg Nurs J.* 2013;16(1):4-9
27. Delaney A, Peake SL, Bellomo R, Cameron P, Holdgate A, Howe B, Higgins A, Presneill J, Webb S; ARISE Investigators. Australasian Resuscitation In Sepsis Evaluation trial statistical analysis plan. *Emerg Med Australas.* 2013;25(5):406-15.
28. Delaney AP, Peake SL, Bellomo R, Cameron P, Holdgate A, Howe B, Higgins A, Presneill J, Webb S; ARISE investigators. The Australasian Resuscitation in Sepsis Evaluation (ARISE) trial statistical analysis plan. *Crit Care Resusc.* 2013;15(3):162-71
29. Martin C, Smith T, Graudins A, Braitberg G, Chapman R. Characteristics of Aboriginal and Torres Strait Islander presentations to three Victorian Emergency Departments. 2013;25:573-579
30. Handrinos A, Braitberg G, Mosley IT. Acute coronary syndrome diagnosis at hospital discharge: How often do we get it right in the emergency department? *Emergency Medicine Australasia.* 2014; 26:153–157
31. Egerton-Warburton D, Meek R, Mee MJ, Braitberg G. Antiemetic Use for Nausea and Vomiting in Adult Emergency Department Patients: Randomized Controlled Trial Comparing Ondansetron, Metoclopramide, and Placebo. *Ann Emerg Med.* 2014;64:526-532
32. Enticott, JC, Cheng IH, Russell G, Szwarc J, Braitberg G, Peek A and Meadows G. Emergency department mental health presentations by people born in refugee source countries: an epidemiological logistic regression study in a Medicare Local region in Australia. *Aust J Prim Health.* June 13, 2014
33. Luke S, Fountain JS, Reith DM, Braitberg G and Cruickshank J. Use of poisons information resources and satisfaction with electronic products by Victorian emergency department staff. *Emerg Med Australas.* 2014;26(5):494-499
34. Arise Investigators. Anzics Clinical Trials Group. Goal-directed resuscitation for patients with early septic shock. *NEJ Med.* 2014;371(16):1496-506
35. Meek R, EgertonWarburton D, Mee MJ and Braitberg G. Measurement and monitoring of nausea severity in Emergency Department patients: a comparison of

Professor George Braitberg

- scales and exploration of treatment efficacy outcome measures. *Acad Emerg Med.* 2015;22:685-693
36. Meek R, Braitberg G, Cullen L, Than M, Graudins A, Glynn D Outcome at 30 days of low-risk chest pain patients accessed using an accelerated diagnostic pathway in the emergency department. *Emergency Medicine Australasia.* 2016;28:279–286. doi: 10.1111/1742-6723.12570
 37. Mnatzaganian G, Braitberg G, Hiller JE, Kuhn L, Chapman R Sex differences in in-hospital mortality following a first acute myocardial infarction: symptomatology, delayed presentation, and hospital setting. *BMC Cardiovascular Disorders.* 2016(16):109. DOI 10.1186/s12872-016-0276-5
 38. Cheek J, Braitberg G, Craig SC and West A. Why do children present to Emergency Departments? Exploring motivators and measures of presentation appropriateness for children presenting to a Paediatric Emergency Department. *J Paediatr Child Health.* 2017 Feb 14. doi: 10.1111/jpc.13482.
 39. Welton R, Liew D and Braitberg G. Incidence of fatal snake bite in Australia: A coronial based retrospective study (2000-2016). *Toxicon.* 2017 Mar 10;131:11-15. doi: 10.1016/j.toxicon.2017.03.008. [Epub ahead of print]
 40. Braitberg, G., Gerdtz, M., Harding, S., Pincus, S., Thompson, M. and Knott, J. (2017), Behavioural assessment unit improves outcomes for patients with complex psychosocial needs. *Emergency Medicine Australasia.* doi:10.1111/1742-6723.12905
 41. Kinsella D, Mosley I and Braitberg G. A Retrospective Study Investigating: Factors associated with mode of arrival and emergency department management for patients with acute stroke. *Australasian Emergency Care.* 2018;21(3):99-104. <https://doi.org/10.1016/j.auec.2018.07.001>
 42. Mnatzaganian G, Hiller JE, Fletcher, Putland M, Knott C, Braitberg G, Begg, Bish M. Socioeconomic gradients in admission to coronary or intensive care units among Australians presenting with non-traumatic chest pain in emergency departments: a repeated measures analysis. *BMC Emerg Med.* 2018; 18: 32. <https://doi.org/10.1186/s12873-018-0185-2>
 43. Harun N, Lachapelle P, Bowatte, G., Lodge C, Hinks, T, Braitberg, G, Irving, L, Dharmage S, Douglass, J.; The royal melbourne hospital thunderstorm-asthma cohort, *Respirology* 2018 Mar; 23:32-32
 44. Turner D, Winter S, Winkel KD, Padula AM, MacIsaac C, Braitberg G. Let's talk about snakebite; a discussion on many levels. *Emerg Med Australasia.* 2019;31: 542–545 doi: 10.1111/1742-6723.13327
 45. Kinsella D, Mosley I and Braitberg G. Presentation During and 'Out-of-Hours' to Three Emergency Departments for Hyper-Acute Stroke Patients. *Australian Nursing and Midwifery Journal.* 2019;26(7), 30 – 33
 46. Mnatzaganian G, Hiller JE, Braitberg G, et al. Sex disparities in the assessment and outcomes of chest pain presentations in emergency departments. *Heart.* 2020. 106(2);111-118. doi:10.1136/heartjnl-2019-315667
 47. Gerdtz M, Yap CYL, Daniel C, Knott JC, Kelly and Braitberg G. Prevalence of Illicit Substance Use Among Patients Presenting to the Emergency Department with Acute Behavioural Disturbance: Rapid Point-of-Care Saliva Screening. *Emergency Medicine Australasia.* 2020. DOI:10.1111/1742-6723.13441. Epub 12/01/2020
 48. Eva Rosenbaum, Shelley Cox, Karen Smith, Fitzgerald M, Braitberg G, Carpenter A and Bernard S. Ambulance management of patients with penetrating

Professor George Braitberg

- truncal trauma and hypotension in Melbourne, Australia. *Emergency Medicine Australasia* DOI: 10.1111/1742-6723.13450. Epub 12/02/2020
49. Gerdts M, Yap CYL, Daniel C, Knott JC, Kelly P, Innes A and Braitberg G. Amphetamine-type Stimulants Use among Patients Admitted to the Emergency Department Behavioural Assessment Unit: Screening and Referral Outcomes. *International Journal of Mental Health Nursing*. DOI:10.1111/inm.12710

Cited Investigator

1. Peake SL, Delaney A, Bailey M, Bellomo R; ARISE Investigators. Potential Impact of the 2016 Consensus Definitions of Sepsis and Septic Shock on Future Sepsis Research. *Ann Emerg Med*. 2017 Oct;70(4):553-561.e1. doi: 10.1016/j.annemergmed.2017.04.007.
2. Rowan KM, Angus DC, Bailey M, et al; PRISM Investigators, Early, Goal-Directed Therapy for Septic Shock - A Patient-Level Meta-Analysis. *N Engl J Med*. 2017 Jun 8;376(23):2223-2234. doi: 10.1056/NEJMoa1701380. Epub 2017 Mar 21.
3. Cudini D, Smith, K, Bernard S, Stephenson M, Andrew E, Cameron P, Lum M, Udy A et al. (2019). Can pre-hospital administration reduce time to initial antibiotic therapy in septic patients?. *Emergency Medicine Australasia*. doi:10.1111/1742-6723.13282

Invited Reviews

1. Green SL, Kerr F and Braitberg G. Review article: Amphetamines and related drugs of abuse. *Emergency Medicine Australasia*. 2008;20:391–402
2. Braitberg G and Segal L. Spider bites - Assessment and management. *Aust Fam Physician*. 2009;11:862-7
3. Braitberg G and Oakley E. Small Dose...big poison. *Aust Fam Physician*. 2010;11:826-833

Invited Editorial

1. Braitberg G. Emergency Department Overcrowding, dying to get in. *MJA*. 2007;187(11/12):624-625
2. Braitberg G. Emergency department overcrowding: the solution to any problem is a matter of relativity. Is the 4-hour rule achievable — and beneficial — in our current system of health care? *MJA*.2012;196(2):88-89

Peer reviewed Case Reports

1. Braitberg G, Curry SC, and Kunkel DB, "Liver Pathology in Fatal Vitamin A Toxicity, *J Toxicol Clin Toxicol*, 1995, 33(5):551-2.
2. Braitberg G, Curry SC. Fluoxetine induced seizure after overdose. *Ann Emerg Med* 1995;26:234-237.
3. Levick N, Braitberg G. Massive European Wasp Envenomation of a Child. *Emergency Medicine* 1996;8:239-245.
4. Geluk M and Braitberg G. Ipecac for slow release potassium poisoning: Pariah or Phoenix. *Emergency Medicine*. 2000;12,226-231
5. Mangion SM. Beulke SH. Braitberg G. Hydrofluoric acid burn from a household rust remover. *Medical Journal of Australia*. 2001;175(5):270-1.

Professor George Braitberg

- Fisher J, Taori G, Braitberg G, Graudins A. Methylene blue used in the treatment of refractory shock resulting from drug poisoning. *Clin Toxicol.* 2014;52(1):63-5

Peer reviewed Other Publications

Major Reviews

- Braitberg G, Miller MB, Curry SC. Anticonvulsant Hypersensitivity Syndrome. *Emergency Medicine* 1995;7(3):170-173.
- Chan BS, Graudins A, Braitberg G, et al. A survey of serotonin syndrome by the New South Wales Poison Information Centre. *Proc Aust Soc Exp Clin Pharmacol* 1997;4:63.

Invited Book Review

- Braitberg G. Occupational, Industrial, and Environmental Toxicology, 2nd edition. *Emerg Med Australas.* 2004;16(1):89
- Braitberg G. Toxicology Pearls. First Edition. *Emergency Medicine Australasia* 2005;17:86
- Braitberg G. Therapeutic Guidelines: Toxicology and Wilderness. *Journal of Pharmacy Practice and Research.* 2008;38(4):334
- Braitberg G. Toxicology Handbook. Ed 2. *J Pharm Pract Res* 2011; 41: 164-165

Letters

- Braitberg G, Serotonin syndrome. *Med J Aust* 1994;160(8):527-528
- Braitberg G, The meaning of overseas specialist training. *Med J Aust* 1995;162:332
- Braitberg G, Curry SC. Cimetidine in the management of paracetamol ingestion in humans. *Emergency Medicine* 1995;7(1):57-59
- Braitberg G. Response to Isbister GK, Dawson A and Isbister JP. Recommendations for the management of overcoagulation with warfarin. *Emergency Medicine.* 2001;13: -472.
- Little M, Murray L, Armstrong J, Dawson AH, Whyte IM, Isbister GK, Dowsett R, Graudins, Daly AF, Braitberg G. Clinical toxicology: 'bones' of contention. *Critical Care and Resuscitation* 2003; 5:1:71-73.
- Egerton-Warburton D, Braitberg G and Kambourakis A. Prevention of peripheral intravenous catheter blood stream infection: The randomised control trial versus the real world. *Med J Aust.* 2014;201 (4):197-198
- Taylor S and Braitberg G. Implementation of hospital-wide reform at improving access and flow: Impact on time to antibiotics in the emergency department. *Emergency Medicine Australasia* (2016) 28, 611–613

Major Consensus Paper

Archer FL, Bielajcs I, Braitberg G, Callanan VI, Grigg L, Hambrecht KB, Jacob IJ, Juul O, Lee KG, Morley PT, O'Callaghan JC, Phillips AC. Adult Advanced Life Support. The Australian Resuscitation Council Guidelines. *Med J Aust* 1993;159:616-621

Submissions accepted for publication

Nur-Shirin H, Lachapelle P, Bowatte G, Braitberg G et al. 2016 thunderstorm-asthma epidemic in Melbourne, Australia: an analysis of patient characteristics associated with hospitalization. *Canadian Journal of Respiratory, Critical Care and Sleep Medicine* - Manuscript ID UCTS-2019-0009.R1. March 5, 2020

Professor George Braitberg

Submissions Pending Outcome

Hannon L, St Clair T, Smith K, Fitzgerald M, Mitra B, Olausson A, Moloney J, Braitberg G, Judson R, Teague W, Quinn N, Kim Y and Bernard S. Finger Thorocostomy for Trauma Performed by Paramedics on a Helicopter Emergency Medical Service. Submitted 11/07/2019. Manuscript ID is EMA-2019-244.

Health Reviews

1. Braitberg G. Standard of Clinical Care. Metropolitan Ambulance Service. Fulfilling a Vital Need. Prepared for the Victorian Auditor General's Office. Special report No. 50. Victorian Government Printer, November 1997.
2. Oakley E and Braitberg G. Interim Orders Study. Department of Human Services 1998.
3. Adler M, Braitberg G, Tate B et al. An analysis of hazardous plants in the Australian Nursing Industry. Horticultural Research Development Corporation and Nursing Industry Association of Australia. Project NYN8047. September 2000
4. Taylor SE, Braitberg G et al. Emergency Department (ED) Clinical Pharmacy Project. Report to Acute Health, Taylor SE. et al. Emergency Department (ED) Clinical Pharmacy Project. Report to Acute Health, Quality Branch, Department of Human Services, Victoria, March 2003
5. Taylor DMcD, Braitberg G. Echuca Regional Hospital - Austin Health WebCam Pilot Project: An Evaluation of its Utilisation. Report for the Department of Human Services (Victoria). August 2007 pp 1-29
6. Braitberg G. April 2010. Toxicology Report for Department of Health and Human Service for the State of Tasmania. Review of Potential Toxic exposure of a mining community in the North West.

Book Chapters

1. Braitberg G, Kunkel DB, Adler M, Geehr EC. Toxic Plant Ingestions. In: Auerbach P (ed), 3rd edition: Management of Wilderness and Environmental Emergencies. Mosby-Year Book Publishers, 1995:862.
2. Braitberg G, Kunkel DB. Amphetamines and amphetamine-like drugs. In: Tintinalli JE, Krome RL, Ruiz E (eds.): Emergency Medicine. A Comprehensive Study Guide, 4th ed., McGraw-Hill, New York. 1995:44-46.
3. Braitberg G, (editor) Emergency Life Support Course Manual. ISBN: 0 646 06134 8. Australian Society for Emergency Medicine.
4. Braitberg G. Poisoning, in Applied Pharmacology in Rural Practice. Course Handbook, Graduate Diploma/Master of Rural Health, Monash University Publication 1996:139-170.
5. Curry SC, Braitberg G. Poisoning in Pregnancy. In: Foley MR, (ed): Obstetric Intensive Care: A Practical Manual. W.B. Saunders Company. Orlando. 1997:347-367.
6. Kunkel DB, Braitberg G. Poisonous Plants. In: Haddad, Winchester and Shannon (eds.). Clinical Management of Poisoning and Drug Overdose, 3rd edition. W.B. Saunders Company, Philadelphia. 1998:375-385.
7. Braitberg G, Kerr JF. The Toxicology of Drugs acting on the Central Nervous System. Braitberg G. In: Cameron P, Jelinek, G et al (Eds). Textbook of Adult

Professor George Braitberg

- Emergency Medicine. Churchill Livingstone. Harcourt Publishers Limited. London. 2000:674-685 and updated in 2004 and 2009 version.
8. Braitberg G Cyanide Poisoning. In: Cameron P, Jelinek, G et al (Eds). Textbook of Adult Emergency Medicine. Churchill Livingstone. Harcourt Publishers Limited. London 2000:705-707 and updated in 2004 and 2009 and 2018 version.
 9. Graeme KA, Braitberg G, Kunkel DB, Adler M.. Toxic Plant Ingestions, in Auerbach P (ed), 4th edition: Wilderness Medicine. Mosby-Year Book Publishers, 2001:1108. (Complete rewrite of previous chapter with new authors and material)
 10. Braitberg G. Seizures; 127-131 and Treatment of Convulsions; 156-159 in Dart R, (Ed), Medical Toxicology, 3rd Edition: Lippincott, Williams and Wilkins Publishers, Philadelphia. 2004.
 11. Braitberg G. Carbamazepine Poisoning. Chapter 50. In: Brent J, Phillips SC, Donovan JW, Burkhart KK, Tenenbein M and Wallace K (eds). Critical Care Toxicology. Harcourt Inc. Orlando, Florida. 2005
 12. Braitberg G. Cyanide Antidotes. Chapter 95. In: Brent J, Phillips SC, Donovan JW, Burkhart KK, Tenenbein M and Wallace K (eds). Critical Care Toxicology. Harcourt Inc. Orlando, Florida. 2005
 13. Braitberg G. Chapter 172. Drugs and Antidotes in Acute Intoxication. In Critical Care Nephrology, Second Edition, Bellomo R, Ronco C (Eds), Elsevier (Pub) Philadelphia. 2009:905-918 (reprint 2017)
 14. Section 16. Chapter 98. Acute Intoxication and Poisoning. Drugs and Antidotes in Acute Intoxication. In Critical Care Nephrology, Third Edition Ronco C, Bellomo R, Kellum JA and Ricci Z (eds). Elsevier (Pub) Philadelphia. 2018:574
 15. Braitberg G. Cyanide. In Cameron P, Jelinek, G et al (Eds). Textbook of Adult Emergency Medicine 4th Edition. Churchill Livingstone Elsevier. Publishers London. 2014;29.15:1008-1010
 16. Braitberg G. Cyanide. Chapter 25.13. In: Cameron P, Little M, Mitra B and Deasy C (Eds). Textbook of Adult Emergency Medicine 5th Edition. Elsevier. Publishers. London. 2019
 17. Terris J and Braitberg G. Consent and competence—the Australian and UK perspectives. In: In: Cameron P, Little M, Mitra B and Deasy C (Eds). Chapter 28.3 Textbook of Adult Emergency Medicine 5th Edition. Elsevier. Publishers. London. 2019

Other

1. ACEM Expert Advisory Group. Systematic Review of Intravenous Thrombolysis in Acute Ischaemic Stroke. https://acem.org.au/getmedia/5e7599e6-cdeb-44b5-9709-299501ee0558/Final_Systematic_Review-_25-May_2016_Final_Updated.pdf.aspx
2. Safer Care Victoria Academy and PEER, A consultation paper. <https://www2.health.vic.gov.au/hospitals-and-health-services/safer-care-victoria/safer-care-publications/scv-academy-and-peer-consultation-paper>. Date Published 11 Sep 2017

Ongoing Research

1. Evaluation of the effect of orthopaedic consultant led Virtual Fracture Clinics on outpatient fracture clinic activity and patient experience. Associate Investigator

Professor George Braitberg

2. SPiT. Screening for the prevalence of illicit toxins in patients with acute behavioral disturbance (Combined with Alfred Health and funded by TAC Vic) Associate Investigator
3. Survey of National Attitudes and Knowledge in Envenomation (The SNAKE Study). Principal Investigator
4. How well prepared are emergency clinicians to face ethical challenges in clinical practice? – A survey to assess current knowledge and training needs. Principal Investigator
5. Emerging drugs of abuse in Victorian Hospital Emergency Departments. Associate Investigator

Active projects in Health

1. Emergency Nurse initiated medicine reform
2. DHHS Internal Advisory Group on the regulation and scope of practice review of Rural Isolated Practice Endorsed Registered Nurses (RIPERNS)

Other

1. Drug Safety Monitoring Committee

Soothe, a study of medication use in the acutely agitated patient in the Emergency Department: a multicentre, randomized, double-blind, controlled trial. RMH HREC no. 2008.082