Medical Research Future Fund

Traumatic Brain Injury Mission

Implementation Plan

Consultation Version

November 2024

Background

Traumatic brain injury (TBI) encompasses a spectrum from concussion to severe injury. Single or repeated TBI can lead to dramatic, often long-lasting, negative consequences for patients, their families and other community support networks. The TBI Mission (the Mission) aims to build the evidence base, optimise care and innovate new strategies for treatment, rehabilitation and community integration for people who have experienced TBI. The Mission aims to accelerate Australian-led TBI research to develop and deliver innovative and effective treatments that substantially and equitably optimise and improve health outcomes, in partnership with people with TBI, their families and other community support networks. The work of the mission will make transformative improvements to the lives of people affected by TBI through:

- personalising care after TBI to achieve the best possible outcomes
- improving the lives of people with TBI by using better interventions identifying how to reduce barriers to support people to live their best possible life after TBI regardless of severity.

This plan supports the implementation of the Mission roadmap and establishes a strategic plan to address the mission's goals within the context of the Medical Research Future Fund 10-year plan. This implementation plan should be read in the context of the mission roadmap, which describes the Mission's scope, goals and principles.

Overview

To target activities to achieve the objectives of the Mission within the 10-year plan, the following aims and priority areas for research investment have been identified.

Aim	Priority areas for investment
1. Personalising care after TBI to achieve the best possible outcomes	**1.1** Developing personalised care for moderate to severe TBI in all care settings that is facilitated by evidence and information
	1.2 Improving care pathways and outcomes for moderate to severe TBI through predictive modelling using novel approaches to data and informatics
	1.3 Helping to ensure that patients consistently receive best-practice treatment and care for moderate to severe TBI
2. Improving the lives of people with TBI by using better interventions	**2.1** Improving acute care by identifying and implementing new treatments and care applications for TBI regardless of severity
	2.2 Improving outcomes for TBI regardless of severity through enhanced rehabilitation
	2.3 Helping to ensure that patients consistently receive best-practice treatments and care for mild TBI
3. Identifying how to reduce barriers to support people to live their best possible life after TBI regardless of severity	**3.1** Understanding the impact of community awareness on the health and psychosocial outcomes of people living with TBI regardless of severity
	3.2 Understanding long term outcomes following TBI
	3.3 Assessing the economic impact of TBI treatments and pathways

Implementation strategy

The implementation strategy has been developed to guide research investment over the life of the Mission. Investment aims to build capability and knowledge, as well as facilitate translation of advancements to clinical practice, to achieve the Mission's objectives. The implementation strategy is intended to make the research purpose and direction transparent, and provide certainty to stakeholders. It also establishes how the outcomes of each focus area will be evaluated in terms of benefit to Australian patients, which will help to clarify the intended outcome and facilitate tracking of the Mission's progress towards its objectives.

Priority areas for investment are allocated across short, medium and long-term timeframes. Priority areas are designed to integrate with each other and form parts of a cohesive whole. National collaborations will be required to ensure key inputs for individual projects are available. Integration of priority areas is designed to maximise data collection and linkage among funded projects, within and between priority areas.

Research activities will be, or contribute to, large programs of work of national strategic importance that are informed by the key priority areas outlined in this implementation plan. The research activities are expected to foster collaboration and harness resources across the system to deliver improved health outcomes for Australians.

The MRFF Monitoring, evaluation and learning strategy is an overarching framework for assessing the performance of the MRFF, focused on individual grants, grant opportunities, initiatives (e.g. the Traumatic Brain Injury Mission) and the entire program. The strategy sets out the principles and approach used to monitor and evaluate the MRFF. It outlines the need for evaluations to be independent and impartial. The strategy aims to be transparent in process and outcomes and agile to the needs of the MRFF, its consumers and stakeholders (such as the health and medical research industry). The Mission and grants funded under this initiative will be evaluated against the strategy.

Aim 1: Personalising care after TBI to achieve the best possible outcomes

Priority area 1.1 Developing personalised care for moderate to severe TBI in all care settings that is facilitated by evidence and information

Research to begin in the …	Priorities for investment (research questions and objectives)
short term (1–2 years)	Refer to Appendix A.
medium term (2–6 years)	**Objective:** Improving care for moderate to severe traumatic brain injury by optimising informatics approaches that gather nationally representative data. Common data elements are to be gathered by a competitively selected national consortium and will include social, biological, health, clinical, intervention and outcome aspects that are of value to people with lived experience of traumatic brain injury. The role of the consortium is to conduct and continue to oversee delivery of this large-scale project and ensure maximal ongoing data collection and linkage. This research should: • encompass the diversity of moderate to severe traumatic brain injury • encompass multiple geographies and demographics • conduct data collection and access that adheres to all best-practice principles. Key inputs for this project include: • approaches and outcomes from the development project (see 1.1 short term). **Outcome:** Developing a tool for personalised care for moderate to severe traumatic brain injury in all care settings that is facilitated by evidence and information **Funding:** Up to $5 million per project. One project is anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 50 Chief Investigators.

Priority area 1.2 Improving care pathways and outcomes for moderate to severe TBI through predictive modelling using novel approaches to data and informatics

Research to begin in the …	Priorities for investment (research questions and objectives)
short term (1–2 years)	Refer to Appendix A.
long term (8–10 years)	**Objective:** Conduct implementation research to support effective national adoption and best-practice use of the prognostic and predictive approaches for moderate to severe traumatic brain injury to enable personalised care to enhance treatment and care pathways that address barriers to implementation, and assess and address inequalities among vulnerable populations including all of: • Aboriginal and Torres Strait Islander people • People affected by family, domestic and sexual violence • Older people who have falls • rural, regional and remote populations in geographically diverse areas • culturally and linguistically diverse populations Key inputs for this project include: • outcomes from the optimal informatics approach (see 1.1 medium term) and reducing inequalities (see 3.2 medium term). **Outcome:** Improving access to personalised care approaches for people with moderate to severe traumatic brain injury. **Funding:** Up to $4.23 million per project. One project is anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 15 Chief Investigators.

Priority area 1.3 Helping to ensure that patients consistently receive best-practice treatment and care for moderate to severe TBI

Research to begin in the …	Priorities for investment (research questions and objectives)
short term (1–2 years)	Refer to Appendix A.
medium term (2–5 years)	Refer to Appendix A.

Evaluation approach and measures

- Informatics approaches developed, implemented and in ongoing use nationally that facilitate improved care outcomes for moderate to severe TBI across all population groups
- Predictive and prognostic approaches developed, implemented and in ongoing use nationally that improve treatment and care pathways for people with moderate to severe TBI
- Evidence-based clinical guidelines and protocols developed, implemented and in ongoing use nationally for moderate to severe TBI

Aim 2: Improving the lives of people with TBI by using better interventions

Priority area 2.1 Improving acute care by identifying and implementing new treatments and care applications for TBI regardless of severity

Research to begin in the …	Priorities for investment (research questions and objectives)
short term (1–2 years)	Refer to Appendix A.
medium term (2–6 years)	**Objective:** Test the efficacy and complete a process evaluation of novel treatments, clinical indicators and/or interventions for mild traumatic brain injury that improve long-term patient outcomes. This research should: • build on nationally integrated informatics approaches that facilitate personalisation of care • encompass the diversity of mild traumatic brain injury (e.g. age of acquisition, cause of traumatic brain injury, repeated traumatic brain injury) • consider confounding health conditions • encompass multiple geographies and demographics. Key inputs for this project include: • identification of novel treatments and care (see 2.3 short term) • optimal informatics approaches (see 2.3 medium term) **Outcome:** Generating approaches to improve long term outcomes for mild traumatic brain injury. **Funding:** Up to $1.5 million per project. Two projects are anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 15 Chief Investigators.

Research to begin in the …	Priorities for investment (research questions and objectives)
long term (6–10 years)	**Objective:** Test the efficacy and complete a process evaluation of novel treatments, clinical indicators and/or interventions for moderate to severe traumatic brain injury in reducing time spent in acute care and/or improving long-term patient outcomes. This research should: • build on nationally integrated informatics approaches that facilitate personalisation of care • encompass the diversity of moderate to severe traumatic brain injury (e.g. age of acquisition, cause of traumatic brain injury, repeated traumatic brain injury) • consider confounding health conditions • encompass multiple geographies and demographics. Key inputs for this project include: • identification of novel treatments and care (see 2.1 short term) • optimal informatics approaches (see 1.1 medium term) Continue identifying novel treatments, clinical indicators and interventions for moderate to severe TBI (building on 2.1 short term). **Outcome:** Improving acute care and/or long term outcomes for moderate to severe traumatic brain injury. **Funding:** Up to $1.5 million per project. Two projects are anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 15 Chief Investigators.

Priority area 2.2 Improving outcomes for TBI regardless of severity through enhanced rehabilitation

Research to begin in the …	Priorities for investment (research questions and objectives)
medium term (2–6 years)	**Objective:** Conduct implementation research to test the effectiveness of best-practice rehabilitation and/or care models for traumatic brain injury regardless of severity focused on personalised outcomes to meet the needs of the individual. This research should: • encompass multiple geographies and demographics • encompass the diversity of traumatic brain injury (e.g. age of acquisition, cause of traumatic brain injury, and repeated traumatic brain injury). Key inputs for this project include: • outcomes from clinical guidelines and protocols (see 2.3 short term for mild traumatic brain injury). • outcomes from clinical guidelines and protocols (see 1.3 short term for moderate to severe traumatic brain injury). **Outcome:** Generating evidence to support existing best-practice personalised rehabilitation and/or care models for traumatic brain injury. **Funding:** Up to $1.0 million per project. Two projects are anticipated to be funded. **Duration:** Grant duration of up to 2 years. Up to 15 Chief Investigators.

Research to begin in the …	Priorities for investment (research questions and objectives)
medium term (2–6 years)	**Objective:** With a focus on Priority Populations, test the efficacy of novel rehabilitation models or approaches and complete a process evaluation for mild traumatic brain injury in improving personalised long-term patient outcomes that meet the needs of the individual. This research should: • build on nationally integrated informatics approaches that facilitate personalisation of care • encompass the diversity of mild traumatic brain injury (e.g. age of acquisition, cause of traumatic brain injury, and repeated traumatic brain injury). • consider confounding health conditions • encompass multiple geographies. Key inputs for this project include: • optimal informatics approaches (see 2.3 medium term). **Outcome:** Generating novel personalised rehabilitation and/or care models for mild traumatic brain injury. **Funding:** Up to $1.5 million per project. Two projects are anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 15 Chief Investigators.

long term (6–10 years)	**Objective:** With a focus on Priority Populations, test the efficacy of novel rehabilitation models, approaches and complete a process evaluation for moderate to severe traumatic brain injury in improving personalised long-term patient outcomes that meet the needs of the individual. This research should: • build on nationally integrated informatics approaches that facilitate personalisation of care • encompass the diversity of moderate to severe traumatic brain injury (e.g. age of acquisition, cause of traumatic brain injury, repeated traumatic brain injury) • consider confounding health conditions • encompasses multiple geographies. Key inputs for this project include: • identification of novel rehabilitation and/or care models and approaches (see 2.2 medium term) • test the efficacy of novel treatments (see 2.2 medium term) • optimal informatics approaches (see 1.1 medium term) **Outcome:** Generating novel personalised rehabilitation and/or care models for moderate to severe traumatic brain injury for individuals. **Funding:** Up to $1.5 million per project. Two projects are anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 15 Chief Investigators.

Priority area 2.3 Helping to ensure that patients consistently receive best-practice treatments and care for mild TBI

Research to begin in the …	Priorities for investment (research questions and objectives)
short term (1–2 years)	Refer to Appendix A.
medium term (2–5 years)	Refer to Appendix A.
long term (6–10 years)	**Objective:** Conduct research to support effective national adoption and best practice use of clinical guidelines and protocols for mild traumatic brain injury, including integration of prognostic and predictive approaches, and assessing and addressing barriers to implementation and inequalities including in all of: • Aboriginal and Torres Strait Islander people • People affected by family, domestic and sexual violence • Older people who have falls • rural, regional and remote populations in geographically diverse areas • culturally and linguistically diverse populations Key inputs for this project include: • clinical guidelines and protocols (see 2.3 short term) • development of predictive/prognostic approaches (see 2.3 medium term) **Outcome:** Improving uptake of and access to best practice care for people with mild traumatic brain injury. **Funding:** Up to $2.0 million per project. One project is anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 15 Chief Investigators.

Evaluation approach and measures

- New treatments and care applications for moderate to severe TBI developed, implemented and in ongoing use in acute care and rehabilitation settings
- Evidence-based clinical guidelines and protocols for mild TBI developed, implemented and in ongoing use nationally, including predictive and prognostic tools
- Reduction in average length of acute care stay for moderate to severe TBI

Aim 3: Identifying how to reduce barriers to support people to live their best possible life after TBI regardless of severity

Priority area 3.1 Understanding the impact of community awareness on the health and psychosocial outcomes of people living with TBI regardless of severity

Research to begin in the …	Priorities for investment (research questions and objectives)
short term (1–2 years)	Refer to Appendix A.

Priority area 3.2 Understanding long term outcomes following TBI

Research to begin in the …	Priorities for investment (research questions and objectives)
long term (6–10 years)	**Objective:** Conduct a prospective longitudinal study and establish a database to support identifying longer-term outcomes for people experiencing traumatic brain injury of all severity including in the context of family, domestic and sexual violence, repeated sports related concussion, and repeated mild traumatic brain injury experienced in the military nationally. This research should: • encompass all states and territories and demographics • include a broad range of consensus-derived indicators and outcomes maximise ongoing data collection and linkage. **Outcome:** Improving understanding of longer-term outcomes of traumatic brain injury to inform continuing care strategies. **Funding:** Up to $5.0 million per project. One project is anticipated to be funded. **Duration:** Grant duration of up to 5 years. Up to 50 Chief Investigators.

Priority area 3.3 Assessing the economic impact of TBI treatments and pathways

Research to begin in the …	Priorities for investment (research questions and objectives)
long term (6–10 years)	**Objective:** Quantify the economic impact of moderate to severe traumatic brain injury in Australia. The approaches may: • include the health, productivity, opportunity costs, out of pocket treatment and rehabilitation expenses associated with living with TBI, and for family members and support network • cover the entire trajectory of people's rehabilitation, recovery and adaptation, from injury and beyond • encompass all regions of all states and territories and demographics Key inputs for this project include: • optimal informatics approaches (see 1.1 medium term). **Outcome:** Quantification of the costs of moderate to severe traumatic brain injury in Australia. **Funding:** Up to $0.5 million per project. Three projects are anticipated to be funded. **Duration:** Grant duration of up to 2 years. Up to 15 Chief Investigators.

Evaluation approach and measures

- Inequalities in access to TBI treatment and care for mild and moderate to severe TBI, measured and reduced over time
- Establishment and maintenance of a longer-term data base for people experiencing repeated mild TBI including in the context of family, domestic and sexual violence, repeated sports related concussion, and repeated mild TBI experienced in the military, to support ongoing data collection and research
- Quantify the cost of moderate to severe TBI treatments and pathways in Australia

Opportunities to use additional investment and other research to support the priority areas include, but are not limited to, the following

- Engagement with Connectivity – Traumatic Brain Injury Australia, National Disability Insurance Agency, motor accident insurance commissions, and the Advanced Health Research and Translation Centres
- Connectivity will support and enhance the outcomes of the TBI Mission by increasing implementation and translation of TBI Mission research findings. Connectivity is a not-for-profit company limited by guarantee, and governance is separate from the TBI Mission. Communication to facilitate the dual purpose and prevent duplication will be achieved through individuals with joint membership of Executive bodies for Connectivity and the TBI Mission
- Other MRFF initiatives and Australian Government initiatives, such as:
  - National Critical Research Infrastructure Strategy
  - National Health and Medical Research Council
  - Australian Research Council
  - Australian Commission on Safety and Quality in Health Care
- Private and philanthropic funding opportunities
- International collaborations to:
  - enhance data analytics, especially for artificial intelligence
  - support development of guidelines and protocols
  - enhance research to test the efficacy of novel treatments and care applications
  - enhance research to assess the impact of TBI awareness on outcomes
  - support investigation of variations in treatment and care, and their underlying causes

Activities required to support the research and facilitate long-term implementation include, but are not limited to, the following

- Existing literature and research activities
- Collaborative, interdisciplinary network of all stakeholders, including established consumer representative groups, to:
  - identify research needs
  - develop research capability in a coordinated way
  - co-design research with people with lived experience of TBI
- National multidisciplinary clinical and care networks to support trials and share expertise
- Data analytics capability, such as data linkage and artificial intelligence
- Ethical and data governance frameworks to support the design, development and implementation of:
  - health informatics approaches
  - predictive or prognostic approaches
- Recruitment and support for early and mid-career researchers to conduct TBI-related research in line with TBI Mission objectives
- Training to support:
  - clinicians and other carers to adopt guidelines and protocols
  - acute care clinicians to adopt novel treatments and care applications
  - rehabilitation workers to adopt new approaches

- Collaboration with organisations that have developed national strategies for a population with similar needs (e.g. Cerebral Palsy Australia) or that provide support to similar populations (e.g. Australasian Rehabilitation Outcomes Centre)

s22

From: PLOENGES, Natasha
Sent: Friday, 22 November 2024 9:57 AM
To: s47E(c), s47F
Cc: s47E(c), s47F
Subject: Request for meeting with DVA [SEC=OFFICIAL]

Hi s47E(c), s47F

Can you please arrange a time for s47E(c), s47 and me (and a member of s47E(c), s47F team) to meet with our counterparts in DVA. It will be to discuss traumatic brain injury research and our next steps, as well as seeking updates from DVA.

Nadine Clode | Assistant Secretary
Research Branch
Research, Evaluation and Data Division
Department of Veterans' Affairs
Tel (03) 9475 s22 Mobile s22
nadine.clode@dva.gov.au | www.dva.gov.au

Executive Assistant: s47E(c), s47F @dva.gov.au

Thanks
N

Natasha Ploenges
(Ms/She/Her)
Chief Executive Officer
Health and Medical Research Office
Australian Government Department of Health and Aged Care

Diversity Champion - Cultural and Linguistic Diversity

T: 02 5132 s22 | E: Natasha.Ploenges@health.gov.au
Location: Yaradhang Building 10.N.114
PO Box 9848, Canberra ACT 2601, Australia

The Department of Health and Aged Care acknowledges First Nations peoples as the Traditional Owners of Country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to all Elders both past and present.

CULTURALLY & LINGUISTICALLY DIVERSE

s22

From: MRFF <MRFF@health.gov.au>
Sent: Tuesday, 23 April 2024 9:05 AM
To: MRFF.Missions
Cc: s47E(c), s47F
Subject: FW: Request for assistance: mild Traumatic Brain Injury research - Australian Royal Commission into Defence and Veteran Suicide [SEC=OFFICIAL]

Hi s47E(c), s47F

Please see the below correspondence.

Many thanks

s47E(c), s47F

From: Paul Scanlan s11C @bigpond.com>
Sent: Monday, April 22, 2024 6:49 PM
To: MRFF <MRFF@health.gov.au>
Subject: RE: Request for assistance: mild Traumatic Brain Injury research - Australian Royal Commission into Defence and Veteran Suicide [SEC=OFFICIAL]

Hello s47E(c), s47F

Many thanks for your time and the call last Thu 18 Apr 24.

Very much appreciate the insights and the advice.

I'll also removed the MRFF from the "Network", but continue to blind cc: my correspondence.

Regards,

Paul Scanlan

From: MRFF <MRFF@health.gov.au>
Sent: Wednesday, April 17, 2024 6:41 AM
To: Paul Scanlan s11C @bigpond.com>
Cc: MRFF <MRFF@health.gov.au>
Subject: Request for assistance: mild Traumatic Brain Injury research - Australian Royal Commission into Defence and Veteran Suicide [SEC=OFFICIAL]

Dear Lieutenant Colonel Scanlan,

The TBI Mission EAP members have been selected by the Minister for Health and Aged Care for their relevant experience and expertise in TBI, and includes members with lived experience. We are finalising the establishment of the TBI Mission Expert Advisory Panel, once this is complete, details of members will be publicly available on our website.

If you can please indicate your preference for a phone call on Thursday 18 April, between 11 and 2 or from 3pm AEST, then a member of the team will contact you at the provided mobile number below.

Kind regards,

MRFF team

Medical Research Future Fund
Australian Government Department of Health and Aged Care
MRFF@health.gov.au
Location: MDP 1016, Sirius Building
PO Box 9848, Canberra ACT 2601, Australia

The Department of Health and Aged Care acknowledges First Nations peoples as the Traditional Owners of Country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to all Elders both past and present.

From: Paul Scanlan s11C @bigpond.com>
Sent: Tuesday, April 16, 2024 2:51 PM
To: MRFF <MRFF@health.gov.au>
Subject: RE: Request for assistance: mild Traumatic Brain Injury research - Australian Royal Commission into Defence and Veteran Suicide [SEC=OFFICIAL]

Many thanks for this email.

Do you have a name and contact number? I spoke to s11C about this response and keen to get some further details about this.

I'd like to explore consideration for addition to the EAP or as a liaison between DVA, the DoD and Department of Health and Aged Care.

I've also been chatting with s11C (I know you are referring to) and I've served all over the world (ie Middle East/Africa/Asia) and come at this from lived experience. Moreover, it's not in War that we are exposing soldiers to Blast Overpressure – its in training. So with the greatest to respect to s11C, perhaps some recent and contemporary perspectives would be useful?

I've also contracted Brain Injury Australia (4 weeks ago – no response) and Connectivity (4 weeks ago and only contacting me now).

Regards,
Paul Scanlan
s11C

From: MRFF <MRFF@health.gov.au>
Sent: Friday, April 12, 2024 3:35 PM
To: Paul Scanlan s11C @bigpond.com>
Cc: MRFF <MRFF@health.gov.au>
Subject: Request for assistance: mild Traumatic Brain Injury research - Australian Royal Commission into Defence and Veteran Suicide [SEC=OFFICIAL]

Dear Lieutenant Colonel Scanlan,

Thank you for your timely email, and patience with my response.

Your email is timely because the Minister for Health and Aged Care has just appointed the TBI Mission's Expert Advisory Panel (EAP). The EAP will review the TBI Mission's strategic priorities for research investment by refreshing the TBI Mission's Roadmap and Implementation Plan. Through this process, the EAP will consider all emerging evidence in developing its advice to the Minister for Health and Aged Care. You will be interested to note that a member of the EAP worked as a neurosurgeon in Iraq during the war, so will be familiar with TBI from blast/shock exposure during service.

Public consultation on the draft documents will occur in the second half of 2024. Through this process, you will have an opportunity to review and provide feedback on the revised priorities for research investment. A new Traumatic Brain Injury Mission Roadmap and Implementation Plan National Consultation Report will be developed from this process. The finalised Roadmap and Implementation Plan will inform future grant opportunities through the TBI Mission.

If you haven't already, in the meantime you may wish to connect with an organisation that advocates for people who have experience of TBI. These organisations might be able to assist you finding researchers with an interest in the questions you raise. Members of the following organisations are also members of the TBI Mission's Expert Advisory Panel:

- Brain Injury Australia https://www.braininjuryaustralia.org.au/
- Connectivity TBI Australia https://www.connectivity.org.au/

If you have any questions please don't hesitate to ask.

Kind regards,

MRFF team

Medical Research Future Fund
Australian Government Department of Health and Aged Care
MRFF@health.gov.au
Location: MDP 1016, Sirius Building
PO Box 9848, Canberra ACT 2601, Australia

The Department of Health and Aged Care acknowledges First Nations peoples as the Traditional Owners of Country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to all Elders both past and present.

From: Paul Scanlan s11C @bigpond.com>
Sent: Wednesday, March 27, 2024 11:31 AM
To: MRFF <MRFF@health.gov.au>; HMRconsultations <HMRconsultations@Health.gov.au>
Subject: FW: Request for assistance: mild Traumatic Brain Injury research - Australian Royal Commission into Defence and Veteran Suicide

Dear MRFF,

I trust this message finds you in good health and spirits – I recently came across the MRFF during a mapping of the research grants awarded to organisations researching Traumatic Brain Injury, specifically as they relate to Veterans.

Moreover, when reviewing TBI documents, namely the **Traumatic Brain Injury Mission Roadmap and Implementation Plan National Consultation Report**, I was unable to find any specific references to research involving the Veteran community as a specific demographic.

My name is Paul Scanlan, a recently retired Australian Army Lieutenant Colonel, with most of my career spent serving within the Australian Defence Force (ADF) Special Operations Command. In one of my final roles, as the Director of 'Diggerworks,' I led a specialised team comprising combat-experienced servicemen and women, scientists, and engineers. Our primary objective was not only to address the evolving needs of close combatants, but also to enhance or develop combat capabilities, akin to the United States Marine Corps' Gruntworks initiative.

During my tenure, I encountered the pressing issue of Mild Traumatic Brain Injury (mTBI), a complex and formidable challenge that the ADF hesitated to address since the completion of PROJECT CEREBRO in Afghanistan in 2012/13. As of now, the ADF (Australian Army):

1. **Do not** monitor mTBI or collect the data.
2. **Do not** know how to test for mTBI.
3. **Do not** understand how to prevent or mitigate mTBI.

Regrettably, despite my efforts, I was unable to find a champion to advocate for a program akin to the one mandated by the US Congress in the National Defense Authorization Act (NDAA) for FY 2018 + - until now.

In 2022, the Australian Government established the Royal Commission into Defence and Veteran Suicide (DVSRC). Through direct communication facilitated by Royal Commissioner Nick Kaldas in 2023, I have engaged with the DVSRC on multiple occasions to highlight the issue of mTBI and its ramifications. Furthermore, I submitted a proposal urging them to recommend to the Australian Government the implementation of a program like that mandated by the US Congress - a relevant excerpt of which is attached for your reference.

More recently, I have participated in key industry and scientific events, including the 26th International Symposium on Military Aspects of Blast and Shock (MABS26) and intend on attending the upcoming International Forum on Blast Injury Countermeasures 2024 (IFBIC 2024). Concurrently, I am in the process of compiling a detailed report to maintain the narrative and shape the discourse surrounding mTBI with the hope of achieving the following **endstate**:

The Australian Army has implemented a comprehensive Mild Traumatic Brain Injury (mTBI) program to understand and mitigate Repetitive low-level blast exposure impact on the brain (and then to roll out to other services).

Following the latest interaction with the DVSRC, specific inquiries were raised by their counsel, Gabiell Rubagotti:

1. **What is the prevalence of mTBI/exposure to Blast & Shock, and which service branch is most affected?**
2. **What are the cognitive impacts, both physical and psychological, of Blast/Shock exposure?**
3. **Is there a discernible link between Blast/Shock exposure and suicidal ideation?** *This is the hook that allows the DVSRC to intervene on this issue and act.*
   - what are the potential long-term adverse health effects?

I am reaching out to seek your insight to facilitate the DVSRC's research and policy formulation endeavours and would greatly appreciate your perspectives on the above. Moreover, this would be an excellent opportunity to collaborate with the ADF/veteran community in Australia to improve our understanding of concussion/CTE/TBI.

The final Hearings of the DVSRC are currently being held in March 2024, in Sydney. Ie now

I eagerly anticipate the possibility of collaborating with you on this critical issue.

Clear live,

Paul

Lieutenant Colonel Paul Scanlan DSM (retd)
s11C

"Important: This transmission is intended only for the use of the addressee and may contain confidential or legally privileged information. If you are not the intended recipient, you are notified

that any use or dissemination of this communication is strictly prohibited. If you receive this transmission in error please notify the author immediately and delete all copies of this transmission."

s22

From: Paul Scanlan s11C @gmail.com>
Sent: Thursday, 18 July 2024 1:56 PM
To: Melinda Fitzgerald
Cc: Paul Scanlan; s47F @usuhs.edu; s47F @usuhs.edu; predict-tbi@uq.edu.au; MRFF.Missions; MRFF
Subject: Re: Request for assistance: mild Traumatic Brain Injury/Blast Overpressure research - Australian Royal Commission into Defence and Veteran Suicide

Thanks Melinda,

I'd welcome the opportunity.

TBI from Blast covers the spectrum of mild - severe. We have Veterans in Australia who have been diagnosed with mild through to severe TBI, due to Blast and so I'm surprised, even with members who have served in the Military or doing research into Veterans, such as Prof Rosenfeld, Sarah Hellelwell, Rowena Mobbs, Michael Reade, Rondhir Jithoo and Adam Manhoney no one has raised any of this?

Moreover, I'm interested who in the Lived Experience Group is from the Veteran community?

Look forward to that meeting - please let me know when suits.

Regards,
Paul Scanlan

On Thu, Jul 18, 2024 at 11:46 AM Melinda Fitzgerald s47F @curtin.edu.au> wrote:

> Dear Paul,
>
> Thank you very much for your email and letter.
>
> The AUS-TBI initiative addresses moderate to severe TBI, as defined in the scope of the systematic reviews in the virtual issue. This is the reason that mild TBI/ blast injury was not specifically addressed in that body of work.
>
> AUS-mTBI is the parallel initiative, funded by the Mission for TBI, which addresses mild TBI. I am very happy to meet with you again to discuss how AUS-mTBI could be extended to more specifically address defence-related blast mTBI and regarding the Report of the DVSRC.
>
> Thanks again.
>
> Kind regards,
>
> Lindy

From: Paul Scanlan s11C @bigpond.com>
Sent: Thursday, July 18, 2024 11:09 AM
To: s11C @gmail.com
Cc: s47F @usuhs.edu; s47F @usuhs.edu; predict-tbi@uq.edu.au; MRFF.Missions@health.gov.au; 'MRFF' <MRFF@health.gov.au>
Subject: Request for assistance: mild Traumatic Brain Injury/Blast Overpressure research - Australian Royal Commission into Defence and Veteran Suicide

Dear the AUS-TBI Initiative Investigators,

I trust this message finds you in good health and spirits – I recently came across all 110 of you and your roles in the recent **AUS-TBI Initiative Virtual Issue**. I'd be grateful if you could please read the attached Letter to all of you.

My name is Paul Scanlan, a recently retired Australian Army Lieutenant Colonel, with most of my career spent serving within the Australian Defence Force (ADF) Special Operations Command. In one of my final roles, as the Director of 'Diggerworks,' I led a specialised team comprising combat-experienced servicemen and women, scientists, and engineers. Our primary objective was not only to address the evolving needs of close combatants, but also to enhance or develop combat capabilities, akin to the United States Marine Corps' Gruntworks initiative.

During my tenure, I encountered the pressing issue of Mild Traumatic Brain Injury (mTBI), a complex and formidable challenge that the ADF hesitated to address since the completion of PROJECT CEREBRO in Afghanistan in 2012/13. As of now, the ADF (Australian Army) and the Departments of Veterans Affairs (DVA) and Health and Aged Care:

1. **Do not** monitor mTBI/Blast Overpressure (BOP) or collect the data.
2. **Do not** know how to test for mTBI.
3. **Do not** understand how to prevent or mitigate mTBI/BOP.
4. **Do not** know how to treat mTBI.

Regrettably, despite my efforts, I was unable to find a champion to advocate for a program akin to the one mandated by the US Congress in the National Defense Authorization Act (NDAA) for FY 2018 + - until now.

In 2022, the Australian Government established the Royal Commission into Defence and Veteran Suicide (DVSRC). Through direct communication facilitated by Royal Commissioner Nick Kaldas in 2023, I have engaged with the DVSRC on multiple occasions to highlight the issue of mTBI and its ramifications. Furthermore, I submitted a proposal urging them to recommend to the Australian Government the implementation of a program like that mandated by the US Congress - a relevant excerpt of which is attached for your reference.

More recently, I have participated in key industry and scientific events, including the 26th International Symposium on Military Aspects of Blast and Shock (MABS26), the International Forum on Blast Injury Countermeasures 2024 (IFBIC 2024), the Mac Parkman Foundation on Subconcussive Trauma and Brain Health and the more recent the UK Blast and Conflict Injury Conference (BCIC). Unfortunately, I was the only Australian in attendance looking at this issue. My research has led me to conclude, and maybe in ignorance, the ADF/DVA is misinterpreting/misdiagnosing mTBI as PTSD. Or PTSD is a missed TBI.

Concurrently, I am in the process of compiling a detailed report to maintain the narrative and shape the discourse surrounding mTBI with the hope of achieving the following **endstate**:

The Australian Army has implemented a comprehensive Mild Traumatic Brain Injury (mTBI) program to understand and mitigate Repetitive low-level blast overpressure exposure impact on the brain (and then to roll out to other services).

Following the latest interaction with the DVSRC, specific inquiries were raised by their counsel, Gabriella Rubagotti:

1. **What is the prevalence of mTBI/exposure to Blast & Shock, and which service branch is most affected?**
2. **What are the cognitive impacts, both physical and psychological, of Blast/Shock exposure?**
3. **Is there a discernible link between Blast/Shock exposure and suicidal ideation?** *This is the hook that allows the DVSRC to intervene on this issue and act.*

   - what are the potential long-term adverse health effects?

   * Given my own research, I have another: How do we accurately diagnose antemortem and treat mTBI/BOP exposure?

As a result of these efforts, opportunities and analysis of research, I've compiled a Contact List of interested parties, now approximately 220+ professionals around the world. I also realised there was a gap in awareness and understanding of this critical issue and founded a social enterprise called Vigil Australia - working to raise awareness of mTBI/BOP in the ADF, Veteran & Police communities. Primarily I do this by influencing policy makers, meeting researchers, and sending email mtBI/Blast Ovepressure Australia Updates and Social Media education to these same professionals to support collaboration and connection, these often include analysis of the events I go to – if you'd like to be added to this bcc Contact List, please let me know.

I am reaching out to seek your insight to facilitate the DVSRC's research and policy formulation endeavours and would greatly appreciate your perspectives on the above. Moreover, this would be an excellent opportunity to collaborate with the ADF/veteran community in Australia to improve our understanding of concussion/CTE/mTBI/BOP exposure.

The final Report of the DVSRC will be delivered to the Governor General 09 September 2024, but there is still an opportunity to include research in their findings.

If you've read this far, you're a trooper and I eagerly anticipate the possibility of collaborating with you on this critical issue.

Clear live,

Paul

Lieutenant Colonel Paul Scanlan DSM (retd)

Founder | Vigil Australia

s11C

s22

From: s47E(c), s47F
Sent: Tuesday, 13 August 2024 4:54 PM
To: s47E(c), s47F
Subject: FW: DVA Request for information re veteran research [SEC=OFFICIAL]

Follow Up Flag: Follow up
Flag Status: Completed

Hello,

Here is the email trail that I believe instigated the DVA/HMRO meeting.

Kindly,

s47E(c), s47F

From: s47E(c), s47F
Sent: Friday, May 17, 2024 5:28 PM
To: s47E(c), s47F @dva.gov.au>
Cc: s47E(c), s47F @dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hello,

The letter to the CEO would be the most appropriate form.

Any further questions don't hesitate to ask.

Kindly,

s47E(c), s47F

From: s47E(c), s47F @dva.gov.au>
Sent: Friday, May 17, 2024 1:22 PM
To: s47E(c), s47F @Health.gov.au>
Cc: s47E(c), s47F @dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hi s47E(c), s47F

Thanks for your prompt reply and additional information.

We are keen to take up your offer to provide rationale and reasoning for veterans and families to be made a MRFF priority population. Can you please advise what format this submission this might take? is there a standard format or would it take the form of a letter to the CEO for example?

Cheers
s47E(c), s47F | A/g Director
Research & Evaluation Strategic Partnership (RESP) Section |Research Branch
Research, Evaluation and Data Division
Mobile: s22

s47E(c), s47F @dva.gov.au
www.dva.gov.au

From: s47E(c), s47F @Health.gov.au>
Sent: Tuesday, 14 May 2024 11:24 AM
To: s47E(c), s47F @dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hello,

Thanks for reach out.

The MRFF Priorities 2022-24 are in force until November 2024 and this currently includes priority populations. This will provide an opportunity for veterans to be considered as a priority population through the MRFF.

We would be happy to provide DVA with further details of what the consultation on the MRFF Priorities would look like closer to the date as we are finalising this with the Australian Medical Research Advisory Board (AMRAB). You might find the last consultation report we had on this helpful for context:
https://www.health.gov.au/sites/default/files/documents/2020/11/australian-medical-research-and-innovation-priorities-consultation-report.pdf

In the meantime, you are welcome to provide rationale and reasoning for veterans made as a priority population for us to consider which we could bring to our CEO's attention and possibly raise this with AMRAB Chair and Deputy Chair if appropriate.

Any further questions don't hesitate to ask.

Kindly,

s47E(c), s47F

From: s47E(c), s47F @dva.gov.au>
Sent: Monday, May 13, 2024 5:14 PM
To: s47E(c), s47F @Health.gov.au>
Cc: RESP <RESP@dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hi s47E(c), s47F

Just keeping in touch around the MRFF priority population indicator we discussed a few months ago. Can you please let me know if there has been any progress? We're keen to keep across developments (as we have previously advised the Secretary this is underway).

Please let me know if there is any assistance we can offer.

Cheers
s47E(c), s47F | A/g Director

Research & Evaluation Strategic Partnership (RESP) Section |Research Branch
Research, Evaluation and Data Division
Mobile: s22
s47E(c), s47F @dva.gov.au
www.dva.gov.au

From: s47E(c), s47F @Health.gov.au>
Sent: Tuesday, 9 April 2024 10:45 AM
To: s47E(c), s47F @dva.gov.au>
Cc: s47E(c), s47F @dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hello,

That's correct, the information isn't readily available. I have passed this information onto our data and evaluations team though, although we haven't specifically asked about veteran populations in our funded research, we will be looking out for it, particularly in terms of how we capture and define our priority populations.

Kindly,

s47E(c), s47F

From: s47E(c), s47F @dva.gov.au>
Sent: Monday, March 25, 2024 12:34 PM
To: s47E(c), s47F @Health.gov.au>
Cc: s47E(c), s47F @dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hi s47E(c), s47F

Was nice to meet you on Friday afternoon, thanks for your time.

In the meeting we discussed the inclusion of a priority population indicator in future MRFF surveys (which would then create a veteran flag in your data) and we are keen to stay across this work. We were also seeking to understand if there was any information available on past investments (e.g. last 5 years) in veterans related research. My understanding based on our discussion, is that this in not readily available, however you mentioned the data team may be able to assist. Are you able to share a relevant contact? or otherwise confirm that this data is not available.

Cheers,
s47E(c), s47F | A/g Director Research & Evaluation Strategic Partnership (RESP) Section
Research Branch | Research, Evaluation and Data Division
Mobile: s22

From: s47E(c), s47F @Health.gov.au>
Sent: Wednesday, 20 March 2024 11:17 PM
To: s47E(c), s47F @dva.gov.au>
Cc: s47E(c), s47F @dva.gov.au>
Subject: RE: DVA Request for information re veteran research [SEC=OFFICIAL]

Hi s47E(c), s47F

I'm glad you reached out and hope you are well too.

I'd be more than happy to discuss options and work out if we can assist you.

Off the top of my head, those are the only two initiatives that specifically mention veterans, but that's not to say that other MRFF initiatives won't be relevant to research you might be looking to undertake.

The data question is a bit tricker and I'd probably have to discuss with a colleague whether we can help you there, but it would be helpful to understand what you're after first.

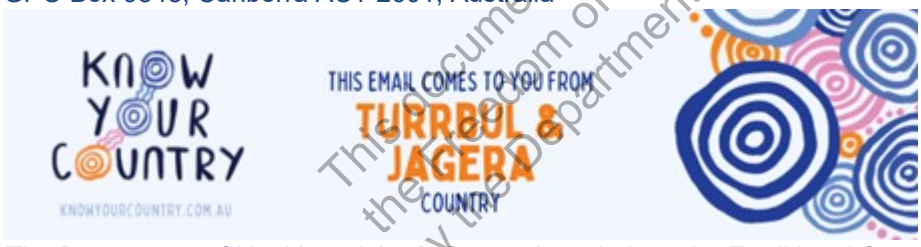
I'm free most of Friday and Monday so feel free to send an invite for a convenient time.

Kindly,

s47E(c), s47F

A/g Director, Mission Strategy and Implementation

Health and Medical Research Office | Health Economics and Research Division
Australian Government Department of Health and Aged Care
T: 07 s22 | E: s47E(c), s47F @health.gov.au
Location: 160 Ann St, Brisbane, QLD
GPO Box 9848, Canberra ACT 2601, Australia



The Department of Health and Aged Care acknowledges the Traditional Custodians of Australia and their continued connection to land, sea and community. We pay our respects to all Elders past and present.

From: s47E(c), s47F @dva.gov.au>
Sent: Wednesday, March 20, 2024 6:42 PM
To: s47E(c), s47F @Health.gov.au>
Cc: s47E(c), s47F @dva.gov.au>
Subject: DVA Request for information re veteran research [SEC=OFFICIAL]

Hi s47E(c), s47F

Hope you are well. s47E(c), s47F from my Department gave me your details, hope you don't mind me reaching out.

Wondering if we might have a quick discussion within the next few days or early next week around some research and evaluation work DVA is exploring. We are moving toward a more collaborative approach to health and medical research for veterans and their families. To assist with understanding possible co-investment and partnering opportunities we would be interested to learn more about MRFF opportunities.

In regards to the MRFF, we note that veterans are listed as a priority population in the Dementia, Ageing & Aged Care Mission and Million Minds Mental Health Mission. Are there any other Missions or funding streams which include veterans as a priority population?

Does the Department of Health maintain information on the target populations involved in research from awarded grants? If appropriate, DVA would be interested to understand previous research investments relating to veteran health and medical.

Happy to direct my query elsewhere if you can steer me in the right direction, otherwise, if you can let me know your availability, I will book us a short meeting.

Thanks in advance,

s47E(c), s47F | A/g Director Research & Evaluation Strategic Partnership (RESP) Section
Research Branch | Research, Evaluation and Data Division
Mobile: s22

Australian Government
Department of Veterans' Affairs

The Department of Veterans' Affairs acknowledges the Traditional Owners of the lands throughout Australia and their continuing connection to country, sea and community. We pay our respect to all Aboriginal and Torres Strait Islander peoples, their cultures and to their Elders, past, present and emerging. With every step we take, we are walking on Aboriginal and Torres Strait Islander Land.

Pronoun: She/her

"Important: This transmission is intended only for the use of the addressee and may contain confidential or legally privileged information. If you are not the intended recipient, you are notified that any use or dissemination of this communication is strictly prohibited. If you receive this transmission in error please notify the author immediately and delete all copies of this transmission."

s22

From: Paul Scanlan s11C @bigpond.com>
Sent: Tuesday, 26 November 2024 11:10 AM
To: MRFF.Missions
Subject: RE: Traumatic Brain Injury Mission Expert Advisory Panel: Advocacy for Prioritising Veterans and High-Risk Communities in TBI Research Guidelines Refresh [SEC=OFFICIAL]

Follow Up Flag: Follow up
Flag Status: Flagged

Dear MRFF Missions,

Thank you for responding to and acknowledging my concerns regarding the prioritisation of Veterans and other high-risk groups in the Traumatic Brain Injury Mission Roadmap and Implementation Plan. I appreciate the opportunity to contribute further to the public consultation and welcome the assurance that these views will be shared with the Expert Advisory Panel (EAP).

I would like to proceed with both suggested pathways: please provide my letter to the EAP members and note my intent to provide a detailed submission during the consultation process. Including these key issues is critical to ensuring that the refreshed Roadmap and Implementation Plan reflect the unique risks, mechanisms of injury, and long-term impacts faced by Veterans and tactical communities, which remain underrepresented in Australia's TBI research priorities.

However, I must raise a concern from the timeline outlined in your response. In rejecting my FOI request for access to the draft Traumatic Brain Injury Mission Implementation Plan, the department's rationale was that public consultation would be forthcoming as part of the deliberative process. This suggested that consultation was imminent at the time. Your current indication that the process will now not occur until 2025 represents a significant and extraordinary delay. Could you please clarify why the consultation timeline has shifted and confirm when stakeholders, including myself, will have the opportunity to provide input?

Such delays hinder progress on addressing critical gaps in TBI research and risk eroding confidence in the Mission's ability to meet the needs of our Veteran community and other high-risk groups. This is particularly concerning given recent scrutiny surrounding the Florey Institute's Medical Research Future Fund (MRFF) project on mTBI, which has raised public questions about transparency, accountability, and outcomes of MRFF-supported initiatives. I hope this consultation process will ensure transparency and meaningful engagement to address these concerns proactively and collaboratively.

I look forward to participating in the consultation and contributing to a meaningful dialogue to ensure that research priorities align with the needs of Veterans and tactical communities. Please do not hesitate to contact me if you require any further information or clarification in the interim.

Thank you again for your engagement and consideration of these concerns.

Sincerely,
Paul Scanlan DSM
Founder | Vigil Australia

From: MRFF.Missions <MRFF.Missions@health.gov.au>
Sent: Tuesday, 26 November 2024 6:36 AM
To: Paul Scanlan s11C @bigpond.com>
Subject: RE: Traumatic Brain Injury Mission Expert Advisory Panel: Advocacy for Prioritising Veterans and High-Risk Communities in TBI Research Guidelines Refresh [SEC=OFFICIAL]

Dear Paul,

We acknowledge your email below and the concerns, views, and suggestions you have raised.

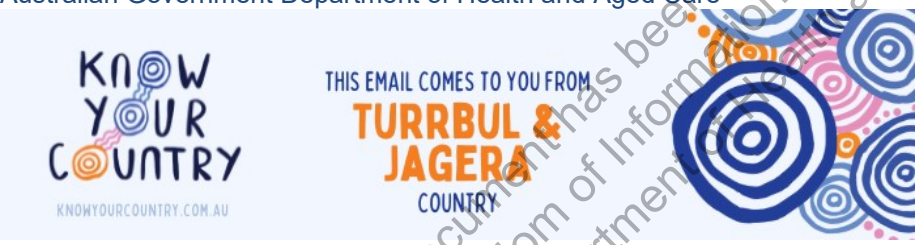
Please be assured that we will conduct a national public consultation in early 2025 on the refresh of the Traumatic Brain Injury Mission Roadmap and Implementation Plan and welcome the views of key stakeholders, including those advocating for veterans and other high-risk groups.

We can provide this letter to the Expert Advisory Panel (EAP) members if you wish, and/or you or your organisation are welcome to provide further submissions to the consultation when it opens.

The EAP will consider feedback received during the consultation before finalising the Traumatic Brain Injury Mission Roadmap and Implementation Plan.

Kind Regards,
Mission Strategy and Implementation Section

Health and Medical Research Office | Health Economics and Research Division
Australian Government Department of Health and Aged Care



The Department of Health and Aged Care acknowledges the Traditional Custodians of Australia and their continued connection to land, sea and community. We pay our respects to all Elders past and present.

From: Paul Scanlan s11C @bigpond.com>
Sent: Thursday, 21 November 2024 3:49 PM
To: MRFF.Missions <MRFF.Missions@health.gov.au>
Cc: s47F @curtin.edu.au; s47F @unisa.edu.au; s47F @aut.ac.nz; s47F @deakin.edu.au; s47F @unimelb.edu.au; s47F @braininjuryaustralia.org.au; s47F @connectivity.org.au; s47F @unimelb.edu.au
Subject: Traumatic Brain Injury Mission Expert Advisory Panel: Advocacy for Prioritising Veterans and High-Risk Communities in TBI Research Guidelines Refresh

REMINDER: Think before you click! This email originated from outside our organisation. Only click links or open attachments if you recognise the sender and know the content is safe.

Dear MRFF Missions Team,

I am writing to request that the attached letter be forwarded to all members of the Traumatic Brain Injury Mission Expert Advisory Panel, including:

- Professor Melinda Fitzgerald
- Emeritus Professor Robert Vink
- Professor Alice Theadom
- Ms Shenane Hogg
- Mr Tony House
- Mr Nicholas Rushworth
- Dr Ann Livingstone
- Dr Marlena Klaic
- Professor Peter Crack
- Dr Gillian Cowen
- Ms Olivia Hodges
- Dr Rondhir Jithoo

Since I haven't been able to publicly locate complete contact details for all panel members, I would like your help to ensure this communication reaches them. I have also observed that many panel members appear to be affiliated with either Curtin University and/or Connectivity Traumatic Brain Injury Australia. While these affiliations are undoubtedly valuable, I hope this diversity of perspectives across the panel ensures a balanced and inclusive approach to addressing the critical issues outlined in my letter.

Thank you for facilitating this distribution. I appreciate your support in ensuring that these important matters receive the attention of the entire panel.

Many thanks,
Paul Scanlan DSM
Founder | Vigil Australia

mTBI in Soldiers: Unravelling the Silence

1. A paramount concern within the military landscape is the underreported and underestimated consequences of mild Traumatic Brain Injuries (mTBI) in soldiers. We lack a process to monitor and assess environmental exposure to blast overpressure resulting in cognitive and other potential health effects. The inaction in measuring and addressing exposure to blasts poses a severe threat to the physical and mental well-being of the members of the Australian Army. This section of my submission seeks to underscore the urgent need for proactive measures, comprehensive assessments, and a commitment to addressing the silent injuries that often go unnoticed, often until too late.

2. As Acting Director Diggerworks, one of my major objectives was to assist in the implementation of a comprehensive Mild Traumatic Brain Injury (mTBI) program within the Australian Army. With regards to mental health, I concluded this is one of the most significant and crucial factors that can be addressed to preserve it. That I had been to four funerals in the years prior, of Commandos who had committed suicide (*we concluded because of* mTBI), made this a personal journey. The issue is, or was, as of right now, the Australian Army:

   a. **Do not** monitor it or collect the data.

   b. **Do not** know how to test for it.

   c. **Do not** understand how to prevent or mitigate it.

3. As my Team and I concluded, we had to at least start collecting the data (i.e., Blast Exposure) we mapped the network of past studies, from PROJECT CEREBRO in Afghanistan, to studies done with companies such as Black Box Diagnostics, Glia Diagnostics, and the new kid on the block – Invicta Prospects Group (*I believe the latter has made a submission*). We also concluded/learned:

   a. mTBI and TBI remain the signature injury in not only current operations, but primarily are a result from training! It is important to make the distinction that it is in training that most of there injuries are perpetuated. Whilst I was concussed from Indirect Fire in Afghanistan, I believe most I was I self-assess as having early onset symptoms of mTBI are from my exposure to explosives in the 2nd Cdo Regt, where you were considered a hero for passing out from too many breaching charges – thankfully the attitude there has changed significantly over the last 20 years.

      i. It is the Commando/Clearance Diver in TAG – East now with 'Breacher's Syndrome' being knocked unconscious from repetitive breaching training, the Gunner next to the 155mm Howitzer, the Trooper next to the M1A1 Main Battle Tank (MBT) Main Gun, the Sapper laying the demolition charge, or the Soldier firing the 84mm Carl Gustav. Whilst at Diggerworks, I found it ironic that a lot of my role was educating Senior Officers and Public Servants that we learn more from training, and get injured more, than we do on Operations. They never understood this.

   b. Repetitive low-level blast exposure impact on the brain is poorly understood; however, it is linked to mTBI and possibly PTSD and suicide.

   c. There is no standard defining "maximum acceptable level of blast exposure", only hearing conservation oriented.

d. Multiple documents and briefings had gone as high as Deputy Chief of Army (MAJGEN Gus Gilmore), however there was no evidence he had either seen or signed it.

e. It was very clear that, regardless of the multiple, disparate initiatives, and consultation with the 5 EYES network (*where multiple efforts had gained traction*) the ADF seems to have no appetite to understand or resolve this complex challenge.

   i. It's been ten years since Project CEREBRO, and I learn as of last week, that we are only engaging in a Pilot program at the Special Operations Training and Education Centre (SOTEC), in collaboration with Canadian Special Operations Command – I tried to do this 6 years ago!

f. We needed a Champion to highlight the significant impact of mTBI and drive a program within the ADF.

4. Unfortunately, just as we believed we had a Champion, a new Director Diggerworks arrived, with very different priorities, and COVID-19 hit Australia. It is my understanding that nothing more has been done in this space.

5. What's the so what from all of this? We found how the United States did it, with help from a company we'd previously worked with – Black Box Biometrics:

a. 2018: The 2018 Center for a New American Security report discussed concerns about the effects of service member blast exposures from their own weapon systems.

b. 2018: Via the National Defense Authorization Act (NDAA). the Under Secretary of Defense for Personnel and Readiness (USD(P&R)) is directed to develop a comprehensive strategy and plan of action focused on promoting war fighter brain health and countering TBI. This included a strategy to address:

   i. Brain Health

   ii. Cognitive and Physical Performance

   iii. Brain Exposures

   iv. mTBI/TBI

   v. Late and Long-Term Effects (i.e., Suicide)

c. 2019: The NDAA further mandates the Secretary of Defense review the guidance on blast pressure exposure during training to include service members who train with high overpressure weapon systems.

d. 2020: The NDAA mandates inclusion of blast exposure history in medical records of service members and directs modification of requirements for the longitudinal medical study on blast pressure exposure of members of the Armed Forces and collection of exposure information.

6. Ideally, the DVSRC should **recommend** to the Government of Australia to direct the Australian Army to implement a program, with intention to roll out to other Services.

Vigil Australia

To:
Traumatic Brain Injury Mission Expert Advisory Panel
Professor Melinda Fitzgerald, Emeritus Professor Robert Vink, Professor Alice Theadom, Ms Shenane Hogg, Mr Tony House, Mr Nicholas Rushworth, Dr Ann Livingstone, Dr Marlena Klaic, Professor Peter Crack, Dr Gillian Cowen, Ms Olivia Hodges, Dr Rondhir Jithoo

Contact for further information:
MRFF.Missions@health.gov.au

Subject: Advocacy for Prioritising Veterans and High-Risk Communities in TBI Research Guidelines Refresh

Dear Members of the Traumatic Brain Injury Mission Expert Advisory Panel,

I am writing to emphasise the critical need for Veterans and other high-risk groups, including those in the Defence and tactical policing communities, to be explicitly prioritised as distinct research populations within the upcoming refresh of traumatic brain injury (TBI) research guidelines. Veterans and these communities face unique mechanisms of injury, including sub-concussive blast, repetitive blast exposure, low-level blast exposure, and their long-term consequences, which are not adequately represented in the current research landscape.

Vigil Australia's Advocacy and Collaboration with Connectivity

Through our advocacy, Vigil Australia has become the leading organisation in raising awareness about mild traumatic brain injury (mTBI) caused by sub-concussive blasts, low-level blast overpressure, and repetitive blast injuries in Australia. We are proud to have collaborated with Connectivity Traumatic Brain Injury Australia on the recent updates to their fact sheets, including Blast-related TBI, low-level blast exposure, and their associated health impacts. These updates represent a significant step in ensuring a better understanding and recognition of these injuries within the broader TBI framework.

Failure to Acknowledge Veterans and Blast-Related mTBI in Current Frameworks

Despite these advances, Australia still lags significantly in research and expertise on military-related TBI. The Traumatic Brain Injury Mission Implementation Plan from September 2021 does not mention Veterans or mild traumatic brain injuries (mTBI) resulting from blast-related injuries, despite global recognition of the prevalence and severity of these conditions. The omission of Veterans and tactical policing communities is particularly concerning, given their distinct risks and injury profiles.

While the mission acknowledges important under-recognised groups such as Aboriginal and Torres Strait Islander people, rural, regional, and remote populations, and those affected by drug and alcohol dependency, family and intimate partner violence, sports concussion, and incarceration, it is perplexing that Veterans - arguably one of the most vulnerable populations in terms of TBI - are absent from the current plan.

This omission raises urgent questions:

1. Who determines research priorities, and why are they so far removed from the realities of TBI globally?

2. What mechanisms ensure Australia's TBI research priorities align with real-world needs and emerging evidence?

Leadership and Perceived Conflicts of Interest

The mission's governance structure, closely tied to a not-for-profit organisation advocating for broader neurotrauma research, adds another layer of complexity. While this connection offers valuable expertise, it also creates the perception of competing interests, potentially skewing priorities away from specific high-risk populations such as Veterans. This concern is further underscored by the fact that this organisation only approached us to explore collaboration when a funding opportunity arose. Such funding-driven engagement risks prioritising grant outcomes over meaningful, ongoing collaboration and genuine efforts to address the needs of vulnerable populations.

Additionally, when I submitted a FOI request for access to the Draft Traumatic Brain Injury Mission Implementation Plan, I was informed that the document was in the consultation phase and, as such, could not be shared. However, since then, I have not received any communication indicating that the plan has been opened for broader review or consultation with key stakeholders, including those advocating for Veterans and high-risk groups.

This lack of transparency raises concerns about how consultation and stakeholder engagement are conducted, mainly when the resulting plan does not reflect the unique needs of critical populations such as Veterans and tactical policing communities. Transparent decision-making processes and broader stakeholder engagement are essential to ensure that research priorities align with real-world needs and address critical gaps, particularly for veterans and other under-represented groups. Ensuring that governance structures remain impartial and reflective of diverse stakeholder perspectives is paramount to restoring trust in the mission's objectives and outcomes.

The Need to Avoid Public Discourse

I am addressing these concerns directly to the panel because I believe they can and should be resolved collaboratively. However, recent media scrutiny of the Florey Institute's final report on its Medical Research Future Fund (MRFF) grant (*FOI 5296 – mTBI MRFF Final Report*) demonstrates the potential consequences of public dissatisfaction. The report's failure to deliver actionable outcomes has already raised concerns about the efficacy and accountability of MRFF-funded projects. Allowing similar issues to persist further undermines public confidence in Australia's TBI research framework.

Data from the United States Highlights Critical Gaps

Globally, the consequences of TBI and blast-related injuries are being actively studied and addressed. For example, data from the U.S. Department of Defense Traumatic Brain Injury Center of Excellence (TBICoE), released in May 2024, highlights:

- **U.S. Veterans with a history of TBI are 1.5 times more likely to die by suicide** compared to Veterans without a TBI diagnosis.

- **Time to suicide is 16.7% faster** for Veterans with at least one TBI compared to those without a history of TBI.

Unfortunately, Australia has no comparable data collection or analysis to understand the relationship between TBI and suicide among veterans. This represents a significant gap in our knowledge and hinders targeted intervention strategies. Research in Australia has not been sufficiently funded to allow us to gather this critical information.

Acknowledgment of Dr Rondhir Jithoo

I commend Dr Rondhir Jithoo, a neurosurgeon and Specialist Reserve Medical Officer in the RAAF, for his recent efforts to advance understanding and expertise in military-related TBI. His work exemplifies the potential for Australian leadership in this critical area. However, as valuable as these efforts are, they remain relatively new and cannot, on their own, fill the extensive gap in national research, funding, and systemic support. A broader, well-funded, collaborative approach is urgently needed to address these deficiencies.

Global and National Engagement Gaps and Veteran Families in Crisis

In my experience attending global conferences over the past 18 months, it has become increasingly clear that Australia is lagging in its research and representation in military-related TBI. I have observed a lack of Australian subject matter experts presenting or participating in discussions on this critical issue at international forums. Similarly, in domestic conferences, the representation of military-related TBI has been minimal. For example, at the recent Brain Injury Australia conference, I was the sole presenter discussing TBI stemming from military service.

That said, I commend Nicholas Rushworth for his efforts in including us in the last Brain Injury Australia conference and creating space for this critical conversation. His work has been instrumental in raising awareness of these issues on a national stage. However, these efforts are just the beginning. There remains a significant gap in research, funding, and structured support for Veterans and their families within the national framework.

The real-world implications of this gap are deeply troubling. I have been approached by many families of Veterans seeking help for TBI-related issues, and it is distressing to see how often they have nowhere to turn. These families, frequently the first to observe and respond to signs of TBI, lack clear pathways for support or access to appropriate care. This highlights an urgent need to establish dedicated programs and resources for Veterans and families who play a critical role in their care and recovery.

Broader Implications for National Security and Economic Cost

Failing to prioritise Veterans and high-risk groups has broader national security and economic sustainability implications. Veterans, tactical policing communities, and first responders are critical to Australia's operational readiness. The cost of inaction - not just in terms of lives lost but also in increased health care expenses, disability support, and loss of workforce productivity—is unsustainable. Investing in targeted research now will reduce these long-term

costs and demonstrate Australia's commitment to the well-being of those who serve and have served.

Recommendations for Immediate Action

I respectfully urge the panel to address the following within the refreshed guidelines:

1. **Veterans as a Priority Population**: Recognise Veterans' unique exposure to injuries such as blast overpressure and their long-term health impacts.

2. **Cross-Departmental Collaboration**: Strengthen partnerships across Defence, DVA, Health, and Social Services to provide holistic care for Veterans.

3. **Outcome-Oriented Research**: Ensure accountability for research funding to deliver tangible, actionable outcomes that improve the lives of Veterans and other high-risk communities.

4. **Innovative Research and Collaboration**: To close knowledge gaps, foster international collaborations and adopt innovative research approaches, such as advanced imaging, biomarkers, and data analytics.

A Proposal for a National TBI Forum

To address these gaps comprehensively, I propose convening a National TBI Forum that includes researchers, advocates, policymakers, and Defence representatives to develop a coordinated and strategic approach to military-related TBI in Australia.

Your Collective Influence

Your collective influence is critical in ensuring that TBI research addresses the unique needs of Veterans and reflects Australia's commitment to those who have served. I am contacting the Traumatic Brain Injury Mission Expert Advisory Panel because I believe your collective expertise and commitment to advancing research can effectively address these concerns. I trust that constructive dialogue and collaboration can ensure that Veterans and other high-risk groups are prioritised in future TBI research efforts without the need for broader public discourse to highlight these gaps.

In closing, I strongly encourage the panel to take immediate steps to integrate Veterans and high-risk communities as priority populations in the guidelines and to leverage existing advocacy networks to shape a meaningful response. This is not just a matter of policy but a critical opportunity to honour and protect those who serve our nation.

Thank you for your dedication and leadership in advancing TBI research.

Sincerely,

s11C

Paul Scanlan DSM
Founder | Vigil Australia

21 November 2024

Paul Scanlan
Founder
Vigil Australia
s11C

Dear Members of the AUS-TBI Initiative,

I am writing to extend my heartfelt congratulations to all members of the AUS-TBI Initiative following the publication of the recent virtual issue in the Journal of Neurotrauma. The contributions made in these publications are a testament to the hard work and dedication of this esteemed group, and they will undoubtedly advance our understanding and treatment of traumatic brain injury (TBI) in various communities.

However, as a representative deeply involved in the study and support of mTBI of military servicemembers and Veteran communities, I must express a concern that has arisen from these publications. I have reviewed all the papers, and despite the breadth and depth of the research presented, not one paper addresses the critical issue of TBI resulting from blast overpressure in the military or veteran community.

While it is encouraging to see a focus on Indigenous and rural communities, which are indeed priorities, the absence of military and Veteran research in this significant body of work is concerning. These individuals, who have dedicated their lives to serving our nation, are equally deserving of research attention and resources to address the unique challenges they face due to TBI, in particular mTBI.

It is also noteworthy that some members of the AUS-TBI Initiative have a military background or are involved with research into military and Veterans, yet there is still nothing about mTBI from blast overpressure in the recent publications. This gap in research is a pressing issue that needs to be addressed. The unique nature of these injuries and their profound impact on the lives of our service members and veterans cannot be overstated. Dave Philipps of the New York Times has extensively reported on the struggles faced by veterans dealing with TBIs, highlighting the urgent need for dedicated research and support for this community.

It is imperative that future initiatives and publications include dedicated research to understand and mitigate the effects of these injuries. By doing so, we can ensure a more inclusive and comprehensive approach to tackling traumatic brain injury across all affected populations.

Once again, congratulations on the recent publications, and I look forward to seeing continued advancements and a broader scope of research in the future.

I can be contacted here or on Instagram: https://www.instagram.com/vigil_australia/

Best regards,

Lieutenant Colonel Paul Scanlan DSM (retd)

From: s47E(c), s47F
To:
Cc: MRFF.Missions
Subject: TBI Timeline for Public Consultation and International Review [SEC=OFFICIAL]
Date: Wednesday, 20 November 2024 3:24:12 PM
Attachments: image001.png
image002.png

Hi s47E(c), s47F

With regards to the TBI Public Consultation and International Review, s47E(c), s47 and I have drafted the below timeline.

- 22 November 2024 – MinSub to be sent to the Minister
- 6 December 2024 – Critical Date
- 9 December 2024 – Start contacting international review members
- s22
- 13 January 2025 - s22
  - International review and public consultation open
- 10 February 2025 - Public consultation closes
- 10 March 2025 – Biotech? return reports
- 11th/12th/13th March 2025– Last EAP meeting
- 27 March 2025 – EAP return any final comments
- 8 April 2025 – EAP ceases

Let us know if you have any concerns.

Thanks!!

s47E(c), s47F
Departmental Officer
Mission Strategy and Implementation Section
Health and Medical Research Office | Health Economics and Research Division
Australian Government Department of Health and Aged Care
Location: 160 Ann St, Brisbane, QLD
GPO Box 9848, Canberra ACT 2601, Australia

The Department of Health and Aged Care acknowledges the Traditional Custodians of Australia and their continued connection to land, sea and community. We pay our respects to all Elders past and present.

Attachment C: Traumatic Brain Injury Mission proposed National public consultation process

The purpose of the national public consultation is to seek feedback from the Traumatic Brain Injury research sector and the public on the Mission's draft Roadmap and Implementation Plan:

- The public consultation is proposed to be open for 4 weeks from mid-January 2025
- The draft Roadmap and Implementation Plan would be published on the Department's Consultation Hub along with specific questions to guide written submissions from the public (these questions will be developed in consultation with the Expert Advisory Panel)
- A webinar would be hosted and conducted by the Chair/s of the Mission's Expert Advisory Panel (EAP)
- Following the consultation process the Department would produce a consultation report for the Expert Advisory Panel's consideration and subsequent publication on the Department's website.

Proposed Consultation Questions to guide submissions (*based on the 2021 consultation*)

1. Are the priority areas for investment identified in the implementation plan the most effective way for delivering on the Mission's goal and aims?

2. Are there existing research activities which could be utilised to contribute to the Traumatic Brain Injury Mission Roadmap and/or Implementation Plan aims and priority areas for investment? How can these be leveraged?

3. Are the 'Evaluation approach and measures' appropriate for assessing and monitoring progress towards the mission's goal and aims?

Appendix A: MRFF Traumatic Brain Injury Mission projects funded as of August 2024

As of August 2024, the Medical Research Future Fund's Traumatic Brain Injury (TBI) Mission has had four grant opportunities that have awarded funding for 14 research projects. The grant opportunities are:

1. 2020 Traumatic Brain Injury Research Grant Opportunity (1)
2. 2020 Traumatic Brain Injury Research Grant Opportunity (2)
3. 2021 Traumatic Brain Injury Research Grant Opportunity (Stream 2 of this grant opportunity was funded through MRFF Emerging Priorities and Consumer Driven Research)
4. 2023 Traumatic Brain Injury Research Grant Opportunity

The below table outlines the projects funded from these grant opportunities, and the 'Priority area/s for investment' as outlined in the Implementation Plan that each project targets. Further information on MRFF funded grants is available.

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Implementation Plan Priority Area 1.1			
Curtin University	An informatics approach to predict outcomes and monitor intervention efficacy following moderate to severe traumatic brain injury	$499,815.70	2 (Stream 1)
Implementation Plan Priority Area 1.2			
Murdoch Children's Research Institute	Can predictive markers assist in early detection of children at risk for persisting symptoms and their response to prevention and intervention?	$1,975,723.00	1

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
University of Adelaide	Forecasting Impairment and Neurodegenerative Disease risk following Traumatic Brain Injury (FIND-TBI): A computational neurology-driven method to predict long-term prognosis	$1,987,160.00	1
University of Queensland	PREDICT-TBI - PREdiction and Diagnosis using Imaging and Clinical biomarkers Trial in Traumatic Brain Injury: the value of Magnetic Resonance Imaging	$1,765,000.00	1

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Implementation Plan Priority Area 1.3			
University of Tasmania	Clinical practice guidelines for the management of psychosocial disorders following adult traumatic brain injury	$448,051.00	2 (Stream 2)
University of Sydney	From injury to long-term physical activity for people living with traumatic brain injury	$406,506.00	2 (Stream 2)
University of Sydney	Implementation of the Australian Physical Activity Clinical Practice Guideline for people with moderate to severe traumatic brain injury	$2,322,461.8	4 (Stream 2)
Monash University	Implementing evidence-based care for cognitive and psychosocial consequences of moderate-to-severe traumatic brain injury	$2,999,957.15	4 (Stream 2)
Implementation Plan Priority Area 2.1			
Monash University	PRECISION-TBI – Promoting evidence-based, data driven care for critically ill moderate-to-severe TBI patients	$499,477.70	2 (Stream 3)
Monash University	The Australian Traumatic Brain Injury National Data (ATBIND) Project	$365,995.00	2 (Stream 3)

Institution	Project Title	Amount (ex GST)	Funded from Grant Opportunity
Implementation Plan Priority Area 2.3			
The University of Queensland	Australian Clinical Practice Guidelines for the Assessment and Management of Mild Traumatic Brain Injury and Post-Concussion Symptoms	$497,834.00	2 (Stream 4)
Monash University	Exercise therapy for mild traumatic brain injury (mTBI) and persistent post-concussion symptoms (PPCS) across the lifespan	$499,705.00	2 (Stream 4)
Curtin University	AUS-mTBI: designing and implementing the health informatics approaches to enhance treatment and care for people with mild TBI	$2,999,658.00	3 (Stream 1)
Implementation Plan Priority Area 3.1			
University of Tasmania	Transforming Awareness, Literacy & Knowledge of Traumatic Brain Injury (TALK-TBI)	$999,998.00	2 (Stream 5)