

Exercise
is Medicine®
Australia



**PRE-BUDGET
SUBMISSION
2020-2021**

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INTRODUCTION

Exercise is Medicine® Australia (EIM) welcomes the opportunity to respond to the 2020-21 Pre-Budget Submission process.

EIM is a global initiative led by the American College of Sports Medicine (ACSM). EIM Australia is managed and funded by Exercise & Sports Science Australia (ESSA) with funding support also provided by the Australian Physiotherapy Association (APA). An EIM Project Officer (0.6 FTE) delivers the current program.

A National Advisory Council oversees the operations of EIM Australia and membership comprises of peak professional healthcare bodies, universities, the Australian Government and a general practitioner:

- Exercise & Sports Science Australia
 - Rhiannon Bennett (Project Officer, EIM Australia)
 - Anita Hobson-Powell (CEO)
- University of Queensland
 - Dr Jeff Coombes (EIM Australia National Director)
- Australian Primary Health Care Nurses Association
 - Nicole McClure
- Australasian College of Sport and Exercise Physicians
 - Kate Simkovic (CEO)
 - Dr Hamish Osborne (Sport and Exercise Physician)
- Australian Physiotherapy Association
 - Anja Nikolic (CEO)
- Edith Cowan University
 - Dr. Robert Newton
- Sports Medicine Australia
 - Anthony Merrilees
- Tintenbar Medical Centre
 - Dr Lynne Davies (General Practitioner in rural Australia)
- University of the Sunshine Coast
 - Dr Chris Askew

- Australian Government Department of Health
 - Elizabeth Flynn (Assistant Secretary, Preventive Health Policy Branch, Population Health and Sport Division)

ESSA is the peak professional body and accrediting authority for over 7,000 university qualified exercise professionals whose members include Accredited Exercise Physiologists who design and deliver effective programs for people with chronic conditions, injuries or disabilities and Accredited Exercise Scientists who apply the science of exercise to design and deliver exercise-based interventions to improve health, fitness, well-being, performance and assist in the prevention of injury and chronic conditions of the general population.

The primary aim of EIM Australia® is to educate healthcare professionals about the role of physical activity in the prevention, and management of chronic disease, and how to prescribe exercise to patients by applying behaviour change strategies. EIM Australia delivers free Primary Care Continuing Professional Development (CPD) Workshops to General Practitioners, Nurses and Allied Health Professionals and Hospital Presentations to Medical Interns. This education is reinforced by freely available resources.

EIM is accredited by the Australian College of Rural and Remote Medicine, the Australian Primary Health Care Nurses Association, and the Royal Australian College of Practitioners.

EIM Australia's recommendations for the 2020-21 Budget are to develop an advanced EIM program specific to health conditions that assists healthcare professionals to better support the Australian population respond to both the COVID-19 pandemic environment and the range of natural disasters (e.g. drought, bushfires, floods, cyclones etc.).

These recommendations also focus on empowering health care professionals in rural and remote areas (Australian Statistical Geographical Classification – Remoteness Area) to support the health of their patients (Australian Bureau of Statistics [ABS], 2020).

Overview of Recommendations:

Recommendation 1: Exercise is Medicine Australia® calls on the Australian Government to fund *Exercise is Medicine: Mental Health & Resilience* program.

The ***Exercise is Medicine: Mental Health & Resilience*** program will educate General Practitioners, Nurses, and Mental Health Professionals about the role of physical activity and exercise in building resilience and preventing and managing mental illness. This education will empower healthcare providers to apply behaviour change strategies to patients, specific to mental illness, physical activity and exercise. This program promotes evidence-based screening to easily identify when and how to refer mental health patients to appropriately trained allied health professionals to deliver exercise treatment services.

Recommendation 2: Exercise is Medicine Australia® calls on the Australian Government to fund *Exercise is Medicine: COVID-19* program.

The ***Exercise is Medicine: COVID-19*** program will educate General Practitioners, Nurses and Allied Health Professionals about the role of physical activity and exercise in the recovery and rehabilitation from COVID-19 and assist those at greatest risk (i.e. those Australians with chronic disease) of contracting COVID-19 improve their general health. This education will empower healthcare providers to provide physical activity advice and motivate patients to adopt and sustain healthy behaviours through behaviour change strategies specific to COVID-19 modifiable risk factors. This program promotes evidence-based screening to easily identify when and how to refer chronic disease patients and COVID-19 patients to appropriately trained allied health professionals to deliver exercise treatment services.

Recommendation 3: Exercise is Medicine Australia® calls on the Australian Government to fund *Exercise is Medicine: Diabetes* program.

The ***Exercise is Medicine: Diabetes*** program will educate General Practitioners, Nurses, Allied Health Professionals, Diabetes Educators and Endocrinologists about the role of physical activity in the prevention and management of diabetes. This education will empower healthcare providers to apply behaviour change strategies, specific to Type 1 and Type 2 Diabetes. This program promotes evidence-based screening to easily identify when and how to refer diabetes patients to appropriately trained allied health professionals to deliver exercise treatment services.

EIM Australia® gives permission for this submission to be published in full or in part.



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RATIONALE

This section will provide a rationale for the development of an advanced Exercise is Medicine program.

The **current** [Exercise is Medicine Primary Care](#) continuing professional development (CPD) education program provides an overview on the benefits of physical activity for General Practitioners, Primary Care Nurses and Allied Health Professionals. It upskills these healthcare professionals on how to

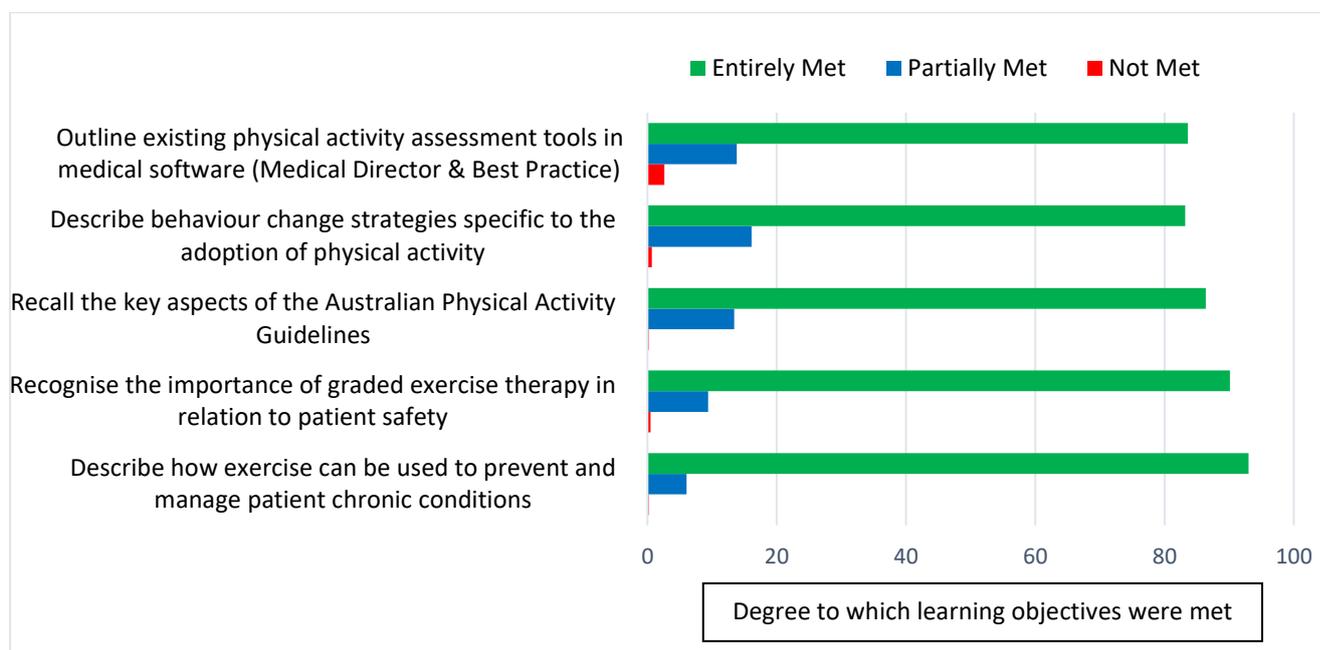
- ask patients about their physical activity levels
- advise patients and provide information and
- assist via referrals if necessary.

This education is reinforced by analysing patient case studies in relation to chronic diseases and it focuses on the benefits of physical activity and behavioural change strategies.

However, feedback from participants and facilitators over the past three years via evaluation forms and anecdotal feedback has identified that this course is foundational and does not meet the needs of those healthcare professionals who are looking for more advanced education. This submission focuses on three education programs of increased complexity which support various Australian Government health plans and priorities and will play a significant role in improving the health of Australians.

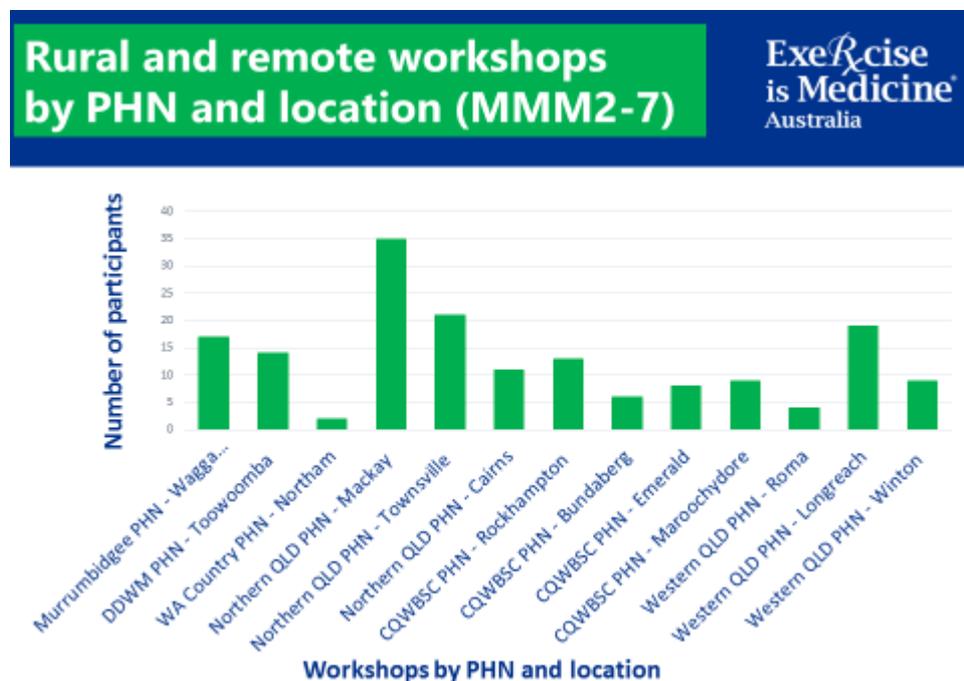
An extensive series of workshops was delivered in partnership with Primary Health Networks (PHNs) in 2017-2018 with funding from the Australian Government Department of Health (DoH). Participant feedback on the learning objectives is outlined in Table 1 below:

Table 1: Overview of Learning Objectives and Feedback from 514 participants attending 32 DoH funded EIM workshops within 17 Primary Health Networks in 2017-2018



This feedback confirms that the existing education program met the expectations of most participants but also highlights areas for improvement, particularly in relation to behaviour change strategies specific to the adoption of physical activity.

Table 2: Numbers of Participants at rural, remote and regional EIM workshops in 2017-2018 in Modified Monash Model areas 2-7:



This analysis highlights that attendances in some rural and remote areas was just as high as in some more largely populated regional areas.

Comments provided via Feedback Forms collected from the workshops presented in partnership with the Primary Health Networks is as follows:

“EIM can improve by providing a follow up program.”

“Workshop is rehashing lots of stuff I already know i.e. benefits of exercise.”

“EIM can improve by providing more workshops.”

“This is often the info we are telling our patients day in day out.”

“EIM can improve by providing more education events.”

“EIM can improve by providing continued education programs.”

In October 2019, ESSA and EIM were joint exhibitors at the Rural Medicine Australia (RMA) Conference which provided an opportunity to collect anecdotal feedback on an EIM workshop. The former EIM Project Officer and three ESSA staff in attendance all received feedback that the workshop was too basic. This feedback was subsequently verified by a summary of post-conference reviews provided by the RMA Conference and Events Officer:

“The presentations didn’t quite hit the mark for our delegates.”

A recent Royal Australian College of General Practitioners report (RACGP, 2019) on the views and attitudes towards physical activity and nutrition counselling in general practice collected via a ten-minute online survey completed by 657 respondents found General Practitioners:

- feel confident in providing physical activity counselling and also report having the skills and confidence to provide generalist physical activity counselling and broad and non-tailored advice
- require professional development opportunities in brief interventions and motivational interviewing and would benefit from clinical decision-making tools to counsel patients
- did not feel qualified to advise on a range of exercise regimes, particularly for those with specific or complex conditions.

Participation in physical activity counselling professional development activities was low with only seventeen per cent of respondents completing a professional development activity related to physical activity over the past 12 months. This was partly due to many already feeling knowledgeable about the topic and others not having the time to undertake the CPD. Respondents expressed a view that educational activities to be provided either via face-to-face workshops (at their practice) or by the use of digital platforms. (Note, the budget in this submission allows for both face-to-face workshops in group settings [not in individual practices] and online learning).

As reported by the Royal Australian College of General Practitioners and the Consumers Health Forum, Australia should use social prescribing, including physical activity initiatives, to counter the rise of chronic health problems (The Royal Australian College of General Practitioners and Consumers Health Forum of Australia, 2019). Of the 200 plus consumers surveyed for the report, 88% of consumers surveyed agreed that community programs and services could help their health and wellbeing but 57% said their GPs never discussed such services or programs. Research by Short et al. (2016) shows that only 18% of patients received a physical activity recommendation from GPs in the past 12 months.

General Practitioners act as the gatekeepers to the Australian health system and the Australian Bureau of Statistics (2019) states that GPs were the most common health service professionals seen with 82.8% of Australians visiting a GP in 2018-19. This indicates that GPs are in an important position to promote exercise as medicine to patients and prevent and manage chronic disease.

However, Australian researchers report barriers healthcare providers face in prescribing exercise to consumers. These include the practitioners' knowledge, perspectives and a lack of training (Way et al., 2018). Research demonstrates that patients respond positively to exercise advice from their GP (Beattie, 2017) and educational workshops for doctors are successful in enabling them to increase their written prescriptions for physical activity and referral of patients (Windt, 2015).

Despite this evidence, there are key barriers to GPs prescribing exercise to patients including the practitioners' knowledge, confidence and a lack of training (Meriwether et al., 2008; Huijg et al., 2015). This indicates a gap in education.

The feedback from the 2017-2018 workshops and the 2019 RMA Conference; and the 2019 RACGP Report on physical activity counselling all confirm an advanced Exercise is Medicine program is essential for the professional development and upskilling of healthcare professionals to discuss physical activity behaviour change with patients to prevent and manage mental health conditions, COVID-19 modifiable risk factors and rehabilitation, and diabetes.

The new programs will include a focus on social prescribing, and it will provide the opportunity to educate healthcare professionals about exercise in relation to disease concepts including causes, disorders, symptoms, courses and treatments. It will empower healthcare providers to offer practical behaviour change advice to patients in relation to the prevention and management of disease, accounting for disease-specific considerations, safety, and contraindications. The program will also promote evidence-based screening to easily identify when and how to refer patients to appropriately trained allied health professionals to deliver exercise treatment services.

EIM aims to deliver its education program proportionately across urban, regional, rural and remote areas and its delivery over the past three years has largely mirrored the population profile.

Table 3: EIM Workshop and Attendee Profile versus the National Population Profile

Location	EIM Workshop Profile (2017-2020)	EIM Attendee Profile (2017-2020)	National Population Profile (ASGC) (ABS,2020)
Major City	75.3%	72%	72%
Inner Regional	12.9%	13.9%	18%
Outer Regional	7.5%	8.8%	8.2%
Remote	1.1%	1.3%	1.2%
Very Remote	3.2%	4%	0.8%

Compared to those living in metropolitan areas, Australians living in rural and remote areas have a shorter life expectancy, increased rates of disease, injury, and poorer access to health services (Australian Institute of Health and Welfare [AIHW], 2019). In 2017-18, it was reported that the rate of potentially preventable hospitalisations were 2.5 times higher in very remote areas compared to major cities (AIHW, 2019). This indicates these education programs are vitally important for the health and wellbeing of rural and remote Australians and the budget reflects expenditure for the delivery of programs to these areas.

Due to the impact of COVID-19 on travel and mass gatherings, it is proposed that the new programs are provided both via online and face-to-face modes as it is impossible to predict what restrictions might be in place during the life of the project.

Online education decreases barriers to attendance such as geographical location, restricted and prohibited gatherings and allows time-poor health professionals to complete CDP in their own time. However, EIM attendance logs indicate that face-to-face education historically has higher rates of participation than online delivery. This is supported by feedback from Medical Education Officers demonstrating that in some circumstances, attendance is higher if education is delivered face-to-face.

“Face-to-face sessions are generally better attended.”

Pre-COVID, there were almost twice as many face-to-face attendees than online attendees in 2019, despite the availability of the online program and limited face-to-face workshops (42 workshops delivered in 2019).

In 2020, taking into consideration the impact of COVID-19 on face-to-face delivery, there were 2.2 online attendees for every face-to-face attendee. These figures demonstrate the impact of COVID-19 on the delivery of face-to-face sessions and reflect the increased popularity and utilisation of online education when attendance at face-to-face sessions is not possible.

RECOMMENDATIONS

Recommendation 1 - Exercise is Medicine Australia (EIM) calls on the Australian Government to fund *Exercise is Medicine: Mental Health & Resilience* program.

This program will educate General Practitioners, Nurses, and Mental Health Professionals about the role of physical activity and exercise in building resilience and preventing and managing mental illness. This education will empower healthcare providers to apply behaviour change strategies to patients, specific to mental illness, physical activity and exercise. This program promotes evidence-based screening to easily identify when and how to refer mental health patients to appropriately trained allied health professionals to deliver exercise treatment services.

The AIHW (2018) reported that 20% of Australians experience a common mental health disorder during a 12-month period and mental and substance use disorders equated for 12% of the total burden of disease in 2015 (AIHW, 2019). Moreover, the cost of mental health related services is around \$9.9 billion in Australia each year (AIHW, 2020b). Common mental illnesses include diagnosed depression, anxiety, substance use disorders and post-traumatic stress disorder (PTSD) (Schuch et al., 2016). People with these common mental illnesses typically experience poorer physical health outcomes and have a higher risk of developing preventable chronic diseases.

In the last twelve months, Australians have faced droughts, bushfires, floods and COVID-19. These natural disasters and a pandemic have significant impacts on determinants of psychological wellbeing with a systematic literature review demonstrating communities experience heightened levels of vulnerability and anxiety (Obradovich et al., 2018; Bults et al., 2015). This increased demand has been recognised by the Australian Government, as evidenced by recent commitments from the Minister for Health, the Honourable Greg Hunt, MP totalling more than \$500 million to support the mental health and wellbeing of Australians through the COVID-19 pandemic (Department of Health, 2020).

Recent media releases and articles highlight the increase in demand for mental health support during COVID-19. Beyond Blue recorded a 20 per cent increase from Victoria alone, in calls and online contact for its Coronavirus Mental Wellbeing Support Service from June to July, 2020 and contacts with the national service from Victoria now make up two-thirds of all calls and web messages (Beyond Blue, 2020). In August, 2020, with Melbourne under strict Stage 4 restrictions, and the rest of Victoria in Stage 3, 75 per cent of contact with the support services were accessed by

Victorians (Bowden & Kewley, 2020) with Melbourne GP and clinical consultant to Beyond Blue, Dr. Grant Blashki commenting:

"At Beyond Blue, every month since March compared to the same time last year, we've seen a 40 to 60 per cent jump. We've had a doubling on the forums, so 1.3 million people are on these chat forums talking to each other."

Physical activity is a cost-effective and an underutilised intervention which has the ability to decrease mortality risk in depression and improve the symptoms of anxiety and PTSD (Murri et al., 2018; Conn, 2010; Parker et al., 2013; Bartels et al., 2013). If physical activity is prescribed by healthcare providers and delivered correctly, it can be just as effective in treating depression as other first-line treatments, while be largely free of adverse side effects (Murri et al., 2018). Society can save \$10,062 per year for each case of depression that is averted through exercise (Deloitte, 2015).

This program aligns with *Australia's Long Term National Health Plan* - Pillar Three: Mental health and preventive health (Australian Government Department of Health, 2019) and it supports the Australian Government to meet its identified goals to respond to local needs in mental health promotion, prevention and early intervention. As identified in the *National Health Plan*, exercise can help reduce mental illness and investing in programs that help people participate in physical activity will achieve these results.

This program also aligns with the *Fifth National Mental Health and Suicide Prevention Plan* Priority Area 5: Improving the physical health of people living with mental illness and reducing early mortality (Australian Government Department of Health, 2017). An investment in the program assists the Australian Government deliver Action 15 whereby resources and programs are developed for health professionals to improve the physical health of people living with mental illness.

Table 4: Exercise is Medicine: Mental Health & Resilience Budget Request

Exercise is Medicine: Mental Health & Resilience Budget Request	2020-2021	2021-2022
Program Management (0.2 FTE) Support the delivery and evaluation of the <i>Exercise is Medicine: Mental Health & Resilience</i> program. Further in-kind support to be provided by Exercise & Sports Science Australia.	\$15,000	\$15,000
Program Resources A nominal payment to support the development, production and printing of educational materials used for the program. Further in-kind support to be provided by Exercise & Sports Science Australia.	\$50,000	\$0
Facilitators' Induction and Training A payment to support the training, upskilling and resourcing of each EIM facilitator in preparation for providing education sessions.	\$50,000	\$0
Marketing A contribution to provide EIM with resources to increase awareness of the program and the importance of physical activity for mental wellbeing & resilience.	\$50,000	\$50,000
Subsidised Mental Health & Resilience Workshops 50 x free for healthcare professionals <i>Mental Health & Resilience</i> workshops with a focus on regional, rural and remote areas.	\$80,000	\$80,000
TOTAL	\$245,000	\$145,000

Recommendation 2 – Exercise is Medicine Australia (EIM) calls on the Australian Government to fund *Exercise is Medicine: COVID-19* program.

This program will educate General Practitioners, Nurses and Allied Health Professionals about the role of physical activity and exercise in the recovery and rehabilitation from COVID-19 and assist those at greatest risk (i.e. those Australians with chronic disease) of contracting COVID-19 improve their general health. This education will empower healthcare providers to provide physical activity advice and motivate patients to adopt and sustain healthy behaviours through behaviour change strategies specific to COVID-19 modifiable risk factors. This program promotes evidence-based screening to easily identify when and how to refer chronic disease patients and COVID-19 patients to appropriately trained allied health professionals to deliver exercise treatment services.

The COVID-19 pandemic has been a rapidly evolving health crisis that has required the Australian Government to lead a fast and coordinated response. To date, Australia has had over 24,000 confirmed cases and 463 deaths (confirmed by the [Department of Health](#) on 21 August, 2020). The pandemic has and continues to have a significant impact on the Australian health care system. To combat the impact and spread of the virus, a variety of public health measures have been implemented in varying stages, including social isolation, lockdowns, cancellation of elective surgeries and closure of sporting and community events.

These mechanisms are important for preventing the spread of COVID-19, but social isolation is conducive to a sedentary lifestyle and opportunities to be physically active have been and continue to be severely limited. During the varying stages of lockdown, it is essential that physical activity is continued to be encouraged to prevent weight gain and the escalation of comorbidities such as obesity, increased blood pressure, glucose intolerance and psychosocial disorders (Ferreira et al., 2020). Additionally, the restriction of movement, loss of routine, reduced social connection can contribute to negative psychological effects which can possibly be mitigated through physical activity (Brooks et al., 2020). Further to this, physical activity can instigate an immune response including the release of pro- and anti-inflammatory cytokines, increased lymphocyte circulation as well as cell recruitment (Silveira et al., 2020). This research indicates that physical activity may decrease the incidence, intensity of symptoms and mortality in viral infections such as COVID-19 (Silveira et al., 2020). As a result, regular physical activity can act as a protective factor, strengthening the immune system for COVID-19.

In addition to physical activity providing a preventative immune mechanism to the impact of COVID-19 as well as reducing the impacts of social isolation and lockdown, the four Chief Allied Health Professions Officers in the United Kingdom identified “an increase in the need for rehabilitation” across four main population groups in a [statement](#) (Welsh Government, Scottish Government, Department of Health, Northern Ireland, NHS England, 2020):

1. People recovering from COVID-19, both those who remained in the community and those who have been discharged following extended critical care/hospital stays
2. People whose health and function are now at risk due to pauses in planned care
3. People who avoided accessing health services during the pandemic and are now at greater risk of ill-health because of delayed diagnosis and treatment
4. People dealing with the physical and mental health effects of lockdown.”

A recent (15 May, 2020) [Blog in The BMJ Opinion](#) noted the impact of COVID-19 on rehabilitation in the United Kingdom (Morris & Murray, 2020):

“The covid-19 pandemic has turned the way we run hospitals upside down, facilitating the expansion of intensive care and revolutionising the way we manage acutely ill patients. The use of virtual services to enhance communication and reduce transmission of covid-19 has been transformational for general practice as well as for hospital outpatient services. It is now **essential that we take the opportunity to develop parallel subacute services, facilities, and workforce in the community not only for patients who are ill with covid-19, but also for frail patients who require on going treatment and rehabilitation.....**”

There has been a **gross underestimate of the functional, physical, and emotional consequences of covid-19** as current NHS rehabilitation services are not set up for the recovery phase of this pandemic.....

We know that COVID-19 is a multisystem disease and there has been increasing understanding about the needs of recovering patients. Post-ITU survivors can experience significant respiratory, renal and cardiac problems, as well as muscle wasting, psychological/psychiatric problems and post-traumatic stress disorder. [1, 2] It is thought that some survivors may take up to a year to go back to work. These **patients require intensive support and rehabilitation in the community to allow them to regain their function, independence, and autonomy.**”

A relatively recent NSW Health [rapid evidence check](#) (4 May, 2020) on the rehabilitation needs of post-acute COVID-19 patients found **post COVID-19 exercise interventions were one of the keys to recovery** (NSW Health, 2020). **EIM foreshadows that exercise physiologists will be integral in supporting the recovery of post-acute COVID-19 patients.**

More recently on 29 June, 2020, leading researchers called for planning for the COVID-19 aftermath to manage the aftershocks:

“Australia needs to plan now, not just for survivors in the initial post- acute stage, but also to manage individuals affected in subsequent waves. Such patients may require rehabilitation, along with those, fearful of infection, who present to hospital late with non-COVID-19 conditions like stroke, and those with deteriorating chronic diseases who have not had access to hospital based services (Faux et al., 2020).”

Primary healthcare professionals are in important positions to promote exercise as a protective measure against COVID-19, strengthening the immune system. Further to this, primary healthcare professionals can encourage physical activity in mitigating the risk of a sedentary lifestyle and chronic disease in social isolation and lockdown measures.

Table 5: Exercise is Medicine: COVID-19 Budget Request

Exercise is Medicine: COVID-19 Budget Request	2020-2021	2021-2022
Program Management (0.2 FTE) Support the delivery and evaluation of the <i>Exercise is Medicine: COVID-19</i> program. Further in-kind support to be provided by Exercise & Sports Science Australia.	\$15,000	\$15,000
Program Resources A nominal payment to support the development, production and printing of educational materials used for the program. Further in-kind support to be provided by Exercise & Sports Science Australia.	\$50,000	\$0
Facilitators Induction and Training A payment to support the training, upskilling and resourcing of each EIM facilitator in preparation for providing education sessions.	\$50,000	\$0
Marketing A contribution to provide EIM with resources to increase awareness of the program and the importance of physical activity for mental wellbeing & resilience.	\$50,000	\$50,000
Subsidised Exercise is Medicine: COVID-19 Workshops 50 x free to consumer <i>Exercise is Medicine: COVID-19</i> workshops with a focus on regional, rural and remote areas.	\$80,000	\$80,000
TOTAL	\$245,000	\$145,000

Recommendation 3 – Exercise is Medicine Australia (EIM) calls on the Australian Government to fund *Exercise is Medicine: Diabetes* program.

This program will educate General Practitioners, Nurses, Allied Health Professionals, Diabetes Educators and Endocrinologists about the role of physical activity in the prevention and management of diabetes. This education will empower healthcare providers to apply behaviour change strategies, specific to Type 1 and Type 2 Diabetes. This program promotes evidence-based screening to easily identify when and how to refer diabetes patients to appropriately trained allied health professionals to deliver exercise treatment services.

The AIHW (2020a) reported that approximately 1.2 million Australians (4.9% of the population) had diabetes (including Type 1 & Type 2) in 2017-18 with high blood plasma glucose levels (diabetes and pre-diabetes) equating for 4.7% of the total burden of disease. Moreover, the cost of diabetes expenditure is estimated to be \$2.7 billion and diabetes associated hospitalisation equate for 11% of all hospitalisations in Australia (AIHW, 2020a).

Diabetic amputations are a prime example with approximately 4,400 each year, and as many as 70% of which may be avoidable (Cant & Foster, 2011). In Australia in 2004-2005, the average length of hospital stay for people with diabetes requiring lower limb amputations was 26 days. A recent study estimated the cost of lower extremity amputations in Australia to be \$A26,700 per person. Estimated costs for other countries were \$A24,660 for Canada; \$A46,064 for France; \$A31,809 for Germany; \$A14,650 for Italy; and \$A21,287 for Spain. Other direct and indirect economic costs of foot complications, not included in the above data, include the costs of rehabilitation, purchase and fitting of orthotics/prostheses, lost productivity and potential costs associated with disablement.

The primary care system is able to provide significantly better value in terms of the cost of supporting people with diabetes. In 2011-2012, the Australian Health Survey showed that over 846,978 Australians or 3.9% of persons aged over 2 had known T2DM (ABS, 2013) and these individuals are entitled to one Medicare funded assessment service per year by a diabetes educator (81100), exercise physiologist (81110) or dietitian (81120). However, the total number of assessment services across Item 81100, 81110 and 81120 in the same year was 9,126 indicating that less than 1.08% of eligible patients were referred for and received this service. This is particularly concerning when research suggest that only 15 per cent of 7,474 patients with diabetes had recorded all values for glucose and body mass and blood pressure and of those with measurements, 20 per cent had recommended overall outcomes for weight, blood pressure and blood sugar.

A study of GP management of heart health found that few patients receive advice or support to address these risks (Swerissen et al., 2016).

A wide body of evidence shows that physical activity and obesity are modifiable risk factors and physical activity can be used to treat many chronic and complex health conditions (Hordern et al., 2012; Stringhini et al., 2012). Yet Medicare data has shown that less than one percent of patients who are overweight or obese or who had type 2 diabetes were referred to an Accredited Exercise Physiologist for treatment (AIHW, 2011).

A focus on prevention can save the system significantly. Exercise & Sports Science Australia commissioned a report by Deloitte Access Economics in 2016 to determine the value of the investment of exercise interventions delivered by Accredited Exercise Physiologists. The report found these interventions to be both effective and highly cost effective for Australians living with complex chronic disease (Deloitte Access Economics, 2015). For example, the net benefit per person per year, for Type 2 diabetes was \$2,820, for people living with cardiovascular disease or with chronic obstructive pulmonary disease this increased to \$7,606 and \$6,629 respectively.

This program aligns with *Australia's Long Term National Health Plan* Pillar Three: Mental health and preventive health. By investing in *Exercise is Medicine: Diabetes* program, the Australian Government achieves the goal of building a more active Australia and preventing type 2 diabetes. This program further aligns with the *Australian National Diabetes Strategy 2016-2020*, aligning with Goal 1: Prevent people developing type 2 diabetes (Australian Government Department of Health, 2015). This program assists in reducing modifiable risk factors of physical activity and obesity in the general population as well as amongst high-risk individuals, providing an effective, evidence-based and cost-effective intervention.

Table 6: Exercise is Medicine: Diabetes Budget Request

Exercise is Medicine: Diabetes Budget Request	2020-2021	2021-2022
Program Management (0.2 FTE) Support the delivery and evaluation of the <i>Exercise is Medicine: Diabetes</i> program. Further in-kind support to be provided by Exercise & Sports Science Australia.	\$15,000	\$15,000
Program Resources A nominal payment to support the development, production and printing of educational materials used for the program. Further in-kind support to be provided by Exercise & Sports Science Australia.	\$50,000	\$0
Facilitators Induction and Training A payment to support the training, upskilling and resourcing of each EIM facilitator in preparation for providing education sessions.	\$50,000	\$0
Marketing A contribution to provide EIM with resources to increase awareness of the program and the importance of physical activity for mental wellbeing & resilience.	\$50,000	\$50,000
Subsidised Exercise is Medicine: Diabetes Workshops 50 x free to consumer <i>Exercise is Medicine: Diabetes</i> workshops with a focus on regional, rural and remote areas.	\$80,000	\$80,000
TOTAL	\$245,000	\$145,000

TOTAL BUDGET REQUEST

Table 7: Exercise is Medicine: Total Budget Request

Exercise is Medicine Programs Total Budget Request	2020-2021	2021-2022
<i>Exercise is Medicine: Mental Health & Resilience Program</i>	\$245,000	\$145,000
<i>Exercise is Medicine: COVID-19 Program</i>	\$245,000	\$145,000
<i>Exercise is Medicine: Diabetes Program</i>	\$245,000	\$145,000
Course Accreditation of the three programs with at least three peak bodies	\$18,000	\$18,000
Online Training Program Hosting & Maintenance for three programs	\$9,000	\$9,000
TOTAL	\$762,000	\$462,000

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