

Exercise Physiology, Social Prescribing and Assessing PA levels

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Who am I?

Director/Exercise Physiologist - Hunter Rehabilitation and Health
Most Passionate Exercise Physiologist in Australia
2018 Australian Exercise Physiologist of the Year



INTRODUCTION

My core purpose

To educate and empower all humans to move more and live better

WHAT IS EXERCISE PHYSIOLOGY?

*AEPs are university qualified allied health professionals equipped with the knowledge, skills and competencies to design, deliver and evaluate safe and effective exercise interventions for people with **acute**, **sub-acute** or **chronic** medical conditions, injuries or disabilities*

INTRODUCTION

TODAY'S FOCUS

THE PROBLEM

RESEARCH

PRACTICAL
IMPLICATIONS

THE PROBLEM

***Physical Inactivity** is one of the largest risk factors for premature **mortality**.*

*Why are we not treating it like other risk factors? What do we do for High Blood pressure, High Cholesterol, High Blood Glucose? **We treat it***

*Physical Inactivity, is still **untreated***

THE PROBLEM

Australian Institute of Health and Welfare and Australian Bureau of Statistics research found that in Australia:

- **more than half (55%) of adults do not meet the physical activity guidelines**
- **2 in 3 (70%) children aged 2 to 17 do not meet the guidelines**
- **only 3 in 10 pregnant women meet the guidelines**
- **only 2% of teenagers aged 13 to 17 meet the guidelines**

THE PROBLEM

Requested Medicare items processed from July 2021 to June 2022



Click on the item hyperlinks below to get the patient age/gender breakdown of that particular item

Item	State									Total
	NSW	VIC	QLD	SA	WA	TAS	ACT	NT		
	Services	Services	Services	Services	Services	Services	Services	Services	Services	
10953 Exercise Physiology	75,155	43,951	94,389	24,664	28,050	5,213	5,803	1,030	278,255	
10960 Physiotherapy	861,793	764,519	626,784	203,103	254,704	28,164	20,187	7,114	2,766,368	
10962 Podiatry	1,060,709	1,030,424	574,665	370,579	317,841	85,337	15,794	7,788	3,463,137	
10964 Chiropractor	195,244	161,367	101,441	35,599	47,280	5,267	1,961	947	549,106	
Total	2,192,901	2,000,261	1,397,279	633,945	647,875	123,981	43,745	16,879	7,056,866	

Only 3% of all Chronic Disease Management sessions in NSW are to an Exercise Physiologist?

THE PROBLEM

Both GP's and the public are looking for ways to engage in preventive health measures. Many GP's are appropriately concerned that addressing physical activity will take too long, but it doesn't necessarily have to.

Ask yourself,

- 1. How many days per week do you engage in moderate (or higher intensity) physical activities (like a brisk walk), and then, on those days, how many minutes do you engage in activity at that level? Multiply the numbers and see if you meet the Australian Physical Activity Guidelines of 150 minutes of moderate-to-vigorous physical activity per week.**



RESEARCH

How long did that take? Did it make you reflect on your physical activity habits?

In 2016, the Canadian Medical Association passed a resolution supporting the inclusion of physical activity questions in the vital signs section of Electronic Medical Records. This was trialled first in British Columbia.

Data from the 2017 Canadian Community Health Survey revealed that in Canada, 57.4% of adults self-reported meeting the national guidelines, whereas in BC that percentage was significantly higher, 64.9%

RESEARCH

The two physical activity questions on the previous slide are an example of a validated exercise history screening tool that is quick and simple to use. When systematically asked in all patient encounters and entered into the patient's records it has been shown to be effective in increasing PA levels

A large study by Kaiser Permanente involving almost 1.8 million patients found that by promoting the systematic collection of these questions into EMRs they were able to identify physical activity history in the charts of 86% of patients after 18 months of implementation

By simply asking the questions we can start to have an impact. Physical activity seems to have a dose-response effect: increasing physical activity even by 10 minutes per day results in a substantial improvement in mortality and morbidity, and this effect is greatest when targeting those who are sedentary

Daily step count and the need for hospital care in subsequent years in a community-based sample of older Australians

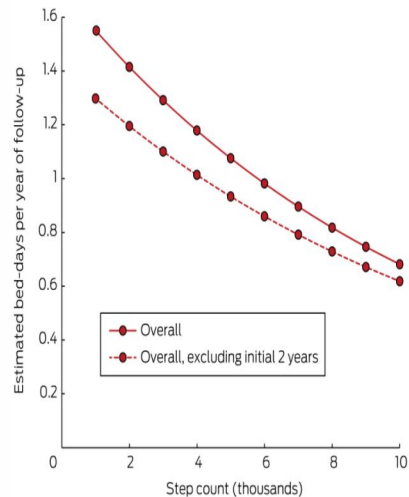
Ben D Ewald¹, Christopher Oldmeadow², John R Attia²

Affiliations + expand

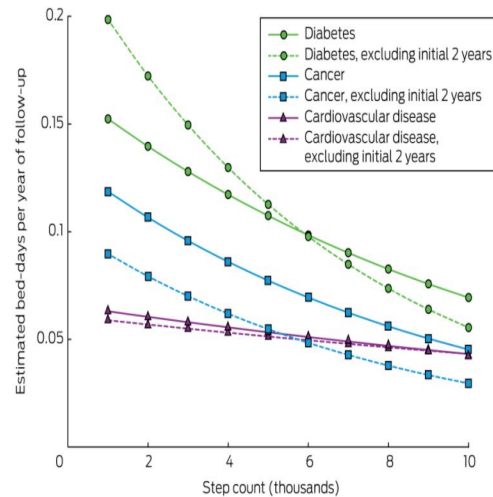
PMID: 28208044 DOI: [10.5694/mja16.00640](https://doi.org/10.5694/mja16.00640)

< > Box 4 – Estimated numbers of bed-days per year of follow-up, by step count: A. overall; B. disease-specific

A



B



What does mean?

Currently costs the government \$1900 per day for a bed in hospital

Currently 7 million Australians aged over 55

25th percentile was 4300 steps per day

If we helped only half of this 25% achieve >8800 steps per day

$7,000,000 \times 0.125 \times 1900 \times 0.36 = \$598,500,000$ million per year saved

Results

- ***Statistically significant reduction in the number of hospital bed-days associated with higher step counts***
- ***The difference between 4500 and 8800 steps per day (the upper and lower quartile boundaries for step count) was 0.36 bed-days per person per year***

Conclusion

More active people require less hospital care, and an achievable extra 4300 steps per day would result in an average of one less day in hospital for each 3 years of life.

CURRENT RESEARCH

2021 META-ANALYSIS FROM MOMMA ET AL. FOUND;

- **As little as 30min/week of strength training was associated with 10-20% lower risk of all cause mortality**
- **Adding aerobic training was associated with 40% lower risk - doubling the effect!**
- **That's why everyone needs strength and aerobic training!**

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PRACTICAL IMPLICATIONS

- 1. *“How many days a week do you engage in moderate or vigorous physical activity?”***
- 2. *“How many minutes on those days do you engage in that activity?”***
- 3. *Record PA in minutes per week in patients notes (review each visit)***
- 4. *If <150mins refer to Park Run, Exercise Physiologist for goal setting and plan***

CONTACT

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