



## **Supporting Information**

### **Supplementary table**

This appendix was part of the submitted manuscript and has been peer reviewed.  
It is posted as supplied by the authors.

Appendix to: Mattison G, Canfell OJ, Forrester D, et al. A step in the right direction: the potential role of smartwatches to support chronic disease prevention in health care. *Med J Aust* 2023; doi: 10.5694/mja2.51920.

## Definitions of prevention as applied to chronic disease

Level of prevention	Target population	Definition	Example
Primordial	Healthy individuals	Preventing the establishment of factors that are known to increase the risk of disease by addressing broad determinants of health	Promoting healthy eating in childhood to reduce rates of obesity and subsequent cardiovascular risk <sup>1</sup>
Primary	Healthy, at-risk individuals	Preventing the onset of disease by altering behaviours or exposures that can lead to chronic illness	Smoking cessation counselling in healthy individuals before the onset of chronic obstructive pulmonary disease <sup>2</sup>
Secondary	Individuals with preclinical pathologic changes	Detecting preclinical changes to lower rates of disease progression and/or prevent disease establishment	Preclinical cancer screening programs: eg, bowel cancer screening <sup>3</sup>
Tertiary	Individuals with chronic disease	Reducing the impact of chronic disease on individual function and quality of life	Pulmonary rehabilitation programs in chronic lung disease <sup>4</sup>
Quaternary	All individuals	Action to protect individuals from medical interventions that are likely to cause more harm than good <sup>5</sup>	Invasive, unethical investigation of symptoms that cannot be biomedically or psychologically explained <sup>5</sup>

## References

- 1 Falkner B, Lurbe E. Primordial prevention of high blood pressure in childhood. *Hypertension* 2020; 75: 1142-1150.
- 2 van der Molen, Schokker S. Primary prevention of chronic obstructive pulmonary disease in primary care. *Proc Am Thorac Soc* 2009; 6: 704-706.
- 3 Brenner H, Chen C. The colorectal cancer epidemic: challenges and opportunities for primary, secondary and tertiary prevention. *Br J Cancer* 2018; 119: 785-792.
- 4 Fieten KB, John SM, Nowak D. Secondary and tertiary prevention: medical rehabilitation. In: Traidl-Hoffmann C, Zuberbier T, Werfel T, editors. *Allergic diseases: from basic mechanisms to comprehensive management and prevention*. Cham: Springer International Publishing, 2022: p 449-470.
- 5 Martins C, Godycki-Cwirko M, Heleno B, Brodersen J. Quaternary prevention: reviewing the concept. *Eur J Gen Pract* 2018; 24: 106-111.