
## Supporting Information

## Supplementary material

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

Appendix to: Schutte AE, Bennett B, Chow CK, et al. National Hypertension Taskforce of Australia: a roadmap to achieve 70% blood pressure control in Australia by 2030. *Med J Aust* 2024; doi: 10.5694/mja2.52373.

This supporting information includes additional figures and tables to illustrate key points made in the Roadmap, and provides further details on the methods and the priority setting process on which actions of the Hypertension Taskforce are based on.

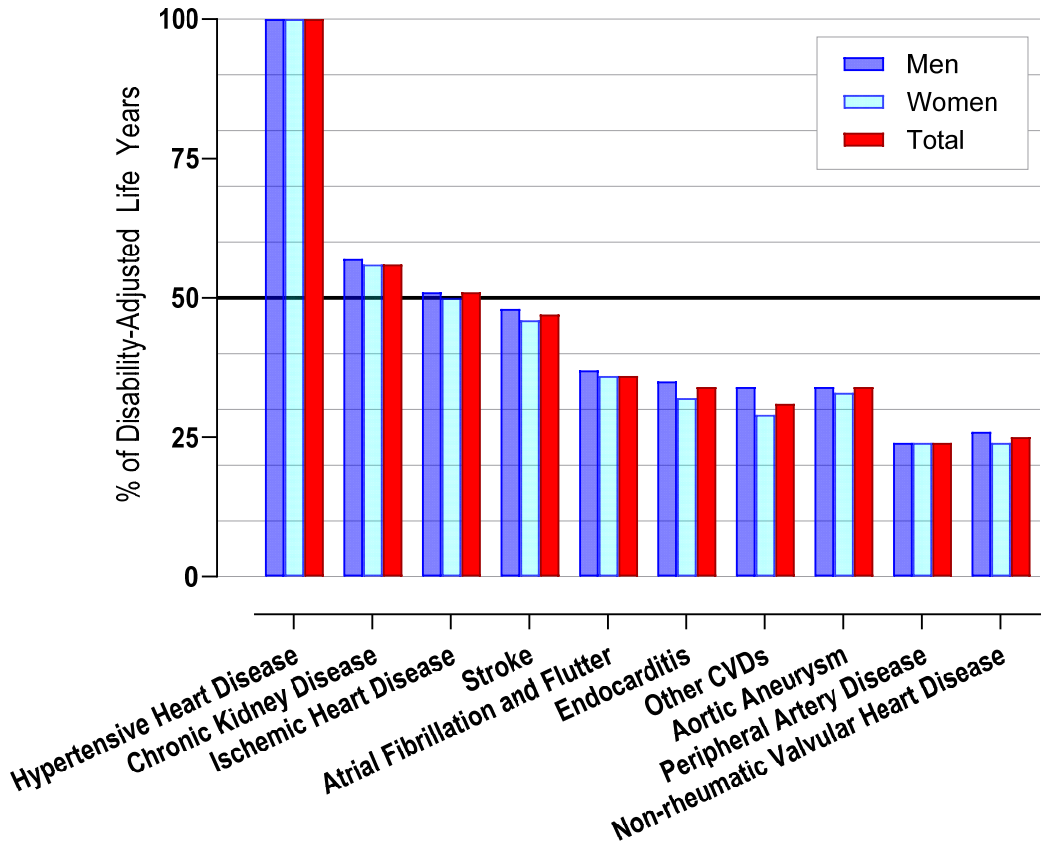


**Figure 1.** The percentage of disease burden in Australia attributable to raised systolic blood pressure.[1]

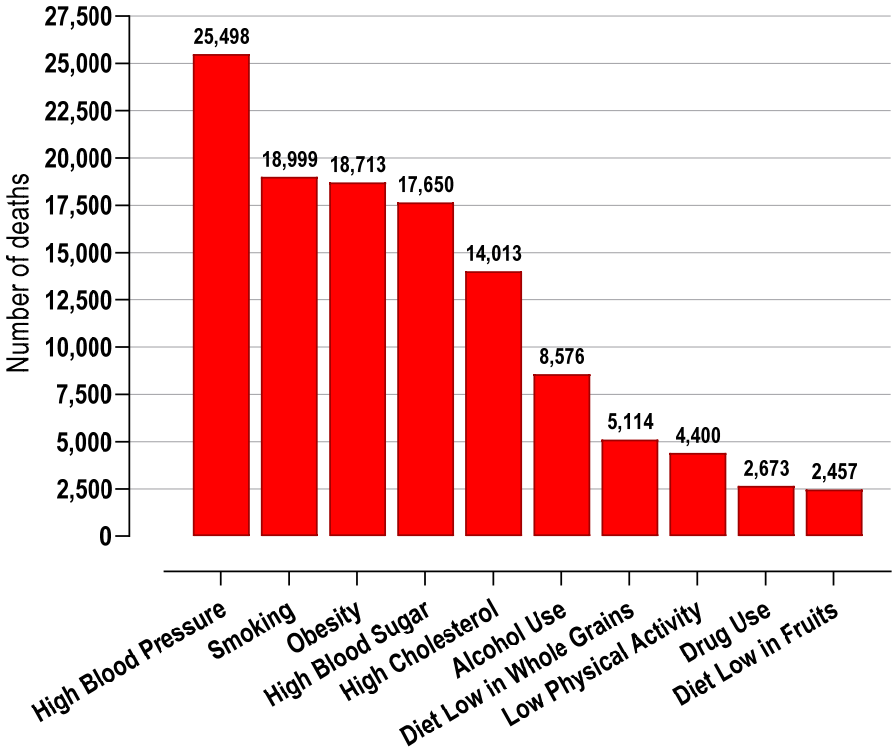


**Figure 2.** Number of deaths per year by the top 10 risk factors in Australia.[2]

Risk factors are not mutually exclusive: people may be exposed to multiple risk factors, and the number of deaths caused by each risk factor is calculated separately.

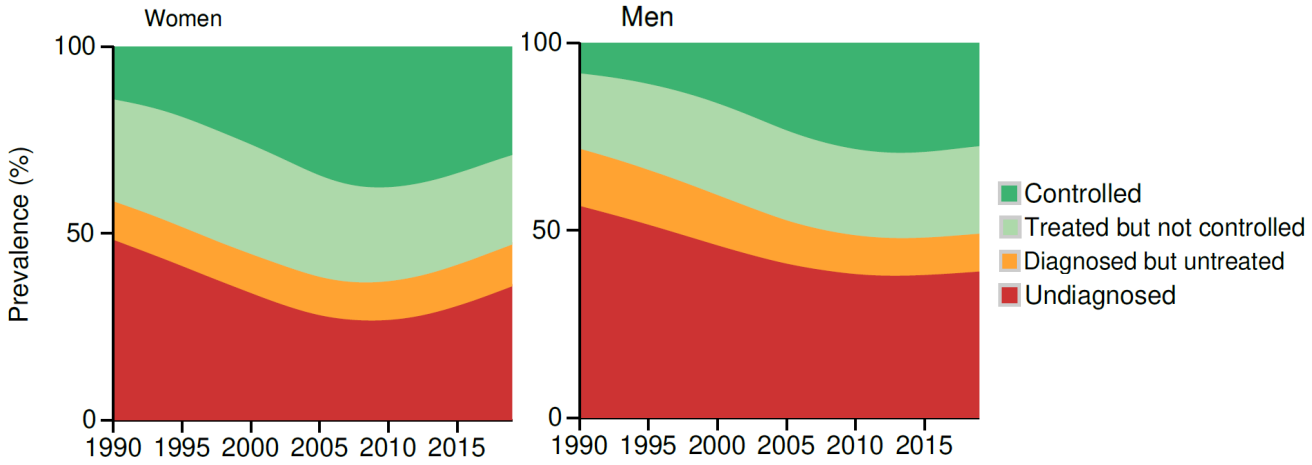


**Figure 3.** Trends in awareness, treatment and control rates for adults with hypertension in the general population of Australia[3]

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## Detailed methods for priority setting to guide the roadmap development

### *Hypertension Clinical Theme: Australian Cardiovascular Alliance*

In response to our Call-to-Action[4] paper, the process in establishing a Hypertension Taskforce was set in motion through the ACvA's Clinical Themes Initiative. The ACvA defines this Initiative as a fast agile approach to identify research-based solutions to develop partnerships across institutions, industry and philanthropic organisations towards a central goal. After submitting expressions of interest, the co-chairs of the ACvA Hypertension Clinical Theme were appointed on 10 November 2021, followed by Sprint-to-Research and Sprint-to-Priorities workshops and a policy roundtable.

Sprint Workshop 1: 29 November 2021

A virtual workshop including 24 attendees from New South Wales, Victoria, Queensland, Western Australia, South Australia, and Tasmania consisting of senior and emerging researchers with expertise in hypertension, stroke, cardiology, and nephrology, general practice, nursing, pharmacy, First Nations people as well as observers from government and representatives from non-governmental organisations (NGOs) joined forces to brainstorm opportunities, challenges and gaps to 'shift the dial'. It was identified that there are challenges at all levels from the patient, practitioner to the health system and that interventions on all levels would be required. Specific issues on each level were identified and listed. The point was raised that we need to learn from international success stories, such as those in Canada[5] and the United States.[6] Finally the collective group identified other stakeholders to be included in subsequent workshops, particularly consumers, implementation experts and representatives of specific societies and NGOs.

Joint National Cardiovascular Implementation and Policy Roundtable: 10 March 2022

This in-person event held in Canberra was attended by 65 participants from across Australia, jointly organised by the CSANZ, National Heart Foundation of Australia and the ACvA. The overall goal of the workshop was targeted to drive implementation and policy change to achieve 30% reduction in cardiovascular disease mortality, morbidity, and inequalities by 2030. A key aim identified as part of the Roundtable was aligned with our Call-to-Action paper[4] namely to "Double current blood pressure control rates to 70%" and to establish a National Hypertension Taskforce to drive this goal. A

summary paper was published in *Heart Lung and Circulation*,[7] and a report is publicly available at: https://ozheart.org/wp-content/uploads/2023/01/roundtable-report_FINALversion_20220812.pdf

Sprint Workshop 2: 27 May 2022

During this virtual workshop 19 attendees representing several consumers, and leaders across areas of general practice, nursing, pharmacy, and NGOs specifically discussed opportunities and acceptability for team-based care, patient perspectives, the potential of technology and digital health and simplified treatment protocols to improve BP control.

***International Advisory Panel***

Already during the early work within the Hypertension Clinical Theme, it was realised that we would benefit immensely from insights from country leaders who have been successful in improving BP control. We therefore invited individuals from Canada who had the highest country-specific BP control rate in the world,[3,5] namely Sheldon Tobe (Sunnybrook Health Sciences Centre, Toronto) and Norm Campbell (University of Calgary). We also invited from the USA, Mike Rakotz (American Medical Association, Chicago), Janet Wright, Paul Muntner (both Centres of Disease Control and Prevention, Atlanta), and Andrew Moran (Columbia University, Resolve To Save Lives) for their leadership aligned with the US Surgeon General's Call-to-Action in 2020 to improve blood pressure control,[6] with resultant key actions to drive the change in BP control. Due to the successes in improving BP control in Latin America, we also invited a key leader of this initiative, Pedro Ordunez (Pan American Health Organisation). Regular online meetings are held with these members who have been extremely helpful in sharing their experiences and lessons learnt. Some take home messages included:

- Clearly define the problem and solution.
- Keep actions as simple as possible.
- Team-based care is essential. Involve all key stakeholders from the beginning.
- Speak with one credible voice.
- Develop simple treatment protocols and applications for increased uptake and adherence.
- Transformative changes require government involvement.

- Need to be able to measure and evaluate progress.

**Formal establishment of the National Hypertension Taskforce of Australia**

On 8 December 2022 the Honourable Mark Butler MP, Minister for Health, officially launched the National Hypertension Taskforce (ozheart.org/taskforce-launched-by-minister/)(**Supplementary Figure 4**), hosted by the ACvA and Hypertension Australia. This was enabled by wide-scale engagement with key stakeholders that would be essential to ensure the necessary actions could be identified and actioned. Through administration from the ACvA contact was made with organisations who put forward representative leads.

| | |
|---|---|
| **Alta Schutte (Co-lead)** | UNSW / George Institute / ACvA |
| **Markus Schlaich (Co-lead)** | UWA / Hypertension Australia |
| **Nigel Stocks** | University of Adelaide/RACGP |
| **Zoe Girdis** | The Pharmacy Guild |
| **Chris Campbell** | Pharmaceutical Society of Australia |
| **Sharon James** | Aust Primary Health Care Nurses Assoc |
| **Breonny Robson** | Kidney Health Australia |
| **Clara Chow** | CSANZ/University of Sydney |
| **Stephen Nicholls** | CSANZ/Monash VHI |
| **Geoff Cloud** | Australian and NZ Stroke Organisation |
| **Jun Yang** | ESA/Hudson Inst Med Research |
| **Natalie Raffoul** | Heart Foundation |
| **Lisa Murphy** | Stroke Foundation |
| **Andrea Sanders** | Stroke Foundation |
| **Audrey Lee** | George Institute Consumer Panel |
| **Belinda Bennett** | George Institute Consumer Panel |
| **Garry Jennings** | Heart Foundation/ACvA |
| **Andrew Goodman** | University of Queensland |
| **Taskeen Khan (ex officio)** | World Health Organization |
| **James Sharman** | Hypertension Australia |
| **Charlotte Hespe** | Notre Dame University |
| **Mark Nelson** | University of Tasmania |
| **Tim Usherwood** | University of Sydney |
| **Jonathan Golledge** | James Cook University |
| **Anthony Rodgers** | The George Institute |
| **Ruth Webster** | University of New South Wales |

**Figure 4.** Members of the National Hypertension Taskforce of Australia (December 2023)

Once established, a formal structure and terms of reference were developed, consisting of a Steering Committee, and formal Working Groups to drive key actions (**Figure 5**).

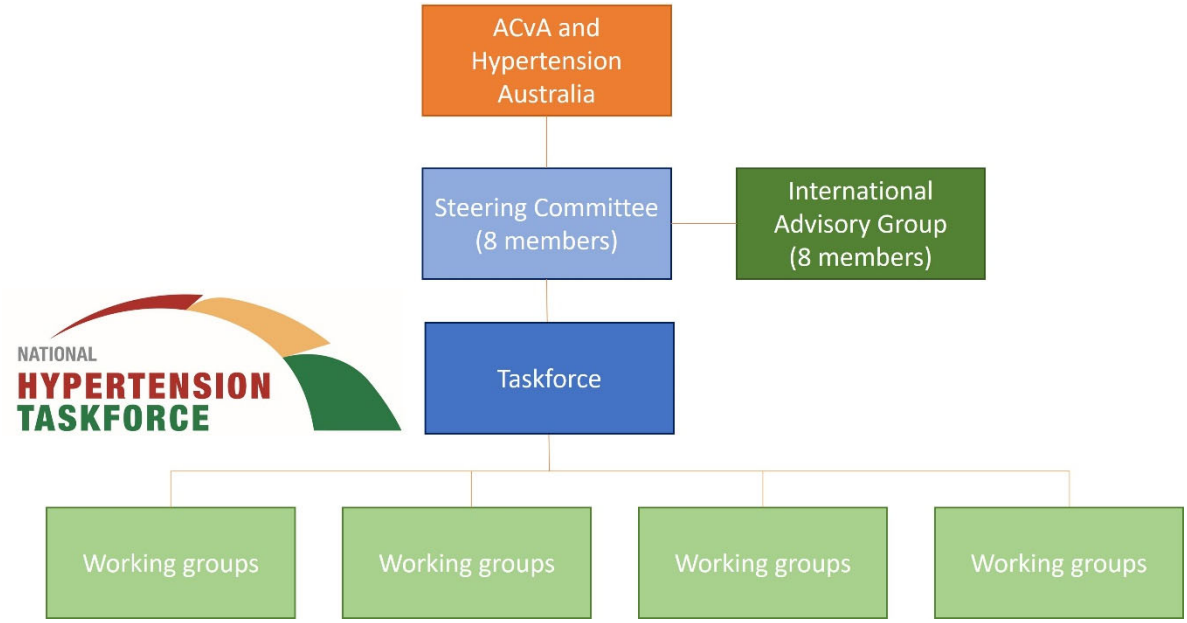


**Figure 5.** Structure of the National Hypertension Taskforce of Australia

The first meeting of the Taskforce was held on 17 February 2023, where the results of a survey sent to the members prior to the meeting, were discussed in detail. The exercise required members to provide open-ended responses to questions: *What actions do you think the Taskforce should focus on that will have impact on blood pressure control rates in the short-term?* (with three priorities), and *What long-term actions do you think the Taskforce should focus on that will contribute to improving blood pressure control rates?* (with three priorities). A wealth of detailed responses was accumulated and discussed.

These responses were then synthesised with recommended actions from the International Advisory Panel and related literature on successful hypertension control programs (such as the WHO HEARTS technical package[8]) and listed in no specific order in preparation for a priority setting exercise by the Taskforce (**Table 1**).

**Table 1.** Hypertension Taskforce Face-to-Face Workshop Priority List

- Population-level reduction of salt and sugar intake (plus other dietary and physical activity behaviours, including alcohol reduction, smoking cessation, increased fibre, potassium and nitrate intake)
- Raising and maintaining awareness at all levels (consumers, healthcare providers, government)
- Improve accessibility to BP checks e.g. through self (home) BP measurement, kiosks and digital health technologies (empower people to know their BP)
- Increase involvement of consumers (setup panel) to guide co-designing of acceptable interventions
- Empowering people to know their BP and associated risks (stroke, dementia, myocardial infarction, kidney disease)
- Education and health literacy – public and healthcare providers
- Policy changes and liaison with stakeholders including government
- Liaison with funding bodies (Medical Research Future Fund, National Health and Medical Research Council, National Heart Foundation for research funding targeting improved BP control – mostly implementation research)
- Advocacy for team-based care approach (including nurses, allied health, and pharmacists)
- Educational courses and refreshers for GPs
- Political lobbying to support first steps
- Public policy to address social and commercial determinants of health
- Develop simplified BP management and measurement protocol/tools/guidelines, including use of single pill combination therapy as first line treatment [*ensure treatment intensification]
- Adhering to guidelines for best practice care
- Improve patient adherence to medication
- BP monitoring for diagnosis and management
- Manage high-risk populations well (treat the aged, risk-based approach, new 2023 Heart Foundation Guidelines on Cardiovascular Risk Management)
- Promote identification of secondary causes
- Mandate BP measurements at routine health checks / opportunistic screening
- Target culturally and linguistically diverse populations and Aboriginal and Torres Strait Islander people
- System-based (electronic medical record) approach to identify patients with uncontrolled BP
- Promote up-titration if BP uncontrolled (General Practice software assisted alerts)
- Economic evaluations on how systematic changes may improve BP control and save costs (value for money)
- Develop and research best local models for team-based care
- Developing a central repository of BPs - National BP surveillance system (high-quality, national health-linked database)

### *James Lind Alliance Process to Set Priorities for the Hypertension Taskforce*

We followed the James Lind Alliance (JLA) approach, which is a well-known method involving a combination of surveys and workshop interactions in bringing consumers, health care professionals, researchers and other stakeholders together on an equal basis, in a priority setting partnership to define a 'top ten' list of research priorities and actions.[9-11] The aim of this approach is to ensure that clinical research and actions are both relevant and beneficial to end users.[9] On 27 April 2023, the Taskforce members convened for an in-person priority-setting workshop in Sydney. Through structured discussions and activities, the Taskforce members collectively decided and adapted the most crucial research priorities from the refined list of actions (**Table 1**), ensuring alignment with real-world healthcare concerns.

The top 10 priorities were aggregated into the three main pillars of work described in the Roadmap, namely (A) prevention, (B) detection, and (C) effective treatment.

### *Establishing Working Groups*

Based on the priorities identified, the first five working groups were established:

1. Developing up-to-date, simple blood pressure management tools for healthcare providers
2. Increasing patient activation and engagement
3. Raising and maintaining awareness at all levels
4. Establishing a systems and data-based approach to blood pressure management
5. Improving detection (screening) of people with elevated blood pressure to identify those at risk

In response to an open call for expressions of interest to join these working groups, many volunteers across Australia have joined these working groups and meet on a regular basis to drive these initiatives forward.

## References


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