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Introduction

Modifiable lifestyle and health factors influence dementia risk, and older adults with subjective cognitive decline (SCD) and mild cognitive impairment (MCI) represent a critical population for preventive interventions, given elevated risk¹. While multidomain interventions can reduce dementia risk, many are resource-intensive and difficult to scale. Digitally-delivered, less resource-intensive interventions may offer a feasible and scalable approach. The CogCoach-Health intervention was co-designed with stakeholders to provide a structured program with ongoing support for behaviour change, suitable for remote delivery and tailored to older adults with memory concerns.

Key Takeaways & Lessons

- 1 Recruitment has shown high community interest, but also a high proportion of the “worried well”. Efficient strategies are needed to identify individuals with SCD/MCI and modifiable dementia risk factors.
- 2 Older adults with SCD and MCI can engage with digital interventions when supported. User-centred design, clear onboarding, and ongoing technical support are important for engagement and retention.
- 3 Reducing burden while maintaining personalisation appears to be an important feature of dementia risk reduction programs in this context. This may support the development of more scalable and widely distributable interventions at a population level.



Fig 1. Flowchart of Participant Process

Design

A two-arm, single-blind randomised controlled trial (RCT) (target n=634) comparing CogCoach-Health with an active control condition.

CogCoach-Health is a **digitally delivered** multidomain program targeting multiple modifiable dementia risk factors. The intervention was **co-designed** through an iterative development process, including:

- Iterative consumer feedback on the e-learning modules and support manuals
- A survey exploring preferences for digital health interventions
- Four prior RCTs

The core program is delivered over 12 weeks, followed by refresher materials, booster sessions, and continued access to digital tools and resources for 12-months to **support behaviour maintenance**. Key components are summarised in Figure 2.

Participants in the active control group receive emailed healthy ageing bulletins containing general health information, with access to the CogCoach-Health e-learning program provided after study completion.

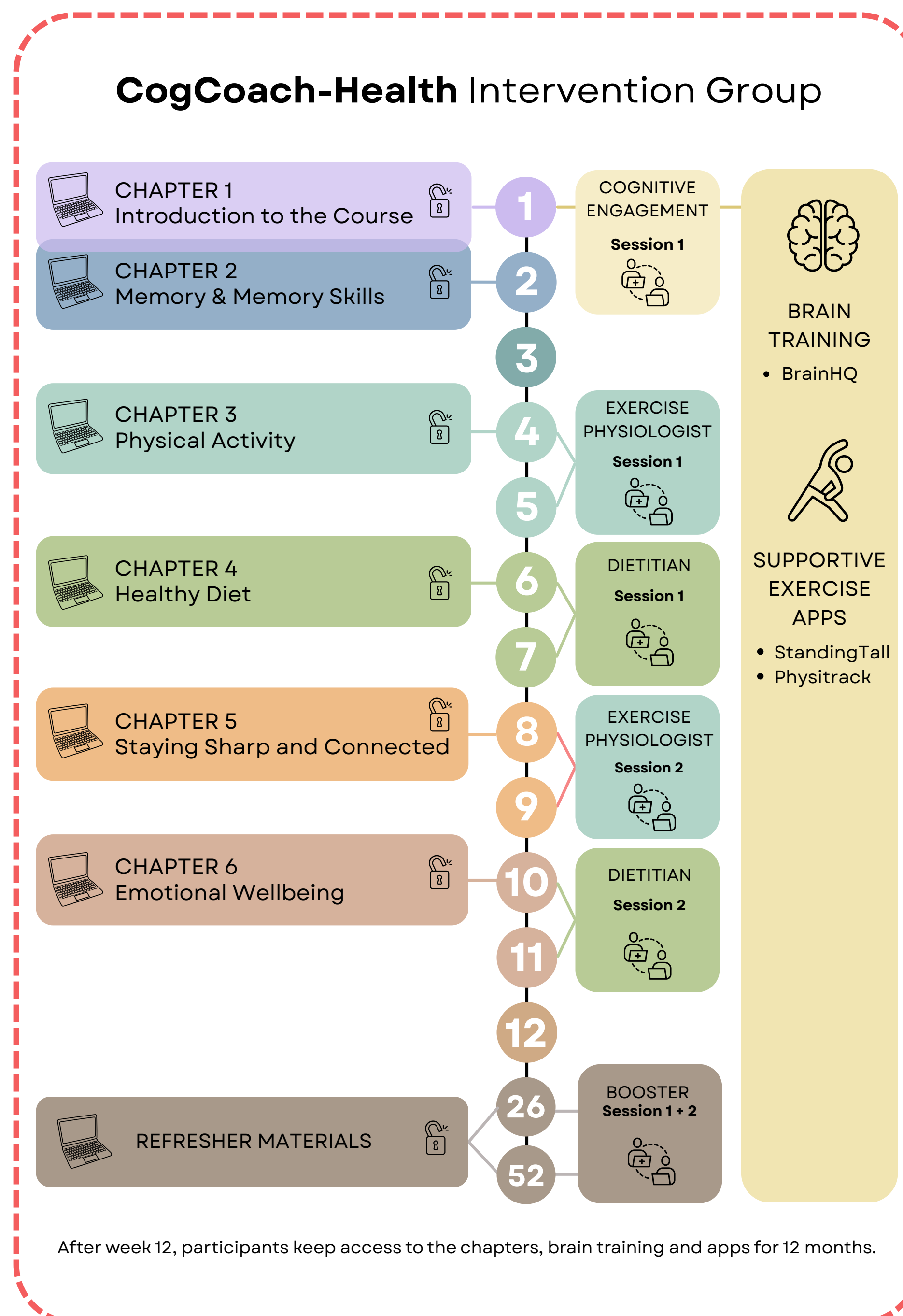


Fig 2. Flowchart of Participant's in the Intervention Group

Recruitment & Eligibility

Recruitment strategies: community newsletters, volunteer registries, GPs, memory clinics, and social media advertisements across Australia.

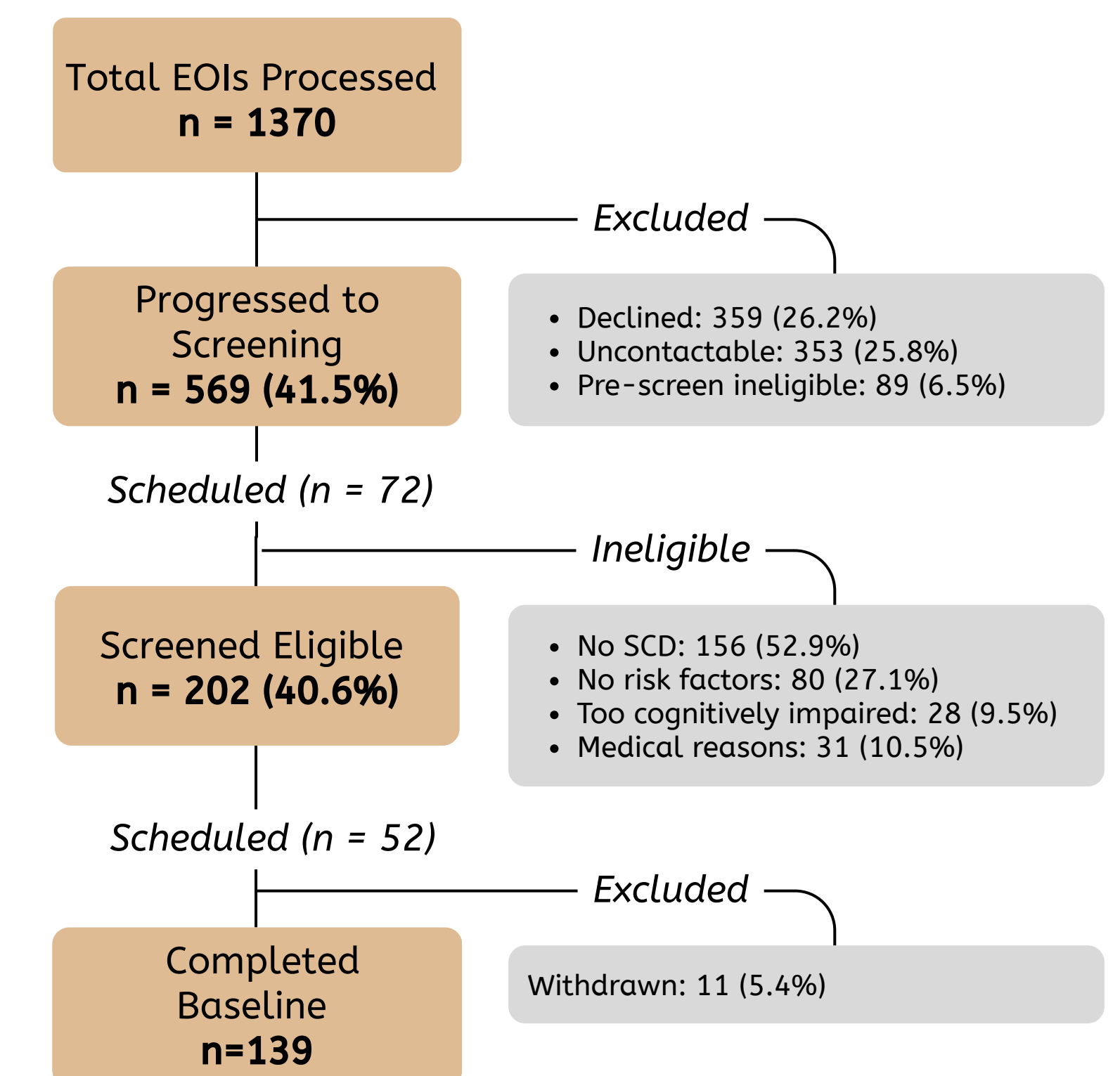
Inclusion:

- Age ≥ 65 years
- SCD (ECog-12³ score ≥ 1.54) or MCI diagnosis
- At least one dementia risk factor (insufficient physical activity, poor diet, or low cognitive engagement)
- Ability to read, write and communicate in English
- Ability to engage in an online course and phone or videoconference interviews
- Willingness to nominate a study partner to report on cognition and daily functioning

Exclusion:

- Moderate or severe cognitive impairment (TICS-M⁴ ≤ 21)
- Current participation in a healthy ageing intervention
- Medical conditions or treatments that would impact participation in the trial

Progress to Date



A higher proportion of consented individuals were drawn from non-urban areas than the Australian national average (35% compared with 27%⁵), including 12% from regional areas, 21% from rural areas, and 2% from remote or very remote areas.



Aims & Objectives

Primary aim: Evaluate the effectiveness of a digitally delivered multidomain intervention (CogCoach-Health), compared to email-based psychoeducation, for reducing the risk of dementia after 12 months (measured by ANU-ADRI²) in people with SCD or MCI.

Secondary objectives:

- Evaluate CogCoach-Health for change in cognitive functioning[†], MIND diet, physical activity, dementia literacy, cognitive engagement, quality of life and health-related quality of life.
- Evaluate feasibility, adherence, and the efficacy of behaviour change technique components.
- Evaluate the cost-effectiveness of CogCoach-Health compared with active control using healthcare utilisation data obtained through Medicare linkage.



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Funding & Registration

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