# A co-designed digital intervention for parents to improve the health of socio-economically disadvantaged adolescents in Australia

## Authors:

<u>Champion K<sup>1</sup></u>, <sup>2</sup>, Davidson L<sup>1</sup>, Lubans, D<sup>3</sup>, Baur L<sup>4</sup>, Mihalopoulos C<sup>5</sup>, Gardne, L<sup>1</sup>, Spring B<sup>6</sup>, Slade T<sup>1</sup>, Chapman C<sup>1</sup>, Burrows T<sup>7</sup>, Thornton T<sup>1</sup>, Partridge S<sup>8</sup>, Sunderland M<sup>1</sup>, Parmenter B<sup>9</sup>, Hunter E<sup>1</sup>, Teesson M<sup>1</sup>, Newton, N<sup>1</sup>

<sup>1</sup> The Matilda Centre for Research in Mental Health and Substance Use, University of Sydney, <sup>2</sup> The School of Public Health, University of Sydney, <sup>3</sup> Centre for Active Living and Learning, University of Newcastle, <sup>4</sup> Sydney Medical School, University of Sydney, <sup>5</sup> School of Public Health and Preventive Medicine, Monash University, <sup>6</sup> Department of Preventive Medicine, Northwestern University, <sup>7</sup> School of Health Sciences, University of Newcastle, <sup>8</sup> Susan Wakil School of Nursing, University of Sydney, <sup>9</sup> School of Health Sciences, UNSW Sydney

### **Background:**

Physical inactivity, poor diet, alcohol use, smoking, sedentary behaviours, and poor sleep are key chronic disease risk factors. These risk factors are higher among adolescents of low socio-economic status (SES) and interventions among this priority population are urgently needed. Parent-based interventions can improve youth outcomes and digital interventions offer many benefits. This study aims to co-design a new parent-based intervention to improve the health of low SES adolescents.

### Methods:

Co-design workshops will be conducted with 40 low SES parents in the Greater Sydney and Hunter/Newcastle regions. Parents will advise on the content, frequency and format of five intervention components. Based on the latest evidence and input from >150 parents, five intervention components will be focus tested and co-designed with parents:

- 1. Online modules: to enhance parents' self-efficacy, improve health literacy, and provide advice on how to promote healthy behaviours within financial constraints.
- 2. Web-based tailored feedback and automated motivational advice.
- 3. Stress management: to teach parents coping strategies to decrease household stress, practice stress alleviation and challenge negative beliefs.
- 4. Text messages: will be co-designed to provide supportive accountability and encourage intervention engagement.
- 5. Health counselling: will provide tailored advice, check-in on progress, and encourage intervention engagement.

Following initial development, parents will provide feedback on the acceptability and feasibility of components via an online survey. Changes will be made, and development of the final components will be conducted by our digital partner.

### **Results:**

Ethics approval has been sought and focus groups are scheduled for June 2024. An overview of the co-design and user testing process will be provided, including acceptability and feasibility data from parents and youth.

### **Conclusions:**

Through meaningful co-design with parents, this study will result in a set of equity-based parentbased intervention components to reduce chronic disease risk factors among low SES youth, ready for rigorous evaluation.

### **Disclosure of Interest Statement:**

None.