A map of community-based obesity prevention initiatives in Australia following obesity funding 2009–2013

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The prevalence of adult obesity continues to rise internationally.1 In
2011–12, 62.8% of Australian adults were classified as overweight (35.3%) or
obese (27.5%); and 25.1% of children aged 2–17 were overweight (18.2%) or obese
(6.9%).2 Data from the Global Burden of Disease study, released in 2014, indicates
that poor diet, followed by overweight and obesity (high body mass index) are now
the two leading risk factors contributing to burden of chronic disease in Australia.3

The prevention of obesity through population-level intervention holds great
promise and the literature includes examples of community-based intervention trials.4,7
Recent systematic reviews indicate that community-based and community-wide
approaches show potential to prevent obesity, particularly in school settings,9 and
should encourage community engagement, participation and capacity building,4,10 policy,
built environments and social marketing19 and whole of community change.11 Other
core elements of successful community-based interventions have been identified as:
a) implementation of multiple strategies; b) operation across multiple levels such as the
socio-ecological model levels of individual, interpersonal, organisational, community
and public policy; and c) development of community participation and ownership.10

Additional considerations might include:

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Submitted: April 2014; Revision Requested: June 2014; Accepted: August 2014
The authors have stated they have no conflict of interest.

The copyright line for this article was changed on 7 January 2015 after original online publication.

Abstract

Objective: Obesity is the single biggest public health threat to developed and developing
economies. In concert with healthy public policy, multi-strategy, multi-level community-
based initiatives appear promising in preventing obesity, with several countries trialling this
approach. In Australia, multiple levels of government have funded and facilitated a range of
community-based obesity prevention initiatives (CBI), heterogeneous in their funding, timing,
target audience and structure. This paper aims to present a central repository of CBI operating
in Australia during 2013, to facilitate knowledge exchange and shared opportunities for
learning, and to guide professional development towards best practice for CBI practitioners.

Methods: A comprehensive search of government, non-government and community websites
was undertaken to identify CBI in Australia in 2013. This was supplemented with data drawn
from available reports, personal communication and key informant interviews. The data was
translated into an interactive map for use by preventive health practitioners and other parties.

Results: We identified 259 CBI; with the majority (84%) having a dual focus on physical activity
and healthy eating. Few initiatives, (n=37) adopted a four-pronged multi-strategy approach
implementing policy, built environment, social marketing and/or partnership building.

Conclusion: This comprehensive overview of Australian CBI has the potential to facilitate
engagement and collaboration through knowledge exchange and information sharing
amongst CBI practitioners, funders, communities and researchers.

Implications: An enhanced understanding of current practice highlights areas of strengths
and opportunities for improvement to maximise the impact of obesity prevention initiatives.

Key words: obesity prevention, community-based, prevention
Mapping obesity prevention in Australia

Overweight or obese individuals. For this discussion, community-based obesity prevention initiatives (CBI) include those with a focus on healthy eating and/or physical activity adopting a multi-strategy approach (policy, built environment, social marketing, partnership building), within multiple settings (e.g. health, education, community and commercial sectors such as community organisations, schools, workplaces or clinics) and across multiple (socio-ecological) levels, excluding one-off events and one-on-one educational sessions with individuals or small groups of individuals.

In 2008, the Australian Federal Government launched a major investment of $932.7 million, through the National Partnership Agreement on Preventive Health (NPAPH), to address the rising prevalence of lifestyle-related chronic disease through communities, early childhood education and care environments, schools and workplaces, supported by national social marketing campaigns. Funding to the states/territories was provided through the Healthy Communities Initiative ($71.8 million; 2009–2014), Healthy Children’s Initiative ($244.4 million; 2011–2018), and Healthy Workers’ Initiative ($221.8 million; 2009–2018), with an additional $23 million; 2011–2018), and Healthy Workers’ Initiative ($221.8 million; 2009–2018), with an agreed monitoring and reporting process to meet a set of population-level performance benchmarks. These benchmarks were to be assessed by the Council of Australian Governments (COAG) Reform Council at two time points: June 2016 and December 2017. The Federal Government budget of 2014 announced the NPAPH will cease as of 30 June 2014, forecast to generate savings to the Federal Government of $367.9 million over four years. The future health cost burden related to decreased investment in prevention remains unclear.

Within states/territories this and other funding has provided opportunities to expand CBI through local and state governments and to direct funding grants to individual communities. Some states/territories have also shared strategies, such as social marketing campaigns and telephone counselling services to reduce duplication and costs.

These layers of investment make it difficult to obtain a comprehensive picture of the current landscape of CBI in Australia. Recent research indicates that a common focus of these initiatives has been to increase healthy eating and physical activity through education and skill building; however, a more comprehensive understanding of CBI currently operating in Australia is needed. This overview aims to increase the awareness of the breadth of CBI activity, highlight the areas of commonality and scope, catalyse discussions and knowledge exchange between practitioners, communities, funders and researchers, and illustrate the national obesity funding investment within Australia.

Objective

This paper reports on a mapping project undertaken to identify CBI operating in Australia during 2013; to provide a searchable online resource to facilitate knowledge exchange and shared learning amongst CBI practitioners and researchers; and to guide professional development towards best practice for CBI practitioners.

Methods

A comprehensive web-based review of local, state, territory and national initiatives was undertaken between 25 March and 31 December 2013. A total of 189 sites were returned using the search terms “community based obesity prevention” site:.org.au 2012..2013 [returned 14 sites]. “community based obesity prevention” site:.gov.au 2012..2013 [returned 50 sites], and “community based obesity prevention” site:.edu.au 2012..2013 [returned 125 sites]. These websites were systematically examined and recorded if they met the inclusion criteria: reported on an initiative that focused on healthy diet or physical activity. Further details of the strategies used were included where identified, (policy, built environment, social marketing, partnership building).

Websites were excluded if they did not identify an initiative operating in 2013, or if the website reported on a once-off single event or projects focused solely on individual behaviour change through one-to-one educational sessions.

The most common finding was an initiative connected to the NPAPH, of which the Healthy Children, Healthy Workers and Healthy Communities initiatives met the definition of CBI. The location, scope and mandate of the NPAPH were therefore examined in detail, including relevant implementation plans.

In total, 259 CBI were identified during the searching period. Table 1 shows the breakdown between the focus of initiatives (healthy eating, physical activity, other) and the strategies used to address these foci. The four strategies chosen are drawn from literature as those with potential (when used as part of a multi-strategic, multi-level approach) to have an impact on obesity prevention long term (policy, partnership building, built environment, social marketing).

The majority (n = 217 [84%]) had a joint physical activity and healthy eating focus. Less than half of the initiatives (n = 93) identified the use of high-level strategies to affect obesity prevention longer term. Table 1 outlines the combination of single and multiple strategies used by the CBI. Importantly, the initiatives that operated at a strategic level were most likely to combine all four strategies (n = 37). Fewer initiatives combined three of these strategies with built environment, partnership building and policy being the preferred combination (n = 9). A number of CBI also reported adopting
the single strategies of policy (n=15), and
to the built environment (n=14).
Table 1 identifies various combinations
of single and multiple strategies used to address
the joint or single focus of healthy eating and
physical activity to combat overweight and
obesity.
An overview of the target populations shows
that the majority of CBI targeted the adult
population, namely 18 to <25 years (20%); 25
to <45 years (18%); and 45 to <65 years (17%)
with 17% targeting under 18 years, with <5
years (7%) and 5 to <12 years (10%). The
most frequently reported target population
was Aboriginal people (42%), followed by
low income populations (35%). Torres Strait
Islander communities were specifically
mentioned in 19% of CBI, while culturally and
linguistically diverse populations (CALD) were
least targeted (6%).
Specific settings were
not explored in this phase of the mapping
activity, however, where a CBI self-identified
a setting, these can be found through the
free search field on the map. New South
Wales (21%) and Victoria (20%) reported the
greatest number of CBI with Tasmania (3%) and
ACT (4%) reporting least activity, which
is fairly consistent with population density in
these states and territories.
The interactive map went live on 21 October
2013, and the website has recorded 626
visits in the first five months to March
2014. Engagement with the map has been
enhanced further though the provision of an
online case study template for practitioners
to provide a narrative about their initiative
which is appraised and attached to the map.

Discussion and Conclusions
The interactive map provides the first
visual and searchable central repository of
CBI activity across Australia. This national
portrayal and macro-analysis of the obesity
prevention landscape is further enhanced by
reporting of the types and combinations of
strategies employed in different geographical
locations. This audit approach advances a
conventional report of summary information,
and provides a foundation upon which to
explore, exploit and enrich the data over
time and provide opportunities for future
analysis. More detailed data regarding
reach (population size distribution,
geographic coverage, duration and capacity);
characteristics (role of local and state-based
organisations and government, target groups,
settings and strategies; quality (best practice
principles) and likelihood of effectiveness
and sustainability of Australian CBI will be
reported through a nation-wide survey
currently in progress by CO-OPS.
The majority of initiatives on the map met
the definition of CBI in terms of focusing
on healthy eating and/or physical activity,
however, a minority adopted a multi-strategy
approach (policy, built environment, social
marketing, partnership building), with
implementation across multi settings and at
multiple levels. The use of a multi-strategy,
multi-level approach is consistent with the
recommendations for population change and
is consistent with evidence for prevention
effectiveness.10
Statistics of current usage suggest that
the interactive map provides practitioners,
funders and researchers with a useful online
resource to discover and examine CBI both
locally and interstate. The map has the
potential to facilitate knowledge exchange,
new collaborations and information-sharing
amongst CBI practitioners and researchers.
through direct access to information on the geographic location and basic characteristics of each CBI. The development of case study narratives based on best practice principles would contribute a more detailed description of individual initiatives being implemented. Appraisal of these case studies provides an opportunity for practitioners and program funders to receive feedback to guide future practice. Embedding case studies into the map of CBI further enhances information sharing.

It is relevant to mention that the new Commonwealth budget, announced in May 2014, proposes to defund the NPAPH initiative. This will impact significantly on state/territory efforts to implement best practice and the national evaluation commissioned to provide insight into this funding approach which recognised the need for continuing funding (nine years) to achieve systemic population level change. The annual update of the interactive map will provide important information regarding the continuation of these CBI.

**Strengths and limitations**

Due to the reliance on websites for identification of initiatives, it is likely that initiatives without a clear web presence will not have been included. This limitation was partially addressed through the use of key informant interviews, meetings and workshops with stakeholders and personal communications with experts in the field of obesity prevention in Australia. A template is also provided on the website to enable CBI practitioners to add new or edit existing initiatives on the map.

The search criteria for data included on the map is not mutually exclusive, for example, a search to identify programs targeting children under 5 years of age will not exclude the program if the same program also targets school age children. In some instances this may appear to be double-counting.

The objective of the map was not to provide a detailed dataset for each CBI identified, therefore, it is limited in the depth of detail provided for each initiative. In its present format, the map provides a useful overview of current initiatives. Ongoing maintenance and development of the map is required to ensure up-to-date information and expansion to provide opportunities for future analysis regarding performance outcomes, cost-effectiveness and return on investment.

A nationwide survey currently in progress by CO-OPS will report upon detailed characteristics, quality and likely effectiveness and sustainability of Australian initiatives. Visits to the website provide an estimate of access and use, but cannot be used to determine collaboration between CBI practitioners featured on the map. The use of the map as a means to enhance collaboration will be explored through the CO-OPS annual national survey and future social network analysis.

**Implications**

The map provides a unique snapshot of Australian CBI, with one-in-five initiatives meeting proposed best practice in implementing multiple strategies. While this is promising, it also points to opportunities for further professional development to ensure practitioners understand, promote and are supported in the implementation of a multi-strategy, multi-level obesity prevention response.

**Future research**

A stronger understanding of the cost-benefit relationship between funding for prevention and a reduced burden of disease through overweight and obesity is required. A more detailed explanation (e.g. funding sources) of reasons for the adoption of a stronger multi-strategy platform by some CBI could inform future investment and development of preventive health responses.

**Acknowledgements**

CO-OPS is funded by the Commonwealth Department of Health ITA 111/1112 Chronic Disease Prevention and Service Improvement Fund.

**References**

Minerva Access is the Institutional Repository of The University of Melbourne

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Whelan, J; Love, P; Romanus, A; Pettman, T; Bolton, K; Smith, E; Gill, T; Coveney, J; Waters, E; Allender, S

Title:
A map of community-based obesity prevention initiatives in Australia following obesity funding 2009-2013

Date:
2015-04-01

Citation:

Persistent Link:
http://hdl.handle.net/11343/261199

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