



The role of Local Government Level in Public Health in Australia

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Abstract

The focus of public health has traditionally been one of clinical prevention and evidence-based services for health care. Many governments have shifted the focus of public health to innovative practices where services are provided outside the clinical setting within the community, and where interventions and outcomes are designed for community wide health promotion and protection. Local government authority is important in achieving this goal and its role is expanding in this regard. However, there is much to understand in terms of implementation and refinement in terms of the challenges, drivers, outcomes, and performance, particularly the role of local government in providing strategic partnerships with the community as a key stakeholder, in health protection and promotion in improving the numerous social determinants of health. This review examined the role within an Australian context to provide a way forward to more informed and effective responses to public health. This review showed an expanding role of LG in health protection beyond health promotion and community engagement to a shift in power and responsibility. Some of the recommendations made were clarifying the role LG in legislation, greater funding and resources, and greater use of evidence-based interventions through a range of public health issues from obesity, food safety and security, to climate change resilience and emergency preparedness.

Keywords public health, local government, Australia, promotion, protection, lifestyle, community

I. Introduction and Background

Public health comprises responses to protect and promote health of a community, and measures and strategies in the prevention of injury, disability, disease and illness (Lin, 2014). These responses, measures and strategies are organised within a framework and are executed within formal government structures in association with private and voluntary efforts from non-governmental organisations (NGOs), individuals and groups (Keleher, 2016). The Centre for Disease Control (CDC) in the United States developed a framework of prevention across three areas of traditional clinical, innovative clinical and total population or community wide prevention (DeSalvo et al., 2017). The latter two are the focus of model for Public Health 3.0, where leaders have a role as health strategists (DeSalvo et al., 2017). These three areas of prevention in the CDC framework are shown in Figure 1, as the three 'buckets' of public health where the focus of the third bucket is on implementing interventions designed to reach whole populations (DeSalvo et al., 2017). The Public Health 3.0 model has two important areas of focus, which are multi sector engagement and forging community partnerships for collective health impact, and to improve social determinants of health which is increasingly becoming the role of local government (LG) (DeSalvo et al., 2017).

The recent focus on the role of LG requires pioneering efforts on the part of government and public health leaders, multiple partnerships of stakeholders, and leveraging of resources including data to tackle the determinants of health equity and health within a population at the community level (DeSalvo et al., 2017).



Figure 1. The three areas of Prevention within the Public Health 3.0 model (CDC, 2017)

Local leaders and community members often provide insights into public health that would otherwise be missed in devising health policy at a community level (Koo, O'Carroll, Harris, & DeSalvo, 2016). At this level, there are numerous determinants of public health including disparities of race and ethnicity, infant mortality, life expectancy, and pollutant exposure (Rice & Sara, 2019). Disparities in life expectancy can vary significantly across different localities making the role of local government in this regard important especially for disadvantaged populations (Stephens, Purdie, Yang, & Moore, 2013). Interventions at community level such as school based initiatives are necessary as in the case for example in dealing with childhood obesity, and are sometimes required to go further than

just healthcare (Shackleton et al., 2016).

In solving the many and distinctive challenges of public health at a community level, determinants of overall health and well-being including housing, education, transportation, safe environments, economic development, and healthy food access must be examined more fully within the local government level (Baum et al., 2016). Public health departments at the community level need to forge cross-sector collaborations that are structured and designed to meet the demands of community wide health protection in areas such as funding, reliable data, service provision, performance metrics, control and stewardship, and joint action (DeSalvo et al., 2017). The local government role in public health must develop strategic health provision, promotion and prevention partnerships (DeSalvo et al., 2017). The leadership and workforce provided by local governments is a crucial factor in implementation Public Health 3.0, together with infrastructure and accreditation, and health data, performance metrics and analysis (DeSalvo et al., 2017).

In Australia, the traditional focus of public health at a local government level was on reducing the spread of infectious diseases, through community access to clean drinking water, waste disposal and sewerage (Browne, Davern, & Giles-Corti, 2016). The way a community lives, works and plays has changed dramatically, and chronic illness has become a leading cause of death with diseases such as obesity (Biggs & Jolly, 2010). This is where the impact of local government is important as individual health has been linked to where a person lives and their postcode (Bowden, Su, & Rana, 2018). Local governments can impact positively on public health by designing healthy neighbourhoods for example, with such initiatives as tree planting, parks and recreations, policy for alcohol and drug management, and planning for the health and well-being of the community (Government of WA, Dept of Health, 2017).

This scoping review is to examine the process, challenges and drivers, and role of local government. The focus is on the outcomes of the processes and policies of local government in achieving the collective outcomes and public health performances, which are achieved through forging strategic community partnerships, and engagement of multi sectors, as well as to understanding the challenges and drivers that improve determinants of public health.

1.1 Aim and objectives

The objectives of this scoping review are to:

- Document the role and scope of public health influence of local government within an Australian context in improving health determinants and outcomes;
- Analyse the nature of the strategic partnerships forged by Australian local governments for public health; and
- Make recommendations for future practice within local governments' promotion of public health in Australia.

II. Methodology

The methodology used matched the guidelines outlined for performing a scoping review as per the outlines by the Joanna Briggs Institute (JBI, 2015). As such it is a step wise process commencing with the inclusion criteria for the research material examined, a search strategy pertaining to keywords of the topic, source of evidence selection, the data extraction process, relevant analysis of the papers and articles, and presentation of results and recommendations.

2.1 Inclusion criteria

The inclusion criteria were developed to produce sources that focused on the key concepts of the topic based on the discussion points noted above. The inclusion criteria used were:

- Australian articles;
- English language articles;

- Peer reviewed articles;
- Full text articles;
- Original research papers including editorials and book sections; and
- Articles must consider public health actions such as protection and promotion

2.2 Search strategy

The databases used to conduct the search were PubMed, ProQuest and Scopus using a 3-step process as recommended by JBI (Pearson, Wiechula, Court, & Lockwood, 2005). Search terms were identified, and for this topic, the key search terms included “local government”, “health policy”, “partnerships”, “determinants”, “challenges”, “funding”, “drivers”, “outcomes”, “stakeholders”, and “community wide”. These terms were used in conjunction with the Boolean AND as well as an OR selection parameters. The search terms are shown in Table 1. A preliminary search within one database (ProQuest) was done and the abstract, title and index terms were analysed to refine the original search terms. The refined search was revised through trial and error to the following search term phrase: "public health" AND "local government" AND Australia AND Role AND (policy OR action OR protection OR promotion OR planning OR partnerships OR determinants OR challenges OR drivers OR outcomes OR stakeholders OR community)

Table 1. Search terms with inclusions and exclusions

Public Health	Local Government
Promotion	Action
Protection	Measures
Lifestyle	Strategies
Chronic disease	Policy
	Environment
	Partnerships
Date limitation	
2016 onwards	
Subject Area limitation	Country
Public Health	Australia

2.3 Source of evidence selection

Only academic sources were searched for and selected based on the inclusion criteria described earlier. Articles from the different database searches were uploaded into the EndNote library. Duplicates arising from the different databases were deleted and removed from the inquiry. The resulting list was matched for relevance against the inclusion criteria and the fifteen checklist items specified in Table 1, based on the four phased PRISMA flow diagram shown in Figure 2 to ensure the review was systematic. The inclusions were examined first by title, then by abstract

and finally through full text for inclusion. A preliminary test was done on the first 5 articles to verify the match to inclusion/exclusion criteria.

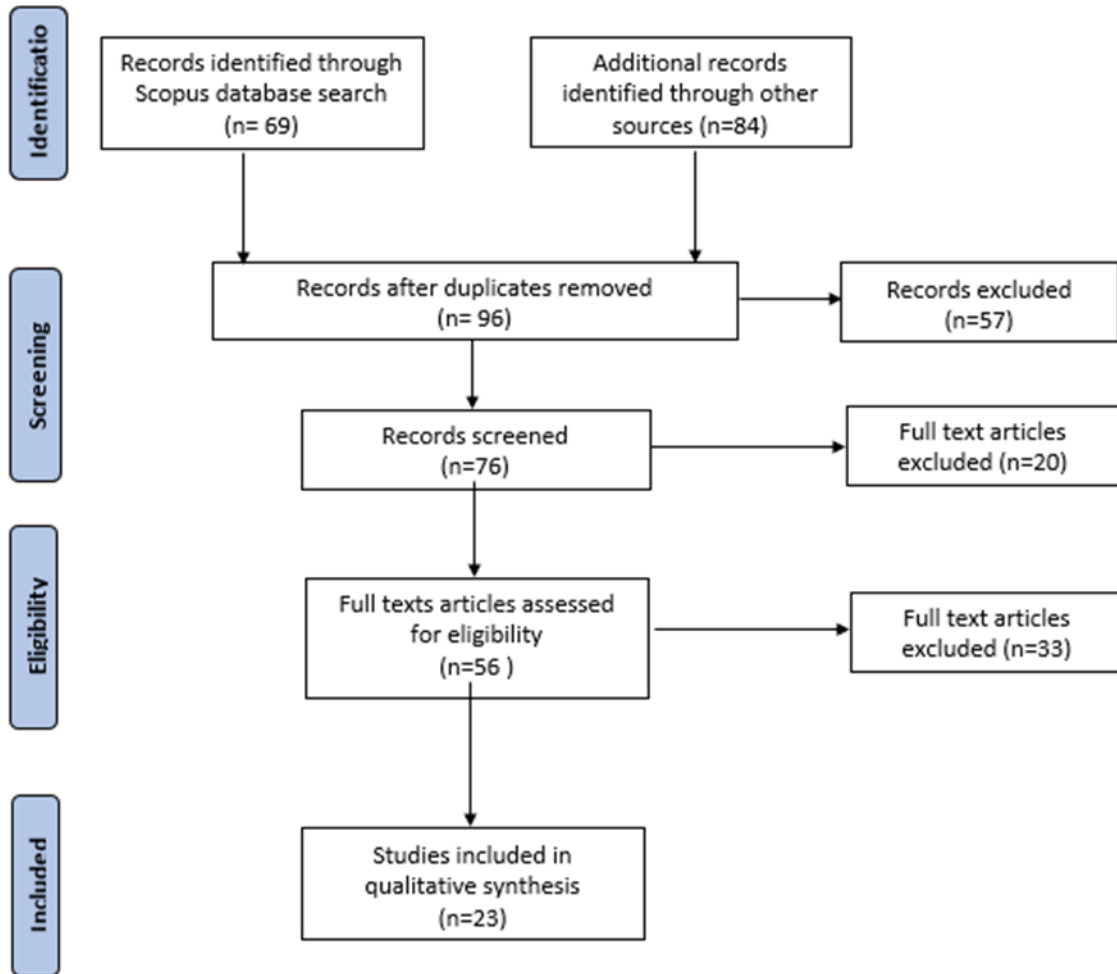


Figure 2. PRISMA flow diagram (Selcuk, 2019)

2.4 Data extraction

After restricting the results to local government articles and through the added filters of only journal articles within the last years, and only Australian location, the search term was applied to each of the databases, The revised search phrase produced a test sample extraction of 75 articles from ProQuest. Using this same search phrase in Scopus, the result was 69 articles journal articles only making a total of 139 articles (See Appendix C). The search from PubMed produced 9 results. The final step was to remove duplicates, use only full text articles and apply exclusion criteria, to arrive at a final list ready for full text analysis. After the exclusion process, 23 articles remained, and all full text pdfs were uploaded automatically in the EndNote library. All relevant information matching the inquiry parameters based on the aims and objectives were extracted using a table with keyword and theme indicators such as title, author, year, country, focus/role, drivers, challenges, outcomes, as well as additional notes as shown in Table 3 in Appendix A.

2.5 Analysis and presentation of results

The PRISMA flow diagram is used to present the results of the literature review, followed by the data extraction sheet (See Table 2 in Appendix A). A descriptive and qualitative analysis is presented to identify the use of the various challenges, drivers, and outcomes of local governance of health policy and health administration at a community and grassroots level. Themes were extracted from the articles to formulate recommendations and solutions to the problems and tensions that arise in shifting the focus to local government in line with the aims and objectives first outlined. The data extraction table helped in determining the roles and providing a focus for organising the results into various groups.

III. Results

3.1 Searchresults

The results from the review were from different role categories ranging from health promotion, disease prevention, and health planning roles. Several categories had multiple facets such as food, obesity, and climate change. There were some articles that covered roles in health policy, road safety, disease prevention, and smoking, alcohol, and gambling.

3.2 Cardiovascular Disease

The study by Alston et al. (2020) was to tackle the effect of cardiovascular disease (CVD) in country Australia by examining the responsibility of policy makers in the use of evidence-based policy (EBP) to address health issues. They used qualitative interviews with advisors and policy makers of federal, state, and local governments to determine their roles in the CVD issue (Alston, Bourke, Nichols, & Allender, 2020). They found that there was a lack of policy action and attributed this to an absence of clarity of roles and responsibilities. They attribute the apparent confusion to the three-tier level of government in Australia of local, state and territory and federal governments (Alston et al., 2020). The strength of this research lies in the power and responsibility perceptions of each of the three level government participants which was aptly illustrated with a map of linkages, showing power and responsibility as the central hub, with linkages to responses of local health authorities, wider health systems, wider social structures, country locations, and geography or location (Alston et al., 2020). This is depicted graphically in Figure 2 which depicts power as evidence driving policy, who makes the policy, what restricts policy making, and what restricts legislation (Alston et al., 2020). The diagram shows that local government is involved in the areas of location, rural communities, academia, and local health services (Alston et al., 2020). The authors concluded that there was no clear government level at which CVD policy was developed, that local government was reluctant to drive such a policy without strong backing from the community, and that there was a lack of local evidence relating to health outcomes in the rural context (Alston et al., 2020). The researchers call for greater collaboration to find new ways of getting better health outcomes especially at the rural level. This research shows the changing role of LG in terms of its broader reach in health outcomes as well as the need for LG to engage the community and get backing from academia for evidence-based interventions, and from state and federal governments in clarifying its role.

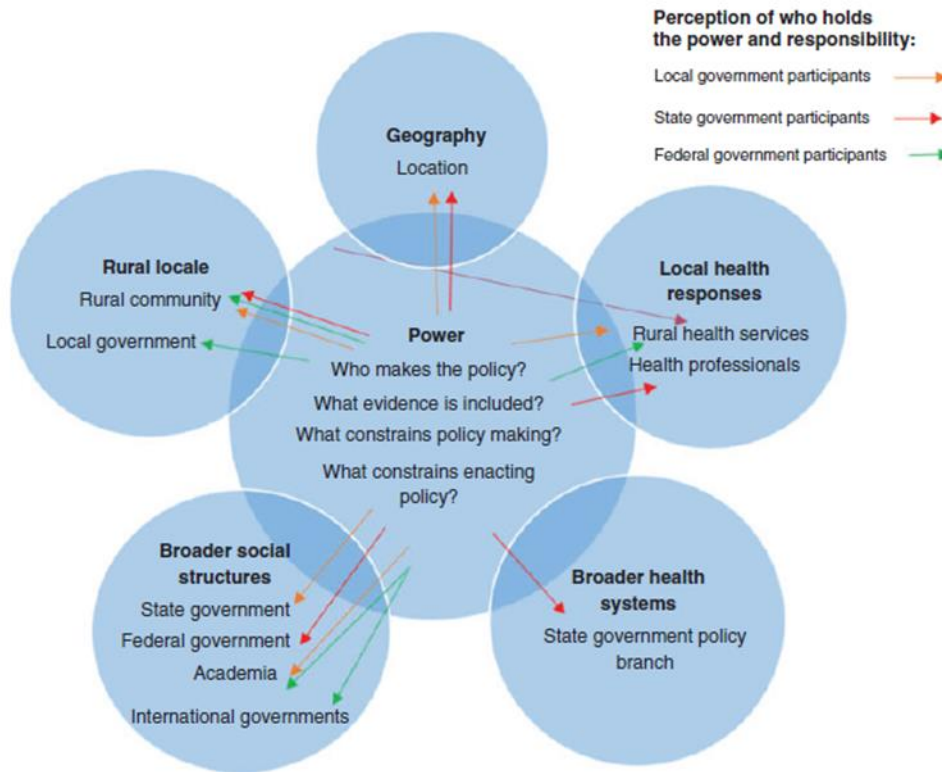


Figure 2. Power, Role and Responsibility perception linkages (Alston et al., 2020)

Hanigan et al. (2019) examined the ischemic heart deaths (IHD) held data by LG and its connection with noise levels in Melbourne. They used a downscaling approach due to the limited LG mortality data, to generate high resolution health risk maps for IHD related to road traffic noise exposure (Hanigan et al., 2019). While not explicitly stated, the authors hint at a local government responsibility in reducing risk to IHD by noise controls in metropolitan suburbs. Not only was the data on noise levels held by LG, but there is an inference that LG has a responsibility in controlling noise levels generated from road traffic which invariably affect public health. This means that the role of LG is in informing land use decisions, transport planning and urban design (Hanigan et al., 2019). The importance of this research lies in the use of it to stakeholders, such as those in city planning and policy making at the LG level, in addressing public health concerns in reducing noise levels, as well as in dealing with other noise related health issues.

3.3 Climate Effects

The focus of the research by Brown et al. (2018) was on cool communities based on the reduction of tree canopy in Perth which was thought to be a key contributing factor to the urban heat island (UHI) effect that affects climate change temperature projections in urban areas, and consequently heat waves and heat related deaths. Reducing the level of tree canopy contributes to decreasing climate resilience in many cities (H. Brown et al., 2018). The authors used a system approach named collaborative conceptual modelling (CCM) to interview participants for this research. The discussions revealed that there were 6 variables that influenced tree canopy levels through urban density, including urbanisation policy/policies, practices and procedures, community expectation and values, health and wellbeing, city designs, market drivers and values, and economic worth of trees (H. Brown et al., 2018).

After examining the features that determine system behaviours such as rules, goals, information flow, and

feedback looping, they found several factors that influenced tree canopy levels (H. Brown et al., 2018). These influences included planning practices and policies supporting compact city development, lack of tree inclusion and retention policies and regulations, accounting and infrastructure processes that did not account for tree value or removal costs, a lack of awareness of removal cost benefit analysis in the long-term, the assortment of benefits offered by tree canopies, and the long term expenses related to trees being removed (H. Brown et al., 2018). They concluded that increasing urban density will continue to reduce the tree canopy levels and affect community health unless there is a shift to sustainable city development. Thus, LG has a role to play in maintaining tree canopy level and reducing the UHI effect on public health.

3.4 Climate Change

Depression Meiklejohn et al. (2021) used practice theory to understand the role of LG in the wicked problem of climate change especially in engaging resources and time to engage households and individuals in reducing greenhouse gas emissions. They used practice theory for its acceptance of dynamism of including the entities and activities of people, families, businesses, corporations and governments working symbiotically in a social context (Meiklejohn, Moloney, & Bekessy, 2021). The authors used semi structured interviews with 29 LG officers involved in climate change community engagement initiatives, as well as an evaluation of 37 LG sustainability and climate change strategies throughout Australia. They found in addition to community engagement, LG had a role to play in regulating action, providing infrastructure, service delivery and advocating policy (Meiklejohn et al., 2021). However, they found that internal structure and culture within a LG may restrict responses to climate change, especially when the political structures and culture place stress the risk exposure, and limit the role of the council (Meiklejohn et al., 2021). In terms of community engagement, the LGs were found to influence individuals in performing daily exercises that contribute to emissions within homes, such as lighting, heating/cooling, washing, cooking, and entertainment (Meiklejohn et al., 2021). LG's use a three step process to engage the community which is recruitment practices (materials and LG competencies), engagement (workshops and building community leader capacity) and evaluation (process measures and outcomes) (Meiklejohn et al., 2021). The authors found three primary limitations to LG engagement practices which were climate change motive rationale, constrained resources, and the spotlight on individuals (Meiklejohn et al., 2021). This is best understood by referring to Table 2.

Table 2. Limitations of LG climate change community engagement (Meiklejohn et al., 2021)

Weaknesses/Practice	Recruitment	Engagement	Evaluation
Limited resources	Small-scale, local recruitment.	Face-to-face interventions.	Favours easy to measure outcomes.
Climate change as motivation for action	Limited to those already engaged.	Psychological barriers.	Misses other motivations.
Focus on individuals	Restricted to behaviour change approaches.	Restricted to behaviour change approaches.	Misses systemic changes.

The authors went on to offer a solution to these weaknesses through the processes of re-crafting through increasing support for uptake of renewable energy, reintegration through tragetting low income pensioners who were left out from solar panel uptake, and substitution practices such as tree-planting, walking and cycling paths (Meiklejohn et al., 2021). This research clearly underlines the role of LG in community engagement and in providing the solutions to the weaknesses emphasised the key role LG plays in tackling climate change at a grass roots level. They suggest the use of practice theory to address how LGs understand the complexities of household practices that affect climate change and how the policies that control them are governed (Meiklejohn et al., 2021), making a clear statement on the role of

LG to acting in an informed way to address climate change in specific contexts.

3.5 Obesity and Physical Activity

Brown et al. (2017) examined Australian policy on active transport (AT), which was specified as cycling, walking, and using public transport for various use benefits. Their health rationale was the “high prevalence of noncommunicable diseases associated with physical inactivity worldwide” (Vicki Brown, Moodie, Cobiac, Herrera, & Carter, 2017, p. 611), the associated mortality health benefits of cycling and walking, and the need to understand the benefits related to diseases such as obesity, which are linked to physical inactivity (V Brown, Moodie, Herrera, Veerman, & Carter, 2017). While they found that AT policies were federally driven, as well as a state responsibility, it depended largely on infrastructure levels for support and encouragement of such activities (V Brown et al., 2017), which was actually within the purview of LG, especially in regards to infrastructure development. They also found that there was a propensity to promote cycling more than walking as component of AT (V Brown et al., 2017). The researchers used scenario-based health impact modelling to estimate the healthcare benefits and healthcare savings of AT interventions in Australia (V Brown et al., 2017).

Clarke et al. (2021), were concerned with how overweight and obesity impacted on mortality and morbidity, and examined the problem from the perspective of policy making related to obesity prevention with reference to the Health Together Victoria (HTV) intervention. While this intervention was state driven, it had a significant impact through its policy instruments at the LG level (Clarke, Kwon, Swinburn, & Sacks, 2021). HTV’s influence at the LG level was centered on funding the large cohort of experts in health promotion directed at obesity prevention from policy change and local action approaches, within the neighborhoods (Clarke et al., 2021). They analysed six HTV interventions using political science and systems thinking including LiveLighter, Jamie’s Ministry of Food, The Achievement Program, Healthy Catering Policies, Menu Kilojoule Labelling Legislation, and Land Use Planning Policies (Clarke et al., 2021). From their closed loop diagram (CLD) analysis and political science framework, they concluded that preventing obesity was complex and the policy interventions were resistant to change. While their results uncovered perceptions into the obstacles and drivers to the prevention of obesity policy shifts, they identified some capabilities of policy actors which could be leveraged to improve responsiveness such as “policy skills, political astuteness, cross-sectorial negotiation skills, consensus building and stakeholder management” (Clarke et al., 2021, p. 18) that could prevent delays in execution. These capabilities could all be exercised at the LG level especially the policy processes and instruments such as the interventions.

3.5 Frailty in the Elderly

Sleep Jadcak et al. (2018) used semi structured interviews with twelve community housed elderly residents related to exercise and frailty. Their analysis uncovered themes such as enablers, barriers, and attitudes to exercise, information access on physical activity (PA) and exercise programmes, the GP and health professional role of GPs in exercise promotion, and the exercise advice provided by GPs for the elderly (Jadcak, Dollard, Mahajan, & Visvanathan, 2018). They unexpectedly found that retirement villages were successfully promoting exercise to their residents. The authors suggest that it was the LG’s responsibility to learn from retirement villages, in incorporating that knowledge into strategies for promoting health to integrate frail and pre frail older people into municipal PA programs, and their contribution could be through targeted brochures (Jadcak et al., 2018). They suggest creating programs designed to educate and make the elderly aware with the aid GPs who would be informed and encouraged to advise their elderly patients of available PA initiatives, or in making referrals to associated healthcare services and local community brochures more often, to address the current trend of GPs not advising patients about exercise (Jadcak et al., 2018). These suggestions are presumably the role and responsibility of LG with respect to engagement,

health promotion and possible funding.

3.6 Social Determinants of Health

Browne et al. (2019), on the other hand specifically concentrated on the role of local governments in improving the social determinants of health (SDoH) in their qualitative study of 16 in-depth interviews through estimating organisational efficiency. Their aim was to respond to the WHO's call for local governments to improve public health through enhancing the social determinants (Browne, Davern, & Billie, 2019). This research highlighted the importance of LG in terms of extending its responsibilities beyond "rates, roads and rubbish". In this study, it was noted that the Victorian State government prepared an array of resources to support LG in the social determinant's health approach to public health, with an increase to LG capability and operational effectiveness (Browne et al., 2019). They addressed their research question on the role of LG through a focus on the extent of LG's regard for state health plans and priorities, and its capacity to improve goals and strategies in improving SDoH (Browne et al., 2019). The researchers found that LG regarded addressing the social determinants (e.g. education, employment) as the first priority, followed by its objective of keeping people healthy (e.g. physical activity, and healthy eating etc), and its continuance of applying interventions (e.g. food safety, vaccinations) to protect the health of all Victorians (Browne et al., 2019). They concluded that LG in Victoria is "punching above its weight" in its role to improve social determinants of health (Browne et al., 2019).

3.7 Cultural Competence

Harrison et al. (2019) examined community health care with respect to cultural competence in engaging consumers from cultural and linguistically diverse backgrounds to build on the strengths of the engagement strategies. They conducted interviews with 21 health professionals and service managers across four LG areas in Sydney (Harrison et al., 2019). The key findings were that it was important to build trust among consumer communities, to generate system, service and community partnerships, to diversify communication channels, and to take time to build relationships (Harrison et al., 2019). While they concluded that it is important to embed cultural competence as a professional capability, and incorporate this into the health system service, they did not ascribe whose responsibility this was (Harrison et al., 2019). However, as cultural competence was part of community health service delivery, it can be assumed to be a LG responsibility.

3.8 Health Planning

Another study on the role of LG done by Javanparast et al. (2019) was the collaboration between LG and primary health care organisations (PHO) in health plans that influence health outcomes. The role of LG in public health was

viewed as an extension to the traditional roles of sanitation and emergency responses to disasters and infectious diseases, to roles in health promotion in public health (Javanparast et al., 2019). They found that apart from WA, VIC, and SA among all the states and territories of Australia, none of the others are mandated to do health planning. Thus, the research uncovered that the role was not consistent throughout Australia (Javanparast et al., 2019). Nevertheless, they found a broad array of difference in the extent of the health planning involvement ranging from full partnership with LGs to focus on social determinants of health (VIC), representation and strategic leadership in decision making (SA) and mere consultation (WA) (Javanparast et al., 2019). They also found that although TAS was not authorized to do health planning, there was LG involvement in both board representation and decision making (Javanparast et al., 2019). They attributed the non-involvement of LG in health planning decision making to resource and organisation constraints such as the three-tier government structure of federal, state, and local bodies. They suggest increasing the collaboration between LG and the PHOs through removing barriers to mandating uniform LG involvement, the

absence of mandates, and lack of resources to both the PHOs and LG in increasing collaboration (Javanparast et al., 2019). This research reinforces the leading role of LG in local planning and the development of health programs that affect health inequities and outcomes, but also increasingly in health promotion and community engagement (Javanparast et al., 2019). It also highlighted the reluctance of LG's in accepting a shift in responsibility without a concomitant allocation of resources, especially funding (Javanparast et al., 2019).

3.9 Health Promotion Role

Local government authorities in Australia have a role in a wide selection of public health issues and interventions which is to some extent explicit in Public Health Acts. These Acts usually deal with existing environment, sanitation issues and transmissible diseases, but also establish LG's governing role in public health safety through initiatives such as waste administration, food safety, and water supply and air quality (Phillips & Green, 2015). These responsibilities are significant stratagems for health safety, and although they serve to control infectious diseases, they do not deal with non-communicable diseases, that are the other main source of illness and death. This expansion of role is part of the new version of public health 3.0 (Tulchinsky & Varavikova, 2014). The expansion is now shifting to LG's role in health promotion activities including coordination of health partnerships to facilitate integrated health responses as well policy inputs in tackling the social determinants of health (SDoH) and non-transmissible diseases (McCosker, Matan, & Marinova, 2018).

With these considerations in mind, Lawless et al. (2017) conducted their research to test the uptake of these roles in two Australian states using a survey of LG employees. They found considerable support for LG's role in public health and understanding of public health ideas, as well as knowledge of the SDoH. In addition, they concluded that many participants felt that LG was involved in the betterment of health, and were using their SDoH understanding to advise policy, programs and plans (A Lawless, Lane, Lewis, Baum, & Harris, 2017). However, they found that metropolitan councils were better equipped in the areas of health promotion or legislation requirements, than the non-metropolitan councils. Another significant finding was that although LG staff were capable and interested in the expanded role of LG, the support from senior decision makers within LG was lacking (A Lawless et al., 2017) The authors called for researchers to find better ways to disseminate evidence and ideas so that they are increasingly accepted and used in policy action (A Lawless et al., 2017). Thus, this research suggests that more action is necessary to advance the role of LG to address the SDoH.

3.10 Road Safety and Transport

Metropolitan transport as a function of LG is highly concerned with road traffic safety and mortality in line with the UN's Sustainable Development Goals (Goal 11.2) which underpin its notion of sustainability in transportation and mobility (Pai & Gupte, 2014). The World Health Organisation's goal of reducing the global death toll from road fatalities is as yet, unrealised (Malik, Swapan, & Khan, 2020). While road deaths are easily ascribable to unsafe roads, the Dutch "Safe System" approach apportions the responsibility to four areas, namely "safer roads, safer vehicles, safer speeds, and safer road users" (Malik et al., 2020, p. 2). This approach and Sweden's "Vision Zero" both acknowledge the human factor in the problem where there is an increased focus on the behavioural and psychological factors of human behaviour. In examining the Australian experience of these approaches, Malik et al. (2020) found that the success of Australia in reducing road fatality was insignificant partly due to lack of implementation frameworks. Their approach was to focus on this failing by developing a concept framework to analyse how state

policy and principles is passed onto LG authority in Perth, through an indepth study of 30 LGAs in the Perth metropolis (Malik et al., 2020). They looked at the responsibility of LGs from the four principles of Clarity of policy alignment, Capability, changing Contexts, and Community engagement (4C). The varying results across the 30 councils,

prompted them to suggest recommendations. These included strategies such as educational programmes, funding, greater understanding of road safety policies, involvement of road users, and host new technologies and build better infrastructure (Malik et al., 2020). Thus, the role of LG in this context is education, funding, policy, engagement, innovation and infrastructure.

3.11 Gambling and Addiction

Electronic gambling machines (EGM) are one of the most destructive gaming products in Australia, and they are not only associated with crippling financial losses but with depression, domestic violence, and criminal activity (Bellringer, Pearson, Koziol-McLain, & Abbott, 2017). Although EGM regulation in Australia is the responsibility of state and territory government, gambling participation has increased due to accessibility of EGMs (Young, Markham, & Doran, 2012). Furthermore, these entities (state and federal governments) derive taxation revenue from EGMs that compromise their ability in harm prevention, unlike LGs which have a raft of policies and practice procedures to prevent and mitigate harm caused by EGMs (Marko, Thomas, Pitt, & Daube, 2020). Marko et al. (2020) aimed to understand how LGs prioritise the issue of EGM harm (Theme one), how stakeholders influence decision making and policy (Theme two), and what the drivers and barriers were to local strategies of reducing and preventing harm (Theme three), which they classed as themes of investigation. They recruited 15 LGs in Melbourne for the study using semi-structured face-to-face and telephone interviews. They found some interesting trends in each of the three theme questions. Within theme one, they found a shift from frameworks of addiction to approaches in public health, a justification for EGM prioritisation, and limits on the capacity to ranking for priority. Within theme two, they found that the general community was difficult to engage, the influence of experts such as academics, advocates, treatment providers, and influences within the LGs. Within theme three, they found a move towards a whole of LG approach, increased resources needed to limit EGMs, the need for both local evidence, and the need to return decision making and regulation to the LGA (Marko et al., 2020). Thus, role of LGA was shown to be crucial in this health issue especially in policy responses and in LGs adopting gambling addiction and prevention, as an important health issue.

3.12 Smoke Free Laws

Smoke free laws in countries are important in prohibiting indoor smoking in workplaces, public places and on public transportation, as per WHO directives (Peruga, Hayes, Aguilera, Prasad, & Bettcher, 2018). Peruga et al. (2018) examined 47 countries around the world that introduced a nationwide inclusive smoke-free law as of 2014, for compliance. They found that local authorities played a role in compliance through the provision of education or assistance for inspections or for both (Peruga et al., 2018). Consequently, they suggest that governments employ local government authority in enforcement but advocate that the enforcement occurs independently. They also suggest that LG has a key role in countering tobacco manufacturers, and its partners' vested interests in undermining enforcement actions (Peruga et al., 2018). This research outlines the role of LG in enforcing smoke free laws, protecting the integrity of the enforcing processes, and countering abuse perpetrated by vested and private interests.

3.13 Mental Health and Wellbeing

Although mental illness is similarly prevalent in both city and country areas in Australia, the suicide rate is 50% higher in rural areas (Kennedy, Adams, Dwyer, Rahman, & Brumby, 2020). A comprehensive approach to tackle this problem is needed, one which entails the promotion of wellbeing, prevention, medical intervention to help the suicidal, and the at risk, and to prevent others from falling prey to this malady (Klonsky & May, 2015). Accordingly, and in response to a mass of suicides, Powell et al. (2019) aimed to examine the issue of rural suicide through implementing a community-based wellbeing and mental health program in the Clarence Valley in New South Wales. The community

in the Clarence Valley which was the location of the suicides, formed the Our Healthy Clarence (OHC) initiative after a community workshop, which consisted of referral focal points in community centres, pop up information areas and a headspace centre (Powell et al., 2019). OHC was a partnership between the police, community, LG, education, health services, and community groups (Powell et al., 2019). Although LG plays a substantial role in OHC, it is largely under the control of the community. LG's role was in providing support and information to community members in helping OHC maintain its focus on well-being and mental health. This research has shown that LG has a part to play in mental health promotion and in addressing pressures and economic

and social determinants of suicide, where that involvement stimulates behavioural changes favorable to health

(Powell et al., 2019).

3.14 Food Policy and Environment

McCartan & Palermo (2017) examined the role of LGA in local food policy in their study of two local rural government areas in Victoria to understand the influence of food policy councils. The aim of their study was to investigate how a food policy coalition influences the local food system, in terms of its structure, function, practices,

food strategies and policies (McCartan & Palermo, 2017). They expected to answer three questions specific to membership structures involved in food coalition functionality, how it addresses food system matters, and what strategies and policies that it influences, and used the Community Coalition Action Theory to guide the evaluation (McCartan & Palermo, 2017). They uncovered five themes including the driving force of coalition work, being leadership structures and processes, the strength of the coalition being on diversity of skill and perspective, the importance of resource pooling for food system advocacy, the optimisation of functionality being on collaboration strategies, and the long-term nature of sustainability in food policy (McCartan & Palermo, 2017). They concluded that the local government representation on the food coalition was the biggest influencer of the system at a high level (McCartan & Palermo, 2017). The authors found that the involvement of LG members on the food coalition made it easier to advocate to LG (McCartan & Palermo, 2017). This research shows that LG plays an important role in local food policy councils and coalitions in shaping the local food environment.

The local food environment is an important influence on what people eat and how healthy the diet is (Schwartz, Just, Chiqui, & Ammerman, 2017). LG plays an important role as an influencer with respect to their policy and practices in the promotion of community health and well being in this regard as already stated (Schwartz et al., 2017). In Australia, many sport and recreation facilities are owned and managed by LG (Riesenberg, Blake, Boelsen-Robinson, Peeters, & Cameron, 2020). These settings host large numbers of people amongst them children, and are an important arena for health promotion, especially in promoting a total message of healthy living (Harrington & Fullagar, 2013). Notwithstanding this, the environment is obesogenic and one where healthier options are less easily available and purchased less frequently than unhealthy foods and drinks which are prevalent in these facilities (Naylor, Bridgewater, Purcell, Ostry, & Wekken, 2010). Riesenberg, Blake, Tara, et al. (2020) assessed LG owned and run sport and recreation services in Victoria through the policies, practices and attitudes of LGs in providing healthy food and preventing obesity. They surveyed 79 LGs for this purpose with questions relating to the priority ascribed to preventing obesity, and their food policies at sport and recreation facilities (Riesenberg, Blake, Tara, Peeters, & Cameron, 2020). They found that in 49 LGs, the priority of obesity prevention ranged from moderate to high. In 27 LGs, the healthy-food promotions increased from the year before. Those local governments in major cities and those in higher socio economic status areas had made healthy changes to the food offered (Riesenberg, Blake, Tara, et al., 2020). These results led them to conclude that LG's rank obesity prevention highly and are making changes towards healthier options. Therefore, this research demonstrates the role of LG in preventing obesity and promoting healthy eating

through healthy food options. However, they acknowledge that this is not happening universally and more support is needed especially in lower income suburbs (Riesenberg, Blake, Tara, et al., 2020).

Accessibility to inexpensive and healthy foods is harder in underprivileged or rural communities than city areas (Love et al., 2018). With this in mind, Whelan et al. (2018) looked at the issue of the food environment as key driver to poor nutrition that contributes to the greater problem of obesity in rural areas through the role of a rural and remote LGs in Australia. They found the food environment required key changes, to increase availability and affordability of healthy food options in both food stores and food service outlets, as the food environment was poor. Furthermore, they found that healthy alternatives, healthy nutrition information and promotion were unavailable at most of the food stores within the LGA (Whelan et al., 2018). They suggest a role for LG to collaborate with consumers and food store owners to make healthier options more obvious, affordable and accessible with a view to assisting consumers in making healthy choices (Whelan et al., 2018).

3.15 Food Standards

In Western Australia, LGAs have the responsibility to monitor food standards within their jurisdictions and their roles is to regularly assess food outlets as a component of surveillance of food safety (Pulker et al., 2020). They also have a legal responsibility for safeguarding community health and wellbeing as per directives of the Public Health Act 2016, and they do this through the creation and maintenance of healthy environments (Department

of Health Western Australia, 2017). Local government authorities (LGA) use a risk assessment approach to food safety which could also apply to nutrition risk in public health whereby they may have authority to ascertain the comparative healthiness of food businesses, and their likely influence on non-communicable disease caused by diet (Pulker et al., 2020). Accordingly Pulker et al. (2020) embarked on an exercise to describe the Food Outlet Dietary Risk (FODR) evaluation instrument which addresses such diet and food concerns within the domain of public health (Pulker et al., 2020). The FODR tool looks at aspects such as “food type and intended consumer use, activity of the food business, method of processing, size of customer base, and implementation of a food safety programme” (Pulker et al., 2020, p.

4). The authors found the FODR tool operated on data that determined public health food characteristics on the basis of the six attributes of obtainability of discretionary foods, nutritious foods, food appeal and acceptability, accessibility, business type, and complexity of food outlets, which is usually obtained by the LGA at business registration (Pulker et al., 2020). The authors concluded that there were some failings in logistics which prevented LGAs in determining the proportion of discretionary foods as part of the risk assessment of healthiness. They suggest alternative tools such as Nutrition Environment Measures Survey for supermarkets or restaurants (NEMS-S and NEMS-R) used in the US, but also recommend a greater frequency in the dietary risk assessment, as well as the development of appropriate dietary risk policy and interventions to assess food outlets (Pulker et al., 2020). This study highlighted the role of LGA in monitoring and assessing dietary risk in food outlets.

3.16 Food Security

Godrich et al. (2020) examined the role of LGs in the complex and “wicked” issue of food security. Their aim was to focus on the community level, and the role of LG and key stakeholders to remove some of the complexities of the wicked classification of the food security problem. They used a systematic lab innovations methodology to identify “windows of opportunity” (Godrich, Stoneham, Edmunds, & Devine, 2020). Accordingly, they used the first four stages of the systemic methodology FEMLAS, it being a linguistic contraction for Form, Explore, Map, Learn, Address

and Share project stages. Some of the food security initiatives they analysed were community garden, festival or event, health promotion intervention, food swapping groups, hunger relief/social support, food trail/farm education, farmers market, policy development, food safety training/auditing, and private/social enterprise projects (Godrich et al., 2020). Their main recommendations were to foster collaborations by LG in community initiatives, build knowledge of food security amongst community groups and local government elected officials, establishing a food policy council between LG and community groups, simplify the language used by LG, and scale up the intervention to other WA areas (Godrich et al., 2020).

3.17 Emergency Preparedness

Gribble et al. (2019) looked at emergency readiness and preparation, and infant and young child feeding in emergencies (IYCF-E) by way of a review of existing plans and guidelines. Their rationale was the high and increasing morbidity of infants and the young in large scale emergencies such as bushfires and cyclones that occur frequently in Australia, where the deaths are mainly from respiratory tract or gastrointestinal infections linked to dehydration or malnutrition (Gribble, Peterson, & Brown, 2019). Their findings from the review showed a lack of responsibility of plans at all government levels, especially when it came to infants and young children feeding at evacuation centres (Gribble et al., 2019). Their view is that all level of government abandoned the onus of responsibility to charity organisations. Consequently, they recommend that LG and state governments step up in this neglected area of IYCF-E (Gribble et al., 2019). As LG invests substantial resources into emergency preparation plans which constitute emergency preparedness, the role of LG is in obtaining funding, planning and preparation for emergencies.

3.18 Healthy Eating and Nutrition

Reeve et al. (2020) also looked at the role of LGA in nutrition and food law with respect to the promoting healthy food availability and healthy-eating and food settings. However, as the main income for LGs is derived from property rates, they have a limited capacity to react to the complexity in inherent in food systems (Reeve et al., 2020). LGs are required to develop plans for public health by state governments in Western Australia, South Australia and Victoria, which some states use for dietary health promotion (Reeve et al., 2020). LGs have a potential within their existing range of power and function to be involved in healthy food access programs, by way of land use

development, or supporting communities with funds and education, and many of whom are using these capabilities to introduce sustainable and healthy food system policies (Reeve et al., 2020).

The authors examined six LGAs in the Sydney region as well 91 related policy documents to ascertain the role of the LGAs in the food system with respect to governance, food system economic drivers, consumer and retail services, food supply chain, breastfeeding, and the consumer environment (Reeve et al., 2020). They found that LGs were involved in “reducing food waste, providing food or meal services for disadvantaged groups, enforcing food safety regulation and promoting healthy eating, cooking or food production skills through education and information” (Reeve et al., 2020, p. 142). They also found that some LGs participated in producing food, establishing community markets and gardens that sell fresh and healthy food, as well as allowing food to be grown on land belonging to LG (Reeve et al., 2020). Thus, this research showed the significant part that Australian LGs play to improve nutrition and maintaining healthiness.

3.19 Alcohol Control

Reducing alcohol related harm in developed city areas is an important objective for local government (Ward,

Belinda, &Buykx, 2018). Policy and interventions such as limiting the availability of alcohol, reducing drink driving, and increasing alcohol pricing are important facets of this objective (Babor et al., 2010; Martineau, Tyner, Lorenc, Petticrew, & Lock, 2013). Ward et al. (2018) examined the issue of alcohol related harm by investigating how “a public shelter and a volunteer-funded and staffed mobile van in a regional city influenced perceptions of safety and reduction in alcohol-related harm” (Ward et al., 2018, p. 1). They wanted to examine the consequences of entertainment precinct alcohol related harm in terms of unintended injuries, violent behaviour, and crime in connection with the risks of excessive alcohol intake (Ward et al., 2018). They found that the volunteer-staffed mobile van and shelter were both appreciated and used regularly. Although the researchers failed to find strong evidence to support that these interventions reduced alcohol related harm, it highlighted the role of LG in providing community based interventions that were in addition, to the evidence based interventions such as restrictions to liquor licenses, in reducing alcohol related injury (Ward et al., 2018). They recommended that there should be more collaboration of LG with other agencies before investing in resources in volunteering, and the constructed environment (Ward et al., 2018).

IV. Discussion

The aim in conducting this review was to ascertain the role of LG in public health, outline the barriers and enablers and identify opportunities for advancing the role in terms of social determinants and health outcomes achieved, identify the strategic partnerships and make recommendations for improving the efficacy of the role. Five of the 23 articles examined had a health focus on obesity, each with a different emphasis and relation to obesity as well as the context. The articles ranged from the role of LG in reducing obesity through active transport (Vicki Brown et al., 2017), in applying interventions such as Health Together Victoria (HTV) as well as others (Clarke et

al., 2021), food security and food policy (Godrich et al., 2020), food environment in sport and recreation centres (Riesenberg, Blake, Boelsen-Robinson, et al., 2020), and the food supply in remote areas (Whelan et al., 2018). The roles of LG highlighted in these five articles were in building infrastructure to support active transport, health promotion and interventions, community engagement through collaboration, community initiatives and food council representation, making obesity prevention a priority, and ensuring food supply in remote areas respectively.

Closely related to this theme was the role of LG in nutrition and food environment which comprised two

articles. These ranged from food councils and food coalitions (McCartan & Palermo, 2017), to monitoring food standards and maintaining food safety at local food outlets (Pulker et al., 2020). There was one article which focused on addressing frailty in the elderly through increasing physical activity and exercise in the elderly in retirement villages. Mental illness was another health issue where one article focused on suicide prevention in rural areas (Powell et al., 2019) highlighting the role of LG in health promotion.

Other articles dealt with health issues such as alcohol related harm (Ward et al., 2018), road traffic deaths (Malik et al., 2020), ischemic heart deaths due to road traffic noise (Hanigan et al., 2019), and heart disease in rural communities (Alston et al., 2020). These articles point to the role of LG in health promotion, evidence based interventions and policy making. There were two articles that dealt with the expanding role of LG in improving the

social determinants through organisational efficacy (Browne et al., 2019), and disseminating evidence and ideas for evidence based interventions in addressing the social determinants (A Lawless et al., 2017). One article covered LGs health planning role through increasing collaborations with PHOs to develop health programs (Javanparast et al., 2019). LG also had a role in compliance and enforcement of smoke free laws in public areas, that also included

countering the vested interests of tobacco companies (Peruga et al., 2018), building resilience to climate change through dealing with the problems of urban density, such as UHI by way of cool communities in increasing or maintaining the tree canopy levels (H. Brown et al., 2018), engaging households and individuals in reducing greenhouse gas emissions, where the role was not simply community engagement, but regulation, providing infrastructure, service delivery and advocating policy (Meiklejohn et al., 2021). Other examples were LG's role in emergency preparedness where they were found lacking in responsibility when it came to infants and young children not being catered for in emergency shelters (Gribble et al., 2019), and policy implementation in controlling EGM (gambling) addiction and its effects on public health such as depression, suicide, violence and crime (Marko et al., 2020). Lastly, there was the role of LG in health promotion by engaging the community and building relationships when it came to the specific issue of dealing with frailty and promoting exercise in the elderly (Jadczak et al., 2018), and in developing cultural competence in terms of community engagement (Harrison et al., 2019).

It is clear that role of LG is shifting from rates, water, sewerage, rubbish and roads to a more expansive role that requires more engagement, better leadership, more resources, greater competence, and power and influence in public health matters that include non-transmissible diseases and the social determinants of health. This review is evidence that role of LG in prevention has advanced considerably to the precepts of Public Health 3.0 in as far as multi-sector engagement and forging community partnerships, and improving social determinants is concerned. However, there are obstacles in this migration of role such as the power shifts from federal and state to local government, leadership, implementation, responsibility and expertise, and funding.

V. Conclusion, Recommendations and Implications

This review provides evidence that the role of LG is evolving from preventing communicable diseases to preventing and interventions in non-transmissible diseases, improving the social determinants of health and involvement in health promotion and community engagement. Some barriers to this expanded portfolio of responsibility are the legal mandate and resources and funding.

In line with the analysis and discussion, the following recommendations are made:

- i. The role of LG must be clarified in terms of governance to accurately define its, power, responsibilities and jurisdiction.
- ii. There should be consistent legislation in the Public Health Acts across all states and territories regarding LGs role in health planning and decision making.
- iii. LG's increasing role in food security and food environment should be supported with greater funding by state and federal governments.
- iv. LG should forge increasing collaboration with academia and researchers in implementing evidence based interventions.
- v. LG should consider the UHI and ensure that urban density is tempered by factoring in climate resilience.
- vi. LG should ensure food safety and food security especially in rural areas.
- vii. LG should play a greater role in obesity prevention and ensure cities are built with infrastructure conducive to increasing physical activity

The implications of this review is in expanding the role of LG in all areas of public health so that responses to health problems and emergencies are more relevant and direct and where full advantage can be taken of community

engagement and health promotion. There is also the consideration of using the recommendations to lobby state and federal governments for greater funding especially in the area of evidence based interventions, and removing the political obstacles that restrain LG from expanding its role in line with WHO recommendations.

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Appendix A

Table 2. Data Extraction Table

No	Title	Author	Year	Study Design	Focus/role	Drivers	Challenges	Outcomes	Role
1.	Responsibility for evidence-based policy in cardiovascular disease in rural communities: implications for persistent rural health inequalities	(Alston et al., 2020)	2020	Semi-structured qualitative interviews Thematic analysis	policy makers on the use of evidence in their efforts to set policy to reduce heart disease in rural and remote populations		Rural context	lack of access to data relevant to their community, social norms within the rural locale, limited funding and lack of skilled staff in rural settings have inhibited their ability to apply scientific evidence to the policy making process	Reducing heart disease in rural communities
2.	Cool Communities—Urban Density, Trees, and Health	(H. Brown et al., 2018)	2018	collaborative conceptual modelling (CCM). 32 representatives from the health, planning, development, and environment sectors across	tree canopy levels	Planning policies and practices	A lack of policies and regulations to support the inclusion and retention of trees in a more compact city.	he UHI effect is not given significant consideration in planning frameworks, and the risk to human health in Perth is likely to increase without action. T	Cooler communities

				state and local government and the private sector attended the workshop.					
3.	Obesity-related health impacts of active transport policies in Australia – a policy review and health impact modelling study	(Vicki Brown et al., 2017)	2017	a cohort simulation Markov model	health-related benefits of active transport	Supportive infrastructure	Changes in leadership A lack of infrastructure cycling focus of current policies	significant health-related benefits of achieving increased prevalence of active transport.	Reducing obesity
4.	'Punching above their weight': qualitative examination of local governments' organisational efficacy to improve the social determinants of health	(Brown e et al., 2019)	2019	Sixteen in-depth semi structured interviews Thematic analysis	Addressing social determinants	LG unique knowledge	LG not feeling significantly beholden to state priorities for health	local governments' unique local knowledge of health priorities. legislating a social determinants role for local government	creating healthy communities improving social determinants by "identifying goals and strategies

5.	Understanding the dynamics of obesity prevention policy decision-making using a systems perspective: A case study of Healthy Together Victoria	(Clarke et al., 2021)	2021	case study design based on the methods described by Yin. in-depth semi-structured interviews (n = 57)	obesity prevention	high political and policy capabilities of policy actors involved in obesity prevention policy. stakeholder consultation t	organisational risk aversion. inter-sectoral decision-making related to preventive health, including siloed working practices, varied standards for evidence, and differences in organisational culture, priorities and incentives across different departments and sectors Policy-relevant evidence	combination of political science theory and CLD methods to develop insights into the barriers and enablers to obesity prevention policy change in a way that reflects the underlying dynamics of decision-making	strategies to facilitate effective and broad-based consultation, both across government sectors and external to government, implemented in ways that do not result in substantial delays in the policy process
6.	Southwest Food Community: how government	(Godric h et al., 2020)	2020	semi-structured interviews	enhance food security through	connection between government and	s community adaptation of policies	connection between government and community groups.	

	and community initiatives are supporting systemic change towards enhanced food security				awareness-raising activities and partnerships	community groups.		Strengthen understanding of food security among community group Focus effort towards poor community response to low food security Refine the Systemic Innovation Lab Methodology Scale up to other WA regions	
7.	Emergency preparedness for infant and young child feeding in emergencies (IYCF-E): an Australian audit of emergency plans and guidance	(Gribble et al., 2019)	2019	plans and related policies and guidelines were audited	infants and young children in emergencies placing them at risk of serious adverse health consequences in emergencies Infant formula		assume that parents and caregivers will meet the needs of children and did not consider that parents and caregivers will need assistance in doing so. emergency kits contain no detailed information on the needs of infants in emergencies.	consultation and involvement of other sectors and community groups, such as the Australian Breastfeeding Association,	

							formula fed infants require substantial resources. heat wave emergency guidance commonly advises the consumption of water (sometimes in large quantities) without identifying that this guidance should not apply to young infants.		
8.	A statistical downscaling approach for generating high spatial resolution health risk	(Hanigan et al., 2019)	2019	Census data	Noise exposure - IHD	high-resolution spatial noise map	scant health outcome data	first spatial health risk maps of road traffic noise for IHD related death in Melbourne	to assess developments in terms of their potential to contribute to disease

	maps: a case study of road noise and ischemic heart disease mortality in Melbourne, Australia								
9.	What is the role of cultural competence in ethnic minority consumer engagement? An analysis in community healthcare	(Harrison et al., 2019)	2019	Semi-structured individual interviews were conducted with 21 healthcare professionals cross-sectional qualitative descriptive study	cultural competence and effective consumer engagement			Building trust amongst consumer communities Generate system, service and community partnerships Diversify communication channels training and education of health professionals	Embedding cultural competence as a health system, service and professional capability is therefore critical to ensure equitable healthcare quality
10.	The perspectives of pre-frail and frail older people on being advised about exercise: a qualitative study	(Jadczyk et al., 2018)	2018	Semi-structured interviews were conducted with 12 community-dwelling older	Exercise for the elderly	exercising with their partner, social aspects and rehabilitation or healthcare services, such as physiotherapy after hip replacement,	family commitments (especially for women whose role as carer may override self-care, hobbies or other activities), physical limitations (pain	The important role of retirement villages in successfully encouraging physical activity among older adults emerged as an unexpected finding.	promote exercise for older people more actively. e local government should be more engaged in promoting physical activity programs for older people.

						where participants recognized the benefits of exercise in the form of improvements in physical function and mobility	and illness), transportation and seasonal climate (cold weather and darkness common during winter months in South Australia).		
11.	Collaborative population health planning between Australian primary health care organisations and local government: lost opportunity	(Javanparast et al., 2019)	2019	online surveys with Medicare Locals (n=210) and Primary Health Networks (n=66) included both quantitative and qualitative methods: Telephone interview + Document review	collaboration with local government.	national policies and legislation strong role that LG can play in linking to local communities and engaging with other social sectors such as education and employment. The absence	unable to capitalise on it due to a range of policy, governance, organisational and resource constraints tensions between the three levels of government the allocation of responsibility between them.	Local government has the potential to tackle social factors affecting health; therefore, their inclusion in population health planning is valuable. Legislative mandates would help to achieve this, and PHNs require a stronger, appropriate governance and leadership, identification of common goals, and pooling of resources and effort where appropriate would maximise the quality and impact	local government collaboration has great potential to improve the quality of health planning and action on social determinants, thus advancing population health and health equity. increased collaborative population health planning between PHC organisations and LGs in Australia. W

						in most states and territories of uniform public health legislation mandating local government involvement; absence of a mandate from the Federal Government; lack of dedicated resources to PHC organisations and LG to support collaboration		of population health planning and lead to improved action on local social determinants of health.	
12.	Social determinants of health and local government: understanding and uptake	(Angela Lawless, Lane, Felicity-ann, Baum,	2017	survey	Social determinants of health and local Government	understanding of how evidence and ideas are disseminated,	An overarching national public health framework based on SDoH that defined the		role of local government in public health and familiarity with public health concepts and SDoH knowledge.

	of ideas in two Australian states	& Harris, 2017)			health promotion	accepted and used in policy action for health	role of local government and provided an associated funding program would provide. a solid basis for capitalising on the interest in SDoH we have found in local government		
13.	Sustainable Mobility through Safer Roads: Translating Road Safety Strategy into Local Context in Western Australia	(Malik et al., 2020)	2020	analysed relevant policy documents of 30 local governments in the PMR.	Road-traffic-related deaths and safety issues	Clarity of policy Alignment; Capability Consideration Consideration of changing contexts. Community engagement		h regional cooperation in addressing road safety issues had better policy outcomes; Undertake more educational programs; Ensure a clear funding structure for the local governments	adoption of the broader road safety strategies along the 4C dimensions

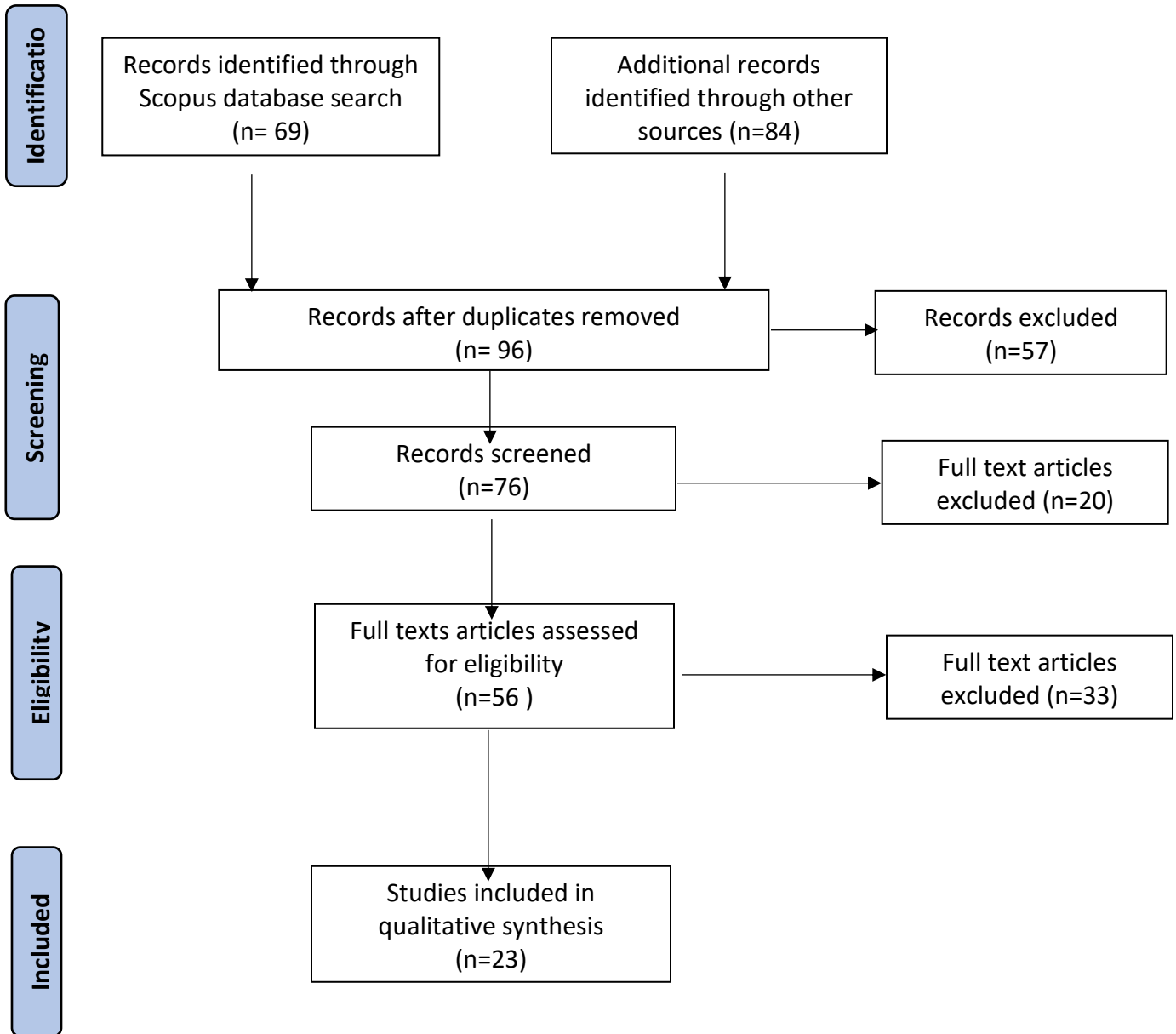
14.	The development and implementation of electronic gambling machine policy: a qualitative study of local government policy makers	(Marko et al., 2020)	2020	Semi-structured interviews were conducted with 16 participants from 15 LGAs	electronic gambling machine policy			prioritise EGMs as an important policy issue; The influence of stakeholder groups in developing and endorsing EGM policy; The barriers and facilitators involved in policy implementation	
15.	The role of a food policy coalition in influencing a local food environment: an Australian case study	(McCartan & Palermo, 2017)	2017	case study approach	an Australian rural food policy coalition	leadership structures and processes; coalition's membership is strengthened through diverse perspectives and skills; food system advocacy can be achieved through the pooling of resources	sustainable food system policy change is a long-term pursuit	coalition's function was optimised by its leadership structure, small-sized core membership and extensive community links	to engage in food system advocacy as well as pool efforts in an environment of limited funding.

16.	Applying a Practice Lens to Local Government Climate Change Governance: Rethinking Community Engagement Practices	(Meikle et al., 2021)	2021	mixed-methods approach; document analysis of local government sustainability and climate change strategies	engaging individuals and households to reduce their greenhouse gas emissions	Identifying these weaknesses offers opportunity.	Limited resources; Climate change as motivation for action; Focus on individuals	Re-Crafting, Substituting and Re-Integrating Local Government Practices; constrained financial circumstances, resulting in low-cost forms of recruitment, engagement and evaluation.	
17.	Correlates of compliance with national comprehensive smoke-free laws	(Peruga et al., 2018)	2018	analysis of WHO cross-sectional data from 41 of the 49 countries that had a national comprehensive smoke-free law in 2014, including 40 states and 1 territory	compliance smoke-free laws	depth of the enforcement infrastructure power of enforcement is perceived to be used in the public's interest and not for private gain,	tobacco industry vested interests higher national tobacco leaf production,	e importance of local involvement and the integrity of the enforcement process, including counteracting the tobacco industry's vested interests to undermine the enforcement process.	enforcement
18.	Our Healthy Clarence: A Community-Driven Wellbeing Initiative	(Powell et al., 2019)	2019	Wellbeing – suicide in rural communities;	mixed-methods review of 65 project document;	Governance and structure; culture of collaboration	mental health promotion should be seen as public health issues	improved care after a suicide attempt, Way Back Support Service; improved mental health care at the emergency room, pop-up hubs and through	Suicide prevention

								also supported urban/local food production, community gardens, and markets selling fresh, healthy food, as well as permitting or growing food on LG land.	
21.	Policies influencing the provision of healthy food and drinks in local government-owned sport and recreation facilities in Victoria, Australia	(Riesen berg, Blake, Tara, et al., 2020)	2020	online survey was e-mailed to all Victorian LGs (n=79)	provision of healthy food and drinks in local government-owned sport and recreation facilities	Increased priority	moderate to high priority. No policy on healthy food and drink	Obesity prevention is a priority for LGs, and they are making changes to improve the food environments in their sporting facilities	contributing to obesity prevention.
22.	Evaluation of a local government "shelter and van" intervention to improve safety and reduce alcohol-related harm	(Ward et al., 2018)	2018	intrinsic case-study approach was used. Document reviews, qualitative interviews with 16 key	improve safety and reduce alcohol-related harm Public safety	volunteer-staffed van and co-located shelter w	high-risk drinking in licensed premises; drink-driving programs; increasing the price of alcohol	lockout policies; increased police patrols; mandatory ID scanners	Approval of alcohol licensing applications; monitoring the density of liquor outlets; implementation and building of the permanent shelter ; funded security guards.

				informants (volunteers, licensees, police, local business owners, patrons, community members and security guards),					
23.	You Can't Find Healthy Food in the Bush: Poor Accessibility, Availability and Adequacy of Food in Rural Australia	(Whelan et al., 2018)	2018	Census audit of rural food environment	Food supply in remote areas	rural loyalty to local business.	food availability and comparative pricing.	local food supply as a determinant of unhealthy weight	Food supply interventions

Appendix B



Appendix C

ProQuest CURTIN UNIVERSITY OF TECHNOLOGY

Basic Search Advanced Search Publications Browse Databases (19)

"public health" AND "local government" AND Australia AND Role AND (policy OR action OR protection OR promotion OR planning OR partnerships OR determinants OR challenges OR drivers OR outcomes OR stakeholders OR community)

75 results Modify search Recent searches Save

Applied filters
Clear all filters

- Last 5 Years x
- local government x
- English x
- Australia x

Select 61-75 75 Selected items Clear

61 Longitudinal study of health, disease and access to care in rural Victoria: the Crossroads-II study: methods
 Glenister, Kristen M; Bourke, Lisa; Bolitho, Leslie; Wright, Sian; Roberts, Stuart; et al.
BMC Public Health; London Vol. 18, (2018).
 ...data can be difficult to obtain for rural health services and rural local ...



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69 document results

"public health" AND "local government" AND australia AND role AND (policy OR action OR protection OR promotion OR planning OR partnerships OR determinants OR challenges OR drivers OR outcomes OR stakeholders OR community) AND (LIMIT-TO (AFFILCOUNTRY, "Australia")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (EXACTKEYWORD, "Local Government"))

PubMed.gov

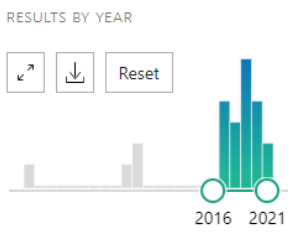
"public health" AND "local government" AND Australia AND Role AND (poli X Search

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9 results



Filters applied: Free full text, Full text, Journal Article, in the last 5 years, English. [Clear all](#)

Who Are Dispensed the Bulk Amount of Prescription Opioids?
 1 Islam MM, Wollersheim D.
 Cite J Clin Med. 2019 Mar 1;8(3):293. doi: 10.3390/jcm8030293.
 PMID: 30832231 [Free PMC article.](#)
 Share BACKGROUND: Excessive and non-medical use of prescription opioids is a **public health** crisis in many settings. This study examined the distribution of user types based on duration of use, trends in and associated factors of dispensing of prescription opioids in New S ...