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The Funding, Administrative, and Policy Influences on the Evaluation of Primary Prevention Programs in Australia

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Abstract
Evaluation of primary prevention and health promotion programs contributes necessary information to the evidence base for prevention programs. There is increasing demand for high-quality evaluation of program impact and effectiveness for use in public health decision making. Despite the demand for evidence and known benefits, evaluation of prevention programs can be challenging and organizations face barriers to conducting rigorous evaluation. Evaluation capacity building efforts are gaining attention in the prevention field; however, there is limited knowledge about how components of the health promotion and primary prevention system (e.g., funding, administrative arrangements, and the policy environment) may facilitate or hinder this work. We sought to identify the important influences on evaluation practice within the Australian primary prevention and health promotion system. We conducted in-depth semi-structured interviews with experienced practitioners and managers ($n = 40$) from government and non-government organizations, and used thematic analysis to identify the main factors that impact on prevention program evaluation. Firstly, accountability and reporting requirements impacted on evaluation, especially if expectations were poorly aligned between the funding body and prevention organization. Secondly, the funding and political context was found to directly and indirectly affect the resources available and evaluation approach. Finally, it was found that participants made use of various strategies to modify the prevention system for more favorable conditions for evaluation. We highlight the opportunities to address barriers to evaluation in the prevention system, and argue that through targeted investment, there is potential for widespread gain through improved evaluation capacity.

Keywords Evaluation capacity · Primary prevention · Health promotion · Evidence-based public health

Background

The need to generate quality evidence through evaluation of primary prevention and health promotion (from here, referred to as prevention) programs has been gaining attention (Jolley et al. 2007; Smith et al. 2016). Evaluation evidence is particularly relevant to practitioners if it demonstrates external validity, and use in program improvement and organizational planning (Francis and Smith 2015; Lobo et al. 2014; van Koperen et al. 2016). There is also the expectation that rigorous, practice-based evidence would be used to inform public health policy (Oxman et al. 2010) and guide the design and implementation of prevention strategies (Pettman et al. 2012). In particular, evidence of effectiveness and impact is needed (Oxman et al. 2010) to build knowledge about implementation success and contextual influences (Datta and Petticrew 2013), inform the scale-up of prevention initiatives (Milat et al. 2013), and enable ongoing accountability to funders (Bourgeois and Cousins 2013; Brug et al. 2011). Yet, the international prevention literature describes several challenges to program evaluation due to the complex nature and cross-sectoral approaches used in primary prevention (Nebot 2006), pressure to use traditional biomedical research methods (Petticrew 2013), and the ongoing requirement to justify investments in prevention programs (South and Tilford 2000).

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To further understand the gap in the availability of rigorous and relevant evaluation for policy makers and practitioners, evidence exploring the factors underlying evaluation practice in prevention organizations is emerging. This research predominantly identifies factors that affect evaluation practice at the individual level, such as knowledge, skills, and confidence to conduct and use evaluation, and at the organizational level, including organizational culture, leadership, support, resourcing, and internal systems for reporting and communication (Brug et al. 2011; Francis and Smith 2015; Huckel Schneider et al. 2016; Lobo et al. 2010; Napp et al. 2002; Schwarzman et al. 2018; van Koperen et al. 2016). Evaluation capacity building models and theoretical frameworks also focus on organizational- and individual-level capacity for evaluation (Labin et al. 2012; Nielsen et al. 2011), and these have become the targets of evaluation capacity building efforts (Norton et al. 2016). Yet, despite the attention given to organizational and individual level factors, there is recognition that the broader policy environment and funding systems can pose challenges to, or facilitate evaluation of prevention initiatives (Brug et al. 2011; Francis and Smith 2015; Jolley et al. 2007; Lobo et al. 2010; Napp et al. 2002; van Koperen et al. 2016).

To define the possible scope of factors that may influence evaluation of prevention programs beyond the individual and organization, we consider two conceptualizations of systems from the Australian health promotion context. Elements that are encompassed within the system include what has been described as the infrastructure for health promotion by Australia's National Health and Medical Research Council, that is: "the systems for policy development, monitoring and surveillance, research and evaluation, workforce development, and program delivery that direct and support action to promote, protect and maintain the health of the population" (Nutbeam 1998). More recently, a study analyzing the state policy context for health promotion in Australian adapted the World Health Organization's five building blocks of a health system for the health promotion system in Australia and included leadership and governance, financing, workforce, health promotion practice, and information (Baugh Littlejohns et al. 2018). In light of these definitions we conceive the prevention system to comprise primarily the funding, administrative, and policy functions that engage with the agencies and organizations delivering prevention activities.

In Australia, prevention activities are undertaken by local, state, and federal governments, as well as non-government organizations (NGOs) including community health services, issue-specific prevention organizations (e.g., AIDS Councils, Cancer Councils), and Aboriginal community controlled organizations. Models of regional coordination and support for prevention activities have been established, with functions that range from the commissioning of programs, regional coordination, partnership development, and workforce support. Policy direction for prevention and health spending in Australia has fluctuated over the past decades (Wutzke et al. 2017). From 2008 to 2014 the National Partnership Agreement on Preventive Health Australia provided resourcing and direction for multiple initiatives across Australia (Wutzke et al. 2016). Within the state context, dramatic shifts in the support for prevention activities have also taken place over the past 15 years (Baugh Littlejohns et al. 2018).

The nature of prevention programs, workforce, organizations, and funding arrangements likely present additional challenges for evaluation when compared to health care or social services settings. Health promotion and primary prevention programs seek to improve health and well-being through addressing the social determinants of health and reducing risk factors associated with disease and injury. Multiple strategies are used concurrently to improve health in diverse populations, in a range of contexts. The approaches are varied, from policy development, to environmental change, community mobilization, to social marketing, and health education. Typically, prevention agencies in Australia work in partnership with communities and other health and non-health organizations, and are responsible for the planning, delivery, and evaluation of prevention intiatives.

The challenges to evaluation practice and use in the prevention field are paralleled by those described in the research translation literature. While Type 2 translation has typically focused on the translation of medical and clinical evidence into practice (Milat and Li 2017), the recognized importance of the contextual influences upon the adoption and sustained implementation of evidence-based interventions has led to attention on policy, funding mechanisms, and infrastructure in translation frameworks for prevention initiatives (Spoth et al. 2013). The Translation Science to Population Impact (TSci Impact) framework highlights the multiple contexts acting at national, state, and local levels, and the infrastructure supports, such as practice-oriented research, research-practice partnerships, and financing structures that interact with each phase of translation from evidence of efficacy or effectiveness into widespread evidence-based interventions (Spoth et al. 2013). The attention to policy, context, and funding levers that can influence the generation and use of research evidence reinforces the necessity to consider Australian prevention system's influence on evaluation practice.

Organizational theory can also identify the potential facilitators for evaluation in the prevention setting, especially as the nature of the relationship between funder and delivery organization affects evaluation practices. Carman (2011) mapped the evaluation motivations and actions of not-for-profit organizations against four organizational theories, highlighting the crucial issues of trust, power, and conflicting administrative rules in the relationship between funder and the

organization. The study identified the potential to adapt contract and accountability arrangements to enhance evaluation practice and encourage use of findings. The authors recommended a shift in the nature of funder-organization relationships (Carman 2011). In government agencies, the widespread adoption of the New Public Management framework, which focuses on performance management, monitoring, and accountability, has driven the uptake of outcomes focused evaluation (Dahler-Larsen 2009).

To date, there has been limited exploration of system-level influences on evaluation practice, particularly in the Australian context. In one qualitative study where prevention practitioners within community health services were interviewed, program timelines, funding constraints, and reporting to funding bodies were identified as influential on evaluation practice (Francis and Smith 2015). A study which explored the perspectives of policy makers and evaluators working within government health departments found that political context, policy, and projects with short time frames, limited funding, and administrative arrangements presented challenges to initiating evaluation (Huckel Schneider et al. 2016). A more recent study examining two Australian national prevention policies found that these could promote evaluation of prevention programs by establishing a national prevention agenda, and providing infrastructure for evaluation (Wutzke et al. 2016).

Despite the growing body of literature on organizational evaluation capacity, and recognition by prevention practitioners and leaders that funding arrangements, political, and system factors influence evaluation practice, there has been no comprehensive exploration of the prevention system's role in facilitating or hindering evaluation practice. Furthermore, the perspectives of different organization types engaged in delivering prevention strategies, and in multiple jurisdictions, have not been explored. In order to address these gaps, and to guide evaluation capacity building efforts, this study aimed to (a) identify the system-level factors that influence evaluation practice from the perspective of experienced prevention practitioners and managers working in government and NGOs and (b) describe how these factors act to influence evaluation practice.

Methods

This study used a qualitative semi-structured interview method. This study was one component of a larger mixed-method research project, in which 116 NGOs and government agencies had agreed to participate. Organizations were eligible if they had at least a 5-year history of conducting prevention strategies, and met the minimum size criteria (prevention budget > $300,000 per annum, > 3 full time equivalent prevention staff) to enable the conduct evaluation and establishment of supportive processes and systems. Organizations were recruited from New South Wales, Victoria, South Australia, and Western Australia given their history of conducting primary prevention work, and likelihood of having organizations with sufficient experience and size. For this qualitative component of the research, prevention practitioners and managers with a minimum of 5 years of experience were invited from within recruited organizations to participate ($n = 40$). Participants each represented a distinct agency or organization, and were purposively recruited to allow for saturation of themes across jurisdictions, government agencies, and NGOs.

The semi-structured interview guide consisted of ten open-ended questions and additional demographic questions (Electronic supplementary material). The guide was developed based on a review of the literature, researcher input, and a pilot study of government organizations that explored determinants of health promotion evaluation practice (Francis and Smith 2015). The interview guide was piloted with three practitioners not involved in the main study. First author (JS) conducted the audio-recorded telephone interviews between February and June 2016. Invited participants were provided with an information sheet before scheduling the interview, and verbal consent was obtained prior to commencement of recording. JS recorded potential biases prior to and during the interview process using a diary, and also recorded reactions and reflections after each interview. The interviews averaged 42-min duration. Monash University Human Research Ethics Committee (HREC), Aboriginal Health and Medical Research Council Ethics, and South Australian Department of Health and Aging HREC granted ethical approval for this study.

Data Analysis

Transcriptions of the audio recordings were provided to participants for comment and approval. Approved transcripts were uploaded into NVivo 11 software for coding. The interview guide and literature review informed the initial coding framework. The first round of coding was completed by two researchers (JS and EM) after dual coding 10 transcripts. The researchers met regularly to refine the framework and discuss discrepancies until consensus was achieved. A third researcher (BJS) reviewed the coding framework regularly to ensure that clarity of concepts before the framework was applied to the remaining transcripts. Thematic analysis was undertaken to identify barriers and facilitators to evaluation practice within the prevention context, and actions taken by organizations to support evaluation.

Results

All 40 participants who were invited agreed to participate. Participants were recruited almost equally from the four

participating states (Table 1), and government agencies ($n = 18$) and NGOs ($n = 22$). Almost half of the participants worked in prevention teams of 3 to 7 staff (full-time equivalent) ($n = 17$). The sample had considerable experience and were highly qualified, with 78% having worked 10 or more years in the prevention field and 80% holding a postgraduate qualification in health promotion or public health. Participant demographics are described in Table 1. Three main themes emerged; the first two describe important system-level influences upon evaluation practice, and the third explores organization's actions to modify system-level influences (Fig. 1).

Evaluation for Accountability: Aligning Expectations

The most widely discussed system-level influence on evaluation practice was discrepant expectations between funding bodies and funded organizations about what constituted an appropriate minimum evaluation, leading to tensions around reporting, resourcing, timelines, evaluation level (e.g., process, impact, or outcome), and indicators. Many participants expressed frustration that funders provided insufficient clarity about their expectations, whereas some who had stronger evaluation capacity appreciated the flexibility. While government participants experienced similar challenges to NGOs in reaching agreement with the central funding agency about evaluation standards, it was NGO participants who discussed at length the challenges in aligning with the expectations of funders for evaluation.

Table 1 Participant demographics

	n
State	
New South Wales	10
South Australia	9
Victoria	11
Western Australia	10
Organizational characteristics	
Type	
Government	18
Non-government organization	22
Prevention staff (full-time equivalent)	
3 to 7	17
8 to 15	9
More than 15	9
Not specified	5
Individual characteristics	
Prevention experience	
5 to 9 years	9
10 to 19 years	20
20 or more years	11
Role	
Manager/Director/CEO	29
Team leader	4
Senior practitioner	4
Other	3
Qualifications	
Postgraduate—health promotion/public health	18
Postgraduate—other	10
Undergraduate	12

Participants referred to four aspects of their funding agreements when describing influences on evaluation practice, namely, reporting requirements, timelines, evaluation level and indicators, and funding levels. While each factor could act alone to facilitate or hinder evaluation practice, what emerged as most critical was the alignment of expectations between the funding agency and delivery organization about what level of evaluation could realistically be achieved with the resources available.

Many participants described the importance of evaluation to enable accountability to their funding body, donors, or in the case of government agencies, tax payers. While accountability was a key driver of evaluation, a small number of participants speculated that evaluations sent to funding bodies were unlikely to be used for any purpose other than meeting minimum accountability criteria, and were therefore a waste of time. Where organizations were required to meet only the minimum requirements, participants appreciated the demand for regular reporting against key indicators, or a template based evaluation, to facilitate data collection from the beginning of a program. Others expressed frustration at reporting against outputs or indicators that added no value for organizational learning, program improvements or could not demonstrate impact of their programs, and found this to distract from efforts to conduct evaluation more useful to the organization.

> "I think for the funders it's kind of almost, like … it's a little bit ticking the box…; we did 15 projects and they were all evaluated." (Participant 1, NGO)

Even with reporting requirements that facilitated evaluative activities, many participants described the challenge of meeting the expectations of funding agencies for evaluation with the available resources, particularly in the case of unclear or changing expectations.

> "… the requirements of the regional office does not align with what the guidelines say. I think if I sat down with people from both of those situations and say do you want us to do formative evaluation? Oh yes of course. Do you want us to do a process evaluation? Oh yes. Impact? Yes if you can that would be good too." (Participant 6, NGO)

Theme 1. Evaluation for Accountability: Aligning Expectations.
Organizations first seek to meet accountability requirements, even if they don't think it's the most useful evaluation. Additionally, expectations of the minimum evaluation expected can be clearly communicated and aligned between the two organizations, or they can be vague and misaligned. Expectations at this level are generally expressed through administrative requirements (e.g. reporting or templates), funding allocations or direct communication between funders and the organization.
Theme 2. Funding and Policy Context: Prioritizing Prevention and Evaluation.
Evaluation is perceived as embedded in prevention practice by many participants. Valuing and understanding population level prevention programs at the political and funding levels is a pre-condition to evaluation practice. Tensions arise when the demand for evidence of effectiveness is expected, yet resourcing, and program and evaluation design does not allow for appropriate evaluation.
Theme 3. Modifying the System: Creating a Favourable Environment for Evaluation.
Prevention organizations undertake a range of intentional activities to improve system conditions, encourage use and create demand for evaluation and prevention activities. The focus of organizational strategies were: A) Addressing evaluation requirements and resourcing, through direct negotiation with funding bodies, participation in forums and networks to provide feedback to policy makers, or proactively seeking additional funding for evaluation; and B) Approaches to strategically engage in policy and political decision making, such as advocacy for prevention approaches, investing in, and using rigorous evaluation evidence in communication with key officials, or strategically modifying program and evaluation language for the political climate.

Fig. 1 Key themes concerning influences on program evaluation

Several participants expressed frustration because they were expected to demonstrate health or social impacts over a 12-month, or shorter, program cycle. Others articulated their concerns that without appropriate guidance, indicators for impact evaluation would be irrelevant or difficult to measure. Participants that worked with vulnerable populations, in complicated or complex program areas, felt that the guidance, technical expertise, and resourcing they needed to design and conduct evaluation was often underestimated by the funding body. A smaller number of participants reported autonomy to determine the level, design, and indicators for their evaluation that was appropriate and commensurate with program time frames. This freedom was appreciated by organizations with access to expertise and resources, particularly those with multi-year funding agreements or ongoing funding.

Several participants discussed the expectation that around 10% of the program budget should be allocated to evaluation. The percentage was taken as a rule of thumb by some funders or program managers; two participants indicated that the 10% was used when receiving a "big grant," or as part of a special grant program for "evidence into practice," to "see if the program would work." Even when the 10% allocation was an expectation, there was lack of clarity about how the funding should be used and frustration arose when the amount was not sufficient to meet the minimum requirements set by the funding body.

Funding and Policy Context: Prioritizing Prevention and Evaluation

Beyond the expectations for evaluation as set between the delivery organization and the funding body, participants described the influence of the political context and prevention funding models. Several participants emphasized the overarching role the political context played in setting the policy and funding environment for prevention activities. Participants associated favorable policy conditions for prevention activities, including adequate resourcing, with the likelihood of better evaluation. A small number of participants expressed satisfaction with supportive policy and funding conditions for prevention. The alternative experience, expressed by a number of participants, was of a political context that favored health care delivery, addressed individual risk factors, and used narrow lifestyle approaches to prevention. It was reported that policy makers, who lacked understanding of the necessary time or resources for every stage of prevention

program planning, delivery, and evaluation, often acted as an indirect barrier to evaluation.

Interviews took place 2 years after funding cuts to national- and state-level prevention initiatives. Examples cited by a number of participants were the cuts to the South Australian health promotion funding, and the disbandment of the National Partnership Agreement on Preventive Health after a change of Federal Government. Participants referred to the sudden reduction in funding in the wake of the National Partnership Agreement on Preventive Health announcements as the dissolution of the "value" of prevention and commitment to a national approach. With the political focus and resources shifting away from prevention, participants reported heightened pressure to focus remaining funds on program delivery. This was particularly evident in organizations which also delivered health services and those with limited evaluation technical expertise. At the same time, participants expressed frustration that the imperative to demonstrate program effectiveness was greater than ever. Several NGOs and some government participants felt particularly vulnerable as funding bodies and government departments implemented competitive tender models for program funding.

> "… that constant need or imperative to defend and justify the work, either the work that's being done, having to defend that work or the necessity or the need for that work. Also then trying to build up the case or the rationale for the work that needs to be done that keeps getting lost in the acute focus or the treatment focus that's not looking upstream." (Participant 27, Government)

Modifying the System: Creating a More Favorable Environment for Evaluation

Many participants described the policy, funding, and administrative influences on evaluation as modifiable, and outlined the strategies they and their organizations engaged in to improve reporting and evaluation requirements and resourcing. Additionally, participants engaged strategically with the prevention system at a policy and political level to promote evidence based decision making, and used evidence to increase support for prevention.

Participants recognized that in many instances unfavorable conditions for evaluation as set out in funding agreements or reporting templates could be changed. A small number of participants outlined their success in negotiating with their funder to better align expectations about evaluation with organizational need and capacity. This was particularly useful for NGOs who had multiple funding sources and sought to minimize reporting duplication. While some were not successful in negotiations, several participants recommended direct communication with the funder to ensure that expectations for evaluation were achievable and the information generated satisfied the minimum requirements for all parties involved. Funding agreements with poorly conceived evaluation requirements tended to impact adversely on participants from smaller NGOs working with underserviced populations, or addressing complex areas of health and social need. These participants were less likely to enter into negotiations about reporting or evaluation requirements, with factors such as resources, expertise, inflexible funding contracts, or the short-term nature of prevention funding appearing to affect the confidence of staff within their organizations to negotiate.

As an alternative to direct negotiation with funding bodies, both government and NGO participants identified prevention practitioner networks and inter-agency committees as an important avenue to influence evaluation standards and expectations. Participants were able to provide feedback to policy makers and funding bodies about the practical requirements for evaluation, and facilitate understanding of prevention program evaluation priorities.

> "So we are often asked to sit on advisory committees, provide feedback to their frameworks and plans and stuff like that so input into the evaluation design." (Participant 24, NGO)

Several participants discussed how involvement in networks supported them to negotiate with funding bodies, or design their own evaluation when guidance from their funding body or organization was lacking. One research and evaluation network in the sexual health and blood-borne virus field offered members access to varying levels of evaluation support, and created opportunities to share evaluation practice insights and findings among peers. In a state government setting, participants described their ability to influence state-wide direction for prevention program evaluation and provide feedback to central decision makers through participation in a regular forum.

While accessing evaluation funding was beyond the reach of many organizations, a small number proactively sought grants to comprehensively evaluate their programs. Some well-established NGOs with diverse funding sources were in a strong position to undertake evaluation beyond the requirements of their funder, as well as strategically engage partners and access funding from external sources. When resources were available, participants described the need to invest in evaluation capacity building, generate evidence as a strategy to protect from future funding cuts, and enhance competitiveness for program funding.

> "… you're spending all this time to set up these good evaluation models, it's worthwhile because you know you're going to be able to do it long enough to make a difference. … So having those good structures in place

> helped to I guess sustain you when things do change." (Participant 16, Government)

Although a small number of participants were resigned to the ad hoc nature of prevention funding, and focused their efforts on improving administrative requirements and resourcing for evaluation, a number of participants sought to bring about system-level changes, including investment in longer program funding cycles more in line with population health and social change.

Participants described using evaluation to advocate for specific health issues and greater investment in prevention more generally. The use of evaluation for advocacy required publication of evaluation results, conducting economic evaluation and demonstrating the longer-term benefits of disease or injury prevention compared to treatment approaches.

> "…having a fundamental underpinning that we can and have made a difference and we've got runs on the board, means we should walk into those conversations on obesity or on anything else, with some confidence to say, we actually do good things. We've got evidence that we do good things. We know how to do things well, so we deserve your support." (Participant 15, NGO)

Achieving the level of rigor in evaluation necessary for advocacy was facilitated by strong partnerships between government, NGOs, and research organizations; the capacity of organizations to commission such work; and access to additional research or evaluation grants. Larger NGOs, in particular, were able to use evaluation evidence effectively to generate political support and resource allocation to prevention initiatives and promote the use of evidence in decision making.

Both government and NGO participants described the importance of communicating evidence of successful programs proactively to decision makers and elected officials. Participants reported that taking a strategic approach to the timing and style of evaluation was necessary. In some situations, participants indicated that a high-quality evaluation may not be as useful to engage politicians and decision makers as a lower quality report that demonstrated program effectiveness for popular strategies. To maximize funding opportunities and avoid program cuts participants considered the political climate and sometimes disguised aspects of programs to suit the dominant prevention paradigm. For example, some participants converted evaluation findings into metrics such as reductions in hospital usage and economic costs. One participant described changes to the language of their activities to align with the prevailing preferences regarding prevention methods.

> If we say we're a service, so we're a health service, then we line up with the language and the jargon of clinical services planning. They're very happy when the system's rhetoric links with partnering with community, or partnering with community organizations. Then suddenly, we'll be allowed to say, oh look, that's what we do. (Participant 33, Government)

A number of participants recognized that it was necessary to distil evaluation into short statements, focus on program effectiveness, and use quantitative evidence to facilitate use. Some government participants described the development of centralized data collection and monitoring systems in order to have information readily available to meet the demand from elected officials for evidence.

Discussion

To date, research concerning evaluation capacity in the health and human services sectors has focused largely on organizational- and practitioner-level factors. In this national study we have identified key aspects of the prevention system that have an impact on evaluation practice. We found that prevention evaluation can be successfully resourced and conducted when there is commitment to prevention programs, evaluation, and evidence use at the political and administrative levels.

Our findings indicate that emphasis on evidence-based (or evidence-informed) public health and research translation at the policy level can serve as an important driver of evaluation practice and capacity in the prevention system. In their framework for evidence informed policy and practice, Bowen and Zwi (2005) propose a range of necessary capacities to implement and adopt evidence-based policy, such as understanding of political arguments, decision-making processes, advocacy, economics of health policy and programs, and priority issues in government. In a qualitative study exploring the use of evidence for decision making in Australian public health insurance agencies, external elements such as political and ministerial factors, stakeholder influences, and media played a key role in shaping participants' use of evidence (Zardo et al. 2014). Similarly, in research translation, there is recognition of the dynamic relationship between research and practice infrastructure, and multiple contexts impacting on each stage of translation from pre-adoption, to intervention sustainability and population health impact (Spoth et al. 2013).

The common challenges identified in our study and literature from the research translation and evidence-based public health fields point to opportunities for widespread gains to evaluation practice and use. However, despite recognition of the value of evidence for health policy making gains, our study has revealed that prevention organizations and practitioners face additional challenges in promoting

the value and effectiveness of primary prevention within the broader policymaking environment. This in turn affects priorities for program administration, expectations, and resourcing for program evaluation. Frustration at a lack of political commitment and the tension between prevention and health service delivery has been described before. The pressure of constant comparison to health services has been described by prevention practitioners in the United Kingdom (South and Tilford 2000), and in Australia, practitioners and leaders expressed frustration at the narrow approach to prevention where environmental-level initiatives had greater potential for population health gains (Huckel Schneider et al. 2016). We found that this tension was recognized by organizations who used evaluation to demonstrate the value of prevention in economic and health service terms in order to remain competitive for limited health funding. For NGOs in particular, these actions demonstrate how organizations survive in a "resource-dependent" relationship where the driver for evaluation is primarily to access and maintain funding (Carman 2011).

Our study highlighted the detrimental impact of misaligned expectations for evaluation between funding bodies and delivery organizations, particularly in the context of limited time and resources. The programmatic and short-term nature of funding for prevention activities have also been described as detrimental to evaluating population-level prevention initiatives (Brug et al. 2011; Huckel Schneider et al. 2016; Napp et al. 2002), particularly the demonstration of effectiveness (Lobo et al. 2014), use of rigorous methods, and follow-up (Pettman et al. 2012). A recent review of prevention funding within Australia identified the particular challenges to delivering and reporting on strategies when receiving time-limited project funding compared to more flexible funding models (Jackson and Shiell 2017). In the case of a poor alignment between the funding model and program design, the authors described the efforts of funded organizations to "subvert" reporting requirements. Agency theory provides an explanation for these actions: the funder is to be served by the delivery organization, and in this relationship, conflict exists between the interests and preferences of each party, resulting in evaluation for the sole purpose of meeting contract requirements (Carman 2011). We also found that practitioners sought to disguise aspects of the program and evaluations for tactical purposes, particularly in a climate of prevention funding cuts, although our finding that larger NGOs and some government agencies appeared somewhat protected from the pressure to report only positive evaluation findings is an important new contribution. This may be explained by an organizations' ability to access diverse funding sources, or realization of the potential for quality evaluation to lead to successful funding applications (Carman 2011; Francis and Smith 2015). This success may result from leadership for evaluation within the organization (Schwarzman et al. 2018).

We identified accountability as a key driver of evaluation in both government and NGOs; however, our findings appear to indicate that there is more at stake for NGOs and some sections of government that must constantly justify the effectiveness of prevention activities. Program evaluation is often driven by accountability in both government and NGOs (Bourgeois and Cousins 2013; Brug et al. 2011; Carman and Fredericks 2009) rather than program improvement (Lobo et al. 2014) or demonstration of impact (Pettman et al. 2012). Requirements for evaluation that focus on meeting accountability requirements through outputs, or indicators perceived to have little relevance to the program, have been found to hinder program evaluation (Carman and Fredericks 2009; Francis and Smith 2015; Lobo et al. 2010, 2014; Napp et al. 2002). Conversely, clear and well-structured reporting requirements can act as a facilitator to evaluation and embedding data collection systems within the organization (Carman and Fredericks 2009; Francis and Smith 2015). Encouraging organizations to firstly focus on using reporting data for program improvement and planning may promote the value of evaluation beyond an accountability requirement (Carman 2011).

Our study identified strategies used by organizations to modify evaluation requirements. Communication between funder and delivery organization is essential to establish an agreed evaluation purpose, design, and resourcing (Napp et al. 2002; Pettman et al. 2012). The theoretical model of a "stewardship" relationship assumes that the funder and organization have high levels of trust, based around "partnership" (as opposed to dependency), and that mutually agreed goals could generate evaluation that drives quality improvement and is shared widely (Carman 2011). We found wide variation in organizations' attempts to align their own evaluation requirements with funding body expectations. Given the range of evaluation designs, time, and expertise required, funding bodies need to take into account the capacity of the prevention organization to contribute to evaluation, and identify ways to support or facilitate access to expertise. In particular, allocation of evaluation resources at the policy and program planning stages is necessary. In the Netherlands, participants argued that resources for evaluation could be readily allocated if they were requested at the planning stage (van Koperen et al. 2016). Lobo et al. (2014) also encouraged funders to engage in dialog with prevention organizations, and highlighted a framework for negotiating details of evaluation, particularly for program improvement (Liket et al. 2014).

In addition to facilitating direct negotiation between funding bodies and prevention organizations, our findings suggest that practitioner and organizational networks can encourage practitioners to engage in dialog with their funding bodies, and take up evaluation capacity building strategies. One such network is the Sexual Health and Blood-borne Virus Applied Research and Evaluation Network (SiREN) in

Western Australia, an initiative that aims to build evaluation capacity by facilitating collaboration between evaluators and practitioners, and supporting networks of practitioners, researchers, and policy makers (Lobo et al. 2016). Research-practice partnerships, networks, and funding models to incentivize collaborative relationships that embed the expectation of evaluation and practice relevant research have been a key focus of Type 2 translation models and recommendations (Spoth et al. 2013). Communities of Practice are also recognized as a strategy to promote translation of evidence-based interventions into practice. Communities of Practice facilitate learning through networks of practitioners based on common professional interests and practice needs. Improvements to practice are thought to occur through informal audit and feedback, relationship-based education, and opportunities for mentoring (Brehaut and Eva 2012). While our study participants found value in network contacts for evaluation, few structured examples were described. The establishment and maintenance of practitioner networks for evaluation requires investment in expertise, administration, and the support of practitioner's organizations to allow time to participate (Lobo et al. 2016). There is a role for leading prevention agencies and funding administrators to initiate the partnerships and assistance for organizations who have less confidence in evaluation (Lobo et al. 2010, 2016).

Beyond SiREN, there are few published examples of system-wide initiatives to improve evaluation capacity. The New South Wales Government has implemented a strategy to address evaluation capacity using a multi-level approach. The strategy uses a government-wide evaluation policy and guidelines, including assessment of evaluation capacity needs, communities of practice, and evaluation technical support (Edwards et al. 2016). To build evaluation capacity across the prevention system, there have been calls to explicitly allocate budget for evaluation in every funding agreement, initiate and strengthen research-practice partnerships, and ensure that evaluation methods and program objectives are achievable (Lobo et al. 2014; Pettman et al. 2012). Further, funding should focus on translation research and evaluation at the key stages addressing program replication and dissemination to ensure widespread implementation of effective programs (Rychetnik et al. 2012).

Implications

The evidence base for prevention remains limited, especially given the complexity of prevention programs and by nature, the lack of standardization between them. Hence, consistent approaches to evaluation, expectations for evaluation, and methods are warranted. Our findings highlight several system-level challenges to the evaluation of prevention programs that can be addressed through advocacy, investment, improved communication, and collaborative efforts between practitioners, policy makers, funding bodies, and researchers.

Specifically, to address challenges that arise from administrative and reporting requirements (Fig. 1, Theme 1), we recommend *strategies that encourage funding bodies and organizations to engage in dialog*, in order to align evaluation requirements that enable accountability, but also contribute to program and organizational learning. To promote the value of prevention work, and encourage appropriate approaches to generating prevention evidence that can inform policy and funding (Fig. 1, Theme 2), we recommend *policy makers, prevention program, research, and evaluation experts come together* to better understand potential health promotion and social outcomes, and advocate for improved program and evaluation funding models. Further, there is a need to *support rigor and independence* of evaluation and disseminate findings widely. Finally, efforts to address the challenges of funding, administrative procedures, and policy influences must occur alongside sustained efforts to build evaluation capacity in prevention organizations and the workforce. Investment in infrastructure that directly supports prevention organizations and workforce to advance evaluation capacity is needed. Two examples of investment for support include *incentives for leading prevention organizations and university evaluators* to support those less capable with evaluation practice, facilitate partnerships, and assist in negotiations for evaluation requirements and resources, and *investment in inter-agency Communities of Practice* based on shared evaluation interests (e.g., obesity) or geography (particularly in regional areas) for all levels of practitioners and managers. We also recommend *researchers engage with practitioners, organizations, and funding bodies* to support quality prevention evaluation, and evaluate the efficacy and effectiveness of evaluation capacity building strategies.

Limitations

This study is unique in that it examines system-level issues across multiple states of Australia and from the perspectives of both government and NGOs in the prevention sector. A limitation of this study is that not all Australian jurisdictions and sectors were represented, and unique challenges may exist within prevention systems of other states or territories. Additionally, participants for this study were recruited from organizations with minimum staffing levels of three prevention practitioners, and budgets for prevention work of at least $300,000 per annum. In the Australian prevention context there are many programs being delivered by organizations of smaller size than this, and it is likely that they may experience the prevention system differently to larger organizations. Furthermore, while we sought to understand the perspectives of prevention practitioners and managers, the experience of those in policy,

funding administration, and evaluation roles has not been explored, and may add depth to the understanding of the prevention system influence on evaluation.

Conclusion

This study contributes empirical evidence of the role of the primary prevention system in facilitating or hindering evaluation practice through funding and reporting arrangements, political context, and priorities, as well as opportunities for organizations to influence the prevention system for more favorable evaluation conditions. To improve the environment for prevention program evaluation, and ultimately improve prevention program effectiveness, the prevention field needs to look beyond each organization. Policy makers, funding bodies, and organizations seeking to address barriers to program evaluation should look for opportunities to collaborate to leverage wide-scale improvements to evaluation practice and use.

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Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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