

Reorientation of health services: enablers and barriers faced by organisations when increasing health promotion capacity

K. McFarlane^{A,C}, J. Judd^B, S. Devine^A and K. Watt^A

^ACollege of Public Health, Medical and Veterinary Sciences, James Cook University, Townsville, Qld 4811, Australia.

^BDivision of Tropical Health and Medicine, James Cook University, Townsville, Qld 4811, Australia.

^CCorresponding author. Email: kathryn.mcfarlane@myjcu.edu.au

Abstract

Issue addressed: Primary healthcare settings are important providers of health promotion approaches. However, organisational challenges can affect their capacity to deliver these approaches. This review identified the common enablers and barriers health organisations faced and it aimed to explore the experiences health organisations, in particular Aboriginal organisations, had when increasing their health promotion capacity.

Methods: A systematic search of peer-reviewed literature was conducted. Articles published between 1990–2014 that focused on a health care–settings approach and discussed factors that facilitated or hindered an organisation’s ability to increase health promotion capacity were included.

Results: Twenty-five articles met the inclusion criteria. Qualitative ($n = 18$) and quantitative ($n = 7$) study designs were included. Only one article described the experiences of an Aboriginal health organisation. Enablers included: management support, skilled staff, provision of external support to the organisation, committed staffing and financial resources, leadership and the availability of external partners to work with. Barriers included: lack of management support, lack of dedicated health promotion staff, staff lacking skills or confidence, competing priorities and a lack of time and resources allocated to health promotion activities.

Conclusions: While the literature highlighted the importance of health promotion work, barriers can limit the delivery of health promotion approaches within primary healthcare organisations. A gap in the literature exists about how Aboriginal health organisations face these challenges.

So what? Primary healthcare organisations wanting to increase their health promotion capacity can pre-empt the common barriers and strengthen identified enablers through the shared learnings outlined in this review.

Received 8 July 2015, accepted 7 January 2016, published online 20 April 2016

Introduction

Health promotion plays an important role in maintaining and improving the overall health of the population. Health promotion is defined as ‘the process of enabling people to increase control over their health and its determinants, and thereby improve their health’¹. Approaches that are multi-strategic and guided by the Ottawa Charter for Health Promotion¹ have been effective in improving healthy lifestyle behaviours and in reducing the risk of developing non-communicable diseases.² By specifically improving diet, physical activity levels and eliminating tobacco smoking it is estimated at least 80 per cent of all heart disease, stroke and type 2 diabetes and over 40 per cent of cancer would be prevented.²

An individual’s health is determined not only by their behaviours but also by their circumstances and environment.³ Health promotion

approaches focus on strengthening the skills and capabilities of individuals, groups and the broader population as well as influencing the social, environmental and economic determinants of health.¹ To address the environmental, social and economic determinants, health promotion approaches are implemented across several organisational settings both within and outside of the health sector. Health services are recognised by the World Health Organization as a key setting for health promotion and include hospitals, primary health care, community health and public health organisations.⁴

Primary healthcare organisations are important providers of health promotion approaches. They are the first point of contact for individuals, families and the community with the healthcare system.⁵ Four out of five Australians will see a primary healthcare professional at least once a year.⁶ The links between health promotion and

primary health care were defined in the Declaration of Alma-Ata.⁷ Primary health care is a key setting for the promotion of healthy behaviours, identification of risk factors for ill health and the treatment of illness.⁸

In Australia, the health status and life expectancy of Aboriginal and Torres Strait Islander peoples is much lower than that of the general population.⁹ The higher mortality rates for preventable chronic diseases is well documented.¹⁰ In response to this health inequity, Aboriginal community controlled health services (ACCHS) emerged in the early 1970s to improve access and provide culturally appropriate health care.¹¹ ACCHS are primary healthcare organisations that provide holistic, comprehensive and culturally appropriate health care, planned and managed by boards elected from the local Aboriginal community.¹¹ The philosophy of community control is consistent with health promotion theory, which states that the health status of Aboriginal people can only be improved by local Aboriginal people controlling healthcare delivery in their community.¹¹

Both mainstream primary healthcare services and ACCHS face many known challenges in the delivery of health promotion. Short-term funding cycles, lack of commitment to long-term evaluations, inconsistencies in practices, and the contested meanings of health promotion by decision makers continue to hinder the effective implementation of health promotion approaches.^{2,12} Additionally, managing both treatment and health promotion roles can be challenging for primary healthcare providers. The broader health promotion role may be neglected if an individualistic approach that focuses solely on the immediate treatment needs of the client is taken. This individualistic approach to health care and emphasis on health education alone may influence decision makers within the health service to prioritise short-term targets of health care at the expense of long-term targets that support improved health outcomes.¹²

With the emergence of health-promoting healthcare settings in the 1990s, health promotion practitioners have focused on building health promotion capacity through infrastructure that includes staff, skills, resources and workplace structures to address health problems more effectively.¹³ Others have focused on building capacity to sustain the effects of health promotion programs and build problem-solving capacity through partnerships at an individual, community and organisation level to better address health problems.^{14,15} Work done by Hawe and colleagues,¹⁶ NSW Health Department,¹⁷ and later supported by Judd and Keleher,¹⁸ identified specific organisational structures and processes that can strengthen health promotion capacity within an organisation. Organisations need workforce capability, organisational support through resource allocation and collaborative approaches, and structures to utilise opportunities and skill sets to deliver effective health promotion approaches.¹⁶ Systems thinking linked with change processes have been used at organisational levels to identify system supports and influencing mechanisms such as policies, inter-relationships,

resources and organisational values.¹⁹ The health promotion capacity building framework identifies five key components required to build capacity: organisational development, workforce development, resource allocation, leadership and partnerships.¹⁷ The framework acknowledges the interdependency between the components and has guided health promotion capacity building work, particularly in Australia, since the early 2000s.²⁰

The health promotion capacity building framework¹⁷ identified areas that can be strengthened to embed health promotion within an organisation. However, when reorientating health services it is important to understand the challenges of implementing change into practice. This review aimed to identify the common enablers and barriers these organisations face and to explore the experiences health organisations, in particular Aboriginal and Torres Strait Islander organisations, had when increasing their health promotion capacity.

Methods

A systematic search of peer-reviewed articles was conducted using electronic databases including APAIS, APAFT, CINAHL, Current Contents Connect, Medline, ProQuest Central, PsycARTICLES, PsycINFO, Scopus, Social Sciences Citation Index, the Cochrane library, Google Scholar and the Australian Indigenous HealthInfonet. Further articles were sourced from hand searching of reference lists from articles identified through the database search.

Search terms (MeSH and text words) were defined by the outcome of interest 'health promotion'; the change effect which included terms such as 'capacity building', 'organisational innovation', 'organisational change' and 'organisational development'; and the health organisational setting using terms such as 'primary health care', 'public health administration' and 'community health services'. Given the particular interest in exploring health promotion in Indigenous healthcare settings, 'Indigenous' and 'Aboriginal and Torres Strait Islander' search terms were also used. However, no relevant articles were found. The Australian Indigenous HealthInfonet database was then searched and one relevant article was found.

Only articles published in English between 1990 and March 2014 were included. The rationale for the start year was that health promoting health settings were first discussed in the early 1990s. The dates of publication for articles in the full text review ranged from 1992 to 2014. To ensure articles described enablers and/or barriers for building organisational health promotion capacity within a health organisation were found, articles were only included if they focused on a health care–settings approach and discussed the factors that facilitated or hindered an organisation's ability to increase their health promotion capacity. Both qualitative and quantitative studies were included to obtain a broader understanding of this area.

Articles were excluded if: (i) health promotion capacity was aimed at collectively increasing a coalition's or group of partner

organisations ability to undertake a combined health promotion approach; or (ii) the content was general in nature and an organisation's experiences were not used as examples of how health promotion capacity was affected.

Titles and abstracts were independently reviewed for topic relevance. Four hundred and sixty-five articles were found. After the removal of duplicates ($n = 340$) a total of 125 articles were then reviewed for relevance. Following a full-text review, 100 articles were excluded, leaving 25 relevant articles to be included in the review. Figure 1 summarises the article selection process.

Results

Twenty-five articles met the inclusion criteria. These articles described health promotion capacity building initiatives in Australia, Canada, United States of America, Africa, China, United Kingdom, Sweden and the Solomon Islands, with the majority of papers from Australia ($n = 8$) and Canada ($n = 8$). The organisational settings included primary health care, community health, hospitals and public health organisations. Table 1 summarises the studies discussed in this review.

There were three main ways the articles identified the enablers and barriers to increasing health promotion capacity. First, health organisations implemented specific capacity building interventions,

such as workforce training and leadership development, and assessed the enablers and barriers when implementing these interventions. Second, health organisations implemented a new program in their organisation and included in their evaluation the impact of organisational enablers or barriers. Lastly, articles reported on what the health promotion workforce perceived were the enablers and barriers to health promotion practice. Across all studies common themes were identified.

Enablers for increasing health promotion capacity within health care organisations

To increase organisational health promotion capacity, management support,^{18,20–33} a skilled and knowledgeable workforce,^{34–38} external specialist assistance,^{18,24,32,34,35} resource allocation,^{20,22,27,31} leadership^{26,27,29,31,33,39,40} and access to external partners to work on health promotion approaches^{21,25–27} were the most commonly reported enablers. Management support was reported in two ways: first, the line manager's influence on work practice; and second, the influence of the organisation's ethos and practice. Key features of these enablers are outlined in Table 2.

Barriers to increasing health promotion capacity within healthcare organisations

The most common reported barriers for an organisation aiming to increase health promotion capacity were: lack of management support,^{20,26,37,38} lack of dedicated health promotion staff,^{25,26,30,41}

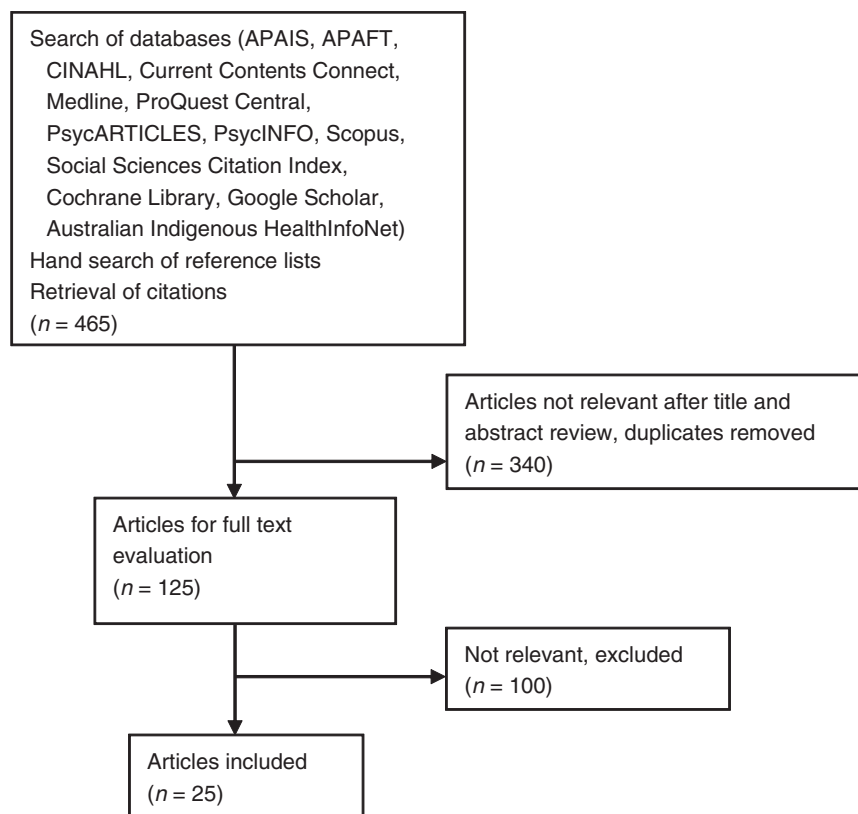


Fig. 1. Search strategy.

Table 1. Summary of relevant literature

BI, brief intervention; CCI, community capacity index; CI, confidence interval; *n*, number in sample; NHS, National Health Service; OR, odds ratio; PAR, participatory action research; QI, quality improvement; SNAP, smoking, nutrition, alcohol and physical activity; US, United States; WHO, World Health Organization

Paper	Purpose	Sampling ^A and participants	Study design and data collection	Measures	Identified enablers and barriers for increased health promotion organisational capacity	Limitations (general)
Quantitative study designs^B						
Barrett <i>et al.</i> (2007) ⁴⁰	To examine organisational leadership and its relationship to organisational action to promote health.	Convenience sample of representatives from regional health authorities. Alberta, Canada (<i>n</i> = 144)	Design: Analytical cross-sectional study Data collection: Self-administered survey	(1) Perceived collective organisational leadership including: practices for organisational learning; wellness planning; workplace milieu; and organisation member development. (2) The relationships of the organisational leadership components with organisational actions. 19 dependent variables were grouped into three areas: health promotion; heart health promotion; and global outcomes that were aggregated scores for settings, activities and actions on the heart health determinants model.	Practices for organisational learning and wellness planning were significantly, positively associated with the outcome variables. Organisation member development had a significant positive association with health promotion implementation. Enablers: organisational learning, wellness planning and the presence of a champion for heart health promotion had the greatest relationship with health promotion actions. Health promotion actions included: assessment; implementation on Ottawa Charter action strategies for health promotion; and evaluation.	Focus on organisational leadership only. Authors stated values were significant but did not provide p values. Selection bias may be present due to volunteer and recall bias. The study may not be generalisable to other organisations outside of regional health authorities in Alberta.
Devine <i>et al.</i> (2009) ³⁷	The effect of health promotion workforce training on longer term practice Evaluation at conclusion of course and 6 months later	Health service staff who attended the 5-day short course. Queensland, Australia (<i>n</i> = 39 out of 54)	Design: Pre test–post test Data collection: Self-report postal survey, focus group and phone interviews	Perceived opportunities and barriers for participants to undertake health promotion in their work environment and whether there was organisational support to do so following the training course in health promotion.	Barriers: No significant associations were reported. However the qualitative data indicated the following barriers: management support; mentoring for new or inexperienced health promotion workers; lack of time; lack of internal funding; health promotion was not incorporated into overall strategic planning; lack of understanding from co-workers and managers; lack of organisational support and commitment; lack of resources, and; competing clinical priorities.	Focus on workforce development only. Selection bias may be present with those who volunteered to be in the post test comprising 39 of the 54 possible respondents.

Guo et al. (2007) ³⁰	To identify the attitudes of managers involved in health promoting hospitals.	Managerial employees from selected health promoting and control hospitals. Beijing, China (<i>n</i> = 106 hospitals; <i>n</i> = 281 managerial employees)	Design: Analytical cross-sectional study Data collection: Face-to-face interviews	Effectiveness of health promoting hospital implementation included: long-term planning of health promotion; specialised funding for health promotion; training for medical staff; training skills in health promotion; provision of health education for patients by professionals. Managerial perspectives were measured for: understanding of health promoting hospitals; attitude about need for health promotion in hospitals; and achievements and barriers for health promotion in hospitals.	Significant positive association with health promotion hospital implementation when long-term planning and specialised funds for health promotion were allocated (OR 12.05 (95% CI: 1.48–97.91) and 2.71 (95% CI: 0.79–9.29) respectively). Enablers: commitment to health promotion evidenced through long-term planning and identified funding; and knowledge and understanding of the concept health promoting hospitals. Barriers: shortages of funds, personnel, time management and professional skills.	Confidence intervals are wide. Confounding bias may be present. Results may not be generalisable outside of Beijing hospital settings.
Kardakis et al. (2014) ²³	To investigate health professional work with lifestyle interventions in primary health care and describe the knowledge, attitudes and organisational support that is available.	Purposive sampling of nurses and physicians in primary health care. Sweden (<i>n</i> = 315)	Design: Descriptive cross-sectional study Data collection: Web-based questionnaire	Attitudes and knowledge of lifestyle interventions; extent to which professionals and primary healthcare centres work with patient lifestyles; and perceived organisational support. A 5-point Likert scale was used to quantify responses (item responses ranged from 'completely disagree' to 'completely agree').	78% of professionals perceived a need for national guidelines for lifestyle interventions and this was statistically significant between professional groups. (<i>P</i> < 0.05) Enablers: management support and local guidelines to guide work with the promotion of healthy lifestyles.	Study may not be generalisable outside of Swedish primary healthcare organisations. Selection bias may be present due to volunteer bias of those that completed the web-based questionnaire.
Panaretto et al. (2010) ⁴²	To report on the organisational capacity to perform opportunistic BIs for SNAP risk factors.	Clinical staff (Aboriginal Health Workers, nurses, doctors and practice managers) at 4 urban Aboriginal and Torres Strait Islander medical services. Queensland, Australia (<i>n</i> = 46)	Design: Analytical cross-sectional study; case series; focus groups Data collection: Self-administered survey, medical chart audit and focus groups	Survey: knowledge and attitudes pertaining to BI, screening tools available, frequency of BI, availability and use of referral services and provision of training. Medical chart audit: risk assessment of SNAP, delivery of BI and completion of key clinical indices. Focus groups: enablers and barriers to the delivery of BI including the role of the workforce, information technology, management support, past training and perceived support needs.	Significant difference in the participating clinics for conducting risk assessments and brief interventions in smoking, nutrition, alcohol and physical activity than comparison clinics (<i>P</i> < 0.001) Enablers: time available with clients and the adult health check screening process prompted brief interventions. Barriers: inflexible staff training, lack of confidence of staff to conduct brief intervention, competing health priorities and high levels of staff turnover.	Focus was on the delivery of brief interventions by the organisations only. Selection bias may be present due to volunteer bias of those that completed the survey and participated in the focus groups.

(continued next page)

Table 1. (continued)

Paper	Purpose	Sampling ^a and participants	Study design and data collection	Measures	Identified enablers and barriers for increased health promotion organisational capacity	Limitations (general)
Tang <i>et al.</i> (2005) ²⁴	To describe the development and implementation of the project and the impact of the technical assistance project.	Convenience sample of participants in the training, key stakeholders of the project. China (<i>n</i> = 219)	Design: Pre test–post test Data collection: Self-administered questionnaires, annual reports	Participants' perceived changes to organisational support and capacity measured through 8 domains: leadership, expertise, structure, reward, helpful mechanisms, relationships, purpose and attitude to change. Evidence of policy, strategy and guideline development in annual reports. Evidence of improved project management in project proposals and project reports.	Significant improvement as a result of the training in all of the domains (<i>P</i> < 0.0001) Enablers: technical assistance providing training in health promotion (knowledge and skill application); support from political leaders and senior managers; and consultant expertise in health promotion and in developing a respectful working relationship.	There may have been other external influences of organisational practice in health promotion in China at this time. Difficult to attribute change to this intervention only without a comparison group. Selection bias may be present due to volunteer bias of those that completed the survey and recall bias over the 3-year period.
Van den Broucke <i>et al.</i> (2010) ²⁸	Three objectives: to integrate health promotion into the health policy plans at the national, provincial and district level; strengthen health promotion capacity in two provinces; and support the development of tools for the monitoring and evaluation of health promotion	Identified participants in the health promotion projects and stakeholders. South Africa (<i>n</i> = 58)	Design: Pre test–post test Data collection: Document analysis, site visit, focus groups and face-to-face interviews.	Stakeholder participation in activities and perceived quality and usefulness of the project activities through project documents and interviews. Increase in health promotion capacity was scored using the CCI to measure indicators on a 5-point scale (substantial decrease, small decrease, no change, small increase, substantial increase), in the domains of: partnerships, knowledge transfer, problem solving and infrastructure.	A substantial increase in capacity was found for two of the CCI domains as scored by the external evaluator based on focus group data: (i) network partnerships, capacity to identify the organisations and groups with resources to implement/sustain a health promotion program; and (ii) knowledge transfer, capacity to develop a health promotion program that meets the needs of the community. Enablers: health promotion recommendations in strategic planning documents; ability to identify the organisations and groups with resources to partner with; skills and knowledge to develop and implement health promotion programs. Barriers: policy makers focused on cure rather than health promotion.	There may be selection bias from volunteers who participated in the focus groups and interviews. Study findings may not be generalisable outside of this context of an external country (Belgium) and the WHO providing support to South Africa.

Qualitative study designs

Bensberg (2000) ⁴¹	To describe how infrastructure can be strengthened to influence the delivery of local health promotion action.	Health promotion practitioners, managers, academics and program advisors. Victoria, Australia (n = 45)	Design: Qualitative Data collection: Interviews: not stated if individual/group or phone/face-to-face	Respondents commented on what they perceived supported or influenced health promotion action. The responses were combined and translated into the regional infrastructure for improving health promotion model.	Enablers: health promotion knowledge; organisational support; alliances; management support; practitioner delivery; community participation and communication. The model generated provides a framework for planning and coordinating organisational health promotion infrastructure improvements. Adoption of the model in an organisational setting was not part of this study.
Flaman et al. (2010) ⁴³	To explore facilitators and barriers to individual and organisational capacity to address priority strategies for community-level chronic disease prevention.	Convenience sampling from a stakeholder workshop conducted for the project. Alberta, Canada (n = 11)	Design: Qualitative Data collection: One-on-one semi-structured interviews	How participants had taken action on 3 priority strategies identified at the workshop; their individual and organisational capacity to take on the priorities; and facilitators and barriers to taking action on the priorities.	Enabler: organisational support for the priority strategies Barriers: organisations lack of or competing priorities; disconnect between the organisation and community priorities; disconnect between organisations and government/funder priorities; limited resources; and; bigger community issues.
Fuller et al. (2007) ³⁴	To increase the capacity of community-based organisations delivery of HIV prevention interventions, and to explore the organisations ability to implement the intervention and identify barriers to implementation	Self-selected community-based organisations. United States of America (n = 16 organisations)	Design: Qualitative Data collection: Phone interviews at 1, 6 and 9 months	Project implementation challenges and costs, agency fit, monitoring and evaluation strategies, recruitment and retention, utilisation of the materials, training and technical support needs and agency barriers and challenges.	Enablers: providing intervention materials, high-quality comprehensive training and ongoing technical assistance, including project monitoring and evaluation; specialised assistance and guidance early in the process with all phases of the program implementation; and assessing agency capacity and resources prior to implementation. Barriers: managing internal agency issues (details not specified)

(continued next page)

Table 1. (continued)

Paper	Purpose	Sampling ^a and participants	Study design and data collection	Measures	Identified enablers and barriers for increased health promotion organisational capacity	Limitations (general)
Germann and Wilson (2004) ²²	To identify key organisational elements that contribute to delivery of successful chronic disease activities at a community development level.	Purposive sampling of front-line workers and organisational leaders. Alberta, Canada (n = 22)	Design: Qualitative Data collection: Semi-structured interviews in person and by phone	Identification of prerequisites that a Regional Health Authority needs to have in place in order to engage successfully in chronic disease initiatives: organisational elements; skills and knowledge; and personal qualities.	Enablers: organisational commitment rooted in particular values and beliefs; leadership and shared understanding; supportive structures and systems such as job design, flexible planning processes; evaluation mechanisms and collaborative processes; and allocation of resources. Enablers: leadership skills that ensure a proactive approach to staff development and succession planning; joint work with other health professionals; use of target regimes as a mechanism for focusing attention and resources on health protection issues. Barriers: lack of resources and capacity to achieve specified targets; reduced budget and access to training; and commitment to treating illness rather than prevention.	Themes from the interviews were used to design a model for practice. Application of the model was not included in the study.
Griffiths and Thorpe (2007) ⁴¹	To identify ways to sustain the capacity of the public health workforce in the context of constant structural changes.	Sampling from public health specialists NHS. United Kingdom (n = not stated)	Design: Primarily qualitative Data collection: Questionnaire distributed by email. Key themes identified by the survey are discussed in the NHS context 3 years after the survey was completed.	Statements from selected public health specialists were rated by the participants on the future of their roles and ways of working to sustain workforce capacity on a 5-point Likert scale: 'strongly agree, agree, neither agree nor disagree, disagree and disagree strongly'. General themes identified by the survey are discussed.	Enablers: leadership skills that ensure a proactive approach to staff development and succession planning; joint work with other health professionals; use of target regimes as a mechanism for focusing attention and resources on health protection issues. Barriers: lack of resources and capacity to achieve specified targets; reduced budget and access to training; and commitment to treating illness rather than prevention.	Results of the quantitative component relating to Likert scales were not provided. Unknown sample size, no information provided about participant recruitment (how, where, etc.). Findings may not be representative of the actual public health workforce.
Haalboom <i>et al.</i> (2006) ³⁶	To identify how research activities have influenced organisational capacity and health promotion practice.	Key informants from heart health projects. 5 provinces, Canada (n = 66)	Design: Parallel case study Data collection: Interviews: not stated if individual/group or phone/face-to-face	Interviews explored: project objectives; meanings of capacity; intervention effectiveness; contextual factors; and facilitators and barriers.	Enablers: knowledge and skills of practitioners in monitoring and evaluating practice; improved planning and prioritising; and improved buy-in and cultivation of relationships with other partners. Enablers: communication with all layers of the organisational system; active commitment and involvement of managers; having a clear consistent vision; having adequate resourcing for practice and internal change; communicating to staff the vision, values and priorities; and health promotion planning across inter-disciplinary teams.	Research as intervention was not a primary study focus for the heart health projects. Selected case studies chosen to highlight the role of organisational change in health promotion capacity building.
Heward <i>et al.</i> (2007) ²⁰	To highlight organisational change as a necessary component of capacity building frameworks in health promotion practice.	Health promotion organisations and staff. Victoria, Australia (n = 880)	Design: Qualitative 3 case study examples Data collection: Policy and document review, survey and interviews/ focus groups	Contextual features of the organisation or system were themed to illustrate organisational change required for health promotion effectiveness and sustainability.	Enablers: communication with all layers of the organisational system; active commitment and involvement of managers; having a clear consistent vision; having adequate resourcing for practice and internal change; communicating to staff the vision, values and priorities; and health promotion planning across inter-disciplinary teams.	Selected case studies chosen to highlight the role of organisational change in health promotion capacity building.

Joffres et al. (2004) ²⁵	To measure organisational capacity for heart health promotion	Community agencies involved in heart health promotion. Nova Scotia, Canada (<i>n</i> = 14 organisations; <i>n</i> = 182 heart health staff)	Design: Qualitative and quantitative measures Data collection: Survey of community agencies by phone and self-administered mail surveys; questionnaire administered by phone; interviews not specified if phone or face-to-face	Community agency survey measured: level of priority and level of involvement in heart health activities. Organisational questionnaire measured: extent to which practice had been implemented. Interviews measured: environmental factors supportive or challenging to heart health promotion.	Barriers: lack of reflection on the implementation of policy strategies; staff lacked readiness for change; and managements' lack of understanding of health promotion. Results were reported in terms of the percentage of organisations involved in heart health activities and the identified barriers and enablers to practice. The following enablers and barriers represent 35% or more of respondents' views. Enablers: support from management and boards; overall organisational interest; and partnerships. Barriers: lack of time; insufficient staffing; lack of resources; lack of knowledge and skills in health promotion; challenges maintaining strong partnerships; and competing organisational priorities.	Results may not be generalisable outside of Nova Scotia or to non-heart health promotion work
Joffres et al. (2004) ²⁹	To explore the factors that influenced organisational capacity building efforts for heart health promotion.	Organisations with a mandate for health promotion or an interest in heart health promotion. Nova Scotia, Canada (<i>n</i> = 76)	Design: Participatory action research Data collection: Reflection logs and semi-structured, face-to-face interviews	Measures included: activities conducted to support capacity building; factors that challenged or facilitated organisational development; who was involved in these factors; and the circumstance in which these factors came into play.	Enablers: partnerships were able to influence intra-organisational policies and staff knowledge and skills; innovative leadership to link capacity building activities; bottom-up and top-down leadership, ability to build on the organisation's strengths and overcome challenges; congruence in relation to mandate, objectives and the organisational values; and organisational readiness. Barriers: not all levels of staff were equally supportive of the project; entrenchment of organisational objectives, values and policies can hinder change; resistance to change from competing organisational priorities and	Results may not be generalisable outside of Nova Scotia or to non-heart health promotion work

(continued next page)

Table 1. (continued)

Paper	Purpose	Sampling ^a and participants	Study design and data collection	Measures	Identified enablers and barriers for increased health promotion organisational capacity	Limitations (general)
Judd and Keleher (2013) ¹⁸	The role that training interventions played in the reorientation of primary healthcare staff and the strategies to shift practice more upstream in terms of a population health approach.	Purposive sampling from an urban community health setting. Northern Territory, Australia (n = 2 settings; n = 100 participants)	Design: PAR Data collection: Survey (n = 61), pre and post questionnaire (n = 30), in-depth semi-structured interviews (n = 20), participant observation (n = 8), workplace diaries (n = 9) and nominal groups (n = 12)	Workforce development measures included pre and post knowledge components of the training intervention, and practical application.	incongruence around the project's and organisation's objectives, values and working procedures. Enablers: management support; supportive policy environment within the workplace and broader organisation; support from health promotion specialists; and targeted health promotion training.	Results may not be generalisable as the study was conducted with one primary health service in the Northern Territory.
Judd and Keleher (2013) ³³	To identify what the core dimensions are to build health promotion capacity in a primary healthcare workforce in a real-world setting.	Purposive sampling from an urban community health setting. Northern Territory, Australia (n = 2 settings; n = 100 participants)	Design: PAR Data collection: Survey (n = 61), in-depth semi-structured interviews (n = 20), participant observation (n = 8), workplace diaries (n = 9) and nominal groups (n = 12)	Staff experiences, understanding and application of health promotion concepts; mapping of practice: upstream, midstream and downstream; barriers to implementing prevention and health promotion activities into practitioner's work.	Enablers: workforce training; adaptable workplace structure to create a health promotion team; consistent with QI processes; regular review and evaluation of activities and projects through formal business planning; relieving staff from clinical practice to undertake specific projects; health promotion leadership (developing partnerships; collaborations and linkages within the community); local team leadership became drivers for change; and PAR facilitated the translation of evidence into practice.	Results may not be generalisable as the study was conducted with one primary health service in the Northern Territory.
Lawn (2010) ³¹	To describe the organisational change processes for service improvement to embed chronic disease	Participants involved in the chronic condition self-management course Flinders University.	Design: Grounded theory Data collection: Semi-structured interviews, written critiques	Participants described steps taken to build chronic-condition self-management initiatives into their health service practice; themes were identified and participants then rated to what degree they	Enablers: clear leadership to ensure investment of time and resources; workplace change champions; targeted training; collaboration within the organisation; and committed resources.	All participants were familiar with and trained in the Flinders program and views may be biased towards what is covered in that

management into practice.	Australia (n = 107)	agreed or not with the overall themes.	program for effective chronic condition self-management support.
MacLean et al. (2003) ²⁷	To describe the partnership and organisational development processes that increase capacity for heart health promotion.	Organisations working on health promotion projects or improving population health. Nova Scotia, Canada (n = 20 organisations) Number of participants not specified.	Design: PAR Data collection: Questionnaire, face-to-face interviews and work logs Enablers: specific health promotion positions created; existing committees reorientated to support an increased focus on health promotion; health promotion included in strategic focus of the organisation; increased skills in health promotion through training; working in partnership (internally and externally); long-term resource commitment; adaptability to changing environments; and leadership. Enablers: health promotion specialist to guide the change in practice; developing a strategic plan; implementing project management systems (including monitoring and evaluation); encouraging independent learning, and; providing managerial support.
McPhail-Bell et al. (2007) ³⁵	To describe what has worked and not worked in a capacity building process undertaken with HIV/AIDS prevention.	Project evaluation. Solomon Islands (n = 3)	Article describes the observed experiences by the authors of a health promotion capacity building process.
Riley et al. (2003) ³⁹	To examine the factors influencing changes in the implementation of heart health promotion activities.	Two public health units implementing heart health promotion. Ontario, Canada (n = 2 organisations). Number of survey respondents and interviews not specified	Results may not be generalisable outside of heart health promotion in Ontario public health agencies
Sharma et al. (2013) ³²	The role of a clinical assessment for systems strengthening framework in building capacity of organisations that can endure and adapt to changing	Stakeholders form the organisations implementing the framework. Kenya, Zambia and Nigeria (n = 68)	Enablers: public health leadership; organisational structure; skills of staff Barriers: using funding as an incentive to undertake health promotion prevented sustainability after funding ceased.
		Stakeholder's motivations for building organisational capacity and their perceptions of the sustainability of those changes.	The change process was mandatory as US-based international partners transitioned to locally owned organisations in Kenya, Zambia and

(continued next page)

Table 1. (continued)

Paper	Purpose	Sampling ^A and participants	Study design and data collection	Measures	Identified enablers and barriers for increased health promotion organisational capacity	Limitations (general)
Wills and Rudolph (2010) ³⁸	financial and policy environments. To report on a training program aimed at developing capacity and capability of health promoters.	Health promotion students. South Africa (n = 20)	Design: Qualitative Data collection: Semi-structured interviews	Acquisition of knowledge and skills; subsequent application of new knowledge; and its impact on the organisation and their role in the organisation.	Enablers: training increased perceived knowledge and confidence to practice health promotion; staff had clarity of what health promotion is and confidence to describe health promotion practice in their workplace. Barriers: lack of management support to change practice; manager's expectations and understanding of health promotion in conflict to new understanding of staff after the training; and disease-orientated healthcare system where health promotion workers were seen as less important than clinical staff.	Nigeria. The findings may not be generalisable outside of this context. The interviews were conducted at the completion of the course, with little time for application into their organisational setting.
Yeatman and Nove (2002) ²⁶	To describe the actions aimed at building organisational support for health promotion.	Senior and middle managers, and service delivery staff. New South Wales, Australia (n = 23)	Design: PAR/qualitative Data collection: Document analysis of written reports, semi-structured interviews and focus groups	Managers perspectives of the training course and the implementation of the learnings in the workplace; application of workplace changes in comparison to the recommendations; and participants perceptions of the implementation of the recommendations and their knowledge of the new structures introduced.	Enablers: leadership that maintains focus overtime as well as motivates and supports staff; partnerships internally and externally (funding body and academic); and building, demonstrating and maintaining commitment over the long term. Barriers: lack of recognition for health promotion activities within the organisation; lack of management support; lack of resources; difficulties in getting health promotion initiatives to be considered priorities; variable quality of health promotion work; and lack of higher level skills training in health promotion.	Describes the experiences of one regional health service in NSW. Difficult to attribute change to this intervention only without a comparison group.

^ASampling process is described for those articles where it was explicitly stated.^BA limitation of all cross-sectional studies is that the direction of association cannot be determined. Cross-sectional studies were conducted by Barrett *et al.* (2007),⁴⁰ Guo *et al.* (2007),³⁰ Kardakis *et al.* (2014)²³ and Panaretto *et al.* (2010).⁴²

Table 2. Summary of enablers for increasing health promotion capacity within healthcare organisations

Enablers	Key points
Management support	Influence on staff work practice: – time allocation, resources and funds^{21,22,25} – access to expertise, workforce development and training^{21,22,25} – recruitment of skilled staff^{21,22,25} – priority given to health promotion approaches.^{25,26} Influence on the organisation's ethos and practice: – aligning health promotion with the organisation's vision, values and priorities^{20,27,28} – long term commitment to health promotion^{26,29} – culture of collaboration^{27,31} – sound knowledge of health promotion³⁰ – build on previous initiatives²⁵ – identify further funding³⁰ – embedding health promotion activities into planning and reporting, including quality improvement processes.^{22,32,33}
A skilled and knowledgeable workforce	– targeted training to meet identified need^{31,33} – support to staff following training^{18,24,32,36} – specific skills included project planning, monitoring and evaluation, and cultivating relationships with partners^{34–36}
External specialist assistance	– mentoring of staff to adopt new skills^{18,24,32,35,37} – mentoring of the organisation to adapt systems such as diversifying funding sources, broadening policy, integrating health promotion outcomes into strategic planning and reporting^{24,32,35}
Resource allocation	– resources include staff and project funds^{20,22,27,31} – accessing resources from both within and outside of the organisation³² – pre-developed health promotion materials and guidelines^{23,34}
Leadership	– ensure investment of time and resources^{21,33} – oversee organisational learning, policy adoption, planning and workplace culture^{33,39,40} – proactive approach to staff development and succession planning³³ – support joint work with key stakeholders³³
External partnerships	– access to external partners (key stakeholders including community members) to work on health promotion approaches^{18,25–27}

staff who lacked skills or confidence in health promotion,^{25,30,39,42} competing priorities,^{25,28,29,37–39,41,43} and a lack of time and resources allocated to health promotion activities.^{29,30,37,41} A summary of these barriers is presented in Table 3.

Discussion

This literature review has demonstrated that, very few studies have comprehensively reviewed building health promotion capacity within a health organisation. Most of the included studies focused on specific areas such as training for the workforce, leadership development or delivery by staff of a new health promotion program. The majority of the articles ($n = 15$) referenced the work of Hawe and colleagues¹⁶ and/or the NSW Health Department capacity building framework for health promotion to guide their interventions. Interestingly, all enablers and barriers identified in the 25 articles reflected at least one of the five areas of this framework (organisational development, workforce development, resource allocation, leadership and partnerships).

There was consistency in the literature regarding the importance of health promotion work in improving overall health outcomes and the challenges faced by health organisations to achieve this. Many authors acknowledged the challenges of the political environment,

through changing priorities, access to resources and long-term funding.^{18,22–24,26,32,35,38,41}

Only one study related to an Indigenous health service.⁴² This study examined the organisation's capacity to conduct brief interventions with clients. The enablers and barriers identified were consistent with other studies in this review.^{25,28,30,38,39,41,43} Brief intervention by itself is a single strategy health promotion approach. The narrow focus of evaluating a single strategy, and that only one study was found, highlights the limited knowledge in this area. Further and more comprehensive research is required to understand the enablers and barriers to increasing health promotion capacity in Indigenous health organisations.

Methodological limitations were present in all of the studies identified in this review. Many studies included a small sample size (less than 25 participants), and selection bias was present in most studies. This is particularly relevant for quantitative studies. Selection bias is expected in qualitative research designs due to purposive sampling, which was required here to ensure those involved in health promotion approaches were included in sharing their experiences. With these limitations the findings may only be generalisable to the relevant organisational context. However, the enablers and barriers identified were common across the studies and despite these limitations there are several key findings that

Table 3. Summary of barriers found when increasing health promotion capacity within healthcare organisations

Barriers	Key points
Management support	– difficult to embed health promotion practice within the organisation without management support^{26,37,38} – hindered if the manager had limited knowledge of health promotion^{20,37}
Dedicated health promotion staff	– difficult to implement health promotion approaches without a dedicated health promotion workforce^{25,26,32,41}
Staff skills or confidence in health promotion	– staff lacked health promotion knowledge and skills^{25,30,39,42} – high turnover of staff hinders investment in training⁴² – no access to tailored training or support in health promotion^{26,37,41,42} – unable to establish or maintain effective partnerships^{25,28}
Competing priorities	– health promotion work not prioritised above more immediate organisational tasks such as treatment of illness^{25,28,38,43} – difficult to adopt in organisations whose aims, values or structure were incongruent with a health promotion approach^{29,37,39}
Time and resources	– insufficient time and resources to plan and implement activities over the long term^{29,30,37,41} – require internal commitment to the program once external funding ceases^{39,43}

can be explored further: management support, leadership, external specialist assistance, skilled staff, partnership work, resource allocation, and the challenge of competing work priorities in health organisations.

Management support was the most commonly reported enabler and barrier. Management support was often referred to as the line manager's role. Managers are leaders for the direction of the work team and translate strategic direction and policies into activity. However, their influence is limited by organisational constraints such as political agendas, funding and reporting requirements. Organisational policies supportive of health promotion practice can limit the influence of these constraints.

Only a few studies identified managers' perspectives on the enablers and barriers to health promotion capacity.^{26,30,33} The majority of studies reported the enablers and barriers from a practitioner's point of view.^{18,21–25,33,37,38} As managers were identified as gatekeepers to many of the enablers and barriers to health promotion practice within an organisation, further exploration of the supports required to assist the management role would be useful.

Managers were identified as crucial for providing leadership within the organisation about health promotion practice. The ability to assess readiness for change and to motivate and support new ways of working was identified as an important leadership skill.^{26,29,33} Additionally, staff who model good health promotion practice can lead a change in practice throughout the organisation,³³ demonstrating that the influence of leadership in this process is not solely the responsibility of managers.

There were several interventions where external specialist assistance was provided and valued by the participants when evaluated.^{18,24,32–35} Access to expertise outside the organisation during and after the change process was important. One-off, short-term assistance such as training would not embed the skills and systems learned without support to translate this into practice.

A skilled workforce is essential for effective health promotion practice.²¹ This was identified in studies that addressed the need to improve knowledge and skills through training^{24,26,27,31,33,34,37,38} and by practitioners who identified that health promotion knowledge and skills were required to effectively deliver health promotion approaches.^{25,29,36,39,40,42} While this finding is not necessarily surprising, the frequency with which it was mentioned in the studies highlights its importance.

Partnerships can achieve greater health outcomes than an individual organisation can do on its own. Working in partnership combines resources and expertise to address a health issue of concern. A practitioner's skills in partnering with external stakeholders, and the organisation's ability to work in partnership, increases the organisation's own health promotion capacity.^{21,25–27} For partnership to occur there needs to be openness and commitment from the organisation to allow staff to build robust relationships.

The strength of an organisation's commitment to health promotion can be measured through its allocation of resources. This includes dedicated staff to work on health promotion programs^{20,22,25,26,30,31,41} and financial support for resources needed to develop, deliver and evaluate health promotion programs. In an environment where additional funds for prevention work are not available, understanding how best to utilise existing resources is essential.

Influencing quality improvement processes to support health promotion practice can increase an organisation's health promotion capacity.^{24,29,32,33} The process of adhering to and reflecting on practice through quality improvement reviews can be a driver for improving practice where incremental standards for health promotion practice have been articulated. Continuous quality improvement processes have been used effectively to sustain improvements in Aboriginal and Torres Strait Islander primary health care settings.^{44,45} Combining this with a focus to assess health promotion practice has been shown to build an organisation's confidence in identifying health promotion improvement strategies

and actions.⁴⁶ Further work is underway to assess how this confidence will impact on organisational health promotion capacity.⁴⁶

Many health organisations provide both treatment and health promotion services. If other priorities are deemed more important, a health promotion and prevention focus can be lost.^{28,29,37–39,41,43}

This could be due to lack of dedicated resources for health promotion approaches, lack of management support, or health promotion not being identified as a priority in the organisation's strategic focus. In primary healthcare organisations that are clearly involved in both treatment and health promotion work, it would be useful to explore further how this challenge is addressed in a resource-poor environment.

Conclusion

Reorientating health services to increase health promotion capacity requires systematic change within the organisation. The enablers and barriers identified critical parts of the system to target change processes; however, the interdependency between these enablers and barriers was not identified in this literature review. Taking a systems approach to better understand the interdependent relationships between management support, leadership, external specialist assistance, skilled staff, partnership work, resource allocation and competing work priorities may help to better understand how organisational capacity for health promotion can be increased within health service organisations. This is particularly important within Aboriginal and Torres Strait Islander communities where problems are complex and there is strong interconnectedness between the health service and the community.

The literature review identified consistent themes in the enablers and barriers for organisations to increase their health promotion capacity. For health services to deliver both treatment and health promotion functions to the communities they service, organisational systems need to support managers and practitioners, ensuring there is a skilled health promotion workforce with opportunities to work in partnership. The challenge of competing work priorities will remain. However health promotion needs to be recognised as a priority and embedded into organisational roles and responsibilities. A supportive policy environment that identifies health promotion as a core part of business will reinforce this within the organisation.

With limited information on how health promotion capacity has been increased in Aboriginal health organisations, the relevance of these findings for ACCHS is not clear. Further research into how ACCHS deliver health promotion, and the identification of enablers that assist practice in that setting, will address this knowledge gap.

References

1. World Health Organization Ottawa Charter for Health Promotion. *Can J Public Health* 1986; **77**(6): 425–30.

2. World Health Organization. Financing health promotion: discussion paper. 2007. Available from: http://www.who.int/health_financing/documents/dp_e_07_4-health_promotion.pdf [Verified 15 March 2016].
3. Wilkinson R, Marmot M. Social determinants of health: the solid facts. 2nd edn. Copenhagen: World Health Organization; 2003.
4. World Health Organization. The world health report 2008: primary health care now more than ever. 2008.
5. World Health Organization Declaration of Alma-Ata. *Lancet* 1978; **312**(8098): 1040–1. doi:10.1016/S0140-6736(78)92354-1
6. Australian Government. Improving primary health care for all Australians. 2011. Available from: http://www.wentwest.com.au/images/docs/ImprovingPrimaryHealthCareforallAustralians_000.pdf [Verified 15 March 2016].
7. World Health Organization and United Nations Children's Fund. Primary health care. Report of the International Conference on Primary Health Care. Alma-Ata, USSR: World Health Organization; 1978.
8. Standing Council on Health. National primary health care strategic framework. 2013. Available from: <http://www.health.gov.au/internet/publications/publishing.nsf/Content/NPHC-Strategic-Framework> [Verified 15 March 2016].
9. Australian National Preventive Health Agency. State of preventive health 2013. 2013. Available from: <http://health.gov.au/internet/anpha/publishing.nsf/Content/state-of-prev-health-2013> [Verified 15 March 2016].
10. Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander health performance framework 2012: Detailed analyses 2013. Available from: <http://www.aihw.gov.au/publication-detail?id=60129543821> [Verified 15 March 2016].
11. National Aboriginal Community Controlled Health Organisation. NACCHO. 2014. Available from: <http://www.naccho.org.au/about-us/> [Verified 28 July 2014].
12. Victorian Healthcare Association. Position statement: health promoting health services. 2009. Available from: <http://www.vha.org.au/docs/20091015-position-statement-health-promoting-health-services.pdf> [Verified 15 March 2016].
13. Schwartz R, Smith C, Speers MA, Dusenbury LJ, Bright F, Hedlund S, et al. Capacity building and resource needs of state health agencies to implement community-based cardiovascular disease programs. *J Public Health Policy* 1993; **14**(4): 480–94. doi:10.2307/3342879
14. Hawe P, Noort M, King L, Jordens C. Multiplying health gains: the critical role of capacity-building within health promotion programs. *Health Policy* 1997; **39**(1): 29–42. doi:10.1016/S0168-8510(96)00847-0
15. Crisp BR, Swerissen H, Duckett SJ. Four approaches to capacity building in health: consequences for measurement and accountability. *Health Promot Int* 2000; **15**(2): 99–107. doi:10.1093/heapro/15.2.99
16. Hawe P, King L, Noort M, Jordens C, Lloyd B. Indicators to help with capacity building in health promotion. 1999. Available from: <http://www.bvsde.paho.org/bvsacd/cd64/capbuild.pdf> [Verified 3 March 2016].
17. NSW Health Department. A framework for building capacity to improve health. Sydney: NSW Health Department; 2001.
18. Judd J, Keleher H. Building health promotion capacity in a primary health care workforce in the Northern Territory: some lessons from practice. *Health Promot J Austr* 2013; **24**(3): 163–9. doi:10.1071/HE13082
19. Foster-Fishman PG, Nowell B, Yang H. Putting the system back into systems change: a framework for understanding and changing organizational and community systems. *Am J Community Psychol* 2007; **39**(3–4): 197–215. doi:10.1007/s10464-007-9109-0
20. Heward S, Hutchins C, Keleher H. Organizational change – key to capacity building and effective health promotion. *Health Promot Int* 2007; **22**(2): 170–8. doi:10.1093/heapro/dam011
21. Bensberg M. Infrastructure and organisational development: a regional approach to health promotion. *Aust J Prim Health* 2000; **6**(1): 67–75. doi:10.1071/PY00007
22. Germann K, Wilson D. Organizational capacity for community development in regional health authorities: a conceptual model. *Health Promot Int* 2004; **19**(3): 289–98. doi:10.1093/heapro/dah303
23. Kardakis T, Weinehall L, Jerden L, Nystrom ME, Johansson H. Lifestyle interventions in primary health care: professional and organizational challenges. *Eur J Public Health* 2014; **24**(1): 79–84. doi:10.1093/eurpub/ckt052
24. Tang K-C, Nutbeam D, Kong L, Wang R, Yan J. Building capacity for health promotion—a case study from China. *Health Promot Int* 2005; **20**(3): 285–95. doi:10.1093/heapro/dai003
25. Joffres C, Heath S, Farquharson J, Barkhouse K, Hood R, Latter C, et al. Defining and operationalizing capacity for heart health promotion in Nova Scotia, Canada. *Health Promot Int* 2004; **19**(1): 39–49. doi:10.1093/heapro/dah106
26. Yeatman HR, Nove T. Reorienting health services with capacity building: a case study of the Core Skills in Health Promotion Project. *Health Promot Int* 2002; **17**(4): 341–50. doi:10.1093/heapro/17.4.341
27. MacLean DR, Farquharson J, Heath S, Barkhouse K, Latter C, Joffres C. Building capacity for heart health promotion: results of a 5-year experience in Nova Scotia, Canada. *Am J Health Promot* 2003; **17**(3): 202–12. doi:10.4278/0890-1171-17.3.202

28. Van den Broucke S, Jooste H, Tlali M, Moodley V, Van Zyl G, Nyamwaya D, *et al.* Strengthening the capacity for health promotion in South Africa through international collaboration. *Glob Health Promot* 2010; **17**(Suppl. 2): 6–16. doi:10.1177/1757975910363923
29. Joffres C, Heath S, Farquharson J, Barkhouse K, Latter C, MacLean DR. Facilitators and challenges to organizational capacity building in heart health promotion. *Qual Health Res* 2004; **14**(1): 39–60. doi:10.1177/1049732303259802
30. Guo XH, Tian XY, Pan YS, Yang XH, Wu SY, Wang W, *et al.* Managerial attitudes on the development of health promoting hospitals in Beijing. *Health Promot Int* 2007; **22**(3): 182–90. doi:10.1093/heapro/dam010
31. Lawn S. Top tips for embedding chronic condition self-management support into practice. *Aust J Prim Health* 2010; **16**(4): 334–43. doi:10.1071/PY09070
32. Sharma A, Chiliade P, Reyes EM, Thomas KK, Collens SR, Morales JR. Building sustainable organizational capacity to deliver HIV programs in resource-constrained settings: stakeholder perspectives. *Glob Health Action* 2013; **6**: 22571. doi:10.3402/gha.v6i0.22571
33. Judd J, Keleher H. Reorienting health services in the Northern Territory of Australia: a conceptual model for building health promotion capacity in the workforce. *Glob Health Promot* 2013; **20**(2): 53–63. doi:10.1177/1757975913486685
34. Fuller TR, Brown M, King W, Prather C, Cazaubon J, Mack J, *et al.* The SISTA pilot project: understanding the training and technical assistance needs of community-based organizations implementing HIV prevention interventions for African American women-implications for a capacity building strategy. *Women Health* 2007; **46**(2–3): 167–86. doi:10.1300/J013v46n02_11
35. McPhail-Bell K, MacLaren D, Isihanua A, MacLaren M. From ‘what’ to ‘how’ – capacity building in health promotion for HIV/AIDS prevention in the Solomon Islands. *Health Promot Pac* 2007; **14**(2): 125–31.
36. Haalboom BJ, Robinson KL, Elliott SJ, Cameron R, Eyles JD. Research as intervention in heart health promotion. *Can J Public Health* 2006; **97**(4): 291–5.
37. Devine SG, Llewellyn-Jones L, Lloyd J. Impact of a five-day short course on integration of health promotion into practice in north Queensland. *Health Promot J Austr* 2009; **20**(1): 69–71.
38. Wills J, Rudolph M. Health promotion capacity building in South Africa. *Glob Health Promot* 2010; **17**(3): 29–34. doi:10.1177/1757975910375167
39. Riley BL, Taylor SM, Elliott SJ. Organizational capacity and implementation change: a comparative case study of heart health promotion in Ontario public health agencies. *Health Educ Res* 2003; **18**(6): 754–69. doi:10.1093/her/cyf051
40. Barrett LL, Plotnikoff RC, Raine K. Organizational leadership and its relationship to regional health authority actions to promote health. *J Health Organ Manag* 2007; **21**(3): 259–82. doi:10.1108/14777260710751735
41. Griffiths S, Thorpe A. Public health in transition: views of the specialist workforce. *J R Soc Promot Health* 2007; **127**(5): 219–23. doi:10.1177/1466424007081782
42. Panaretto K, Coutts J, Johnson L, Morgan A, Leon D, Hayman N. Evaluating performance of and organisational capacity to deliver brief interventions in Aboriginal and Torres Strait Islander medical services. *Aust NZ J Public Health* 2010; **34**(1): 38–44. doi:10.1111/j.1753-6405.2010.00471.x
43. Flaman LM, Nykiforuk CI, Plotnikoff RC, Raine K. Exploring facilitators and barriers to individual and organizational level capacity building: outcomes of participation in a community priority setting workshop. *Glob Health Promot* 2010; **17**(2): 34–43. doi:10.1177/1757975910365225
44. Bailie R, Sibthorpe B, Gardner K, Si D. Quality improvement in Indigenous primary health care: history, current initiatives and future directions. *Aust J Primary Health* 2008; **14**(2): 53–7. doi:10.1071/PY08022
45. Bailie RS, Si D, O'Donoghue L, Dowden M. Indigenous health: effective and sustainable health services through continuous quality improvement. *Med J Aust* 2007; **186**(10): 525–7.
46. O'Donoghue L, Percival N, Laycock A, McCalman J, Tsey K, Armit C, *et al.* Evaluating Aboriginal and Torres Strait Islander health promotion activities using audit and feedback. *Aust J Prim Health* 2014; **20**(4): 339–44. doi:10.1071/PY14048