Barriers and facilitators to effective whole system approaches

Guidance to tackle obesity at a local level using whole system approaches was initiated by NICE in 2009. The work was put on hold in November 2010 and reviewed as part of the Government's obesity strategy work programme. The revised scope has a stronger focus on local, community-wide best practice. It addresses both process and outcomes.

Before the development of this guidance was put on hold, the Programme Development Group (PDG) for this work met on four occasions and a series of evidence reviews was completed.

This is one of four evidence reviews that were considered by the PDG. The review has been edited to produce a shorter more accessible report for stakeholders.

The PDG is of the view that this review on "barriers and facilitators to effective *whole system* approaches" will have resonance in considerations about *community-wide* approaches to obesity prevention. For example, this review considers issues around capacity building, sustainability, embeddedness and partnerships. However, we would also like to hear stakeholder's views on the work that the PDG has considered to date.

We are particularly interested to hear stakeholder's views on:

1. **The implications of the review findings for current and emerging practice at the community-wide level.**
2. **Whether any evidence has been overlooked, particularly in light of revisions to the scope.**

In a “whole system approach”, regognising the system in which public health problems such as obesity operate is considered vital. We are interested to hear from stakeholders whether this also applies to a local community-wide approach: is defining and recognising the community a fundamental issue and if so how can this be done?

Please also see the associated call for evidence.

Preventing obesity using a 'whole system' approach at local and community level

Barriers and facilitators to effective whole system approaches

This is an edited version of a systematic review undertaken by the Peninsula Technology Assessment Group (PenTAG) for NICE (final version submitted January 2011). The original report authors were: Mark Pearson, Research Fellow, PenTAG; Ruth Garside, Senior Research Fellow, PenTAG; Anne Fry-Smith, Information Scientist, WMHTAC; Sue Bayliss, Information Scientist, WMHTAC

This review was edited by analysts at NICE in order to produce a shorter more accessible report for stakeholders. The original unedited version of the report is available on the NICE website.

List of abbreviations

ASSIA	Applied Social Sciences Index and Abstracts
BME	Black and minority ethnic groups
CEA	Community Energy Advisor
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CPHE	Centre for Public Health Excellence (National Institute for Health and Clinical Excellence)
EPPI	Evidence for Policy and Practice Information
GP	General Practitioner
HAZ	Health Action Zone
HC	Healthy City
HIA	Health Impact Assessment
HImP	Health Improvement Plans
HMIC	Health Management Information Consortium database
HUP	Healthy Urban Partnership
INTUTE	Gateway to subject catalogues for study and research
LA	Local Authority
MEDLINE	National Library of Medicine's bibliographic database
NHS	National Health Service
NA	Not applicable
NR	Not reported
OECD	Organisation for Economic Co-operation and Development
PCT	Primary Care Trust
PDG	Programme Development Group
PenTAG	Peninsula Technology Assessment Group
PH	Public Health
SALAD	Schools Acting in Leicester Against Diabetes
USA	United States of America
WHO	World Health Organisation
WMHTAC	West Midlands Health Technology Assessment Collaboration
WSA	Whole System Approach

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1. Summary of key findings

1.1. Aim

The aim of this evidence review is to understand the factors that impact on the development and implementation of a whole system approach to preventing obesity or other complex public health problems. The primary research question was:

- What factors act as barriers to, and facilitators of, the successful development, implementation, delivery and effectiveness of a whole system approach to preventing obesity (or other complex public health problems) in a locality?

The secondary research questions were:

- What factors act as barriers to, or facilitators of, successful:
    - Capacity building
    - Encouragement of local creativity
    - Relationships between individuals and organisations
    - Engagement of all relevant sectors and workers
    - Communication between individuals, organisations and the public
    - Embeddedness of action for obesity prevention in organisations and systems
    - Robustness and sustainability of the system to tackle obesity
    - Facilitative leadership
- Who are the essential partners and packages of activities for a successful whole system approach to obesity prevention?
- Are there any implications for evaluation and monitoring?

1.2. Methods

The review used published evidence that was identified through a search of electronic bibliographic databases and websites using subject terms and a qualitative research filter. Studies were included if they reported in English on qualitative research that focused on how 'whole community' obesity or smoking prevention programmes (in

OECD countries), or ‘whole community’ programmes without a specific health focus (in the UK), were planned, managed, delivered or evaluated.

The synthesis used the ten whole system features identified in Review 1 as an analytic framework of major themes, under which sub-themes were developed.

Sixteen study reports (relating to 14 separate studies) were included from the UK, USA, and New Zealand.

1.3. Evidence statements

Evidence statement 1: System recognition

It is important to recognise the system in which public health problems such as obesity exist and the importance of collaborative working practices (such as partnership working, using novel networks, or managing meetings in a constructive, non hierarchical way) (Bauld et al 2005a [-], UK; Hall et al 2009 [+], UK; Benzeval 2003 [+]; Campbell-Voytal 2010 [-], USA).

Evidence statement 2: Ownership and involvement

Partner organisations need to feel that they are actively involved and have some “ownership” of a strategy (Hall et al 2009 [+], UK; Platt et al 2003 [++], UK; Campbell-Voytal 2010 [-], USA). This can help reduce the strain between partner organisations (Platt et al 2003; Hall et al 2009). It is important to develop shared awareness and perspectives (for example, through pre-engagement work or training), but this may take considerable time (ie years rather than months)(Campbell-Voytal 2010). Consultations should be focused to prevent partners becoming disillusioned (Hall et al 2009) and community concerns recognised, even if these are at odds those envisaged in public health programme (Campbell-Voytal 2010).

Evidence statement 3: Capacity building

Adequate time and resources need to be set aside for capacity building(Campbell-Voytal 2010, [-]; Bauld et al 2005a [-], UK; Charlier et al 2009 [-], New Zealand). Training and awareness raising may be particularly important – for example to increase staff evaluation (or other technical) skills or bring health onto the agenda of bodies that do not have public health as a primary concern (eg city planners),; (Hall et

al 2009 [+], UK; Benzeval & Meth 2002 [+], UK; Benzeval 2003 [+], UK; Cole 2003 [+], UK).

Evidence statement 4: Partnerships

Partnerships may encounter problems in establishing consensus on the design, delivery and priorities of a programme. (Bauld et al 2005b [-]; Hall et al 2009 [+]; Benzeval & Meth 2002 [+]; Po'e et al 2010 [+]; Platt et al 2003 [++]; Charlier et al 2009 [-]; Powell et al 2001 [-]; Evans & Killoran 2000 [+]). Partnerships need time and space to develop and are likely to be stronger where (1) there is active involvement from both the community and senior staff in key organisations (with communication downwards and upwards) (2) organisations have a positive historical relationship (3) actors form natural communities and share at least some interests or areas of work (4) pre-existing tensions are resolved (5) there is strategic leadership and (6) a common language is developed (poor communication can lead to silo working and strained relationships). (Bauld et al 2005a [-], UK; Bauld et al 2005b [-], UK; Benzeval & Meth 2002 [+], UK; Benzeval 2003 [+], UK; Cole 2003 [+], UK; Platt et al 2003 [++], UK; Campbell-Voytal 2010 [-], USA; Evans & Killoran 2000 [+], UK; Charlier et al 2009 [-], New Zealand; Rugaska et al 2007 [+], UK; Hall et al 2009 [+], UK.

Joint working is easier where programme workers have the skills to establish a relationship with the local community and key individuals can act as "boundary spanners" across organisations, linking their concerns. Such individuals can be vital to the success of a programme, but this has implications for sustainability (Rugaska et al 2009 [+], UK).

Evidence statement 5: Embeddedness

Whole system working is more likely to become embedded where whole systems principles are integrated into strategy and policy documents (Hall et al 2009 [+]) and actions and policies are present at both strategic and operational levels (Bauld et al 2005a [-]).

Evidence statement 6: Sustainability

The sustainability of whole systems approaches may be hindered by traditional organisational structures (Platt et al 2003) or poor experience from previous projects (Cole 2003[+]). Funding issues impact on the sustainability of a whole system approach for a range of reasons including (1) difficulties in making the case for funding for diffuse objectives, (2) the lack of continuity and stability inherent in short-term funding for addressing long term issues and (3) inadequate staffing levels (Campbell-Voytal 2010 [-]; Po'e et al 2010; Platt et al 2003; Charlier et al 2009 [-]; Bauld et al 2005b; Benzeval & Meth 2002; Powell et al 2001).

Evidence statement 7: Leadership

Strategic leadership was considered important when implementing a whole system approach – for example, ensuring focus in programme meetings, providing clarity on staff role, managing tensions between programme staff, providing active leadership at the local level and demonstrating personal commitment (Hall 2009, Cole 2003, Platt et al 2003, Evans & Killoran 2000). However, implementing formal accountability arrangements in cross-organisation partnerships can be difficult (Cole 2003, Evans & Killoran 2000). Leadership may face a range of problems including difficulties in achieving consensus between partners (Hall et al 2009; Benzeval 2003); tensions between local and national priorities (Hall et al 2009), ensuring the overall strategic direction doesn't stifle local leadership Platt et al 2003 [++]; Rugaska et al 2007 [+] UK) and difficulties ensuring inclusive working with minimal resources (Benzeval 2003). Studies have noted implementation problems related to management decisions taken without staff consultation (Platt et al 2003), autonomy of local staff and clarity of management structures (Platt et al 2003), and local programme staff feeling isolated from a national programme (Bauld et al 2005b).

Evidence statement 8: Monitoring and evaluation

The usefulness of evaluation may be limited by a lack of clarity about objectives and a lack of specificity about outcomes to be measured (Bauld et al 2005a [-], UK; Hall et al 2009 [+], UK). Intermediate or broader outcome measures may be more appropriate for assessing whole system approaches, at least in the first instance, rather than specific short term health outcomes. Broader indicators of success may have the added benefit of fostering partnership working (Po'e et al 2010 [+], USA; Platt et al 2003 [++], UK; Bauld et al 2005a [-], UK; Bauld et al 2005b [-], UK; Powell et al 2001 [-], UK; Hall et al 2009 [+], UK). It may be particularly difficult to evaluate non health outcomes and "reward" partners who do not have a traditional health role (Powell et al 2001). Problems may arise with data collection where, staff responsible for collecting the data are unclear about its usefulness or relevance, partners use different information systems or where organisations struggle to reach a consensus on appropriate outcome measures (Bauld et al 2005a [-], UK; Bauld et al 2005b [-], UK; Powell et al 2001 [-], UK). Unresolved organisational issues or the promotion of a working culture where partners feel unable to openly discuss problems in implementation may act as a barrier to organisational learning (Bauld et al 2005b [-], UK; Benzeval 2003 [+], UK) There may be an unfounded assumption at the national level that local agencies have the capacity to develop / deliver a WSA (Bauld et al 2005a [-]).

Evidence statement 9: National policy and priorities

The broader political climate may open a 'national policy window' which facilitates policy change, influencing the ability to take a systems approach (Dodson et al 2009; Benzeval 2003 [+], UK) and enabling partnerships that focus on addressing health inequalities (Evans & Killoran 2000 [+], UK; Benzeval & Meth 2002 [+], UK; Benzeval 2003 [+], UK). Supportive national policy can help foster partnerships and influence the local agenda (Evans & Killoran 2000 [+], UK; Benzeval & Meth 2002 [+]; Benzeval 2003 [+], UK). However, changes in

national policy may create uncertainty (Bauld et al 2005b [-];Benzeval 2003 [+], UK) and reduce the credibility of local programmes (Benzeval 2003 [+], UK). Targets or funding attached to narrowly-defined areas of health, and limited timeframes may limit the ability to take a systems approach. (Benzeval & Meth 2002 [+], UK; Powell et al 2001 [-]).

2. Aims and Background

2.1. Objectives and Rationale

This review aimed to systematically review and synthesise qualitative research on factors which enhance or inhibit a whole system approach to obesity prevention.

2.2. Review questions

Main review question

What factors act as barriers to, and facilitators of, the successful development, implementation, delivery and effectiveness of a whole system approach to preventing obesity (or other complex public health problems) in a locality?

Supplementary questions

What factors act as barriers to, or facilitators of, successful:

- Capacity building
- Encouragement of local creativity
- Relationships between individuals and organisations
- Engagement of all relevant sectors and workers
- Communication between individuals, organisations and the public
- Embeddedness of action for obesity prevention in organisations and systems
- Robustness and sustainability of the system to tackle obesity
- Facilitative leadership

Who are the essential partners and packages of activities for a successful whole system approach to obesity prevention?

Are there any implications for evaluation and monitoring?

3. Methods

3.1. Identification of evidence

3.1.1. Searches

The primary method of identifying evidence for this review was through searches of the following electronic databases: Cochrane Library, MEDLINE, ASSIA, CINAHL, HMIC, SSCI, EPPI-Centre, and NHS CRD databases. The search terms for Review 1 and Review 2 were used with a filter for qualitative research. The search was limited to studies conducted in an OECD country and published in English from 1990 to present. Grey literature sources were also searched (ZeTOC database and ISI Conference Proceedings Citation Index). A range of websites (previously identified for reviews 1 and 2) were also searched.

In addition to the above, citations were identified through searching reference lists of included studies, citation searching, and communication with members of the PDG.

3.1.2. Inclusion of relevant evidence

3.1.2.1. Inclusion criteria

In summary, the inclusion criteria were:

- Systematic reviews
- Primary qualitative research which use recognised methods of data collection and analysis
- Studies conducted among those involved in the design, management, delivery or evaluation of whole community initiatives to prevent obesity (or other public health initiative) whether from public sector, private sector, voluntary or lay populations.
- Included studies had to relate to specific health promotion activities to ensure that the findings illuminated ways of working, relationships between organisations and between them and local populations and so on. In order to produce a manageable synthesis within the timeframe available, we restricted included programmes by area of health and geographical location:

- ‘Whole community’ obesity or smoking prevention programmes (any OECD country).
- ‘Whole community’ programmes on any public health issue (UK only)

Studies were excluded if they were mainly concerned with:

- understanding of issues around obesity, e.g. food choices or barriers and facilitators to eg healthy eating or physical activity, not linked to a specific programme.
- community engagement, unless there were elements specific to obesity prevention
- relationships between members of a primary care team
- single-setting, multi-agency work - for example, collaborative work between schools and Local Authority but was only delivered within the school
- physical activity or healthy eating alone

Studies were excluded if they did not provide details of the qualitative methods used.

3.1.2.2. Screening

All titles and abstracts were screened by one of two reviewers (MP or RG). A sample of 10% of abstracts was screened by a second reviewer (MP or RG). A predefined checklist was used to assess whether or not sources met the inclusion criteria. If the abstract provided insufficient information to assess for inclusion, or if no abstract was available and the report was not clearly excludable on the basis of the title alone, then the full text of the report was obtained. The generic features of a whole system approach were solely used as an *analytic tool*, and not used as a tool for screening studies for inclusion.

3.2. Methods of analysis/ synthesis

3.2.1. Quality assessment

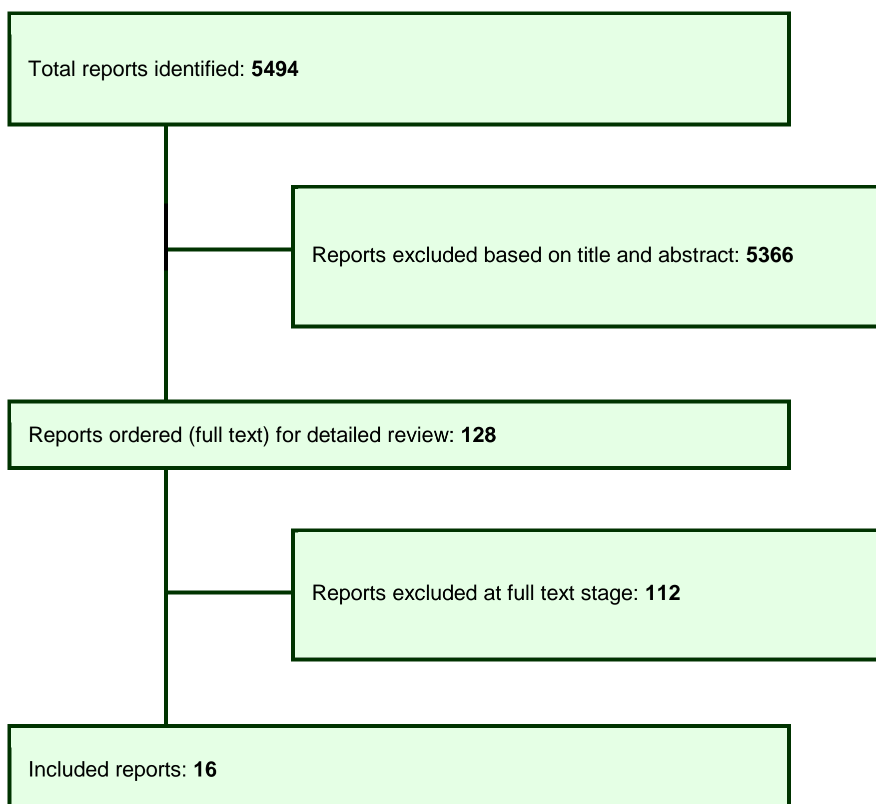
All included studies were critically appraised by one reviewer (MP or RG) using the Wallace et al (2004) tool (see Appendix 5). The final quality rating (++, +, or -) was assigned following discussion and agreement between two reviewers (MP and RG). Consensus was reached on the quality rating for all included studies without needing to refer to a third reviewer.

3.2.2. Data extraction, analysis and synthesis.

For each included study, details were extracted by one reviewer (MP or RG) about the context in which the programme was implemented, the programme itself (population targeted, programme aims and components), the research methods and the findings. The generic features of a whole system approach, as identified in Review 1, were used as the main thematic categories under which sub-themes were developed by a process of discussion between the reviewers.

4. Summary of included studies

4.1. Identified studies



4.2. Included studies

A total of 19 reports were included.

- Five related to obesity prevention programmes internationally (Campbell-Voytal 2010; Dodson et al. 2009;;Po'e et al. 2010)

- Ten were about locality wide health promotion activities, such as Health Action Zones and Healthy Cities, in the UK (Bauld et al. 2005a;Bauld et al. 2005b;Benzeval 2003;Benzeval & Meth 2002;Cole 2003;Evans & Killoran 2000;Hall et al. 2010) (;Powell et al. 2001;Rugkasa et al. 2007)

- Four papers were about smoking prevention (Charlier et al. 2009;Platt et al. 2003;Ritchie et al. 2004;Ritchie et al. 2008). Three of these were based on a single piece of work about the same intervention, Breathing Space, (Platt et al. 2003;Ritchie et al. 2004;Ritchie et al. 2008) and so have been treated as a single

study (Platt et al. 2003). Breathing Space is the only programme about which effectiveness findings were also located (see Review 2).

Table 1: Study details

Study (quality)	Target	Dates	Location	Levels of action	Data collection	Participants
Bauld et al 2005a (-) HAZ	Health Inequalities	1997-2002	8 English HAZ locations	Individual, Family, School, Community, PH policy	• Annual visits / interviews (Directors) • Informal meetings /survey & group interviews (personnel) • Document analysis	HAZ Directors and personnel
Bauld et al 2005b (-) HAZ	Health Inequalities	1997-2002	8 English HAZ locations	Individual, Family, School, Community, PH policy	Interviews	Project managers (n=26)
Benzeval, 2003 (+) HAZ	Health Inequalities	1997-2002	3 English HAZ locations	Individual, Family, School, Community, PH policy	Interviews Documentary analysis	HAZ project managers & stakeholders (N=57)
Benzeval & Meth 2002 (+) Health Improvement Plans (HImPs)	Health inequalities	1999-2001	5 English towns/cities	Community	Interviews Document analysis	"key players" in HA, PCTs, acute trusts, councils, voluntary groups, regeneration partnerships, key local projects N=64
Campbell-Voytal 2010 (-) Healthy Eating Everyday/ Active Living Everyday. Active for Life/ Active Living Everyday	Obesity in Mexican and African American communities	1999-2008	Michigan USA	Individual, School, community	Not clear - ?case study through observation	NR (2 project examples used)

Study (quality)	Target	Dates	Location	Levels of action	Data collection	Participants
Charlier et al 2009 (-) Keeping Kids Smokefree	Smoking	2007-2009	Auckland New Zealand	Individual family, school	Focus groups Interviews	Students (n=NR) Stakeholders (health service providers, programme & research teams, smokefree group) (n=NR)
Cole 2003 (+) HAZ	Health Inequalities	1998-2005	1 English HAZ	Individual, Family, School, Community, PH policy	Interviews	Key workers from 37 HAZ projects. Health sector informants <50% sample. n=72
Dodson et al 2009 (+) Obesity prevention policies	Childhood obesity	2003-2005	12 USA states	PH policy	Interviews	Key informants, staffers and legislators N=16
Evans & Killoran, 2000 (+) Health Improvement Plans (HImPs)	Health inequalities	1996-1999	5 English settings	Individual, Family, School, Community, PH policy	Interviews Observation	Project managers, project sponsors, steering group members & other stakeholders. Steering groups, seminar & other events.
Hall et al 2010 (+) Healthy City	Health promotion	2001-2008	England	Individual, Family, School, Community, PH policy	Interviews Documentary analysis Facilitated workshop	Partnership members – public, statutory, elected, community & voluntary, neighbourhood, business. N=27.

Study (quality)	Target	Dates	Location	Levels of action	Data collection	Participants
Platt et al 2003; Ritchie et al 2004; Ritchie et al 2008 (++) Breathing Space	Smoking	1998-2001	Scotland	Individual, school, community	Interviews Focus groups Observation Media analysis	Programme managers, intervention staff. n=NR Young people aged 12-15, local youth workers, smoking cessation counsellors, community group workers. n=NR Programme meetings and key events. Local newspapers & community publications
Po'e et al 2010 (+)	Childhood obesity	NR	USA	Community	Interviews Survey	Workers in community outreach organisations, after school programmes, clinic based programmes n=24
Powell et al 2001 (-) Health Improvement Plans (HImPs)	Health inequalities	NR	England / NR	Community	Interviews	HA managers, community, health council chief officers, LA policy officers, voluntary sector reps, GPs, PCG managers, NHS trust staff. (n=43)
Rugkasa et al 2007 (+) HAZ	Health inequalities	2000-2002	NI	Individual, family, community	Focus groups Interviews	Partnership members (N=27 in 4 groups) Statutory, community & voluntary sector representatives (n=12)

NR - not reported; PH - Public Health HAZ - Health Action Zone; PCT - Primary Care Trust

5. Study findings

This section presents the findings using the thematic headers from the list of generic features of a whole system approach, identified in review 1. Additional findings are presented on the impact of national policy and priorities.

5.1. Explicit recognition of the public health problem(s) as a system

No studies were identified that made direct reference to a whole system approach in their findings. Four reports were identified which made indirect reference to a whole system approach: a US based obesity prevention programme (Campbell-Voytal 2010), two reports about HAZs in England (Benzeval 2003; Bauld et al 2005a), and one report about a WHO Healthy City in England (Hall et al 2009).

All four studies recognised the importance of managing meetings in a constructive way that enabled a wide range of voices to be heard and for novel possibilities to be explored (resonating with Pratt et al's (2005) proposals) – for example emphasising careful planning (Bauld 2005a), partnership working (Benzeval 2003) and collaborating around common issues (Campbell-Voytal 2010).

The study of the WHO Healthy City reported that meetings between partners may not have achieved all that they could because they lacked focus, were not sufficiently interactive, and did not relate explicitly to opportunities available (in this case, through the Local Strategic Partnership's involvement with commissioning) (Hall et al 2009). (Hall et al 2009). Using meetings to develop a strategic approach, with members networking that other members they would not normally encounter in their working lives, was identified as a missed opportunity (Hall 2009). Working 'from the bottom-up' through novel networking opportunities was also considered key in the study of an obesity prevention programme (Campbell-Voytal 2010).

5.2. Capacity building

Nine reports presented findings on capacity building: one on a obesity prevention programme in the USA (Campbell-Voytal 2010), two smoking prevention programmes (Platt et al 2003, Scotland; Charlier et al 2009, New Zealand), and six on whole community programmes in England (Evans & Killoran 2000 and Benzeval & Meth 2003, HImPs; Benzeval 2003, Cole 2003, and Bauld et al 2005, HAZs; Hall et al 2009, Healthy City).

Three studies describe the importance of creating a sense of ownership within communities, and the need for processes which help to get people and organisations involved in health promotion (Campbell-Voytal 2010; Platt et al 2003; Hall et al 2009). Failure to ensure a sense of ownership within communities can cause strain between partner organisations (Platt et al 2003). Although community involvement was considered one of the successes of the Healthy City project, some partners felt there was too much consultation and engagement (Hall et al 2009). This suggests that it is important to be clear about the reasons for doing this. A "pre-engagement" phase to build mutual awareness (for example, awareness of the barriers to addressing obesity that a community might experience) may need to be planned for communities that are initially unaware, disinterested or unable to engage in prevention activities (Campbell-Voytal 2010). The authors noted that this phase took several years and that that scrupulous practice is crucial in this early phase to establish credibility (Campbell-Voytal 2010). The time needed to build relationships, shared priorities and build understanding between groups may be a challenge for resourcing (Campbell-Voytal 2010).

Adequate resources were considered important for capacity building and successful programme implementation by two studies (Bauld et al 2005; Charlier et al 2009). Resources could be tangible, such as suitable teaching and learning materials (Charlier et al 2009) or intangible, such as allowing enough time for partners to genuinely engage with one another and develop a local strategy (Bauld et al 2005).

Four studies identified the importance of training for capacity building (Hall et al 2009; Benzeval & Meth 2002; Benzeval 2003; Cole 2003). Training was considered to be of use for 'technical' issues (Hall et al 2009; further details not provided) and improving evaluation skills in research-based projects (Cole 2003). A lack of training and support was perceived to have a negative impact on programme implementation (Hall et al 2009). A lack of understanding of the impact of professional roles (for example, of city planners) on wider determinants of health may can inhibit a public health programme (Benzeval 2003).

Capacity building can help to bring public health onto the agenda of bodies that do not have it as their primary concern and provide support for people unfamiliar with a public health approach. In a WHO Healthy City project, awareness raising and training of city planners around health and wellbeing was perceived to have made a substantial difference to both urban planning and partnership working. This was linked to a framework around which professional groups could collaborate and through which key principles and objectives to be embedded into future local authority planning (Hall et al 2009).

5.3. Local creativity

No reports explicitly presented findings on fostering of local creativity. However, this is clearly a part of other features of a whole system approach such capacity building, relationships and facilitative leadership.

5.4. Relationships

Eleven reports presented findings on relationships between personnel within and between organisations: two reports about smoking prevention programmes (Platt et al 2003, Scotland; Charlier et al 2009, New Zealand), three reports about HImPs in England (Evans & Killoran 2000; Powell et al 2001; Benzeval & Meth 2002), four reports about HAZs in England (Benzeval 2003; Bauld et al 2005a; Bauld et al 2005b; Cole 2003), one report about HAZ in Northern Ireland (Rugaska et al 2007and one report about a WHO Healthy City in England (Hall et al 2009).

5.4.1. Collaboration

Although HAZs were considered to have implemented some mechanisms that helped community organisations work with one another - such as joint appointments across organisational boundaries and secondments, there was a perception that the programme insufficiently explored the potential of, for example, pooled budgets and integrated services (Bauld et al 2005a). HAZ did provide opportunities for novel partnerships and ways of working to be developed (Bauld et al 2005a; Bauld et al 2005b; Benzeval 2003; Cole 2003) between organisations and communities (Bauld et al 2005a) or between different organisations (Cole 2003). Collaborations were fostered by addressing health as a collective process, agreeing common goals.

Two HAZ studies report suggest collaborative working may be important in driving a programme forwards (Bauld et al 2005b; Benzeval 2003). Firstly, demonstrating the effectiveness (success) of a partnership approach can contribute to the further implementation (development, maintenance or expansion) of projects (Bauld et al 2005b). Secondly, by credible, cross sector meetings around which collaborators could meet, providing an intellectual space for discussion and fostering a sense of the possibilities of what could be achieved (Benzeval 2003).

Tensions can arise when attempting to balance local collaborative approaches with professionals' concerns about accountability (Bauld et al 2005a), or the "centralised, professionally-led" nature of the NHS (Benzeval & Meth 2002). Substantial time was required for HAZs to negotiate their position within statutory systems, reducing the time available for community engagement and development of community priorities (Bauld et al 2005a). How partnerships are developed and managed at a strategic level may also cause tensions (Bauld et al 2005a). In Scotland, the Health Board's way of

working was felt to sit uncomfortably with a community development approach to smoking prevention (Ritchie et al 2004). Some team members were uncomfortable with, and resistant to, the emergent process of establishing project objectives in collaboration with the community. The process was felt by some to be "amorphous" and "shapeless" and difficult to translate into practice (Platt et al 2003).

Programme staff may require support (not just training) when working within a novel, emergent approach, particularly in relation to any concerns they have about their own job security in a changing work environment (Benzeval & Meth 2002).

5.4.2. Power and representation

Six studies reported how the presence or absence of a broad range of professionals and community members impacted upon the delivery of programmes (Benzeval & Meth 2002; Platt et al 2003; Bauld et al 2005b; Hall et al 2009; Rugaska et al 2007; Cole 2003). Lack of representation at senior organisational levels (for example, weak public health presence on PCT boards, Benzeval & Meth 2002) *and* lack of community involvement in programme development and implementation (Platt et al 2003) have been reported. Joint appointments between statutory agencies may help public health be seen as a shared responsibility (Bauld 2005a). Advocates from senior levels in organisations may be vital to the success of projects (Cole 2003) and under-representation of senior professionals may compromise strategic action (Hall et al 2009).

The presence of a wide range of people in a partnership is necessary, but may not be sufficient for achieving adequate representation (Benzeval & Meth 2002; Platt et al 2003; Powell et al 2001). Established power relations may hinder genuine collaborative working (for example, where representation from PCT executive level is viewed to be lacking, Benzeval & Meth 2002). Professional interests may also "trump" partnership working (Benzeval & Meth 2002).

The imbalance in power between statutory organisations and the voluntary sector (in terms of historical status, control over resources and assumptions about expertise) was viewed by some as having a substantial negative impact on the extent of the role that the voluntary sector could play (Powell et al 2001).

In the smoking prevention programme study (Platt et al 2003) relationships between different groups were constrained by difficulties in establishing a common language, employees attitudes about the "amateur" status of community organisation, and a perception that tensions between groups had been exacerbated by inadequate leadership, line management and support (Platt et al 2003).

Key individual(s) who are widely respected and can act as 'boundary spanners' that link together key players across organisational and policy environments may be vital

for achieving genuine representation (Rugaska et al 2007). In HAZ, a project manager who acted as a 'boundary spanner' was a widely-respected individual who had significant influence that went beyond what would normally be expected in their role. It remains unclear how roles can be developed to ensure that they are boundary spanning and carry respect and influence. Relying upon an individual's strong character, rather than the strength and density of connections within a system has ramifications for the robustness and sustainability of a system.

5.4.3. Working relationships

It is important to resolve any pre-existing tensions between voluntary, community and statutory agencies before cross-sectoral services can be developed (Benzeval 2003; Cole 2003; Powell et al 2001). In one study, providers who were not part of the core implementation team felt that they were not trusted to deliver elements of the programme which had been made their responsibility (Charlier et al 2009). Where joint working is already well-established, levels of trust are likely to be higher (Powell et al 2001).

In the delivery of a HImP, professionals held different views on how partnership working should be achieved, despite agreement on the broader areas of the approach (Powell et al 2001). The goal of partnership working in HAZs was viewed by some as being important for providing a space in which, for example, historical conflicts could be resolved. This was not necessarily a comfortable process, but it was vital for the development of partnership working (Bauld et al 2005b). This suggests the system will need to allow time for working relationships to develop. In HAZ, it was the experience of partnership working that fostered more constructive, respective working relationships.

One study suggested that 'fun days' could help develop working relationships between professionals and community members (Charlier et al 2009). However, others suggested a more strategic approach was required to develop relationships - such as targeting inter-professional and inter-agency relations to address specific issues (such as GP involvement in the delivery of HImPs) (Evans & Killoran 2000) or taking steps to develop a common language and approach that reconciles social and medical models of care (Cole 2003). Efforts to foster partnership working through formal organisational links may have unintended consequences. For example, formal accountability of a health authority for HAZ led to the perception that it was an NHS "entity" rather than genuine cross sectoral partnership (Benzeval 2003).

5.5. Engagement

Twelve reports presented findings related to engagement: two reports about an obesity prevention programme in the USA (Campbell-Voytal 2010; Po'e et al 2010),

two reports about smoking prevention programmes (Platt et al 2003, Scotland; Charlier et al 2009, New Zealand), three reports about HImPs in England (Evans & Killoran 2000; Powell et al 2001; Benzeval & Meth 2002), two reports about HAZs in England (Bauld et al 2005b; Benzeval 2003), one report about HAZ in NI (Rugaska et al 2007), and one report about a WHO Healthy City in England (Hall et al 2009).

5.5.1. Raising awareness and shared vision

Raising awareness appears to be a necessary initial step in the process of engagement with public, private, and community partners. One study noted that while association with a high profile organisation (WHO) legitimised the approach and facilitated 'buy-in' from key actors, a "comprehensive communication strategy' "directed at carefully segmented target audiences" was also required to increase the programme's credibility and visibility (Hall et al 2009). However, attempts to raise awareness need to be conducted with an understanding of the barriers to engagement in the strategy – such as capacity to undertake additional work (Benzeval & Meth 2002).

In communities where there is a history of working together it may possible to develop a shared strategic vision on addressing health inequalities (Evans & Killoran 2000). Similarly, partnership working may be more successful where organisations are used to working with other organisations (Evans & Killoran 2000), and less successful where they are not (Powell et al 2001). Organisational cultures, between and within eg the NHS and Local Authorities, may act as a barrier to the development of partnerships (Benzeval & Meth 2002). Introducing non medicalised perspectives into debates about health inequalities in HAZs enabled a diverse range of stakeholders to participate (Bauld et al 2005b).

For organisations without a history of collaborative working, time pressures, concerns about resourcing or the personal health behaviour of "gatekeepers" (such as school principles) or practitioners (such as teachers) can inhibit the development of partnerships or implementation of programmes (Charlier et al 2009). Programmes may struggle to get "buy in" where staff have difficulty following a healthy lifestyle themselves and are not seen to "set a good example" (Po'e et al 2010).

Studies reported problems in establishing a shared vision and focus in the local policy agenda (Powell et al 2001); lack of consensus amongst health care professionals on what community participation meant for programme design and delivery (Platt et al 2003); and disparities between what health professionals considered a priority (smoking) and what the community considered a priority (drugs, alcohol and sexual health), again suggesting a lack of shared vision (Platt et al 2003).

5.5.2. Ways of working

Helping people involved with programme implementation and the local community see "eye to eye" may be enabled by (1) building on existing knowledge, experience, and personal relationships (Charlier et al 2009) (2) reducing cultural barriers by involving programme workers from the same ethnic group as community members (Charlier et al 2009) and (3) programme members being actively involved in and understanding community life (Charlier et al 2009; Rugaska et al 2007). One study on the implementation of a smoking prevention programme in Scotland reported that, despite the programme's stated aim to address the wider determinants of health programme workers predominantly viewed smoking cessation as only involving individual behavioural factors best addressed by health professionals in a clinical setting (Platt et al 2003).

A lack of joint working (or common interests) was reported where programme implementation involved agencies or groups whose geographical boundaries did not form 'natural communities' (Benzeval 2003). An approach might be considered unfair or inconsistent, for example, where there was a mismatch between the programme and lead organisations borders or where the geographical boundaries of the programme changed (Benzeval 2003).

One study reported that the historical relationship between a community and academics involved with programme implementation required 'working through' in order to develop a constructive working relationship (Campbell-Voytal 2010). Sharing at least some interests or areas of work is likely to facilitate stakeholder events and steering groups (Evans & Killoran 2000).

Single individual(s) in a programme may be identified as being key to success, because of their drive, cultural background, intensive involvement and bond with the local community (Rugaska et al 2007). However, an approach that relies on the involvement of one individual is likely to be less robust and sustainable (see also Section 5.8).

5.6. Communication

Five reports presented findings related to communication: two reports about smoking prevention programmes (Platt et al 2003, Scotland; Charlier et al 2009, New Zealand), one report about HAZs (Bauld et al 2005a), one report was about a HImP (Benzeval & Meth 2002), and one report about a WHO Healthy City in England (Hall et al 2009).

Four studies suggested that poor communication can lead to "silo working" inhibiting the delivery of a strategic approach (Charlier et al 2009; Platt et al 2003; Bauld et al 2005a; Benzeval & Meth 2002). To achieve a strategic approach, practical support is needed across different project areas (Bauld et al 2005a) (Benzeval & Meth 2002) –

this is likely to mean more than just a co-ordination role, rather significant input by individuals skilled at working across boundaries. One study provided an example of a programme co-ordinator unable to do this (they ended up contributing to front line work due to time limitations and disengagement of staff) (Platt 2003), where as another suggested that team members with experience of academic and community participation were important for translating research findings into the delivery of a community strategy (Charlier et al 2009).

Communication methods may also act as a barrier to participation. Teachers expected to be involved in a smoking prevention programme reported finding informal methods of face-to-face communication (eg at tea and lunch breaks) preferable to methods which made them feel they were subjected to the programme rather than being substantially involved (flyers and newsletters posted in school mailboxes) (Charlier et al 2009). A common language – that overcomes established boundaries between programme members - may need to be developed to avoid strained relationships (Platt et al 2003).

Communication difficulties may exist where a programme is part of a wider network (such as in the Bright WHO Healthy City project), with lack of clarity "downwards" from the wider network to those implementing the programme having a potential negative impact on the involvement of local actors (Hall et al 2009). Communication 'upwards', from programme workers to key local actors, may be vital for maintaining the political support necessary for programme implementation but this cannot take place without timely 'downwards' communication from the wider network about, for example, strategic direction and budgets.

5.7. Embeddedness of actions and policies

Three reports presented findings related to the emebeddedness of action and policies: two reports about HAZs in England (Bauld et al 2005a; Cole 2003) and one report about a WHO Healthy City in England (Hall et al 2009). Actions and policies may not become embedded unless they are present across a range of sites and levels (from the strategic to the operational, and involve both governance and community engagement) (Bauld et al 2005a). Experience of previous initiatives may impact on the embedding process; previous projects considered to have addressed important local issues may pave the way for embedding similar approaches in the local policy agenda, whilst issues that historically had a low priority remained in this marginal position (Cole 2003). Embedding strategy principles into organisational policy, is particularly important where public health is not a primary concern – such establishing HIAs as a component of council planning development (Hall et al 2009).

5.8. Robustness and sustainability

Nine reports presented findings related to the robustness and sustainability of a whole system approach: two reports about an obesity prevention programme in the USA (Campbell-Voytal 2010; Po'e et al 2010), one report about the implementation of obesity prevention policies (Dodson et al 2009), two reports about smoking prevention programmes (Platt et al 2003, Scotland; Charlier et al 2009, New Zealand), two reports were about HAZs in England (Bauld et al 2005a; Bauld et al 2005b), and two reports were about HImPs in England (Benzeval & Meth 2002; Powell et al 2001).

Organisational restructuring may be a significant risk to implementation, reducing morale and turning programme staff's focus inwards to the organisation (and concerns about their job position and career), rather than outwards to the partners with whom they were supposed to be collaborating (Bauld et al 2005a; Bauld et al 2005b; Benzeval & Meth 2002). Staff in one study felt organisational restructuring was centred on internal organisational priorities rather than the needs of the programme, disrupting working relationships and decreasing the scope for communication (Platt et al 2003).

Lack of funding may hinder programme implementation through inadequate staffing levels (Campbell-Voytal 2010; Po'e et al 2010; Platt et al 2003; Charlier et al 2009; Bauld et al 2005b; Benzeval & Meth 2002; Powell et al 2001) and restricting the use of resources for the more diffuse objectives of partnership working (Powell et al 2001). This may result in programmes having to rely on the energy and commitment of specific individuals, with implications for programme robustness and sustainability (Benzeval & Meth 2002; Campbell-Voytal 2010; Po'e et al 2010).

Uncertainty over funding may have a negative impact on programme implementation (Platt et al 2003; Bauld et al 2005b; Po'e et al 2010; Powell et al 2001). Delivery of programme objectives may be hindered by the need to obtain new sources of funding (Bauld et al 2005b; Platt et al 2003). Staff working on one obesity programme sought unpaid volunteers to fulfil aspects of the programme that received short term funding. (Po'e et al 2010). Costs are always likely to be a major consideration in policy making, both for those aiming to reduce obesity in the health sector and for other actors concerned about wider financial implications (Dodson et al 2009). Short-term funding may be at odds with the long-term nature of the public health issues being addressed (Powell et al 2001).

5.9. Facilitative leadership

Six reports presented findings related to facilitative leadership: one report about a smoking prevention programme (Platt et al 2003, Scotland), two about HAZs (Cole 2003; Rugaska et al 2009), two about HImPs in England (Benzeval & Meth 2003;

Evans & Killoran 2000), and one was about a WHO Healthy City in England (Hall et al 2009).

Clear responsibility and line management was perceived to be important for successful programme delivery (Cole 2003), whereas inadequate line management exacerbated tensions between personnel (Platt et al 2003). Formal accountability processes may be problematic for cross-organisation partnerships with different ways of working (Cole 2003; Evans & Killoran 2000) and this may be a significant source of tension (Evans & Killoran 2000). The perceived personal commitment of others (particularly at a senior level) may impact on the implementation of a partnership approach (Platt et al 2003; Benzeval & Meth 2002).

In a smoking prevention programme in Scotland the desire to foster a 'bottom-up' rather than 'top-down' approach resulted in no one person or group taking on the leadership role and the partnership lacking the energy for 'driving forward' (Platt et al 2003). Tensions may also arise through a bottom up approach because of difficulties in reaching consensus about the approach priorities and subsequent use of resources (Benzeval 2003) or difficulties in managing existing tensions between local and national priorities and strategies (Hall et al 2009). This tension is not necessarily irresolvable with skilled partnership working that maximises the number and strengths of connections in a network, ensures all actors are working towards the same strategic approach and avoids relying too much on key personnel (Rugaska et al 2007). It remains unclear how a whole system approach can foster individuals' energy and creativity without limiting the robustness and sustainability of the system.

One study reported that programme staff felt a lack of control over programme delivery (and moral adversely affected) with senior management decisions made in response to the wider political climate without consultation with staff (Platt et al 2003). Furthermore, key staff reported that while they lacked the authority to make decisions about programme implementation, a confusing management structure made it difficult to resolve any issues, hindering partnership working (Platt et al 2003). Two studies reported contrasting experiences in the implementation of HAZs (Bauld et al 2005b; Rugaska et al 2007). Participants in one area felt isolated from the national programme, leaving them feeling insecure and uncertainty about the programme (Bauld et al 2005b). In the other however, participants reported a sense of shared ownership with harmonious, evenly balanced relations between partners (Rugaska et al 2007).

5.10. Ongoing monitoring and evaluation

Eight reports presented findings on the monitoring and evaluation of projects: one report about an obesity prevention programme in the USA (Po'e et al 2010), one report about a smoking prevention programme in Scotland (Platt et al 2003), four reports about HAZs in England (Bauld et al 2005a; Bauld et al 2005b; Benzeval 2003;

Cole 2003), one report was about a HImP (Powell et al 2001), and one report was about a WHO Healthy City in England (Hall et al 2009).

5.10.1. Indicators of success

Measures used for monitoring and evaluation were considered to drive the implementation of programmes in certain directions (Po'e et al 2010; Platt et al 2003; Bauld et al 2005a; Bauld et al 2005b; Powell et al 2001; Hall et al 2009). In three studies, these measures were perceived to divert programmes away from their overall goal of addressing the wider determinants of health (Platt et al 2003; Bauld et al 2005b; Powell et al 2001). Issues identified as important by a community might not accord with those identified by programme funders (Platt et al 2003). Concern was raised that programmes may be prematurely labelled as unsuccessful if inappropriate, short term indicators are used (Bauld et al 2005b). Indicators of community development may be more appropriate for judging the success or otherwise of programmes that need space and time to develop and that are attempting to address deeply-ingrained social issues (Powell et al 2001). It may be particularly difficult to evaluate and reward action by bodies involved in partnerships but outside of the programme evaluation (such as those with out a traditional health role) (Powell et al 2001).

Broader indicators of success may foster partnership working and provide a focus for addressing wider determinants of health (Hall et al 2009). Furthermore, intermediate measures (such as programme attendance) may be a more appropriate measure of success, at least initially, than health outcomes such as levels of obesity (Po'e et al 2010).

5.10.2. Mechanisms for data collection

Partnership working may make data collection more complex (Bauld et al 2005a; Powell et al 2001). Data collection across a range of agencies may be tricky where different information systems are used (even where they are ostensibly measuring the same outcome) (Powell et al 2001) or where agencies struggle to reach a consensus on which outcomes to measure (Bauld et al 2005a).

Successful data collection may rely on the perceived usefulness of the data by those responsible for its collection (Bauld et al 2005a). Data collection was unlikely to be successful where programme workers could not understand its relevance. Providing feedback to staff on programme progress at a national level was identified as an important 'missed opportunity' for raising the profile of a programme at the national level and acting as a motivator for future work (Bauld et al 2005b).

5.10.3. Organisational learning

Two studies reported the way in which organisational learning was perceived to take place during programme implementation (Bauld et al 2005b; Benzeval 2003). A working culture in which staff can speak candidly about problems encountered in programme implementation may facilitate organisational learning (Bauld et al 2005b). However, existing issues within an organisation may act as barrier to organisational learning or changes to working practice that could facilitate partnership working (Benzeval 2003).

5.10.4. Complexity

One study of HAZs identified a lack of clarity about objectives and a lack of specificity about measured outcomes as substantially limiting the evaluation of HAZs (Bauld et al 2005a). This weakness was traced back to the assumption at a national planning level that local agencies had the capacity to develop a complex, whole community approach; the reality was that this capacity was unevenly distributed, with many HAZs struggling to plan activities and reach a consensus on appropriate intermediate outcome measures (Bauld et al 2005a). A list of problems HAZs encountered in their efforts to develop appropriate outcome measures are shown in Table 2. A study of a WHO Healthy City in England also reported doubts as to whether evaluation could identify the impact of a complex programme due to lack of clarity around objectives, targets, and benchmarks (Hall et al 2009). However, another HAZ study in reported that, although evaluation efforts could be patchy, many projects had *begun* to make the links between context, programme mechanisms, and evaluation outcomes (Cole 2003).

Table 2 Issues encountered in developing appropriate outcome measures in HAZs

- Lack of existing baseline data to enable comparison with data after implementation of HAZs
- Targets sometimes developed without accessing routinely collected data, or without being identified by needs assessment
- Targets expressed without enough specificity to see if they had been met
- Selection of targets only partially represented the overall HAZ strategy
- Targets set by central government were not necessarily realistic locally, as the contexts in which programmes were implemented could differ significantly
- Activities and interventions delivered as part of the HAZ programmes were not conceptualised clearly enough; process measures were not always plausibly linked to the types of outcomes predicted to emerge from them
- Complexity and extent of HAZ programme activities made assessing impact difficult

Source: Bauld et al (2005a)

5.11. National policy and priorities

Eight reports presented findings related to national policy and priorities and the effect that these had on the implementation of programmes: three reports about HImPs in England (Benzeval & Meth 2002; Powell et al 2001; Evans & Killoran 2000), four reports about HAZs in England (Benzeval 2003; Bauld et al 2005a; Bauld et al 2005b; Cole 2003), and one report about the implementation of obesity prevention policies in the USA (Dodson et al 2009).

5.11.1. Priorities and targets

National policy can have a significant impact on the delivery of local programmes (Evans & Killoran 2000; Bauld et al 2005b; Benzeval & Meth 2002; Benzeval 2003). A national focus on health inequalities was perceived to have fostered the development of partnerships that prioritised health inequalities in HImPs (Evans & Killoran 2000) or provided the impetus for getting health inequalities onto the local agenda (Benzeval & Meth 2002; Benzeval 2003). However, when national priorities were re-oriented to have less of a focus on HAZs, uncertainty was created about the future of local programmes (Bauld et al 2005b; Benzeval 2003). In one study, this move was perceived to signal a reduced focus on health inequalities, and reduced the credibility of the work in which local authority, community and voluntary sector partners were engaged (Benzeval 2003).

Two studies of HImPs identified how, despite a commitment to addressing health inequalities at both a national and local policy level, efforts to address inequalities remained peripheral to the concerns of health agencies due to the many other targets agencies were required to meet (Benzeval & Meth 2002; Powell et al 2001). Many health agencies believed that they weren't funded adequately even to meet targets related to their core priorities (Benzeval & Meth 2002). Two studies identified the perception that the funding for more wide ranging projects that address the determinants of health may be limited by central funding being attached to prioritised, but narrowly defined, areas of health (Benzeval & Meth 2002; Powell et al 2001). However, central funding attached to areas of health or priorities cognisant with wider determinants enabled managers at a local level to ensure that programmes addressing wider determinants received funding (Benzeval & Meth 2002).

Although it was recognised in the implementation of HImPs and HAZs that national priorities and targets would have to take account of local contexts, in reality this was not always the case (Benzeval 2003; Bauld et al 2005a; Powell et al 2001). For example a locally-identified priority around addressing tuberculosis in East London struggled against nationally set targets for recognition (Benzeval 2003). In one study of HAZs, the need to strike a balance between national and local priorities (including the need for local priorities not to have to react to every policy change) was identified

(Bauld et al 2005a). Time and training helped partners develop strategic priorities that attained a better balance between the national and local (Bauld et al 2005a).

5.11.2. Legitimacy of public health

Two studies identified how the broader political climate can facilitate programme delivery, either through wider policy changes (Dodson et al 2009) or through acting as a ‘policy vehicle’ that enabled a health inequalities agenda to be promoted at a local level (Benzeval 2003). Both studies also recognised the importance of capitalising on an open “policy window”, with increased action or at a national level in the US (Dodson et al 2009, obesity prevention) or England (Benzeval 2003, HAZ) helping to create (and legitimise) opportunities and “space” for action at the local level that might not otherwise have arisen.

5.11.3. Pressures on policy makers

One study reported how pressures could be brought to bear on USA policy makers, in relation to obesity prevention policy (Dodson et al 2009). It flagged that the totality of pressures that may be placed on policy makers should be considered. Seeking to control the more overt aspects of the system (for example, private sector lobbyists) may lead to the influence of ostensibly less powerful players being overlooked (for example, school representatives concerned about the financial impact of policies).

6. Discussion

6.1. Main findings

Building and maintaining positive relationships between actors and organisations emerged strongly as a key concern in this review. Positive relationships with a broad range of partners are strengthened through careful and free flowing communication and well thought-out methods of engagement. Such collaborations require a shared vision which can focus efforts while permitting innovative potential activities. Particularly where novel approaches are employed, support and training for staff is required. It is important to build a critical mass of actors and organisations that recognise the wider determinants of health in a locality. A broad range of actors should be represented and, in addition, there may be a crucial role for skilled "boundary spanners" who are able to work across organisations and link their concerns. Someone who is immersed in, and understands, local communities may be particular valuable in this role. Overreliance on such individuals, however, may be unwise since developing many links across these networks is likely to result in a more robust system.

Challenges to strong relationships and partnership working include the impact of existing power relations between organisations. As well as engaging with communities, visible senior staff support is important to lend credibility to activities. Differences between organisational structures and languages can hamper positive partnerships so this needs to be recognised and, where possible, mitigated against through development of shared language and goals.

Community engagement requires that a community's concerns, which may not be the same as project workers' involved in public health programmes, are recognised. Working together to address these may be necessary in order for the community to later become aligned with the concerns of health promotion staff.

The importance of partnership working for tackling complex public health problems is far from a new idea. Many localities will have extensive experience of joint working. Previous poor experiences of partnership working may have a lasting legacy. While existing tensions are not resolvable (and working them through may lead to enhanced relationships and alliances) the limitations or unintended consequences of partnership working should not be ignored.

Complex programmes require sufficient resourcing, in terms of sufficient numbers of well trained staff and identifiable, long term finance for their activities. There is also a need for leadership roles, both at the strategic level and enabled at the local level, to be identifiable and supported. Local staff need to be able to take decisions as

appropriate. Questions of accountability and responsibility between individuals and organisation need to be carefully managed.

Potentially pertinent findings from the HAZ and HImP studies, given the current economic and political environment, relate to the difficulties of maintaining momentum for specific public health activity in uncertain political times. These projects existed through major structural reorganisation of the health service and changing priorities in central government. Staff insecurity about their jobs, and uncertainty about future funding streams can undermine programme robustness and sustainability. It is unclear how such disruption can be avoided. Further, it is suggested that resources for crucial, but perhaps more nebulous, activities such as engaging communities and developing partnerships, can be more difficult to justify during budget cuts.

Monitoring and evaluation can be used positively to ensure that successes are known about and shared and that changes can be made where activities are less successful. This latter requires trust between partners to allow open discussion of activities that have not been successful. In addition, it may be difficult to maintain the interest of (non-health) partner organisations if the indicators of success on which they are measured and rewarded do not reflect their role in addressing health outcomes. Staff involved in data collection need to be aware of the purpose of the information they provide, suggesting that feedback of results to participants is important.

There is a tension between funding which is attached to specific projects in the short term, and the long term vision required for a whole system approach to obesity prevention.

Local activity, including partnership working, may be fostered by supportive national policy which prioritises key health areas and legitimises public health work across the community. It is less helpful where competing targets and priorities divert attention away from these areas, where funding and targets are attached to narrowly defined health issues or where insufficient time is available for developing local priorities that balance national and local concerns.

That the engagement of a broad range of actors was seen as important in so many of the included studies is even more notable given the fact that we *excluded* studies for which issues of community engagement were a primary focus. Existing CPHE guidance about Community Engagement is clearly pertinent to this programme of work. However, we did not identify any qualitative evidence that would aid understanding of one of the secondary questions for this review, namely: Who are the essential partners and packages of activities for a successful whole system approach to obesity prevention?

6.2. Methodological considerations

We used the generic features of a whole system approach to obesity prevention, developed through previous reviews and PDG input, as a framework for analysis in this review. Although we found this to be helpful, we are aware that other interpretations of the data are possible. In addition, as many of the generic features are linked or overlap, it was not always easy to decide where a particular finding should sit, leading to some repetition or blurring between various features. For example, mechanisms for enabling good relationships and developing engagement are strongly interlinked and may support each other; each strengthening the other. Further, both of these may require enhanced communication strategies to flourish.

While we were able to identify considerable support for the identified features of a successful whole system approach, there was little evidence describing how each of the features might be achieved.

Only three qualitative research reports about community wide obesity programmes were identified. We therefore expanded our inclusion criteria to include whole system approaches to other public health problems in the UK. Evaluations of locality wide health promotion activities accounted for nine out of a total of 14 studies. Eight related to HAZ and HImP activities in the 1990s and 2000s. While HAZ and HImP were designed to address health inequalities their explicit focus on health promotion using a whole system approach means that their inclusion can offer insights transferable to obesity. The programmes of work described in them had the chance to mature, which most whole system approaches to obesity prevention have not yet had the chance to do.

We acknowledge that the inclusion criteria developed for this review may have resulted in the exclusion of studies that some would consider appropriate to include. This is a reflection of the balance between sensitivity and specificity that it is necessary to strike when trying to locate studies in a complex area. Furthermore, the inherent breadth of a whole system approach means that *all* areas of policy and practice are unlikely to be covered exhaustively. For example, it is likely that further evidence about the role played by 'boundary spanners', the impact of short-term funding, and the nature of partnerships with non-statutory agencies could be located using a wider search strategy. We also note that the ongoing evaluation of key whole community programmes such as 'Healthy Towns' meant that research on such initiatives remained unpublished at the time of our searches.

Generally, the included studies were rated as poor (five papers were rated [-]) with only one appraised as very strong ([++]). However, we remain cautious about interpreting such results given the lack of consensus within the research community about what constitutes a fatal flaw in qualitative research as well as the lack of agreed reporting standards. These are compounded by often low word counts in journal articles restricting the detail provided.

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