Lost in translation? Theory, policy and practice in systems-based environmental approaches to obesity prevention in the Healthy Towns programme in England

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ABSTRACT

This paper explores how system-wide approaches to obesity prevention were 'theorised' and translated into practice in the 'Healthy Towns' programme implemented in nine areas in England. Semi-structured interviews with 20 informants, purposively selected to represent national and local programme development, management and delivery were undertaken. Results suggest that informants articulated a theoretical understanding of a system-wide approach to obesity prevention, but simplifying this complex task in the context of uncertainty over programme aims and objectives, and absence of a clear direction from the central government, resulted in local programmes relying on traditional multi-component approaches to programme delivery. The development of clear, practical guidance on implementation should form a central part of future system-wide approaches to obesity prevention.

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1. Introduction

The need to develop environmental interventions aimed at tackling obesity has been recognised internationally (French et al., 2001; Finegood et al., 2010). In the United Kingdom, obesity policy has been described as a 'policy cacophony' due to the lack of knowledge on the causes of obesity, the lack of a coherent government strategy, and a weak evidence base on the effectiveness of population-level interventions (Lang and Rayner, 2007). In order to improve the UK policy response to obesity, the Government Office for Science commissioned work through the Foresight Programme to explore how society might deliver a sustainable response to obesity in the UK over the next 40 years. The resulting report, 'Tackling Obesities: Future Choices', (Butland et al., 2007) conceptualised obesity as a complex problem, in which no single influence dominates, and which goes beyond obesity simply being a matter of individual choice. In particular the report suggested that modern society is fundamentally 'obesogenic' and therefore a comprehensive, 'system-wide' obesity strategy is required. Such a 'systems-based' approach would target multiple determinants, at multiple levels throughout the life course. In particular, the report stressed the importance of reshaping the built and social environments in order to facilitate improvements in diet and increase physical activity levels.

In response to 'Tackling Obesities', (Butland et al., 2007) a cross-departmental obesity strategy 'Healthy Weight, Healthy Lives', (Cross-Government Obesity Unit, 2008) involving the Department of Health and the Department of Children, Schools & Families was published. The Strategy was heavily influenced by 'Tackling Obesities', and described the causes of excess of weight as: "a broad set of social and environmental factors (…): human biology, culture and individual psychology, the food environment and the physical environment" (Cross-Government Obesity Unit, 2008, p. 3). The Strategy

drew particular attention to the role of the environment in shaping people's behaviours and the need for joint working in order to achieve health-promoting change in these environmental determinants: "Government will work with planners, architects, health professionals and communities to promote physical activity through the built environment" (Cross-Government Obesity Unit, 2008, p. vii). A key initiative to realise this strand of work within *'Healthy Weight, Healthy Lives'* was the Healthy Community Challenge Fund.

1.1. Environmental approaches to obesity prevention: The healthy community challenge fund

The Healthy Community Challenge Fund (HCCF) was intended to stimulate a 'whole town' approach to address the environmental determinants of obesity by testing and validating "holistic approaches to promoting physical activity"[5(p22)] through investments in "infrastructure improvements that implement the lessons of a variety of programmes (e.g. Home Zones and Cycling Demonstration Towns)", combined with "galvanising local members of the community to take action to change both food and activity habits, following the example set by the EPODE model[2]." (ibid). The fund represented a £30 million investment over the period of 2008–2009 to 2010–2011 (Department of Health, 2008) to be distributed between a small number of 'Healthy Towns'. Local authorities and Primary Care Trusts were invited to bid jointly for funding, with a limit of £5 million per town, which had to be match-funded from local sources. Towns were expected to deliver a coherent cross-sectoral plan that implemented a programme of interventions in their local area.

The fund tender document (Department of Health, 2008) referred to the Foresight report and 'Healthy Weight, Healthy Lives', and set the following aim for the programme: "to learn more about how environmental factors can help to prevent overweight and obesity in adults and children." (Department of Health, 2008) The tender document specified that the food environment and the physical environment were key areas of focus and that towns should take a multi-agency approach, and target diverse populations. Learning from implementation of this environmental approach to tackling obesity in order to facilitate healthy food choices and increased physical activity within communities, was also highlighted as a key output of the programme.

The timeframe for the development of the programme was short. The interval between the launch of '*Tackling Obesities*' and publication of '*Healthy Weight, Healthy Lives*', and the start of the programme were three months, and fourteen months respectively. The timeframe for the different stages of the commissioning process was also short: local areas had one month to respond with an initial expression of interest, and two months to design full proposals. Funding officially ran for two years and five months, instead of the originally planned three-year duration. Department of Health (2008) overall just three and a half years separated the publication of '*Tackling Obesities*' in October 2007 and the official end of the HCCF in April 2011.

An analysis of the design and implementation of the fund allows us to answer a set of questions about the translation of policy into practice during a period of rapid policy development in which the innovative and complex ideas being piloted and tested represent a significant break from past policy and practice (Petticrew et al., 2004; Bambra, 2009). This provides an opportunity to learn about how new perspectives in prevention are understood and translated into complex programmes and interventions at a local level (Ogilvie et al., 2011). The successful translation of national policies at the local level is important as variations in interpretation of these policies may lead to variations in implementation and delivery. This in turn may lead to variations in programme targeting and effectiveness, and thus the maintenance or exacerbation of health inequalities.

In this paper we report on data gathered from interviews designed to investigate how key national and local stakeholders interpreted and operationalized the approach to obesity prevention promulgated by the Healthy Community Challenge Fund. The aim of the paper is, first, to explore how key informants understood and 'theorised' this approach to obesity prevention policy, and, second, to investigate how these 'theories' were translated into practice. We then reflect on how far interpretation and implementation of the programme mirror current academic thinking around environmental and 'systems-based' approaches to obesity prevention.

2. Methods

The setting and sample for this study comprised the nine bid-winning English 'healthy towns'. These comprised a London borough (Tower Hamlets), three large cities (Manchester, Portsmouth and Sheffield), two medium-sized towns (Halifax and Middlesbrough), one metropolitan borough (Dudley) and two smaller provincial towns (Tewkesbury and Thetford). Overall, the nine towns implemented in excess of 300 individual interventions, primarily focused on promoting a healthy diet and increasing physical activity. Each town established a programme board to oversee and ensure delivery of the programme. Boards generally included representation from the primary care trusts, local authorities, and non-governmental and academic sectors.

2.1. Participants

Participants were purposively selected to represent local programme management members, and key national policy actors involved in the development and delivery of the programme. The final sample included nine programme directors, nine board members and two national policy actors. In the six towns where programme directors were not involved in programme development from the early tendering and implementation stage, interviews were conducted with HT board members. One or two board members were interviewed in each of the towns. Although the number of policy actors interviewed was small, it was representative of the restricted group of individuals operating at national level. All participants provided written informed consent to be interviewed.

2.2. Procedure

Participants were initially contacted via email and invited to be interviewed, and were then followed up by telephone. Research aims and procedure were explained to participants in detail, and participants were guaranteed anonymity. Nineteen interviews were conducted face-to-face, and one was conducted over the telephone, with interviews lasting between 50 and 110 min. Interviews were digitally recorded with the participants' written informed consent, anonymised and stored securely. The fieldwork was conducted during the summer and autumn 2010. Ethical

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[2] 'EPODE' stands for 'Ensemble Prévenons l'Obésité Des Enfants' (Together let's prevent childhood obesity). EPODE is an international programme, which was originated and launched in France in 2004. Its goal is to help families to change health-related behaviours and sustain these, through local action. It focuses on encouraging healthy eating and physical activity, and development of a local environment conducive to these behaviours. Through micro-changes in every sector of local communities, EPODE seeks to facilitate the adoption of healthy lifestyles at both individual and collective level. It represents, essentially, an awareness-raising and multi-level mobilisation programme.

approval for this research was given by the Queen Mary, University of London Research Ethics Committee.

2.3. Interview content

Semi-structured qualitative interviews were designed to allow interviews to explore emerging themes as well as salient issues in relation to the programme. Interviews included questions surrounding the origins and history of the programme, its underlying rationale, and programme design, development, implementation and management. Within these broad questions participants were specifically asked about their understanding of the 'obesogenic environment', what they thought of national support and guidance offered for intervention development, and how the approach promoted by the fund informed the way the local programmes were designed and developed.

2.4. Data analysis

Interview data were transcribed verbatim, and transcripts were checked against the audio-recordings. Transcripts were coded and analysed thematically (Miles and Huberman, 1994; Ritchie and Spencer, 1994). Analyses were guided by the initial research questions: (1) how had key informants understood and 'theorised' the Healthy Community Challenge Fund approach to obesity prevention; and (2) how were these 'theories' then translated into local programmes of interventions?

Transcripts were read and an initial coding framework was developed by two authors (ES and SC). Transcripts were fully coded by the lead author (ES), and then independently checked by a third author (DG) who assessed whether codes fully reflected the data. Consensus over the assignment of quotations to specific codes was reached through discussion. Codes were then abstracted and resultant dominant themes discussed and agreed between ES and SC. These initial analyses were then explored with all authors with refinements being made based on group discussion. Direct quotations from interview transcripts were used to illustrate key themes. Participant categories (i.e., role, position) and names of local areas were anonymised. Interviewees were labelled as 'National policy actors', 'Programme managers', and 'Bid development managers', and the nine local areas were labelled using letters from 'A' to 'I'. To ensure confidentiality, town identification in this paper does not match the descriptions used in other papers arising from this project.

3. Results

Results suggest that there was a clear disconnection between how a 'systems-based' environmental approach to obesity prevention was theorised by informants, and what was then implemented in practice. Despite having a general theoretical understanding of what such an approach might entail, informants in the nine towns instead described implementation in terms of delivery of a traditional multi-component approach, which excluded references to the key characteristics of systems, such as complexity. It was suggested that a lack of clear and comprehensive guidance from central government on how 'systems-based' environmental approaches should be designed and implemented partly contributed to this disconnection. Below we illustrate how this approach was theorised at the national and local levels, how it was translated into practice, and which factors have affected implementation.

3.1. A new approach to obesity prevention

When designing the Healthy Community Challenge Fund, national policy actors described a strategy that prioritised an environmental approach to obesity prevention but recognised that it would be desirable to undertake this with within a broader 'systems' framework. Taking such a perspective would allow policymakers and practitioners to learn how different elements of a programme focused on environmental approaches to prevention would work individually, in relation to each other, and as a whole 'system':

> We wanted to test out how to encourage more cycling and walking and what changes can you make to the built environment to reduce levels of obesity. There seems to be less good evidence on what would work in this area. (…) But there is [even] less evidence on what happens if you bring it all together, how does that work, what are the things that will be really successful, what are the things that will be least successful, and how will the interactions between them work. (National policy actor).

At the same time, the acknowledged need to develop a comprehensive approach to tackling obesity suggested that although environmental approaches were necessary, they represented a partial solution:

> You needed a portfolio of policies and a very broad approach to prevention, and that included some work around the built environment, but also community-based interventions and so forth. (National policy actor).

Within this context national level policymakers expected that local areas were to adopt a 'systems' approach to delivery:

> Healthy Towns were about how do you do Foresight [Tackling Obesities] in local areas, how do you take that vision of the whole system map, how do you work on that broad range of determinants to come up with a coherent local strategy which would be implemented through the actions of multiple stakeholders in local areas, bringing together the health people who had obesity in their remit with the local authorities having the levers for change (…) So we were certainly looking for people who appeared to have some vision of a 'systems' approach, have understood the issues about getting things working together. (National policy actor).

However, despite the intention to implement a 'systems' approach, there was a lack of a *"shared understanding"* about how to communicate this in the policy context of *Healthy Weight, Healthy Lives*:

> There was a lot of discussion about what exactly is meant by 'Healthy Towns', and about the fact that [in the Healthy Weight, Healthy Lives document] it was in a section labelled 'A Supportive Built Environment' which had implications of planning, transport policies, etc, but the example given was building on the success of EPODE, which actually didn't do that. (…) There was no shared understanding of whether we were talking about something which was about changing the built environment, or whether we were talking about something like EPODE which I saw as a community-based, multi-stakeholder, complex intervention. (National policy actor).

Thus, there appeared to be a mismatch between the aspiration to implement an innovative 'systems-based' approach, and the way such an approach had been conceptualised and represented in *Healthy Weight, Healthy Lives*. It was within this uncertain policy context that local actors had to interpret the aims of Healthy

Community Challenge Fund and implement the programme on the ground.

3.2. Theorising the healthy community challenge fund 'on the ground'

Local actors understood that tackling the 'obesogenic environment' was the primary focus of the fund, but their definition of the 'obesogenic environment' was expressed in two separate, though related, ways that mirrored the articulation of this approach in *Healthy Weight, Healthy Lives*. Though the dominant narrative was holistic, describing a 'system-wide' perspective, other informants expressed a more reductionist approach centred around isolating single or multiple environmental or other determinants of obesity as targets for action.

'System-wide' perspectives were primarily expressed through references to interrelationships between elements of the 'obesogenic environment', as well as interactions with the wider context:

> The 'obesogenic environment', it is not just the physical environment, it is about the physical, it is about the social, the psychosocial, all of those things influence our environment. It is almost like remapping the wider determinants of health really, but you could just put obesity at the top of it, everything influences that. (Programme manager, Local area G).

> It is a spider model of web of causation, just as everything and anything finds its way back contributing obesity and the wider environment. (Bid development manager, Local area F).

This perspective was often accompanied by references to a multi-scale view of the 'obesogenic environment' that emphasised the broader context in which particular towns were located:

> I think everywhere is an 'obesogenic environment', as far as I understand it, (…) Britain today, as opposed to particular cities or towns in general. And I think we could go on all day about 'obesogenic environment' and all the different things that impact on it; I don't think G [name of local area] got anything particularly. (Programme manager, Local area G).

> You know, C [name of local area] is much like other cities in the country in the sense that a lot of these elements of society are nationwide rather than locally specific. (Programme manager, Local area C).

This suggests that respondents' understanding of the 'obesogenic environment' was not tied to any particular *"locally specific"* context but was embedded within, and symptomatic of, a wider, inherently obesity-promoting system.

While other informants referred to the various elements that comprised the 'obesogenic environment', references to interactions, feedback loops and other key characteristics of systems, such as complexity, were noticeably absent from these descriptions:

> We took quite a simplistic view around things like the environment can obviously either hinder or support walking for example, and it can hinder or support children playing out in an informal way. (Programme manager, Local area B).

> Yeah, it was on one particular issue around healthy eating, active travel and physical activity, subsumed under 'obesogenic environment'. (Bid development manager, Local area D).

Informants instead emphasised an approach taking a *"simplistic view"* rather than one which embraced complexity, focused on identifying specific risks that are hypothesised to contribute directly to an obesity-promoting local environment.

3.3. Translating theory into practice

Despite the majority of local informants having some understanding of the 'systems-based' theories and concepts underlying the programme, when it came to the task of translating these into practice, informants outlined the challenges they faced in implementing a 'systems' approach:

> We did put a lot of effort into trying to join up the different interventions, and we have project leads meeting regularly, so some of them have developed strong connections. But otherwise it falls to the central team to knit all that together, and that's quite a big challenge, there's so many things that we could try and make a stronger connection with, but you can't, you have to come back and say: 'I've got to manage my programme and my projects, and make sure they deliver'. Sometimes people say: 'Isn't sport the answer to this?', and you're quite conscious of it, but you can't do everything. Having said that, there's lots of other people who have those connections, so you have to some extent rely on the fact that those people are making those connections. (Programme manager, Local area D).

This informant suggests that generating links between projects was challenging, particularly in an environment where there was focus on specific programme strands in order to *"make sure they deliver"*. This organisational focus on the delivery of individual programme elements was replicated in other towns, which did not correspond with the aim to implement a 'system-wide' approach. As a result, the majority of towns focused on multi-component approaches and placed an emphasis on tackling specific environmental determinants in order to reshape the wider physical environment:

> It is about changing the environment so that it's easier for people to be more active, and just generally lead a healthier lifestyle, which is things like making it easier for kids to cycle to school, putting in cycle routes, but it's also looking at things like when building schools for the future, think about health. (Programme manager, Local area A).

> We wanted to see whether we could change aspects of the environment to make it easier for people to get out walking, or playing, or growing their own. It's just about getting people outside. (Programme manager, Local area B).

Approaches adopted under the banner of the programme also included existing health promotion and physical environment interventions, with little evidence of thinking about possible interactions between these interventions, or with the wider context:

> We were not too prescriptive about the interventions to implement. (…) Some people are doing food growing projects, so there are some that would have an environmental impact, but probably some of them are more around just behaviour changes and about getting people think about the issues, others are about physical activity. (Bid development manager, Local area D).

Only one of the nine towns could be said to have described a focused attempt to implement a 'systems' approach which sought to modify multiple health behaviours, at multiple levels, in the spirit of *Tackling Obesities* and *Healthy Weight, Healthy Lives*:

> Although this is a physical activity promotion programme, we have factored in facilities for cooking classes, so if people come for one lifestyle behaviour change, we're going to capitalise on that one; and while people come for the cooking classes—whatever service we are doing on the physical activity. So we're

trying to capitalise on the two behaviours, because you cannot separate out one from the other. (…) And now that we have changed the environment physically we need to change it philosophically, but we cannot change it philosophically if there is no environment to support it. (…) And it will have long reaching impact on a lot of agendas: schools, police, older people, intergenerational activities, health values, etc. (Programme manager, Local area C).

Overall local informants demonstrated a basic abstract theoretical understanding of what a 'systems' approach to obesity prevention might involve. However, in terms of delivery, a traditional multi-component approach to implementation and practice was described. References to key characteristics of a 'systems' perspective, such as complexity, synergy, feedback, and interaction between programme components or the wider context, were almost entirely absent in descriptions of programme delivery.

3.4. Theory versus action

As outlined above, for the most part, the nine towns did not adopt a 'systems-based' environmental approach. There appeared to be a gap between theorising such an approach and implementing it in practice. Informants suggested that this may partly reflect assumptions made at the national level about the degree of knowledge and understanding of what constituted a 'system-wide' approach at the local level. The programme tender document did not specify how interventions to tackle the 'obesogenic environment' should be designed and implemented, and it was clear that local areas were expected to understand this without further explanation:

It helps if people know what they are tendering for, and I think that the tender was pretty vague, and hence people in local areas interpreted it in a way which best suited their own individual circumstances, and so we ended up [at the first bidding stage] with a huge number of applications which were all over the show. (National policy actor).

We did not really need to [explain it] because they had all read the Foresight [Tackling Obesities], and they had all understood that almost immediately because they're so used to thinking in that community level and how does everything fit together. (National policy actor).

At the first stage of tendering, this lack of clarification was seen as one of the main reasons for differences in interpretation of the aims of the programme. Proposed approaches to tackle the 'obesogenic environment' varied in nature, and 'systems-based' approaches were not articulated in the majority of first-stage applications:

The applications that were not very good just thought: 'Well we will just do this one thing', and no, no, no that's not what it's about. (National policy actor).

There were some bids where we thought: 'There is nothing really new here, but what they have done is they have brought everything together in a really coherent way, and they get it' [the 'systems-based' approach]. But then there were also some exciting ideas. Let's try that. (National policy actor)

At the second stage of the tendering process, innovation and diversity were favoured as key attributes of successful bids, in order to generate evidence on how best to tackle the 'obesogenic environment':

There were some areas which were saying: 'We have got a lot of initiatives going here and what we want to do is to use this additional Healthy Towns money to coordinate that and bring that into a system, then there were local areas who really had a

significant opportunity to change the built environment, there were some that had a real niche, a really different concept (…). So we were then trying to shortlist diversity, so that we would have a range of different approaches, and the plan was always to create diversity because we absolutely saw these pilot projects. (National policy actor).

This situation was echoed by key actors in local areas who referred to uncertainty surrounding the idea of an 'environmental' approach to obesity prevention. In particular, they were concerned with how oriented towards 'systems' or 'physical environment' interventions local programmes were expected to be:

We were told: 'There is Food, Nutrition and Physical Activity', on the other had we started to get steers saying: 'Well, we are actually looking for environmental, walking and cycling changes', so we were unclear when we put our bid in whether we had done enough around walking and cycling. (Bid development manager, Local area H).

Although this national programme was about testing the environmental approaches to tackling obesity, which for me meant things like Foresight [Tackling Obesities] and some of the NICE guidance material, it felt like quite a lot of the programmes chosen were more individually focussed; I wasn't sure how much the environmental theme was sustained across. (Bid development manager, Local area D).

4. Discussion

The Healthy Community Challenge Fund was established to pilot and test community-based environmental interventions to prevent obesity within a broad 'systems' framework. Our results demonstrate important differences between how informants theorised a 'systems' approach, and how this was then translated into practice. Despite articulating a general theoretical understanding of what a 'systems-based' approach to obesity prevention might entail, in practice towns instead tended to rely on more 'traditional' multi-component risk-factor based approaches to programme delivery. Only one town could be said to have attempted to develop and implement a set of environmental interventions within a 'systems' perspective, but even here this approach was implicit rather than explicit.

4.1. Clarity and uncertainty

Informants emphasised uncertainty about the aims and objectives of the programme at both the national and local level. At the national level this included a lack of 'shared understanding' between policymakers about what a 'systems-based' response to obesity might be and how this was portrayed in the context of *Tackling Obesities* and *Healthy Weight, Healthy Lives*. Although *Healthy Weight, Healthy Lives* advocated a 'joined-up' strategy, it did not explain how this should be achieved in practice. In addition the *Guidance for Local Areas*, (Cross-Government Obesity Unit, 2008) an appendix to *Healthy Weight, Healthy Lives* which was intended to clarify this strategy, presented *"the delivery chain"* in a structured, linear and hierarchical way, which did not correspond to the 'systems-based' environmental approach described in the *Tackling Obesities*. This lack of a clear policy narrative was highlighted as a problem by informants in each of the individual towns, who desired more explicit guidance on designing a 'systems-based' approach to tackling the 'obesogenic' environment. As a result there was uncertainty over what programmes and interventions should have been prioritised and

developed as a result of the fund, which in turn led to a reliance on less risky 'simplistic' interventions and modes of delivery.

4.2. Translating 'systems' thinking

Overall, informants had a broad understanding of the main elements of an environmental approach to obesity prevention, but this was not matched by their articulation of 'systems thinking'. Instead, this articulation reflected a more linear and established 'risk-factor' approach, whereby the task was to identify individual environmental determinants of diet and physical activity and then develop and deliver appropriate interventions that might influence them. This articulation was a direct response from clear 'steers' to focus on physical environment programmes which were seen by some informants as being somewhat at odds with the original aims of the programme. There was little articulation of more abstract properties of systems such as synergies and interactions between interventions, non-linearity, multiplier effects, phase shifts and feedback loops (Shiell et al., 2008) and little evidence of these abstract ideas being implemented in practice. In part, this may have been due to insufficient time for teams in local areas to think through the strategies for developing and implementing the programme (Goodwin et al., 2012). This finding mirrors much of the current research and policy literature on 'systems thinking' in public health, which tends to focus on developing the underlying concepts around 'systems' thinking, (Hawe et al., 2011; Diez Roux, 2012) but provides little guidance about what might actually constitute a 'systems-based' intervention, how it might be delivered in practice, and how it might be evaluated.

4.3. Bridging the gap between theory and practice: the challenge of localism

The Healthy Community Challenge Fund was presented as an opportunity to shift obesity prevention from an approach focused purely on the individual to one which included environmental and population-level strategies. While it is apparent that a true 'systems' approach was not implemented in the programme, towns did seize the opportunity to develop and deliver environmental programmes and interventions which represented a clear break from past practice. The aims and objectives of the Healthy Community Challenge Fund were seen as important, and there was an appetite to deliver them; but, the results reported here suggest that policymakers need to produce clearer guidance when introducing programmes where there is a limited evidence base, or where current policy is substantially different philosophically from those applied in the past.

This has implications for the current 'localism' policy agenda in the United Kingdom which decentralises decision-making and responsibility for the delivery of public health and other services to local areas (Department for Communities and Local Government, 2010). Understandably towns responded to the complex, daunting and risky task of implementing a system change to affect a health outcome via a set of complex and poorly understood causal pathways, by relying on existing approaches. In this context it will become increasingly important for central government to provide the knowledge and intelligence to support the local delivery of true 'systems-based' approaches in order to avoid uncertainty at the local level. Failing to do this may result in 'default' to a simple "aggregation" of individual intervention components and may therefore result in weak prevention (Hawe et al., 2009).

4.4. Strengths and limitations

This study is the first qualitative study to investigate the implementation of a national 'systems-based' obesity prevention programme. However the limitations of this study should be acknowledged. Though a small number of national policy actors were interviewed, they were representative of the small policy team responsible for the fund and allowed us to access valuable information on the initial stages of fund development and selection process for each of the towns. During interviews with local informants in each town, it became apparent that some programme managers were not involved in the initial bidding and programme set-up, due to staff turnover and role changes. Though this was mitigated by interviewing board members in each town, we could not avoid the possibility of loss of potentially relevant information.

5. Conclusions

'Systems-based' and environmental approaches to obesity prevention are currently being promoted by researchers and policymakers as solutions to the obesity epidemic (Butland et al., 2007; Huang et al., 2009; Hammond, 2010; National Institute for Health and Clinical Excellence, 2012). Much of this work has focused on theorising a 'systems' approach; however our results identify clear challenges to implementing these theories and policies in practice. Though towns had some understanding of what was required from the spirit and ethos of the Healthy Community Challenge Fund, there remained a degree of uncertainty over programme content and delivery. This resulted in towns retreating back to traditional multi-component approaches to prevention. When implementing 'systems-based' approaches, local practitioners require a clear policy narrative at a national level in order to reduce uncertainty over the 'what' and 'how' of delivery, along with sufficient time to develop their approaches. The development of clear, practical guidance on implementation should form a central part of future 'systems-based' approaches to obesity prevention.

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