



HEALTHY POMPEY
PROGRAMME EVALUATION:
Successes and challenges

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The Department of Health's Community Challenge Fund

- The Government's white paper titled "Healthy Weight, Healthy Lives" preceded the development of the National Healthy Towns programme.
- The aim was to demonstrate commitment to the co-ordinated promotion of
 - healthy food choices, and
 - increased physical activity within communities.
- The initiative hoped to learn more about environmental influence on prevention/ reduction in the prevalence of overweight/ obesity in adults and children.





Details of the Healthy Pompey programme

- The Healthy Pompey (HP) portfolio of initiatives aimed, specifically, to:
 - improve and address some of the health and well being issues identified within the city of Portsmouth's less affluent communities
 - target areas with higher health inequalities regarding maintenance of healthy weight.
- Under the remit of the global HP aims, other projects were developed to serve the same purpose: e.g.
 - to reduce obesity at *local* population level rather than individuals *per se*.



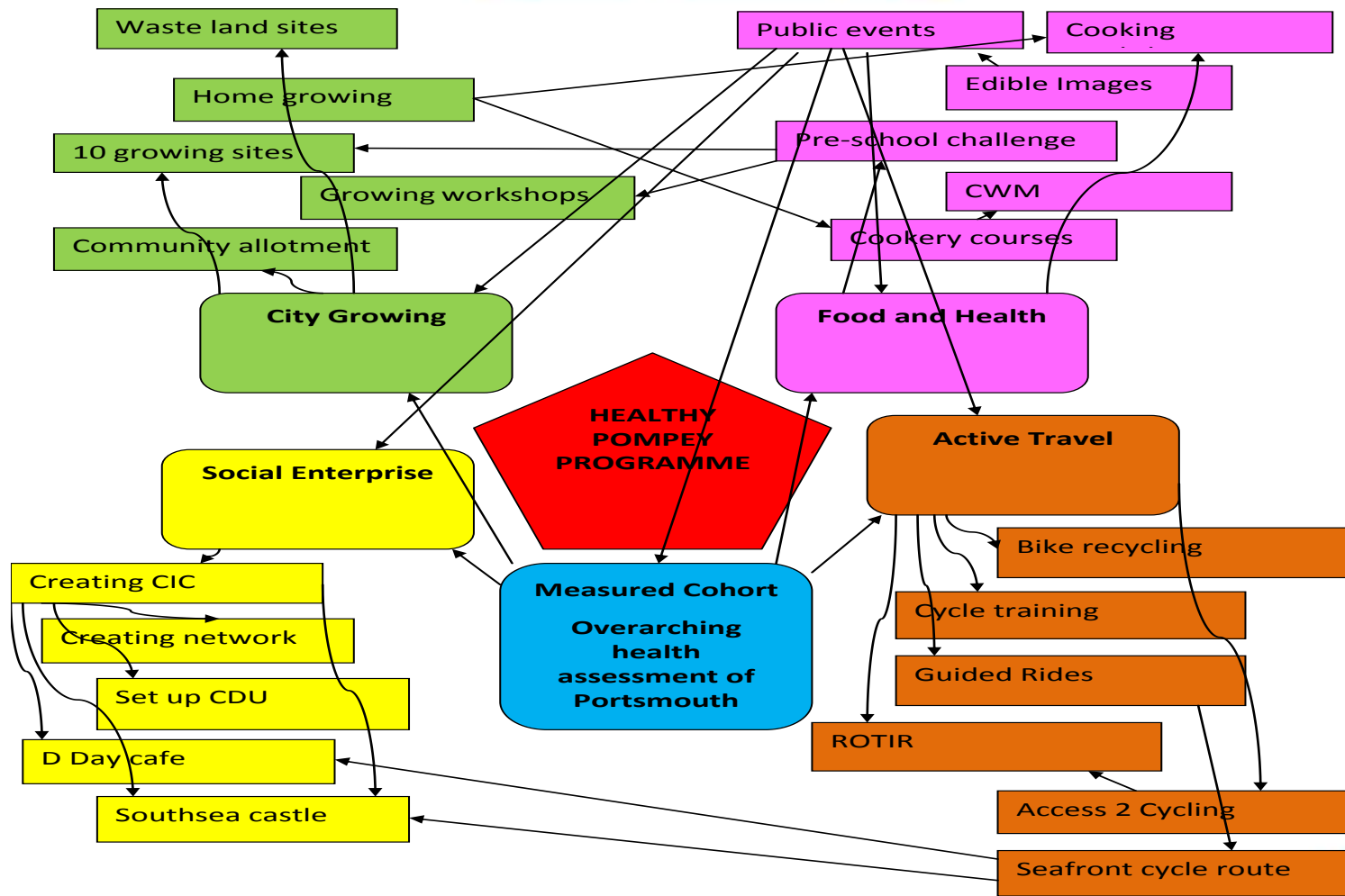


Overview of projects undertaken as part of the Healthy Pompey programme

Measured cohort (MC)			
Active Travel (AT)	Food & Health (F&H)	City Growing (CG)	Social Enterprise (SE)
Bike recycling	Cookery courses	Community allotment	Creating CIC
Cycle training	Pre-school challenge	Growing workshops	Creating network
Guided Rides	CWM	10 growing sites	Southsea castle
ROTIR	Edible Images	Home growing	Set up CDU
Access 2 Cycling	Public events	Waste land sites	D Day cafe
Seafront cycle route	Cooking workshops		



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Overview of Bodymorph's global evaluation: aims

- To aid the development of theme specific questionnaires for baseline data collection and on-going evaluation.
- To establish a symbiotic relationship between themes and overarching evaluation.
- To ensure adherence to the National Obesity Observatory (NOO) Evaluation Framework.
- To include a combination of quantitative and qualitative methods.
- To utilise our experience in appropriate research/data analysis methods.





Evaluation objectives

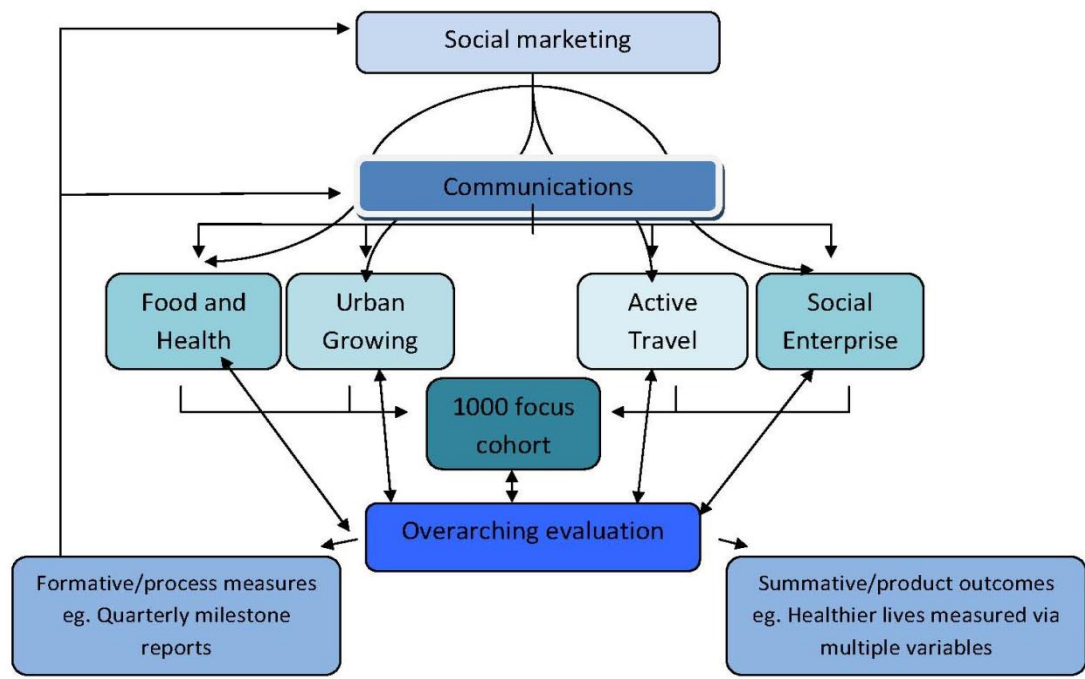


Figure 1: Bodymorph's proposed evaluation flow chart





Communication and interaction with the Healthy Pompey themes.

- Bodymorph required theme leads to collect data which was then analysed and interpreted by the evaluation team.
- Bodymorph attended the HP implementation meetings held every 6-8 weeks, to ensure that evaluation was embedded as a dynamic process.
- Each theme had its own specific evaluation focus with theme specific aims and objectives.
- Outcome objectives were to provide recommendations to address the successes and challenges of each project for future commissioning.





- Several factors create complexity when evaluating healthy lifestyle outcomes of any programme.
- For example there are many people who engaged in the programme's various project activities but did not engage in or complete the evaluation elements.
- Therefore the evaluation refers to samples of a wider population but with a degree of self selection bias in the data.
- Some of the project activities had very small sample sizes reducing the inferential capacity of the findings to the wider population of Portsmouth or indeed other locations in the UK.
- Quality assurance was applied to maximise the useable output from the programme.





Why Portsmouth?

- Factors affecting whether the Healthy Pompey programme would meet the expected Department of Health outcomes:
 - Local trends of rising childhood obesity.
 - The long term entrenched and generational issues of poverty and deprivation in the city.
 - Significant health inequalities between certain wards in the city.
 - The fact that Portsmouth is a densely populated island with little space or uncontaminated land to develop growing projects.
 - Local authority spending cuts.



The evaluation methods

- The evaluation adhered to recommendations by the National Obesity Observatory (NOO), Change4Life and the National Institute of Clinical Excellence (NICE).
- A range of evaluation methodologies were applied, utilising appropriate approaches for different themes and projects.
- These included
 - questionnaires to embrace demographics
 - outcome measures
 - process measures
 - behaviour change
 - focus groups
 - Interviews



Data Analysis

- Quantitative
 - MANOVA
 - MANCOVA
 - Correlational analysis
 - Chi-Square
 - Longitudinal multilevel modelling
- Qualitative
 - Emergent theme analysis
 - 1st, 2nd and 3rd order analysis
 - Transcription of interviews/
questionnaires/focus groups



Data Analysis: Longitudinal multilevel modelling

- Person-period data was incorporated (showing how each individual changes over time by examining intercepts and slopes rather than specific values/units specific to each measure).
- Initial status (intercept)/rate of change (slopes) for all variables were determined. This measured inter-individual heterogeneity in change.
- Various predictors (such as involvement in specific themes, initial health status, age, ethnicity, gender, etc) were used to summarise between-person variability.
- Variability at each wave (quarterly evaluation) was examined to see how trajectories of change differed across the Healthy Pompey project duration.
- Calculated changes included the TEM (technical error of measurement) indicating a 95% confidence that recorded changes were true changes and not attributable to measurement error.





Additional foci

- For future commissioners planning similar events, a simplistic cost analysis was computed for each theme to indicate the level of investment required for certain projects.
- Where possible cost-benefit ratios were determined by dividing costs by the total footfall for specific projects (over the two year duration), with the proviso that footfalls should not be compared between themes.
- Determining value for individuals engaged within a project/intervention is very difficult from an objective angle as the internal/external benefits for one individual can be perceived totally differently by another.





City Growing: evaluation foci, key findings and recommendations

- Data was obtained via questionnaires, one focussed on growing sites and the other on the impact of the growing kits distributed across the city.
- User engagement, demographic differentiation, the relationship between involvement in growing activities and healthy behaviour and indirect/vicarious impact on health behaviour were examined.
- There was a discrepancy in post code representation across growing site felt to be attributable to travel distance and travel mode to and from home to growing site.
- The project reflected an improved utilisation of green space in Portsmouth.





- Differences in activities recorded at specific growing sites were due to the type of growing site and the population of those frequenting the facility.
- The characteristics of each growing site dictated what was appropriate to grow regarding soil types, shelter from various weather conditions and requirements.
- Growing activities positively impacted on healthy eating behaviours, either improving 5-A-Day consumption or maintaining it.
- A positive impact on their state of health was reported by participants engaged in city growing projects.





- 59% of engagement at growing sites was by retired or unemployed members of Portsmouth's population with almost 1/3 (27%) of the responders aged 51 years+.
- The growing kit project had a very positive impact on projected health behaviours as a legacy from the project with 97.4% of people confirming they would be growing their own produce (fruit and vegetables) next year.
- More than half of growers (52.3%) said they were more likely to include fresh fruit and vegetables in their diet.
- There were some mistakes in the delivery of the growing kit project, with disappointment reflected about the quality of the kit and the instructions that accompanied them.
- Future commissioners should consider the success of this project from an inclusion perspective as the characteristics of the participants reflected equality across demographic filters.





Food and Health: evaluation foci, key findings and recommendations

Pre-school challenge:

- The baseline questionnaire revealed a lack of policy across Pre-schools regarding healthy eating and physically active behaviours.
- The PSC pack was positively received and considered to be informative, and helpful with regard to healthy eating and physical activity.
- The PSC offered a structure for raising health awareness using information dissemination from the Pre-school to parents/guardians.
- Recommendations from the group research included a need for renewed focus on organisation and cohesion of any intervention like the PSC.
- A lack of cohesion and mixed perceptions regarding support and resources resulted in a disillusioned perception of this intervention in some cases.





- The PSC impacted on behaviour change both at individual and policy level. Policy changes evoked an increase in healthy snack provision.
- The improved health behaviours and awareness of healthy eating and physical activity for those interacting with Pre-schoolers was viewed as an important outcome of this project.
- The overwhelming evidence from the one-off training sessions linked to the PSC demonstrated that they emphasised raising awareness and enjoyment.

Community Weight management

- The sample sizes were small suggesting a lack of uptake.
- Using physical measures (BMI and body mass) as key performance indicators (KPIs) was not appropriate for courses of six weeks duration
- Focusing on education and behaviour change did elicit some success for this group.





Edible Images

- The Edible images project focussed on re-vamping school dining rooms using fruit and vegetables in the design process.
- The evaluation aimed to examine how the intervention taught children about healthy eating and physical activity.
- The results suggest that the process was valuable for those children involved in the actual artwork.
- A vicarious benefit emerged as other children reflected positively about their improved dining environment.

Community obesity prevention (cooking courses, bespoke activities and general events)

- Participants felt that they had benefitted from attending cookery courses by improving their culinary skills (90%).
- Inclement winter weather disengaged potential participants from some outside activities such as the “Santa Strolls”.
- The general health awareness events were designed to engage the general population of Portsmouth, with the hope that at risk individuals would also attend.



Active Travel: evaluation foci, key findings and recommendations

- Evaluation was conducted using an internet based survey. Qualitative and quantitative measures were recorded.
- Quarterly engagement figures were also evaluated.
- There was a huge increase in active travel participation with a positive uptake in cycling and cycling related activities.
- It is a recommendation to set realistic achievement targets at the outset of a project. This theme shows a great improvement from baseline but despite a huge added value, many of the HP targets identified at the have not been achieved.
- The interventions indicating the best cost-benefit ratios were under ten's cycling training, people participating in the bike recycling, and the sheer number of bikes that were restored to working order or checked for road maintenance.





- Staff recruitment problems affected the implementation phase of some of the active travel projects which negatively affected progress.
- The evaluation revealed a negative effect from inclement weather which reduced engagement and participation in active travel pursuits.
- The Active Travel (AT) survey revealed that people within Portsmouth used their bikes more as a mode of transport with a fixed purpose such as transportation to work, school or the shops than for leisure, fitness or pleasure. This was emphasised during the weekdays.
- The AT survey indicated that substituting a car ride with a walk was usually for efficiency reasons.
- Those choosing to cycle instead of drive did so for personal fitness, money saving and convenience of route reasons.
- The evaluation suggested that the projects within this theme were well pitched and reflected the key considerations from the Portsmouth residents perspective when considering active travel., i.e. financial constraints, time, fitness and safety.





- Recommendations from the evaluation include the implementation of a standard evaluation framework to ensure a quality assurance process into the future.
- Conceptual and working definitions that impact on the broader aims and objectives of the Healthy Pompey programme should be determined.
- The “Healthy food” concept may have been misinterpreted- the emphasis has not been on key elements of healthy eating as defined by the DoH and the FSA, i.e. Reducing salt and fat intake and promoting increased intake of fruit and vegetables.
- A success of the *Yellow Kite* development has been the excellent focus on organic, whole food produce prepared and delivered with consideration for environmental issues and fair trade principles.



Measured cohort: evaluation foci, key findings and recommendations

- The evaluation for this element of the Healthy Pompey programme was different and bespoke.
- A cross section of Portsmouth residents were matched to the larger demographic of the city as a whole.
- The design of this section determined if there were measurable health effects from either direct, indirect or vicarious involvement in the Healthy Pompey programme globally or any of the component projects within it.
- Filtering for different demographic indices (such as post code, ethnicity and age) did not yield any significant differences in anthropometric measures. This supported previous research literature.
- Observed power even across non significant changes was high which indicates that the project design was robust.





- Skinfold measures located in the android region demonstrated longitudinal trajectories of change over the duration of the project. Fat stored in this region is more indicative of health risk.
- Measures of systolic blood pressure, triglycerides, total cholesterol, HDL cholesterol, LDL cholesterol and peak flow showed a significant effect from behaviour change.
- Reduction in circulating triglycerides combined with information from food diaries suggested reduced intake of processed foods and high calorie/high sugar foods.
- HDL cholesterol and peak flow were closely linked to increased exercise and energy expenditure yielded from exercise diaries.
- Significant differences in the magnitude of change across many key measures were seen between BME groups and Caucasians.
- Support from peers, joining gyms and sport clubs, and Bodymorph assessments were stated as positive support mechanisms for ongoing behaviour change.





- Ideas to promote and assist health behaviour change consisted of better time management, more money/ cheaper gym membership and opportunities to exercise in non- threatening environments.
- Individual reports for participants following an assessment help them set realistic goals and signpost them to suitable interventions.
- There was a 5.86% attrition from the total cohort (n=870) across the duration of the evaluation of the measured cohort. This suggested that the assessments provided information which encouraged adherence.
- 85.71% of the measured cohort (n=870) felt that the Healthy Pompey projects were accessible to them, whereas 14.29% felt that this could be improved.
- 24.85% of the measured cohort reported that they were actively involved in Healthy Pompey projects spanning the 4 themes.
- The results from the measured cohort do not differentiate magnitude of change between those who were directly or actively involved in Healthy Pompey projects and those who were engaged indirectly or vicariously





Outcomes for Portsmouth

- The HP programme has enabled learning to occur across a wide range of activities. This has enabled resources to be dispersed across the city.
- The HP project has indicated what works and what does not work in Portsmouth.
- Over forty successful partnerships have been developed as a result of the HP programme.
- HP messages were endorsed and supported by local community settings, promising sustained goodwill beyond the funding stream.
- Central resources such as the Healthy Pompey brand and the website for Healthy Pompey have been developed and will continue to be used.





Factors affecting the evaluation

- There was a lack of compliance and cohesion to any evaluation framework suggested by the evaluation team. This resulted in a reduction of meaningful evaluation outcomes.
- Evaluation was not always considered at the start of a healthy intervention and additional projects were included without implementing evaluation appropriate methods.
- Despite a DoH directive, 10% of the award was not reserved for evaluation.
- Recruitment for evaluation was not factored into all elements of the projects. This is an important process and method to disseminate to the public so they understand evidence based learning.
- There was an imbalance in contingency planning and funding across projects.





General Recommendations

- Evaluation should be the pivot of design for all public funded programmes to ensure that money is not wasted on projects that lack measurable outcomes and cannot provide evidence based learning.
- Evaluation frameworks for all individual interventions should be matched.
- Multi-faceted projects need to be linked by aims and objectives so participants can see the added value of engaging in multiple aspects of the programme.
- Multi faceted projects present real challenges in establishing consistent quality standards.



Recommendations

Formative lessons

- Are only achieved by combining quantitative and qualitative evaluation mechanisms.
- The Portsmouth data set should be used to inform future projects.
- Data from a comprehensive health study should be published in the wider academic literature.

Implementing change

- The evaluation has determined what works and what doesn't locally.
- Scalability should be considered when planning interventions.
- Assessments with immediate individual feedback serve as a support mechanism for behaviour change.
- There is evidence to suggest sustainability in a health assessment service beyond HT.





What (if anything) could be applied elsewhere?

- Incentivising people to address their own health issues is key.
- Health screening or QoL assessment serves as a huge incentive for engagement by identifying personal deficits in people's own health profile.
- The provision of a *holistic* model with a set of *strong links* between the different themes and sub-themes would assist in scalability (Hub and Spoke model).
- Anecdotal feedback should not be dismissed but a “show and tell” format alone does not provide enough evidence to assist in future funding opportunities.
- The data collected from Bodymorph has made it possible to learn lessons and show VFM on a large scale.



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Thank you for the opportunity to present this evaluation summary.

Any questions.

