

**Merseyside Health
Action Zone:
Safe and Warm Housing
Improvement Project**

**Final monitoring report
2003**

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The Aims of the Project

The origins of this project are to be found in the long-standing concern for the relationship between housing conditions, health and well-being. These relationships have been well researched and documented over many years and support substantial areas of policy at national and local levels of government. Nevertheless, it could be argued that there has been a lack of adequate contact between health professionals, based within the National Health Service and housing professionals, based in local government and the social housing sector. Responding to the government's social inclusion agenda, a particular area of concern that the originators of this project wished to address was that of reducing winter deaths from inadequate home heating amongst vulnerable and risk groups within society whilst permitting them to remain in their own home.

Thus, reflecting this range of concerns, the aim of the project was to examine ways in which health, housing and other organisations could work more closely together to undertake specific actions to reduce the incidence of avoidable winter deaths and serious illness due to inadequacies in home heating, insulation and fuel poverty.

The project was funded through the Merseyside Health Action Zone (HAZ) and involved action-research in two case-study areas: Larkhill, Liverpool; and Cement City, St Helens.

This evaluation report is based upon a monitoring and review process that comprised the following. The evaluation team were invited to attend all meetings of the project group. These occurred at approximately 6 – 8 weekly intervals. An interim evaluation report was written in the winter of 2001/02. That report was based upon the results of initial physical survey work undertaken by the local authorities, an initial social survey of residents, and a series of in-depth interviews with members of the steering group. This final evaluation report is based upon the information contained within the interim report supplemented by 'before' and 'after' surveys of the health of residents using the SF36a questionnaire, a further social survey of residents, further physical surveys of the improved properties, and a further round of interviews with members of the project group.

The Organisations Involved and their Roles

The project involved a number of partner organisations including the Liverpool Health Authority (LHA); a number of departments of Liverpool City Council (the Central Regeneration Team, the Housing Regeneration Unit, and the West Derby Housing Office); St Helens Borough Council; Local Solutions – a part of Merseyside Council for Voluntary Service; Scottish Power. Project monitoring and evaluation was being provided by Liverpool John Moores University. As the project developed there was also been contact with other organisations: Liverpool Strategic Housing Partnership; Merseyside Fire Brigade; the Croxteth, Pirrie and Gilmoor Area Committee, and Alt Valley Primary Care Group.

At the start of the project Liverpool Health Authority (LHA) was the lead organisation for public health within the city and the main access point for HAZ funding. LHA facilitated project implementation and provided the Chair of the project group. In February 1999 Dr Kate Arden (Consultant in Public Health Medicine) was approached by a former energy efficiency officer from Liverpool City Council with a view to seeking HAZ funding for a 'Safe and Warm' housing project and was thereafter responsible for leading the development of the bid that eventually evolved into the present project. Although the LHA itself did not receive any additional funding for its part in the project, Dr Arden's workload did increase,

chairing the project meetings and dealing with financial issues. Furthermore, as a result of the project she became involved in other partnerships and networks concerned with fuel poverty. Thus the project fitted well both the LHA and Dr Arden's wider role and responsibilities for improving public health through mechanisms such as housing policy.

At the end of March 2002 the LHA was abolished and its functions dispersed. Dr Arden became Head of Public Health for South Liverpool Primary Care Trust but continued to maintain responsibility for chairing the project group.

Liverpool City Council: Housing Regeneration Unit played a leading role in bringing together all the partners involved with the project and more specifically with the implementation of the Liverpool (Larkhill) case study area. The main person involved was Gaile Connolly (Policy & Strategy Officer), assisted by Richard Quinn (Energy Efficiency Officer). Neither had been involved with the bidding process and first began involvement with the project in September 2000. Most of the funding for the Housing Regeneration Unit's involvement came from the Council's own planned maintenance budget. Whilst Ms. Connolly was employed primarily to co-ordinate this project, Mr Quinn saw some increase in his workload, particularly in administration. The project was seen to fit well with the City Council's wider concern for area regeneration and the development of more sustainable communities.

Liverpool City Council: Central Regeneration Team is responsible for the programmed maintenance of the city's council housing stock. Gerry Brennan was the officer who provided the lead on this project. He first became involved with the project in April 2000 and made some inputs to the bidding process. His workload was not increased significantly, his input to the project forming part of his general duties. In addition to contributing to the Council's wider regeneration programme, Mr Brennan felt that the project enabled the development of complementary programmes and acted as a pilot for future proposals.

Liverpool City Council: West Derby Housing Office is responsible for the management of the housing stock within the Liverpool case study area. There were three main persons involved: Sharon Roberts, the Deputy Housing Manager; Gill Garvey, Housing Officer; and Jimmy Pugh, Welfare Rights Officer. Mr Pugh was brought in later than most other participants, joining the project team only in July 2001. His role was to assist households in maximising their incomes by undertaking checks to ensure that they receive all the welfare benefits to which they were entitled. Involvement in the project increased this aspect of his workload.

St Helens Borough Council was represented on the project by Jim Nixon, the Housing Energy Efficiency Officer. He was later supported by Chris Bennison.

Local Solutions (MCVS) is responsible for assisting low-income households with the provision of energy efficiency measures and security improvements. They also have the capacity in certain circumstances to refer people on to other organisations who can provide solutions to a range of welfare problems. The Local Solutions team (John Allen and Gill Digney) was not part of the bidding process and first became involved with the project in May 2001. They had been involved with a similar initiative for Liverpool City Council for the previous three years and so the project represented a continuation rather than increase in their workload. They received HAZ funding for their work on this project, which fitted well with the organisation's more general aim of helping communities.

Scottish Power, through Malcolm Bebbington, provided advice on energy saving and low energy appliances for use in the improved dwellings.

The Improvement Works Undertaken

Larkhill, Liverpool

Forty council owned properties were initially selected for the scheme. The main criterion for inclusion was that the dwelling contained 'occupants over 60 years of age'. The physical improvements proposed were extensive. New central heating boilers were installed with appropriate radiators and thermostats. In many cases these were replacements for older, obsolete and less efficient systems. Loft insulation was brought up to modern building regulation standards. Although many properties already had some sort of loft insulation few met modern standards and in all cases this was renewed. Where cavity walls were not already insulated, this was provided. Double glazing window units were installed to most properties, the exceptions being some properties that already had relatively up-to-date d/g units fitted. Hot water tanks were insulated to building regulation standard and all pipes between hot water cylinder and boilers were insulated to a similar standard. Finally, hot water controls were undated and low energy light bulbs fitted.

In addition to these physical works, tenants were offered guidance on energy saving, security, fire safety and the advice of a welfare benefits officer on benefit entitlement.

Cement City, St Helens

The properties in Cement City were not council owned. These were homes that had formerly been owned by the National Coal Board (NCB) and sold off to tenants over a period of time. A common feature of these properties was that they all had coal fires, many of the occupiers still in receipt of 'coal allowances' from having worked for the NCB. Here the installation of high efficiency condensing boiler central heating systems was the main concern. Insulation works were carried out, loft insulation was installed, but no cavity wall insulation due to the solid wall construction type of the properties. However, many of the owner-occupiers had already carried out such improvements at their own expense. Draught proofing was improved in all the properties and security issues addressed by fitting improved locks, door chains and spy holes. Low energy light bulbs were also fitted. Improvements here were less extensive than at Larkhill, hence the turn-round time for improvements was much faster.

Again, in addition to the physical works advice on energy saving, security, fire safety and benefit entitlement was also offered.

Project Implementation

The original bid had been for £200,000 but in the event only half that amount was awarded to the project. In consequence it was decided to concentrate action on social housing and not to include owner occupied housing in the Larkhill, Liverpool, part of the project.

Once funding approval had been obtained the partners quickly came together to commence work on the project. Meetings of the project group were held approximately every 6 – 8 weeks. Attendance and participation in the meetings was good. The minutes of one meeting tended to form the agenda for the next, thereby providing a framework for monitoring progress and permitting partners to raise issues and to comment on any item. It was generally felt by team members that there was good project coordination and

cooperation between the partner organisations. There were a small number of project implementation issues worthy of note:

Liaison with Contractors

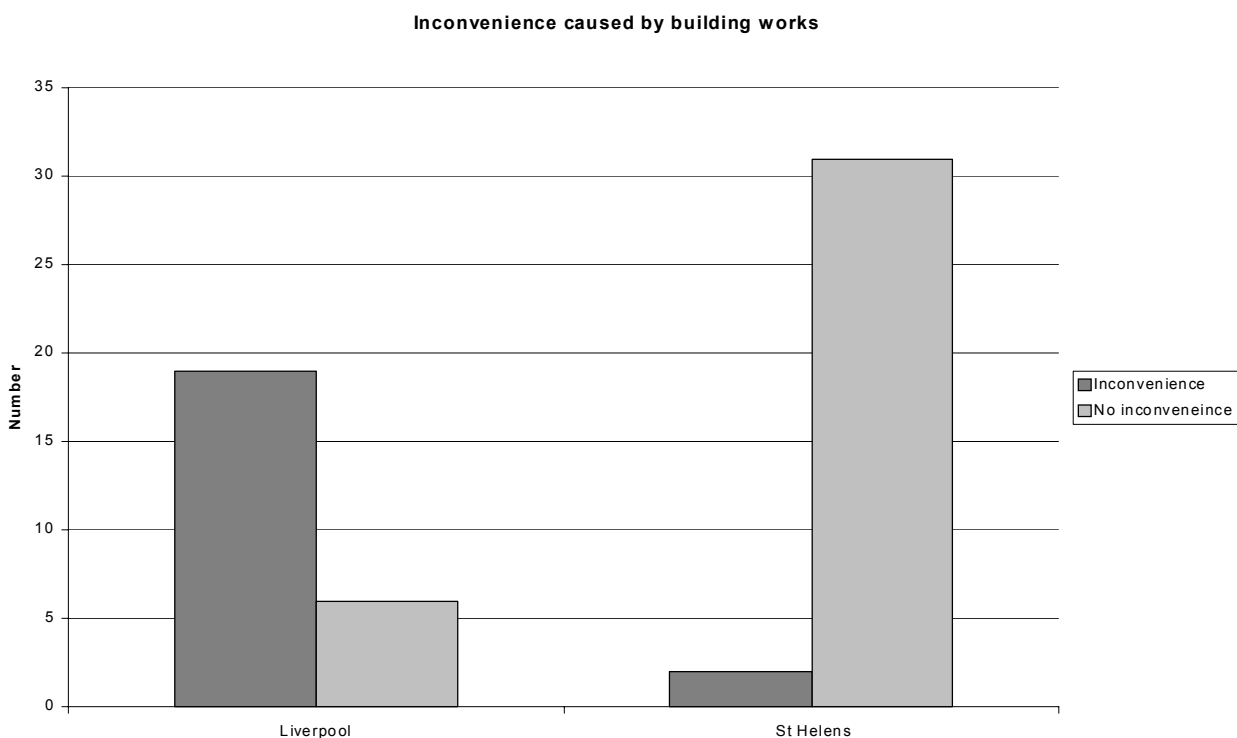
Some concern was expressed about problems of co-ordination between Local Solutions and Unicorn (the contractor for the housing improvement works in that district). According to the City Council representatives and Local Solutions, the contractor was for much of the implementation period, reluctant to facilitate access to the properties until their work had been completed. This resulted in delays in undertaking the necessary survey work prior to the installation of energy saving and security improvements.

The installation process

The installation of efficient heating and insulation systems went well in both districts, although in Liverpool there were some delays caused by the difficulties of liaison with contractors and sub-contractors. However, it was also recognised that in addition to installing heating systems of a high standard, it was important that tenants were informed about the operation of the system and how they can make it work to maximise their own comfort. The local housing offices were committed to visiting tenants to ensure this happens.

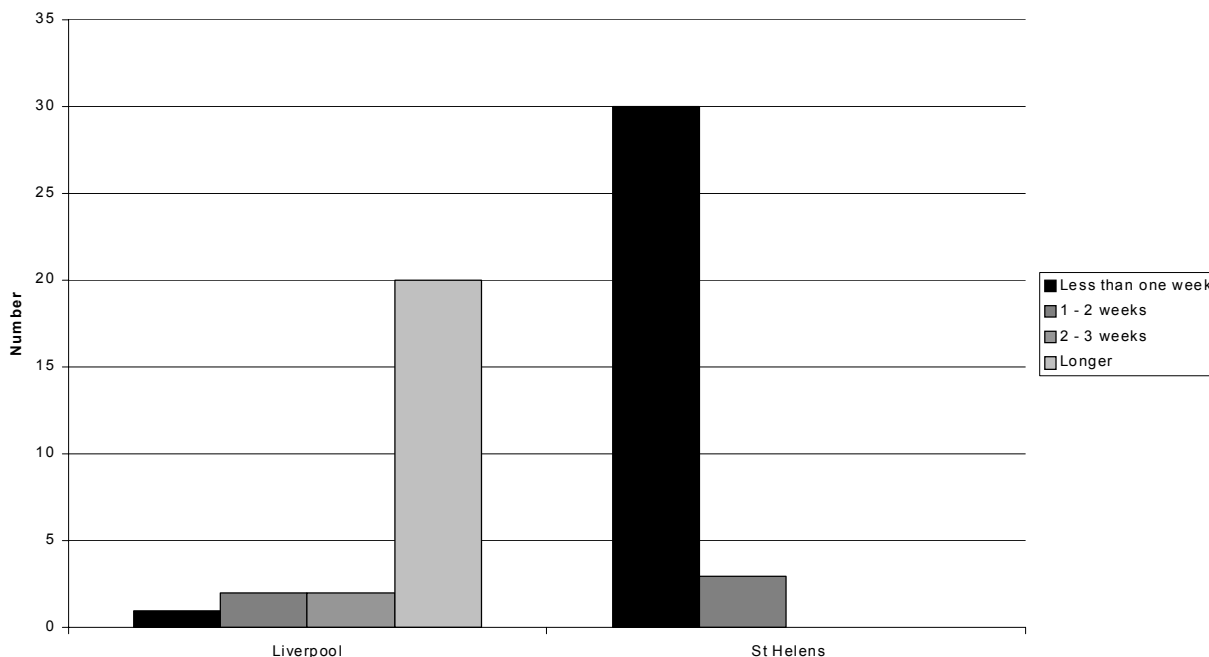
In the St Helens district the scheme was integrated with the Government's warm front grants, administered by the Eaga Partnership Ltd. This allowed for a further 19 properties to be included in the scheme to the same work specifications, giving a total of 39 properties having works done. Having Eaga manage all the installations allowed a seamless flow of works to be carried out without identification of benefit recipients.

Nevertheless there were different experiences of the installation process in each district. In answer to the question 'during the building works did you experience any inconvenience' there were significant differences between the two districts as the following answers show:



And in answer to the question about the time taken to complete the works the following answers were given:

Length of time taken to complete works.



It can be seen that the works in St Helens were perceived to cause much less inconvenience to residents and that the works were generally completed over a much shorter period of time. But, as indicated above, this was not due to any difference in management or competence in the implementation of the works but simply the fact that the improvements to the Larkhill, Liverpool properties were more substantial than those carried out to the Cement City, St Helens properties.

Balance between the Liverpool and St Helens projects and the timing of project implementation.

There was a lack of balance between the representation of Liverpool and St Helens Councils on the project. Whereas in Liverpool the workload was shared amongst five individuals, all of whom regularly attended the project meetings, for much of the period, Jim Nixon took the full burden of responsibility for representing colleagues at St Helens Borough Council at the project meetings. There was no significant involvement from the St Helens & Knowsley Health Authority. This created a potential for some difficulties in liaison on the small number of occasions when he was unable to attend project meetings, but these were minor and did not disrupt the project in any significant way.

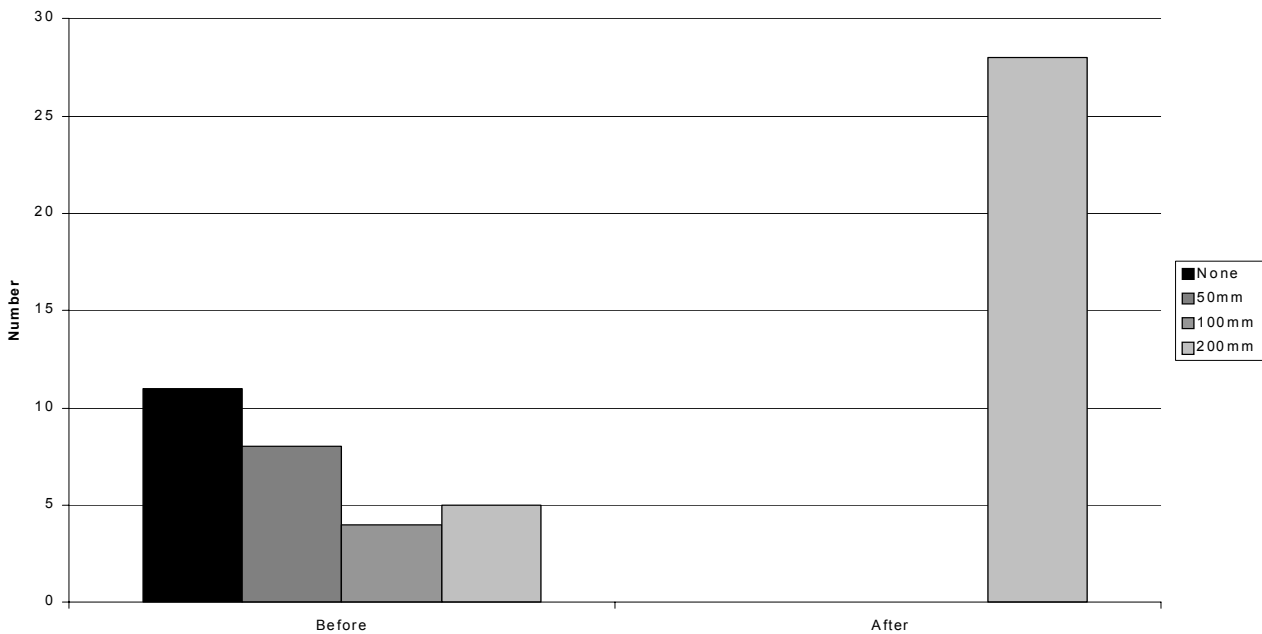
It had originally been anticipated that the Liverpool and St Helens case studies would proceed in parallel. For various reasons Liverpool City Council were able to identify the case study area and properties ahead of St Helens Borough Council. In consequence, work in Liverpool proceeded ahead of that in St Helens.

Achieving Project Objectives

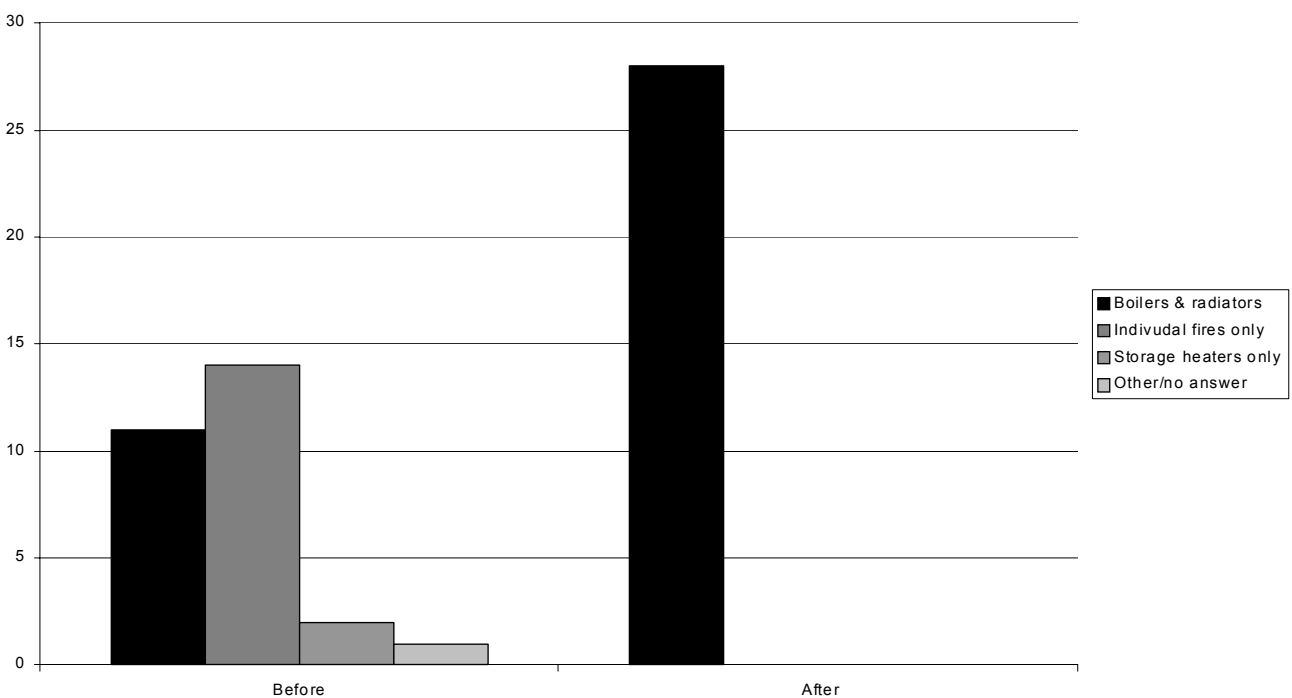
Housing improvements: heating and insulation systems

Data on dwellings improvements and the impact upon home energy consumption and costs were gathered by the local authorities. In Liverpool Council officers undertook a total of 28 physical surveys. These surveys provided data on the facilities available within the property before and after improvement works were carried out. In St Helens home energy checks were overseen by EAGA and provided data on NHER and SAP ratings before and after improvement works.

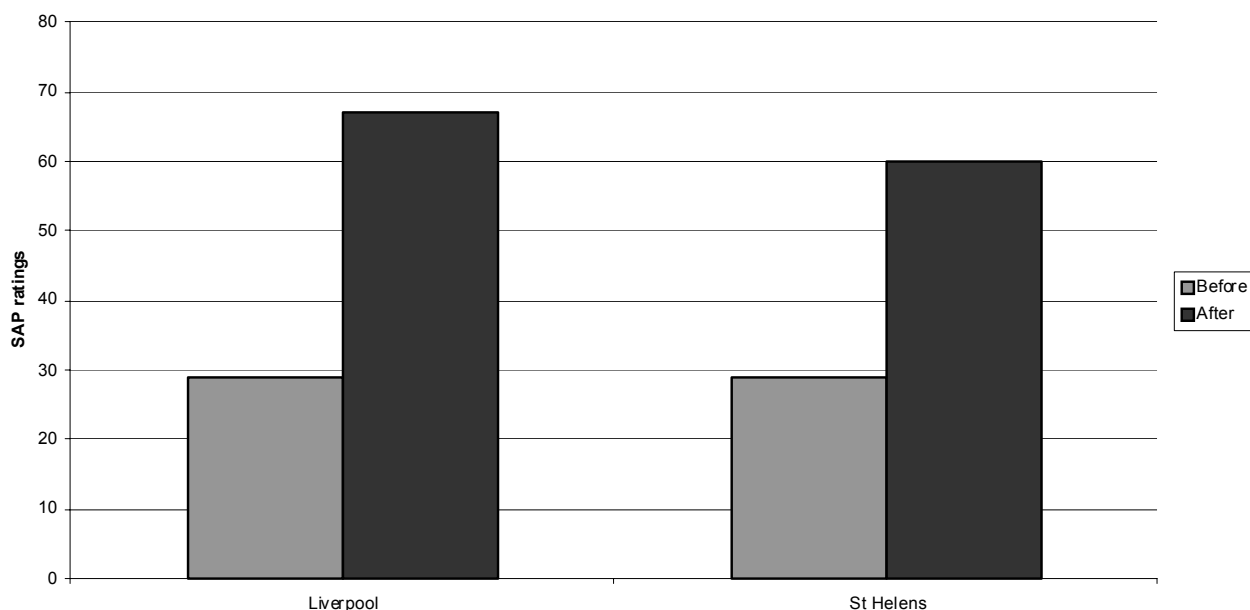
Liverpool, dwellings with loft insulation



Liverpool, heating systems



SAP ratings before and after improvements



It can be seen that prior to the works the dwellings in Larkhill, Liverpool were generally inadequately insulated and heated. After the works all of the properties benefited from modern standards of loft insulation and heating. In both areas there were significant improvements in the SAP ratings after completion of the works. From a poorer initial condition the more substantial works carried out on the Liverpool properties yielded a more substantial improvement in average SAP ratings.

Income Maximisation

The maximisation of household incomes was a late addition to the objectives of the project but through the work of the Welfare Rights Officer in Larkhill some significant gains are being made in this area. (NB: This section is taken from the report of Jimmy Pugh, the Welfare Rights Officer working in the Larkhill area).

The target group was over 60 years of age and of a mixed gender and status. Their housing conditions were similar and none were selected by medical conditions. The entire group came from a similar social economic group. The role of the Welfare Rights Officer was to establish any potential benefit entitlement. This was achieved by contacting tenants, asking them to complete a checklist that enabled the officer to identify the benefit entitlement. Assistance was then given to complete forms, submission of claims and appeals where necessary. The average time spent by the officer on each case was 2 – 3 hours. The average length of time taken from initial contact to outcome is between 3 and 6 months but can take up to 12 months if the process involves an appeal.

As a result of this welfare rights assessment there was an average increase in each household £40 to £50 per week and in some cases as much as £100 per week. Out of the 29 tenants interviewed findings of the results showed:

- 5 tenants (17.25%) were receiving correct entitlement with no additional disability benefit or extra Income Support.
- 11 tenants (37.93%) were already in receipt of additional disability benefits / Income Support.

- 13 tenants (44.82%) received additional disability benefits / Income Support with the assistance of a Welfare Rights Officer. The total weekly award of benefit was £616.72 giving a 52 week projection of £32,079.44.

In St Helens similar results were achieved:

- 8 tenants received additional disability benefits / Income Support with the assistance of a Welfare Rights Officer. The total weekly award of benefit was £503.50 giving a 52 week projection of £26,182.00.

The welfare rights assessment has increased income in a number of households which has allowed for an improvement in quality of life by way of improved diet and being able to budget better for their needs. This also enables them to take more care of their home environment, for example being able to pay utility bills in the winter months.

With the extra income generated through the maximisation of benefits tenants had a sense of feeling better within themselves both physically and mentally. They also retained/regained independence in that they were more able to afford to look after themselves rather than depending on financial support from family. Also there was a greater sense of freedom as tenants who gained financially were able to visit family, friends and shops without the worry of the extra costs involved.

Reduction in Fuel Poverty

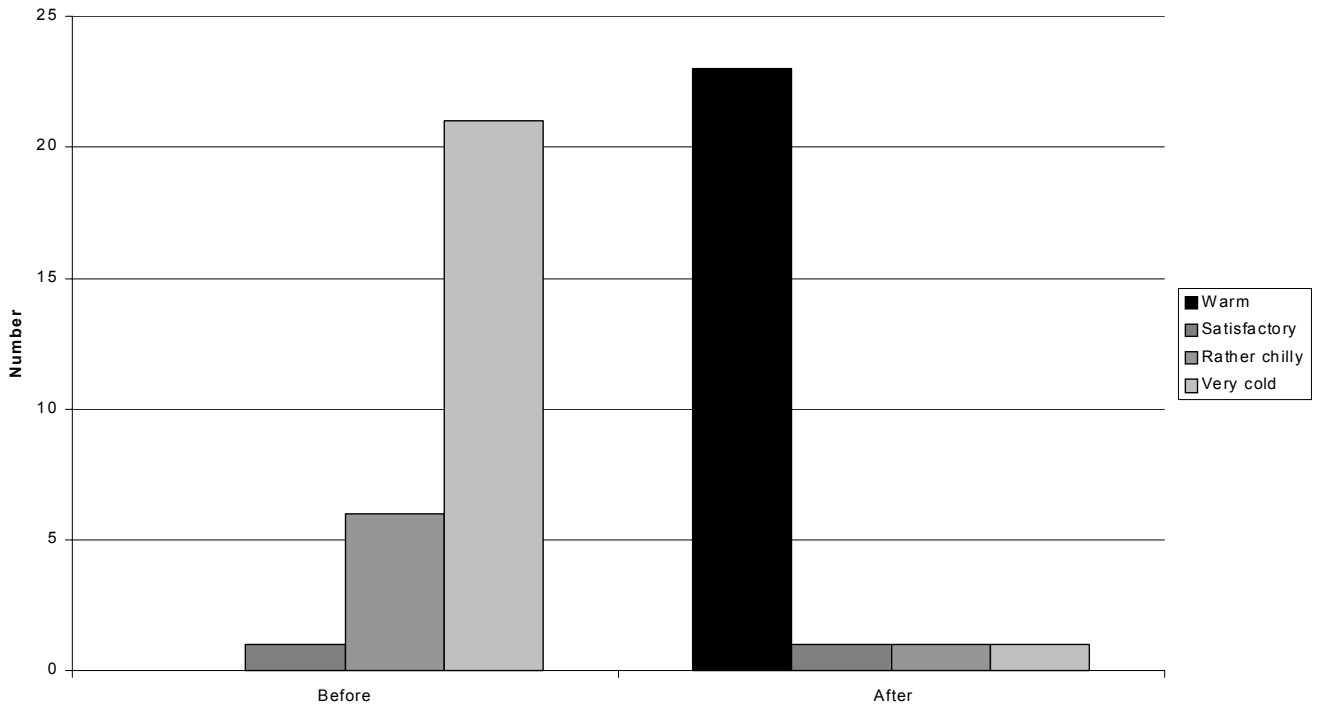
To address fuel poverty the project has implemented three actions simultaneously: maximising incomes; improving the efficiency of heating systems; and improving home insulation to reduce heat loss. The work fit with the government's aim of eliminating fuel poverty and meeting the Decent Homes Standard by 2010.

Data from the St Helens home energy checks calculated that average annual home energy costs reduced from £1,057.72 pa. before the improvements to £549.30 pa. afterwards, a saving of £508.42 pa. per household.

Improving health and empowering people to remain in their own homes

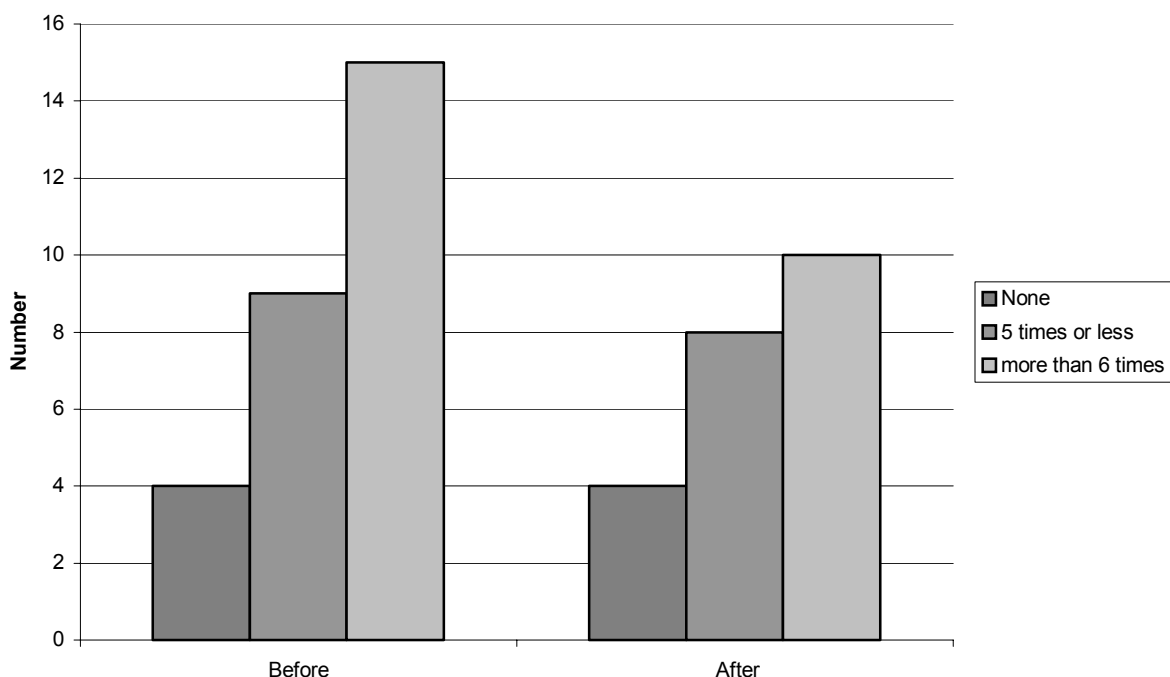
Whether the project will be successful in empowering people to remain in their own homes can only be evaluated in the longer term. Two approaches were used in the evaluation of this objective. Firstly two supplementary questions were attached to the home energy check surveys in the Larkhill, Liverpool area to ask people's subjective view about their feeling of warmth in their home. They were also asked about the frequency of visits to their GP. More objectively, a base-line survey of the health and well-being of householders was undertaken, using the standard health research form SF36a, prior to any works being carried out. A repeat survey was undertaken at the end of the project. The findings of these surveys are indicated below.

Liverpool tenants description of warmth in the home



The fact that the great majority of tenants in Liverpool described their accommodation as 'very cold' prior to completion of the works, and 'warm' after the works is an excellent and telling indicator of the success of the project. The fact that tenants now feel warm in their homes bodes well for their long-term comfort and desire to stay in their own homes. However it is a matter of concern that a small proportion of tenants still do not feel warm in their homes. They have somehow slipped through the net: possibly because of lack of understanding about how to operate the heating system effectively. This needs to be addressed by the agencies concerned.

Liverpool: Number of visits to the GP in the last 6 months



Another useful indicator is the number of visits to the GP (doctor) in the last 6 months. Of particular significance is the decline in multiple visits (more than 6 times). Although the numbers of households involved is small the indication is that these housing improvements do lead to health improvements and a reduction in the burden on primary health care services.

The SF36a questionnaire is structured to measure eight health attributes using the Lickert method of summated ratings. The attributes are:

PF	Physical Functioning	VT	Vitality
RP	Role Physical	SF	Social Functioning
BP	Bodily Pain	RE	Role Emotional
GH	General Health	MH	Mental Health

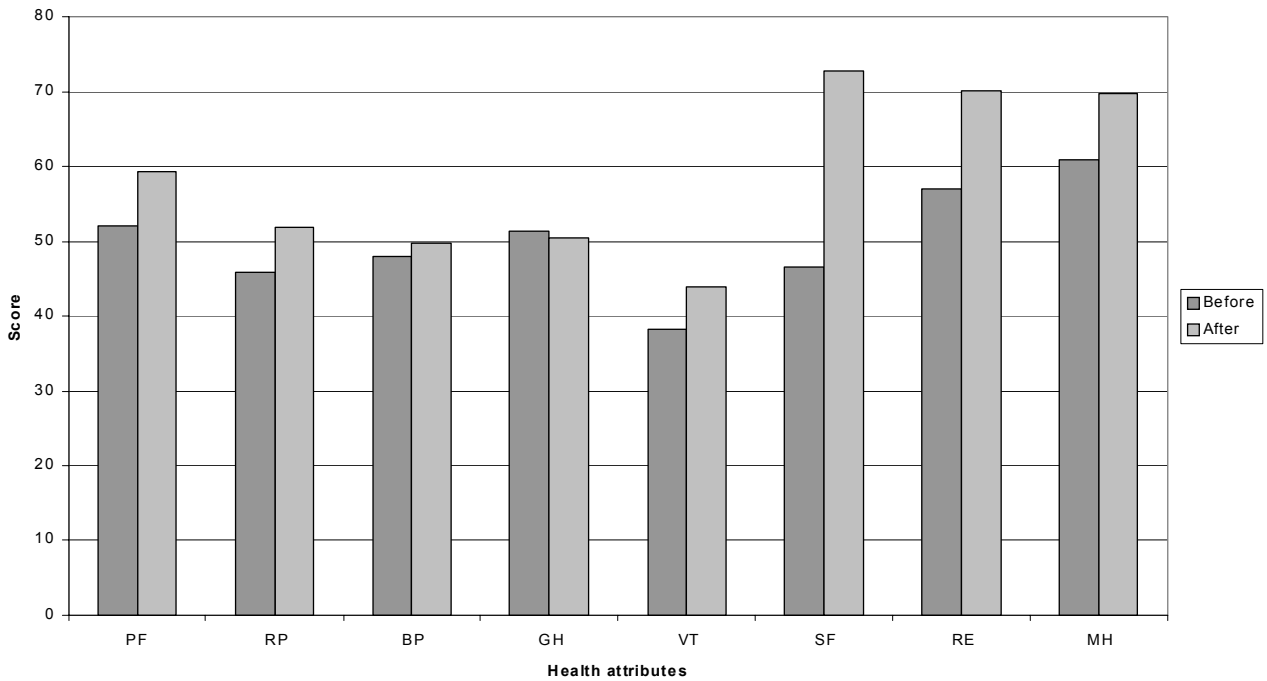
A further attribute (HT – Reported Health Transaction) is contained within the General Health attribute. Each response in the SF36a questionnaire is scored numerically. In general a higher score indicates better functioning or health, but this is not the case with every attribute – some require recoding in order to avoid bias. The questionnaire is designed to be completed by the respondent. However, in the circumstances of the Safe and Warm at Home project it was felt better for a surveyor to visit respondents in their own homes and to administer the survey as a structured questionnaire. There were two reasons for this approach:

- it was known that this method would achieve a higher response rate than a postal questionnaire
- the age and general health of respondents would mitigate against a complete and accurate responses to a postal questionnaire

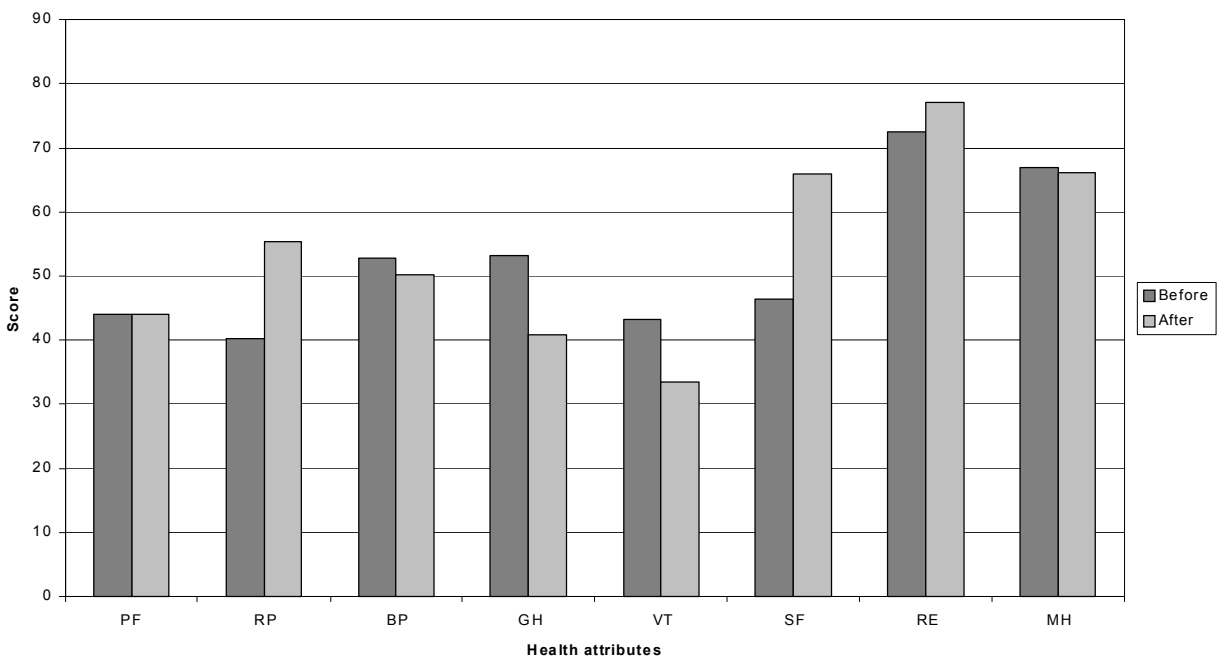
In total there are 36 questions. Answers are grouped to give a score for each of the eight attributes. Data was gathered from respondents in each of the study areas (Larkhill in Liverpool and Cement City in St Helens) at two points in time, before the improvement work in the winter of 2001/02 and after completion of the works in the winter of 2002/03. The initial survey yielded 26 completed responses in Liverpool and 36 in St Helens. In the second survey the figures were 24 and 33 respectively. These are very small numbers for a survey of this nature. It must therefore be understood that the findings are of little statistical value and cannot be said to offer any real conclusions about the impact of the housing improvements upon the health of residents.

The findings are presented as two charts, one each for the Liverpool and the St Helens study areas. Data is presented before and after housing improvements under each of the eight health attributes. It will be seen that in the Liverpool case some improvement in health is identified in 7 out of the 8 attributes. This would seem to indicate that the work done to the dwellings did have a positive effect on health and well-being. However, in St Helens, where the work done to the dwellings was less extensive, improvements can be seen in only 3 attributes, with 2 remaining virtually unchanged and 3 deteriorating.

SF36a survey results for Liverpool



SF36a survey results for St Helens



It is significant that in both areas the biggest improvement was recorded in the 'social functioning' attribute. This is particularly important as it relates to the individual's feeling of well-being and their ability to undertake social activities and interaction with others.

Householder Consultation and Participation

Households were recruited to participate in the project on a voluntary basis after having received a letter from local housing office staff. Most project team members felt that the whole issue of public-participation was a matter for the local housing office. There is no

evidence that householders have been involved with project decision-making in any formal or structured way. Nevertheless, it is clear that the project evolved in a manner that shows a responsiveness to the concerns of participating households, for example in recognising the importance of explaining the operation of new heating systems and in its work on income maximisation.

Meeting Wider HAZ Aims

Achieving Equity

The project has made a contribution to improving equity within the boundaries of each case study through measures that reduce fuel poverty.

Engaging Communities

Whilst there was a good relationship and an informal dialogue between local housing officers and participating households, it has to be acknowledged that the project did not attempt to involve these communities in project decision-making.

Working in partnership

One of the most successful aspects of the project was the bringing together of partners from a variety of agencies. Whilst most had worked with each other on various occasions, it was unusual for such a wide range of partners to be involved within a single project.

Engaging front-line staff

Although front-line staff in the local housing office were not significantly involved in the bidding process they clearly played an important role in the implementation of this project. There is some suggestion that in this process they were given more opportunity for policy development than would normally be the case, however more involvement in the earlier stages of a future project should be given consideration.

Taking an Evidence Based Approach

The project was based upon sound nationwide evidence of fuel poverty. The condition of dwellings in terms of heating and insulation standards was well documented. There was also clear national evidence of reluctance amongst some social groups to claim their full entitlement to welfare benefits. The surveying of households before and after implementation of the project added to this evidence base.

Developing a Person Centred Approach to Delivery

The project was aimed at households from vulnerable and at risk groups and was intended to be responsive to their particular individual needs. In this regard the role of the local housing office was very important. Some agencies have indicated that they would like a closer involvement with householders in future projects.

Taking a Whole System Approach

The project made a useful contribution towards the bringing together of housing and health professionals. However, the project only tackled part of the complex web of

circumstances and influences that lead to personal poverty, the fundamental cause of fuel poverty. It only tackled one aspect of housing conditions: heating and insulation; making no contribution towards other aspects such as space standards; the provision of other household amenities; general housing maintenance and repair; or local environmental conditions. Furthermore, it only tackled selected aspects of health and well-being: warmth and security; making no contributions towards other aspects such as diet; exercise; hygiene and so forth. Despite its focus on households who have been recruited to the project, the real focus was on the quality of the dwelling rather than the health of the individual. This is the basis on which some argue that any future development of the scheme should be less 'pepper-potted' and more tightly focused on a given area in order to maximise the contribution towards community sustainability rather than individual personal health and well-being.

Conclusions

The project was successful in improving physical housing conditions, particularly in relation to heating and insulation systems and security in the home. This has led to occupiers feeling warmer at home and experiencing reduced heating costs. Welfare benefits advice resulted in increased household incomes in many cases. Collectively these physical and economic improvements have in turn led to health benefits. Particularly noticeable have been:

- improvements in social functioning
- reduced demands upon GP services

Not only does the project confirm the view that investment in housing conditions can improve the health and well-being of householders and therefore reduce the burden both on primary health care, but there will also be some:

- reduced burden upon hospitals

as fewer elderly people will need to be referred to hospital and in fewer cases will their discharge be delayed by the unsuitability of their housing conditions. However, it should be noted that a small number of residents did not feel warmer after the works, possibly because of lack of understanding how to work the new heating system effectively. This is an issue that needs to be addressed by the agencies concerned.

The primary aim of the project was concerned with reducing the incidence of avoidable winter deaths and serious illness due to inadequacies in home heating insulation and fuel poverty. This aim was achieved. However, the project also demonstrated:

- benefits for community sustainability

These occur as improvements, such as those achieved through this project, enable the elderly to stay in their homes longer, so contributing to the stability of the local community and maintaining demand for property in the area.

The project was successful in bringing together professionals from the health and housing sectors who do not traditionally work closely together. The benefits of this were that:

- health and housing professionals became better informed about each other's aims and the constraints under which they work

This is likely to lead to better and more efficient co-ordination and collaboration between these groups in future.

The project has also:

- strengthened the evidence-base available to policy makers

and specifically informed the Health Impact Assessment and the Housing Strategy Statement formulation process in Liverpool.

Recommendations

The success of the project suggests that there is merit in considering its extension to a wider area and a broader range of households. Furthermore, many aspects of the project could usefully be absorbed into mainstream housing and health policies.

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May 2003.

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