

How can we ascertain the true costs of loneliness?

1. Introduction

The project brief

This report summarises research and consultation work undertaken over a three month period from May to July 2013 for the Campaign to End Loneliness.

The original project brief was to:

Undertake a piece of scoping work, by means of conducting a dialogue with practitioners, researchers and commissioners about what is needed to ascertain the true financial costs of loneliness and isolation in older age.

This initial piece of work would aim to:

- *Create a better understanding of loneliness and isolation, its impacts and potential costs*
- *Generate debate among commissioners, practitioners and researchers about which costs should be included*
- *Draw conclusions about which costs have already been calculated, and what further work is needed to ascertain, ideally, the total costs of loneliness and isolation in older age.*

The intention was that the scoping work should contribute towards the ultimate aim:

To establish what the financial costs of loneliness are to the state, and to wider society; in particular, focusing on costs that health and wellbeing commissioners prioritise in their decision making.

However, during the course of the project, it quickly became apparent that others were already pursuing this end and the project morphed into an investigation into these initiatives.

This report therefore outlines the findings of our discussions with commissioners regarding their interest in, and understanding of, the costs of loneliness, and offers a review of current initiatives being undertaken in this field.

As other organisations have carried out work in this area, several have discovered a lack of the data and analysis that would be needed to provide robust estimates of the total costs of loneliness and isolation in older age. In addition some knotty issues have emerged regarding methodology. These points are discussed in more detail later.

Finally, having reviewed the work ongoing in this area, this report offers some recommendations for future action by the Campaign to End Loneliness.

The scoping work

This report is based on:

- consultation with a small group of academics and researchers undertaking relevant work and other experts;
- telephone interviews with ten commissioners working in both health and social care;
- some limited desk research;
- a seminar discussion with service providers and commissioners at the Campaign's *Connect + Act* conference in June 2013.

It was recognised from the outset that, as this was a developmental piece of work, it was likely to flex as we gained a better understanding of the territory.

It very quickly became clear that, in order to make the project manageable, we would need to limit its scope (see box below).

It also became clear, early in the project, that there were other initiatives either underway or planned that had the same purpose i.e. to establish the financial costs of loneliness.

Therefore focus of the work became to:

- establish how health and social care commissioners perceive the issue of the costs of loneliness in older age;
- review the ongoing initiatives in this territory and consider whether and how the Campaign might seek to support them.

The scope of the project

This report is based in part on telephone interviews with health and social care commissioners. It became clear in discussion with commissioners that they are more inclined to focus on social isolation or social connectedness rather than loneliness per se. This appears to be for a number of reasons, not least the fact that social isolation is perceived as easier to track because it is not subjective. This report therefore describes work which encompasses both loneliness and isolation.

The initial brief was to ascertain "ideally" the total costs of loneliness in older age i.e. across the full range of public services (including transport, housing etc) as well as to individuals and their families. However it quickly became apparent that this would be an enormous project and demand greater time and resources than were available and so a decision was made to focus on costs to health and social care.

2. How commissioners think about the costs of loneliness

Interviews were conducted with health and social care commissioners covering their perceptions of how loneliness impacts on costs and their attitudes to, and experience of, costing methodologies.

An important factor in assessing the feedback from these interviews is that these commissioners were “warm” contacts of the Campaign i.e. they were known to it because of their interest in its work.

Framing the issue

Many of the commissioners interviewed characterise their interest in addressing loneliness and isolation amongst older people as part of a wider agenda focused on prevention:

“There’s a need to make sure that the statutory sector is investing up stream....we can’t afford the number of people who need critical care to grow.”

Budget constraints and the prospect of increased demands on services as the population ages are undoubtedly a real cause for concern.

However, while there is perceived to be a long term financial imperative to invest in prevention (one commissioner described it as an ‘invest to save’ approach) those interviewed also tended to value the opportunity that it provided to design and deliver services outside the traditional mould. They variously described the work they were doing on loneliness and isolation amongst older people as part of an effort to “*increase community resilience, promote independence and put the heart back into communities*”, as “*enabling a more person centred approach to service provision*” and as enabling the authority “*to think not just about the problems of individuals but also community solutions and how to help communities begin to look after each other*”. One commissioner said:

“Our emphasis is shifting more to what makes people happy. We are interested in extending people’s volunteering, helping them to be part of the solution. We know that they want to have a role and to be valued”

The impacts of loneliness

The commissioners interviewed were clear that loneliness and isolation among older people has a serious detrimental effect, both because of its impact on the physical and mental health of individuals, and because it results in increased use of health and social care services.

Commissioners referred to the social determinants of health and/or lifestyle issues. They said that lonely people tend:

- not to manage their health well in various ways for example, by smoking;
- to be more likely to engage in substance misuse (drug and alcohol);
- to have a poor diet or to stop eating altogether;
- to be inactive (often because they have no one to go out with);
- not to take action to prevent long term conditions occurring in the first place and then not to manage them properly;
- to be more likely to suffer falls (which often leads to a significant deterioration in their health).

A number of commissioners indicated that loneliness is a significant theme in local discussions of depression and mental health needs. The interviews also demonstrated that practitioners perceive a direct link to two behaviours which have a profound impact on health, inactivity and alcohol abuse. A number of commissioners referred to the link between loneliness and isolation and alcohol misuse, one suggesting that this problem was most acute in the most affluent areas. One said that he had heard numerous stories from accident and emergency staff of self medication with alcohol masking a sense of loneliness and isolation. A couple of commissioners said that they considered that the link between loneliness and isolation and depression, lack of physical activity and negative health impacts to be reasonably well proven.

There was a general recognition among commissioners that depression leads to physical health problems and that people present at GPs with physical ailments when the underlying problem is one of loneliness. One said:

We're getting reports from GPs who see five or six people every day whose primary issue is that they are depressed and isolated and they tend to be elderly.

Generally, commissioners described how loneliness and isolation tended to result in more GP visits, visits to accident and emergency units, longer hospital stays and earlier admissions to care homes.

One commissioner referred to the impact that knowing someone was living alone had on the decisions of medical practitioners, he said:

The rising figures for urgent care indicate that GPs don't have confidence that people can hold out on their own. If people had social support the GP's decision would have been different. The driver is not simply medical but the social situation. There's a logic model – GPs are thinking about the isolated – who's going to notice if their patient gets worse.

Another commissioner summed up the general sentiment of the interviews when he said:

It is known that people live longer, more safely and are less of a burden on the public purse if they aren't lonely.

Views on costing

The remit of this project was to consider the financial costs of loneliness and isolation amongst older people to health and social care – i.e. to calculate the financial costs of failing to address loneliness effectively. However, one of the main findings from the interviews was that work of this kind has not typically informed service planning to date. The interviews indicated that this was for a number of reasons:

- any economic analysis has tended to be cost benefit analysis of particular services (i.e. a more specific and contained exercise);
- the focus tends to be on the health and well being implications of providing a service as opposed to the economic costs of not providing it;
- reliable and robust data to support work of this kind can be hard to come by, whereas the authority may consider that it has sufficient information from those who are 'experts by experience' i.e. their staff;
- such work tends to have relevance across a range of services and it is difficult to achieve agreement to collaborative work of this kind for a number of reasons (for example, the upheaval created by the recent structural changes, the difficulty of sharing data between different public sector organisations).

A couple of commissioners were engaged in cost-benefit type analysis of services designed to address loneliness and isolation amongst older people. One described how she was undertaking a cost benefit analysis of three small scale services. She explained that it was her practice to do this when commissioning services that marked a departure from the norm. Another had funded a Social Return on Investment (SROI) analysis of a service it was delivering in partnership with a voluntary organisations aimed at addressing loneliness and isolation among older people.

However, the scoping also suggested that some commissioners are developing, or planning, work of the sort this report is concerned with i.e. based on a cost-effectiveness or cost-utility analysis (see the box below for definitions), but this work relates to preventative services for older people more generally, not just those designed to deal with loneliness and isolation.

One commissioner suggested that this change in their approach had been inspired by the notion of reablement and evidence about the cost savings that it can deliver:

“There is a basic tool on reablement – which asks the question if we don’t do something – how much is it going to cost us? We know that re-abling a person so that they are independent can reduce the costs of care packages by 34 per cent compared with the cost of doing nothing.” (See box in next section for detail on this tool).

Common Types of Economic Evaluation in Health Research

1. Cost analysis (CA) computes the net cost of an intervention by subtracting the cost of treating an illness from the cost of preventing it. An intervention is said to be cost-saving when its net cost is negative. CAs do not assess the benefits of the intervention, however, and therefore are not strictly economic evaluations.
2. Cost-benefit analysis (CBA) typically compares the cost of an intervention to the expected or actual improvements in health as valued in pounds. CBAs can also adopt a broader societal perspective to capture benefits beyond health. Results are often presented in terms of a benefit-to-cost ratio (i.e. sterling value of health and/or social improvement divided by cost of prevention). Benefit-to-cost ratios greater than one suggest that the intervention of interest offers value-for-money. In practice, however, the assignment of sterling value to various health and social gains, including the value of life itself, presents a number of challenges (including that of public acceptability).
3. Cost-effectiveness analysis (CEA) compares interventions in terms of the net cost required to achieve a nominal unit of health improvement, such as life year gained or case of illness avoided. CEA calculations are typically expressed in terms of an incremental cost-effectiveness ratio (ICER) (e.g. cost/death averted). ICERs are compared either against the ratio of another intervention option (e.g. the next best alternative, standard practice, no intervention etc.) or an arbitrary threshold below which interventions are considered reasonably cost-effective. A common rule of thumb in North American research practice is to set this latter benchmark at US\$50,000 - \$100,000/ quality- adjusted life year (QALY).
4. Cost-utility analysis (CUA) is a sub-type of CEA for which the unit of health improvement achieved is a utility-weighted health metric, such as a QALY. The primary benefit of CUAs is that they facilitate the direct comparison of two or more interventions, even across disparate issues whose natural units of health differ from one another.

Source: Adapted from Public Health Agency of Canada (2009)

Tools and methodologies

Commissioners said that they would welcome a tool or methodology that would help them to assess the costs of not addressing loneliness and isolation among older people. However, views differed about what sort of tool or methodology would be most helpful.

Some favoured a very simple, easy-to-use online “ready reckoner”, in which you entered some basic characteristics about your area including numbers of at risk older people (living lone, in care, needing help with bins etc) and a total cost figure would emerge:

“What’s needed is something simple - research shows/amount of money spent/amount saved and why - a simple business case based on national research and evidence on social and health care.”

The implication was that best available data would suffice.

Others suggested that such a simplistic response would not be adequate:

“There are a lot of ready reckoners – if you do this, you’ll get these results – but this issue is a lot more complicated. How do you define who’s in the population group/how do you define the period over which you’re looking for change – 1 year/5 years etc etc?”

They indicated that in order to have any real influence the data populating any such tool would have to be robust:

“The way to gain traction is to gain the support of public health consultants – to do that you need something that is based on sound evidence.”

Notably, while social care commissioners emphasised that they were willing to make decisions based on the best available data, health commissioners tended to emphasise the quality of the data and refer to the need for controlled experiments. Generally, those commissioners who appeared best informed about relevant work suggested that there was a need for better research and data about loneliness and isolation and its impact on the health and social care needs of older people in order to produce results with an appropriate degree of rigour. They raised a number of concerns about our current understanding of the issue and the data (discussed in more detail in a later section). Not least of these was the need to know more about the effectiveness of interventions (see the box below).

The effectiveness of interventions

Two of the commissioners interviewed described making small investments in services to address loneliness and isolation among older people on the basis of their understanding of the data currently available about their effectiveness.

One said that according to her research - time banking services appeared effective - so her authority would be likely to invest in services of this type. Another commissioner was investing in three different services and evaluating them in order to assess which was the most effective.

Indeed, all the commissioners that referred to investing or partnering in services aimed at reducing loneliness and isolation among older people were also commissioning evaluations to assess their effectiveness.

NB The Campaign has undertaken a companion piece to this piece of work examining how to encourage increased evaluation of the effectiveness of loneliness interventions.

Commissioners were asked what features they would expect a costing tool or methodology for loneliness and isolation to have, in order for it to achieve traction. They suggested that:

- it should be based on local information and local profiles;
- it should make clear where costs and savings fall (because social care may have to pay more to keep people at home but this will reduce the costs for health);
- as regards savings it should track number of GP visits, unplanned admissions, length of stay, admission to residential and nursing care and the health and well-being effect of keeping people at home longer;

- it should include evidence of increased use of health and/or social care services as a result of loneliness and isolation;
- it should factor in the rate at which older people's health is likely to decline anyway and the ways in which it will decline so that we can determine the loneliness co-efficient i.e. the difference that loneliness and isolation makes;
- it might provide an assessment of the impact of preventative services and examine the financial results of preventative interventions at different stages.

Commissioners were also asked if there were costing tools or methodologies which they used in other areas of their work which might usefully be applied to the issue of loneliness and isolation among older people. The reablement tool referred to above was recommended as a good model (see the box below).

The Reablement Toolkit

The Reablement toolkit was developed for the Social Services Improvement Agency in Wales by Whole Systems Partnership (WSP). It is now available to all local authorities. The toolkit has been developed to support local authorities in developing their plans for reablement by learning from experience gained elsewhere, and by better understanding their current position against best practice.

The tool consists of:

- a database of local services;
- a self-assessment tool (based on a gold standard); and
- a generic capacity tool designed to indicate the scale and impact of an optimised reablement service.

The tool allows an authority to test out in a systematic and structured way the costs of introducing reablement (or enhancing an existing service) and the potential impact of this on their use of resources. Evidence and assumptions underlying this tool are drawn primarily from the CSED sponsored evaluations of reablement across England. A range of assumptions including demographics, expected outcomes, reablement team input and costs can be varied using the generic tool. This allows for a number of options for service delivery to be tested providing the robust evidence required for business cases.

The full reablement toolkit includes an online learning environment, database, and self assessment tool. WSP also provides bespoke capacity planning sessions building on the generic tool.

NB WSP have also undertaken other relevant work including prototyping a decision support tool to help local authorities support local partnerships in assessing the impact of prevention and early intervention services. The tool has been piloted in Berkshire West.

3. Relevant initiatives

The research undertaken as part of this scoping exercise identified a number of initiatives already either underway or planned that will make a contribution to our understanding and knowledge of how to assess the costs of loneliness in older age.

Two of these initiatives are designed to have a national impact: a systemic review and proposed costs modelling by University of York and a programme of work by Social Finance to develop a social impact bond for services aimed at addressing loneliness and isolation amongst older people. These are outlined in more detail in the boxes below.

University of York, Costs of Loneliness Project

Barbara Hanratty and colleagues at the University of York are completing a systemic review of the literature on the association between loneliness and use of health services.

They plan to use the results of the review to estimate the potential cost to the health service of not addressing loneliness in older age.

A report on this work should be available in early 2014.

Social Finance, Social Impact Bond on Loneliness and Isolation

Social Finance has been undertaking work, commissioned by Worcestershire County Council, to develop a Social Impact Bond for investment in services to reduce loneliness and isolation among older people.

As part of this, Social Finance has undertaken detailed analysis with Matrix health economists to develop a model for calculating the costs of loneliness to the health and social care system within a community.

The model takes account of two ways in which loneliness can affect health and care service usage. These are:

- Direct impacts of loneliness on service usage (e.g. increased likelihood of entering residential care and increased frequency of presentation at A&E) caused by a lack of support networks and eroded personal resilience; and
- Medium-term impacts (e.g. the onset of health conditions including dementia, depression, and long-term conditions resulting in part from inactivity caused by loneliness).

The work is based on the premise that loneliness increases the likelihood of developing conditions in the medium term through behavioural changes which impact health. The data sources used to build the model are peer-reviewed papers, local data on the population of older people that are lonely and isolated and national sources including the English Longitudinal Study of Ageing.

Social Finance has also worked with Age UK Herefordshire and Worcestershire to develop new interventions aimed at tackling loneliness and isolation, which will be robustly evaluated for their effectiveness.

These services will then be funded through a Social Impact Bond, with a fixed price paid for each client whose loneliness is reduced through the course of the intervention. A pilot of the Social Impact Bond has now been agreed, and will start in 2014. Social Finance has an ambition that it will be possible to roll out both the model for calculating the costs of loneliness, and for assessing the value of interventions to other areas of the country.

In addition to these projects, the commissioner interviews indicated that other relevant work on preventative services for older people – although not all directly linked to loneliness and isolation and /or costs - is being developed or planned locally, including :

- examining whether investment should be channelled to preventative services for older people;
- examining the difference to older individuals and to spending that investment in appropriate services makes and
- testing the hypothesis that loneliness and isolation amongst older people is a partial explanation for unexplained deaths.

These projects (outlined in the boxes below) could have wider relevance and serve as a model for others.

Demand modelling and modelling of preventative services for older people

One of the commissioners we spoke to is planning demand modelling, not just for their own services (public health), but also for social care and other parts of the health service locally (for example, acute trusts). This commissioner emphasised the need “to measure across the whole system to get a broader sense”.

Its population of older people is projected to increase by nine per cent over the next 10 years and the intention is to model preventative services to help it work out, with peer organisations, where best to invest.

The authority is proposing to construct the model based on the numbers of people coming into and coming out of intermediate care services and tracking where they go afterwards (nursing home, residential home, own home and if they receive care at home). The model will consider whether there are reductions in the numbers of people who need their services and/or the delay in needing them. The work will examine what are the benefits of making particular sorts of investment, how much is being spent and the outcomes for the individual and the public sector:

“If 60 fewer people in the next three months need some higher level service because of preventative services that will be a significant benefit.”

In other words the modelling will provide an indication of the savings achieved or costs averted because of preventative services.

This authority is already working with a local practice manager to develop a business case for a small service it is funding in which patients visiting two GP surgeries with non medical needs are referred to volunteers for social support. The intention is to be clear about how much money is being saved and by whom. As this commissioner said:

“There is a need to evidence it – to start to talk about shifting funding around the broader system.”

A simulated calibration for dementia services

Another authority has developed a simulated calibration for dementia services. They calibrated what would happen if they did not invest at all and what would happen if they choose to invest in particular services. The work examined six local areas and the difference that varying levels of care and support would make to the costs of dementia. It led them to conclude that providing two additional Community Psychiatric Nurses can hold costs down.

Testing the hypothesis that loneliness and isolation explains a proportion of unexplained deaths

Another authority is looking to test the hypothesis that loneliness and isolation may be the explanation for a number of previously unexplained deaths. Given the fact that some models allow costs to be attributed to avoidable deaths, this model may have potential to be adapted into a costs model.

The authority believes a proportion of unexplained deaths are likely to be very isolated people whose health declines slowly at first but then enters a rapid decline in the latter stages. They are planning to collect data to test this hypothesis.

4. Issues for the Campaign to End Loneliness

In the course of this project a number of issues have emerged which should inform the Campaign's decisions about how best to take the work forward:

The research base is inadequate

There is a strong view that we lack some of the data and analysis needed to provide robust estimates of the costs of loneliness and isolation in older age. In particular:

- the data tends to be about isolation rather than loneliness (even in instances in which the headline information about the study refers to loneliness or both loneliness and isolation);
- evidence about cost savings is patchy;
- we don't know what normal usage of services is for older people who are not lonely and isolated, this is needed in order to make comparisons;
- we do not yet properly understand the "dependencies" or the connections between loneliness and isolation and physical and mental illness;
- neither do we understand some of the complexities in decisions about service provision for example, is there a significant social element to decisions to admit people to hospital or to discharge them (while instinctively we may know it to be true, we do not have the data to back it up).

In considering how the research base might be developed, there are also some knotty issues that emerge regarding methodology. One is the potential length of the time over which we might be seeking to track the impact of loneliness and isolation (i.e. across the life course from aged fifty to the nineties). Another is that of control groups. One health commissioner stressed:

"You need a defined population and to look at how you can reduce their loneliness, and another control group in order to be able to make comparisons."

There appears to be some agreement that in order to overcome these difficulties a large scale research project is needed (one commissioner estimated the investment needed as around £250k). The view is that it would be helpful if this could be commissioned by a respected health research organisation for example, the National Institute for Health Research and that it should involve a university department, local authorities, CCGs etc in order to generate reliable data. It might for example, build on data already collected by GPs and social services departments about older people's health and social care needs and use of services considering how to best to harvest, share and analyse it:

It would be possible to work with GPs who segment their older population according to risk including those who are isolated/at risk of being isolated and track what is happening to them in the system.

In the absence of a new major research study, initiatives like the social impact bond described in a box in the last section, which will be rigorously evaluated, should over time enable a better case to be made about investment in this area.

Loneliness is an ambiguous concept

One of the commissioners interviewed referred to loneliness amongst older people as an 'ambiguous' concept. This perhaps explains a general preference amongst commissioners for a focus on reducing isolation or supporting the creation of greater social connectedness. Numbers of social contacts can be easily and objectively measured whereas loneliness is subjective.

An obvious difficulty with the focus on isolation rather than loneliness is that research demonstrates that loneliness can cause significant problems even when an individual is not isolated (a good illustration of the latter is concern about loneliness amongst people in care homes).

Some commissioners have identified the potential importance and value of supporting older people through key transition points. Some expressed an awareness that transitions such as losing a spouse, loss of mobility etc often resulted in older people feeling lonely and depressed with detrimental impacts on their mental and physical health. A few referred to giving up a car as a difficult transition for many older people which could precipitate a decline:

"Having to give up your car is a big issue for many older people. It's particularly difficult in the countryside where transport can be a problem. We're looking at whether people need better help in making the decision about giving up their car— since there's evidence that in instances where they have more support, their health and wellbeing is better subsequently."

A couple of commissioners suggested that a lack of resilience in dealing with transitions tended to be the key determinant for prolonged hospital stays, precipitous admission to residential care etc:

The impact on people's health relates to people's resilience and their ability to bounce back from things.

This appears to suggest that commissioners believe that there may not be a direct correlation between loneliness and service use amongst older people because the picture is complicated by the fact that different older people have different levels of personal reserves and resources determining how they respond. However, it also suggests that transitions may provide a useful focus for work on the issue of loneliness and isolation amongst older people enabling providers to identify those most at risk and to target services.

Different types of economic evaluation

Some of the commissioners that we spoke to assumed when we were asking about costs that our interest was restricted to the costs to the state. One explained that her authority thought only in terms of the health and quality of life improvement that its expenditure was creating or its contribution to reducing unnecessary deaths. This chimes with what we know about the field of economic evaluations of health in which the focus is often the cost of each

unit of health improvement (see the box above). This suggests that there is an important distinction between a concern with cost saving and a concern with cost effectiveness. Generally it is regarded as more difficult to provide compelling evidence of cost savings over the longer term.

The interviews indicated that most commissioners are aware of cost benefit analysis and may already be using it to some degree. However cost utility analysis is much less familiar territory to the commissioners we spoke to. Cost utility analysis is closer to the Campaign's brief for this work since it would enable public authorities to consider the cost effectiveness of not intervening as compared with intervening in different ways to address loneliness and isolation amongst older people.

General or specific?

Another key issue highlighted by this report is that much of the work that commissioners are currently planning or developing is not specific to loneliness and isolation, but is more generally about preventative interventions for older people. The Campaign will need to consider if it should seek to engage with and influence this wider agenda on prevention and promote the importance of loneliness and isolation within it.

5. A future agenda for the Campaign and others

The original brief for this project, as set out in the introduction, was to establish what the financial costs of loneliness are to the state. However, it quickly became clear that others were developing significant projects in this space and so the emphasis shifted to reviewing their work and considering how it might be consolidated and developed.

On the basis of the research and consultation work undertaken for this report it seems clear that the Campaign potentially has two important roles to play. Firstly, a role in supporting the development of the research base and encouraging the exchange of learning, and secondly, a role in promoting/developing approaches/tools to support the work health and social care commissioners do on this theme.

Supporting the development of the research base - encouraging the exchange of learning

This report indicates that there is a need for significant investment in developing the research base so that we can better understand how loneliness and isolation impacts on older people's mental and physical health and well-being and their use of services, and therefore the costs of these services.

It is not within the remit of the Campaign to raise funding and commission large scale research of this kind but it is within its remit to work with its Research Hub to promote the need for such research and support its delivery.

One direct way in which the Campaign can assist with the research agenda would be to develop its role as a gathering point for research and data on the costs of loneliness. The Campaign might develop a role in supporting the sharing of learning about such work, perhaps by providing an online repository of all the key research and a forum for those undertaking it.

This report indicates that local public spending bodies are starting to undertake economic evaluations of services to address loneliness and isolation amongst older people and it would doubtless be helpful if the people undertaking this work were networked and if awareness and knowledge of such research efforts was increased in order to support the development of more and more in-depth work of this kind.

Over the medium to longer term the Campaign might seek to develop and grow its role as a resource for research and learning by encouraging the standardisation of data collection for initiatives addressing loneliness and considering their cost effectiveness. It might then be able to use new technological applications to aggregate and analyse the data from numerous local initiatives to potentially build a stronger evidence base for intervention.

Next steps:

1. The Campaign should discuss this report and its recommendation with the members of the Research Hub.
2. It should investigate options for developing its website to enable it to become both a repository and active discussion forum for researchers and practitioners

developing relevant work and investigate the feasibility of fundraising to enable it to deliver this function.

3. Before full functionality is established it should seek to network those undertaking relevant work and seek to distil and disseminate the learning from it.

Promoting/developing approaches/tools which health and social care commissioners might use

The work being undertaken by Social Finance involves modelling the costs of loneliness among older people using the best available data and recognising that the existing research base is flawed.

This work has enormous potential to be a valuable resource for local authorities and the health service and to increase the investment made in services aimed at addressing loneliness and isolation amongst older people.

Social Finance is proposing, when they have completed work on the model, to make the methodology open source so that anyone can use it. Over time as experience of using the model grows the data and assumptions underpinning it will be tested and it will become more robust.

The Campaign might choose to have a role in promoting Social Finance's model to commissioners. It might also do some work considering what sort of support commissioners might need in adopting it: for example training seminars, a simple guide to populating it with data and a template for a business case for investment in services to reduce loneliness and isolation.

Overtime as more commissioners start to use the model, the Campaign might work in partnership with Social Finance to develop case studies on how it has been used and the outcomes achieved in terms of health and well-being benefits and reduced spend.

This work might build on/learn from the approach used by Whole Systems Partnership (WSP) for the Reablement Tool Kit. It might develop into a comprehensive package of training, analysis and support for the public sector in considering the issue of loneliness and isolation amongst older people and the development and evaluation of strategies to deal with it.

Next steps:

1. The Campaign should discuss with both Social Finance and the Whole Systems Partnership the option of collaborative work to develop a range of tools to support uptake and development of the Social Finance model.
2. It should examine the feasibility of funding being raised to support this work.