

Demonstrating the Effectiveness of Housing Support Services for People with Mental Health Problems: A Review

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Disclaimer

Views expressed in this report are not necessarily those of the National Housing Federation, the National Mental Health Development Unit, the University of York or Hull York Medical School. Responsibility for any errors lies with the Author.

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Summary

- The evidence base on housing support services for people with a mental health problem is less well developed than it could be. One consequence of the limitations with current evidence is that it is not clear to clinicians and health service commissioners how housing support services can potentially support and complement the work of the NHS and deliver important health outcomes
- This review was designed to identify outcome measures that can be used to examine the effectiveness of housing related support for people with mental health problems. The main objective of the review was to review effectiveness measures and discuss the development of an evaluation methodology that would:
 - be of sufficient robustness to stand up to the scrutiny of clinicians, social care and housing related support professionals and local and central government;
 - be both practical and cost effective to deploy in research that will often only have restricted resources available;
 - clearly and unambiguously demonstrate the extent to which housing related support services can have beneficial effects on the wellbeing of people with mental health problems.
- The review found that there was considerable variation in the provision and nature of housing support services for people with mental health problems. This variation had partially arisen for historical reasons but was also linked to guidance on the use of funding streams for supported housing that defined what could be funded in quite broad terms. This gave local authorities and service providers scope to innovate and develop service provision in their own ways.
- Categorising service types and service provision is quite difficult given the level of variation in the housing support service sector. Services and service activities do not fit easily within standardised categories.
- Services are also inherently flexible because they operate with a high degree of service user involvement and offer a considerable degree of personalisation. This means that a housing support service for people with mental health problems may not have a 'standard' package of support, but instead tailors its services to suit individual need.
- Services that were originally focused on 'housing support' activity have increasingly become involved in welfare, health and education, training and employment related services. Recent changes to funding arrangements mean that services can pursue the delivery of a package of support that extends

beyond housing related activity to a greater degree than has hitherto been possible.

- The UK and wider EU evidence base is quite weak in respect of housing support services for people with mental health problems. There is a quite substantial evidence base available from evaluations conducted in the US. However, many evaluations are focused on services for homeless people with severe mental illness; there is less evidence on housing support services for people with mental health problems as a whole. While many of these studies are very rigorous by UK standards, some US scholars have questioned the quality of some of the US evidence.
- Many US evaluations use standardised and validated outcome measures. These measures are 'validated' in that they have been used in multiple studies under different circumstances and found to produce consistent results. These measures are often those employed for clinical research and are used to assess continuity of care, psychological functioning, mental well-being, quality of life and cost effectiveness.
- A standard approach in the US is to precisely detail the process of service delivery and then to test service outcomes against recognised standardised validated measures for services for people with mental health problems. A housing support service is therefore assessed according to the extent to which it can demonstrate improvements in quality of life and mental well-being using outcome measures that clinicians and health service commissioners recognise from mental health service evaluations.
- This standard approach allows the detailed recording of the process of service delivery. This means that it is clear exactly what service delivery and service outcomes are associated with improvements in well-being, that the cost of services can be accurately detailed (and cost effectiveness determined) and that patterns of service delivery that are associated with good outcomes can be replicated. As outcomes are assessed in a uniform and consistent way, services that are operationally distinct can be robustly cross compared.
- The US evidence base includes evaluations that use quasi-experimental methods as well as evaluations that employ randomised control trials. Quasi-experimental models, where well conducted, are taken seriously as evidence of effectiveness by policy makers and service commissioners. However, there is a general expectation that evaluations will employ a comparison or control group or groups and that evaluations will use longitudinal methods (i.e. look at outcomes over time, including after contact with a housing support service has stopped).
- Longitudinal evaluation can show improvements over time, relative gains in well-being and quality of life for people who may not stay with a service for as long as was intended and also show the endurance of gains in well-being

after service contact has ceased. If a service can demonstrate that the benefits it delivers are sustained, a stronger case can be made for supporting that service.

- A great many indicators and outcome measures have been employed in evaluations of housing support services for people with mental health problems. There is a strong case for maximising robustness by not relying on any one set of outcome measures or a single outcome measure.
- In a context in which funding for housing support services will reduce very markedly by 2015 making the case for housing support services by robustly demonstrating their effectiveness and cost effectiveness will become increasingly important.
- The evidence base can be improved. While the costs of undertaking more rigorous evaluation will be higher than those associated with some previous attempts to show how well services are performing, those costs can be managed. It is not necessary or practical to evaluate every service using a clinical standard of proof as a small number of evaluations that demonstrate the general effectiveness of housing support services can support the sector as a whole. Evaluation can also inform service monitoring, which can be adapted to demonstrate service effectiveness on a wider scale.
- An evaluation must carefully record processes of service delivery in order to be certain about what patterns of service delivery are associated with improvements in service users well-being and quality of life, to allow service interventions to be accurately costed (and cost effectiveness to be assessed) and to allow good practice in service delivery to be accurately replicated. It is vitally important that the process of service delivery is fully understood.
- Service outcomes must in turn be tested against standardised and validated measures of mental well-being, quality of life and cost-effectiveness. A small number of relatively large scale and robust evaluations that are longitudinal and which employ a comparative or control group methodology should be conducted.
- It is recommended that a pilot exercise to test possible evaluative measures is conducted.

1 Introduction

The reasons for this review

This review by the Centre for Housing Policy (CHP) working with Hull York Medical School (HYMS) was commissioned by the National Housing Federation (NHF), working in collaboration with the National Mental Health Development Unit (NMHDU). The review looks at how housing support services for people with mental health problems could better demonstrate both the range of support they provide and also clearly show the benefits of that support. In particular, NHF and NMHDU were interested in how housing support services can systematically demonstrate service effectiveness to clinicians and health service commissioners, given that housing support services have the potential to positively influence clinical outcomes.

This review was intended to identify measures that can be used to examine the effectiveness of housing related support for people with mental health problems. The main objective of the review was to look at existing effectiveness measures and explore the potential for developing an evaluation methodology that would:

- be of sufficient robustness to stand up to the scrutiny of clinicians, social care and housing related support professionals and local and central government;
- be both practical and cost effective to deploy in research that will often only have restricted resources available;
- clearly and unambiguously demonstrate the extent to which housing related support services can have beneficial effects on the wellbeing of people with mental health problems.

This review is focused on housing support services for adults with mental health problems and severe mental illness. It does not encompass services for people with dementia.

Limitations in the current evidence base

The review was commissioned in a context in which the rigour and extent of evidence on housing support services for people with mental health problems was regarded as variable. There have been important developments in monitoring service activity and outcomes, most notably the Client Record and Outcomes Data collected on services that were funded through the Supporting People programme in

England¹ (Centre for Housing Research, 2010). However, these data were in some respects limited. One reason for this was that they did not monitor outcomes after someone with mental health problems had left a housing support service (only reporting outcomes at the point at which they ceased to use that service). Another reason was linked to the extent of the administrative burden that could be placed on housing support providers. While these returns were as detailed as was practical, there were necessarily quite 'broad brush' records of service activity rather than highly detailed, specific data. In particular, the Client Record and Outcomes Data are designed to fit all housing support services and there is no specific data collection focused on services for people with a mental health problem (Centre for Housing Research, 2010).

The standard of evidence about housing support services for people with mental health problems has been subject to criticism for some time (Quilgars, 2000; Fakhoury *et al*, 2002; O'Malley and Croucher, 2005). Chilvers *et al* (2009), gave the following assessment of the evidence base in a recent review for the Cochrane Collaboration:

Support for people with severe mental illness may be provided through supported housing schemes with the intention of increasing treatment success rates and reducing cycles of hospital readmissions. Many of these initiatives are based on informal reports of effectiveness and they are costly in terms of development, capital investment and on-going care provision. In this review we sought to compare supported housing schemes with outreach support schemes or 'standard care' for people with severe mental disorder/s living in the community. We did not identify any studies from randomised trials in this review. There are a number of supported housing options funded by local authorities as well as charities, which may be beneficial but could equally increase levels of dependence on professionals and provide greater exclusion from the community. Whether or not the benefits outweigh the risks are currently only a matter of opinion, debate and informal reports. There is an urgent need to assess the effectiveness of these schemes using well-conducted randomised trials.

It is important to note that perception of the quality of available evidence will change with the point of view. At least some providers of housing support services for people with mental health problems would dispute the conclusions of the Cochrane Collaboration, citing evidence that they have collected on their own services. Yet even if the Cochrane Collaboration's conclusions might be disputable in the case of individual services or service providers, the general lack of robust evidence across the sector as a whole is more difficult to take issue with (O'Malley and Croucher, 2005).

¹ See <https://www.spclientrecord.org.uk/> registration is required to access the data collected.

A need to show service effectiveness in new ways

Existing funding for housing support services will be subject to very heavy cuts for several years. All housing support services will therefore have to justify their costs both in terms of providing good outcomes for service users and increasingly in terms of how they can help *reduce costs* for other services, particularly NHS clinical services.

A new type of outcome monitoring will be required for housing support services for people with mental health problems. To show their effectiveness and how they can reduce costs to the NHS, social work services and other services, housing support services have to be assessed in new ways. Four points are particularly important here:

- It must be clear *precisely* what is being provided by housing support services, i.e. there must be a clear and detailed picture of service delivery. Unless the nature and scope of service interventions delivered to each service user are properly monitored and understood, it will be difficult to assess the cost effectiveness of housing support.
- *Language* is very important. Sometimes housing support services and health and social services use their own terminology or interpret similar terms in different ways. Outcome measurement must be comprehensible to an external audience.
- The *relationships* between housing support service interventions and beneficial outcomes must be *clearly demonstrated*. This includes showing the benefits for people with mental health problems using those services (such as improvements in quality of life) and other benefits, particularly the reduced use of clinical services and reductions in hospital admissions. Again, it is very important to have a full picture of *exactly* which services are being delivered so the associations between specific types of support and beneficial outcomes can be properly understood.
- Clinicians and health commissioners are used to service evaluations that employ validated² robust measures to assess outcomes for people with mental health problems and also to assess the impact of one service on patterns of use of other services. To attract health funding, housing support services will have to demonstrate their effectiveness using these methods.

It can sometimes be difficult to see the detail of a housing support service intervention. While some housing support services use more flexible approaches than others, what might seem a fairly 'standard' task might be approached through

² i.e. methods that have been repeatedly tested under differing conditions with different populations to ensure they produce consistent and comparable results.

one of a number of different service interventions. For example, ensuring someone pays his or her rent might involve a brief reminder from a worker, a much more time consuming intervention to ensure that rent is paid, or taking responsibility for rent payment away from an individual and handling it directly. Defining both the exact nature of a housing support service intervention can therefore sometimes be quite complex (see Chapter 2).

Language is important here in two senses. First, the terminology used by housing support service providers can sometimes differ from that employed by other service providers. A good example here is the use of the term 'intensive' which in health and social work terms has a specific meaning. However, in the senses in which it can be sometimes be employed by housing support services, the term 'intensive' can range from meaning something similar to what a clinician or social worker would understand by the term, through to meaning relatively intensive compared to other housing support services of the same type. As noted, when assessing and evaluating housing support services, it must be clear exactly what those services are doing which means evaluations should always carefully describe services and not use any terminology that might be ambiguous.

Relationships between housing support service activity and what clinicians regard as tangible benefits will sometimes have to be shown using the methodologies that clinicians recognise. This is very much the approach that has been adopted in North America, where housing support services for people with mental health problems have been shown to have benefits through using clinically recognised and validated measures of continuity of care, mental well-being and quality of life (see Chapter 3). It is potentially quite challenging for the housing support service sector to recognise these expectations, because significant changes in how service evaluations are carried out will be needed.

Finally, it has to be recognised that clinical research is more rigorous and systematic than many current approaches to assessing housing support service effectiveness (Chilvers *et al*, 2009). The methodological rigour from clinical assessment will need to be adopted when undertaking evaluations of the effectiveness of housing support services for people with mental health problems. As is discussed below, it must be understood that clinical research is generally better resourced than research into housing support services in the UK. As resources for evaluative research will decrease markedly over coming years, this means there is a case for focusing what resources there are on fewer, more rigorous, evaluations of housing support services (see Chapter 4).

The kinds of outcome measurement that will be required in this new context will include outcomes data on the following areas:

- Precise, detailed and unambiguous measurement of exactly what *forms of support* are being delivered by housing support services.

- The sustainability of *positive outcomes* after service contact has ceased, for example at 6, 9, 12 or 24 months after someone with mental health problems has stopped using a housing support service.
- The interrelationship between housing support services provided and *continuity of care* by the NHS and social services (social work). For example, can housing support services be shown to be associated with a reduction in unplanned psychiatric hospitalisations or with reduced use of community mental health services?
- The associations between housing support services and changes in *mental well-being and psychological functioning*. For example, can housing support services be shown to be associated with improvements in mental health and functioning?
- The links between housing support services and *quality of life, including social interaction*. For example can housing support services be shown to be associated with improvements in quality of life and positive forms of social interaction?
- The *costs and potential for cost savings* for housing support services. For example, can the cost of providing a housing support service be shown to be offset by corresponding savings in NHS expenditure?

In the UK, rigorous evaluation of clinical services has led to reconsideration of broader mental health policy and the range of services that are provided. Piloting of the IAPT programme³ which was designed to increase access to cognitive behaviour therapy, was demonstrated to have increased well-being and to have reduced NHS costs through careful evaluation. This led to the adoption of the IAPT approach throughout the NHS (Clark *et al*, 2009).

As is described in Chapter 2, some American models of housing support have been evaluated both in terms of their effectiveness for service users and in terms of the cost savings they could potentially generate elsewhere in the US welfare system (Tsemberis, 2010; Culhane *et al*, 2002; Metraux *et al*, 2003). These evaluations have demonstrated that housing support services helped reduce other welfare and health system costs, lowering the frequency of unplanned admissions into psychiatric wards and the rates at which US equivalents to community mental health services are used. There was also evidence that housing support services were reducing the rates at which the service users became homeless (reducing use of homelessness shelters) and the rates at which they were arrested (the costs of criminal justice interventions in the US are high). There was also evidence of improvements in well-being among service users.

³ Increasing Access to Psychological Therapies programme see: <http://www.nmhdu.org.uk/nmhdu/en/our-work/improving-access-to-psychological-therapies>

North American research has been able to make a policy case for housing support services based on rigorous service evaluation. This led to some models of housing support service being regarded as an 'evidence based' policy at Federal level in the US (USICH, 2010) and those models being adopted widely elsewhere, including in several EU member states (Pleace, 2008; Johnsen and Teixeira, 2010). The right kind of evidence collected using the right methods can make a very strong case for funding housing support services for people with mental health problems.

Methods

The work described in this report was a small and intensive three-month project conducted from September to November 2010. The review gives fairly detailed consideration of the key questions it sought to address, but was necessarily a much smaller scale and shorter exercise than the recent systematic Cochrane review of the evidence base (Chilvers *et al*, 2009).

The review centred on a critical assessment of methodologies that have been used to demonstrate the effectiveness of housing support services for people with mental health problems. All relevant research and related evidence from both the UK and abroad that was available in English (or English translation) was examined. The methodology we followed was a Rapid Evidence Assessment (REA). Based on the principles of a systematic review, an REA is intended to assess in a systematic and transparent manner the best available evidence to address specific research questions and involved:

- searching the electronic and print literature as comprehensively as possible within the constraints of the available timetable;
- collating descriptive outlines of the available evidence on the topic;
- critically appraising the evidence;
- providing an overview of what the evidence was saying.

Key decisions about which research to include in the review was a consultative process, with NHF, NMHDU and the Advisory Group established by NHF for the research (please see Acknowledgments). The research team made suggestions about the scope of what should and should not be included in the search terms which were then considered and commented upon by the research commissioners and the Advisory Group.

It was decided that only empirical studies should be included in the review stage. By limiting the review stage to empirical studies, the research team were able to focus on actual attempts at evaluating housing support services for people with mental health problems.

One reason for the research team suggesting an REA approach is that it is arguable that the Cochrane review may have set the bar for the inclusion of studies at an

unrealistically 'high' level, given the available evidence. For example, a series of longitudinal studies on the Pathways Housing First model, which are regarded as making the policy 'evidence based' at Federal level in the USA (USICH, 2010), were discounted by the Cochrane review because they were not clinical standard randomised control trials (Chilvers *et al*, 2009). Through the medium of an REA, the review was able to provide an assessment of the *best available* evidence. Please see **Appendix 1** for more details on the REA that was conducted for this review.

Report structure

Chapter 2 provides an overview of the range of housing support services that exist for people with mental health problems in the UK and also reviews some of the challenges that exist in evaluating those services. Chapter 3 discusses how best to measure the effectiveness of services, the benefits they deliver to service users and their cost effectiveness by drawing on the evidence from existing evaluations of housing support services for people with mental health problems that have been conducted. Chapter 4 presents a guide to developing a practical model for monitoring and evaluating service effectiveness. Where possible, this chapter makes recommendations for the employment of specific methodologies.

2 The challenges in evaluating housing Support for people with mental health problems

Introduction

This chapter provides an overview of housing support services for people with mental health problems. It begins with a definition of housing support and reviews how the sector has developed over time. The chapter then explores two of the key challenges in evaluating these services, the ambiguity in the available data that describe what these services do and the extent of diversity in service provision.

Defining housing support services

The emergence of a diverse sector

Housing support arose as a policy response to meeting the needs of people with mental health problems because of what was described as 'revolving door' syndrome (Quilgars, 2000). This described a situation in which someone with mental health problems experienced a crisis, were hospitalised and stabilised, but were then discharged, could not cope with living independently, experienced another crisis, and re-entered hospital. Mental health services were 'fire-fighting', responding to crises using often expensive emergency interventions, including unplanned hospital admissions, but not able to tackle the underlying issues that heightened the risk of those crises occurring and reoccurring.

There was some evidence that low intensity services that provided help and support in maintaining independent living could counteract the risks of someone with mental health problems experiencing this 'revolving door'. These services might help with minor practical tasks, such as paying the rent and utilities bills, which could undermine security of tenure but might be neglected when someone was experiencing a decrease in their mental well-being. A low intensity service might also help address issues like social isolation, by encouraging social interaction and providing some emotional support. In addition, low intensity services could also take a role in ensuring that clinical services were alerted when warning signs were present, for example if someone had ceased to take medication, and thereby try to stop a crisis from occurring (Quilgars, 2000; O'Malley and Croucher, 2005).

The development of housing support services

Initial attempts to help people with mental health problems live independently while minimising risks to their mental well-being began with the closure of long stay psychiatric wards. A key consideration in promoting this policy was cost reduction, as the long stay wards were very expensive to run, but closure was also pursued because of concerns about the quality of life for people with mental health problems living in long stay hospitals. The first models of what we would now regard as housing support began to emerge in this context.

From the outset it is important to make a clear distinction between *housing support* services and some NHS funded community services. An NHS service that moved people from a hospital ward into a smaller, shared living environment that was staffed with clinicians and nurses and provided permanent residence was a 'health' rather than a housing support service.

As the available funding for housing support services was 'housing' related, it could *not* be used to fund clinical care (i.e. clinicians and clinical treatment of any sort) or personal care (i.e. involving touching, such as washing, dressing or feeding someone). This meant there was a definitional line between what were regarded as 'housing' support services and the clinical and personal care services that NHS and local authority social services provided. This distinction was a very important one, because it led to the appearance of a distinct service sector focused on 'housing support' in the UK. A range of revenue funding was accessible to fund service development, including the Housing Benefit Service Charge Element and the Supported Housing Management Allowance, which could be used to cover a considerable range of revenue costs (Oldman *et al*, 1996). There were also grants to support the capital costs of developing purpose built accommodation based housing support services.

Housing support services were all intended to promote independent living by delivering low intensity 'housing related' support. Three broad types of housing support service emerged:

- *Staircase models* which used a series of shared residential stages to progress people with mental health problems towards independent living. The number of stages varied, but each successive stage would offer less support and have fewer rules than the preceding stage, with the intention that moving up a series of 'steps' would eventually lead to an independent life.
- One stage, purpose built supported housing with on-site staffing, usually intended as a halfway point between institutional care and eventual resettlement into ordinary housing. These services tended to offer individual rooms and/or self contained studio flats and are sometimes called *accommodation based services*.

- Mobile support workers aid the transition to living independently in ordinary housing from institutional settings and/or prevent issues linked to support needs from posing any threat to housing stability/tenancy sustainment. This group of housing support services are sometimes called *floating support services*.

The evidence was sometimes variable in quality, but these various housing support services appeared to be a cheaper option than keeping people who had the potential to live more independently in psychiatric hospitals. Importantly, these services also appeared to deliver an improved quality of life (O'Malley and Croucher, 2005).

The staircase model was used in the UK, but it was less widely adopted than in some other countries (Johnsen and Teixeira, 2010). This was less about the evidence that questioned its effectiveness and more a matter of the available resources for housing support services, which made single-stage accommodation based services and floating support services more financially viable options. Thus when the effectiveness of the staircase model began to be questioned in the international evidence, it had a less pronounced effect on UK service provision than was the case in North America and some EU countries. The problems that started to be identified with the staircase model centred on each step on the 'staircase' being in some senses a 'test', as a person using a staircase service had to show they could live successfully in one stage before being allowed to move on to the next stage. People were getting 'stuck' at particular steps, rather than progressing all the way to the point of living independently. In addition, staircase services were expensive to develop and run (Ridgway and Zippel, 1990).

British services tended to use one of these three broadly defined models, with the single stage accommodation based service and floating support services predominating. These services were not necessarily very consistent with one another in terms of the range of services they provided or how they worked. One reason for this was that services were being developed at a local authority level on a slightly haphazard basis, appearing because there was an apparent need combined with a local political willingness to prioritise meeting those needs. Another reason was that the capital and revenue available clearly specified that health and personal care services could not be funded, but used quite broad definitions of the 'housing support' that could be funded. There was considerable scope for local authorities and third sector agencies to innovate, adapt to local circumstances and to a considerable extent to go their own way in terms of what a specific service did. This meant housing support services for people with mental health problems in Britain were *diverse*.

An accommodation based service, for example, could be operating at what would in health or social service terms be regarded at a very low intensity, with workers on site providing a basic monitoring service and low level support. Yet there were also examples of accommodation-based housing support service models that were nominally the same service 'type', but which were far more intensive. There was less

variation in what floating support services did, but nevertheless, some services delivered a wider range of support and had much more contact with people with mental health problems than others. To compound the potential for confusion, different services and different service providers did not always use the same terminology, or when they did use the same terms, did not necessarily interpret those terms in quite the same way as one another.

It was well known that there was diversity in the sector because there were visible 'extremes' at either end of the accommodation based and floating support based types of service provision. However, the actual pattern of that diversity was not that well understood because the evidence base was not well developed (see Chapter 1). In a review of the evidence that was available on accommodation-based housing support services for people with mental health problems, O'Malley and Croucher (2005) noted:

Various typologies of accommodation have been developed reflecting the diversity in types of housing and support that exists. Generally, these reflect a continuum of support and staffing levels from relatively low levels, such as the supported group home, to high levels of support and staff, such as 24-hour staffed facilities. However, variations in terminology and criteria used to define residential facilities can impede comparisons between studies despite attempts to produce robust classification systems based on size, extent of day and night cover and staffing levels (p. 834).

NHS and social services funded community based services that could be described as 'hospital hostels', 'rehabilitation units' or were registered care homes, were *not* regarded as housing support because of the clinical and personal care services they provided (O'Malley and Croucher, 2005). Yet the demarcation between a 'housing support service' and some models of NHS or social services funded group homes, which could offer fairly limited support was not necessarily all that clear in terms of what those services did. They were not usually regarded as 'housing support' because they were funded with health and/or social services money, but it is arguable that the demarcation was at least in part *administrative*. Group homes might offer permanent residence, whereas most housing support services did not, being intended to promote independent living, but there were examples of housing support services that provided permanent housing-like accommodation. This blurred line between some 'health', 'social services' and 'housing support services' did not help clarify exactly what housing support services did and what their wider role was (O'Malley and Croucher, 2005). Arriving at a definition of what constituted a 'housing support service' for people with mental health problems was not an entirely straightforward exercise because of these considerations.

Housing support services after 2003: the impact of Supporting People

Since the early 2000s, the nature of housing support services in the UK has been strongly influenced by the Supporting People programme. Supporting People will shortly cease to be a single national programme with a dedicated funding stream (CLG, 2010).

The Supporting People programme was launched in April 2003. The programme was designed to enhance the quality of life for vulnerable people through the use of what was called 'low intensity housing-related support'. The programme provided extensive guidance and a ring fenced (dedicated) revenue funding grant. Local authorities that were designated as Supporting People Administering Authorities were given the power to use the ring fenced grant to commission services within the terms set by central government and to produce an area strategy. Supporting People was intended to deliver two main groups of low intensity housing-related service:

- Services that enhanced independence by enabling people with health care and support needs to live independently in their own homes, including people with mental health problems. These support services often enhanced and extended packages of care provided by social services and the NHS.
- Services designed to enhance the independence, well-being and inclusion of 'multiply disadvantaged' adults, a group that included people with mental health problems. A multiply disadvantaged adult was defined as an individual who was characterised by sustained worklessness that is associated with social isolation, risky behaviours like problematic drug use and various forms of support need.

Recent developments in service design

Supporting People encompassed the broad forms of housing support service already discussed and also included 'supported lodging' services. Supported lodgings were designed as low intensity support services, usually for a single adult, in which a landlord or (paid) host family had a low level support function. These services are not always clearly or consistently defined, but as a working definition they encompass arrangements where a landlord or host family keeps a (benevolent) eye on someone with mental health problems. This element of service provision is generally less formally organised than others.

As had been the case with the funding regime that preceded it, Supporting People was not very prescriptive about the service models that could be used to deliver housing support services. The programme was more specific about what *sorts* of support could be provided, although here too there was an element of ambiguity (Pleace, 2008b).

When Supporting People first began to operate, the definitions of housing support services it used focused on 'low intensity' services, these were low intensity in the sense that they did not involve as many contact hours as health and social care services and also because they did not provide personal care or clinical services (DETR, 2001; Pleace and Quilgars, 2003). Initially, Supporting People could fund the following types of service:

- *Help with finding appropriate accommodation and moving.* If someone with mental health problems has a housing need or was homeless, housing support services could help someone pursue the most appropriate accommodation available, visit accommodation and could also help with the move.
- *Practical assistance in setting up and maintaining a home.* Services that provided decorating, repair or gardening services were not initially fundable by the Supporting People grant. However, help in arranging access to these kinds of services and helping someone access a Community Care Grant to buy furniture and white goods, was fundable.
- *Training and support in daily living skills.* Including how to manage finances, to prepare and cook food, to shop and to clean.
- *Help with accessing health, care and other services.* This could include acting as a service 'broker', communicating with and in some instances helping to coordinate clinical, community care and other support services and alerting those services if a crisis looked imminent. It could also include ensuring that an individual was registered with a GP.
- *Help with accessing benefits.* People with mental health problems might need help in accessing all the benefits to which they were entitled.
- *Promoting choice and control.* Working to enable people with mental health problems to self-advocate, allowing them to claim benefits or services, make applications and deal with appeals or complaints on their own.
- *Support in developing social supports, social skills and social networks.* Services could help establish new social networks, helping people access opportunities for socialisation and work on developing friendships, peer support, befriending and other relationships and re-establishing links with family. Such support can help prevent isolation and increase the likelihood of mental well-being.

- *Emotional support and facilitating access to counselling services.* Some services provided direct emotional support to homeless people, within the context of an overall objective to promote eventual independence.

Over time, the scope of service provision that could be funded by Supporting People began to broaden. Flexibility in Supporting People funding was introduced for most Supporting People Administering Authorities. If an authority was graded 'excellent', (from 2007/8 the majority of authorities were graded 'excellent') Supporting People funding could be used 'for the purposes of providing, or contributing to the provision of, welfare services' (CLG, 2008). Certain activities, such as the direct provision of education, training and employment (ETE) services were still outside the remit of what could be funded, but the already fuzzy line between housing support services and personal care services became more blurred.

A housing support service can approach social services or a primary care trust and seek funding to directly deliver personal care or clinical services. Similarly, funding can be sought, for example from Jobcentre Plus, to deliver training and education services. Supporting People funding could not be used to fund these kinds of services, but that did not stop service providers from becoming active in these areas if they sought funding to do so⁴. Services existed that were part funded by Supporting People, the NHS and social services budgets and which directly provided a package of health, social work and housing related support. In the 15 pathfinder authorities that piloted the removal of the ringfence from Supporting People in England, 10% of all housing support services were receiving social services funding and 5% were receiving money from a primary care trust (Pleace, 2008b).

The working relationship between housing support services and health services has also become closer. Recent work published by the National Housing Federation discusses how innovations in housing support services, like 'extra care' supported housing for older people, have been encouraged and part funded by health commissioners and integrated into health care strategy⁵ (Molyneux, 2010).

The final changes introduced before the 2010 change in government were the removal of the Supporting People 'ring fence' in Scotland and the planned removal of the Supporting People ring fence in England. Leaving aside the heated debates about the logic and likely consequences of this change, as an authority could now theoretically opt to spend nothing on housing support services (Pleace, 2008b), this meant that several decades of administrative demarcation about what housing support services could do had come to an end. There was now (in Scotland and in England) no administratively defined 'housing support' sector that was shaped by the stipulations on how a dedicated 'housing support' funding stream could be spent.

⁴ These arrangements could predate the implementation of Supporting People.

⁵ www.housing.org.uk/Uploads/File/Policy%20briefings/Neighbourhoods/Health%20and%20housing.pdf

Providing it could raise the funding, an accommodation based or floating support services could deliver clinical care, social work support, employment and education services or anything else it thought might be required alongside the housing support services it also provided.

The line between 'housing support services' and other forms of support that might be received by people with mental health problems had, at least theoretically, been broken. This creates both opportunities and uncertainties for a sector that has until recently been defined by providing 'housing' support but can now, potentially, subject to available funding, choose between concentrating on its existing role, or redefine that role into something far broader.

Current provision of housing support services for people with mental health problems

Data collected on Supporting People funded service activity in England can be used to establish a general picture of housing support service use by people with mental health problems (CHR, 2010). In 2008/9, the status of some 5,928 people with mental health problems was recorded in the 'Outcomes Data' as they left or stopped using housing support services⁶. The bulk of this group were leaving floating support services (73%) with most of the remainder being people leaving accommodation based services (20%). Only a very small proportion of people had used supported lodgings. Most of the remaining 7% had used housing support services that were not primarily focused on people with mental health problems (the most commonly reported service use of this type was direct access accommodation for street homeless people at 2%). This data predates the removal of the Supporting People ringfence in England.

As can be seen in Figure 2.1, this group were most likely to be recorded as receiving support directly related to their mental health problems (shown as 'mental health' in the graphic, 83%). This support would have included both low intensity counselling, emotional support and, frequently, helping to facilitate access to or helping to coordinate NHS clinical and/or social work services.

Support provided was also frequently focused on promoting choice and control (69%), i.e. enhancing the ability of people with mental health problems to exercise their own decision making and helping them to take on responsibility. Tenancy sustainment, i.e. support designed to ensure that current housing arrangements were not threatened, for example by failure or inability to pay rent, utility bills or council tax, or because someone was exhibiting behaviour that others found challenging or anti-social, was also a prominent form of support (56%).

⁶ This total may include some double counting as the released data do not allow us to differentiate between individuals for data protection reasons. The figure is based on the individuals whose primary client group was recorded as person with mental health problems. The data are based on an exit interview/recording of last known status when someone leaves or stops using a housing support service.

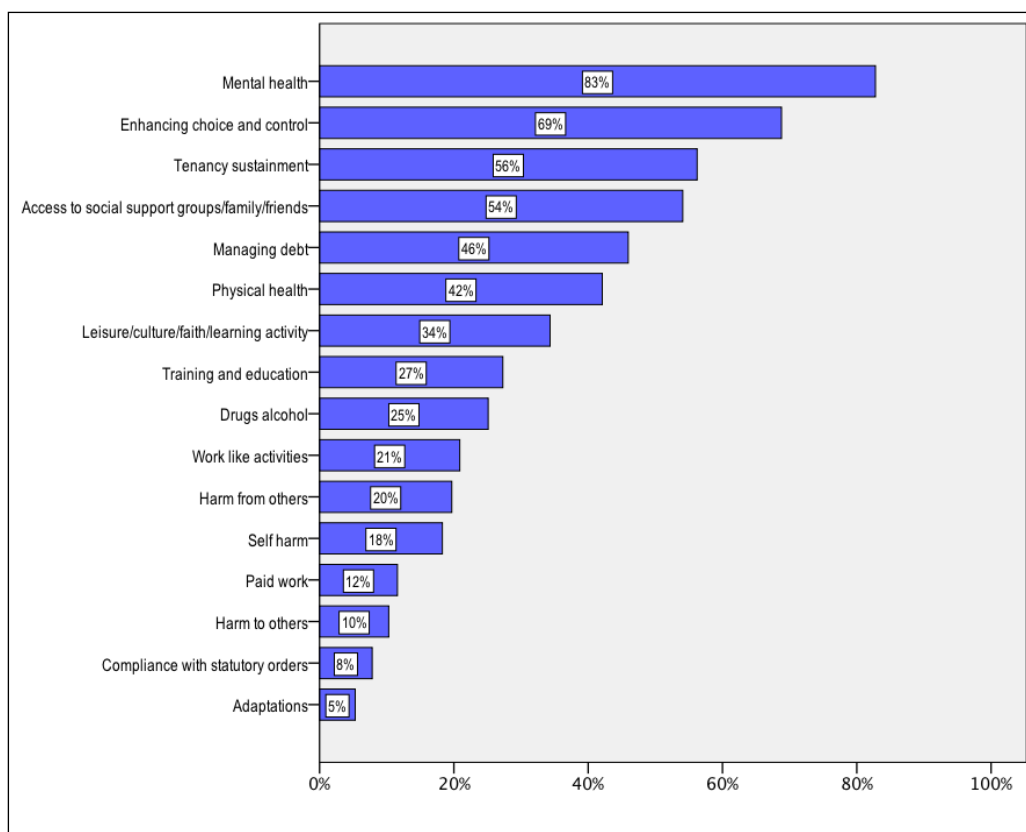


Figure 2.1: Types of support that had been received by people exiting housing support services for people with mental health problems in England in 2008/9. Based on Supporting People Outcomes Data for 2008/9 Authors' Analysis.

More than one half of people with mental health problems had also received support focused on enhancing their social networks, i.e. contact with family and friends, establishing new friendships and relationships and/or participating in social activities (54%). Beyond the associations between poor mental health status and social isolation, these problems have also been linked with failures in tenancy sustainment (Pleace, 1995).

Advice and assistance were also quite frequently provided with managing debt (46%) and with physical health (42%). One quarter of people with mental health problems had received similar support with accessing drug and alcohol services and one fifth with the management of threats of harm from others. Support with 'harm from others' would have included help in dealing with victimisation (e.g. by young people in areas characterised by anti-social behaviour) and help with 'harm to others' and 'self harm' may have included emotional support and also referral to other services. This showed that services were not only dealing with lower levels of need.

The range of services is clear from Figure 2.1. Activity focused directly on tenancy sustainment is still evident, but it is only a part of a wide range of support provision that includes linking up and working jointly with other forms of service. Note for example the 34% of people with mental health problems who had received support

with accessing leisure, cultural and learning activities or the 27% receiving help with education and training.

The categorisations of service delivery shown in Figure 2.1 are quite *broadly defined*. These are quite general measures of ‘types’ of service activity, they do not detail the exact nature of delivered services. This is an issue with the evidence base on housing support services more generally (see Chapter 1).

Figure 2.2 contrasts the support provided by the two main (broadly defined) service types, floating support and accommodation based services. The close parallels in the support received by people using both these service types are immediately apparent. These (broadly defined) service models are distinct, accommodation based services often using staffed, purpose built accommodation that is clustered together on a shared site⁷, whereas floating support services deliver support to people in ordinary housing scattered across an area.

It is important to remember that both these broad categories contain a wide range of services offering different levels and intensities of support, while some services use both the accommodation-based and floating support model. Nevertheless, the broad type of housing support service that people with mental health problems were using did not predict the kinds of support that they would receive. This point is quite an important one that we will return to in the following section.

⁷ As noted above, this is not exclusively the case, there are models that are dispersed or scattered or which use a combination of a clustered accommodation on a shared site and dispersed flats or houses.

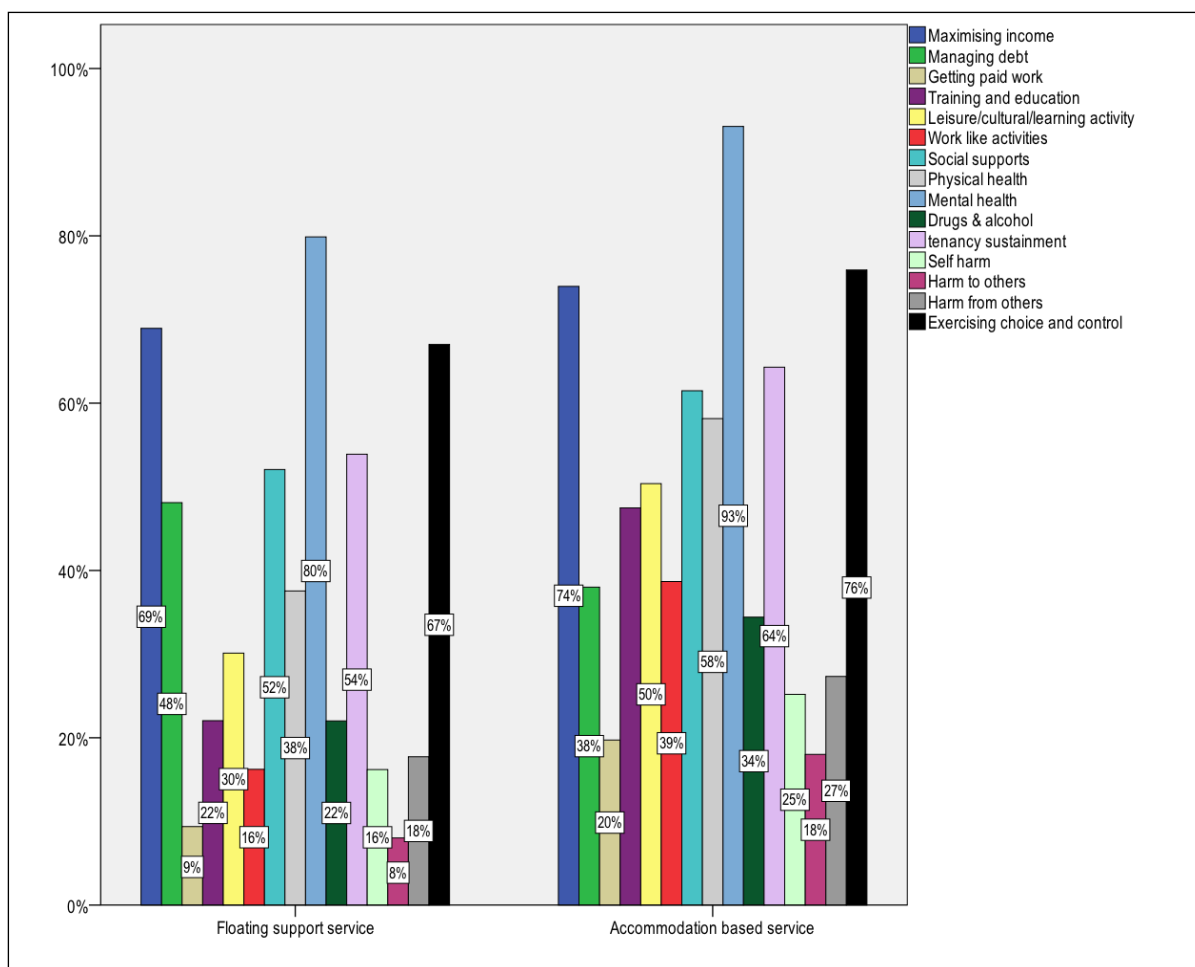


Figure 2.2: Types of support that had been received by people exiting housing support services for people with mental health problems in England in 2008/9 by broad service type.

Based on Supporting People Outcomes Data for 2008/9 Authors' Analysis.

Challenges in the evaluation housing support services

Ambiguity and variation

Ambiguity exists in the design, definition and operation of housing support services. This ambiguity is the result of *variation* in the sector both in the sense of the models used to deliver support services and in the sense of the range of support that these services provide. As noted above, this variation has been generated by the context in which housing support services have been developed.

Three areas of variation in the provision of housing support services for people with mental health problems can be identified. These can be summarised as:

- variation in *service models*;

- variation in housing support *service interventions* and ambiguity in the available description of those interventions;
- variation arising from the highly *flexible* and *user-led* nature of many housing support services.

The first of these issues has already been discussed in some detail, but it is worth revisiting some of the key points and considering the challenges it can present evaluative research. There will of course be some variation in service provision, including clinical and social work services, but it is nevertheless the case that these services are fairly *standardised*. Housing support services are less standardised and the nature and the extent of support they provide is subject to considerable variation.

- The broad 'service model' used does not indicate the *intensity* of support offered. Some accommodation based services offer only very low intensity support, while others closely resemble models that are funded by the NHS or social services. There are some inherent limits to the intensity of floating support services because these employ mobile workers visiting people in their own homes, but there is nevertheless considerable variation. It cannot be assumed that an accommodation based service is more intensive than a floating support service.
- The *range* of support provided by services is not accurately indicated by the broad description of the model used. Though different types of services can meet different needs, it cannot be assumed that accommodation based services provide a different range of support to that offered by floating support services.
- There are *hybrid* and *combined* models of service provision. This can include services that offer supported accommodation on a shared site, dispersed supported housing and floating support services for example.
- Services can employ combinations of funding sources to *deliver a range of non-housing related services*, including clinical services and social work, alongside their housing related support functions. In such cases a multidimensional package of services is being delivered by a single agency.
- While only some services are designed to provide open ended support, it is important to note that different services can be intended to work with someone for variable periods of time.

This variation creates a need for evaluative research to be very precise about what a housing support service is, how it works and what it is doing. The need to be precise about how a service works and what services it delivers is integral to a robust evaluation methodology (see Chapter 4).

This variation has made services and service activity quite difficult to classify precisely. There are two dimensions to this:

- Service *types* are defined in broad terms to try to encompass the variation that exists and because detailed categorisation of services would generate a large number of categorisations.
- Service *delivery* is often described in terms that focus on the broad type of support rather than being specific about exactly what that support entails and how exactly it is being provided. This is because the ways in which support needs can be met are varied and also because of the variation in the way services are designed and operate.

Some of these issues can be illustrated with a simple example. As mentioned, someone with mental health problems may face a threat to their tenancy because they are failing to pay the rent. This ‘need’ might exist on several levels, ranging from a simple unfamiliarity with living independently and with handling money, an administrative problem with Housing Benefit that is nothing to do with the individual concerned, or as arising because someone is living a chaotic existence as a result of their support needs. The intervention provided by a housing support service could range from a simple reminder to pay the rent, a housing support worker acting on behalf of a service user and tackling a benefit administration problem or, potentially, removing financial control from an individual and liaising with clinical services. All of this activity, which might range from a five minute phone call through to many hours of work, can be classified simply as ‘tenancy sustainment’.

From an administrative perspective, it is easy to see the logic for this, because using the category of ‘tenancy sustainment’ makes it broadly clear what a service is doing without attempting to describe what is actually a varied – and sometimes complex – process of service delivery. Yet if a service is being evaluated for its effectiveness as a mental health intervention, having such a broad description of service activity becomes a problem, because it is not clear what precisely is being delivered, which means that it is difficult to be precise about the effect of those services on the wellbeing of service users and also difficult to be clear about what that service intervention is costing. More broadly, if the categorisation of the service model itself is also sufficiently broad to be ambiguous (as is the case in relation to housing support services) then the administration and the process of service delivery also become unclear. Again, what works administratively is not necessarily suitable for evaluation, it is not enough to know, from an evaluators’ perspective that something is a ‘floating support service’, because that term encompasses too much variation.

An often reported strength of housing support services is their capacity for promoting user-involvement and the user-led nature of the support they can provide. Good housing support services can demonstrate a high degree of personalisation in service provision. There is evidence from evaluative research on housing support services that a willingness to be flexible, in the nature, the extent and the duration of services provided can be a key strength of housing support services (Jones *et al*, 2002; Jones *et al*, 2006).

The personalisation and user-led nature of housing support services potentially adds to the variation that can be encountered when trying to measure and evaluate service activity. This is because the packages of support provided can vary on a case-by-case basis. Housing support services may not have an entirely 'standard' response to a given set of needs because they are user-led.

Individual service providers will be clear what their services are doing or how they work and understand their own processes of service delivery. However, statistical data collection and some evaluations of housing support services use the *imprecise* broad classifications of service type and service delivery that were designed to make the variation in service models, the process of service delivery and the nature of services manageable from an administrative perspective. Writing in 2005, O'Malley and Croucher identified imprecision in the description of services as being a limit on the quality of the evaluative research. The later Cochrane Collaboration review also reported the same finding (Chilvers *et al*, 2009).

Having identified this issue and spent some time discussing it, it must now be noted that it is fairly simple to resolve. If future evaluations are precise about how services operate and what support they deliver, this will help make those evaluations valid and robust (see Chapter 4). It is vitally important that the *nature of support delivered* and the *process of service delivery* are fully detailed and clearly understood when undertaking an evaluation of a housing support service.

Showing the sustainability of service outcomes

The monitoring of housing support services for people with mental health problems has tended to focus on immediate outcomes (Quilgars, 2000). Housing support services should be able to produce evidence that they promote *sustainable* independent living. This means that the monitoring of outcomes for service users over a sustained period is required (this is known as longitudinal research). Obviously a service that can be shown to have lasting benefits after someone stops receiving support is inherently more effective (and more cost effective) than one that can only show short term gains that do not endure once service contact has ceased.

Longitudinal research is relatively expensive. However, as is argued below, one way to tackle the cost issue may be to focus on small number of realistically fundable evaluations that demonstrate the sustained effectiveness of housing support services. There cannot be an attempt to rigorously evaluate each individual housing support service as this is just not financially feasible (see Chapter 4).

In some instances, housing support services may operate on an open ended basis and keep support in place for people with mental health problems with higher support needs or whose circumstances create a need for on-going support. Again, there is a need to show that there is an on-going benefit to service users who are receiving permanent or semi-permanent support, in that their well-being is being promoted through service contact and that their living situation is both suitable and sustainable.

New directions in housing support services and new challenges for evaluation?

The influence of the longitudinal evaluation of housing support services in North America was briefly mentioned in Chapter 1. The evaluations of one service in particular, the Pathways Housing First model, are important in that they show that global policy interest in housing support services can be generated when the effectiveness of services for people with mental health problems is clearly demonstrated⁸.

The evaluations of Housing First in North America are important in another sense, because they give us some insight into the challenges that future evaluations of housing support services in the UK might need to meet. Housing First is a 'comprehensive' health, social work and clinical service that can in some senses be described as a welfare state in miniature (Pleace, 2008a). This means that any evaluation of Housing First has to be multifaceted, because alongside the housing support services it offers, Housing First also directly provides drug rehabilitation services and an Assertive Community Treatment (ACT) team (Tsemberis, 2010). Where such 'comprehensive' service models are adopted, the range of service activity to be evaluated is much broader.

As noted above, less and less control has been exercised in respect of defining what forms of 'housing related' support can be funded by Supporting People in England, a process that culminated with the removal of the Supporting People ringfence in 2009. This, combined with existing examples of joint commissioning using Supporting People, NHS and social services funding, creates a context in which what were 'housing support services' can also become clinical and social work services. Further, given current welfare policy changes there will be a policy imperative to help people with mental health problems into paid work and this is another area in which housing support services will become more active.

New multifaceted services may require new, multifaceted evaluative teams using a range of experts from different disciplines. There may also need to be an increased reliance on the use of methodological tools designed for the evaluation of health and social work services, alongside assessments of the housing support provided by such services. It is important to note that at the time of writing, it is not clear how widespread the use of multifaceted services similar to Housing First might become in the UK (Johnsen and Teixeira, 2010).

⁸ The Pathways 'Housing First' model is sometimes described as a homelessness service but it is only available to individuals who exhibit severe mental illness, often alongside problematic drug and/or alcohol use. It is perhaps most accurately described as a service for people with severe mental illness at risk of sustained homelessness, a group referred to as 'chronically homeless people' in the US.

3 Existing models for evaluating housing support services for people with mental health problems

Introduction

This chapter explores the methods used by evaluations of housing support services for people with mental health problems. The chapter begins with an overview of this evidence base before moving on to discuss four evaluative approaches. The chapter concludes with a discussion of the challenges that can exist in selecting from the wide range of outcome measurements that are available.

An overview of existing evaluative research

Evaluations of housing support services for people with mental health problems are unusual in the UK (Sharples *et al*, 2002; Park *et al*, 2002; O'Malley and Croucher, 2005; Bowpitt and Jepson, 2007) and such evaluations are also not that widespread within the EU (Brunt and Hansson, 2002; Sahlin, 2005; Furlan *et al*, 2009)⁹. The British and European evidence base on housing support services for people with mental health problems is therefore quite thin.

In addition to the specific evidence on housing support services, there are NHS data that can be used to understand context, such as the Mental Health Minimum Dataset (MHMDS)¹⁰ which is used for all people with mental health problems in England who use secondary mental health care. The MHMDS records basic data on the housing circumstances of people with mental health problems. This allows us some understanding of the extent of poor housing and homelessness among people with mental health problems, although it cannot be utilised for service evaluation purposes. In addition, there is a substantial literature looking at health service interventions and outcomes for people with mental health problems. This includes research from the mid 1980s that focuses on the use of *community based* health and social services in closing down long stay psychiatric hospitals, for example the 'Team for the Assessment of Psychiatric Services' or 'TAPS' studies (Thorncroft *et al*, 1992). There is also a UK and international medical research literature on rehabilitation and recovery that has obvious relevance, which can be accessed through publicly accessible resources such as the PubMed web interface to the

⁹ This review only looked at studies that were written in English or which were available in English translation (see Appendix 1)

¹⁰ www.ic.nhs.uk/mhmds

Medline database¹¹. As noted above, there are also examples of rigorous evaluation of clinical services that has led to the reconsideration of broader mental health policy and the range of services that are provided, for example the piloting of the IAPT programme¹² (Clark *et al*, 2009). The vast array of research evidence on mental health and mental health services is valuable in setting the broader context and thinking about some of the ways in which outcomes (particularly around mental health) can be measured. However, the short piece of work described in this report was only designed to critically assess *specific* attempts at evaluation of housing support services for people with mental health problems and to discuss what might be learned from these evaluations to improve the UK evidence base.

There is a substantial literature detailing specific evaluations of housing support services conducted in North America. Most of this literature is from the US and that is heavily focused on services for homeless veterans (Rosenheck *et al*, 2003; Mares *et al*, 2004; Cheng *et al*, 2007; O'Connell *et al*, 2008) and services for long-term homeless people with severe mental illness often coupled with problematic drug and alcohol use (Tsemberis, 1999; Culhane *et al*, 2002; Jones *et al*, 2003; McHugo *et al*, 2004; Martinez and Burt, 2006; McGraw *et al*, 2009; Gilmer *et al*, 2010, Tsemberis, 2010). There are a smaller number of other North American studies that critically evaluate the provision of housing support services for people with mental health problems who are not in either of these two groups (Carling, 1993; Wong and Solomon, 2002; Nelson *et al*, 2007).

These evaluations tend to approach the assessment and evaluation of housing support services in a similar way. Services are, with varying degrees of precision, described and the process of their service delivery is recorded, again with varying degrees of precision. Many of the authors of these evaluations are psychiatrists and psychologists and the approach they take is to test various elements of housing support service activity against validated¹³ *clinical* measures which can be broadly described as falling within one of three groups.

- Outcome measures focused on the *continuity and extent of use of clinical care*, for example the extent of unplanned psychiatric hospitalisations and patterns of emergency service use. Recorded reductions in unplanned use of emergency health services, alongside reductions in the use of clinical services more generally, are both key arguments employed in favour of the cost effectiveness of housing support services (see below).
- Outcome measures focused on *mental well-being* and *psychological functioning*, these include many widely used scales such as the GHQ-12 or the BPRS (see below). Improvements in well-being and psychological

¹¹ <http://www.ncbi.nlm.nih.gov/sites/entrez>

¹² Increasing Access to Psychological Therapies programme see: <http://www.nmhdu.org.uk/nmhdu/en/our-work/improving-access-to-psychological-therapies>

¹³ Measures that have been tested several times in the field to ensure that they produce consistent results.

functioning which can be linked to use of housing support services serve as one of the key arguments in favour of the effectiveness of housing support services.

- Outcome measures focused on *quality of life and social interaction*. These include tools like the MWIA or COPES-R (see below) that measure social support, community integration and the overall quality of an individual's social life. Again, improvements in these outcome measures, where they can be linked to housing support services activity, also serve as a key argument in favour of these services.

These studies also tend to measure the progress of service users over time, using a longitudinal approach, usually covering a period between one to three years, although some can be as long as five years. One particular advantage of this approach is that it can illustrate the '*distance travelled*' by service users. For example, it will sometimes be the case that service engagement ultimately ends with an unplanned break in contact with a service user and it not necessarily being clear what eventually happened to that individual. If validated measures have been applied to that individual over time, any relative gains during service contact, for example in continuity of care, mental health status and quality of life will have been recorded. In addition, when a service user does not reach the position the service would have ideally wished, those gains that have been made will also be recorded.

There are also specific studies of cost effectiveness that measure the impact of housing support services (Dickey *et al*, 1997). For example, Culhane *et al* (2002), looking at the "New York, New York" supported housing initiative which sought to reduce the levels of sustained homelessness linked to severe mental illness in the city, examined the potential cost savings from reduced use of clinical and other services. Their study also explored reductions in the use of emergency homelessness shelters and in the rates at which street homeless people with severe mental illness were arrested and experienced short term imprisonment. A similar study tested cost savings in clinical services against various measures of individual mental health, social support and quality of housing (Rosenheck *et al*, 2003). Value for money for housing support services was assessed in terms of the cost offsets for other services, i.e. housing support was demonstrably reducing the rate at which *more expensive* services, particularly emergency medical services, were being used.

The methodologies employed do vary, but much of this evaluative research shares five broad features.

1. There is detailed recording of the activity of the housing support service being evaluated, including the processes of service delivery. This is necessary because it must be *precisely* clear what a service is doing in order to properly assess service delivery costs and in order to replicate good practice that is achieving positive outcomes.

2. Validated measures of mental well-being and quality of life are used to monitor the impact of housing support services on service users. The most common methodology is to use (often advanced) statistical analysis to test changes in well-being and quality of life against housing support service provision. Thus the success (or failure) of housing support services in terms of the well-being of people with mental health problems is expressed by using validated outcome measures. As is discussed below, some of these validated measures encompass the suitability and quality of housing.
3. Assessment of cost effectiveness is a feature of much American work on housing support services for people with mental health problems. As noted, cost effectiveness is almost always assessed in terms of the *reductions* in other forms of service use, particularly clinical services that can be associated with people with mental health problems using housing support.
4. The evaluations are often longitudinal.
5. It is common practice to employ quasi-experiment and randomised control trial methodologies that test outcomes for two or more matched groups receiving and not receiving the service being evaluated.

A number of North American studies have adopted an approach that involves creating a 'summary' score for broad types of activity. For example, a considerable number of individual tasks might be involved in promoting tenancy sustainment for someone with mental health problems. Rather than test all the areas of 'tenancy sustainment' related service activity against the quality of life and well-being of an individual, these studies create a summary variable (usually a score, for example between 0-5 or 1-10) that describes the general level of 'tenancy sustainment' support provided.

Summary variables can be useful when testing the relative importance of different areas of housing support service activity, such as the collective effect of all 'tenancy sustainment' service interventions compared to the collective effect of all service interventions focused on 'social isolation'. This technique also makes it easier to make judgements about *broad* types of housing support service activity that make the most positive difference to reducing costs and improving individual well-being. Using summary or score variables might also allow comparison of services that work quite differently but which have the same broad objectives. However, care is needed in ensuring that the summary variables are properly representative of the actual patterns of housing support service provision (Tsemberis *et al*, 2003).

The design of North American evaluations often reflects, or directly employs, the methodologies used in clinical research. The key methodology employed by clinical research is comparison between similar or (insofar as possible) identical groups. One group is given a new treatment and the other group is given an existing treatment and the outcomes are monitored over time (studies can encompass more than two groups given different treatments). These two elements are central to

clinical evaluation, research *compares matched groups* given different treatments and the variations in outcomes between those groups are *monitored over time*.

Clinical research uses statistical analysis to assess outcomes and will be designed to make that analysis robust. Statistical tests will often be advanced techniques that are designed to try to control for spurious associations. To take a hypothetical example, a test of one variable against another (e.g. a crosstabulation) might suggest an association between receiving support focused on countering social isolation and an improvement in mental health. However, a test that controls for the effects of several variables might actually show this association is not actually present, because other variables are influencing the result. For example, the apparent 'association' between receiving support for isolation and improving mental health status might be shown to be because those people receiving support for isolation tended to be better housed, or had more disposable income, i.e. it was living in better conditions or having more money, *not* the support focused on countering isolation, that was *actually* improving their mental health.

The requirement for matched comparison and for studies to monitor effects and outcomes over time has important implications. While evaluations do not need to be very large to be statistically robust, they do need to be carefully conducted for the statistical analysis to be valid.

From a clinical perspective, the costs of these forms of evaluative research are not particularly high at least when looked at in relation to the costs of some of the treatments being tested against one another. From the perspective of housing support service providers who are delivering relatively low cost services within tight budgets, the financial cost of a robust evaluation may look daunting. As noted in Chapter 4, one way to deal with the issue of resources may be to support a small number of robust evaluations that clearly show effectiveness and whose results can be drawn upon by a large number of service providers. In addition, it is also possible to fund smaller, relatively robust pieces of evaluative research that are of sufficient quality to be taken seriously by health commissioners (see Chapter 4).

The cost of the most robust forms of evaluation is reflected in North American research base. Full randomised control trials (RCTs) are fairly unusual in the existing research literature because it is a costly and time consuming exercise to draw together two properly matched samples (one of which receives the housing support service being evaluated and the other does not, although they usually receive alternative services). Many evaluations are cheaper 'quasi-experimental' exercises that employ *comparison groups* that are broad, but not exact, matches. Some pieces of work have also employed administrative data from databases and compared outcomes over time, without directly collecting evidence from services or service users themselves.

It is important to note that while the North American evidence base is generally better than that available elsewhere, it is not uniformly excellent. O'Campo *et al*

(2009) in their recent evidence synthesis on housing support services for homeless people with severe mental illness identify several limitations in North American evaluations. These included weakly constructed and/or poorly described comparison or control groups, high attrition rates (the study lost contact with a statistically significant number of the people it was focused upon) and evaluations being 'statistically under powered', either because of problems with sampling or with the tests used. In addition, some evaluations were viewed as giving an insufficient description of what housing support services were doing and how they were delivering services. As noted in Chapter 1, the recent Cochrane Collaboration review took a generally negative view of the quality of the entire research base on housing support services for people with mental health problems (Chilvers *et al*, 2009). There can also be problems in using matched group comparisons, such as RCTs, in assessing services that provide complex and multifaceted interventions, as RCTs are a model primarily developed for assessing medical treatments.

Britain has a different evaluation tradition in housing support service and welfare service evaluation from that found in North America. The British academics working in this field tend to be social policy and housing policy specialists with broad social science training, rather than clinicians, and are less likely to possess advanced statistical skills. The work they produce is generally much more qualitative and focused on the perceptions of people using services (Sharples *et al* 2002; Bowpitt and Jepson, 2007). Evaluative research of this sort is likely to involve one to one semi-structured interviewing of service users (i.e. only the broad parameters of the conversation are set by a researcher, the service user is given space to talk and voice opinions) and focus groups (a similar process in which a group is encouraged to talk about a subject within parameters set by a researcher). North American evaluations do include detailed work that is solely concerned with understanding the preferences of people with mental health problems (O'Connell, *et al* 2006; Nelson *et al*, 2007; Montgomery *et al*, 2008) but some evaluations only allow service users to express opinions in a surveys, or sometimes only record user well-being using standardised measures (McCarthy and Nelson, 1991; Morse *et al*, 1994).

The representation of service users' views that the British social science tradition brings to evaluative research is important because, when correctly and rigorously implemented, it can give a systematic expression of the 'voice' of service users. By contrast, evaluative research that is entirely statistical in nature uses predetermined outcome measures to assess what is 'good' or 'bad' about a service without asking service users themselves. This might be seen as disempowering service users through not directly representing them. The counter argument is that service users' views are not sufficient on their own to allow a full and proper evaluation of services and that, even accounting for this deficiency, the standard, rigour and robustness of the North American evidence base far exceeds that found in the UK. Equally it might also be argued that the user views expressed in British evaluations are still being filtered and interpreted by researchers.

Another criticism that might be focused at the North American evidence is that it can sometimes make limited allowance for context. Some, though not by no means all, evaluative research can, implicitly, adopt the view that the social and economic position of people with mental health problems is a result of their diagnosis and that improving their mental health will improve that position. Focusing on individual characteristics when looking at social problems runs contrary to European social scientific tradition. Some European approaches reject explanations of social and economic exclusion that look solely at individual characteristics and look for more complex and nuanced explanations in how groups like people with mental health problems interrelate with wider society. From this perspective, if someone with mental health problems ends up homeless, it might not be just their diagnosis that put them there, it might also reflect failures in the wider context of mental health services, the welfare system and also the economic situation in which they live.

Understanding context is important because housing support services do not operate in isolation. A housing support service will probably have better outcomes if it operates in an area with excellent NHS services with which it is well coordinated than a similar service working in an area in which NHS service are relatively poor. Sometimes the external factors will be more subtle and indirect, a housing support service that is able to access suitable housing with good and affordable public transport links might perform better in promoting social support, for example, because service users can travel to meet friends and family more easily. Similarly, outcomes on education, training and employment may be better in areas which are more economically prosperous and in which more work is available (see Chapter 4).

Different approaches to evaluating services

Testing service effectiveness using services' own goals and objectives

One way to deal with variety in housing support service provision is to assess services in their own terms. This essentially involves looking at the targets a service sets for itself, which will to some extent be specific to that service (or the same service provided on multiple sites by the same provider) and determining whether the service is delivering what it seeks to deliver. This approach is quite widespread in outcome monitoring conducted by service providers on their own services in the UK, but there are a few problems with evaluating services in this way.

- Services can be so different from one another in what they seek to achieve and in how they measure those achievements, that cross comparing them in terms of the *own* outcome measures is difficult. A major reason why North American studies rely heavily on validated outcome measures is to allow comparison across service evaluations, i.e. varied service models with

differing objectives can be directly compared with one another using a 'standard' set of outcome measures.

- There are dangers in relying entirely on a service's own definitions of its goals and what constitutes a 'success'. A criticism that has been directed at the comparative US research that tested Pathways Housing First models against staircase models has been that the comparison uses a 'Housing First' outcome measure, *not* the measures of success that staircase models would use (Pleace, 2008a; Tsemberis, 2010). In other words, one set of services has ended up being tested against the criteria for 'success' that was actually designed for the other set of services it is being compared with.
- The measures developed by individual service providers may be insufficient in range and/or quality to be widely accepted as measures that demonstrate service effectiveness. A service that constructs its own, untested, broad measure of mental health status based on the views of its housing support workers is, from a clinical perspective, not being precise about measuring outcomes. By contrast, a service that is rigorously employing a widely recognised and validated measure of mental health status would be regarded as monitoring outcomes much more precisely.

Many US evaluations have four stages. First, the goals a service sets for itself are described in detail. Second, service delivery processes are described in detail. Third, the evaluation tests whether, or to what extent, the outcomes a service seeks to achieve for itself are actually delivered. Finally, the evaluation tests to what extent the service achieving the outcomes it sets for itself makes any difference to continuity of care, mental well-being, psychological functioning, quality of life and the costs of service use for people with mental health problems, using widely accepted, standardised and validated outcome measures (Kallert *et al*, 2007). This process is summarised in Figure 3.1.

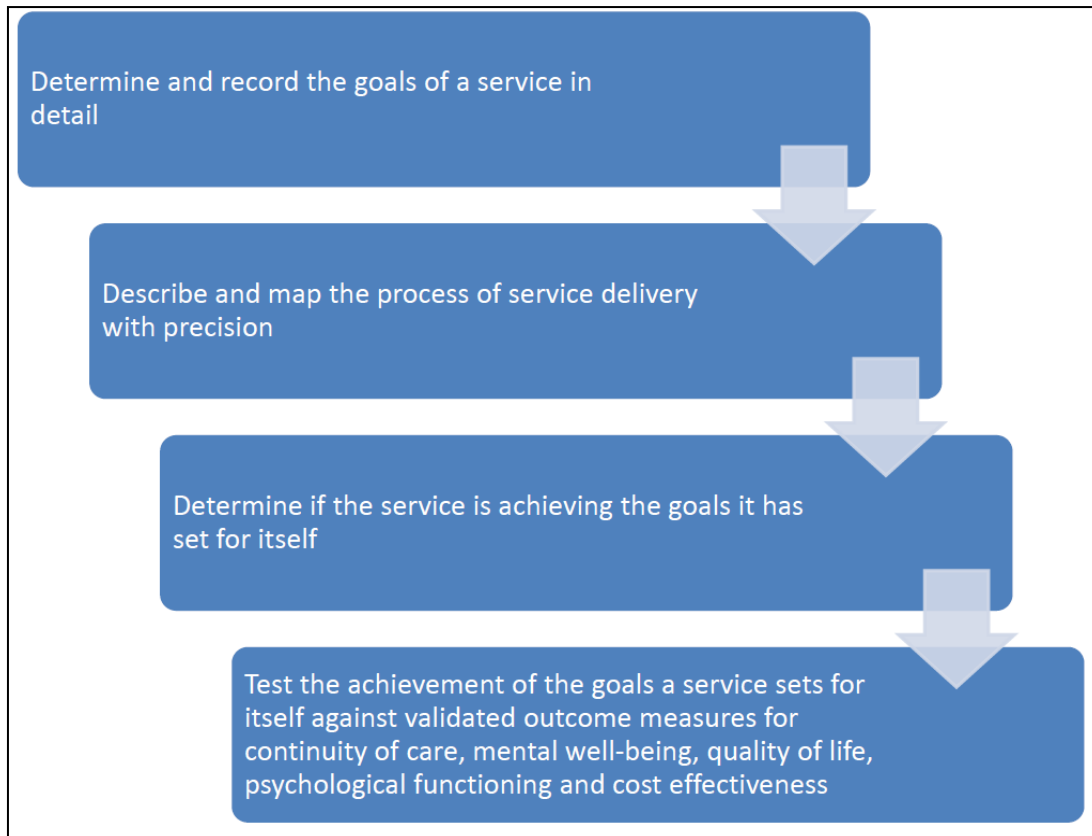


Figure 3.1: Testing whether a service achieving its own targets and objectives is having beneficial effects using validated measures

Testing service effectiveness using standardised definitions of service interventions

The disadvantage of the preceding approach to evaluation is that it can be difficult to compare what different services are *doing*. While the self-defined goals and the detail of the service delivery used (and hence its cost) can be recorded in detail, services can be sufficiently different from one another to make cross comparison rather difficult (see Chapter 2).

The problem is exacerbated by what is sometimes called ‘paradigm drift’ or ‘model drift’. This refers to a situation in which services that begin by sharing, or at least saying that they are sharing, a basic operational model, gradually drift apart and become distinct from one another as they adapt to specific circumstances (Pleace, 2008a and see Chapter 4). Model drift is very evident in respect of ‘Housing First’ services, which now exist in such a diversity of forms that the agency that developed the original service has introduced a ‘fidelity scale’, designed to test whether a service actually resembles their model of service delivery (Tsemberis, 2010).

These factors make the idea of constructing standard definitions of housing support service interventions appealing, because if service interventions can be defined in a standard way, direct comparison of services not only in terms of outcomes and costs, but in *what they are doing*, theoretically becomes possible. This happens to some extent now in terms of the outcome monitoring data for Supporting People

funded services in England (Centre for Housing Research, 2010). However, this example uses broad categories to describe service activity which do not record the detail or nuance of service delivery. Furthermore, the Government decided to end the national collation and analysis of outcomes data in April 2011.

However, a problem exists with this approach because of the diversity described in Chapter 2. On one level, it might seem easy enough to categorise a service intervention as 'tenancy sustainment', but the operational reality is rather more complex. Returning to the example of the difficulties a person with mental health problems may have paying their rent, the intervention might be seen as 'tenancy sustainment' if a support worker reminds someone with mental health problems to pay their rent. However, if their failure to pay their rent is because they are experiencing a downturn in their mental health that is linked to problematic drug use, and which requires a support worker to ensure clinical and drug services are involved, can that be called 'tenancy sustainment'? Clearly on one level it is, but the housing support service is also arranging help with mental health problems, problematic drug use and ensuring the health and well-being of the person it is working with. Should this activity be recorded under several categories and if so, should one of those categories take precedence over another?

Intensity of support is also a difficulty, in that a 'tenancy sustainment' activity might constitute a friendly reminder to pay the rent, or the worker taking some financial control from someone with mental health problems to ensure it is paid. Questions exist about quite how to record these interventions, such as what constitutes an 'intense' or 'low level' service.

Another difficulty is that nuance of service operation can be lost, in the sense that what might be different approaches to meeting a need might potentially be assigned to a single broad category of service activity. For example, the tenancy sustainment activity of two housing support services might differ markedly in terms of the range, nature and extent of support provided. In order to fit into a 'standard scale' of service interventions, both services would probably find the detail of what they delivered over simplified and perhaps even distorted. This would have happen to some extent in order for a workable shared categorisation of service activity to work.

Categorisations of service activity would have to be *intentionally distinct* from how any one service would describe itself because they would be intended as the basis for a system of outcome assessment that can be employed for comparative evaluation. From the perspective of housing support service providers this approach might be seen as too narrow, or as not representative, because their particular service or services have a wider remit. Differences in operation are, as noted in Chapter 2, also reflected in differences in language and definition. Ensuring consistency in recording across a standardised system might be highly challenging.

The danger, in a diverse sector like housing support services for people with mental health problems in the UK, is that the standardised definitions of service

interventions might not actually be directly representative of anything. If service activity is, in effect, 'forced to fit' into predetermined categories, accuracy is compromised. A further question concerns those aspects of service activity that a standardised scale fails to record. One of the pre-requisites of high quality evaluation is to fully understand what is being done by services, i.e. the *process* of service delivery, not least because it is so important to ascribe costs to service activity. Ultimately one key risk with standardised measures of service activity is that they compromise accuracy.

If a standardised set of service activity and service process measures were to be devised, these would still need to be tested against validated measures of well-being, cost effectiveness and other measures of effectiveness. This process would involve categorising service delivery goals and processes of service delivery into standard definitions of service interventions and then testing these against validated measures of continuity of care, mental well-being, quality of life, psychological functioning and cost effectiveness (see Figure 3.2).

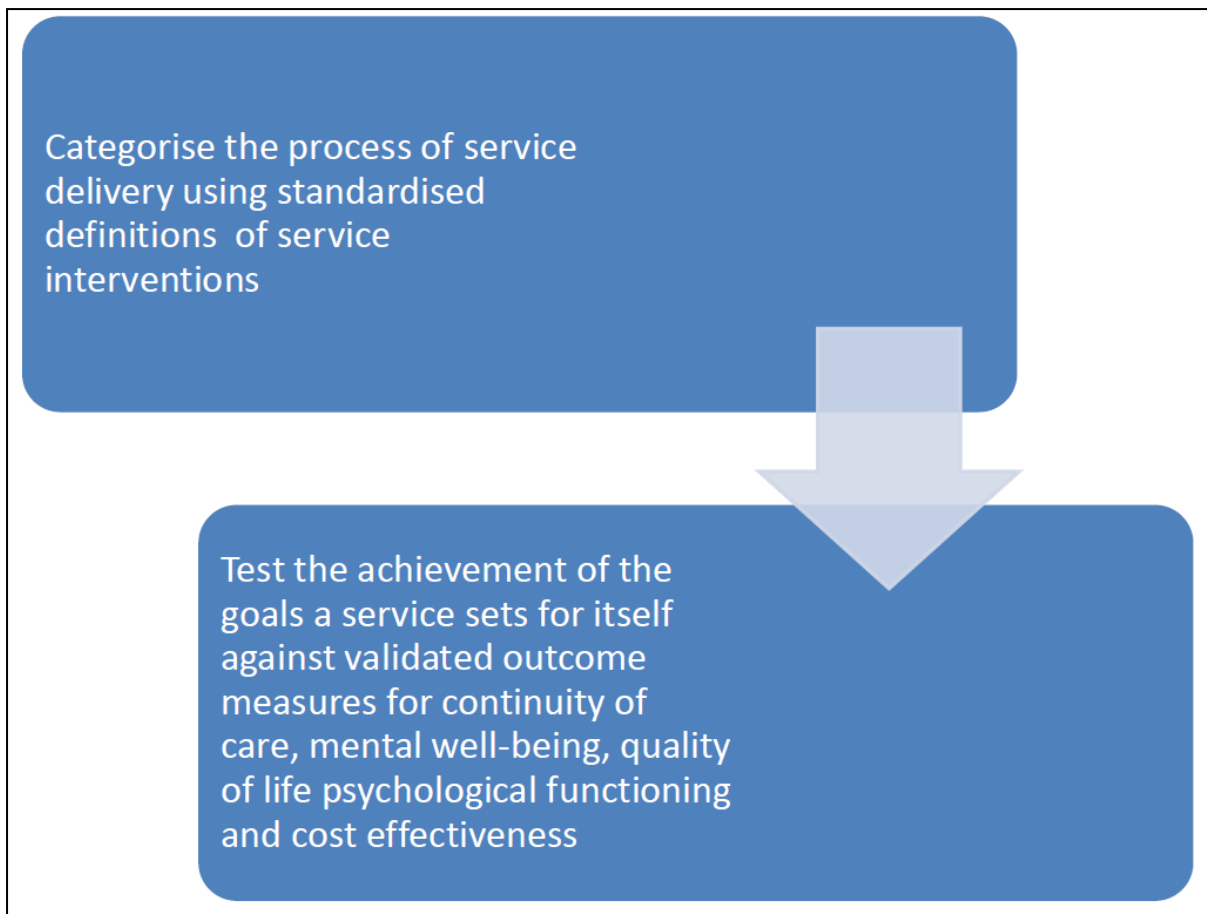


Figure 3.2: Testing service effectiveness using standardised definitions of service interventions

Testing service effectiveness by using validated housing support outcomes for service users

The previous section raises the question of whether it is possible to evaluate housing support service activity in detail *without* trying to generate a single categorisation of service interventions. An alternative approach is to adopt a detailed validated scale of 'housing support' *outcomes* for service users. This is a practical proposition because housing support services tend to share the same broad operational goals, i.e. to maximise independence and quality of life for people with mental health problems and reduce their need for clinical services. If a shared set of common goals that all housing support services for people with mental health problems should aim to achieve can be assessed using shared validated outcome measures, services can be directly compared using the same outcome measure.

The detail of service operation still needs to be recorded, i.e. there must be a precise and detailed understanding of the *process* of service delivery. Again, this is necessary for the same reasons as for any other form of evaluation, it must be clear what exactly is being done to ensure that the costs of service delivery can be measured and to allow any good practice in service delivery to be accurately replicated.

In this approach, there is no attempt to place service delivery processes or the goals services set for themselves into pre-determined categories. Outcomes are assessed using validated 'housing support' outcomes for service users. An example of this kind of this approach is shown in Figure 3.3 below.

The SAMSHA (Substance Abuse and Mental Health Services Administration) scale of housing satisfaction shown in Figure 3.3 asks a series of questions, based in this instance on Likert scales (respondents give a rating between 1-5 or 1-10). The answers to these questions then contribute to four scores (summary variables) at different weights, as is shown in the 'weighting' column. These summary variables are choice, safety, privacy and location. For example, a good score on living close to shopping, transport and other amenities increases the overall 'location' score more than a question that is not really related to location¹⁴. In another example, service users being able to exercise choice about when, or whether, they see a housing support worker both make more heavily weighted contributions to the summary 'choice' variable than to other summary variables (Tsemberis *et al*, 2003). This approach therefore allows direct comparison on some detailed outcomes and also, through the use of the summary variables, on overall service performance in more broadly defined areas.

¹⁴ The term 'proximity' is used by Tsemberis *et al* (2003).

Question	Weighting
The amount of choice you had over the place you live	Privacy, Choice, Safety, Location
How close you live to family and friends	Location, Safety, Choice, Privacy
How close you live to agencies where services* are available	Location, Safety, Choice, Privacy
Choice you have about <i>when</i> to see housing support worker	Choice, Privacy, Location, Safety
The choice you have about whether to take medication	Choice, Safety, Location, Privacy
How close you live to shopping, transport other amenities	Location, Choice, Safety, Privacy
How much control you have over who can enter your home	Privacy, Safety, Choice, Location
How long you will be able to live in your home	Choice, Privacy, Location, Safety
The safety of your neighbourhood	Safety, Privacy, Location, Choice
The amount of privacy you have	Privacy, Safety, Choice, Location
How affordable your home is	Choice, Privacy, Location, Safety
Amount of time it takes to get repairs to home done	Safety, Privacy, Choice, Location
Condition/state of repair of your home	Safety, Choice, Location, Privacy
Safety and security of your home	Safety, Privacy, Choice, Location
How close you live to recreational activities	Location, Privacy, Choice, Safety
How much independence you have in your daily life	Privacy, Location, Choice, Safety
Opportunities to socialise where you live	Safety, Privacy, Location, Choice
Ease of contacting housing support worker	Choice, Privacy, Safety, Location
Choice you have <i>whether</i> to see housing support worker	Choice, Safety, Location, Safety

Figure 3.3: The SAMSHA Housing Satisfaction Scale (adapted from Tsemberis *et al*, 2003) * Including health services.

The difficulty with these sorts of approaches lies in agreeing what exactly the validated housing support measures should be measuring. These are outcome measures that, from the perspective of providers of a Pathways Housing First model in the USA, are a perfectly 'normal' part of the delivery of a housing support service that is designed to retain service users by granting them very considerable choice and control (Tsemberis *et al*, 2003; Tsemberis, 2010). From the perspective of some British housing support service providers, a service that fails to encourage taking of medication, or in which there is not regular contact between a housing support worker and a service user, might be seen as taking unacceptable risks.

However, while careful design would be needed to develop a model that could suit the British context, the underlying logic of this approach to evaluation would appear to have some advantages. These advantages can be summarised as follows.

- Detailed comparison of housing support service outcomes using validated measures becomes possible; services can be directly compared because service outcomes are tested in a *uniform* and *consistent* way.
- The approach is user focused in the sense that it relies on the ratings that service users give on the extent to which a housing support service has helped ensure their well-being.
- Because data collection is longitudinal (i.e. data are collected at a series of intervals) it becomes possible to monitor outcomes in terms of the 'distance travelled' by individual service users. This means the cumulative effect of service delivery on those whose service use comes to a planned end can be recorded as can any benefits accrued by service users whose service use comes to an unplanned end.
- Comparison of service outcomes becomes possible by testing validated outcome measures for housing support against equivalent measures on mental well-being, psychological functioning, and continuity of care, quality of life and social interaction. In other words, validated outcome scales, rather than definitions and methods of outcome measurement that are specific to each housing support service, are tested against clinical and other outcome measures. This makes these comparisons much easier to understand, because the outcomes of housing support services are being described in a *uniform* and *consistent* way.

As with other forms of evaluation, there is still a strong case for testing standardised and validated 'housing support' outcomes against other validated measures of mental well-being, continuity of care, quality of life and cost effectiveness. This process is summarised in Figure 3.4.

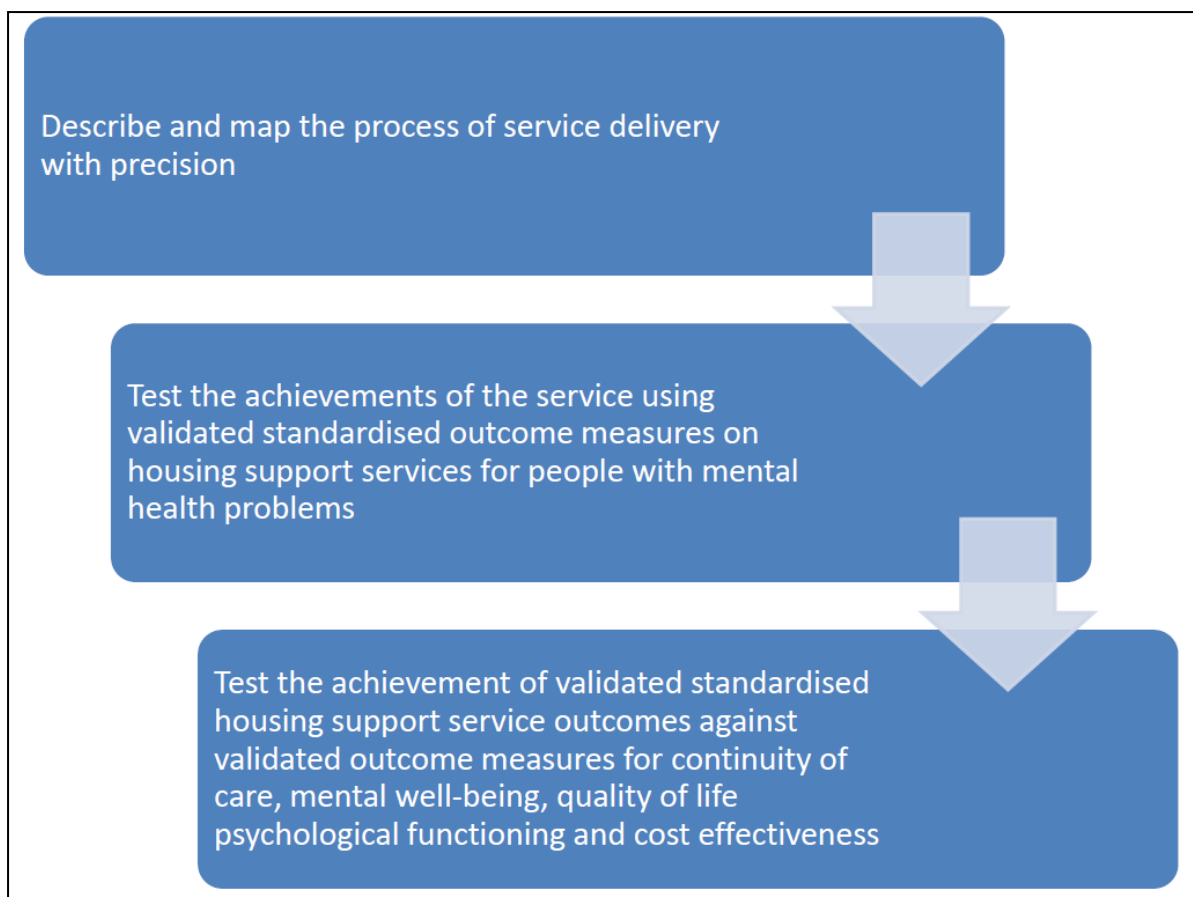


Figure 3.4: Using standardised and validated measures of housing support services outcomes

Testing service effectiveness with validated measures on quality of life

One final approach is to employ a validated measure of quality of life for people with mental health problems as the basis for testing service outcomes. This method employs quality of life outcome measures that are used to assess quality of life for people with mental health problems receiving community health services or which are employed when monitoring resettlement from a stay in hospital. This allows direct comparison of outcomes for housing support services with studies that look at outcomes for people who have not received housing support services. It also employs ‘clinical’ sets of measures, or at least a set of measures that are used by clinicians in mental health research, to assess what difference housing support services can make to quality of life.

The overlap between the Lehman quality of life interview (QOLI, see Figure 3.5) for people with mental health problems and the SAMSHA measure of housing support outcomes (shown in Figure 3.3) is considerable. Although it is not intended as a means of assessing housing support services, the QOLI does monitor outcomes in many of the areas that might be defined as within the housing support remit (Uttaro and Lehman, 1999).

Area	How do you feel about?
Family	<ul style="list-style-type: none"> Your family in general How often you have contact with your family The way you and your family act toward each other The way things are in general between you and your family
Finances	<ul style="list-style-type: none"> The amount of money you get The amount of money you have to cover basic necessities How comfortable and well off you are financially The amount of money you have available to spend for fun
Health	<ul style="list-style-type: none"> Your health in general The medical care available to you if you need it How often you see a doctor The chance you have to talk to a therapist Your physical condition Your emotional well-being
Leisure	<ul style="list-style-type: none"> The way you spend your spare time The amount of time you have to do things you want to The chance you have to enjoy pleasant or beautiful things The amount of fun you have The amount of relaxation you have The pleasure you get from television or radio
Living	<ul style="list-style-type: none"> The living arrangements where you live The food where you live The privacy you have where you live The amount of freedom you have where you live The prospect of staying on where you live for an extended period of time
Safety	<ul style="list-style-type: none"> How safe you are in your neighbourhood How safe you are where you live The chances of finding a police officer The protection you have against being robbed or attacked Your personal safety
Socialisation	<ul style="list-style-type: none"> The things you do with other people The amount of time you spend with other people The people you see socially How you get along with other people in general
Global	<ul style="list-style-type: none"> Your life as a whole

Figure 3.5: The QOLI measure (from Uttaro and Lehman, 1999).

Looking at Figure 3.5 it can be seen that the questions categorised as relating to 'living' include areas that might be relabelled as 'tenancy sustainment' and the questions categorised as 'safety' would all be seen as within the direct remit of a (British) housing support service. Similarly, the questions focused on relationships with family and socialising also fall within the remit of enhancing social supports to people with mental health problems.

The advantage of using an established quality of life scale to demonstrate service effectiveness is, as noted, that these are tools for outcome measurement that are recognised by groups such as health commissioners. The disadvantage of this approach is that the outcome measures are not housing support service specific and may therefore leave out areas of service activity in which service providers want to demonstrate effectiveness (e.g. preventing homelessness). This means that it might

not be sufficient to use one of the quality of life scales as the *sole* means of recording and assessing the outcomes of a housing support service.

A measure like the QOLI would, of course, still need to be tested with other outcomes scales on mental well-being, continuity of care, cost effectiveness and other areas of interest to clinicians and policy makers for evaluative purposes. This process is summarised in Figure 3.6.

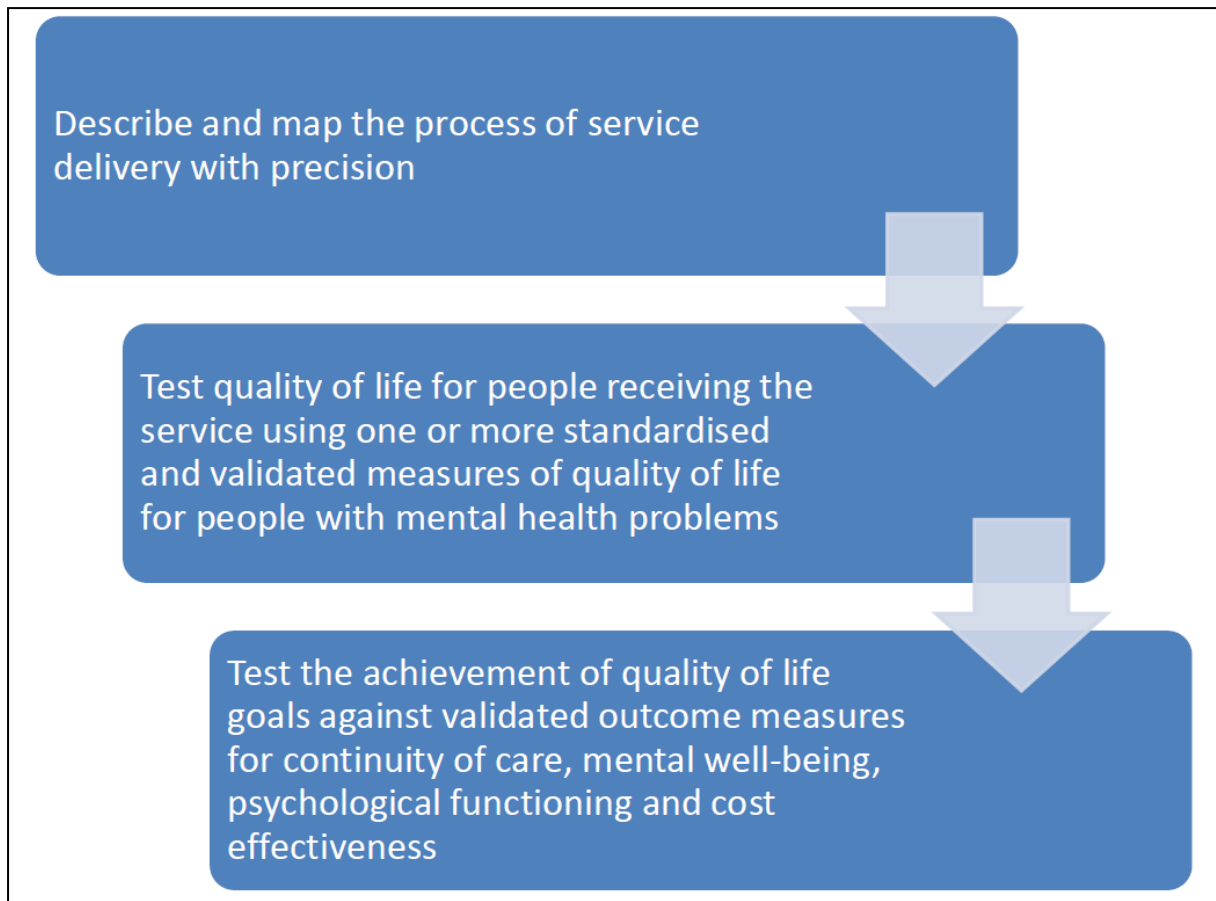


Figure 3.6: Using standardised measures of and testing those against validated measures

Selecting from the wide range of detailed outcome measures

The literature on outcome monitoring for housing support services for people with mental health problems is, by the standards of clinical research, not particularly extensive. Nevertheless, the diversity of approaches in housing support services, both in the UK, but also to some degree in the USA and Europe, is reflected in the diversity of approaches used in evaluations.

In North America, the tendency to test housing support service outcomes against validated outcome measures of mental well-being and quality of life is near uniform in evaluative research. There is, however, considerable variation in *which* validated measures are employed or whether just one, two, or three or four validated

measures are used. The rapid evidence assessment conducted for this review found that 19 separate validated sets of outcome measures for quality of life had been employed, sometimes solely and sometimes in combination, in North American evaluations. Similarly, six standardised sets of measures of continuity of care, nine sets of standardised measures for mental well-being and psychological functioning and six sets of validated diagnostic tools had been deployed.

In some cases, evaluations had deployed a standardised outcome measure to explore the detail of what housing support services were doing (for example the SAMSHA scale, see Figure 3.2), in other cases a specifically designed series of outcome measures were used. There were also examples of evaluations that tested services' self defined outcome measures against standardised measures of mental well-being, clinical effectiveness and so forth.

Cost effectiveness is also not measured in a consistent way. Some studies compared service use prior to, during and following receipt of housing support services (Culhane *et al*, 2002). Cost savings were calculated according to whether use of expensive services, such as unplanned admission into psychiatric hospital, use of accident and emergency services and homelessness services has been reduced. Other studies have compared reductions in clinical and criminal justice service use by using a randomised control trial (Rosenheck *et al*, 2003). Importantly, although studies of cost effectiveness always approach the basic question in the same way, i.e. does the use of housing support services *reduce* the use of other, more expensive services, that people with mental health problems would otherwise exhibit, the variables they use to assess this varies.

Figure 3.4 illustrates these issues by listing just some of the measures employed to assess service outcomes in respect of tenancy sustainment. As can be seen, the studies employed often similar, but not necessarily directly comparable, measures in differing combinations.

Picking between what may be equally valid indicators can be difficult. There are only a finite number of questions about which any evaluation can collect data on, partly for resource reasons, but also because after a certain point the people from whom one is seeking data become fatigued. There are arguments for collecting data on all the outcome measures shown in Figure 3.7, but there may only be practical scope to collect data on a few of them.

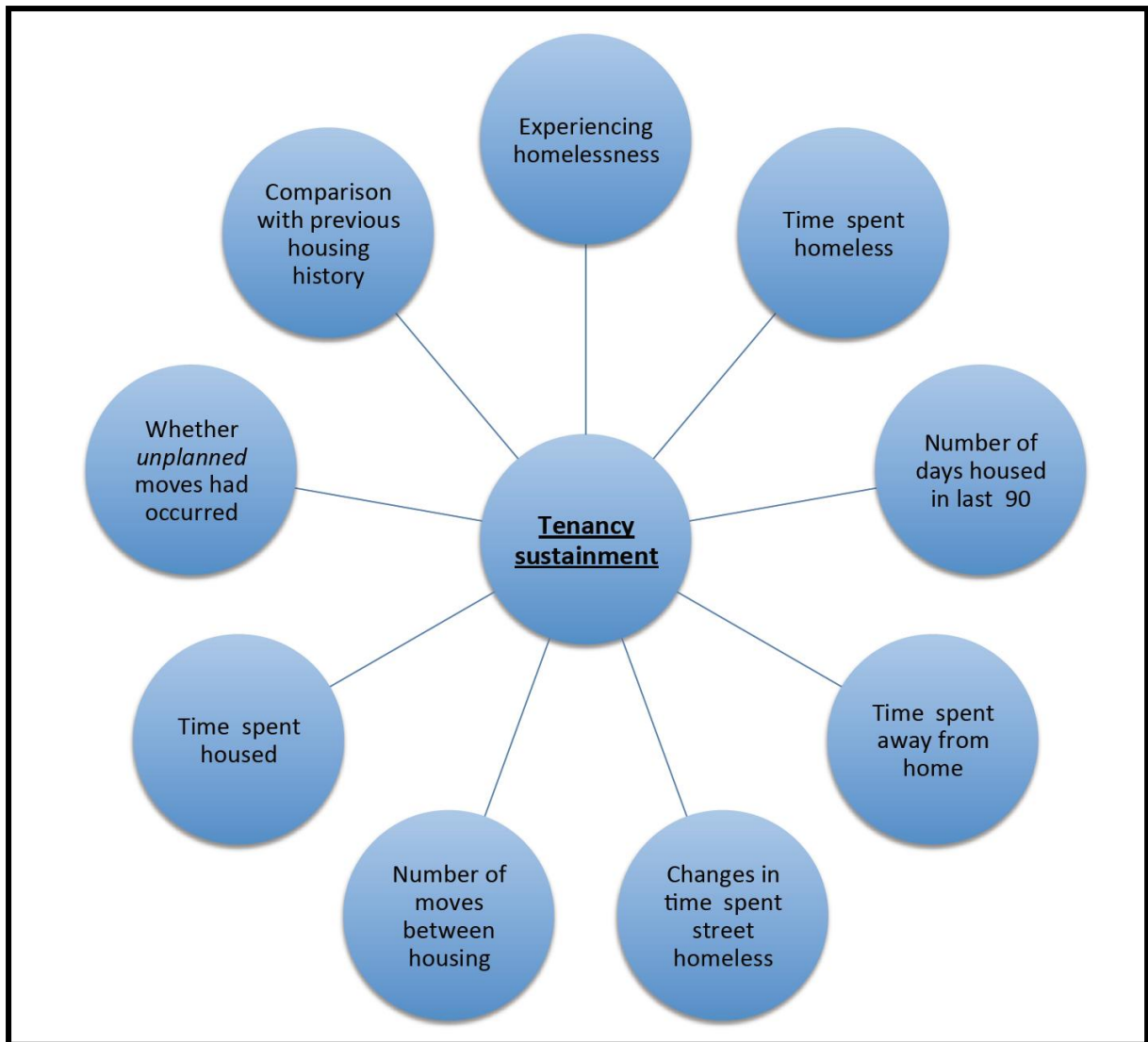


Figure 3.7: Some different outcome measures used to assess tenancy sustainment in evaluations of housing support services for people with mental health problems

(Sources: Brown *et al*, 1994; Dickey *et al*, 1997; Shern *et al*, 1997; Tsemberis, 1999; Lipton *et al*, 2000; Rosenheck *et al*, 2003; Coldwell *et al*, 2007)

Another factor to bear in mind is that many of these outcome measures were developed for specific services working in a specific context. As was noted at the beginning of this chapter, much of the North American work is focused on housing support services for homeless people with severe mental illness, specifically those with problematic drug and alcohol use. Outcome measures developed for these services are not necessarily applicable to housing support services for people with mental health problems in the UK. Evaluating UK services is not merely a matter of selecting from what is a rather overwhelming mass of existing outcome indicators, there may well be a need to develop specific outcome measures (see Chapter 4).

4 Towards an evaluation methodology

Introduction

This chapter is intended to help inform the development of new approaches towards the evaluation of housing support services for people with mental health problems. The goal is to help service providers, service commissioners and research funders think about demonstrating the effectiveness of housing support in new, more rigorous and more comparable ways.

The chapter begins by reviewing some of the general principles of evaluative research and moves on to a brief discussion of the management of the opportunities and risks of evaluative research. There is then a discussion of how to demonstrate the effectiveness of services in respect of changes in mental well-being, continuity of care and also on providing evidence of cost effectiveness. This chapter concludes with an overview of how a pilot evaluation might be structured and what sort of questions it might focus upon.

Good practice in evaluation

The reasons to evaluate services

Before discussing some of the general principles of evaluation that need to be borne in mind whenever conducting an assessment of a housing support service, it is useful to revisit some of the arguments in favour of evaluation. Some of the main reasons for evaluating housing support services are summarised below.

- The evidence base is inadequate. It is not sufficiently clear to external audiences, including clinicians, policy makers and service commissioners what housing support services can do for people with mental health problems.
- Services that monitor the achievement of goals that they have set for themselves are *not* being evaluated. It needs to be clear that delivery of the goals the service sets itself are of clear and direct benefit to service users. Validated outcome measures on mental well-being, quality of life and continuity of care need to be tested against service outcomes to clearly and objectively demonstrate how effective housing support services can be.
- The funding of housing support services will constrict very significantly from 2011-2015. If housing support services are to play a role in meeting the needs of people with mental health problems, it must be clearly demonstrated how they benefit the well-being of people with mental health problems. Equally importantly, the *cost effectiveness* of these services and the ways in which they reduce clinical costs for the NHS, reduce costs for the criminal justice system and for other general welfare services and homelessness services must be clearly demonstrated.

- If housing support services are to make a convincing argument about the role that they can play in helping people with mental health problems, there are good reasons to pursue longitudinal evaluation. If housing support services can demonstrate that they are not only improving the well-being of people with mental health problems while they are using the service, but that former service users show sustained improvements for six, nine, 12 or 24 months after they *stop using* the service, the arguments in favour of housing support services become that much stronger.
- There is no need for continual, robust evaluation of housing support services nor is it the case that all services have to be thoroughly evaluated. A fairly small number of robust studies can form an evidence base that is sufficient to make a clear case for housing support services. It will be necessary, drawing on the results of these evaluations, to think about how *all services are monitored*, in order to clearly demonstrate they are in line with models of service delivery that are of proven effectiveness. However, this monitoring need not be costly or administratively onerous if it is properly designed. There will need to be periodic updating of the evidence base using robust evaluation.

The clearest example of what relatively robust evaluation can achieve is the Pathways Housing First model. As noted above, this service was able to demonstrate it was more effective in preventing homelessness among people with severe mental illness and that it was also more cost effective than the staircase model that had dominated service provision up until that point (Tsemberis, 2010).

On the strength of this evaluative research, Federal government in the US determined that the Pathways Housing First approach was ‘evidence based’ and a major reorientation of policy towards homeless people with severe mental illness ensued. This in turn has caused governments in Denmark, France, Finland and Sweden to review the Housing First model and incorporate it into their national strategies. Very importantly, the detailed and systematic evaluation of Housing First has not stopped in North America, it is still being evaluated and the achievements that are claimed for this service model are subject to continual, critical assessment (Kertsez *et al*, 2009).

Of course, the evaluation of Pathways Housing First showed the effectiveness of a service model that was in some respects inherently appealing to service commissioners and to politicians. Housing First was shown to deliver better results in terms of reducing homelessness among people with severe mental illness at a *significantly lower cost* than other service models. It is arguable that the increasingly widespread adoption of the Housing First model would not have occurred, if the service were more effective but also significantly more expensive than alternative services. Rigorous evaluation greatly reinforces the strength of the arguments that a service can make for itself, but it would be wrong to suggest that the presentation of

excellent evidence will always necessarily lead to a positive response from policy makers and service commissioners.

Effective approaches to evaluation

Policy and service evaluation are central to what government does. Policy ideas are often pursued on political principle, rather than firm evidence, but the process of delivering on those policy ideas and making them operational always has to be evaluated. Any administrative system has to be evaluated and assessed at least periodically, to check it is delivering what it is supposed to and is not costing more than it should. This is as true for an online company selling books as it is for public sector administration of welfare payments. The 'Magenta Book' produced by the Government Social Research Unit currently serves as the basis for policy evaluation within government and identifies the following forms of evaluation (GSR, 2007).

- *Summative evaluation* that asks questions about the impact of policies in comparison with 'doing nothing' or in comparison with another type of intervention.
- *Formative evaluation* which asks how a policy intervention works, who it benefits and under what conditions it benefits them, this is a form of evaluation that might use qualitative (talking to people) methodologies as it may have to understand the nuance of how interventions work.
- *Goal-based evaluation* that explores whether policy objectives have been achieved by looking at the actual effects of an intervention and whether there have been any unintended consequences.
- *Experimental and quasi-experimental evaluation* that tests policy interventions using robust models, either comparing the intervention *with other interventions and/or with doing nothing*.
- *Economic appraisal and evaluation* that looks at the relative benefits and costs of an intervention. 'Cost effectiveness' assessments compare relative costs between services. A 'cost utility' analysis examines whether or not there are different outcomes from an intervention for different groups (i.e. is a service better value for money when it works with one group of people than when it works with another group of people). The term 'cost benefit analysis' is often used to describe assessments that are actually exercises in cost effectiveness. A real 'cost benefit analysis' is a highly elaborate exercise that is only rarely conducted because it is both complex and expensive. A 'cost benefit analysis' not only looks at what an intervention costs, it also considers the alternative uses to which the money could have been put and the opportunity cost.

The UK evidence base on housing support services for people with mental health problems does not fit entirely comfortably into any of these categories, though it can be broadly described as formative and goal-based. The North American evidence

base can be described as fitting into the 'experimental and quasi-experimental' category and into the 'cost effectiveness' subcategory of economic appraisal and evaluation. In order to make a policy impact and to demonstrate the effectiveness of housing support services to service commissioners, the goal of evaluation of housing support services in the UK should be to produce work that sits comfortably in these last two categories of evaluation.

As the Magenta Book (GSR, 2007) notes, an evaluation has to demonstrate that a housing support service has produced the outcomes that it is supposed to and also needs to demonstrate that:

- these outcomes are not arising for other reasons, i.e. they would have happened anyway without the service being present or are due to the activities of other services; and,
- the evaluation has used a methodology that produces 'potentially unbiased' estimates of housing support service impacts has been employed, ideally using randomisation to reduce the risk that two or more groups being compared with one another are not 'systematically' different.

If, for example, two groups of people with mental health problems are asked to participate in an evaluation, the first group is given access to one housing support service and the second group to another housing support service, it needs to be clear that any differences in outcomes are due to the services they are receiving. One of the ways to achieve this is through 'randomisation', which means ensuring that one group is not 'systematically' different the another. For example, an evaluation comparing two forms of housing support service would *not* be reliable, if it turned out that one control group was significantly more likely to exhibit problematic drug use than the other group. Randomisation would involve an attempt to ensure that the representation and nature of problematic drug use was equal across the two groups being compared¹⁵.

One criticism levelled at the evaluations of Pathways Housing First in the USA is that there is some evidence that the people with severe mental illness it was working with were *less likely* to present with severe problematic drug use than were the people using the services with which it was being compared (Kertsez *et al*, 2009; Tsemberis, 2010).

The Magenta book also highlights the importance of what it terms internal and external *validity* (GSR, 2007). Internal validity refers to the design of an evaluation ensuring that what it is intended to measure is actually being measured. This relates both to what is sometimes called the 'Hawthorne Effect', whereby people might behave differently if they know they are being observed or are part of an experiment, and also to the precision of the tools being used for measurement.

¹⁵ Complete randomisation can be difficult to implement, i.e. attempts to avoid systematic difference between two groups are often not *entirely* successful, particularly when trying to control for several variables.

The example was given earlier of a housing support service using its own untested self-devised 'scale' of improvement in mental health based on worker judgement. This is problematic as a means of measurement in two senses. First, to be regarded as robust a scale must be tested and validated; it must be shown to accurately measure what it is supposed to measure under different circumstances and with different groups of people. Second, anything based just on worker judgement is inherently flawed; it can never be consistent because people do not judge things consistently. There is potentially a third problem in this instance, if the housing support worker doing the recording is also providing support, there is arguably a disincentive for that worker to record a deterioration in mental well-being. By contrast, using a validated measure of mental well-being in the proper way will produce evidence of gains in mental well-being that is more difficult to dispute.

Internal validity can also be undermined if there is a significant change in the group or groups being studied. The best example of this is sample attrition, i.e. the loss of people from a study. If certain subgroups of people are more likely to be subject to attrition, or there is simply a sufficient loss of numbers, then the statistical reliability of the evaluation can be undermined.

External validity refers to whether an evaluation could be repeated. In essence this means that the evaluation must be applicable to 'real world' situations because it has been conducted in circumstances that will *also exist* in the situations in which a service would be deployed. It also refers to the effect of changing policy landscapes. The entire policy context for housing support services is undergoing radical shifts: not only are significant cuts being made to Supporting People funding, the impact of the 'Big Society' and 'Localism' agendas that could fundamentally alter the situation in which services operate. Evaluations conducted prior to the Coalition taking power will quickly become out dated because the context is becoming so different. By contrast, when the policy and economic situation are stable, an evaluation may go on being replicable and applicable for years after it was first conducted.

What this means in terms of the evaluation of housing support services for people with mental health problems is that it must be clear that randomisation was a part of the design of comparative work, that the measures used are accurate and that the evaluation is replicable, in the sense that the conditions in which it was conducted reflect the World as it currently is. Factors like the management of sample attrition are less controllable than some other aspects of evaluation, but careful design of evaluative research can minimise these kinds of risk.

The limits of experimental design

One potential criticism of some of the North American work that was noted in Chapter 3 was the limited extent to which some of the evaluations of housing support services have allowed for the context in which services operate. This is partially a question of bias in results that occurs simply because services are provided in a

World that interacts with both the service providers and the people using those services. Some evaluations can be seen as 'isolated' from reality in some senses, because how a service works, indeed whether it works, is not just a question of how it is designed, or what it appears to cost. Services are interlaced with the economy, the culture and the welfare regime in which they operate and fully controlling for that interconnection is something that is very difficult for an evaluation to do (Pawson and Tilly, 1997). Beyond this, there are essentially cultural and philosophical questions about the underlying logic of housing support services that relate, for example, to how we as a society define certain behaviours as being 'mental illness'.

These points are not merely academic. Thinking about the underlying logic of a service, the impact of the environment around that service and even about how the support needs that service is designed to address are conceptualised is important, which is why for example the Magenta Book concerns itself with these issues (GSR, 2007). There are some risks in talking about the meanings and possible consequences of some of these ideas in the abstract, so it is perhaps helpful to provide a concrete example.

In one related area of housing support service activity, the provision of tenancy sustainment and resettlement services to lone adults with a history of homelessness, it became a convention for services to provide what was called support with 'daily living skills'. This meant essentially teaching and supporting formerly homeless lone adults to manage bills, shop for food and cook or undertake the various tasks necessary to run a household. This support built into services because it was *assumed* that lone homeless people would often be unused to living independently because they had either been on the street or in shelters or hostels that were institutions. When this area of service activity was eventually looked at carefully, it was found that the *underlying assumption was incorrect* and that an entire element of service provision had been founded on a misconception. Although some young people who had never lived alone and some people with high support needs required some help with daily living skills, most lone homeless people did not, because most already knew how to run a home, or did not find it difficult. This mattered, because resources were being directed towards often unnecessary support with 'daily living skills', while some other areas, particularly the social isolation of some formerly and potentially homeless people, were being relatively neglected (Jones *et al*, 2001).

Similarly, criticisms of staircase models intended for people at risk of homelessness due to mental health problems and problematic substance misuse have criticised the underlying *logic* of these services. This has included critiques of the implicit assumptions that these service models make about how severe mental illness and homelessness interact and how those assumptions influence how these services operate. What is perceived as the flawed operational logic in staircase services has been advanced as an explanation of why these services can sometimes fail (Sahlin, 2005).

Providing sufficient evidence

Evaluations do not have to catalogue and detail every nuance of a service, they only need to be demonstrably unbiased and to produce clear and unambiguous results that *centre* on the questions of interest to policy makers and commissioners. Keeping a clear focus helps control the costs of undertaking an evaluation. If an evaluation can show that a service delivers benefits to the people using it, be clear about what it does and what it costs, both in overall terms and on a per-capita (typical cost per service user) basis, this is sufficient (GSR, 2007; HM Treasury, 2003).

However, while an evaluation should be designed around the outcomes it is intended to test and focused on relevant detail, proper recording of service activity remains vital. As has been discussed throughout this report, it is essential to ensure that the process and outcomes of service delivery are properly mapped and understood. There are three main reasons for this.

- If the process of service delivery is not properly understood, it is not clear what services are doing to achieve positive outcomes or what they are failing to do if outcomes are negative.
- If the process of service delivery is not mapped with sufficient precision and detail, it is not clear exactly what services cost, which means cost effectiveness cannot be properly assessed.
- If the process of service delivery is not fully described and understood, then good practice in service delivery cannot be replicated properly elsewhere.

There are two risks in conducting evaluations. The first lies in undertaking 'evaluations' that are too poorly designed or resourced to be taken seriously (see Chapter 1), and the second lies in not going too far the other way and setting a standard so high that the funding of evaluative research becomes impractical. Full randomised control trials are a potentially valuable addition to the evidence base and should be conducted on housing support services in the UK, but these studies are very expensive and do not deliver *perfectly* reliable data (even when carefully implemented). Valid, useful and robust evaluations can also be undertaken using other, less expensive, methodologies. It must be remembered that much of the North American evidence is based on quasi-experimental longitudinal studies, including much of the work on Housing First, the results of quasi-experimental evaluations are taken seriously when the evaluation has been well conducted.

It is not necessary for every single service to be evaluated to the same standard. A few robust studies that show housing support services can be effective in improving outcomes for people with mental health problems and in lowering costs to the NHS and the criminal justice system can be used to make the case for the sector as a whole. The housing support service sector can also, collectively, look at these

evaluations and their results and modify their monitoring to demonstrate that they are replicating any good practice found by these evaluation and also delivering on key outcome indicators (which in many cases can be built into monitoring systems).

In short, evaluations need not involve or be applied to all services in order to have a beneficial effect in demonstrating the effectiveness of the housing support service sector as a whole. There is scope to use the result of evaluations to modify monitoring of services and to show effectiveness based on measures that were employed in rigorous evaluation. In addition, an evaluation need not exhaustively describe absolutely everything about a service, while detail and precision will be required, the scope of an evaluation and thus its cost, can be reduced by having a clear focus on relevant outcome indicators.

The need for clear service objectives

A robust service evaluation has to begin with a proper sense of what a given service is aiming to achieve. A clear understanding of the overall objective of a service and the specific targets that a service sets itself, in order to deliver that objective, is fundamental to good quality evaluative research (Orwin, 2000).

Clarity of purpose can sometimes be confused with making very simple bold and apparently easily understood 'mission' statements. For example, a service that defines its purpose as 'improving the lives of people with mental health problems' has a 'clear' objective in the sense that its goals are, on the surface, easily understandable. However, from an evaluation perspective, it needs to be entirely clear what such a statement means. There have clear meanings in terms *range* of support provided, the *intensity* of the support offered, the *specific* goals of a service. If objectives cannot be defined fairly precisely, success in meeting those goals cannot be measured and the performance, the cost effectiveness of the housing support service cannot be properly assessed and good practice cannot be replicated (Weiss 1973).

Controlling for programme fidelity

Measuring 'programme fidelity' means monitoring the extent to which a service reflects its original objectives and design. If programme fidelity is not monitored, one cannot be sure how far success or failure is due to the original design or due to the ways in which the service may have been modified. Even small changes to an original concept might lead to failure or to its success. Programme fidelity is often measured once a project has been operational for some time, as any changes that are made to day-to-day running will occur as a project 'beds down'. Fidelity is also

usually measured at service points to ensure that operational changes are not occurring over time (Orwin, 2000).

The operational reality of a service can often differ from the service model on which it is based, because, for example, services need to adapt to specific circumstances. Where divergence in service design and operation are occurring but not being recorded, the danger is that the results of evaluations will not actually represent the outcomes for the service model they are supposedly reporting on. This would be the case because how a service described itself and what it actually did were different from one another.

For example, the Pathways Housing First model has become widely distorted and altered as it has (sometimes only nominally) been adopted by other service providers and in countries other than the US. The divergence between the original Pathways service model and the wide variety of other services calling themselves 'Housing First' has led Pathways to develop a 'Fidelity Scale', as the evidenced model is not always being replicated which means success or failure of these services cannot be linked to the Housing First model (Tsemberis, 2010).

Giving a voice to service users

The user led nature of housing support and the emphasis on personalisation of services are key elements of how this form of support works. Exploring the extent to which service users are able to exercise choice and control and giving a voice to those people with mental health problems using housing support is of central importance.

The best ways in which to do this are through survey methodologies and, particularly, through the use of qualitative research methods such as semi-structured face-to-face interviews and focus groups. It is important that user perception of how well services work, whether the needs the services are designed to address reflect their own needs, and to what extent they feel they are being helped is documented. These elements can be built into the design of an evaluation and user feedback can be made integral to how housing support services monitor their own performance.

Managing the opportunities and risks of evaluation

A robust evaluation can provide the basis for a strong defence of the need to continue funding a service. Evaluation can also form the foundation of a process that eventually leads to a particular service model being widely adopted.

The risks of evaluation are that it will uncover limitation and failure. High quality evaluation of the continuum or 'staircase' model, the type of service that appears to be being eclipsed by Housing First in the USA, provided what was in effect ammunition that could be used against it (Tsemberis, 2010).

Any service provider is naturally apprehensive about engaging in a process that might show that what it is doing has shortcomings or is in some respects ineffective. However, it is possible to become overly defensive about service evaluation. Unless an evaluation is actually completely damning, a service provider that can demonstrate it is prepared to learn, adapt and improve services in response to a negative evaluation can draw (and show that it is drawing) something positive from work showing its limitations.

It is also very important to bear in mind that policy makers and commissioners and, most of all, central government, do *not* expect service success to be *absolute*. Government, for example, knows that engaging with groups of people with mental health problems will mean providing support to people with whom it may be challenging to work and it will *expect* that there will be some failures. A service that has good evidence of success in improving outcomes for 30-40% of the people it works with is much more likely to be taken seriously than a service that has poor evidence, but claims near 100% success, and which tries to illustrate that 'success' through the story of successful working with one or two people.

Government, policy makers and service commissioners are likely to view high levels of claimed success with some caution, again because the realities of service provision to groups with mental health problems are understood. Something that can be forgotten is that the public sector is constantly confronted with limitations in policy effectiveness and sometimes with outright policy failure and that leads to an expectation that success will rarely be unqualified.

This means, when high rates of success are claimed, there is a chance that policy makers and commissioners will start asking 'difficult' questions. For example it might be asked if a service is performing so well because it is 'cherry picking' people who are easier to work with than the services it is comparing itself too. Robust evaluations are necessary for this reason too, because policy makers and service commissioners will need to be convinced that a service's achievements are valid representations of what is being directly achieved by a service (H.M. Treasury, 2003).

On balance, particularly in the current policy context, an *absence* of robust outcomes data is probably a greater risk for a housing support service to face. A service model that has not been properly evaluated or well monitored, cannot provide robust evidence that it makes a useful contribution.

How to measure what housing support services are doing

Chapter 2 emphasised the diversity of housing support service provision in the UK. Chapter 3 discussed the possibility of standardised definitions of housing support service interventions, in the light of the diversity of provision and concluded that using a standardised definitions of housing support services would probably lead to distortions on two levels. The first distortion would be in respect of individual services, in that the specifics of whose service delivery would be grouped into generic categories of service intervention, which would not precisely reflect what those services delivered. There might also be omissions because only some types of service would be recorded. The second level of distortion would be that because the activity of any one service provider was not correctly, or fully, described, there would be a risk of a cumulative distortion of what the sector as a whole was doing.

As was described in Chapter 3, there are models that use quite detailed outcome measures that are specific to housing support services; the example given was the SAMSHA outcome monitoring system (Figure 3.3). This allows detailed comparison of housing support services based on a common set of outcome indicators that are specific to those services. This approach differs from existing monitoring of housing support services in the UK in a number of respects:

- The North American model is longitudinal, recording the situation at several points, and this allows the monitoring of ‘distance travelled’ by service users as well as the cumulative effect of service use.
- the data collected in current Supporting People monitoring in England are not specific to housing support services for people with mental health problems, they are not generic indicators that could be applied to any housing support service;
- the use of a longitudinal model in the North American approach allows the sustainment of positive outcomes to be monitored after service use has ceased.

It is therefore recommended that an attempt to categorise the highly varied practices of service delivery into standardised categories of ‘service intervention’ is *not* a route that should be taken because it is unlikely to generate a satisfactory result. However, detailed comparison of the performance of different types of service can be undertaken by using a validated set of detailed outcome indicators, following some of

the approaches that have been adopted in North America (Tsemberis *et al*, 2003). There is a need to be cautious and careful in designing and testing this set of detailed outcome indicators and the design of evaluations may still need to be varied to some degree to suit specific types of housing support services.

Instead, service delivery processes must be recorded with precise detail. As has been noted throughout this report, it must be clear what services are doing and how they are doing it. Again, the reasons for this are to determine exactly those forms of service provision are associated with positive outcomes for service users and to be clear about what those services cost (both of which can only be achieved by knowing exactly how they are working) and to make good practice in service provision replicable.

Relating housing support services outcomes to mental health status and well-being

Demonstrating improvements in mental well-being and psychological functioning

There is a major literature on the development, assessment and design of outcomes measures focused on mental well-being. It was not possible to review this literature for the work described in this report because that would be a major exercise in itself and this review is a small, time-limited project (see Chapter 1).

North American research approaches the question of measuring mental well-being and psychological functioning among people using housing support services in a specific way. The basic methodology of these evaluations, collecting clear and detailed data on what services are doing and then testing that service activity against validated standardised measures, is sound. It is therefore recommended that one or more validated standardised scales be used to assess changes in mental health symptoms among users of housing support services.

To work properly, this kind of approach has to be longitudinal. Changes in the well-being of people using housing support services, at the point of referral, during the time they receive support and after that support has ceased must be recorded to show whether or not housing support is having an impact on mental well-being. The basic principles of good evaluation must also be followed. It has to be clear, insofar as possible, that the effects being measured are, for example, strongly associated with receiving housing support services and are not likely to be a result of sample composition (the characteristics of the people receiving support), the activity of other services or contextual factors.

Figure 4.1 shows an *example* of one of the measures used in the North American literature. Note that there are strong reasons to consider using more than one measure in order to ensure results are valid. The Modified Colorado Symptom Index is merely shown as one example of the kind of measure that is available.

The example shown in Figure 4.1 is relatively simple. Other examples of validated measures of mental well-being and psychological functioning employed in the evaluations of housing support services for people with mental health problems include:

- the GHQ-12 (General Health Questionnaire 12 question module on mental well-being);
- the Brief Symptom Index;
- the Brief Psychiatric Rating Scale (BPRS);
- the Epidemiology Research Interview (PERI);
- The SCL-90 / Global Severity Index;
- The Psychiatric Epidemiology Research Instrument;
- The Positive and Negative Symptoms Scale (PANSS);
- The Global Functioning Score/Global Assessment Scale

Question	Frequency*
In the past month how often have you felt nervous, tense, worried, frustrated or afraid?	0-4
In the past month, how often have you felt depressed?	0-4
In the past month how often have you felt lonely?	0-4
In the past month how often have you been told you acted paranoid or suspicious?	0-4
In the past month how often did you hear voices, or hear and see things that other people did not think were there?	0-4
In the past month, how often did you have trouble making up your mind about something, like deciding where you wanted to go, or what you wanted to do, or how to solve a problem?	0-4
In the past month how often did you have trouble thinking straight, or concentrating on something you needed to do, like worrying so much, or thinking about problems so much that you can't remember or focus on other things?	0-4
In the past month, how often did you feel that your behaviour or actions were strange or different from those of other people?	0-4
In the past month, how often did you feel out of place or like you did not fit in?	0-4
In the past month, how often did you forget important things?	0-4
In the past month, how often did you have problems with thinking too fast (thoughts racing)?	0-4
In the past month, how often did you feel suspicious or paranoid?	0-4
In the past month, how often did you feel like hurting or killing yourself?	0-4
In the past month, how often have you felt like seriously hurting someone else?	0-4

Figure 4.1: The Modified Colorado Symptom Index

* 0 = "Not at all", 4 = "At least every day"

Some of these validated outcome measures are available free of charge, others can only be employed if they are paid for and are *not available* publicly. They require various degrees of resources to implement, some can be administered by trained interviewers, and others require a clinician to be asking the questions. Some scales are small, like the example shown in Figure 4.1, but others include a large number of questions.

Demonstrating improvements in quality of life and social interaction

Some discussion of the possible use of validated outcome measures was included in Chapter 3. Figure 3.5 showed the QOLI measure (Uttaro and Lehman, 1999), and discussed how this overlapped with some of the outcomes that providers of housing support services would wish to be measured among people with mental health problems using their services.

The limitation with only using an existing scale on quality of life and social interaction is that it is not explicitly designed to record data on housing support services. One way to approach this shortfall is to design a specific, validated, measure focused on housing support services (the example of the SAMSHA scale was given in Chapter 3). The other way is to build in the use of one or more validated quality of life measures into an evaluation, testing the support that services are providing against changes in quality of life recorded in those measures. There are, as is the case with monitoring changes in mental well-being, very strong arguments in favour of using existing validated measures, because they are instantly accessible to groups like clinicians and are widely accepted standards of proof. Again, if an existing validated measure of quality of life is being employed, evaluations should be longitudinal, showing changes in status recorded by the measure over time.

There is no reason, if resources are available, not to employ a standardised measure of quality of life alongside specific outcomes measurement of housing support outcomes. On balance, it seems logical to recommend the approach often adopted in North America, which is to test good quality evaluative data on housing support service outcomes against one or more validated measures of quality of life.

The validated measures of quality of life and social interaction employed in evaluations of housing support services for people with mental health problems have included the following:

- COPES-R;
- Mannheim disability assessment schedule (DAS-M);
- Pearling and Schooler's Mastery Scale;
- Berlin Quality of Life Profile;
- QOLI (Lehman quality of life interview);
- Basic Everyday Living Schedule (BELS);
- Social Network Instrument (Van Tilberg);
- Social Network Schedule (SNS);
- Social Integration Scale.

Measuring Ontological security associated with home and quality of life

The concept of 'ontological security' is derived from Sociology and can be useful when thinking about the quality of life of people with mental health problems. In a broad sense, ontological security is a "sense of security". In terms of housing, this refers to how we feel about our homes and those homes as places that offer an environment we can control, where we feel free from surveillance and feel free to 'be

ourselves'. This is particularly important for mental well-being when the wider world can feel uncontrollable and possibly threatening (Dupius and Thorn, 1998).

Some of these issues are picked up in existing validated quality of life measures and include a sense of physical security at home, the sense that the surrounding neighbourhood is not threatening and that one's home offers some sense of security of tenure. These validated measures also concern themselves with privacy. If someone's sense of security or privacy at home is undermined, it can be demonstrated as having negative psychosocial effects (Kearns *et al*, 2000). Thus 'ontological security' is particularly important to measure, both in a general sense and because, as housing related forms of support, the services that are the subject of this review would be expected to have a direct, beneficial effect on this area of service users' lives. There is some scope for using methodologies such as semi-structured interviews for investigating this issue, as it can be quite complex and nuanced.

Demonstrating improvements in risky behaviours

Severe mental illness has what has been described as a 'mutually reinforcing relationship' with experience of three well-known social problems (Kemp *et al*, 2006; Pleace, 2008a).

- *Homelessness*, particularly homelessness experienced by lone adult men that includes periods sleeping rough and/or staying in emergency homelessness accommodation such as nightshelters.
- *Problematic drug and alcohol use*. Younger people are more likely to be using Class A drugs and to exhibit problematic use of several drugs, alcohol use may be more common among some older groups.
- *Offending*, particularly low level offences and frequent arrests associated with problematic drug use and frequent short term imprisonment.

The presence of severe mental illness does not predict that someone will experience these three social problems, but it can act as a catalyst. The relationship is 'mutually reinforcing' because experience of these three social problems appears to sometimes exacerbate existing mental health problems and is also sometimes associated with the development of severe mental illness. Experience of one of the these three situations also seems to increase the risk of the others occurring (Pleace, 2008a).

Reductions in the rates at which these problems are experienced among people with mental health problems that can be associated with using housing support services clearly demonstrates the case for housing support. Reducing the rate at which these problems are experienced, particularly among people with previous experience of these circumstances, is also a key indicator of cost effectiveness.

Monitoring service impacts on homelessness and offending is relatively straightforward in that reduced rates or the cessation of these experiences can be

recorded and there are methodologies that allow successful longitudinal analysis of groups like people involved with problematic drug use (Kemp *et al*, 2006). Drug and alcohol use is a complex subject and there are many debates about which measures are best to employ. Where possible, use should be made of validated scales designed to monitor changes in drug use and drinking over time (Pleace, 2008a).

Employment, education, training and work related activity

As was noted in Chapter 2, the range of activities that housing support services can become involved with has expanded to include both activity that helps individuals with mental health problems towards paid work and work related activity. Services may also become involved in the direct provision of these sorts of services. The evidence base in relation to employment related services for groups with high support needs is quite limited (Pleace and Minton, 2009). Definitions in this sphere of activity are also not always exact, in the sense that 'work-related' activity might include arts-based services, like working in a theatre group or can just mean volunteering that is essentially unpaid work.

This sphere of activity will become increasingly important. If a service is able to demonstrate that it brings even only a small proportion of people with mental health problems back to employment and/or progresses individuals to a point where employment will become a realistic prospect, this can be used as a strong argument in favour of the cost effectiveness of that service. An individual who is working ceases to be a financial burden on the state and their well-being could be enhanced by the sense of self-esteem and social support that can accrue from being in paid work. One note of caution is that paid work is not *always* satisfying, some jobs are demeaning and stressful experiences that may not necessarily enhance the well-being of an individual (Gilliom, 2001).

Relating housing support services outcomes to cost effectiveness

The existing evidence base on the cost effectiveness of individual housing support services is weak in the UK (YHHRSG, 2010) although there have been wider assessments on Supporting People as a whole (Robson Rhodes, 2004). The North American evidence base does however include several attempts to demonstrate cost effectiveness (Culhane *et al*, 2002; Rosenheck *et al*, 2003). These evaluations have used one of two methodological approaches.

- Comparing the use of clinical and other services prior to, during and following use of housing support services, recording any decreases in clinical and other service use and ascribing costs saved to those decreases.

- Comparing clinical and other service use of using two or more control or comparison groups, where one group has received housing support services and the other has not, and ascribing costs to any reductions in clinical and other service use among the people receiving housing support services.

These approaches are particularly concerned with what might be termed the 'Million Dollar Murray' cost effectiveness debates in the USA. These debates began with research conducted by an academic called Dennis P Culhane which showed that people with severe mental illness who were sleeping rough were financially very costly to American society (Culhane *et al*, 2002). The *New Yorker* then reported on one street homeless person with severe mental illness and problematic drinking, referred to as 'Murray'. While 'Murray' had not actually cost the American taxpayer a million dollars, he had cost many tens of thousands of dollars because he kept being arrested, experiencing short term imprisonment and was periodically picked up by emergency health, mental health and detoxification services without his basic need, for subsidised housing with low level support, being met. 'Murray' stayed on the street and eventually died there. Because of this he kept tangling with the criminal justice system and kept using emergency clinical and welfare services and his homelessness proved very expensive (Gladwell, 2006).

This is the core argument of North American studies of cost effectiveness for housing support services for people with mental health problems, that these services reduce the pressure on expensive services such as clinical care. As is the case in the US, the most expensive elements of NHS service provision are the emergency services, be it the use of Accident and Emergency, or the very high costs associated with an unplanned admission into a psychiatric ward.

Continuity of care

Outcome measures that centre on continuity of care can serve as one measure of the well-being of people with mental health problems but are also an important component of evaluations that judge cost effectiveness. If a housing support service can help someone stay in contact with a GP it may be that this can be associated with a lower use of mental health services than they previously exhibited. If it can be shown that people with mental health problems who were previously being arrested and experiencing short term imprisonment, or who were experiencing homelessness, are doing so at a reduced rate due to housing support services, the arguments for the cost effectiveness become stronger.

If housing support services can show they are moving people with mental health problems beyond a situation in which they experience the 'revolving door', then the case in favour of those services is clear. Some of the measures of continuity of care used in the evaluations examined for this review included:

- Comparison of rates of use of mental health services between comparison or control groups, one of which is receiving housing support services.
- Patterns of mental health service use among people using housing support services with a comparison centring on a given period before they had housing support, the period during which they had housing support and a period following the end of their use of housing support services.
- Comparisons based on days spent in psychiatric wards, either based on comparison of prior experience among one group of service users or on comparison or control groups.
- Use of data from mental health and other public health services, contrasting total emergency health service use prior to, during and sometimes following use of housing support services.

There is a need to be realistic what can be achieved in terms of cost savings and, as is the case with evaluation of services more generally, for service providers to accept that savings will be marginal. The North American work has tended to find that housing support services actually represent a marginal *increase* in total costs, i.e. while significant money is saved by housing support services being associated with reductions in emergency health service use and fewer entanglements with the criminal justice system, housing support services still have a net cost, rather than delivering a net saving in public expenditure (Culhane *et al*, 2002). The argument in favour of these services as a 'cost effective' intervention nevertheless holds, because there is demonstrably less pressure on emergency services which is coupled with improvements in the well-being and situation of many people with mental health problems receiving housing support services (Rosenheck *et al*, 2003).

Towards a methodology for a pilot evaluation

Some methodological recommendations

Based on the findings of this review, it is possible to make some recommendations about what some of the key features of a robust evaluation of a housing support service should involve. These recommendations are as follows.

- Clear, robust and statistically valid data collection on the process of service delivery is *vital*. There must be a comprehensive picture of what a service is doing and how it is doing it.
- Services must have clear objectives and the detail of operational goals must be clear if an evaluation of that service is to be successful.
- It is not desirable to try to force the diversity of housing support service activity/interventions into categorisations that are likely to fail to describe the

detail of service provision clearly, both in general terms and in terms of specific services.

- Detailed comparison based on a shared validated set of housing support service outcome measures is a practical proposition. There is a case for carefully developing a validated set of detailed outcome indicators that are applicable to all housing support services for people with mental health problems to allow detailed cross comparison of service performance.
- The context in which services are operating must be accounted for insofar as is practical within the design of an evaluation.
- An evaluation should not hold back from exploring the underlying logic or cultural factors that shape how a service has been designed and what it is intended to do.
- Evaluations should be longitudinal, both to monitor the progress of people using housing support services over time and in respect of examining the sustainability of any successes that have been associated with housing support service use, once use of those housing support services has stopped.
- Consideration should always be given to using a quasi-experimental or RCT methodology that employs one or more comparison or control groups. This approach is a robust way of assessing housing support services outcomes relative to alternative services and also for comparing housing support services.
- Mental well-being and psychological functioning of people using housing support services should be assessed using one or more validated clinical outcome measures.
- Quality of life and social interaction should also be assessed using one or more validated clinical measures. There should be particular emphasis on exploring how housing support services are able to generate a sense of ontological security associated with having a sense of a 'secure' home. It may be desirable to use validated measures of housing support outcomes and test these against a validated scale on quality of life and social interaction.
- Evaluations should specifically assess whether reductions in experiences of homelessness, rates of offending and conviction and rates of problematic drug and alcohol use can be clearly associated with receiving housing support services.
- Continuity of care should be assessed using one or more clinical measures, both as a measure of well-being and also to inform assessments of cost effectiveness.

- Cost effectiveness should be ascertained in terms of the impacts that housing support services have in reducing demands on emergency and other clinical services provided by the NHS, reductions in the use of homelessness services, any reductions in criminal justice interventions and any reductions in drug and alcohol service interventions.

Assessing the intensity of services

There is little in the existing evidence base that can serve as a model for measuring the intensity of housing support services. While it is known that different services and service models provide a varying range of support and that the time housing support workers spend with people with mental health problems also differs between services (see Chapter 2), there is no commonly used way of describing this. The two key variables to consider can however be identified; the amount of time workers spend with service users and the range of support that is offered. As interventions provided by individual housing support services can vary in nature and intensity it seems most logical that any system used to record service intensity should give a typical picture. This might include indicators of the mean (average) hours devoted to service users and the typical pattern of support provided. It might also be useful to indicate the upper and lower range of services, i.e. the minimum hours of support a service would expect to provide and any ceiling on extent of support it can provide.

It is recommended that a separate exercise that explores the measurement of the intensity of service provision be conducted. This would need to construct and test a measure because the existing literature is focused largely on outcomes and overall (comparative) costs.

Conducting an evaluation

It is important to be clear that this review is not recommending very widespread rigorous evaluation of housing support services. Instead it is recommended that:

- A small number of rigorous studies be conducted to clearly demonstrate the effectiveness of housing support services for people with mental health problems in general terms.
- Evaluations can be carefully focused to help manage costs. A balance can be struck between delivering rigorous evaluation and keeping expenses manageable, it is not necessary for all evaluations to involve randomised control trials, there are other methods that can deliver robust results at less cost.
- Modification of monitoring systems to reflect the results of these evaluations in that services should be able to demonstrate that they are operating in the

ways that evaluations in the sector have shown are beneficial and delivering on the outcomes that the evaluations have shown to be beneficial.

- Cessation of funding of small, inadequate studies that do not have any methodological rigour and which carry no weight with clinicians or health service commissioners.

Conducting an evaluation of a housing support service for people with mental health problems that will provide a new standard of evidence about the importance of these services is an exercise that needs to be done with some care. If an evaluation is to influence the opinions and attitudes of policy makers, commissioners and clinicians, it also has to be quite substantial exercise.

This does not mean that every evaluation conducted should attempt to mirror the scale and the resources of some of the work undertaken in North America. Small, robust, evaluations can add to the weight of evidence, though in order to be robust, a longitudinal study of say 50-60 people using one or more housing support services will still seem expensive relative to the amount of money that has typically been spent on housing support service evaluation to date. However, there are strong arguments in favour of pooling resources and conducting one or two robust evaluations, instead of eight or ten weak pieces of work.

There is also a case for a small number of large robust evaluations. As was recently argued by the Cochrane Collaboration, this should ideally include randomised control trials (Chilvers *et al*, 2009). From the review of the evidence base, there are arguments in favour of three approaches when undertaking a larger scale evaluation.

- Evaluations that assess the collective contribution of the housing support services sector across a major city or region. This allows comparison of different service models and also enables the evaluation to assess the cost-effectiveness of housing support services, both in terms of individual services and as a sector.
- Evaluations that focus on comparing different types of housing support service, for example floating support and accommodation based services. This approach is most useful when comparing the merits of two or more housing support services and can be particularly useful when piloting (testing the viability) new models of service.
- Evaluations that focus on a single service type operating in several different locations and contexts. This approach can be useful in respect of piloting a new service model, to see if it functions equally well in different circumstances and as a way of determining if particular models of housing support service work best in a specific context (for example some service models may work best in cities, others may be more suitable for rural areas).

There is no set approach to study design in terms of the range of services covered, the duration of the evaluation (though it should always be longitudinal) or the size of

the sample of people with mental health problems who are included. It will often be the case that evaluation design will need to be adapted to the budget available and some element of compromise in study design is almost inevitable. Financial constraints on project evaluations and the capacity of organisations to monitor clients is one important reason that the North American evidence contains more quasi-experimental evaluations based on comparison groups than it does randomised control trials.

It is the case that when budgets drop below a certain limit attempting to assess outcomes becomes a pointless exercise. It is better to fund one, robust, evaluation every five years than fund five annual attempts at assessing outcomes that do not produce any robust data. That said, budgets do not need to be very large and to be adequately robust evaluations do not have to involve randomised control trials. Quasi-experimental evidence that has been carefully collected might not carry the same standard of proof as an RCT with clinicians, but it is nevertheless taken seriously by policy makers and commissioners.

It should be remembered that the data that led the US Federal Government to regard Housing First as an 'evidence based' policy was largely quasi-experimental evidence based on comparison groups (Tsemberis, 2010). More generally, 'absolute' robustness is not something that is obtainable in social scientific or clinical research, evaluations are always limited in one way or another and there is always a caveat attached to their reliability. This is as true for RCTs as it is for quasi-experimental models, maximising rigour in research design and repeated testing of standardised measures to check results are consistent greatly reduces the risk that findings will be in error, but it does not remove the risk of inaccuracy. The standard that is sought is one that provides the best possible evidence that a service is delivering good outcomes while bearing in mind that costs must be kept as realistic as possible. The caveat here is that robust evaluation will nevertheless be inherently more expensive than many of the inadequate evaluations of housing support services that have been conducted to date in the UK (Chilvers *et al*, 2009).

One of the most useful exercises that could be undertaken is a pilot, large scale evaluation that would develop and test a range of outcome indicators focused specifically on UK models of housing support service for people with mental health problems. The budget for this exercise would be relatively substantial, but it would be a first concrete step to take in improving the evidence base.

One final point is important here and that concerns the *weight* of evidence. There are only going to be limited resources available for evaluations of housing support services for people with mental health problems, yet the case in favour of these services can only be made stronger by an accumulation of outcomes data. The more robust data that demonstrate the effectiveness of housing support services the better the case that can be made in their support. This is both in the sense that decisions to cut or cease expenditure on these services can be questioned and in the sense that the case in favour of expanding provision can be backed up by strong evidence.

In a context in which there is likely to be little money to undertake evaluations, the only way to generate a large evidence base is to draw on the results of evaluations and to modify *monitoring* systems. Some evaluations of housing support services have to be done before this is possible, because only evaluations can determine which data the administrative systems of services should aim to collect (i.e. which data are the most reliable as outcome indicators).

Use of monitoring data does not carry the same robustness as evaluations of housing support services, but it does add to the weight of evidence and it can actually bring something new to the evidence base. For example, one study in New York combined administrative datasets and was able to track some outcomes for *all* the homeless people with severe mental illness using housing support services. The data were less comprehensive than would have been generated by interviews and surveys of a sample of service users, but because it was in effect a census of service users, there were no concerns about whether or not the data properly represented service users (Culhane *et al*, 2002; Metraux *et al*, 2003).

The areas to include in an evaluation

It is important that an evaluation is designed to suit the particular services or services that are being assessed. While there are certain broad principles to be followed and there is, in particular, a need to generate data that allow rigorous comparison of the outcomes and cost effectiveness data that evaluations produce, evaluation design must properly reflect what a service does and how it works. For example, although there will always be areas of overlap, the questions that should be asked about an accommodation based service are not always the same as those that should be asked about floating support services. One particular design of evaluation will not fit all housing support services.

Table 4.2 gives an overview of what an evaluation of a housing support service for people with mental health problems should *broadly* involve and makes some suggestions about the outcome measures that might be used. Some of these measures might also be employed as part of routine monitoring of service outcomes, others can only really be used as part of a formal evaluation because of the resources they require (for example some validated outcome measures).

Area	Broad outcome measures
Housing	<ul style="list-style-type: none"> • Does housing offer sufficient living space • Housing is in good repair • Heating is adequate • Housing is affordable (housing costs can be met while still meeting other living costs)
Sense of home (ontological security)	<ul style="list-style-type: none"> • Housing is seen as physically safe • Neighbourhood is not perceived as threatening • Housing is seen as offering privacy • Sense of control over their housing • Security of tenure
Location	<ul style="list-style-type: none"> • Proximity to affordable public transport • Proximity to friends and family (social support) • Can access required clinical services
Quality of life	<ul style="list-style-type: none"> • Assess using a validated scale • Include qualitative work on service user's views, employing face to face interviews and/or focus groups to ensure that their voices are represented
Social support	<ul style="list-style-type: none"> • Assess using a validated scale • Include qualitative work
Mental well-being and psychological functioning	<ul style="list-style-type: none"> • Assess using a validated scale • Employ more than one validated scale if practical
Tenancy sustainment	<ul style="list-style-type: none"> • Duration of stay in housing • Sustainment of stable housing following end of support • Monitor rates of homelessness during service contact • Sustained avoidance of homelessness following end of support
Continuity of care	<ul style="list-style-type: none"> • Assess using a validated scale • In addition, report on ensuring access to GP, mental health services and social work services
Drug and alcohol use	<ul style="list-style-type: none"> • Assess using validated scale
Offending	<ul style="list-style-type: none"> • Monitor rates of conviction and imprisonment • Sustained avoidance of conviction and imprisonment following end of support
Cost effectiveness	<ul style="list-style-type: none"> • Patterns of clinical service use • Use of emergency health services • Use of other services (homeless services, social work, drug and alcohol services) • Contact with the criminal justice system • Evidence of change associated with using housing support services • Evidence of sustained change following end of support
Work related activity	<ul style="list-style-type: none"> • Involvement in work related activity • Education • Training • Paid work while in contact with services • Sustainment of paid work, education, training or work related activity following end of support

Figure 4.2: Areas that an evaluation of housing support services for people with mental health problems might include

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Appendix 1: Methods

This review of evaluation research that demonstrates the effectiveness of housing related support services for people with mental health problems employed Rapid Evidence Assessment (RAE) techniques. An RAE utilises systematic review methods in a way that meets the needs of policymakers seeking robust answers to policy questions in a short time period. This means that some elements of bias will inevitably exist within the review.

Rather than review the outcomes of all the studies that have evaluated housing related support services for people with mental health problems, this review sought to examine *the range of study designs and outcome measures* used in the field.

On this basis, the literature search used a range of prominent health and social care/social science databases to identify a sufficient number of evaluation studies and those studies or commentary that related to methodological issues regarding mental health or housing support services. Paramount to the identification and retrieval of relevant studies was that they informed the review questions. Papers were therefore selected if they met the following inclusion criteria:

1. If study is an evaluation of the effectiveness or impacts of a housing support related service provided to people with mental health problems
2. If it offered commentary on the methodological approaches to researching or evaluating the impacts of housing on mental health/MH status etc
3. If it researches the general impacts of housing and environment/ neighbourhood on people with mental health problems (to provide contextual information)
4. If for another reason that shows potential to inform the review, i.e. service brokerage, methodological approaches of measuring impacts or effectiveness of housing on related populations (drug and alcohol addiction) etc

Reviews and *any* primary empirical research from any country were included in this RAE if published after 1990 in English.

Relevant studies were read by one of two researchers who extracted data relating to their context; study designs; housing and mental health outcome measures; any commentary on the effectiveness or otherwise of the measures or study designs; and the study findings or conclusions.

Literature Search

The search strategy was developed to identify published studies about housing related support for people with mental health problems. A combination of relevant

free text terms, synonyms and subject headings were included in the strategy. The terms were identified through discussion with the project team and the National Housing Federation, examination of key papers and database thesauri. The search strategy was developed on MEDLINE and then translated to run on other databases. A date limit of 1990-2010 was used on each database. A study design filter, whereby search results are limited to particular study types, was not used.

The following databases were searched during September 2010:

- MEDLINE
- MEDLINE In-Process & Other Non-Indexed Citations
- PsycINFO
- Social Science Citation Index

The search strategy for Medline is outlined below and was adapted for other databases. The searches were run in September 2010.

- 1 mental disorders/ or exp mood disorders/ or exp personality disorders/ or exp "schizophrenia and disorders with psychotic features"/ (293433)
- 2 Mentally Ill Persons/ (3755)
- 3 "Diagnosis, Dual (Psychiatry)"/ (2397)
- 4 (mental\$ adj2 (ill\$ or disorder\$ or problem\$)).ti,ab. (38855)
- 5 (psychiatric adj2 (ill\$ or disorder\$ or problem\$)).ti,ab. (26667)
- 6 (psychological adj2 (ill\$ or disorder\$ or problem\$)).ti,ab. (3704)
- 7 (depression or depressed or depressive or bipolar or bi polar or schizophreni\$ or personality disorder\$ or psychotic or psychosis or psychoses or paranoi\$ or mania\$ or manic\$).ti,ab. (350486)
- 8 dual diagnosis.ti,ab. (800)
- 9 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 (514719)
- 10 exp Housing/ (21426)
- 11 (support\$ adj3 (housing or house or houses)).ti,ab. (480)
- 12 ((housing or house or houses) adj4 (tenure or tenancy or tenancies)).ti,ab. (223)
- 13 ((tenure or tenancy or tenancies) adj3 (sustain\$ or maintain\$ or support\$)).ti,ab. (22)
- 14 floating support\$.ti,ab. (7)
- 15 (resettl\$ or re settl\$).ti,ab. (893)
- 16 Housing First.ti,ab. (21)
- 17 core pathway\$.ti,ab. (53)
- 18 (wraparound service\$ or wrap around service\$).ti,ab. (16)
- 19 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 (22868)
- 20 9 and 19 (1224)
- 21 letter.pt. (705750)

- 22 editorial.pt. (272557)
- 23 comment.pt. (444894)
- 24 21 or 22 or 23 (1065274)
- 25 20 not 24 (1198)
- 26 exp animals/ not humans/ (3537631)
- 27 25 not 26 (1104)
- 28 limit 27 to yr="1990 -Current" (850)

A total of 2194 studies were identified (Medline 812; Psycinfo 761 and SSCI 621). However, as expected many of the identified studies were not relevant to this review (for example. studies concerned with psychiatric trauma in war or conflict zones or studies concerned with the mental impairment and/or housing for people with learning disabilities or dementia). These studies were excluded leaving the following number of studies entered into the review.

Evaluation studies (From Medline, Psycinfo, SSCI) (
Evaluation studies	
-randomised control trials	22
- quasi experimental methods	6
-observational methods (including qualitative and participatory	52
- reviews	10
Supported housing and mental health background	
-neighbourhood/environment effects	12
-housing quality	2
-community/social integration	4
-client characteristics that might impact on outcomes	9
-client preferences for housing/housing services	23
-reviews	3
-miscellaneous	7
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