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Recovery Housing in Scotland: A Review of the International Literature

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Key Findings

- **Recovery housing is an umbrella term for substance-free, safe living environments for people in recovery from problem substance use.** Different levels and models of recovery house exist, which differ in their extent of structure, support, and staffing. **However, there are large discrepancies in meaning between recovery housing terms** and this highlights the importance of defining recovery houses by the services and level of support they offer.
- Key to recovery housing is the focus on the **social model of recovery principles** of **peer support, experiential knowledge, non-hierarchical relationships, and high involvement in a recovery community**.
- People often go to recovery housing following a stay in residential rehabilitation, although for some houses this is not always a requirement. Recovery housing therefore **offers support and structure to people as they transition back to living more independently, and no longer require the high level of support and structure from a residential rehabilitation service**.
- International evidence, predominantly from the United States, observed positive, longitudinal resident outcomes across various social areas including **higher rates of abstinence** and **lowered reports of substance use; positive employment outcomes; reduced involvement in the criminal justice system; improvements to personal social support and skills; improved psychological measures; and community benefits**. Longer stays in recovery housing is associated with improved positive resident outcomes.
- **Research has also indicated that resident outcomes may also depend on other characteristics**, including age, resources, and co-occurring conditions.
- Further research on recovery housing is required. **There is a lack of UK and Scotland-based research on recovery housing** in general. Further research on longitudinal residents' outcomes; acceptability; level of knowledge; and lived experience would be useful to inform service design and understand current barriers and facilitators.

Contents

1. Introduction

The level of harms from alcohol and drugs in Scotland are high in comparison to the rest of the UK and Europe, and causes avoidable damage to people's lives, families, and communities. Tackling the high level of drug related deaths in Scotland is a priority for the Scottish Government. In January 2021, Nicola Sturgeon, in her role as First Minister, made a statement to Parliament which set out a National Mission to reduce drug deaths through improvements to treatment, recovery and other support services.

The Residential Rehabilitation Development Working Group (RRDWG) was established in April 2021 as a successor to the Residential Rehabilitation Working Group (RRWG). Its role is to advise Scottish Ministers and the wider drug and alcohol sector on implementing the recommendations made by the RRWG in December 2020. These recommendations were published in a suite of reports that provided insight into the pathways into, through and out of residential rehabilitation in Scotland. A specific "need to ensure robust exit planning and continuity of care for those leaving residential rehabilitation" was outlined as a recommendation for future work. This report aims to address this by reviewing the Scottish, UK and international academic and grey literature on recovery housing as a potentially important service for people leaving residential rehabilitation. In doing so, this report responds to the recommendation by the RRWG to better understanding the "local community-based resources […] and other recovery initiatives" that operate alongside residential rehabilitation (recommendation 6b). It also contributes to better understanding the diversity of residential treatment interventions across Scotland (recommendation 7a).

Recovery housing, as part of structured aftercare following a period of residential rehabilitation treatment, has been put forward as a potential avenue for meeting early recovery needs that can be incorporated into the continuity of care for people in recovery. Although a clear definition of recovery housing is lacking [1,2], it is generally accepted that it is a shared-living, substance-free living environment, centred on peer support to promote sustained recovery and independent living. Recovery housing therefore acts as a bridge between structured residential rehabilitation treatment and independent living. Recovery housing is one continuity of care service that can run alongside, and independently, of residential rehabilitation.

This report reviews the evidence from the Scottish, wider UK and international literature base pertaining to various aspects of recovery housing. Specifically, this report sets out to address the following research questions:

- What is meant by recovery housing: is there a definition and what are the key principles?
- What are the key recovery housing models/types and how are they similar and/or different?
- What evidence is there on the influence of recovery housing on resident outcomes?
- What challenges are associated with recovery housing?

2. Methodology

A review of the online literature was carried out end of June-July 2023. A search strategy was developed, and search terms piloted to ensure they captured publications relevant to current understanding.

Due to the exploratory nature of the review, a ‘wide net’ approach was adopted and as such the inclusion criteria was developed to capture all literature, including academic and grey literature, on recovery housing that focused on the treatment of problem substance use published in English between the years 2003 and 2023. All literature identified that was, either directly or indirectly, relevant to the Scottish context was included. Literature which focused on recovery homes that primarily exist for people experiencing homelessness, ex-offenders, veterans, or other groups, but also integrate support for social care and health issues, including substance addiction was excluded as this was beyond the scope of this review. Given the breadth of the literature, these sub-topics could likely warrant a review in their own right.

The literature captured was analysed thematically using a narrative synthesis approach.

2.1 Search strategy

2.1.1 Grey literature

This review began with a search of grey literature using the search engine Google. A initial scoping search of ‘recovery housing’ and ‘drugs or alcohol or addiction’ was conducted to identify relevant documents and webpages. This identified various recovery housing organisations and recovery support webpages that discussed recovery housing. This search identified both key online publications and also informed and refined subsequent searches.

2.1.2 Academic literature

Literature was identified by searching three academic databases: CINAHL, Sociology Source Ultimate, and Web of Science. These databases cover health, human behaviour, psychology, and medical academic literature. A narrow search strategy was developed, which utilised BOOLEAN operators as shown below:

(‘Oxford house’ OR ’Oxford Houses’ OR ’Oxford Housing’ OR ’Recovery house’ OR ’Recovery Housing’ ’OR ’Recovery Houses’ OR ‘Recovery home’ OR ‘Recovery homes’ OR ‘Rehab* house’ OR ‘Rehab* Housing’ OR ‘Rehab* Houses’ OR ‘Sober living’ OR Sober-living OR ‘Transition* house’ OR ‘Transition* housing’ OR ‘Communal living’ OR ‘Communal housing’ OR ‘Halfway house’ OR ‘Dry house’)

AND

(‘Substance misuse’ OR Drugs OR Addiction OR ‘Substance use’ OR Alcohol OR ‘Substance abuse*’)

Pilot searches were conducted before the strategy was finalised. The initial searches were wider, and incorporated terms such as residential treatment, residential recovery, and social support. However, these searches captured a high volume of ineligible results that were more relevant to residential rehabilitation, as opposed to recovery housing.

To aid the narrower search strategy selected, supplementary search techniques were employed. This involved hand searching on Google and Google Scholar and forward/backward citation searching.

2.1.3 Search results

The search was conducted on the 23rd of June 2023. The search string identified 3,624 articles across the three databases, which underwent a two-stage screening process by one researcher. In the first stage of screening, titles and abstracts of the identified studies were screened against the eligibility criteria and duplicates were removed. This reduced the total number of articles down to 278. In the second stage of screening, the remaining publications underwent full-text screening against the eligibility criteria. A total of 112 papers were identified via this search for inclusion in this review. Supplementary searching identified a further 16 studies for inclusion. In total, 128 publications were identified and included in this rapid review of the literature.[1]

3. Results

[1] It should be noted that this approach, although comprehensive, may not be sufficient to capture all relevant literature.

The narrative below describes the main themes identified in the literature and adopts the following structure: understanding what is meant by recovery housing; different models of recovery housing; the evidence base; and limitations of recovery housing services.

3.1 Understanding what is meant by Recovery Housing

3.1.1 Defining recovery housing

A stable and safe place to live is vital to recovery, with the wrong environment posing various challenges to recovery. People with problem substance use experience many barriers in accessing suitable housing, such as stigma [3], and this reduces the likelihood of successful reintegration into the community [4]. Recovery housing therefore addresses the need for a safe and substance-free living environment for a person in recovery [5, 6 7]. More than offering a place to live, recovery housing provides recovery support and facilitates peer support between residents who share similar recovery goals [5, 6, 8]. Recovery housing is not a formal treatment for substance use disorders; it is a service that supports recovery during or after treatment from other treatment providers.

The Substance Abuse and Mental Health Services Administration (SAMHSA) [6], an agency in the United States (US) Department of Health and Human Services, defines recovery housing as:

> 'Safe, healthy, family-like substance-free living environments that support individuals in recovery from addiction. While recovery residences vary widely in structure, all are centred on peer support and a connection to services that promote long-term recovery. Recovery housing benefits individuals in recovery by reinforcing a substance-free lifestyle and providing direct connections to other peers in recovery, mutual support groups and recovery support services.'

The process of re-establishing their life and reintegrating into their community after residential treatment presents as a key challenge for people in early recovery; especially for those who do not have a stable living environment to return to or adequate social support [1, 4, 9-13]. Recovery housing is used by people who no longer need the intense levels of support and structure of residential rehabilitation or in-

patient care, but require support and structure in transitioning back to living more independently within a safe environment [14, 15].

The emphasis in recovery housing is often peer-driven, abstinence-orientated recovery [16]. Recovery housing services also typically offer help with navigating systems of care, removing barriers to recovery, staying engaged in the recovery process, and providing a social context for people to engage in community living without substance use [8]. An interview study on US recovery housing operators' self-defined purpose found that this went beyond simply ensuring their residents remained abstinent, to more broadly improving the lives of their residents by offering a safe, family-like and supportive environment that linked residents to recovery services [17].

3.1.2 Key principles of recovery housing

Social model of recovery

The implementation of the social model of recovery principles [18] are an integral part of the recovery housing philosophy [8]. This model originates from Alcoholics Anonymous (AA) and emphasises mutual help, experiential knowledge, non-hierarchical relationships, and the active involvement in the wellbeing of their recovery community [8, 18]. The social model of recovery principles include:

- Substance use disorders are chronic conditions that cannot necessarily be cured but can be helped through abstinence and a programme of individual recovery and mutual help.
- People in recovery need a safe abstinent social environment in which to recover at their own pace.
- Social model programmes may be non-profit organisations but the experiential knowledge and authority of people in recovery control and direct the organisation.
- In social model programmes, the staff members are recovering peers who manage the environment, not the person in recovery.
- People in recovery are "prosumers" (consumers and providers) not clients, who recover by helping others and themselves.
- People are assisted in taking responsibility for their own plan of recovery; accordingly, residents, not staff, develop their own personal recovery plans.

- The physical environment should be home-like and non-institutional, with places for privacy and reflection and open areas for social and peer activities.
- Governance of programmes is provided by a rotating “residents’ council” that uses democratic participation of residents as a vehicle for making programme decisions.

Research highlights a variety of ways that recovery houses can incorporate social model of recovery principles into their day-to-day running to facilitate peer support across the different National Alliance for Recovery Residences (NARR) levels of recovery houses [19]. For example, incorporating the social model into house meetings, house rules and policies, and applicant interviews.

Recovery capital

Recovery housing helps build residents’ recovery capital [8, 20, 21]. The concept of ‘recovery capital’ refers to the quality of a person’s social, physical, human, and cultural resources, which can facilitate recovery from drugs and alcohol [22]. Addictions UK [23] specifies a number of categories that amount to recovery capital:

- Human recovery capital: a person’s values, skills (including interpersonal and problem-solving), knowledge, experience, and education.
- Physical recovery capital: this includes basic needs such as access to safe housing, food, transportation, and clothes. Other physical needs include good health, employment, and financial security.
- Social recovery capital: a person’s relationships with people who support their recovery and other positive changes.
- Cultural recovery capital: this includes support a person receives from their local community, neighbourhood, or broader communities.

Having a strong recovery capital is associated with a higher likelihood of overcoming substance use-related problems [3, 22, 24]. It has also been associated with better physical wellbeing, psychological wellbeing, overall quality of life, and increased involvement in recovery groups [25]. Recovery housing has been proposed as an important pathway to build recovery capital for some people [3, 6, 10]. By offering a safe housing environment, peer support and a recovery community, it helps builds physical, social and cultural capital, respectively [26, 27]. Although each facility is different, many offer life skills classes, meaningful activities, or employment-related

support, which contribute to human capital [21]. Human capital may also be enhanced by different features of recovery homes including enforcing house rules, promoting accountability, encouraging involvement in mutual help groups, and fostering communal learning that draws from collective experiential knowledge [8, 28, 29]. Recovery houses are therefore a potential key component of the continuum of care for people with problem substance use [6, 10].

Ten Guiding Principles

SAMHSA [6] outline ten best practices and minimum standards for recovery houses. Services should:

1. Have a clear definition that describes what their service offers.
2. Recognise that substance use disorders are a chronic condition that require a range of recovery support.
3. Recognise that co-occurring mental health disorders are often associated with substance use disorders and be adequately informed on how this can affect a person's recovery journey.
4. Assess the needs of applicants and the appropriateness of the residence to meet these needs. Decisions should be based on what gives the resident the best chance for obtaining lasting recovery.
5. Promote and use evidence-based practices.
6. Have clearly written and easy-to-read documents for operating procedures and policies. New residents should have this explained, and a handbook is also advisable.
7. Ensure quality, integrity, and resident safety.
8. Learn and practise cultural competence. Staff should be trained to respect different beliefs and backgrounds.
9. Maintain ongoing communication with interested parties and care specialists.
10. Evaluate programme effectiveness and resident outcomes.[2]

[2] SAMHSA recommend several measures: abstinence from use; employment; criminal justice involvement; and social connectedness.

3.2 Different recovery housing models

3.2.1 Levels of support

Recovery housing is therefore an umbrella term for a wide range of housing service facilities for people recovering from problem substance use. NARR [30] have categorised four levels of recovery housing according to level of resident support, services offered, and structure of the house. However, some consider that the fourth level outlined is more indicative of the type support typically offered at residential rehabilitation services, and therefore exclude this level [31]. Table 1 below describes the different levels of recovery housing, as adapted from NARR [30] and Ohio Recovery Housing [31]. It should be noted that these are key sources describing recovery housing from a US perspective. The relevance and applicability of these specific defining criteria and how well they map to the current services in operation in Scotland is yet to be determined.

Table 1. Different levels of recovery housing [30, 31]

	Level 1	Level 2	Level 3	Level 4
Description	Peer-ran	Monitored	Supervised	Service Provider, or Residential rehabilitation
Governance/ Administration	Democratically ran	House manager or senior resident. Follows policy and procedures.	Organisational hierarchy. Administrative oversight for service providers. Follows policy and procedures.	Overseen organisational structure. Clinical and administrative supervision. Follows policy and procedures.
Typical resident	Self-identifies as being in recovery.	Stable recovery but wish to have a more structured, peer-accountable and supportive living environment.	Those who wish to have a moderately structured daily schedule and life skills support.	Require clinical oversight or monitoring, stays in these settings are typically briefer than in other levels.
Workforce	Typically no on-site paid staff. Sometimes an overseeing officer.	Resident house manager(s), often compensated by free or reduced fee.	Paid house manager, administrative support, certified peer recovery support service	Paid, licenced/credentialed staff and administrative support.

			provider or case managers.	
On-site supports	On-site peer support and offsite mutual support groups encouraged, and as needed, outside clinical services. Drug screening and house meetings.	House meetings and house rules provide structure. Peer recovery supports including buddy systems, outside mutual support groups and clinical services are available and encouraged. Drug screening.	Community/house meetings, peer recovery supports including buddy systems. Linked with mutual support groups and clinical services in the outside community. Emphasis on life skills development. Service hours provided in the house.	Clinical services and programming are provided on-site. Life skills development within the house.
Resident move-in decision-making	Residents take the lead in deciding who moves in with support from operator	Operator makes decision about who moves in with support from residents	Operator makes decision about who moves in. Residents may have input on developing move in process	N/A
Resident suitability	Home must have a process for ensuring residents are at a point in their recovery where they do not need monitored environment and are able to help others. Many homes require at least six months in recovery or a successful stay in a Level III or Level II recovery home prior to moving in	Residents able to live in a home that is monitored but does not have 24/7 staff support. While not required, many homes look for at least 30 days in recovery.	Residents may be very early in recovery but are not actively under the influence of alcohol or illicit substances. Recovery homes must have staff support in the home whenever residents are present	N/A
Recovery planning	Recovery planning typically focuses on maintaining long-term	Recovery planning focuses on fully transitioning/ sustaining long-	Recovery planning focuses on completing treatment plan and/ or maintaining positive outcomes	N/A

	recovery. The resident sets their own goals, identifies strategies, and asks for help when needed to achieve goals or with setbacks. Recovery home checks in with residents on at least a monthly basis and available if resident requests additional support.	term recovery. Recovery house helps resident develop skills such as identifying their own goals, thinking through strategies to meeting those goals, and making plans. Focus on life-skills development for implementing plans and maintaining recovery. Recovery home meets with residents at least once a week to check in on plans.	achieved during treatment. Plan may be integrated with treatment plan. Plan also includes life skills development, development of recovery capital, as well making initial connections to social service programmes and supports. Recovery home meets with residents at least weekly, with newer residents often needing more support	
House environment	Residents responsible for meals. Residents responsible for house chores and basic maintenance. Residents decide on if they would like additional rules such as a curfew. Residents may come and go as they please. Residents may use common areas of the home at all times (while being reasonable and	Residents responsible for preparing meals, but some food may be provided by operator for those who may not have enough income to purchase their own food. Residents responsible for house chores and basic maintenance. While there is a curfew in the home, and a strategy to ensure it is upheld, residents came	Some may provide meals, but residents must have the ability to prepare their own or have snacks if they want. Home may have larger commercial kitchen or larger dining area to accommodate all residents. Residents may be working and may leave to go to work or engage in job seeking. Newer residents are often asked to remain in the home or follow buddy or mentor systems	N/A

	considerate to housemates).	come and go as they please. Residents may use common areas of the home at all times (while being reasonable and considerate to housemates)		

Some recovery housing providers facilitate residents moving across different housing levels in a phased approach, with increasing autonomy and reduced staff support [25]. The rationale is to provide a meaningful pathway of continuing care that phases the transition to independent living. For example, in Scotland, Phoenix Futures provides a five-stage model to housing, from residential rehabilitation (with high intensity staff support and access to specific therapeutic approaches), to bridge housing to prepare clients to exit treatment, to supported housing to develop life skills, to self-managed recovery houses, and then to full independent living [25, 32]. Resident assessments found higher recovery capital and perceptions of wellbeing were observed in residents at the later stages of the phased model [25]. Later stage, self-governed recovery houses have been found to help some people create a sense of 'home' during the recovery journey than is always possible in more formal facilities [33].

3.2.2. Different recovery house models

Different models of recovery housing have been identified across the international academic and grey literature that fit within the umbrella concept of recovery housing. Although these houses may differ in their specific approach to structure and type of support offered, all are centred on peer support and promoting sustained recovery. This section will briefly describe each of the models identified as part of this review. Oxford houses and sober living houses (SLHs) seem to be the most widely researched types of models within the academic literature base, with halfway houses being referenced to a slightly lesser extent. These main models are described in more detail in subsequent sections of this report.

Other types of recovery houses have also been identified, although it is not clear if this is due to a difference in terminology used in the literature and whether they would map to the principal models as identified in this review, or, if these are indeed distinct models of recovery housing. Examples of these include transitional housing, recovery residences, move-on housing, and supported accommodation. This lack in clarity highlights the importance of defining individual recovery houses by their key features, such as the services and level of support they offer as opposed to a named model, which can be more restrictive.

It should also be noted that there is marked disparity within both housing providers and the published literature concerning what model is attributed to a specific residence. For example, some advocate that SLHs are structured differently to a halfway home; and others use the terms interchangeably [34, 35].

Oxford House

Oxford Houses [36] are peer-ran recovery houses that fit under the Level 1 NARR category. They are self-sustaining houses, meaning residents cover the complete cost of maintaining the house, including rent, food, and bills. The house is substance-free and facilitates peer-support and communal living. There is generally no paid staff within an Oxford House. There is also no maximum length of stay; however, on average residents stay one year. This has been found to facilitate residents to reach more long-term goals, such as entering into further education programmes [37].

Typically, people enter an Oxford House following completion of a residential rehabilitation or detoxification programme, and so it assumes that they are not using any substances, however no specific level of abstinence is specified. Oxford houses accommodate up to fifteen people in recovery, in either a men-only or women-only residence. Larger Oxford Houses have been found to lead to a greater number of days abstinent, which in turn leads to more positive outcomes for residents [38]. This may be due to increased opportunity for positive social support in larger residential settings or the financial burden being shared with other residents. Additionally, some Oxford Houses allow parents and their children to live together. It has been shown that children benefit from living with their parents at an Oxford House, however it should be noted that this may be due to the lack of alternative options for staying together [39].

All Oxford Houses in the US are overseen by the umbrella non-profit organisation, Oxford House, Inc [36]. This organisation represents the network of registered houses, grants charters to groups who want to start a new Oxford house and publish annual reports on Oxford House progress. The charter ensures that new houses commit to the basic standards and principles of the Oxford House model.

Sober living house (SLH)

SLHs are a model of recovery house that are typically placed in the NARR level two or three category, depending on the extent of their structure and support.

There are notable differences between the US and UK descriptions of SLHs. In the UK, SLHs fit within the level three supervised environments category. People in recovery can gain access to the substance-free SLH once they have successfully completed a residential rehabilitation programme [34, 40]. In the house, days are structured and incorporate therapy, group meetings and life skills development activities supported and guided by a team of professionals [34, 40]. This more structured and staffed environment sets this model apart from Oxford Houses. Moreover, it is common for SLHs to follow the 12-steps programme and residents may also be involved in work, education, or external recovery treatment activities/services. Residents must also adhere to the following rules and principles: abstain from drugs and alcohol, not have overnight guests; actively participate in recovery meetings; and comply with random drug and alcohol testing [40]. The aim of SLHs is to provide a

bridge between residential rehabilitation and independent living, focusing specifically on establishing routines and promoting individual accountability [34].

SLH operations are overseen by a house manager, who is typically someone in recovery and often someone who has lived in an SLH as a resident [41]. However, a house manager's role in SLHs can vary considerably, with some managers viewing their role as primarily administrative and others reporting extensive time committed to providing recovery support [42].

In the US, SLHs do not always require people to have recently completed a residential rehabilitation programme and there are no limits on stay duration, providing residents comply with house rules [43]. Moreover, in the US, similar to Oxford Houses, SLHs are all financially self-sustaining [44]. SLHs in the US can also be connected to a residential rehabilitation centre and are seen as an extension of the recovery process, which are considered more costly and formal.

Halfway houses

Halfway houses, also known as dry houses in the UK, is a model of recovery housing that is usually provided by the third sector or private companies and provides a substance free residential setting for those in recovery. There is some variation in the level of support offered by halfway houses, with some sources describing a hostel-type environment with little support or structure, and others describing a more structured environment similar to SLHs, namely where admittance is only granted after successful completion of a residential rehabilitation programme [45, 46]. In more structured halfway houses, the facility is run by professional staff, and residents attend specific therapy sessions. Halfway houses discourage residents from undertaking full-time work during their time at the house [45], instead the days are structured around specific recovery activities. Residents are however encouraged to volunteer or engage in further education [45] and those who actively engage in the halfway house may be offered council accommodation after they leave [45]. A key distinction of halfway houses is that they do not adopt a self-sustaining model and require external funding. This can be costly for residents [35].

Similar to other models, there are key differences between how US and UK recovery services define halfway houses. In the US, halfway houses are usually run by government agencies, and are less costly for residents as a result. It has however

been noted that this funding model is more restrictive in terms of the range of services a house is able to offer [43]. Similarly, there is usually a limit on how long residents can stay and a previous stay at a residential rehabilitation is a prerequisite for entering this service. Compared to self-sustaining models, halfway houses are limited by the funding they receive in terms of what level of support they are able to offer. There may also be a more limited sense of ownership and empowerment for residents in this model of recovery house [44, 47].

3.3 Evidence base for recovery housing and key limitations

3.3.1 UK Recovery Houses Evidence

There is limited research on recovery housing in the UK. A mixed method evaluation of the first Oxford House in the UK, which opened in 2011, found that there was a high rate of abstinent self-efficacy (measured via The Situational Confidence Questionnaire) and social support (measured via The Interpersonal Support Evaluation List) for the residents (n=7) [48]. Furthermore, qualitative data showed that for people with long periods of abstinence prior to joining the house, principles of the house (including charitable work and common house initiatives) benefited other areas of their lives.

The academic literature explores two recovery houses in the North of England. The first organisation [3] operates as a social enterprise that focuses on upskilling people in recovery into the local construction industry to build or invest in new affordable housing. By doing so, residents and previous residents (alumni) were shown to build recovery capital and sense of community while investing in their local area. Despite the study indicating that this recovery house was associated with positive outcomes, more research on long-term outcomes is needed [3]. Resident outcomes from another recovery house reported that 79% of their clients stayed abstinent for three months and 65% remained abstinent at the nine month follow-up within the programme (n=201) [13]. A high level of employment/ skills development was also observed in the 71 clients that stayed in the programme for six months, with 73% volunteering and 39% entering paid employment. Moreover, positive outcomes for people who had previous involvement in the criminal justice system were reported (n=142), with 71% not re-offending within 12 months, 35% volunteering, and over 22% in paid employment.

There was no literature identified as part of this review that directly looked at recovery housing in Scotland. There was however one study that explored the key principles of recovery housing in a Scottish context, namely the role of recovery social networks and meaningful activities. They found that the strongest predictors of well-being and quality of life for people in recovery were high involvement in recovery social networks and engagement in education and training, employment, and activities associated with parenting [49]. This does indicate that associations between recovery housing, well-being, and quality of life are relevant to a Scottish context.

3.3.2 International Evidence

In the US, recovery housing is an increasingly common service provision for people recovering from problem substance use [8, 50]. It is estimated that there are between 10,000-18,000 recovery houses across the US [2, 50]. In comparison, there is only a handful of recovery homes in the UK and across Europe. Due to this, academic research on recovery housing is predominantly focused on the US context. International evidence provides key information on its potential utility as a continuum of care service when UK/ Scotland specific research is lacking. Where research is from a non-US context, this will be specified.

Maintained abstinence

Research has consistently shown that, across different types of recovery housing, residents have improved abstinence rates while living in the house and after leaving at follow-up [7, 8, 14, 47, 51-55]. A reduced risk of relapse for people in recovery housing programmes has also been observed [56]. This has been explained by the recovery house providing close monitoring, access to additional services, and building abstinence self-efficacy [57, 58]. Abstinence self-efficacy has been found to be enhanced in the recovery house environment due to the availability of abstinence support, guidance, and information that can be provided by other residents who have the same goal of long-term sobriety [28]. In Brazil's first recovery housing programme, the use of urine tests to monitor abstinence were found to have a positive effect on maintenance of abstinence [59].

Recovery houses can also help residents cope with environmental triggers or cues (such as alcohol outlets or neighbours who use substances) through social rules, house processes, and peer support [60]. This less formal and ad hoc approach may be

more effective than one-size-fits-all interventions [60]. Additionally, residents of SLH described that the recovery house peer-support environment facilitated motivation for abstinence in various ways, including feeling understood, recognising vulnerability in others, identifying with the recovery processes of others, receiving supportive confrontation, and engaging in mutual accountability [61]. These experiences are hard to replicate outside of the recovery house context.

Reduced substance use

Consistent evidence from SLHs have shown reduced substance use from residents at follow-up [44, 53, 54, 62]. This has been observed at six month and 12 month follow-ups in SLH residents [63], and at two-year follow-up of Oxford House residents [29, 57, 64].

Improved employment outcomes

Research across different types of recovery housing has consistently shown positive employment outcomes for residents [7, 8, 14, 44, 53, 54, 62, 63, 65]. The Oxford Houses environment has been found to increase economic opportunities for residents [66]. For example, residents who stayed for six months or longer reported a higher number of days working, higher income from employment, and higher overall income [66]. Additionally, at two-year follow-up in a randomised control trial, residents in the Oxford House condition had significantly higher monthly incomes than those in the usual care condition (no recovery house residence) [29, 55]. These positive results have also been observed in a non-US context, with 80% of people that completed the 12 months stay in Brazil's first recovery housing programme being in paid employment at follow-up [59].

Reduced involvement in the criminal justice system

Residents' reduced involvement in the criminal justice system has been a consistent positive outcome reported in SLH [44, 53, 54, 62, 63] and across other recovery housing types [7, 8, 14, 29, 55, 64, 67].

Improved psychological wellbeing

Improvements across different psychological measures have been observed for recovery house residents, including improved psychiatric symptoms severity in SLHs [54, 62] and Oxford Houses [68]; reduced level of anxiety in Oxford House residents [69]; and reduced suicidality in a recovery housing programme [64]. Additionally, overall

psychological distress, symptoms of depression, and phobic anxiety significantly improved over time in SLH residents [70].

However the evidence is more mixed, as risk factors for relapse were still present, suggesting that additional support for residents with psychiatric symptoms could improve substance use outcomes. In contrast, some research has found that recovery housing only maintains residents wellbeing and does not always significantly improve it [7].

Benefits to social support

Social support and interpersonal relationships are important facilitators to long-term recovery; conversely, a lack of efficacy in managing interpersonal relationships and building new support networks are barriers to long-term recovery [9, 71-73]. Research has shown that living among other residents in the recovery housing environment can help build social support and instil a sense of community [8, 74-79]. Moreover, women in an Oxford House reported high sense of community scores, which implied potential to have empowering effects on women who have experienced trauma, have a low sense of self-worth, and dependence on past relationships [80]. Several other positive implications for resident social support have been identified across the literature, including residents experiencing improvements in their family relationships [65]; the social environment of recovery houses serving as a protective factor against relapse-predicting interpersonal stress [79] and being positively associated with resident quality of life [81].

Recovery houses facilitate naturally-occurring, family-like interactions between residents that can help people build valuable social skills, such as negotiation and conflict resolution [82]. This can also help reinforce motivation and abstinence throughout the day [82]. Many different forms of informal peer support activities have been identified as occurring within an Oxford House, including sharing emotional support around recovery; directive guidance in recovery; and sharing recovery-related life experiences [83]. Moreover, research shows that the Oxford House model encourages residents with high quality of life scores to engage in a friendship with residents with a low quality of life score [84]. This could be due to the Oxford House principles of mentoring, stemming from AA-related practices, and that residents benefit from the growth and success of other residents (e.g. through house stability

due to low turnover). Recovery houses, such as SLHs, have been found to facilitate strong psychological and economic ties between residents that have been referred to as 'alternative families' or fictive kin relationships [85]. Residents exchange various types of support, and can incorporate other residents into existing family relationships, particularly in homes where there were children. The residents perceived these fictive kin as more supportive than actual kin, which encouraged them toward greater individuation. Overall, this highlights the potential of recovery homes for facilitating the development of supportive mentor-like relationships and supportive social networks.

Additionally, alumni of recovery houses have been found to stay highly involved in their previous recovery house communities [65, 86]. One study found that alumni of Oxford Houses who continued to visit their previous recovery house maintained contact with the organisation, continued to see other alumni, and continued the same A or Narcotics Anonymous (NA) meetings as when they were a resident, had a high level of self-efficacy and abstinence (95%) [86].

Evidence around length of stay and early leave

Increased length of stay has been found to improve a range of positive outcomes for residents that include abstinence [87-89]; alcohol and drug use [29, 90]; employment [29, 66, 90]; self-efficacy [71, 90]; self-regulation [29]; and quality of life (this relationship was also observed in residents with a psychiatric comorbidity) [91]. However, the first few weeks in a recovery house are the most vulnerable period for a resident to prematurely leave and further research is needed on how to best to support people to stay beyond this period [92]. For example, in Brazil's first recovery housing programme, 49% of their sample experienced a relapse and this mostly occurred in the first 45 days [59].

Several barriers for residents staying in a recovery house have been identified so far, including issues assimilating into the recovery house [93]; issues adhering to house rules [93]; low personal social capital [93]; social anxiety [94]; challenges establishing family ties [59]; and issues building a social network [59]. Research has also found that residents with less resources (including financial, transportation, housing instability) are more likely to perceive recovery housing more favourably and be more invested than residents with more resources [37]. Additionally, older age and experiencing

financial worries have been identified as individual factors that are associated with staying longer than 3 months in a recovery house [87, 95, 96].

Evidence around the 12-step programme

Residents' involvement in the 12-step programme while in a recovery house has been identified as a strong predictor of positive resident outcomes [15, 53, 54, 62, 97, 98]. Research has found that living in an Oxford House provides additional benefits to people in recovery, independent from their engagement with the 12-step programme; with participants in an Oxford House more likely to remain abstinent than participants in the usual care (with 12-step programme) group at follow-up [98-100]. Residents report that the programme incorporated into recovery housing provided them with structure, discipline, sense of community through communal living and meetings, the opportunity to receive peer emotional support, and kept them accountable [15].

Recovery housing for sub-populations

Recovery housing research has also explored outcomes for different population groups in recovery who face unique recovery challenges.

- Women with co-occurring experience of domestic and sexual violence and substance use disorders benefited specifically while residing in a SLH, scoring less on measures of substance use, posttraumatic stress, financial worries, and depressive symptoms [102]. Longer duration and higher involvement in the programme were predictive of increased positive outcomes. Other research has found that women who have experienced trauma benefit from the democratic, independent-living environment [103].
- Low rates of substance use, high rates of employment, and high engagement with out-patient treatments were reported for men who have sex with men (MSM) in recovery housing [104]. However, within this study the health-related quality of life decreased in the 3-month follow-up. With nearly half of the sample reported having chronic medical conditions, most commonly MAT, the authors emphasised the importance of linking healthcare providers within recovery support for MSM in recovery housing.
- Significant improvements on Human Immunodeficiency Virus (HIV) risk measures were observed in recovery housing residents [63].

- The housing status of residents previously experiencing homelessness have been reported to improve. It was shown that, between entry and 18-month follow-up, homelessness fell from 16% to 4%; people who were in marginal housing situations fell from 66% to 46%; and stable housing grew from 13% to 27% [7, 101].
- People who have been prescribed medication-assisted treatment (MAT) have been reported to benefit from the recovery housing environment in terms of their lived experience managing their recovery and medication compliance [105]. Residents prescribed MAT reported developing skills that helped their ability to reintegrate to independent living; felt supported by and connected to their family; and felt an increased sense of accountability and community [105]. Other research has found that recovery houses such as Oxford Houses can facilitate valuable social support for people prescribed MAT in their recovery [106]. However, although Oxford Houses may be suitable recovery settings for people utilising medications for opioid use disorder; there is a gap in research in how other residents may respond to this [107].
- Various positive outcomes for residents who also have specific co-occurring mental health concerns have been reported:
    - At a two-year follow-up, residents of an Oxford House with post-traumatic stress disorder (PTSD) showed higher levels of self-regulation than people in the usual care condition with and without PTSD [108].
    - Research has also recommended the Oxford House model as a recovery referral pathway for people recovering from problem substance use, who also experience problem gambling [109].
    - Women with co-occurring eating disorders and substance-related disorders have been found to benefit from democratic, independent-living recovery houses [103]. A longer duration of residency has also been associated with higher body image self-efficacy scores [110].
    - Oxford House residents with a severe psychiatric comorbidity were found to have similar positive abstinence rates at follow-up as compared to residents with mild or no psychopathology; despite earlier concerns that people with severe psychopathology would experience challenges functioning in the recovery house environment [111].

The evidence around community engagement, location and acceptability of the service

- People who achieve stable recovery have been shown to contribute highly to their local community (UK study) [112]. For example, 80% of the people who were in stable recovery surveyed reported actively volunteering in their local communities, which is twice the rate reported by the public [112]. Additionally, more than 70% were in stable employment, also boosting the local economy and reducing benefits costs [112]. Moreover, recovery houses in the US often practise a 'good neighbour' policy that encourages their residents to be involved in community services [113]. This has been found to positively influence neighbourhood perceptions of recovery houses [113]. Another US study found that SLH residents developed valued identities as helpers in their local communities, by providing advice to neighbours that had family or friends with problem substance use; and organising community events to improve the neighbourhood.
- The location of the recovery house has found to influence resident outcomes in the US context. A positive relationship has been observed between resident perceptions of the facility neighbourhood (low on crime, high on cohesion, and high on transport accessibility) and reported recovery capital [114]. Alternatively, residents may feel hesitant to socialise in the community or seek services if they perceive the area to have a high crime rate, or will be unable to if there is a lack of transport [114]. Additionally, higher relapse rates have been reported in recovery houses located in areas with lower income and educational levels [115].
- Research has found a general support for the importance of recovery housing services [113]. A Romanian study [116] found favourable community attitudes towards recovery houses and a willingness to live near an Oxford House. Studies from the US [113, 117] have also found constructive and positive attitudes towards recovery houses, where it was suggested that Oxford Houses with close contact with their community neighbourhoods led to increased positive attitudes and perceptions. Furthermore, US health professionals have been shown to have positive perceptions and are highly supportive of the role of SLHs in the recovery journeys of people with problem substance use [118].

The applicability of this research to the Scottish context is unclear. However, a 2011 Scottish Survey on public attitudes towards drug users [119] found conflicting community perceptions about people in recovery. For example, while 80% of respondents agreed that 'it is important for people recovering from drug dependence to be part of the normal community'; results also indicated that 46% were fearful of having recovery services in their own neighbourhood. Researchers posit that there is a need to challenge negative perceptions by promoting the idea that people in recovery can be a valuable asset to the local community [120].

3.4 Key considerations identified in the literature

A central aim of this literature review was to establish if a working definition could be identified and it is clear that an agreed operational definition is lacking. Moreover, there is confusion between housing types that fall within the umbrella of 'recovery housing' and general inconsistencies in how language is applied [1, 2, 121, 122]. There are also limitations to the research designs used to study recovery housing, which restricts the level of evidence [14]. This includes the inconsistency in definitions but also inconsistencies in how recovery and other outcome measures are captured, issues around sample size, and a general lack of research on long-term outcomes for residents leaving recovery houses [14, 123]. The development of an agreed definition, principles and standards would help to establish recovery housing as a recognised service delivery and improve research designs [121].

Providers often report that motivating residents to stay in the initial first few weeks in the recovery house is a key barrier to sustained recovery [17]. Further research is needed on better understanding the difficulties experienced by residents and how to reduce risks for people during this vulnerable period for premature leave [92]. This is an important area for development as resident outcomes have been shown to be improved by longer stays in recovery homes.

Lower levels of support and services available in certain types of recovery housing (e.g., Oxford Houses) may not be suitable for all people in recovery. Rules and regulations in these houses can be minimal, and this requires a high level of motivation, independence, and interpersonal functioning from residents [97]. This can

be difficult for some people depending on where they are in their recovery, and can be especially challenging for people with co-occurring mental health concerns [11]. Residents of recovery houses also specifically highlight the challenge of finding a residence which is a 'good fit,' and this is especially important given the emphasis on social recovery capital in recovery housing [8]. Thus, a breadth of services that accommodate different needs is required.

Relatedly, research on specific sub-populations have identified unique challenges. For example, barriers to inclusion for people with specific disabilities [124] and low levels of motivation for staying abstinent for people with specific mental health concerns [125] have been identified as challenges for residents of recovery housing facilities. This draws implications on unique challenges for specific sub-groups and the need for increased linking between services to accommodate their needs.

There are also challenges associated with how services are funded and how people are able access them [122]. The specific challenges faced by some providers around securing and sustaining external funding for a recovery house have been noted [17]. Relatedly, self-sustained models of recovery housing, funded primarily by the residents themselves, limits access to those services for many [8].

Finally, there is a lack of research on recovery housing and maintaining long-term recovery in the UK [48]. The literature captured within this review is predominantly from the US context, as such caution should be exercised when relating these findings directly to what is applicable within a Scottish context. More research to better understand the Scottish recovery housing landscape is needed.

4. Conclusion

Recovery housing is an umbrella term for substance-free, safe living environments for people in recovery. There are different levels of recovery housing, which differ in their extent of structure, support, and staffing. However, across levels, recovery houses always centre on facilitating peer support between residents and providing access to recovery support services. It is not a formal treatment for problem substance use - people often go to recovery housing following a stay in a residential rehabilitation, although for some houses this is not always a requirement. Recovery housing therefore offers support and structure to people as they transition back to living more independently, and no longer require the high level of support and structure from a residential rehabilitation service. Recovery housing services generally follow the key principles of the social model of recovery, including mutual-help, experiential knowledge, non-hierarchical relationships, and involvement in a recovery community. Finally, building resident's recovery capital for sustained recovery is a key aim of recovery housing.

The positive longitudinal evidence on residents of recovery houses suggests that this model of continued care may be an effective option for people in recovery wanting a substance-free living environment. Improvements in various areas were observed from international and limited UK evidence including higher rates of abstinence and lowered reports of substance use; positive employment outcomes; reduced involvement in the criminal justice system; improvements to personal social support and skills; improved psychological measures; and community benefits. Longer stays in recovery housing were found to improve these positive outcomes. Recovery housing was also described as useful to sub-populations of the recovery population that face unique challenges; however, attention was also drawn to additional support needs for certain groups.

4.1 Further areas for investigation

This review identified several areas that would benefit from further exploration:

- There is a lack of UK and Scotland-based research on recovery housing in general. Further research on longitudinal resident's outcomes; acceptability; and lived experience would be useful.

- How to best maintain residency in the first three months of a new resident joining a recovery house, which has been shown to be a vulnerable period for premature leave. Qualitative and lived experience research may be best suited to this area of research, where residents that have stayed for prolonged periods or left prematurely can discuss barriers or facilitators.
- Research demonstrated a wide range of knowledge levels on recovery housing, whereby those who had higher levels were more supportive of recovery housing [118]. The current knowledge levels of key Scottish stakeholders (including residential rehabilitation providers and other recovery service providers, people experiencing substance use problems, policy makers and colleagues) is unknown. Research to gauge this knowledge level would be useful to know the degree of knowledge dissemination required.

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