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# Review of the impact of loneliness and social isolation on health and well-being and whether people who experience loneliness/social isolation have higher use of public services

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Review of the impact of loneliness and social isolation on health and well-being and whether people who experience loneliness/social isolation have higher use of public services

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Research

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Views expressed in this report are those of the researchers and not necessarily those of the Welsh Government

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## Glossary

<b>Acronym/Key word or phrase</b>	<b>Definition</b>
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, Queer and “Plus” which represents other sexual identities including pansexual, asexual and omnisexual. The accepted and inclusive way to refer to the queer community, who can be grouped by one common theme: the fact they don’t identify as straight or cisgender.
BAME	Black, Asian and minority ethnic
Carer	A person who provides or intends to provide care for an adult or disabled child.
Informal carer	Any person, such as a family member, friend or neighbour, who is giving regular, ongoing assistance to another person without payment for the care given.
Care leavers	Any adult under the age of 18 who spent time in care as a child. This could be in foster care, residential care (mainly children’s homes), or other arrangements outside the immediate or extended family. The care could have been provided directly by the state (mainly through local authority social services departments) or by the voluntary or private sector (for example, Barnardo’s, The Children’s Society and so on).
Socio-behavioural model of health care utilization	Conceptual model which includes social and behavioural factors in relation to the use of healthcare
Neurodiversity	Neurodiversity is a concept where neurological differences are to be recognized and respected as any other human variation.
WHO	World Health Organisation
Heteronormative	Worldview that promotes heterosexuality as the normal or preferred sexual orientation.

## **Executive Summary**

### **Introduction**

The National Assembly's Health, Social Care and Sport Committee recommended that the Welsh Government should either undertake or commission work to assess the impact of loneliness and isolation on health and well-being and whether people experiencing these issues make increased use of public services. The University of Sheffield and OB3 Research were commissioned by the Welsh Government to undertake research into this issue. The academic literature suggests that there is a strong link between social isolation, loneliness and health. For example, people who are socially isolated can have greater levels of mental health problems, cardiovascular issues and chronic illness. What we do not know is whether loneliness and social isolation are a causative factor for ill health, whether ill health is a causative factor for loneliness and social isolation, or whether there is a combination.

The terms loneliness and social isolation have been separated because they are different, although in the academic literature the terms are often used interchangeably. The area is highly complex because some people who experience loneliness can also be socially isolated whereas other people who are socially isolated do not always experience being lonely. Loneliness is how people feel about their social situation. It is not about how many people they have in their social network, instead it is about the quality of those relationships. What the literature tells us is that anyone can experience social isolation and loneliness at some stage in their life.

### **Methods**

A range of methods were used to generate evidence. From December 2018 to January 2019, a scoping search of the academic and grey literature was carried out. The initial searching returned 2,777 articles and after detailed inclusion/exclusion criteria were applied a total of 40 studies were left for inclusion in the scoping review. A statistical procedure called a meta-analysis was used to combine data from multiple studies which emerged from the scoping review to increase the robustness of the findings. Nine of the 40 articles (one article contained three different studies and the statistics could be used from all three separate studies) contained usable data to provide statistical evidence. A

consultation exercise was included as part of the scoping review with 10 key organisations representing a range of groups in Wales; the groups included for interview were guided by both the existing literature and the Welsh Government. The consultation was carried out using telephone interviews, which took place from January to February 2019.

## **Findings**

The scoping review suggested that although there was a link between experiences of poorer health and increased or decreased use of public services, it was highly complex and not merely a cause and effect relationship. The statistical analysis concluded that there was a small but significant association between loneliness and increased visits to a doctor. It also suggested that there were other factors present, for example existing health conditions which may have increased visits to the doctor.

The academic literature and the consultation interviews suggested that loneliness may begin in childhood and can result from social inequalities which can contribute to being socially isolated, bullied or victimized at school and not having a supportive friendship network. Counselling and pastoral care in schools was viewed as useful but the level of service was inadequate for young people who were a diverse group. Younger lesbian, gay, bisexual, transgender, queer and “plus” (LGBTQ+) people report more mental health issues than their non LGBTQ+ peers. This was often due to issues at school such as bullying, not being appropriately addressed and young people not being able to talk about their issues openly with others.

Feelings of social isolation and loneliness are compounded when people are stigmatised or experience discrimination, for example both the academic research and consultation interviews suggest that LGBTQ+ groups are less likely to access services because they feel professionals such as social workers, carers, GPs, hospital and medical staff display a lack of understanding about the complexity of their lives. They also feel that they are being judged about their sexuality. This adds to loneliness, especially around key stages in their lives such as bereavement. Issues relating to loneliness and social isolation tend to be more prominent amongst older LGBTQ+ people because they have grown up in a time period where homosexuality was a crime. They are therefore less likely to disclose their

sexuality. Transgender people were a group that highlighted particular issues with services around discrimination.

Single parents experienced loneliness and social isolation. They were socially isolated because of lack of access to transport, a lack of confidence to make new social links and they experienced higher levels of poverty. The academic literature suggested that single and new parents had a higher incidence of accessing their GP for support and referrals to mental health services as a result of post-natal depression, sleepless nights, stress, mental frustration and distress. The consultation interviews revealed that parents who were known to social services were less likely to access services because of stigma, but also because they felt services were not appropriate to meet their complex social needs and instead tended to medicalise them and focus on treatment.

Refugees and asylum seekers appeared to experience higher levels of loneliness compared to the general population in Wales. This was a result of having come from a country/community where they previously had good access to strong family, friend and professional networks. They also had a level of distrust about services usually gained from their interactions with officials, both in their country of origin and throughout the resettlement process. Having poor English language skills prevented integration into the community and access to public services. It was questionable whether the health service understood their particular issues and perspectives. Organisations supporting refugees and asylum seekers suggested that they were not being considered seriously when requesting support and often only accessed services when in crisis.

The academic literature indicates that disabled people struggle with budget cuts and reductions in service provision. The consultation interviews supported this position. Changes to how services were delivered, for example more telephone services increased issues for people with hearing impairments because they acted as a barrier to access. Services also failed to be joined up with duplications or omissions occurring as a result of a lack of communication and collaboration. There was also unnecessary duplication of some services or a complete absence leading to a lack of joined up care.

Poverty is cited in the academic literature as having the greatest impact, this was supported by the consultation interviews revealing that it reduced people's ability to travel around, interact with others and increase their social network. The consultation interviews revealed that refugees and asylum seekers were particularly affected. Carers whose lives had transitioned into a caring role often failed to recognise their changed status, making them unaware of benefits and grants to which they may be entitled. People who would previously have received help were no longer being supported, and this increased demands on informal carers. In turn, this increased the risk of loneliness and social isolation and exerted an effect on physical and mental health. Issues such as spending cuts on public services; lack of public transport and particularly on-demand/responsive transport, for example, voluntary transport schemes, meant older people were prevented from accessing wider services to increase social interaction. The closure of day centres where other activities were also held means that there were fewer affordable places to hold meetings and activities and older people experienced more social isolation and loneliness as a result.

Housing was cited as an area of need for older people in the academic literature, but the consultation interviews revealed that it was also an area of need for care leavers, disabled people, refugees and asylum seekers. Inadequate housing has been cited in the academic literature as an area that can increase mental health problems. Organisations reported that there was a limited amount of appropriate, affordable and accessible housing. For example, disabled people could feel trapped in their own homes because they were not adapted to meet their needs. This left them feeling isolated. Appropriate sheltered accommodation for disabled women who experienced domestic abuse was often unavailable and this left people even more isolated and vulnerable. Care leavers were frequently housed in accommodation that was sub-standard and in another geographical area with which they were unfamiliar. This meant they lost their social support network, increasing their feelings of loneliness and social isolation. Refugees and asylum seekers were often housed in areas with which they were unfamiliar and their English language skills were often inadequate to help them integrate.

Throughout the scoping review of academic literature, the meta-analysis and from the consultation interviews, loneliness and social isolation does play a part in increased use of services. The academic literature and the consultation interviews suggest that the area is highly complex and loneliness and social isolation alone do not create the conditions for increased service use. Rather it is the way society and services are structured to take into account the multiple and competing needs of a diverse population.

## **Recommendations**

There are 16 recommendations for the Welsh Government to consider for policy. These are not presented in any order of importance. Recommendations 1, 7, 14 and 15 come directly from the academic evidence. Recommendations 2, 4, 5, 6, 8 and 9 come from the interviews and recommendations and 3, 10, 11, 12, 13 and 16 are combined from the interviews and academic evidence.

**Recommendation 1:** Fund more research into loneliness and social isolation, in particular measuring loneliness routinely in at risk groups attending primary care services, as recommended by the academic evidence.

**Recommendation 2:** Carry out a survey to provide evidence around the level of use of the short break directory developed by Swansea University and Bridgend Local Authority to ascertain whether it would be worthwhile extending the service across Wales.

**Recommendation 3:** Voluntary and public sectors should recruit more key or peer support workers for different groups of people into the voluntary and public sector. For example, care leavers, families, refugees and asylum seekers, and LGBTQ+ people who may need support with accessing services. These can be a mixture of voluntary and employed personnel who have insight into the particular issues for specific groups.

**Recommendation 4:** Practitioners in Wales need to remain informed about clinical governance and good practice relating to discrimination through workshops on diversity awareness within services and exploration of confirmation bias (which favours pre-existing beliefs about people). This should take place involving groups of people such as refugees, asylum seekers, LGBTQ+ people and disabled people.

**Recommendation 5:** Schools and colleges should implement teaching for all young people around the concept of positive and healthy friendships as an integral part of the

curriculum. The aim is to increase peer-to-peer interaction, gain an insight into the impact of issues such as bullying and victimisation for different groups and the reasons why this occurs.

**Recommendation 6:** Within the Welsh Government, the Department of Health and Social Services and Department of Education and Skills should collaborate to develop a pathway of access for formal counselling, psychology and mental health assessment services, embedding mental health provision to create more joined up delivery of services and identify issues earlier before they reach crisis point.

**Recommendation 7:** Fund new research to work with marginalised groups and explore ways of making housing and sheltered accommodation more affordable, accessible and appropriate for people most in need. For example, care leavers; asylum seekers and refugees; disabled people and particularly disabled women experiencing domestic abuse.

**Recommendation 8:** Fund research to survey existing transport provision with a view to providing accessible and affordable or free transport for some groups. Accessible transport means people not having a long walk to the bus stop if they have physical impairments and making sure transport feels safe.

**Recommendation 9:** Encourage data sharing through Information and Communications Technology [ICT] and explore other ways of making services more joined up using technology to reduce the level of duplication and ensure that services collaborate with one another. This may also help with making assessment more individually tailored. Develop ICT related solutions for carers to adopt to enable them to carry out their daily lives.

**Recommendation 10:** Analyse existing service provision for different groups across Wales to ascertain if there is unequal access across regions and redirect resources to reduce the incidence.

**Recommendation 11:** Carry out a mapping exercise and evaluate the ways local authorities in Wales identify, assess and support carers. This may highlight good practice, indicate further gaps and create a smoother pathway for transitions and support.

**Recommendation 12:** Welsh Government should work with the British Medical Association, British Dental Association and British Nursing Association to encourage them to provide more teaching on the undergraduate curriculum on particular issues such as LGBTQ+ people and other minority groups in relation to health.

**Recommendation 13:** Funders and commissioners should build on existing research being undertaken in Wales at Swansea University to develop guidelines for services, in collaboration with transgender people.

**Recommendation 14:** Funders and commissioners should support work to close the gaps in evidence around loneliness throughout the life course. Funders should support research that uses respected and rigorous measures of loneliness. In the absence of big data sets it would make sense to focus on those groups which seem likely to be at particular risk of becoming lonely.

**Recommendation 15:** Welsh Government should provide more clarity around the different services available to older carers/people. This should include which services they can access free through the NHS versus means tested support through social services. Additionally, Welsh Government should investigate whether older people's assessments are making appropriate assumptions about older peoples care needs.

**Recommendation 16:** Welsh Government should increase support for advocacy services with external organisations that enable people to access benefits and other areas of help and support. Ensure that health services have information to signpost people. This would appear to be a non-threatening way of promoting inclusion, supporting people and alleviating poverty for some groups.

# 1. Introduction/Background

1.1 The aim of this study is to review the literature and provide evidence of whether people who experience loneliness and/or social isolation have an increased or decreased use of public services.

## *Definition of loneliness and social isolation*

1.2 Loneliness and social isolation are related but quite distinct concepts. Loneliness is often defined as:

*“[...] a situation experienced by the individual as one where there is an unpleasant or inadmissible quality of certain relationships. This includes situations, in which the number of existing relationships is smaller than is considered desirable or admissible, as well as situations where the intimacy one wishes for has not been realized.” (De Jong Gierveld, 1987:20)*

1.3 Loneliness is therefore a subjective and negative experience based on the perceived lack of depth or closeness derived from interpersonal relationships (Weiss 1987). It is about the quality of relationships, rather than the quantity. Loneliness can make people feel disconnected from others, as if they do not belong and indicates a discrepancy between what people feel they may need compared to its availability (Hawkley, Browne, and Cacioppo 2005; Hawkley and Capitano 2015).

1.4 In contrast social isolation is a lack of contact with significant others, community integration and access to services (Wheeler, Reis, and Nezlek 1983; Victor et al. 2002). It is about the degree of social participation that an individual may possess or choose to engage with (Perlman and Peplau 1981, Peplau and Perlman 1982). People who are socially isolated may not necessarily feel lonely, just as some people can report feeling lonely despite being surrounded by others.

1.5 Despite their different definitions, both loneliness and social isolation can be experienced by anyone at any time throughout their lifecourse.

### *Background Literature*

- 1.6 Various reports have indicated that loneliness in particular is a growing issue and Age UK predicts that between 2008 and 2033 there will be a 44 per cent increase in the number of 65-74 year olds living alone, a 38 per cent increase in those aged 75 to 85 and a 145 per cent increase in those aged 85+ (Davidson and Rossall 2014). In their 2016 report, the Co-op and the British Red Cross identified that loneliness affected people of all ages, not merely older people and that disabled people, parents, carers, migrants and refugees as well as young people can experience loneliness or social isolation at some stage or throughout their lifetime (Kantar Public 2016).

### *A lifecourse approach to loneliness and social isolation*

- 1.7 The effects of loneliness may be said to be cumulative across the lifecourse and persistent. For example, the Dunedin longitudinal study in New Zealand suggests that raised rates of cardiovascular disease are present in people who have experienced social isolation in childhood and are strongly linked to the social determinants of health (Caspi et al. 2006). The social determinants of health are the conditions in which people are born, grow, live, work and age. These conditions are shaped by socio-economic and social circumstances at global, national and local levels. From the Dunedin study, the social determinants would appear to be strongly correlated with loneliness, social isolation and social exclusion. This infers that issues like poverty, housing, access to education, healthcare, jobs, family and social support and so on exert an impact on health (Marmot and Wilkinson 1999; Wilkinson and Marmot 2003). Marmot's work suggests that social exclusion is itself a fundamental driver of health inequalities. This is because it limits participation in activities, access to services, and has a profound impact on quality of life and indeed social cohesion (Levitas et al. 2007). The social determinants of health can also include people's lived environment and access to services may include the availability and affordability of transport, which is often described as a gateway service (Anciaes, Jones, and Mindell, 2014; Local Government Association 2016). For some older people who are frailer, the fear of falling or other chronic conditions may keep them restricted to their homes and unable to access services (Collard et al. 2012).

- 1.8 The processes which lead to social exclusion may be said to be multi-dimensional, embedded in unequal power relationships, interacting across cultural, socio-economic, and political dimensions and operating at individual, community, population and global levels (Popay et al. 2008). All of which leads some researchers to suggest that loneliness and social isolation themselves should be a social determinant of health (Holt-Lunstad, Robles, and Sbarra, 2017).
- 1.9 There are also key triggers or transition points throughout the lifecourse which can increase the risk of social isolation and loneliness. For example, becoming a parent, especially a young parent; leaving secondary education and entering further education; leaving care; becoming a full time carer; being made unemployed/redundant; the break-up of a long-term relationship; living without children at home (empty-nester); retirement; and bereavement of partner (Kantar Public 2016). A factor which increases resilience to these transitions or triggers could be social support. Social support not only gives people a sense of belonging and identity (Walsh et al. 2015), it can provide knowledge of how to access social resources and services (Whitley and Campbell 2014), influence the health behaviours of individuals both positively and negatively (Berkman 1985; Richmond and Ross 2008; Harvey and Alexander 2012), and assist in coping with stressors such as changing schools, jobs, role changes, relationship breakdowns, retirement and bereavement (Sarason, Sarason and Pierce 1990; Burke, Neimeyer, and McDevitt-Murphy, 2010).
- 1.10 It can be suggested therefore that there are multiple factors which may contribute to feelings of loneliness and the risk of being socially isolated, for example having poor physical or mental health, an impairment, living alone, being a carer, living in sub-standard housing, a lack of social support and belonging to certain minority groups (Walker, 2017).

*Minority groups, loneliness and social isolation*

- 1.11 Looking at a range of minority groups suggests that, older lesbians experience greater levels of loneliness than their heterosexual counterparts for numerous reasons. For example they may have had many years of privacy and self-concealment; more likely to be single; childless, and have fractured relationships with birth families (Wilkins 2015). They can also experience low levels of social support which is not merely related to age. Indeed, support plays a crucial role in Lesbian, Gay, Bisexual, Transgender, Queer and

“plus” (LGBTQ+) youth loneliness, hopelessness and mental health outcomes (McConnell, Birkett, and Mustanski, 2015). There also appears to be greater health disparities for LGBTQ+ adults and this can possibly be attributed to a lack of accessible services accompanied by a lack of confidence that services will meet their needs (Guasp 2011; Emler and Fredriksen-Goldsen 2017).

- 1.12 Disabled people may also be viewed as amongst the most marginalised within society (World Health Organisation [WHO] 2011). Levels of marginalisation, loneliness and social isolation for people with intellectual disabilities may be even more profound (Campbell and Oliver 1996). This can be for a number of reasons. Evidence suggests that from early childhood, children with intellectual disabilities can have fewer reciprocal relationships and may experience difficulties in making and maintaining friendships compared to their neurotypical peers (Solish, Perry, and Minnes, 2010). Adolescents with intellectual disabilities tend to spend more time alone and this persists into adulthood with friendships usually with people with intellectual disabilities and social relationships restricted to family and care staff (Buttimer and Tierney 2005; Lippold and Burns 2009; Bigby and Knox 2009). These experiences highlight the lack of social opportunities for people with intellectual disabilities, the limit of skill training to develop friendships and the attitudes of society (Gilmore and Cuskelly 2014). Rather than focus on the disabling notion of intellectual disability, numerous authors have encouraged us to use a social model of disability approach which argues that society creates the foundations for loneliness and social isolation by stigmatising, marginalising and excluding people (Chappell 1997; Cross 2013; Macdonald et al. 2018).
- 1.13 Stigma and marginalisation does not only happen to people who are disabled, single parents may experience stigma because of their social status and financial hardship, often going without food to ensure their children have enough; they may take on extra work and spend sleepless nights worrying about things like bills, food, tax-credits and taking care of their children (Stack and Meredith 2018). If they are isolated and lacking in support then this can escalate until they feel overwhelmed and unable to cope. Some then seek professional help for support. Other studies indicate that single parents who experience financial hardship also have poorer health than their counterparts who are co-habiting or in married relationships (Van de Velde et al. 2014; Campbell et al. 2015).

1.14 The academic research exhibits a degree of variation in loneliness and social isolation for Black, Asian and minority ethnic (BAME) groups, particularly as they age and they are more likely to experience health inequalities and utilise health services to a greater extent (Scheppers et al. 2006; Victor, Burholt, and Martin, 2012). Social isolation in particular has negative associations with health across racial and ethnic groups, with loneliness exerting an impact on physical health and social isolation a profound effect on mental health (Miyawaki 2015). Within the UK, BAME individuals experience more health, social and economic inequalities compared to non BAME individuals (Jivraj and Simpson 2015). Inequalities may result in fewer opportunities for social participation, which increases the risk of becoming isolated throughout the lifecourse (Jivraj and Khan 2013). For some groups, language barriers are also a contributory factor and can have an impact when health is involved (Simkhada et al. 2015). What the literature fails to address is the diversity amongst sub-groups of BAME people and whether different dimensions of social isolation exert varying effects across a wide range of countries.

*Loneliness, social isolation, health and health services*

1.15 Loneliness has also been associated with a variety of measures of physical health and people in poor health often report higher levels of loneliness (Penninx et al. 1999; Steverink et al. 2001; Kramer et al. 2002; Cacioppo et al. 2002; Courtin and Knapp 2015; Holt-Lunstad et al. 2015; Shankar et al. 2017). Loneliness has also been linked with a range of adverse health outcomes, from physical and mental health problems to quality of life (Lente et al. 2012; Schinka et al. 2012). Social isolation also increases the risk of being diagnosed with chronic illnesses, but people engaged in higher levels of social participation appear to have a lower risk of experiencing multiple chronic diseases (Cantarero-Prieto, Pascual-Sáez, and Blázquez-Fernández 2018; Holt-Lunstad 2018; Shankar et al. 2017).

1.16 There is some evidence to suggest that loneliness and social isolation are linked to greater usage of public and health services (Lauder et al. 2006; Fulton and Jupp 2015; Gerst-Emerson and Jayawardhana 2015). The reasons for these associations are unclear, appear to be complex and have many contributory factors. Very little is known about whether the same factors might explain greater health service use for both social isolation and loneliness. Both loneliness/social isolation and higher usage of public services have

been linked to higher reports of negative mood, depression, and anxiety (Perese and Wolf 2005; Zebhauser et al. 2014) and this may be one reason for the association. For example, people who experience high levels of negative mood, including anxiety and depression, are more attentive to the presence of physical symptoms, interpret those symptoms as reflecting serious rather than benign health issues, and consequently seek care at greater rates (Taylor, Sirois, and Molnar 2017). Anxiety and depression not only influence the likelihood of seeking contact initially but also may lead to recurrent visits and lengthened hospital stays (de Jonge et al. 2003; Rubin, Cleare and Hotopof 2004). This finding is consistent with evidence indicating that loneliness is linked to higher re-admissions to hospital (García-Pérez et al. 2011; Valtorta and Hanratty 2012; Newall, Chipperfield, and Bailis 2014).

- 1.17 Health care-seeking may also be used as a proxy for social support when such support is not readily available. For example, one particular study suggests that there was a fourfold increase in the use of out-patient health services when individuals had both a high level of distress and low levels of perceived social support (Kouzis and Eaton 1998). In contrast, other studies suggest that when there is a particular condition, for example a mental health problem, then it is people with wider and more effective social support networks who are encouraged to engage more often with health services (Maulik, Eaton and Bradshaw 2010). Therefore, whilst it is possible that people who are lonely and/or socially isolated may make more health-care visits as a means of satisfying their need for social connection, it is also possible that the condition in association with increased levels of social support may itself have an effect on whether or not people access health care. This indicates the complexity of the area and the need for specificity when carrying out research.
- 1.18 The Welsh Government's strategy, 'Taking Wales Forward 2016-2021', set out a commitment to 'develop a nationwide and cross-government strategy to address loneliness and isolation' as part of its plan to improve the health and wellbeing of the population (National Assembly for Wales 2017). Loneliness and social isolation are now recognised to be of wider societal and political concern. In 2017, an Eden Project study suggested that the associated additional costs of social isolation amounted to £2.6 billion per annum in Wales, £427m of which was incurred by the health service and £10m by policing costs (Centre for Business and Economic Research 2017). The recommendation

of the National Assembly's Health, Social Care and Sport Committee, was that the Welsh Government should either undertake or commission work to assess the impact of loneliness and isolation on health and well-being and whether people experiencing these issues make increased use of public services.

### **Structure of the report**

- 1.19 The aims of this study are to explore the evidence around the relationship between social isolation, loneliness and the increased use of public and health services for all groups. A secondary aim is to examine the types of contexts that increased or decreased service use as a result of loneliness and social isolation.
- 1.20 This report explores the evidence around the relationship between social isolation, loneliness and the increased use of public services. It seeks to interpret the evidence from a range of sources; academic, grey literature and consultations with key organisations.
- 1.21 The report begins with a review of the literature around the area; the next section takes us to the methods used. This involved a scoping review of the academic literature, a meta-analysis which involved statistics and combined the results of key studies to look for the strength of their association. There was also a consultation exercise which involved interviews with key organisations who gave us further insights about loneliness and social isolation and public service use for minority groups. The report finishes with conclusions and recommendations.

## **2. Methods**

2.1 This section outlines the research methods and their strengths and limitations. The study employed a scoping review, a meta-analysis of nine papers and a narrative analysis of the remainder. In conjunction with the scoping review, a consultation exercise occurred which involved 10 interviews from organisations representing minority groups.

### **Interviews with Key Organisations**

2.2 Initially, a topic guide to structure the interviews was developed. The topic guide was informed using previous academic literature and expertise around loneliness, social isolation and health from commissioned and Welsh Government researchers. The questions were used to guide the interviewers when in the field, to stop them moving away from the focus, develop some degree of similarity but at the same time because it was a guide, to enable a degree of flexibility for organisations that were structured differently (See Annex C). The Welsh Government provided links to the organisations that they particularly wished to be included and advised on other types of organisations, in order for a variety of views to be represented. A total of 10 organisations representing minority groups agreed to participate, a further four organisations did not participate. One felt they had nothing to contribute, one said they did not take part in research and a further two agreed but despite being followed up twice failed to set an interview time and date. After the second approach, a decision was taken not to contact the organisations again, as it was felt that the researchers could be perceived as trying to coerce the organisations into participating, rather than consenting voluntarily.

2.3 Telephone interviews using the topic guide took place in January and February 2019. Two separate researchers were involved in the interviews and subsequent write-ups. The topic guide was amended whilst in the field. This accounted for organisations whose focus was advocacy and not service provision and organisations who felt that they could not answer some of the questions because the person interviewed was not at the forefront of delivering services.

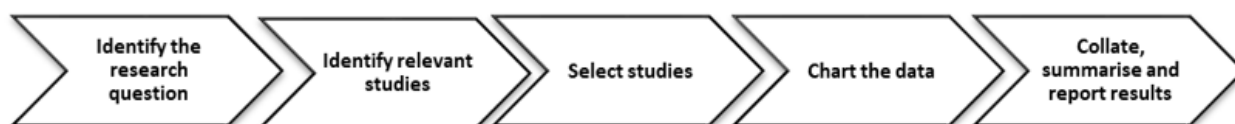
2.4 The interviews were read and segmented into storied sections for ease of reading. This process began with particular issues for groups, then subgroups. For older people there were also interviews with organisations representing older carers. These were placed into

one section and older carers were placed as a sub group of older people because they had similar issues but were also carers. Access to services was the next section, and then what works for groups and what was needed. There was awareness that placing groups of people together reduced their level of diversity but representing their needs collectively also gave them more strength as a group.

### Scoping review

2.5 The literature was scoped and focused on the increased use of public health and services for all groups experiencing social isolation and loneliness. Note was also taken of any indicators mentioned about the context in which these groups exist, for example low socio-economic status, age, geographical area and so on. The five stage methodological framework for scoping studies suggested by Arksey and O'Malley (2005) was followed. The optional 'consultation exercise' of the framework was also followed by interviewing organisations who provided additional references about potential studies to include in the review as well as valuable insights about issues relating to loneliness and social isolation for minority groups and their interactions with services that a scoping review alone would not have identified.

**Figure 2.1 Process of carrying out a scoping review**



Source: Arksey and O'Malley (2005)

2.6 The aim of a scoping review is to rapidly map the key concepts within a research area, the main sources and types of evidence available and to highlight the gaps in the evidence. It is used when an area is complex or has not been previously reviewed comprehensively (Mays, Roberts and Popay 2001; Levac, Colquhoun, and O'Brien 2010; Daudt, van Mossel and Scott 2013). This study differs from previous reviews in that we focused on the impact of isolation and loneliness on increased or decreased use of public services.

### **Search engines**

- 2.7 The search for evidence took place between November and December 2018. A range of search engines were used to search for evidence: Medline, Web of Science, Current Contents Connect, Scopus, Psych INFO and Cochrane databases plus the first 10 pages of Google Scholar. The scope was limited to empirical studies [not reviews, editorials, letters, and conference papers], written in English and published in peer-reviewed journals from 1990 to 2018 to take into account interventions from the 1990s and more recent policy and guidance.

### **Search terms**

- 2.8 From the existing literature on loneliness, social isolation and health a table of search terms were constructed.

**Table 2.1: Literature search terms**

<b>Population or target group</b>	<b>Issue</b>	<b>Health outcome</b>
Older people	Isolation	Health*
elderly	Loneliness	Mental health
Age*	Cumulative Disadvantage	Mental Health Problems
Single mothers	Stigma	Depression
Children, Young People, Adolescents	Life transitions	Symptoms
BME, BAME	Life stages	Dementia
LGBT	Bereavement	Mental Disorder
LGB	Widowhood	Well-being
Lesbian*	Partner death	Incontinence
Gay	Leaving care	Fluctuating health, Chronic Illness
Bisexual, Transgender	Retirement	Acquired Brain Injury (ABI)
Men, boys, Women, girls	Carer role change	Frailty
Students	Divorce	Hearing Loss, Hearing impairment, Sight loss,
Informal Carers, Family carers, Unpaid carers, Young carers	Parking	In-patient admission, hospital visits
Volunteers	Access to transport	Cardio-vascular disease
Refugees	Dependency	Alzheimer's
Unemployed	Low income or benefits	Vision impairment
Intellectual disability	Friendships	Stress
Learning disability*	Renting	Memory problems
Disability*		Health related quality of life
		Physician visits
		Anxiety
		Cognitive decline

### **Inclusion and Exclusion Criteria**

2.9 The exclusion criteria were:

- Studies focusing on countries other than Western Europe, USA and Canada because of cultural and setting differences
- Studies focusing on issues other than social isolation, loneliness and health
- Studies not assessing physical or mental health outcomes

- Editorials, letters, book reviews, conference papers, dissertations and theses
- Discussion papers and guidance documents
- Systematic, scoping, critical and literature reviews
- Studies not covering the target groups
- Studies not written in English

2.10 The inclusion criteria were:

- Studies focusing on social isolation, loneliness and increased or decreased use of public services
- Studies from 1990-2018 to take into account interventions from the 1990s and more recent policy and guidance
- Full text articles
- All ages of participants

### **Title and abstract relevance screening**

2.11 Studies were eligible for inclusion if they broadly described loneliness, social isolation and the impact on health. There were limited resources for translation, and for this reason articles published in languages other than English were excluded. For the first level of screening, only the title and abstract of citations were reviewed by two reviewers. This was to preclude wastage of resources in obtaining articles that did not meet the minimum inclusion criteria. The second stage involved obtaining the full paper and agreement was reached between two reviewers as to which papers to include and exclude. A third reviewer was appointed in the event of any disagreements that could not be resolved. There were no significant disagreements between the reviewers and agreement occurred as to which papers to include according to the exclusion criteria.

### **Literature screening and collation**

2.12 A Microsoft Excel 2010 (Microsoft Corporation, Redmond, WA) spreadsheet was populated with headings to denote; author, date, title, publication, research design, sample size, age or age range, country/area, outcome. All relevant full text articles were obtained, tabulated and shared.

### **3. Findings**

3.1 This section presents the findings from the scoping review, meta-analysis and consultation exercise involving telephone interviews with the 10 organisations. It begins with the scoping review and meta-analysis and finishes with the interviews.

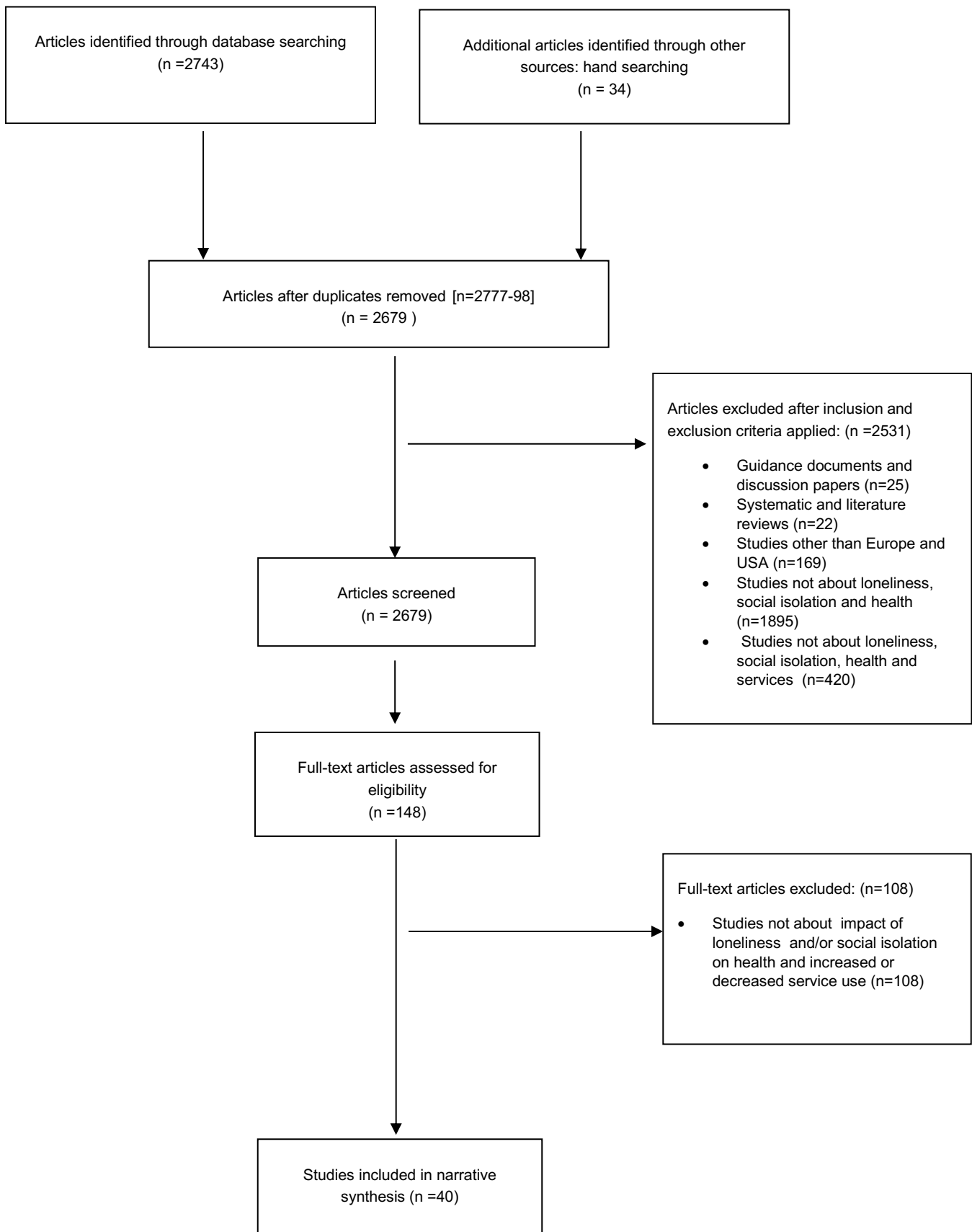
#### **Scoping review**

3.2 For the scoping review, from the initial 2778 results, 98 duplicates, 25 guidance and discussion papers, 22 systematic reviews, 169 papers that were outside Europe and the USA, 1895 studies not about loneliness, social isolation and health and 420 studies that were not about loneliness, social isolation, health and services were excluded, leaving 141 studies. A further 108 studies which were not about the impact of loneliness and/or social isolation on health and increased or decreased use of public services were excluded leaving 40 studies for inclusion (See Annex A).

#### *PRISMA Flow Chart*

3.3 The Preferred Reporting Items for Systematic Reviews and Meta-Analyses scoping review extension [PRISMA ScR] guidelines were followed. PRISMA is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses, with an extension for scoping reviews. A flow chart of the study selection process was constructed and is illustrated in figure 2.2:

**Figure 2.2: PRISMA ScR Flow Chart of study selection process**



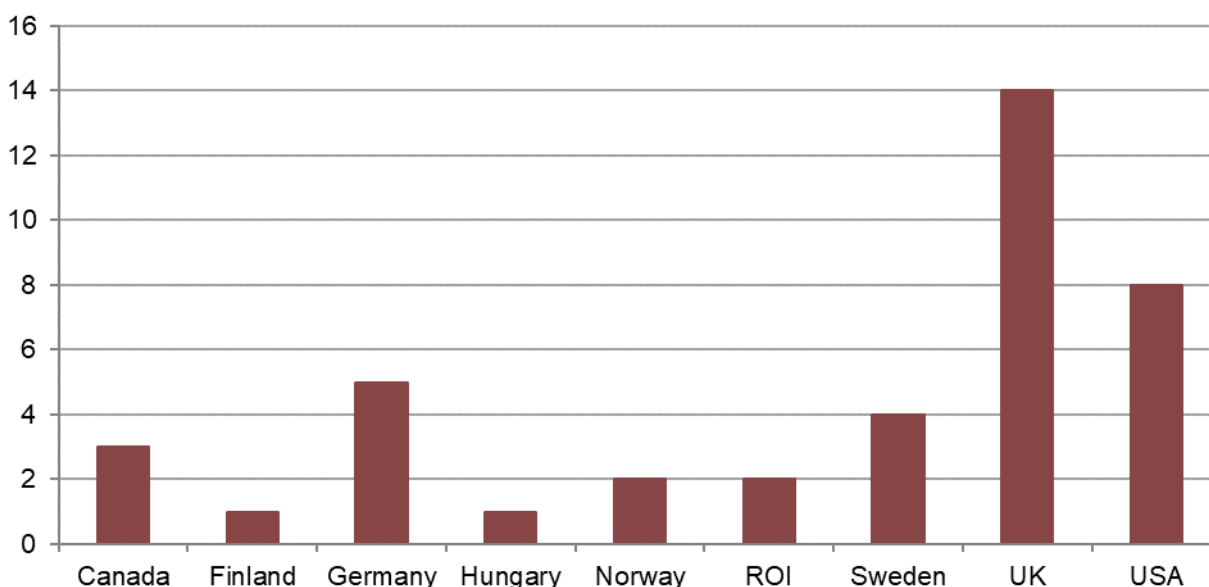
### *Narrative analysis of the studies*

3.4 A narrative review approach was used to collect similar information on studies (Pawson 2002). This is where the characteristics of and findings from the studies were described and discussed and then a table was used to record first author; year of publication; country; study design; sample size and findings. Context for the studies was also provided.

### *Number of papers by country*

3.5 The largest number of papers came from the UK (14); followed by the USA (8); Germany (5); Sweden (4); Canada (3); Norway (2); The Republic of Ireland [ROI] (2); Finland (1); and Hungary (1). This may possibly reflect policy focus for these countries.

**Figure 2.3: Number of papers published by country**



3.6 Research on the impact of loneliness and social isolation on an increased use of public services indicates there is a large and growing body of literature, with an increase in 2018. During a 14 year period from 1999-2013 there were 14 articles published compared to the 5 year period from 2014-2019 where 26 articles were published, of which eight were from the UK.

- 3.7 All of the studies collected data that were from a larger study or generated their own data; one study (Cruwys et al. 2018) contained three designs in one study making 42 designs for 40 studies. 36 study designs were quantitative; 21 of which were cross-sectional. Two studies were mixed methods, and three study designs classed themselves as qualitative, but merely used interviews with no methodological or theoretical framework which undermines the robustness of their findings, the remaining one qualitative study design was action research.
- 3.8 Under half of the studies provided a definition of loneliness and mostly used that provided by Peplau and Perlman (1982) as a negative or undesirable experience, but only three studies then proceeded to describe different dimensions (Kvaal, Halding and Kvigne 2013; Kearns et al. 2015; Reijnders et al. 2018). In contrast, seven studies contrasted loneliness with social isolation and provided a definition but treated social isolation as a unidimensional concept or an objective measure of family or friends. No studies explored the quality of relationships.
- 3.9 The focus was general health for 23 out of 40 of the studies. From these studies on general health a third focused specifically on the increased or decreased use of primary care services as part of the study design.

**Table 3.2: Focus of health outcomes in studies**

Health Condition Outcome	Number of studies
Stroke	1
COPD	1
General Health and physical function	23
Mental health	11
Community support	1
Wellbeing	1
Bereavement	1
Medication use	1
Total	40

- 3.10 Of the studies that chose to specifically include increased or decreased use of services for people who were either lonely, socially isolated or both, the focus was not entirely on older people, nor did they focus on particular minority groups. The age range in these studies was 18-97 (Cruwys et al. 2018); 15-80 (Geller et al. 1999); 40-60 (Ellaway, Wood and MacIntyre 1999); and 45-95 (Newall, McArthur, and Menec 2015). The remainder of the 40 studies chose to focus on age ranges of 60+ and one study 75-92 (Pitkala et al 2009).
- 3.11 Potential reasons and factors for the increased or decreased use of services varied. For example, when people were better integrated in their communities, or had wider community linkages, they had a lower use of GP services than the general population and experienced more positive mental health and well-being (Field, Walker and Orrell 2002; Pitkala et al. 2009; Denkinger et al. 2012; Li, Hubach, and Dodge 2015; Newall McArthur, and Menec 2015; Cruwys et al. 2018; Taube et al. 2018). The social determinants of health are considered as playing a key role with social deprivation linked to loneliness and increased use of GP services (Kearns et al 2015). For parents, low socio-economic status and particularly lack of financial support are viewed as factors that contribute to loneliness and higher use of GP services (Stack and Meredith 2018). Low income was also considered to be a significant factor associated with loneliness (Dahlberg and McKee 2014). Whilst other research indicates that people from more economically deprived backgrounds may have greater risks of social isolation (Steptoe et al. 2013). Low socio-economic status, depression and loneliness were not only highly correlated with an increased use of GP and in-patient services, but also the presence of pathogenic (health impairing) behaviours such as increased smoking and alcohol intake (Beutel et al. 2017). Loneliness itself was connected to the increased use of prescription medications generally and psychotropic drugs for older people (Bath and Gardiner 2005; Theeke and Mallow 2013; Boehlen et al. 2015).
- 3.12 Living alone was also seen as a factor that contributes to loneliness or social isolation (Dreyer et al. 2018; Gutzman, Sohn, and Harada 2004). These particular studies fail to differentiate between living alone (description of living arrangements), being socially isolated (level of integration within society) and being alone (time spent alone). The lack of depth in considering what was meant by living alone reduces understanding of the factors that contribute to loneliness and social isolation. For older people, living alone without support and experiencing chronic loneliness was seen as a contributory factor to early

care home admissions (Hanratty et al. 2018). Other studies indicated that friendship ties (kin or community) increased out-of-home physical activity which maintained functional status and reduced depression and social isolation (Herbolsheimer, Ungar, and Richard 2018). Befriending services for older people in particular appear to reduce the cost to health and social services. This particular piece of work done in Merseyside suggests that these types of services increase quality of life and reduce social isolation and loneliness by reducing risk factors for falls, increase self-care and forestall emergency action by preventing crises. In turn, this increases independent living and enables older people to 'age in place' with the support of a carer where necessary (McGoldrick, Barrett, and Cook 2017).

- 3.13 There was also an indication that the effects of deprivation, abuse, bullying and victimization in childhood and feelings of loneliness and being socially isolated had lasting effects on health across the lifecourse and particularly on mental health and well-being (Løhre 2012; Ollife et al. 2018). These studies suggested that feeling persistently lonely or experiencing social isolation in childhood lasted into adulthood and was a risk for self-harming behaviours or suicidal tendencies. One protective factor was supportive families who acted as a buffer to reducing suicidal tendencies (Chang et al. 2017). This appears to point to the quality of relationships that people may have with their families, not merely support in isolation.
- 3.14 Improved well-being was suggested as being a result of accessing support services which also provided transport to access activities (Hemingway and Jack 2013). Efficient, reliable and accessible transport appeared to be a factor in decreasing both social isolation and loneliness for people who lacked their own car or transport and enabled them to stay socially connected (Ellaway, Wood, and MacIntyre 1999; Field et al. 2005; Burholt and Scharf 2014).
- 3.15 Organisations representing minority groups assisted in reducing excessive service use and some LGBT older adults relied on LGBT-focused organizations to meet their needs. The majority tended to mainly rely on mainstream providers, such as community-based social support, and health care providers (Brennan-Ing et al. 2014). Challenges were found to exist for older LGBT adults when trying to access mainstream services for fear of discrimination when disclosing their sexual identity to non LGBT providers and feeling that

there is a lack of understanding of the complexity of their issues which compounds feelings of loneliness (Jenkins et al. 2014).

### **Strengths and limitations of the scoping review**

- 3.16 A key strength of this scoping review is that it has provided a rigorous and transparent approach to mapping the research on loneliness and social isolation and use of services in a short space of time (compared to a systematic review). Presenting the results in a summarised format means that policy makers are better placed to make use of the findings. A limitation is that the quality of the evidence was not formally assessed. Assessing the evidence generated against the outcomes of the studies could not occur as it would have done in a systematic review, which would synthesise the evidence to form new conclusions. This would have taken a further six months to produce any useful evidence.

#### *Meta-analysis*

- 3.17 A meta-analysis is a statistical procedure for combining data from multiple studies to estimate the size of association of outcomes. The results give a more robust estimate of the effect of treatment or outcomes. To combine results the studies need to report the association between two variables (bivariate) that do not include the influence of other variables (multivariate). It is also important that the data combined reflect associations between similar variables. For the meta-analysis we only included papers that reported associations between loneliness/social isolation and making visits to a physician/General Practitioner [GP] as the effects. From the papers screened and included in the narrative analysis, 11 were identified as meeting the above criteria for inclusion in the quantitative analysis. One paper (Cruwys et al., 2018) included data from three separate studies, each of which met the inclusion criteria. However, the effects reported were multivariate, and the author was contacted to obtain the simple bivariate effects. A total of 11 effects were extracted and screened for inclusion in the meta-analysis, these 11 studies included 30,969 participants (see Annex B for the table and further technical explanation of the meta-analysis). The meta-analysis revealed a significant small positive average association between loneliness/social isolation and making visits to a physician/GP. Although there was some variability in the size of these associations across the studies,

further tests indicated that this was not due to differences in the age or sex of the participants.

- 3.18 The findings from this small-scale meta-analysis suggest that people who experience loneliness and feelings of social isolation make a greater number of visits to their physician/GP. Although the association found was small, it indicated differences in age and sex. These findings could be interpreted in several ways. A greater number of physician/GP visits could reflect greater medical need as suggested by the Socio-behavioural model of health care utilization (Andersen 1995). This proposition would be consistent with other evidence linking loneliness to poorer health (Luo et al. 2012). It is also possible that health care-seeking is a proxy for social support when such support is not readily available. It is plausible that a combination of both factors are at play, such that loneliness is a risk factor for poor health and that visits to a physician/GP are a means of satisfying a need for social connection. Nonetheless, the studies analysed were predominantly cross-sectional, making it difficult to establish a causal direction.
- 3.19 Other factors could also account for the association, including depression, and pre-existing health conditions, each of which are known to contribute to primary-care health care seeking behaviours (Andersen 1995). Indeed, although there was a significant degree of variance across the effects analysed, the moderators tested (sex and age) were not significant. This suggests that the association between loneliness and physician/GP visits is impacted by other variables. For example, it could be that the ways in which loneliness and doctor visits were defined and measured contributed to the high degree of variability among the associations found, because a number of different measures and time frames were used to assess these variables.
- 3.20 There are also several strengths of the present analysis worth noting. There was some variety in the types of samples included in the studies analysed. Although several focused on older adult samples, there were also middle-aged, younger, and general community samples. The variety in the range of ages suggests that the potential impact of loneliness on physician/GP visits is not restricted to certain age groups or to being male or female. This finding, though preliminary due to the small number of studies analysed, is nonetheless important and points to the potentially pervasive effects of loneliness on health care use. A number of studies included in the analysis were population-based

studies rather than small convenience samples. This increases confidence that the current findings can be generalised to other similar samples.

### **Summary**

- 3.21 The original aim of this study was to scope the literature around social isolation and loneliness and the increased or decreased use of public services. The research evidence on these areas has expanded since 1999. The majority of the available evidence came from the UK and mostly focused on loneliness and increased use of services. One issue in the academic literature was the tendency to conflate social isolation with loneliness, failing to define the two constructs, which are quite different. There was also a failure to define living alone (description of living arrangements), being socially isolated (level of integration within society) and being alone (time spent alone), this reduced understandings of the factors contributing to loneliness and social isolation. The majority of studies focused primarily on aspects of general health and physical function, closely followed by mental health, with increased or decreased use of services as a secondary aim. The primary aim of over a third of the studies was loneliness and social isolation associated with increased use of services but because their research design was predominantly cross-sectional, it only gave a snapshot of a period in time and could not infer cause and effect. The design of the studies influenced the way they collected data and the types of findings that emerged. For example, some studies took a life course approach, others chose to focus on a particular issue, others looked at the support needs of particular groups such as parents, this made it difficult to synthesise the results in terms of outcomes.
- 3.22 Although the meta-analysis suggests a small positive average association between loneliness/social isolation and making visits to a doctor, again the studies analysed were predominantly cross-sectional which is a type of observational study that analyses data from a population, or a representative subset, at a specific point in time. This makes them useful for estimating disease but because they rely on a one-time measurement it is difficult to establish a causal direction. Overall, the scoping review and the meta-analysis both suggest that there are other variables influencing loneliness and social isolation and use of public services.

### ***Interviews with Organisations***

- 3.23 This section presents the views of the organisations representing a variety of groups within Wales. The interviews have initially been left as complete narratives and segmented to illustrate the main issues for different groups related to loneliness and social isolation, the diversity within the particular population, issues with accessing services, what has been seen to work and what more can be done. The section finishes with a short summary of the differences and similarities for the groups in relation to loneliness, social isolation and service use. Section 4 then illustrates the themes derived from the narratives using narrative analysis (Reissman 2008).

### ***Children and Young People***

#### *Issues for children and young people related to loneliness and social isolation*

- 3.24 Both loneliness and social isolation were reported in the interviews as primarily affecting young people, more than young children. For example, 'bullying is an issue within schools raised regularly by young people who suggest that it can be very isolating. Young people leaving care, between the ages of 16 and 18 are usually given a choice of whether they wish to go into supported lodging accommodation or live on their own.' The interviews with the organisations identified that 'they are moved into either supported lodging or housed in another area to the place where they have been fostered or cared for.' Lack of consideration as to where young people are housed can create the conditions for loneliness and social isolation. For example, 'one young person from Cardiff had a foster placement in Wrexham but had to move back to Cardiff on leaving care – they lost all of their support network and friendship network overnight.'

#### *Diversity within and between groups*

- 3.25 The academic literature and the interviews reported that children and young people with physical impairments as well as those with mild to moderate learning difficulties and children who are neuro-diverse are more likely to report that their health condition has had an impact on both loneliness and social isolation.
- 3.26 Young people in care as well as care leavers tend to experience more loneliness and social isolation compared to other young people within society. Care leavers experience greater levels of loneliness and social isolation than those still in care because 'young

people who are in foster homes or residential care settings tend to have some support network around them.'

### *Accessing Services*

- 3.27 The interviews with organisations identified that young people are likely to turn to immediate counselling and pastoral support based within schools or colleges for support but very unlikely to turn to other external services such as GP services because they are viewed as only treating physical illness. 'Support within school services is very light touch and often serves as a signposting role to other external services that are better placed to support the young person with their problems.' Counselling services for young people are targeted at the 'most needy; those demonstrating the worst conditions' and quite often those with less severe needs or conditions go without support. Parents and formal paid carers can also be gatekeepers to services and this has bearing upon the demand and uptake.
- 3.28 'Whilst in care, the use of public services by young people will depend on the level of encouragement and instruction offered by their main carer, in the same way as any young person will be dependent on their parents to take them to the doctor. The degree of trust built with their main carer will have bearing upon their access to services.' Organisations reported that they knew that loneliness could lead to poor wellbeing and that young people 'don't always look after themselves.' This was when a deterioration in physical ill health occurred. For example, 'they may experience weight gain because they don't eat well, they may struggle with poor dental conditions and so on. Physical health is often not the cause but rather the result of mental health issues triggered by their experiences.' For some young people, being on their own can lead to issues of anxiety and depression and 'if they don't access the right sort of help then these can lead to more critical ill-health and other issues.'

### *What organisations perceive to work*

- 3.29 Successful interventions cited by organisations were accessible and approachable local youth clubs and activities which were viewed as playing a vital role in supporting young people and children to develop good social networks. These were often seen to 'act as a preventative approach to reduce levels of isolation later in life.' The role that school based counselling and pastoral support plays was viewed as 'important in identifying issues at an

early stage and addressing them before they become severe in nature and require more intensive intervention from other health services.’ For young people leaving care, then going to university meant sometimes living in halls of residence, which is a half-way house with appropriate accommodation in a setting where they have instant access to the company of other students.

*Suggestions about what more can be done*

- 3.30 Organisations felt that addressing the timing of delivery of talking therapies enabling speedier access could reduce psychological distress and reduce the deterioration of mental health. Secondly, the school curriculum could be used more effectively to teach social skills alongside the concept of positive healthy relationships. Lastly, they felt that implementing programmes to address diversity and reduce loneliness and social isolation such as peer-to-peer support would better integrate younger people in schools.
- 3.31 Organisations discussed social prescribing as being a new concept that could offer a real opportunity for young care leavers to get involved. For example, ‘getting GPs to prescribe social solutions, such as gardening projects or photography lessons, would help address health issues as well as building social connections and overcoming issues of isolation.’
- 3.32 Another suggestion was the introduction of ‘corporate parenting’ – when a person moves into care then the state becomes the responsible parent for that individual. It was argued that responsibility currently rests with social services and elected members from within local authorities, but could be extended to other public bodies, including health trusts.
- 3.33 Service provision between social services and health was seen as an area that needed addressing with more collaboration to support young care leavers. The housing sector was seen as needing to create innovative solutions to accommodate the needs of young people and care leavers. Anecdotal evidence was cited as showing that young people in better standards of accommodation with support networks around were more likely to thrive.

## **Families**

### *Issues for families related to loneliness and social isolation*

- 3.34 The Home Start 2018 Impact Report<sup>1</sup> suggests that '44 per cent of families were lonely and isolated', 41 per cent reported mental health difficulties and 20 per cent reported needing help accessing services. Organisations supporting families suggested that isolation is due to several factors, with the main one being practical difficulties such as taking several young children outside the home. They argued that this can often be compounded by factors such as 'living in a remote area, having no access to transport (or difficulties taking children on public transport), having a physical disability, illness, or mental health condition which becomes long-term.' Organisations suggested that for some parents their response to being isolated could include 'self-soothing responses or coping strategies such as increased consumption of alcohol or drug-taking as well as increased risky behaviour.' These behaviours were suggested by the organisations as having the potential for adverse impacts upon family life and children's development. For example, it can lead to rejecting a child or dysfunctional parenting. This was supported by the academic literature.

### *Diversity within and between groups*

- 3.35 Organisations reported that sub groups of families for whom social isolation is an issue were 'young mums or dads (often single parents), parents with mental health issues, post-natal depression, asylum seekers or refugees and disabled parents.' Other sub groups include 'families who have been stigmatised because their other children have been removed by social services or families who have experienced domestic violence.' Organisations suggested that parents with these types of histories tended to voluntarily isolate and distance themselves from others within their community.'

### *Accessing Services*

- 3.36 Interviewed organisations suggested that 'families with the most intensive needs are subjected to many different initial assessments by varying services who fail to communicate with one another.' It was suggested that there was a plethora of services and initiatives but little or no continuity of care and that 'families didn't always have a

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<sup>1</sup> [Home Start](#)

single facilitator to simplify their access to the range of services available.’ This supports the 2018 publication by Home Start.

- 3.37 Families who were seen as less inclined to take up support were those who worked (and often experienced poverty) with many organisations saying they found it difficult to provide support during non-working hours. This was because volunteers as well as staff tended to support families during working hours.

#### *What organisations perceive to work*

- 3.38 Organisations interviewed reported that the one-to-one volunteer model of home visits was particularly effective in addressing isolation issues amongst parents. They also said that ‘services users who experienced chronic isolation were more likely to attend a group session with the assistance of a trusted volunteer.’

#### *Suggestions about what more can be done*

- 3.39 Organisations suggested that having a trusted key worker who could support families in a non-threatening way and who liaised with other services on their behalf would assist families. Identifying and supporting families at risk of social isolation was seen as a preventative measure which would ‘prevent families accessing services when in crisis.’ Organisations also felt that services needed to be more joined up to provide greater continuity of care.

### ***Disabled people***

#### *Issues for disabled people related to loneliness and social isolation*

- 3.40 Disabled people were viewed by organisations as being more likely than non-disabled people to experience both loneliness and social isolation. This was also supported by the academic literature. Many factors were suggested as contributing towards higher levels of isolation and loneliness including a lack of accessible private and public transport, but also fear of using public transport, often a result of hate crime and harassment. There were also perceived barriers around physical access to buildings and other venues, coupled with restricted parking for people with physical impairments. For example, ‘inappropriate use of blue badge places which limits the places available for disabled people to park. There can be tensions with neighbours which were sometimes the result of designated disabled parking bays outside their homes to which neighbours objected.’

### *Diversity within and between groups*

- 3.41 Tinnitus or partial hearing loss was an additional impairment, but is often not considered to be a disability. Societal attitudes are frequently reported in the academic literature as a barrier to social acceptance. Organisations suggested that people with hearing loss will often find themselves isolated due to a 'lack of awareness and understanding of their requirements.' For example, 'they are often unable to secure employment, because employers are unaware of their needs to access employment.' This has the potential to create the conditions for social isolation in the longer term.
- 3.42 Apart from older people with hearing loss as they age, a sub-group within a sub-group is older military veterans. 'The artillery corps can expose armed forces personnel to loud noises and without ear protection they are more at risk to hearing impairments such as tinnitus or hearing loss. This can often be compounded by or impact on unresolved post-traumatic stress disorder [PTSD] issues.'
- 3.43 People with intellectual disabilities were identified by organisations as another sub-group who often experience more challenges than people with physical or sensory impairments. The organisations, and the academic literature discussed in section one, identified that young people with intellectual disabilities 'have good formal support and networks but lack friends other than family members or carers and so have limited social networks.' The academic literature and the organisations supporting disabled people discussed two main factors responsible; they lacked the opportunities to meet with other people outside of their family circle and often lacked the necessary skills to socialise with other young people. Organisations suggested that people with intellectual disabilities often 'found it difficult to differentiate between a genuine friend and someone who could take advantage of them', saying that 'some people thought it was better to have a bad friend than no friend at all.'
- 3.44 A further sub-group consisted of disabled women who found themselves in toxic relationships. Organisations said disabled women had previously been supported by Welsh Women's Aid to address domestic abuse. They [disabled women] were viewed as being targeted by particular types of men who like women who are dependent on them. They then found it more difficult to leave their partner because there was 'a lack of appropriate sheltered accommodation for disabled people available.'

### *Access to Services*

- 3.45 Telephone services (e.g. for diagnosis), were reported as discriminating against people with hearing loss because it made access to services harder. For example, 'a person with hearing loss had not been able to order a repeat prescription because services had changed to be telephone based at her GPs. The inaccessibility of the service had an impact on her general health.' The outcome of the 'reduction of sensory loss expert social workers meant many people with hearing impairments were not being assessed accurately for their needs.' It was generally felt by organisations supporting a range of disabled people that public sector services did not meet their needs. For example, 'health services tended to be accessed during crises whereas the social care sector provides the long-term response, which is about preventative support and often underfunded.' Social care services were seen as having a very important role to play in helping disabled people maintain their independence.
- 3.46 Housing was another key service where there were perceived issues because homes were not properly adapted and people felt that they became trapped. The Access to Work initiative was viewed by organisations as 'a barrier for people wishing to volunteer because it can only be accessed by those wishing to return to paid employment.' Organisations argued that being able to volunteer would help alleviate social isolation levels. For example, offering disabled people the opportunity to engage with other people in work settings and developing more social and transferable skills.

### *What organisations perceive to work*

- 3.47 Local member and volunteer groups were viewed as trying to tackle barriers at a local level. For example, they tend to take up issues around hate crimes and accessibility with bus companies and local authorities. The focus is on addressing the structural issues as opposed to addressing the issues of loneliness and social isolation experienced by disabled people. Greater use of Direct Payments as means of having greater choice and control over the type and the way support is provided. Associated with this, 'the Citizen's Directed Co-operative Model, which was run in collaboration with the Wales Co-operative Centre, is considered to be an effective model whereby disabled people can adopt the Direct Payments offer without the worry of having to employ their carer or PA directly themselves.'

### *Suggestions about what more can be done*

- 3.48 Investment in apps and sensory loss guidelines (with adequate training) was suggested as a way of helping to improve the everyday lives of people with hearing impairments, with general practitioners referring earlier when hearing loss was suspected.
- 3.49 Amending the 'Access to Work' initiative in order for disabled people to be able to work as volunteers was another suggestion. 'Supporting the development of social care services to become more joined up and effective and so reduced duplication of services and making them more tailored to need. Addressing issues around accessible, appropriate and acceptable public transport. Finding creative solutions to integrate disabled people into their local communities.' Embedding social skills training and characteristics of positive healthy relationships within the school curriculum, alongside extending opportunities for younger disabled people to develop a wider social network. 'Focusing on housing to make it accessible, affordable and appropriate for disabled people.'
- 3.50 Organisations interviewed argued that 'financial austerity was also placing the responsibility on individuals to buy the resources they needed (e.g. a specialist telephone) rather than being given one by the social services department.'

### ***Refugees and Asylum seekers***

#### *Issues for refugees and asylum seekers related to loneliness and social isolation*

- 3.51 Organisations reported that refugees in particular could spend long durations in initial shared accommodation with people they did not know. The accommodation 'did not feel like a home and this could trigger a longing for their family and home life and intensify feelings of loneliness.' Living accommodation was reported as being 'frequently allocated within dedicated dispersed target cities, which meant it took longer for refugees and asylum seekers to familiarise themselves with their new location.' This was compounded by poor English and limited financial means. Severe poverty, and often destitution, made it virtually impossible for them to be able to afford to engage and network. For example, 'being unable to afford a bus ride into town to attend ESOL classes.' Organisations reported that the financial restrictions also inhibited social interaction and engagement.

- 3.52 Organisations supporting refugees and asylum seekers reported that not having a right to work restricted their ability to develop social and professional networks. Loneliness was seen as an immediate issue, having come from a country/community where they 'previously had good access to strong family, friendship and professional networks.' People were reported as missing their old social networks and worrying about circumstances back home. Some asylum seekers were reported as 'spending time sitting and observing other people in shopping centres just to experience some normality, although they were often restricted from engaging with others due to linguistic barriers.'
- 3.53 Asylum seekers were reported as experiencing more profound loneliness and social isolation than refugees because they are newer to the UK/their current accommodation and will have been moved from one place to another. By comparison, 'refugees will have been here longer and are more likely to have settled somewhat and come into contact with local communities and support groups.' Organisations felt that the groups in need of the greatest support are 'those who are destitute and cannot access any public sector funds.' For example, if individuals are found not to be entitled to multiple occupancy accommodation.

#### *Diversity within and between groups*

- 3.54 Asylum seekers who are also from the LGBTQ+ community, or who are also single parents or are a woman, can face more isolation and loneliness issues. They can be socially isolated from their community because of heteronormative assumptions or 'because homosexuality is culturally unacceptable.'

#### *Access to Services*

- 3.55 Organisations had observed that asylum seekers and refugees were less likely to take up public sector services for a number of reasons.

*'Firstly, they feel that the onus on survival is their responsibility. Secondly, they do not wish to disclose or show themselves to official authorities until their immigration application is resolved. Thirdly, their only experience of public services within the UK to date has often been the Home Office, and if they have had a negative experience then it is likely to deter them from contacting any other service. Fourthly, they may be coming to the UK with a misconception that they will have to pay for health services*

*and this can be a deterrent. Fifthly, they usually lack English language skills to communicate their issues or needs. Sixthly, single parents, often women, and particularly those with young children struggle and are less likely to be able to take up services offered due to poverty, lack of time, practical logistical issues of getting to a group or event and the tendency to speak less English compared to their male counterparts. Lastly, they may find it difficult talking about issues such as mental health with public service providers if they are from a country/culture where mental health is stigmatised and not widely discussed.'*

Organisations suggested that asylum seekers and refugees felt that they were not being considered seriously when requesting support because GPs and health service personnel did not understand their cultures and the issues attached to being a refugee or asylum seeker.

*What organisations perceive to work*

- 3.56 Voluntary and community support groups offer guidance and support to refugees and asylum seekers. They refer people to other services and make them aware of what is available to them, including third sector and public services. Displaced People in Action and the Swansea Bay Asylum Seekers Support Group provide services such as orientation support (helping individuals to become familiar with their new city), befriending/mentoring services and drop-in services (e.g. the Bethel Community Church in Newport). 'The key message is to work via local groups which are well regarded and well networked with the refugee and asylum community.' For instance, these would include the Ethnic Minorities and Youth Support Team [EYST] in Swansea.

*Suggestions about what more can be done*

- 3.57 Organisations felt that accessible advocacy services were needed to facilitate access to health and social care, alongside networking with local groups who are aware of the issues and who can provide support and guidance. 'There also needs to be cultural awareness training for public service staff, with a particular focus on the needs of different groups and sub groups.' Access to affordable and accessible transport was also seen as necessary and some way of people being able to support themselves. Lastly there 'needs to be innovative solutions to housing and support for those most at need.'

## **LGBTQ+ People**

### *Issues for LGBTQ+ people related to loneliness and social isolation*

- 3.58 Organisations underlined the diversity of LGBTQ+ people who can be more likely to experience loneliness and social isolation, but this isn't the case for all. They discussed the type of family support structures that LGBTQ+ people have which are very different [from non LGBTQ+ people]. For example, 'older LGBTQ+ people are less likely to have children, less likely to have contact with their family due to family estrangements and not accepting them as they are.' LGBTQ+ people are less likely to have the same support structures in place as people not identifying as LGBTQ+ as they get older. There is also the issue that 'their support network of friends and peers reduces with age as this network experiences the same care needs as they do.' (This is supported by further evidence from Stonewall<sup>2</sup>).

### *Diversity within and between groups*

- 3.59 The issues relating to loneliness and social isolation tend to be more prominent amongst older people. This is due to a number of issues – not least because older LGBTQ+ people have experienced greater discrimination because of their sexuality. For instance 'they may have been raised within a community where homosexuality was a criminal act and they may have had direct experience of discrimination. The fear of further discrimination may often result in them trying to hide or not discuss their sexuality.' For example, 'an older LGBTQ+ person living in a care home may not disclose any details about their sexuality for fear of homophobic reactions. Younger LGBTQ+ people can experience mental health issues, with suicidal thoughts and self-harm appearing frequently and much higher than amongst non LGBTQ+ young people.' This is often a result of bullying at school not being appropriately addressed and young people not being able to talk about their issues openly with others.

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<sup>2</sup> [Lesbian, Gay and Bisexual People in Later Life](#)

### *Access to Services*

- 3.60 LGBTQ+ people were reported as less likely to access health and care services generally. One critical factor mentioned was ‘the lack of awareness and understanding that medical professions have in their interactions with LGBTQ+ patients.’ LGBTQ+ people were seen as less likely to access services or any networks if ‘their promotional material was not openly inclusive.’ Organisations felt that LGBTQ+ people tended to experience loneliness as a result of ‘not being able to open up, discuss their sexuality with others and express their true identify.’ For example, ‘a lesbian whose partner has died may not feel comfortable discussing this with professionals, or if they are in a care home with other residents because they feel that they have to hide their sexuality.’ Transgender people are ‘often concerned about growing old alone because of them being trans\* and are less likely to use services because of perceived discrimination about their trans\* history.’<sup>3</sup> Swansea University is currently involved in exploring ways of improving health and social care services for trans\* individuals over 50 years of age.<sup>4</sup>
- 3.61 Organisations felt that LGBTQ+ issues were not considered as part of the medical curriculum or training which health staff undertake so the needs of LGBTQ+, ‘especially trans\* people, were not understood by professions in Wales.’ ‘Trans\* people are much more likely to have negative experiences of the health services and until recently had been required to access services such as gender transition services in England.’ The other issue in relation to health services is that provision needs to focus on being ‘inclusive and accessible’.

### *What organisations perceive to work*

- 3.62 Local LGBTQ+ community groups provide an important mechanism in some areas for health services to consult with. For example, ‘the Unique Transgender Network in North Wales has been involved with the Betsi Cadwaladr Health Board to develop appropriate support for people with dementia. One limitation is that these relationships or collaborative discussions are not consistent across Wales.’ Befriending services provide a solution to

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<sup>3</sup> [Trans Mental Health Study](#)

<sup>4</sup> Trans Ageing and Care (TrAC): [Dignified and inclusive health and social care for older trans people in Wales](#)

companionship for LGBTQ+ people – particularly in rural areas where there may not be a social group available to them to meet and socialise with other LGBTQ+ people.

*Suggestions about what more is needed*

- 3.63 Organisations felt that a reduction in social inequalities and access to services would be assisted by the development of appropriate and acceptable health service support across Wales for LGBTQ+ people. Campaigns were suggested to tackle stigma and embed more diversity and equality education for health and public service professionals. They also suggested that working with the British Medical Association to provide more teaching on the undergraduate curriculum on particular issues such as LGBTQ+ people in relation to health would be beneficial. Final suggestions from organisations were ‘ensuring any public service material openly discusses accepting people for who they are and provision of more support for befriending services for LGBTQ+ people, particularly in more rural areas.’

**Carers**

*Issues for carers in relation to loneliness and social isolation*

- 3.64 Research undertaken in 2017 by Carers UK suggests that 8 out of 10 carers experience loneliness and social isolation.<sup>5</sup> Carers are more likely to experience higher levels of both loneliness and isolation compared to the general population because of their caring commitments and being unable to leave the house and/or sustain relationships with other people. Social isolation was perceived as leading to greater levels of loneliness because carers are ‘often restricted from leaving their homes (due to their caring responsibilities) and this triggers loneliness. The trigger for isolation and loneliness is becoming a carer and the longer someone has been a carer then the more likely they are to report these issues.’

*Diversity within and between groups*

- 3.65 Organisations reported that

*‘Heavy’ carers (those caring for over 30 hours a week) are more likely to be socially isolated simply because they can’t get out and about to see their friends or family. They don’t have the time to socialise and quite often their circle of friends will start*

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<sup>5</sup> Carers UK: [Carer Loneliness Report](#)

*making assumptions about them that they're unable to meet up so invitations to participate reduce over time. Those in work often report that they could not talk about their caring responsibilities due to the 'stigma that is attached to it. They are also more likely than their colleagues to miss out on social interactions and opportunities because of the need to rush back home straight after work.'*

- 3.66 Carers frequently report that they 'feel invisible', even when visitors come to the house because those visitors have come to see the cared for person, as opposed to the carer. Older carers have additional needs and this is reported in the older people section but the areas in this section also apply to them.

#### *Access to Services*

- 3.67 Organisations supporting carers suggested that

*'many carers do not identify themselves as 'carers' and this is one of the biggest issues restricting access to support services. The process of becoming a carer has often been a gradual one and so people don't see that their role has changed. As a result, they do not identify their own needs and entitlements, which are available but often underutilised leading to financial difficulty. One important trigger as part of this identification process is the point at which the cared for person accesses disability benefits. As part of this assessment they will be asked about whether they have a carer or not and this opens up the discussion and aids the identification process. Another trigger point will be when the cared for person accesses GP or health services at a time of crisis. At this point they will be given a leaflet about support for carers.'*

There was a perceived geographical difference in the provision, which carers can access within their local area, which was cited as a postcode lottery. At a pan-Wales level the support available appeared insufficient and public services needed to consider how it can better invest between preventative care and crisis care. It's difficult to get the balance between these two services right. There is stigma attached to using social services, so carers tend to value voluntary support.

### *What organisations perceive to work*

- 3.68 Organisations suggested that social media networks were useful because ‘carers can turn to them as one way of overcoming loneliness and social isolation.’ Social media networks are easily accessible from their home, at any time of day. Another reported positive was access to sitting services, which were flexible and affordable to allow carer the ‘time out’ to engage in social interactions. A directory of accessible accommodation at affordable prices for carers has been developed by Swansea University and Bridgend Local Authority. ‘This directory offers time away opportunities e.g. affordable and accessible mini-breaks for the carer and cared for person (and other family members where relevant).’

### *Suggestions about what more is needed*

- 3.69 Organisations suggested replicating the short break directory developed by Swansea University and Bridgend Local Authority across Wales. Developing IT related solutions for carers to adopt (e.g. Smart speakers) and being able to put the TV on remotely when away from home. Ideally, they would like to see a reduction in inequality of access to service provision pan Wales. They also wanted to see an increase in accessible and affordable transport for carers and their cared for person.

### **Older People**

- 3.70 Some of the issues affecting older people appeared in case studies around older people and older carers and therefore the two have been merged to present a more complete account of the complexity.

### *Issues for older people related to loneliness and social isolation*

- 3.71 There are a number of stages along the life course, which can trigger loneliness and social isolation such as bereavement, retirement, giving up driving.<sup>6</sup> There are also a range of risk factors, not merely illness, which can increase the likelihood of someone experiencing loneliness and social isolation.<sup>7</sup> Addressing these risk factors and the ways in which they

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<sup>6</sup> Public Health England (2015). [Local action on health inequalities: Reducing social isolation across the lifecourse.](#)

<sup>7</sup> Piachaud D, Bennett F, Nazroo J., and Popay, J., (2009). [Report of task group 9: social inclusion and social mobility. Task group submission to the Marmot Review.](#)

interact with people's individual circumstances were seen as a way of reducing the risk of people transitioning into loneliness as they age.

- 3.72 Organisations suggested that older people 'don't identify themselves as lonely but further down the line services find out that they are actually looking for something social or a friendly ear.' For example,

*'telephone support services are closed down over the weekend, frequently a point of high need leaving people with no one to speak to. Stigma surrounding loneliness often prevents people from asking for help, sometimes even from close relatives and neighbours. Loneliness has a detrimental effect on the physical and mental wellbeing of older people – they're stuck indoors, they become less mobile, they get stiff, they can't get about, that leads to trips and falls and visits to A&E. At the extremes of loneliness you get depression...people don't want to socialise...or there's chronic isolation.'*

- 3.73 In the interviews with organisations, poverty was mentioned as a particular issue involved in older people being more likely to experience loneliness and social isolation because

*'they could not afford to access services, or the effects of poverty may have already had an impact on their health. Issues such as spending cuts on public services; lack of public transport and particularly of on-demand/responsive transport e.g. voluntary transport schemes disabled people from accessing wider services to increase social interaction. The closure of day centres, means that additional activities held in those spaces have also closed, coupled with the reduction in community groups.'*

The rental on community spaces was often unaffordable and this also reduced the ability to meet and interact. The closures, reductions and costs of services were seen to exclude older people and increase feelings of loneliness and social isolation. Environmental factors were mentioned, for example lack of safe walkways from older people's homes to village halls and a lack of public toilet facilities for people with continence issues which added to the anxiety for many of leaving home. 'All compound the feelings for the older person of "I can't – I don't want to take the chance".'

### *Diversity within and between groups*

- 3.74 The interviews with older people's organisations revealed that 'older carers are a sub group of older people whose needs often go unmet and there are often unreasonable assumptions made by assessors as to older people's ability to cope without formal support.' This appears to be a misinterpretation of the Social Services and Well-being (Wales) Act (2014),<sup>8</sup> which suggests that people are only eligible for care and support if their needs 'can and can only' be met by social services. From this it can be inferred that there appears to be a poorly understood distinction between social care means tests and NHS. In 2002, the Scottish Government removed the means test for personal care services (including help with washing and dressing) for people over 65, although a needs test still applies. It may be useful to view this policy because it differs from England, Wales and Northern Ireland and ascertain whether the model may be implemented in Wales.

### *Accessing services*

- 3.75 There was a perception from the interviews with organisations that many older people are 'simply not getting the basic social care services they need in order to have a good quality of life and maintain good quality relationships and a network of social contacts.' In terms of social services there were reported issues with 'not getting assessments, not getting the right advice, or being fobbed off...this in turn makes older people unwilling to contact their local authority – they become suspicious because they have had no help in the past.'
- 3.76 Organisations suggested that older carers had raised concerns about: waiting times for assessments; being signposted inaccurately and referred inappropriately. 'They have difficulty in finding out what is available, and report a use of jargon and duplication in the assessment process.' There was a perceived lack of person-centred assessment with social services 'frequently failing to listen or respond in a timely fashion to the concerns of the family of the person requiring care, or that person's carers.' There was a perception that more concern was given to benefits and who was going to pay for extra care.
- Older carers' complex health and social care needs mean that the assessment process to determine the support needs of an older carer often needed to be multidisciplinary. There were also examples provided by older people's organisations of people being told 'they

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<sup>8</sup> [Social Services and Wellbeing Act \(Wales\) 2014](#)

could not have an assessment prior to leaving hospital because a social worker was unavailable, but that they can put in support until an assessment takes place.’ In other cases, people were being told that ‘they were not eligible for support through social services and managed by buying support.’ This appears to be an area of unmet need. People who would previously have received help are no longer being supported increasing demands on informal carers.

*What organisations perceive to work*

- 3.77 Organisations reported that the free bus travel scheme has been invaluable in helping older people in Wales to retain their independence and remain active, and in providing connections to services and amenities. Low-level preventative services were reported to have made an important contribution to people’s well-being. Although there was no hard evidence to corroborate these perceptions. ‘Gwynedd a Mon’s advocacy service, provides a completely bilingual outreach service to those over 50 and their households, living in rural areas, who have little or no access to mainstream services and support. This enables people to access services.’
- 3.78 In Ebbw Vale, there is an active network of community connectors who connect local people to activities, but how successful this was in reducing loneliness was unknown. Wider provision was considered to vary by the area people live in, with more social isolation in rural areas. Social prescribing was also mentioned by organisations as a positive intervention but that there ‘needed to be much more clarity about the term because GPs did not like to prescribe without an evidence-based outcome. There also needs to be more clarity about community connectors, their roles and outcomes.’
- 3.79 Guided conversations, or motivational assessments, to understand older people’s circumstance helped to create tailored support. Examples of tailored support mentioned were traditional befriending services, or benefits advice, wellbeing information, transport, or practical support and social engagement opportunities. Efforts to reduce loneliness were not always seen as about encouraging more social engagement but about ‘resolving other issues, such as access to benefits, helping people participate in activities, or enabling them to help themselves, thereby reducing their feelings of loneliness.’

### *Suggestions about what more is needed*

3.80 Organisations suggested there needed to be more development of services and educational resources which support people across the life course and enable them to cope well with key life stages where there can be increases in loneliness. This perception is supported by research on loneliness across the lifecourse for the Calouste Gulbenkian Foundation<sup>9</sup>. Organisations also felt that ‘using advocates and advocacy services as facilitators of people’s voices could assist in addressing loneliness and social isolation.’ They felt that assessment and support needed to be more person-centred and tailored. For multidisciplinary assessments, organisations felt that ‘data-sharing underpinned by ICT needed to occur, alongside a reduction in inequality of access to services.’ An increase in prevention and early intervention was also seen as necessary to reduce future impact on services.

#### **Limitations of the interviews**

3.81 Limitations of the consultation interviews are that they were only done with a small number of organisations (10 in total) representing, advocating for people, or providing services. Other organisations could have had different views on some of the issues discussed. The views offered are limited to those of the person within the organisation and are possibly not those of service users themselves. Furthermore, not all groups are represented because some organisations refused to participate. Using a telephone to interview also means that vital information gained through non-verbal communication can be missed. The benefit of telephone interviews is that a large number of interviews can be done within a short time scale over a wide geographical distance.

#### **Summary**

The diverse needs of the population in Wales are reported by the different organisations, but there were common themes that repeated themselves. Accessible, affordable and appropriate transport was mentioned as a way of enabling people to move around and integrate more effectively. Alleviation of poverty for some groups and access to affordable and appropriate housing was an issue for younger people, refugees and asylum seekers and disabled people. Access to services in terms of how appropriate they were for

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<sup>9</sup> [Loneliness across the Life Course](#)

assessments, how accessible they were in terms of gaining access and how acceptable they were in terms of staff attitudes towards people who were viewed as 'different'. A reduction in inequalities of service provision across Wales was a repeated theme, but implementation of this may be a challenge that needs further exploration. Replicating the short break directory for carers across Wales was suggested as a benefit for carers but there was little evidence as to how often this service was used, how it was regulated, how inclusive it was, who had ownership and updated the directory and how easy or challenging this may be to implement. Organisations suggested that there needed to be support for the development of social care services to become more joined up and effective and advocacy services were viewed as necessary, both in terms of developing relationships with services and enabling people to voice their needs. Greater access to affordable activities that take place in safe settings was also viewed as important. Overall, the view from organisations representing or advocating for people was that communities in Wales appear fragmented and creating supportive communities that work together may be a challenge for the future.

## 4. Conclusions and Recommendations

- 4.1 At the outset of this study there were two main aims, the first aim was to explore the evidence around the relationship between social isolation, loneliness and the increased use of public and health services for all groups. The second aim was to examine the types of contexts that increased or decreased service use as a result of loneliness and social isolation.
- 4.2 The scoping review of the evidence, the new evidence generated by the meta-analysis and the consultation interviews indicated that whilst there appeared to be a small association between people who experienced loneliness and feelings of social isolation and making a greater number of visits to their physician or general practitioner, the area is lacking in clarity and highly complex. The review highlights a number of gaps in the evidence base. Firstly, there is a lack of consistency in the ways loneliness is defined and in some cases measured. This limits the level of comparison for the studies and the conclusions that can be drawn. Secondly, half of the studies in the review used a cross-sectional design which does not infer cause and effect and therefore mechanisms and links for causal effects remain unknown. Thirdly, there is a paucity of evidence around minority groups and their interactions, or lack of them with services. Fourthly, although there is some movement to include younger segments of the population in work around loneliness and social isolation and use of services, the tendency is still to focus on older people. This has the potential to bias findings and reduce generalisability.
- 4.3 From the meta-analysis of the studies we can suggest that further research is needed to better understand the processes linking loneliness to greater use of primary health-care, as it was not possible to address this question quantitatively owing to the small number of studies found and the lack of attention to process variables in the research. It would also be useful to examine whether these results extend to other forms of health care use to obtain further insights into how loneliness impacts health service use such as use of emergency department care, outpatient services, hospitalisation, and mental health care services. Studies also recommended that measures for loneliness and social isolation should be incorporated into patient visits and contact with primary care personnel and this may also be an area of further research worth pursuing (Cruwys et al. 2018; Gerst-

Emerson and Jayawardhana 2015;. Newall, McArthur and Menec, 2015; Kvaal, Halding and Kvigne 2013).

- 4.4 The themes derived from the interviews and academic literature will now be expanded in the next section.

#### *Stigma and service use*

- 4.5 In both the academic literature and consultation interviews, stigma was mentioned as a contributory factor in not accessing services. Stigma is a conceptual idea which has been discussed at varying levels over the past 50 years and first defined by Erving Goffman (1963). Goffman proposed that stigma was a social relation in which people become discredited by a conspicuous or intrusive attribute that they cannot conceal. For others, there is also a loss of status by stigmatization which occasions a spiralling of disadvantage (Link and Phelan 2001). Types of contexts that increased or decreased service use appeared to be dependent on the individual circumstances of people. For example, if we consider refugees or asylum seekers who are lonely or socially isolated then some will not access services for a whole range of factors ranging from mistrust to feelings of stigma about issues such as mental health problems. This means an initial decrease in access but then an increase when services have to deal with people in crisis. Stigma is also a reason why families who have had children taken into care may not engage with services, they become socially isolated and then only re-engage when there is a crisis.

#### *Service related barriers*

- 4.6 There are various barriers that can create an initial decrease and then increase to using services. For example, the consultation interviews produced evidence of services moving towards telephone use only for areas like ordering repeat prescriptions. This excludes people with hearing loss and can have an impact on their health. The consultation interviews also revealed perceptions of poor communication between service providers and people accessing services, for example not giving appropriate advice, or making people feel they and their needs are unimportant. This can reduce trust and make a person either suspicious or unwilling to engage, which further isolates them and creates issues for the future. These perceptions are supported by the academic literature on access to healthcare for different population groups (Moore et al. 2017; Bradby et al. 2015; Krahn, Walker and Correa-De-Araujo 2015; Vance, Halpern-Felsher and Rosenthal

2015). There was a perception from organisations around the reduction of availability of resources such as those for hearing loss which meant individuals having to buy their own. Many organisations argued that there appeared to be an uneven distribution of resources, between different areas across Wales. Other organisations discussed duplication of resources for some people and a paucity of resources for others. In the academic literature and the consultation interviews, attitudes of staff were a service barrier with many organisations reporting a lack of diversity awareness from staff. Conversely, there may also be barriers with language because many refugees and asylum seekers do not speak English and translators may not always be available.

#### *Heteronormative assumptions*

- 4.7 In both the academic literature and the consultation interviews, LGBTQ+ people felt that services lack insight into their diverse needs. For example, the academic literature suggests that lesbians were uncomfortable discussing the death of a partner because gender-neutral pronouns often failed to be used until they had disclosed their partner's gender (Wilkins 2015). The consultation interviews revealed that older gay males were unwilling to disclose their sexuality to carers for fear of discrimination and this added to their feelings of isolation. This is supported by the academic literature which discusses how LGBTQ+ people experience stigma when accessing health services, but earlier disclosure can facilitate greater uptake of services and less access when in crisis (Healthy People 2020; Whitehead, Shaver and Stephenson 2016). Transgender people in particular have negative perceptions towards using public services (Bradford et al. 2013; Kosenko et al. 2013) and there is current research taking place at Swansea University, which may yield new knowledge as to recommendations for this particular group. Negative experiences make people less likely to engage with services until a crisis occurs. This is compounded when people come from cultures where homosexuality can be a crime and they are less likely to disclose their sexuality. There was a perception from organisations that LGBTQ+ people may not engage with services if they were not promoted as being inclusive. Although the organisations themselves failed to differentiate between people who were lesbian, gay or bisexual and instead grouped everyone together, making it difficult to account for diversity.

### *Bullying and victimisation*

- 4.8 The academic literature suggests that a lifecourse approach may see issues appearing from childhood when children are bullied or victimized at school because of an aspect of difference, for example disability, chaotic family background, abuse, being in care, or identifying as LGBTQ+. If support is not provided at this stage then issues can persist into adulthood with a potential greater uptake of services. The consultation interviews and academic literature highlighted that school was an area where children did experience bullying, victimisation, social isolation and loneliness. School counselling and pastoral services may take the load off general services for issues that are minor but they have to recognise when the issue is beyond their scope of competence and know when to refer on.

### *Transitions*

- 4.9 The Co-op and British Red Cross Report suggests that transitions throughout the lifecourse can create key stages when loneliness or social isolation may become an issue and help seeking behaviour occurs (Aiden 2016). Examples from the consultation interviews included young people leaving care and losing their support networks and/or friendships and then living in unsuitable accommodation. This has the potential to lead to a downward spiral of health issues and without preventative measures an increase in service use. The consultation interviews also indicate 'when people become carers their health and social needs frequently come second to that of the person for whom they care. Without support their need for health related services may increase as they become more isolated and lonely as a result of their caring role.'

### *Disability and Equality*

- 4.10 The academic literature indicates that disabled people are a particular group who have been frequently excluded and marginalised (Chappell 1997; Cross 2013; Macdonald et al. 2018). Issues such as domestic abuse or mental health problems often fail to be addressed because there are no dedicated specialist services to assist. The academic literature and consultation interviews suggest that they also experience higher levels of loneliness and social isolation from childhood and struggle to make or maintain friendships either because they lack the social skills or because society fails to include them, or a combination of both. The Equality Act 2010 suggests that people should not be treated

differently because of any characteristic they may possess and disability is one characteristic that also identifies people as being at risk. The consultation interviews also revealed that disabled women who experience domestic violence have been previously supported by Welsh Women's Aid but that there is a lack of appropriate sheltered accommodation available for them. The Equality and Human Rights Commission (2018) have already explored this area in depth, with similar conclusions and recommendations that suggest 'Progress to ensure that disabled people have accessible homes that support their right to independent living is unlikely to be made unless disabled people are actively engaged in shaping housing policy and practice.' (p.86).

### *Housing*

- 4.11 In the consultation interviews, housing was mentioned as an issue for refugees and asylum seekers and feeling as if they belong somewhere and have accommodation that feels more permanent may assist in reducing anxiety and mental health problems. Research suggests that housing in particular can have a profound effect on mental health for all groups.<sup>10</sup> Appropriate, acceptable and affordable housing was also suggested by organisations and by the academic literature as an issue for disabled people and young people leaving care (Equality and Human Rights Commission 2018; Allen 2003). Frequently, refugees, asylum seekers, disabled people and young people are often relocated and housed in areas that feel unsafe and where they lack a social support network. The organisations supporting them reported that accommodation was often sub-standard and disabled people were reported by organisations supporting them as 'often unable to leave their home because of the lack of adaptation.'

### *Poverty*

- 4.12 Poverty may be said to exert the greatest impact on people (Marmot and Wilkinson 1999; Wilkinson and Marmot 2003). For some groups there are greater impacts than others, but living on or below the poverty line creates an impact on the extent and type of resources that can be accessed. For example the consultation interviews revealed that, 'refugees and asylum seekers are unable to travel to English Language classes which could help them with integration into the local community.' Sitting in shopping centres, being unable

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<sup>10</sup> [The Mind guide to housing and mental health](#)

to understand what was being said, but just wanting 'normality' through feeling as though they belonged by being surrounded by others indicated the level of isolation that some refugees may feel. Ensuring people who are at risk because of a protected characteristic either have adequate access to accessible, affordable or free transport, or housing them closer to services may be one way of reducing loneliness and for some social isolation. Another way is assisting people to access benefits to which they are entitled and in doing so place the control back in their hands and indeed the choice of how they wish to participate.

#### *Decreases in Service Use*

- 4.13 Decreases in service use that were reported as positive were when advocacy and volunteer services were used to support people with particular needs. Transport that was accessible, cheap or free was also seen as a positive for enabling people on low incomes to travel around and access different resources and facilities. Creating meeting places for people that were affordable or free was also seen as beneficial. Befriending services were also seen as positive because they could often direct people to support services, or be around when people needed to talk. Although, there is little evidence that this reduces loneliness or social isolation and at a formal level there are issues around safeguarding. The organisations claimed that 'these services helped reduce feelings of loneliness but that it also depended on the quality of the relationship with the befriender.' Having a trusted supporter was seen as necessary for young people to thrive, for example when leaving care having someone who could assist with their transition and be there if needed. This is supported by the Joseph Rowntree report on young people leaving care with responsive, flexible, targeted and tailored support as the main factor in successful transition to young adulthood (Allen 2003).

#### **Recommendations**

There are 16 recommendations for the Welsh Government to consider for policy. These are not presented in any order of importance. Recommendations 1, 7, 14 and 15 come directly from the academic evidence. Recommendations 2, 4, 5, 6, 8 and 9 come from the interviews and recommendations and 3, 10, 11, 12, 13 and 16 are combined from the interviews and academic evidence.

- 4.14 **Recommendation 1:** Fund more research into loneliness and social isolation, in particularly measuring loneliness routinely in at risk groups attending primary care services, as recommended by the academic evidence.
- 4.15 **Recommendation 2:** Carry out a survey to provide evidence around the level of use of the short break directory developed by Swansea University and Bridgend Local Authority to ascertain whether it would be worthwhile extending the service across Wales.
- 4.16 **Recommendation 3:** Voluntary and public sectors should recruit more key or peer support workers for different groups of people. For example, care leavers, families, refugees and asylum seekers, and LGBTQ+ people who may need support with accessing services. These can be a mixture of voluntary and employed personnel who have insight into the particular issues for specific groups.
- 4.17 **Recommendation 4:** Practitioners in Wales need to remain informed about clinical governance and good practice relating to discrimination through workshops on diversity awareness within services and exploration of confirmation bias (which favours pre-existing beliefs about people). This should take place involving groups of people such as refugees, asylum seekers, LGBTQ+ people and disabled people. This should result in increased staff awareness of the particular issues that affect people's lives to help groups receive more appropriate treatment/support within services.
- 4.18 **Recommendation 5:** Schools and colleges should implement teaching for all young people around the concept of positive and healthy friendships as an integral part of the curriculum. For example, characteristics of a good friend, negative uses of social media and using the Social Model of disability approach to challenge the ways in which society perceives and deals with difference. The aim is to increase peer-to-peer interaction, gain an insight into the impact of issues such as bullying and victimisation for different groups and the reasons why this occurs.
- 4.19 **Recommendation 6** Within the Welsh Government, the Department of Health and Social Services and Department of Education and Skills should collaborate and work together to develop a pathway of access for formal counselling, psychology and mental health assessment services, embedding mental health provision to create more joined up delivery of services and identify issues earlier before they reach crisis point.

- 4.20 **Recommendation 7:** Fund new research to work with marginalised groups and explore ways of making housing and sheltered accommodation more affordable, accessible and appropriate for people most in need. For example, care leavers; asylum seekers and refugees; disabled people and particularly disabled women experiencing domestic abuse.
- 4.21 **Recommendation 8:** Fund research to survey existing transport provision with a view to providing accessible and affordable or free transport for some groups. Accessible transport means people not having a long walk to the bus stop if they have physical impairments and making sure transport feels safe. Transport is a key factor in people accessing services such as English language classes, or maintaining friendship networks, which assists in reducing loneliness and social isolation.
- 4.22 **Recommendation 9:** Welsh Government should encourage data sharing through Information and Communications Technology [ICT] and explore other ways of making services more joined up using technology to reduce the level of duplication and ensure that services collaborate with one another. This may also help with making assessment more individually tailored. Develop ICT related solutions for carers to adopt to enable them to carry out their daily lives.
- 4.23 **Recommendation 10:** Analyse existing service provision for different groups across Wales to ascertain if there is unequal access across regions and redirect resources to reduce the incidence.
- 4.24 **Recommendation 11:** Carry out a mapping exercise and evaluate the ways local authorities in Wales identify, assess and support carers. This may highlight good practice, indicate further gaps and create a smoother pathway for transitions and support. Then fund co-produced research which involves carers in developing solutions.
- 4.25 **Recommendation 12:** Welsh Government should work with the British Medical Association, British Dental Association and British Nursing Association to encourage them to provide more teaching on the undergraduate curriculum on particular issues such as LGBTQ+ people and other minority groups in relation to health.
- 4.26 **Recommendation 13:** Welsh Government should build on existing research being undertaken in Wales at Swansea University to develop guidelines for services in collaboration with transgender people.

- 4.27 **Recommendation 14:** Funders and commissioners should support work to close the gaps in evidence around loneliness through the life course. Funders should support research that uses respected and rigorous measures of loneliness. In the absence of big data sets it would make sense to focus on those groups which seem likely to be at particular risk of becoming lonely. For example, young people who are leaving care, people with experience of domestic violence, refugees and asylum seekers, disabled people, people and families experiencing multiple disadvantage.
- 4.28 **Recommendation 15:** Welsh Government should provide more clarity around the different services available to older carers/people. This should include which services they can access free through the NHS versus means tested support through social services. Additionally, Welsh Government should investigate whether older people's assessments are making appropriate assumptions about older peoples care needs.
- 4.29 **Recommendation 16:** Welsh Government should increase support for advocacy services with external organisations that enable people to access benefits and other areas of help and support. Ensure that health services have information to signpost people. This would appear to be a non-threatening way of promoting inclusion, supporting people and alleviating poverty for some groups.

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## Annex A: Table of papers identified for use in scoping review

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
1.	Anaker, A., von Koch, L., Heylighen, A., and Elf, M.,	2018	'It's Lonely': Patient's experiences of the physical environment at a newly built stroke unit	<i>Health Environments and Research Design Journal</i> 1-12	Sweden	No Design; Interviews	16  Age unknown	Loneliness increased after admission to hospital after stroke because of the layout and design. Patients then experienced higher levels of depression and more dependence on services. Design of hospital environments needed to be considered; meeting areas; access to nature; links to the wider community to stop people feeling 'cut off'.  Conflates loneliness and social isolation. No theoretical or methodological focus and so difficult to understand how data was analysed.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								Focus Stroke
2.	Bath, P, A and Gardiner, A	2005	Social engagement and health and social care use and medication use among older people	<i>European Journal of Ageing</i> . Vol. 2: 56-63	UK	Cross-sectional  Data derived from NLSAA	1042  Age 65+	Higher social engagement associated with less use of medical services. Caution given as to type of sample because they may have already been using services which meant their interaction had declined at the time data was gathered.  Uses social engagement for social isolation and as a measure for loneliness.  Focus General health

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
3.	Beutel, M. E., Klein, E. M., Brähler, E. I., Jünger, C., Michal, M., Wiltink, J., Wild, P. S., Münzel, T., Lackner, K. J., and Tibubos, A. N.	2017	Loneliness in the general population: prevalence, determinants and relations to mental health.	<i>BMC Psychiatry</i> , 17(1), 97.	Germany	Cross Sectional	15010 Age range 35-74	Depression and loneliness highly correlated with increased use of GP and in-patient services. SES mentioned as a factor. Pathogenic behaviours such as increased smoking and alcohol intake associated with loneliness.  Focus of study is depression.  Difficult to separate the complexity of the association of depression with loneliness and difficult to imply cause and effect with cross-sectional study.
4.	Boehlen, F., Herzog W, Quinzler R, Haefeli WE, Maatouk I, Niehoff D, Saum	2015	Loneliness in the elderly is associated with the use of	<i>International Journal of Geriatric Psychiatry</i> . Vol. 30(9):957-964.	Germany	Cross sectional	3111 Age range 55-85	Older people who are lonely had more contact with health system and higher use

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
	KU, Brenner H, and Wild B.		psychotropic drugs					<p>of psychotropic drugs.</p> <p>Uses UCLA scale to measure loneliness.</p> <p>Fails to differentiate between loneliness and social isolation.</p> <p>Focus is use of medication</p>
5.	Brenna-Ing, M., Seidel, L., Larson, B., and Karpiak, S., E.,	2014	Social Care Networks and Older LGBT Adults: Challenges for the Future	<i>Journal of Homosexuality</i> , Vol. 61(1):21-52	USA	Cross-sectional	210 Age range 50- 92	<p>Some LGBT older adults rely on LGBT-focused organizations to meet their needs, but mostly tend to mainly rely on mainstream providers, such as community-based social support, and health care providers. Challenges exist for older LGBT adults when trying to access mainstream services because of not wanting to disclose sexual identity to non LGBT providers</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								for fear of discrimination. This can lead to underutilization of services. Conflates social isolation and loneliness. Focus is community support
6.	Burholt, V., and Scharf, T	2014	Poor Health and Loneliness in Later Life: The Role of Depressive Symptoms, Social Resources and Rural Environments	<i>Journals of Gerontology, Series B: Psychological Sciences and Social Sciences</i> Vol. 69(2):311-324	Republic of Ireland	Cross-sectional Wave 1 data from TILDA	6613 Age range 50-90	Location amplifies the association between poor health and use of social resources in rural areas compared to urban areas. Increasing social interaction may have little effect in reducing for people who have poor physical or mental health because it is not about geographical location or illness. Addressing cognition may assist instead. Loneliness is a product of complex

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								interactions between microsystem; health state, mesosystem; societal resources and exosystem; availability of factors to increase participation.  Fails to differentiate between social isolation and loneliness  Focus is general health
7.	Chang, E, C., Chang, O, D., Martos, T., Sallay, V., Lee, J., Stam, K, R., Batterbee, C, N-H., and Yu, T.,	2017	Family support as a moderator of the relationship between loneliness and suicide risk: Having a supportive family matters!	<i>The Family Journal: Counseling and Therapy for Families and Couples</i> Vol. 25(3): 257-263	Hungary	Cross-sectional	456 Age range 18-35	Association between loneliness depression and suicide. Supportive families acted as a buffer. Cause and effect could not be indicated, just associations. Query as to generalisability across cultures. Does not differentiate between social isolation and loneliness.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
8.	Cruwys, T., Wakefield, J, R, H., Sani, F., Dingle, G, a., and Jetten, J.,	2018	Social isolation predicts frequent attendance in primary care	<i>Annals of Behavioural Medicine</i> . Vol. 52:817-829	UK	3 studies: Study 1. Cross sectional Study 2. Longitudinal Study 3. Pre-post intervention	Study 1: N=175 Study 2: Range 18-97 Study 2: N=79 Study 3: Range 17-37 Study 3: N=46 Age 45	Focus is depression People who are socially isolated are more likely to access primary care with higher frequencies than people with more social connections. Increasing social connections may reduce primary care attendance. 3 studies: 1. higher social connectedness associated with lower primary care use 2. lower social connections increase in primary care use and mental health issues 3. pilot study and increased group interaction meant lower primary care usage and increased well-being.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								Focus general health
9.	Dahlberg, L., and McKee, K, J.,	2014	Correlates of social and emotional loneliness in older people: Evidence from an English community study	<i>Ageing and Mental Health</i> . Vol 18(4): 504-514	UK	Cross-sectional	1255 Age range 65-101	Social and emotional loneliness differentiated but confuses them as work moves along. Has conflated social isolation with social loneliness. Low income strongly associated with all aspects of loneliness. People with functional limitations as measured on GARS scale correlated with higher levels of emotional loneliness. Limitation is the cross-sectional nature of the study so cause and effect cannot be accurately mediated.
								Focus is general health
10	Denkinger, M, D., Lukas, A., Herolsheimer, F., Peter,	2012	Physical activity and other health-related	<i>Zeitschrift für Gerontologie und Geriatrie</i> , 45(4), 290-297.	Germany		1506 Age range 65-90	Loneliness associated with higher use of health services. Query as to

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
	R., and Nikolaus, T.,		factors predict health care utilisation in older adults.					<p>whether this is because of higher rate of depression and difficult to imply cause and effect with cross-sectional study.</p> <p>Does not differentiate between loneliness and social isolation.</p> <p>Does not segment sample in terms of condition and loneliness or social isolation.</p> <p>Focus is general health</p>
11	Dreyer, K., Steventon, A., Fisher, R., and Deeny, S, R	2018	The association between living alone and health care utilisation in older adults: a retrospective cohort study of electronic health records from a London	<i>BMC Geriatrics</i> . Vol. 18:269	UK	Cross-sectional	1447 Age range 65-90	<p>Living alone has an impact on health care service utilisation for older patients. Social isolation, a lack of social support and living alone may have greater impact on health.</p> <p>Study fails to differentiate between living alone (description of</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
			general practice					living arrangements), being socially isolated (level of integration within society) and being alone (time spent alone). Instead, it conflates all 3 and moves between them as if there is no distinction.  Focus general health
12	Ellaway, A., Wood, S., and MacIntyre, S	1999	Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations	<i>British Journal of General Practice</i> , Vol.49 (442): 363-367.	UK	Cross-sectional	691 Age range 40-60	People without access to a car, living in rented housing, having poorer self-assessed health, and reporting higher levels of loneliness had a significantly higher mean number of consultations with the GP at the surgery. Consultation rates were also significantly associated with number of symptoms and score on the HADS anxiety and HADS

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								<p>depression scales. Social class, housing tenure, self-rated health, loneliness, and neighbourhood of residence were all significantly associated with the mean number of reported home visits. The number of symptoms in a month and anxiety and depression scores were also significantly associated with consultations at home. Study fails to tease out associations and diversity.</p> <p>Considers social determinants of health as reason and people from more deprived backgrounds had higher use of primary care services.</p> <p>Does not differentiate</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
13	Field, E. M., Walker, M., and Orrell, M	2002	Social networks and health of older people living in sheltered housing	<i>Ageing and Mental Health</i> Vol.6(4):372-386	UK	Cross-sectional	87 Age range 63-87	<p>between social isolation and loneliness.</p> <p>Focus general health</p> <p>People with private support networks more likely to use services more and have higher rates of depression. People with private support networks more likely to report being lonely and more likely to experience serious activity limitations.</p> <p>Does not differentiate between social isolation and loneliness.</p> <p>Focus is depression</p>
14	Field, E., Walker, M., Hancock, G., and Orrell, M	2005	The needs of older people in sheltered housing	<i>Journal of Housing for the Elderly</i> . Vol. 19(2):107-117	UK	Comparison study between inner city [IC] and new town [NT] sheltered housing	138 Age range 71-87	<p>People with restricted social networks had higher health related needs for both groups. Areas with poorer external service provision (transport etc.)</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								also exerted a greater impact on people who were socially isolated.
								Loneliness and Social isolation not focus of study but one of findings.
								Focus is general health
15	Geller, G., Janson, P., McGovern, E., and Valdini, A.,	1999	Loneliness as a predictor of hospital emergency department use	The Journal of Family Practice. Vol. 48(10):801-804	USA	Cross sectional	164 Age range 15-80	Chronic loneliness predicted higher use of emergency services independent of chronic illness.  Uses UCLA scale for loneliness.  Study fails to distinguish between loneliness and social isolation and conflates the two.  Fails to identify any other reasons.  Focus on general health
16	Gerst-Emerson, K and	2015	Loneliness as a public health	<i>American Journal of Public Health.</i>	USA	Longitudinal	7060 Age 60+	Chronic loneliness +vely associated with

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
	Jayawardhana, J		issue: the impact of loneliness on health care utilisation in older adults	Vol. 105:1013-1019				higher number of GP visits. GPs a source of social support.  Conflates social isolation with living alone and loneliness  Focus on general health
17	Gutzman, J, S., Sohn, L., and Harada, N, D	2004	Living alone and outpatient use by older veterans	<i>Journal of the American Geriatric Society</i> . Vol. 52:617-622	USA	Cross-sectional	1030 Age 65+	Veterans living alone have greater total outpatient visits than those who live with others.  Conflates living alone with social isolation  Focus on general health
18	Hanratty, B., Stow, D., Collinridge Moore, D., Valtorta, N, K., Matthews, F.,	2018	Loneliness as a risk factor for care home admission in the English Longitudinal Study of Ageing	<i>Age and Ageing</i> . Vol. 47:896-900	UK	Longitudinal	254 Age 50+ Mean age of 82.1	Feelings of loneliness correlated with higher admission to care homes independent of social isolation. Loneliness suggested as a risk factor for increased care home admission.  Conflates loneliness and social isolation and lack of

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
19	Hemingway, A., and Jack, E	2013	Reducing social isolation and promoting well-being in older people	<i>Quality in Ageing and Older Adults</i> Vol. 14 (1):25-35	UK	Mixed methods but with no methodological basis for the qualitative work	100 Mean age 80	complexity in the analysis. Focus on general health Improved well-being as a result of accessing support services which also provided transport to access activities. Outcomes are also reduced levels of social isolation. Conflates loneliness and social isolation. Lack of theoretical basis and research design means results lacking in robustness and analysis of data is unclear. Focus on well-being
20	Henricksen, J., Larsen, E, R., Mattisson, C., and Andersson, N, W.,	2017	Loneliness, health and mortality	<i>Epidemiology and Psychiatric Sciences</i> 1-6	Sweden	Longitudinal Prospective	1363 Age range 40-99	Increased mortality for females who are lonely compared to male. BUT no relationship

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								between physical health and mortality risk factors. Does not differentiate between loneliness and social isolation. Focus on general health
21	Herbolsheimer, F., Ungar, N., and Richard, P	2018	Why is social isolation among older adults associated with depressive symptoms? The mediating role of out-of-home physical activity	<i>International Journal of Behavioural Medicine</i> . Vol. 25: 649-675	Germany	Longitudinal	334 Age range 65-84	Friendship ties (kin or community) increased out-of-home physical activity and reduced depression and social isolation. Conflates social isolation and loneliness
22	Houle, L. G., Salmoni, A. W., Pong, R. W., Laflamme, S., and Viverais-Dressler, G. A.,	2012	Predictors of Family Physician Use Among Older Residents of Ontario and An Analysis of the Andersen-Newman Behavior Model.	<i>Canadian Journal on Aging / La Revue canadienne du vieillissement</i> , 20(2), 233-250.	Canada	Cross sectional	7112 Age > 65	Loneliness associated with higher use of GP services in males particularly. Focus of study was physician use. Loneliness was an outcome of increased use. Conflation

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								between SI and loneliness Focus on general health
23	Jenkins, C, L., Edmundson, A., Averette, P., and Yoon, I.,	2014	Older Lesbians and Bereavement: Experiencing the Loss of a Partner	<i>Journal of Gerontological Social Work</i> Vol. 57(2-4):273-287	USA	Interviewing – no methodological framework	55 Age Range 55-82	Lesbians experienced complex issues with health impacts when they were bereaved; social workers failed to understand the complexity of their issues and increased feelings of loneliness. Recommendations for training around diversity for social workers. Focus was on bereavement, loneliness was an outcome.
24	Kearns, A., Whitley, E., Tannahill, C., and Ellaway, A.,	2015	Loneliness, social relations, and health and well-being in deprived communities	<i>Psychology, Health and Medicine</i> Vol 20(3): 332-344	UK Scotland	Cross-sectional	4082 Age 16+	Loneliness linked to mental health and well-being but more prominent in socially deprived areas with low levels of perceived social support. Focus on mental

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								health/depression. Conflates loneliness and isolation talks about 'situational loneliness'.
25	Kvaal, K., Halding A-G., and Kvigne, K.,	2014	Social provision and loneliness among older people suffering from chronic physical illness; A mixed methods approach	<i>Scandinavian Journal of Caring Sciences</i> Vol. 28:104-111	Norway	Mixed methods	101 Age range 65-96	Differentiates between social and emotional loneliness. Social loneliness appears to be another term for social isolation. People with chronic illness more likely to be lonely and have higher incidence of depression. Interventions for social and emotional support seen as necessary to reduce loneliness. Move from own home to hospital increased feelings of emotional loneliness. Discharge from hospital and feeling unable

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								to cope increased anxiety and dependence on community services. SPS and MDRS scales used. Lack of theoretical framework to inform analysis. Conflates loneliness and social isolation. Focus on general health
26	Li, M, J., Hubach, R, D., and Dodge, B	2015	Social Milieu and mediators of loneliness among gay and bisexual men in rural Indiana	<i>Journal of Gay and Lesbian Mental Health</i> Vol. 19(4):331-346	USA	Cross sectional	225 Mean age 30.65	Social connections decreased health related issues in rural communities for gay and bisexual men. They were used to access community resources and also increase community connectedness. This also helped with the reduction in feelings of loneliness and social isolation.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								UCLA loneliness scale used.
								Conflates loneliness and social isolation
								Issues with sustainability and modelling cannot offer causal inferences.
								Focus on general health
27	Løhre, A	2012	The impact of loneliness on self-rated health symptoms among victimized schoolchildren	<i>Child and Adolescent Psychiatry and Mental Health</i> Vol. 6:20	Norway	Cross-sectional questionnaire	419 Age range 7-16	Children who experienced victimization experienced greater health related symptoms when they were lonely. Children who described themselves as lonely had more reported health symptoms than those who did not describe themselves as lonely; more referrals to nurse or increased time away from school.
								Conflates loneliness and social isolation.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
28	McGoldrick, C., Barrett, G, A., and Cook, I	2017	Befriending and re-ablement service: A better alternative in an age of austerity	<i>International Journal of Sociology and Social Policy</i> Vol. 37(1-2):51-68	UK	Literature review and interviews (no design)	50 Age 65+	<p>Does not explore other factors.</p> <p>Focus on general health</p> <p>Befriending and re-ablement services reduce cost to health and social services. They increase quality of life and reduce social isolation and loneliness by reducing risk factors for falls, increase self-care, forestall emergency action by preventing crises, increases independent living and enables older people to 'age in place'. They also have a positive impact on carer health because of the support.</p> <p>Small sample size and lack of in depth description of the way the study was</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								carried out and data analysed. Conflates social isolation and loneliness Focus on general health
29	Milligan, C, Payne, S., Bingley, A., and Cockshott, Z	2015	Place and well-being: Shedding light on activity interventions for older men	<i>Ageing and Society</i> Vol. 35:124-149	UK	Evaluation but no theoretical framework	62 Age range 52-73	Men's sheds reduced social isolation and increased well-being, acted as a therapeutic and safe space for men to discuss feelings and gain health advice and referrals into targeted services for health related issues. Focus was on Sheds. Loneliness and SI an outcomes of the work. Accepts there is a difference but then conflates the 2 in the report. Focus on general health
30	Mistry, R., Rosansky, J., MGuire,	2001	Social isolation predicts re-	<i>International Journal of Geriatric</i>	USA	Cross sectional	123	American veterans who were socially

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
	J., McDermott, C., Jarvik, L., and the UPBEAT Collaborative group		hospitalization in a group of older American veterans enrolled in the UPBEAT Program	<i>Psychiatry</i> . Vol. 16: 950-959			Mean age 70	isolated more likely to use in-patient health care services. Veterans with a lower risk of social isolation did not buffer against psychological issues or prevent re-hospitalisation. Veterans needed people with an understanding of the military to speak to.  MHI-38 scale, SF36 scale, and LSNS scale used.  Fails to discuss loneliness as an issue.  Focus is mental health
31	Newall, N., McArthur J., and Menec, V, H	2015	A Longitudinal Examination of Social Participation, Loneliness and use of Physician and Hospital Services	<i>Journal of Ageing and Health</i> . Vol. 27(3):500-518	Canada	Longitudinal	954  Age range 45-95	Loneliness and social isolation increase use of GP services but not hospital. Loneliness meant people were at greater risk of being re-hospitalised, people who had more social connections

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								had shorter hospital stays.  Uses social participation for social isolation, but conflates findings with loneliness.  Focus on general health
32	Ollife, J., Broom, A., Popa, M., Jenkins, E, K., Rice, S, M., Ferlatte, O., and Rossnagel, E.,	2018	Unpacking social isolation in men's suicidality	<i>Qualitative Health Research</i> 1-13	Canada	Action research	35 Age range 20-68	Social isolation and men's suicide. Issues began either in childhood and linked to other traumatic events or at key transition times such as unemployment. Social isolation increased when men felt they lacked agency within mental health services because they were too prescriptive. Safe environments and accessible interventions needed to be built into the community.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								Conflates social isolation with loneliness. Focus is mental health
33	Pitkala, K, H., Routasalo, P., Koutianinen, H., and Tilvis, R. S.,	2009	Effects of Psychosocial Group Rehabilitation on Health, use of Health Care Services, and Mortality of Older Persons Suffering From Loneliness; A Randomised Controlled Trial	<i>Journal of Gerontology: Medical Sciences</i> . Vol. 64A(7):792-800	Finland	RCT	235 Age range 75-92	Deteriorating health effects of loneliness and reliance on primary care services can be reduced by using psychosocial group rehabilitation. Conflates social isolation with loneliness. Focus is mental health
34	Reijnders, T., Schuler, M., Jelusic, D., Troosters, T., Janssens, W., Schultz, K., and von Leupoldt, A.,	2018	The impact of loneliness on outcomes of pulmonary rehabilitation in patients with COPD	<i>COPD: Journal of Chronic Obstructive Pulmonary Disease</i> . Vol. 15(5), p.446-453	Germany	Evaluation of 3 week programme	104 Mean age 57.6	People with COPD have higher levels of social isolation and loneliness related to their condition because they have reduced functional capacity. Pulmonary rehabilitation reduced loneliness and social isolation and also

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								<p>increased motivation to carry on with PR. Only a 3 week study weakens claims in the work.</p> <p>Focus on COPD, loneliness and outcome</p> <p>DJGLS used. Social and emotional loneliness rather than social isolation and loneliness used so outcomes are confusing.</p>
35	Stack, R, J., and Meredith, A	2018	The Impact of Financial Hardship on Single Parents: An Exploration of the journey from social distress to seeking help	<i>Journal of Family and Economic Issues</i> Vol. 39:233-242	UK	Interviews, no Concrete research design	15 Age range 23-47	<p>Single parents experienced loneliness and social isolation: did not always access food banks because they did not know whether or not they were eligible.</p> <p>Accessing mental health services through sleepless nights, stress, mental frustration,</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								<p>distress, accessed GP for support. Felt services not set up to meet complex social needs but instead medicalised them and focused on treatment.</p> <p>SES status discussed as a contributory factor for loneliness. Conflates social isolation and loneliness.</p> <p>Lack of research methodology and theoretical framework means study outcomes not robust. Analysis lacks framework and explanation as to how themes were arrived at. Limitation small numbers for study.</p> <p>Focus is mental health</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
36	Stephens, A., Shankar, A., Demakakos, P., and Wardle, J.,	2013	Social isolation, loneliness and all-cause mortality in older men and women	<i>PNAS</i> . Vol.110(15):5797-5801	UK	Longitudinal	6500 Age range	<p>Social isolation in men and women predicts higher mortality rates. The effect is independent of the emotional impact of loneliness. Recommends interventions that focus on social isolation because this has a greater impact on mortality. Indicates that people from more economically deprived backgrounds may have greater risks of social isolation. Fails to tease out the correlation between loneliness and social isolation. UCLA scale used.</p> <p>Conflates social isolation and loneliness in discussion.</p> <p>Focus on general health</p>

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
37	Squires, S, E	2015	To a deeper understanding of loneliness among Irish older adults	<i>Collegium Antropologicum</i> Vol. 39(2): 289-295.	Republic of Ireland	Cross sectional	629 Age range 60-92	11 per cent of emotionally lonely people had more difficulty accessing services. Reasons not given. People with higher level of falls more socially withdrawn and lacking in confidence to go out.  Uses social and emotional loneliness but conflates the 2.  Focus on general health
38	Taube, E., Kristensson, J., Sandberg, M., Midlöv, P., and Jakobsson, U.,	2015	Loneliness and health care consumption among older people	<i>Scandinavian Journal of Caring Sciences</i> . Vol. 29: 435-443	Sweden	Cross sectional	153 Age 65+	Frail older people who were lonely or socially isolated had higher use of outpatient and A+E services.  Conflates social isolation and loneliness  Focus on general health
39	Taube, E., Kristensson, J., Sandberg,	2018	The use of case management for	<i>Scandinavian Journal of Caring</i>	Sweden	RCT	153 Age range	Case management using RCT to explore impact.

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
	M., Midlöv, P., and Jakobsson, U.,		community dwelling older people: the effects on loneliness, symptoms of depression and life satisfaction in a randomised controlled trial	<i>Sciences</i> Vol. 32: 889-901			65+	Case management reduced loneliness in older people because issues were addressed before crisis point was reached. For example, targeting areas that needed addressing such as social support, social skill improvement and CBT for faulty cognition. Referrals to appropriate avenues of support important. Frail older people may benefit even more positively.  Conflates social isolation and loneliness  Focus is depression
40	Theeke, L, and Mallow, J	2013	Loneliness and Quality of Life in Rural Older adults	<i>American Journal Of Nursing</i> Vol.113(9):28-38	USA	Cross sectional	60 Age range 65+	Study in rural Appalachia suggests that loneliness has a profound effect on health, poorer chronic

Paper #	Authors	Date	Title	Journal/publication	Country	Research design	Sample Size	Findings
								<p>illness control, lower quality of life, higher levels of obesity, higher use of prescription medication.</p> <p>UCLA scale and CASP-12 scale used.</p> <p>Correlations and not causality, depth missing in the work.</p> <p>Conflates social isolation and loneliness</p> <p>Focus on general health</p>

## Annex B: Table of studies in meta-analysis and technical meta-analysis summary

**Table: Meta-Analyzed Effect Sizes Between Loneliness and Visits to Physicians Across 11 Studies (Total N = 30,969).**

Study	N	Sample	Mean Age	Percent female	Health care outcome	Loneliness measure	<i>r</i>	95 per cent CI
1. Bath & Gardiner (2005)	1042	Nottingham Longitudinal Study of Activity and Ageing, nationally representative sample of people aged > 65.	75.21	61.0	Visits to family doctor in the previous month	The Brief Assessment of Social Engagement, reverse keyed	.017	[-.04, .08]
2. Beutal et al. (2017)	15,010	Gutenberg Health Study (GHS) population-based, sample from western Mid-Germany	54.9	49.4	Physician visits in the past month	Single item measure	.071	[.06, .09]
3. Cruwys et al. (2018) -1	1,752	Community sample of primary care attenders in Scotland	57.55	57.3	Appointment frequency last 6 months (chart data)	four-item measure of social group connectedness, reverse keyed	.07	[.06, .16]
4. Cruwys et al. (2018) -2	79	Sample of young people undergoing a life transition	22.04	67.1	Change in appointment frequency last month	four-item measure of social group connectedness, reverse keyed	.11	[.10, .50]
5. Cruwys et al. (2018) -3	46	Sample of disadvantaged adults	44.67	73.9	Change in appointment frequency	four-item measure of social group	.17	[.04, .57]

Study	N	Sample	Mean Age	Percent female	Health care outcome	Loneliness measure	<i>r</i>	95 per cent CI
					last 3 months after social engagement intervention	connectedness, reverse keyed		
6. Denkinger et al (2012)	1,056	Population-based sample of people aged > 65 years, located in southern Germany.	75.84	44.9	Number of physician contacts in past year	Single item rating from 0 to 10	.067	[.01, .13]
7. Gerst-Emerson & Jayawardhana (2015)	3,530	Population-based sample of adults aged > 60, from the Health and Retirement Study, United States	71.0	59.2	Doctor visits in the past 2 yrs.	Validated 3-item loneliness scale	.063	[.03, .10]
8. Houle et al. (2001)	7,112	Population-based sample of adults aged > 65, from the Ontario Health survey, Canada	72.69	58.6	Total number of visits to a GP in the last year	Dichotomous single item (Y/N)	.153	[.13, .18]
9. Newall et al. (2015)	954	Population-based sample of adults aged > 45, from the Wellness Institute Services Evaluation Research, Winnepeg, Canada.	63.5	53.8	Number of physician visits	Single item measure	.120	[.06, .18]

Study	N	Sample	Mean Age	Percent female	Health care outcome	Loneliness measure	<i>r</i>	95 per cent CI
10. Pitkala et al (2009)	235	Sample of adults aged >74, from and RCT in Finland	80.0	73.61	Physician visits in cost units	Loneliness after Intervention to increase loneliness vs. control	.134	[.01, .26]
11. Taub et al. (2015)	153	Sample of adults aged >65 who lived at home and were frail, from Sweden	81.5	66.7	4 single items created by the authors	Total number of visits, telephone contact and other contact with a physician.	.164	[.01, .32]
					Meta-analysis results	Average <i>r</i>	.101	[.01, .32]
						Total <i>N</i>	30,969	

### *Technical Summary of the meta-analysis*

Several of the studies reported effect sizes as  $r$ -values, all other effects (odds ratios, chi-square,  $t$ -values) and these were first converted to  $r$ -values. According to Cohen's (1992) guidelines, effects of  $r = .10$  are considered to be small,  $r = .30$  to be medium, and  $r = .50$  to be large. These guidelines were used to assess the magnitude of the effects.

A random effects meta-analysis was used to estimate the average effect size of the relationship between loneliness/social isolation and frequency of making physician visits using the Comprehensive Meta-Analysis (CMA) software (Borenstein et al. 2005). CMA first transforms the individual correlation coefficients into Fisher's  $z$  scores, and weights the effects before meta-analyzing them.

Estimates of the between-studies variability in effect sizes were calculated using two approaches to determine whether the moderator analysis was warranted. The first approach used the heterogeneity statistic,  $Q$ , to assess the degree of variability among the pool of effects sizes (Card 2012); with moderator analysis warranted if this statistic is associated with a large confidence interval. The second approach used the  $I^2$  statistic to estimate the proportion of variability present that was not due to sampling error within studies (Slosar 2009). In general,  $I^2$  values of 25 percent reflect low heterogeneity, 50 percent reflect moderate heterogeneity, and 75 percent or more reflect high heterogeneity (Viechtbauer 2010).

Moderator analysis were planned to assess the potential influence of participant gender and age on any significant average effects. Gender was recorded as a continuous variable (percent female), and therefore a mixed effects meta-regression (method of moments) analysis was used to assess the potential moderating effects of this variable. The potential moderating effect of age was similarly evaluated using a meta-regression in CMA.

A multi-pronged approach was used, as recommended by Card (2012), for assessing publication bias, that is, to assess the extent to which the "file drawer" problem – that is the absence of unfound studies - may bias the results from the meta-analysis. This was especially important given the relatively small number of studies included in the meta-analysis and that only published research was included in the analysis. First, a fail-safe  $N$  was calculated for each effect size using the Rosenthal (1979) method. This statistic provides an estimate of the number of studies with non-significant results ( $p > .05$ ) that would need to be included in the meta-analysis to threaten the conclusion of a significant association (Rosenthal 1979). As a guideline, Rosenthal (1979) suggests that an adequately high fail-safe  $N$  should be greater than  $5k + 10$ , where  $k$  = the number of studies included.

With reporting in academia, there is a tendency for only publications with a significant effect to get published, therefore as part of the meta-analysis we tested to see if this bias was present in the literature. Funnel plots were examined for the meta-analysis, as they provide a graphical representation of publication bias. If a visual inspection reveals asymmetry in the funnel plot shape from the expected triangular configuration, then there is a possibility of publication bias (Card

2012). This was accompanied by a quantitative estimate of potential scatterplot asymmetry and therefore publication bias, using Duval and Tweedie's (2000) "trim and fill" approach. This approach first "trims" any studies contributing to funnel plot asymmetry, then reinstates the trimmed studies and imputes values to "fill" in the funnel plot so that symmetry is achieved, then compares the filled results to the original estimates. If not comparable, this would suggest publication bias. If they are found to be comparable, then the original results are considered robust to publication bias (Card 2012). Third, we used Egger's regression test (Egger et al. 1997) to assess the asymmetry of the funnel plots. In this test, the intercept reflects publication bias, with a significant test suggesting the presence of publication bias. When used in tandem and there is consensus among the results, these multiple approaches can help reduce Type 1 error in assessing publication bias (Card 2012; Ferguson and Brannick 2012).

### *Results of meta-analysis*

Table 1 presents the correlations, study coding, and results for the meta-analyses of loneliness/social isolation with physician visits. The data analysed from 11 studies included 30,969 participants. The meta-analysis revealed a significant small positive average association between loneliness/social isolation and making physician visits ( $r_{avg} = .10$ ).

The tests of heterogeneity of the effect sizes were significant,  $Q_{total} (10) = 52.60, p < .001; I^2 = 80.99$  per cent. Because the  $I^2$  value was above the 75 per cent threshold, moderator analyses were conducted to probe the source of heterogeneity among the effect sizes.

The meta-regression of the influence of sex revealed that the associations between loneliness/social isolation and physician visits were consistent across respondent sex,  $b = -.106 [-.39, .18], Q_{model} (1) = 2.133, p = .14, Q_{residual} (9) = 9.24, p = .42$ . Similarly, the meta-regression for age was non-significant, indicating that the magnitude of the effects across the studies did not vary as a function of participant age,  $b = -.002 [-.01, .00], Q_{model} (1) = 1.90, p = .17, Q_{residual} (30) = 7.99, p = .53$ .

## 1.2 Publication Bias Tests

The tests were unanimous in suggesting the absence of publication bias. The fail-safe  $N$  analysis revealed that an additional 533 studies with null results would need to be included in the meta-analysis to reduce the  $p$  value below .05. This was well above the threshold value of 65. The funnel plot showed no signs of asymmetry and the trim and fill test resulted in 3 studies being trimmed, and thus similar values for the obtained ( $r = .101 [.07, .14]$ ) and imputed effects ( $r = .091 [.06, .12]$ ). Egger's test of the intercept was also non-significant,  $b_o = .909 [-1.56, 3.38], t (9) = .83, p = .21$ , further supporting a lack of publication bias.

## **Annex C: Topic guide for interviews with key informants**

### **NOTE TO INTERVIEWERS**

This topic guide is intended for interviews with key informants from representative groups and associations.

It is intended to be used flexibly and will not be used to ask questions verbatim: it will be tailored according to the participant's knowledge about the impact of loneliness and/or social isolation concerning their target group of interest. Please ensure that participants have an **information sheet**, have **been given time to consider whether they wish to participate** and on agreeing **have signed a consent form**.

### Context

Thank you for agreeing to be interviewed. My name is ....., from OB3, which is a Welsh research company. This work has been commissioned by the Welsh Government and we are working directly with the Centre for Loneliness at The University of Sheffield.

You have been asked to participate in this study because we are interested in your views on the services focusing on reducing loneliness and/or social isolation available for **[target group]**, in the local area that your organisation covers. We are also interested in the ways social and public services may reduce the impact of loneliness and/or social isolation.

For this project, we are defining 'loneliness' as the gap between what a person desires in terms of social contact and their actual level of social contact. Moreover, it is about the quality of their relationships. In contrast social isolation is about the number of contacts in a social network, not about quality.

Before I start the interview can I ask you if you agree to let me audio-record our discussion. The recordings will be shared only with other members of the research team. We will do everything we can to observe your anonymity, and we will not quote you by name in any report. However, by virtue of your role you should be aware that comments you make could potentially identify you.

Have you signed the consent form? Yes  No

Are you happy for me to record the rest of our interview? Yes  No

Do you have any questions before we begin? Yes  No

### Questions

1. Can you provide information on the organisation that you work for, and your role within it?
  - a. What sort of services does your organisation offer? (interventions, advice, activities support and so on)
  - b. What is the main purpose of your service? (reducing loneliness or other)

- c. What is your role within the organisation? (commissioning, delivery, policy and so on)

2. In what ways do you support **[target group]**?

3. Do you operate on a referral basis and if you do can you provide more details? (Prompts: who refers, is there a specific process [forms etc. or telephone call], who is usually referred, do you refer elsewhere)

4. Do you work alongside any other organisations in the community? (find out if they collaborate with other groups, who they are, the process of how they do this, do they target specific groups)

### **[Explain]**

Loneliness is about the gap between what a person desires in terms of social contact and their actual level of social contact. Moreover, it is about the quality of their relationships. Loneliness is not a choice and it can take a long time to lessen feelings of loneliness. In contrast, social isolation is about the number of contacts in a social network, not about quality. People may choose to only have small networks and social isolation can be overcome quickly by expanding the number of people in a network. It is important to understand the distinction between loneliness and social isolation for us to ensure that any solutions are focused on increasing opportunities for people to meet or speak and on helping build, maintain and re-establish meaningful relationships.

5. Based on your experience or evidence what do you feel that your organisation knows about the extent to which loneliness and/or social isolation is experienced by **[target group]**?

- a. Thinking about the differences between loneliness and social isolation and based on your experiences do you feel that **[target group]** appears to experience higher levels of loneliness compared to the general population?
- b. Or do you feel that **[target group]** appears to experience higher levels of social isolation compared to the general population?
- c. Do you feel that the services you offer are sufficient to meet the needs of **[target group]** who are lonely and/or socially isolated? (Get them to talk about the gaps and distinguish between loneliness and social isolation, does this relate to specific **[target groups]**, what is missing )

- d. Do you have any evaluations, reports or findings that you have done about **[target group]** on loneliness and social isolation that you can share with us?
6. What barriers and facilitators do you feel apply to **[target group]** making them more or less likely to experience loneliness and/or social isolation?
- a. What barriers do you feel contribute towards higher levels of loneliness for **[target group]**? (Prompts: practical, cultural, emotional and physical barriers such as confidence, personal security issues, public transport, language, health, discrimination, etc.)
  - b. What barriers do you feel contribute towards social isolation for **[target group]**? (same prompts)
  - c. What facilitators for **[target group]** make them less likely to experience loneliness? (Ask about social and family support, availability of public services)
  - d. What facilitators for **[target group]** make them less likely to experience social isolation?
  - e. From your own experiences, are there particular times in **[target group]** lives when they are more likely to experience loneliness? (Prompts: experiences in school, transition from schools, teenage years, coming out, marriage, entering into a civil partnership, becoming a parent, divorce or dissolving a civil partnership, bereavement and so on)
  - f. From your own experiences, are there particular times in **[target group]** lives when they are more likely to become socially isolated?
  - g. Have **[people in target group]** ever stopped engaging with or using your service? (If yes, do you know why?)
  - h. [If struggling to answer prompt] Were there logistic or practical issues? e.g. transport, cost of interpreter, being able to afford or offer leaflets in Welsh or other languages to promote service etc. Any feedback from communities themselves?)
7. Based on your own experiences would you say health and public services in Wales are sufficient to meet the needs of **[target group]** who have one or more health conditions and who experience loneliness?
- a. Which aspects of **[target group's]** health would you say are most likely to exert an impact on loneliness? (Prompts: mental health, including depression, anxiety, autism spectrum disorders, dementia [define what type Lewy body, stroke induced or Alzheimer's]; as well as physical health such as physical illness, chronic illness,

hearing or vision impairment/loss, intellectual or learning disability, physical and cognitive impairment. Also if people who have more than 1 health need [get them to give examples] report higher levels of loneliness)

- b. Do you have any examples of where health conditions of **[target group]** have led to loneliness? (get them to distinguish how)
- c. What aspects of health services do you feel may have increased **[target group's]** experiences of loneliness? (Prompts: access to services [get them to state which services, include nursing and care homes as health service] e.g. public transport, attitudes of staff in the services, accessibility of information, affordability of care, referrals to services, emergency care, in-patient stays)
- d. What aspects of health services do you feel may have decreased **[target group's]** experiences of loneliness?
- e. What aspects of public services (ambulance services, fire services, police, housing, youth and community services, probation services , courts, transport, education, public funded leisure services, do you feel may have a positive or negative impact on **[target group's]** experiences of loneliness? (get them to give examples if they can)
- f. What research or evidence does your organisation [or do you know of any other reports that we could access] have about **[target group's]** interactions with services?
- g. What are the key messages from the research?
- h. Can any research reports or findings be shared with us?

8. Based on your own experiences would you say services in Wales are sufficient to meet the needs of **[target group]** who have one or more health conditions and who are socially isolated?

- a. Which aspects of **[target group's]** health would you say are more likely to exert an impact on social isolation? (prompts; reasons why and whether more than 1 health need [get them to give examples] report higher levels of loneliness)
- b. Do you have any examples of where health conditions of **[target group]** have led to social isolation? (get them to distinguish how)
- c. What aspects of health services do you feel may have increased **[target group's]** experiences of social isolation? (Prompts: access to services [get them to state which services, include nursing homes as health service] e.g. public transport, attitudes of staff in the services, accessibility of information, affordability of care, referrals to services, emergency care, in-patient stays)

- d. What aspects of health services do you feel may have decreased **[target group's]** experiences of social isolation?
  - e. What aspects of public services (ambulance services, fire services, police, housing, youth and community services, probation services , courts, transport, education, public funded leisure services, do you feel may have either a positive or negative impact on **[target group's]** social isolation? (get them to give examples if they can)
9. Do you have any suggestions on the ways in which organisations in Wales who offer services to reduce or prevent loneliness or social isolation can successfully engage **[target group]** or different **[target group]** communities to reduce the impact on health and services? (Prompts: examples of what works well [and what does not work as well] that they can share, any current activities, any learning that they are willing to share?)