

## Strengthening social participation of socially disadvantaged older people in Switzerland

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#### Keywords

Isolation, loneliness, eldery population, socially disadvantaged, social participation

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## Table of Contents

Key Messages	4
Executive Summary	6
Background and Context	8
The Challenge	14
Conceptual linking of social isolation and loneliness	14
Social isolation and loneliness in the elderly population - a growing but under-monitored pr in Switzerland	
Existing programs in German-speaking Switzerland – difficulty in finding socially isolated an lonely older individuals and often non-targeted program goals	
Limited actionable evidence available on how to address social isolation and loneliness in s disadvantaged older people	
Recommendations to strengthen social participation of socially disadvantaged older ac Switzerland	
Recommendation 1: Improved methods to reach vulnerable or affected individuals	23
Recommendation 2: Include target populations in the planning and implementation of program that aim at reducing social isolation and loneliness	
Recommendation 3: Improved program evaluation, taking into account socially disadvantage groups	
Implementation Considerations	33
Summary	36
Acknowledgements	37
References	38
Appendix I	44
Appendix II A	45
Appendix II B	46
Appendix II C	48
Appendix II D	49
Appendix II E	51

## Key Messages

#### The Challenge

Social isolation and loneliness in the elderly have a number of negative health consequences, which are magnified for those in socially disadvantaged groups. Increased social participation of socially disadvantaged older people can contribute to reducing social isolation and loneliness and the associated health inequalities in this group. However, this is a challenge because:

- the concepts of "social isolation" and "loneliness" are closely linked and there is no consensus on terminology and measurements yet;
- due to the limited data available, social isolation and loneliness among the elderly in Switzerland is not yet widely monitored;
- it is difficult to find socially isolated and lonely individuals, and few programs focus primarily on these conditions
- there is limited actionable evidence on how best to address the problem of social isolation and loneliness in affected populations

#### Options to address the challenge

Improved methods to reach those affected

- New methods to reach socially isolated and lonely people include: (a) better data and innovative ways of using it, (b) the role of a community navigator, (c) partnerships with other entities who already interact with older (socially disadvantaged) persons.
- Programs must go beyond the reach of traditional media and word of mouth to reach the socially isolated or lonely.
- Due to potential stigmatization, individuals found through improved methods should not be labeled as socially isolated or lonely.

Inclusion of target groups in the planning and implementation of programs

- Program planners should be aware of the heterogeneity across population groups and the importance of addressing the target group specifically.
- Working with individuals in the target group and community advisory boards are important steps in the planning of participatory programs.
- Formative research, including needs assessments of target group(s) should be an integral part of program planning.

Improved program evaluation considering socially disadvantaged groups

- Current and future programs need to be more systematically evaluated to strengthen the evidence of effectiveness of interventions.
- The collection of demographic information from program participants, in addition to the pre- and post-program outcome measures, may help to better evaluate the effectiveness of programs for people from specific populations and with an increased risk of health problems.
- Steps to take include determining which information to collect and which tool(s) to use, setting up a systematic data collection and analysis, and developing solutions for storage of data and results.

#### Implementation Considerations

Barriers to implementation include:

- social isolation and loneliness are sensitive subjects for some individuals, and not well understood by others;
- the time it takes to identify and involve affected individuals and target groups in program planning and development;
- a lack of incentives, lack of time, and/or lack of resources that limit efforts, as well as potential program partners, to implement programs.

Potential windows of opportunity include:

- established groups at community level that can be included as potential partners in program planning and implementation;
- many potential partners already have existing points of interaction with older adults;
- programs that already conduct evaluations can more easily build on existing evaluation approaches.

## **Executive Summary**

#### The Issue

Social isolation and loneliness in the elderly are associated with a number of negative health consequences. In addition to higher mortality, social isolation and loneliness are associated with a number of negative health behaviors, including: increased consumption of alcohol and tobacco, lack of exercise, increased nutritional risk and inadequate use of health services. In the general public, social isolation and loneliness pose a greater risk to health than obesity. In addition, social isolation and loneliness have been associated with poorer mental health, such as an increased risk of depression.

Social isolation and loneliness are important risk factors that may contribute to existing health inequalities in socially disadvantaged groups. Although little evidence exists yet on the relationship between social isolation, loneliness, and health inequalities, research has shown that the three concepts share many common risk factors. One mechanism that contributes to this relationship is stigmatization. Stigma is associated with both social isolation and loneliness, and each of these two states are viewed by some as individual failure. Fear of stigma can make it more difficult for socially isolated and lonely people to ask for help. This in turn can lead to even more isolation and loneliness, as well as worse health outcomes.

Targeted programs are needed to reduce social isolation and loneliness and related health inequalities in the elderly. Socially disadvantaged groups are more likely to be socially isolated and insufficiently reached by today's programs in Switzerland. One of the goals of the Health2020 Strategy [1] adopted by the Federal Council is that "all population groups (...) should have equal opportunities to enjoy a healthy life and optimum life expectancy". People who lead programs for older people can therefore contribute to achieving this goal by deliberately targeting socially disadvantaged groups.

#### "Social Participation" as a challenge

Increasing social participation of socially disadvantaged older adults in Switzerland is a challenge for several reasons. First, social isolation and loneliness are closely linked concepts that are often used interchangeably both in research and practice. Although there are indeed overlaps in the risk factors, they are two different concepts that are measured in different ways. Second, social isolation and loneliness are not adequately monitored among the elderly population in Switzerland. Although demographic data show that social isolation and loneliness will worsen with a growing elderly population, very little is still known about these problems in socially disadvantaged populations. Third, experience from literature and a series of qualitative interviews with program managers in Switzerland show that socially isolated individuals are difficult to reach and few programs explicitly aim to reduce social isolation or loneliness. Fourth, there is a lack of systematic evidence of how programs need to be designed to reduce social isolation and loneliness or increase social participation. While there is a growing body of research into the determinants and consequences of social isolation and loneliness in the elderly, there are still significant gaps in knowledge regarding effective strategies to address the issues.

#### Three recommendations for action

In view of the existing evidence and recent reports on social isolation and loneliness in the elderly, three recommendations for action have been identified, which are discussed here to address this growing challenge. Based on a series of reviews and statements from program managers, it can be summarized that it is difficult to find older people at risk of social isolation and/or loneliness. Therefore, the first recommendation describes methods to better identify this group of people.

The second recommendation for action describes the involvement of socially disadvantaged groups (target groups) in the planning and implementation of programs. Systematic reviews have found that a participatory approach to program planning is an essential feature of effective programs to reduce social isolation and loneliness. In addition, program planners should clearly identify those target groups and individuals who are at increased risk of being affected by health inequalities in order to approach the issue of health inequalities and social isolation in Switzerland.

The third recommendation for action is the improvement of program evaluations while taking into account socially disadvantaged groups. Numerous studies have documented the lack of high-quality evidence describing which types of programs are effective in reducing social isolation and/or loneliness and in which population groups. Monitoring program results, collecting detailed demographics, and sharing lessons about what works and what does not work would strengthen programs as a whole, increase their effectiveness for socially disadvantaged groups, and improve participants' quality of life in the long term.

#### Implementation Considerations

Organizations that wish to support social participation in socially disadvantaged older adults in Switzerland face several barriers in implementing the described action recommendations. At the individual interpersonal level, social isolation and loneliness are delicate issues that may be difficult to discuss for affected individuals. These individuals may also be reluctant to share personal information and collaborate with larger organizations. Further challenges include a lack of awareness of the issue, limited incentives, and time and resource constraints.

Potential windows of opportunity that already exist in the form of established communities and groups include churches, immigrant groups, clubs or associations. In addition, many public and private institutions already have existing contact points with the elderly. The same applies to healthcare workers, who have both touchpoints with older people and information about individuals who are at an increased risk of social isolation and loneliness. Furthermore, many programs that are already aimed at the elderly have components that support social participation and conduct program evaluations. These could be purposefully extended to increase their effectiveness.

### Background and Context

In 2015, the proportion of people aged 65 and over in Switzerland was about 18%. It is expected that this proportion will rise to nearly 30% by 2045 [see, e.g. 2]. In general, getting older is associated with a deterioration of health status and health-related quality of life. Increasing age is one of the major risk factors for non-communicable diseases, such as cancer and cardiovascular diseases, as well as a general worsening of the functioning of the nervous system [3]. In addition, as people age, function and independence generally decline as a result of decreased cognitive and physical capacity [4]. Further, studies show that older age is associated with an increased risk of mental health problems, such as depression and anxiety [see, e.g. 5-7]<sup>1</sup>.

Besides the natural deterioration of health in the elderly population, growing research has shown that health inequalities, defined as health differences between different demographic and/or socio-economic groups, persist in later years of life [8]. Studies from Europe, for example, confirm that physical health deteriorates at a faster rate in elderly from lower occupational grades than among elderly from higher occupational grades [8]. In addition, educational differences influence both mortality [9, 10] and frailty status [11] until older age.

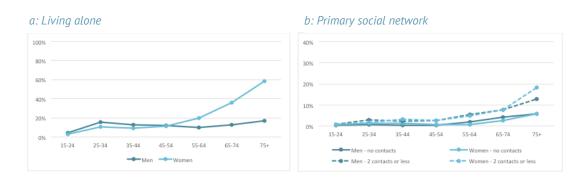
#### Social isolation and loneliness as risk factors

Key risk factors that contribute to health inequalities or may perpetuate existing health inequalities among socially disadvantaged groups include social isolation and/or loneliness [12]. (See Table 1 on page 13 for definitions of "social isolation" and "loneliness".) In the general population, for example, it has been found that social isolation and loneliness can present a greater threat to individual health than obesity [13].

Based on data from the Swiss Health Survey 2012 and the Swiss Household Panel 2013/15, Figure 1 (a-d) shows four selected indicators that operationalize the concepts of social isolation and loneliness in Switzerland: (a) the proportion of individuals living alone, (b) the proportion of individuals with two or fewer persons in their primary social network (relatives and/or close friends), (c) participation in clubs, associations or other groups (including religious ones), and (d) feeling of loneliness. These indicators are grouped by age group and presented separately for men and women. Measured by these characteristics, the results consistently show that older individuals are more likely to be affected by social isolation and/or loneliness. Furthermore, both appear to be more common in women than in men, especially in older age.

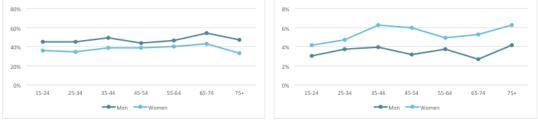
<sup>&</sup>lt;sup>1</sup> Data from the Swiss Health Survey 2012 show that women and younger individuals are more likely to suffer from depressive symptoms than men and older individuals. Hence, the association between age and mental health outcomes should be interpreted with caution in the Swiss context. However, with regard to this brief it is also important to highlight that in particular socially disadvantaged groups (in this case immigrants) have been found to be overrepresented for treatment of depressions in hospitals and clinics in Switzerland.





#### c: Participation in clubs, associations or other groups





Source: Swiss Household Panel 2013 (b) and 2015 (a, c), Swiss Health Survey 2012 (d). Notes: The proportion of individuals living alone is based on the number of people living in the same household. The primary social network is constructed from two questions on the number of relatives and number of close friends of the respondent. On this basis, indicators have been formed that mean that a person either has no relatives or close friends, or that a person has two or fewer relatives or close friends. Information about participation in clubs, associations and/or groups (including religious ones) has been collected in binary format (yes / no). The feeling of loneliness was covered by the question of how often the respondent feels lonely, with the following answer categories "never", "sometimes" to "often" and "very often". The latter two categories were coded as feeling lonely.

Social isolation oftentimes is a result of exclusionary processes that are more likely to occur in socially disadvantaged groups [14]. Different processes of stratification and segregation, including class, gender, and ethnicity, can influence how people participate in social, cultural, political, and economic relationships. Unemployment, for example, can reduce personal income, which in turn affects how a person engages with the society. Having to leave one's own home due to financial constraints can burden existing relationships and affect health. In addition, a change in the environment, such as moving from a rural to an urban area, or vice versa, can contribute to a deterioration in health [12-18], which in turn can affect individual social participation. Migrants, for example, are more likely to suffer from loneliness and low levels of social integration, which can be exacerbated by low socioeconomic status or poor language skills [19].

#### The role of stigma

Although there is still no clear understanding in research of the exact relationship between social isolation and/or loneliness and health inequalities, the above examples show that the concepts are closely interrelated and share many of the same risk factors [15-17]. One possible mechanism that contributes to this relationship is stigma. Research has shown that stigma can be a cause of population health inequalities. Stigma towards certain groups of people (e.g., mentally ill, sexual minorities, obese, HIV/AIDS, disabled, minority ethnicities) is associated with reduced availability of resources, social relationships, poorer psychological and behavioral responses, and increased stress, which can ultimately lead to a poorer state of health [20]. On the other hand, loneliness and social isolation are also associated with stigma. The literature suggests that talking about social isolation may be offensive to seniors [21]. A lack of friendship and social ties is often considered socially undesirable and the perception of lonely people is often considered unfavorable [22]. This can make it more difficult for those affected to ask for help, which in turn contributes to greater social isolation and/or loneliness.

#### Social isolation, loneliness and health among older people

It is often reported in the literature that older populations are more affected by social isolation and loneliness [19] and the associated negative health outcomes [23, 24]. Many of the risk factors associated with social isolation and/or loneliness are more prevalent among older people than younger people. Among the elderly population increased social isolation and/or loneliness is associated with higher mortality rates [25, 26] and increased blood pressure [27-29]. Furthermore, it has been found that social isolation and/or loneliness leads to an increased number of falls [30] as well as an increased risk of re-hospitalization [31] and inadequate use of health services [32]. Social isolation has also been linked to a range of negative health habits [33], including increased alcohol [34] and tobacco consumption, sedentary lifestyle [35] and increased nutritional risk [36]. With regard to mental health, studies show a consistent link between social isolation and reduced well-being and quality of life in the elderly [33, 37-42]. In addition, the literature repeatedly identifies an association between loneliness and depression in older population groups [23, 43, 44]. Furthermore, social isolation in men has been associated with an increased risk of suicide [33].

#### Social participation

Social participation has been proposed as a remedy for social isolation and loneliness. In its broadest meaning, social participation refers to an individual's engagement in activities that involve interaction with other individuals. Social participation can range from simply being with other people to helping and contributing to community and society [45]. The literature shows that lower social participation occurs especially in the elderly (see also Figure 1c). Among others, a link between higher social participation and lower mortality [46, 47] was found in the elderly. Furthermore, social participation has been associated with a lower risk of disability and depression as well as a generally higher quality of life [48, 49] and health [50, 51].

Data from the Swiss Health Survey 2012 show that self-rated health is generally higher among people with high social participation than those with low participation (own calculations, see Appendix I for more information). The data also show that the decline in health over the lifespan in people with high social participation is less pronounced, meaning the health status of elderly people who are more socially active is considered to be significantly higher than that of older people who are less socially active. When comparing the highest with the lowest

income quintile, the data show that there are almost no health inequalities (differences in selfassessed health) between the income groups at lower age. Yet, in the older age groups, differences in subjective health increase between the richest and the poorest, and are much more pronounced among people with low social participation than among those with high social participation. This means that inequalities between the two income groups are more pronounced among the less socially active elderly.

While the relationship between reduced social participation and associated social isolation and/or loneliness seems almost self-explanatory, literature shows that the opposite can also be the case when feelings of social isolation and loneliness lead to reduced social participation. In addition to common barriers to engaging in social opportunities, such as disability, illness or the lack of (accessible) social opportunities, lonely older adults may purposefully forego social participation.<sup>2</sup> Fear of social rejection and the loss of preferred identities can be additional barriers. While social isolation and/or loneliness can fuel social anxiety, some people not affected by social isolation or loneliness also consciously abstain from social participation. This happens, above all, in situations that conflict with the preferred identity (e.g., when people see themselves as very active, but social activities are aimed primarily at inactive people or in situations where being older is particularly emphasized) [52].

#### How to move forward

The literature shows that programs that increase social participation have the potential to reduce social isolation and loneliness in the elderly. Program leaders could step up their current efforts by addressing socially disadvantaged older people who are currently underserved in Switzerland. In this way program leaders can support the goal that all persons in Switzerland have "(...) equal opportunities to enjoy a healthy life and optimum life expectancy," which the Federal Council enacted in the national strategy Health2020 [1]. In the following, central challenges in the present context will be discussed, followed by evidence-based recommendations for action in order to strengthen social participation of socially disadvantaged older adults in Switzerland.

<sup>&</sup>lt;sup>2</sup> For socially disadvantaged groups additional barriers to social participation can include economic vulnerability and lack of financial resources, lack of transportation and neighborhood resources, as well as a lack of community belonging [see e.g. 54-56]

#### Table 1: Important definitions of terms used in this policy brief

Terms and defir	nitions
Social partici- pation	Time spent in social interaction as well as time spent with others [53].
Socially disad- vantaged groups	Low-income, low-educated, immigrant, sexual minority, disabled, as well as family caregivers. These groups are at increased risk for health problems.
Older persons, elderly <sup>3</sup>	Individuals aged 65 and older.
Vulnerable groups	In this policy brief: Those who are vulnerable to social isolation and loneliness, including socially disadvantaged groups noted above.
Health ine- qualities	Differences in the health status or in the distribution of health deter- minants between different groups in a society.
Social isola- tion	<ul> <li>An objective measure based on the number of contacts with family and friends [23]. Other example measures include:</li> <li>number of close social contacts</li> <li>frequency of social contacts</li> <li>quality of contacts, marital status, household composition</li> </ul>
Loneliness	A subjective term that describes the negative feeling someone experi- ences when there is a "discrepancy between a person's desired and actual social relationships"[57].
	and loneliness are often used interchangeably in research and practice. Fwill maintain the original terminology from cited sources.

<sup>&</sup>lt;sup>3</sup> The scientific and public discussion increasingly differentiates between "third" and "fourth" age. Whereas individuals in the "third age" (also called young elderly) are considered to live independently and free of any major disability, individuals in the "fourth age" are likely to be less independent due to physical limitations (increased likelihood for multiple diseases) and increasing need for care, However, high individual variability in the elderly makes it difficult to clearly define these two stages of aging. For pragmatic reasons, it is proposed to define the range of the "third age" from 65 to 79 years and the "fourth age" from 80 years and older [59, 60].

Social exclusion	The dynamic process of being shut out, fully or partially, from any of the social, economic, political or cultural systems which determine the social integration of a person in society [58].
Social support	Social support can refer to different types of support: tangible (e.g., financial), instrumental (help solving problems), or emotional (feeling of belonging, being cared for) support. These may come from various sources, such as partners/spouses, family members, friends, co-workers, neighbors, or even pets [42].

## The Challenge

Answering the question of how best to increase social participation of older socially disadvantaged groups is complicated by four contributing factors:

- 1) open questions around definitions and measuring instruments of social isolation and loneliness;
- 2) limited monitoring of social isolation and loneliness in the population;
- 3) the challenge of finding the lonely and socially isolated; and
- 4) little systematic evidence of effective interventions.

These contributing factors are explained in more detail in the following section.

#### Conceptual linking of social isolation and loneliness

In research and practice, the two terms "social isolation" and "loneliness" are often used interchangeably. They are similar in that they both can be either short-term or long-standing states. Furthermore, both conditions are very complex and difficult to address directly. A brief review of the literature identifies that in older people both concepts share common categories of risk factors (Table 2). The factors listed below have been identified at least twice among the selected (review) studies.

Category of risk factor	Indicators
Health	Poor physical and/or mental health
Age	Increasing age
Household structure	Being unmarried
Socioeconomic status	Low level of income or education
Life changes	Job loss, retirement, relocation, health changes, loss of spouse/partner

#### Table 2: Common risk factors social isolation and loneliness among older people

Source: Author's compilation based on: [33, 40, 61-63].

However, social isolation and loneliness are two different states that are measured with different indicators. While social isolation can lead to loneliness (and vice versa), someone may also feel lonely without being socially isolated, or be socially isolated without feelings of loneliness.

#### Social isolation

Social isolation is typically described as an objective concept based on the number of social contacts a person has, the size of one's social network, or household composition. However, there is still no clear consensus on how to precisely define and measure social isolation in practice. Many studies define social isolation as a one-dimensional concept: as the objective lack of social contacts and interactions with family members, friends, or the broader society.

The Lubben Social Network Scale LSNS-6 is an example of this type of measurement [64]. It includes questions focused separately on relatives and friends, in particular: the frequency of contact, the ease of discussing private matters, and how many persons someone could call on for help. Other definitions of social isolation include both the quantity and quality of relation-ships and form a multi-dimensional concept [65].

#### Loneliness

Loneliness, sometimes referred to as emotional isolation, refers to the subjective, unwelcome sense of lack or loss of companionship [66]. It is usually measured with a direct question of how often someone feels lonely (always, often, sometimes, never) or through multiple indirect questions. An example of the latter measurement is the UCLA loneliness scale [67], which measures self-perceived isolation as well as relational and social connectedness. Another measure is the de Jong-Gierveld loneliness scale [68], which includes social and emotional subscales. The scale asks to what extent respondents feel a sense of emptiness, whether they miss out on having other people around, and whether there are people they can rely on and trust. In these scales, the terms "lonely" and "loneliness" are not directly used.

Some researchers believe that loneliness is underreported due to a perceived social stigma about loneliness. To this end, one can distinguish between social loneliness (lacking a circle of friends) and emotional loneliness (lacking a close companion) [69]. Men, for example, compared to women, are less likely to be affected by social loneliness, while loss of a loved one (combined with emotional loneliness) can be devastating for some men [70]. The state of lone-liness can be temporary, situational (following a change in life circumstances) or chronic (as a persistent, lasting experience) [71].

The literature describes three ways to reduce loneliness [see, e.g. 72]:

- a) increase the number and quality of relationships to the desired level;
- b) adjust the standards for relationships to the level of reality;
- c) reduce the discrepancy by having people accept these feelings or by putting the feeling of loneliness in perspective.

#### Practical considerations

To sum up the arguments described above: social isolation and loneliness describe two different states, although they are often related. Social isolation and loneliness are not always easy to address because of their complexity. However, because both concepts have similar risk factors, it may not always be necessary for programs to measure both.

#### Social isolation and loneliness in the elderly population - a growing but undermonitored problem in Switzerland

#### Demographic and societal changes

The age structure of the Swiss population will undergo considerable changes in the upcoming decades. Not only will the proportion of older people (aged 65+) continue to increase, but life expectancy of men and women will rise and the gender gap in life expectancy will become smaller. Forecasts by the Federal Statistical Office show, for example, that life expectancy for

women at birth will rise to 89.4 years by 2045 and to 86.2 years for men [2]. For the first time, Swiss society will span four generations [73].

Various societal trends contribute to the current and future challenges of increased longevity and these trends may also contribute to an increase in social isolation and/or loneliness. These include changes in the family structure (marrying later, divorces, registered partnerships or fewer children per family), a more mobile and individualized society with smaller personal networks and "intimacy at a distance" where family members no longer live close to each other. As a result, older people may be less able to rely on family relationships [40]. Additionally, as people age, they face many significant transitions, which may be linked to both social isolation and loneliness. These include retirement, possible relocation, loss of spouse and close family members and friends, declining health with specific care needs or potentially becoming a caregiver oneself. Reduced income when retiring, suffering from reduced mobility or a deteriorating state of health can limit opportunities for social participation or social relations [70].

#### Social isolation and loneliness among the elderly in Switzerland

In Switzerland, relatively little is known about the distribution of social isolation and loneliness among the general population and the elderly in particular. Only two data sources exist on the general population level that contain information on social isolation and/or loneliness:

- The Swiss Health Survey, conducted every five years since 1992 and administered by the Swiss Federal Statistical Office, records information on the concepts of loneliness and perceived social support.<sup>4</sup>
- The Swiss Household Panel, a yearly panel survey since 1999 and managed by the Swiss Centre of Expertise in the Social Sciences (FORS), collects information on the social network of respondents, as well as their levels of social participation and social support.<sup>5</sup>

In addition, smaller datasets on a more local or regional level have been used in previous research, but these datasets neither are representative of the general population, nor have been collected systematically over a longer time horizon.

#### Evidence on social isolation

Based on data from the Swiss Health Survey and the Swiss Household Panel, a report from 2014 [74] shows that social networks tend to shrink with increasing age, especially among people over 75 years. Furthermore, gender differences in social networks also become apparent with increasing age. Women over 75 years are 63% more likely to manage their day-to-day life without a core network (for example, living in the same household with a partner and/or children living in the same household) compared to 16% of men. Additionally, with increasing age a growing proportion of women indicate that they do not have a confidant in their close environment, whereas for men the proportion remains relatively stable over the life course

<sup>&</sup>lt;sup>4</sup> For further information about the Swiss Health Survey, see www.bfs.admin.ch/bfs/de/home/statistiken/gesund-heit/erhebungen/sgb.html

<sup>&</sup>lt;sup>5</sup> For further information about the Swiss Household Panel, see www.swisspanel.ch

[74]. We have replicated some of Bachmann's findings [74] in this report with the latest data from the two data sources, to highlight the current state of evidence (see Figures 1-2).

Another study from 2006 [64] found in a sample in Solothurn that 11% of adults aged 65 and older were at risk for social isolation (compared to 20% in Hamburg and 15% in London; yet significant demographic differences between those samples makes it difficult to directly compare the results).

#### Evidence on loneliness

Similar to social isolation, research on loneliness and its relationships with health and lifestyle factors is rather limited in Switzerland [75, 76]. A study from 2014 found that being lonely and having unmet support needs are associated with clinical depression and depressive symptoms across a wide range of adult age bands [75].

A recent study from 2017 [76] examined the relationship between loneliness and physical and mental health and behavioral factors among Swiss people aged 15 and over. Based on data from the 2012 Swiss Health Survey, 27% of 70- to 74-year-olds feel lonely (at least temporarily). This percentage rises to 34% among 75-year-olds and older people. These results suggest that those who transition from the "third age" to the "fourth age" are more likely to suffer from loneliness. It should be noted that this study did not include individuals living in social institutions and results of loneliness prevalence may therefore be underreported [76]. With regard to relevant health(-related) outcomes, the authors found that lonely older adults (age 60+) were more likely to visit a medical doctor more often in the past 12 months than those who did not feel lonely [76]. This may be due to having worse health, or, related to medical doctors who may fill a social role for those who need someone to talk to [77].

#### Social isolation and loneliness among socially disadvantaged elderly in Switzerland

As briefly outlined in the introduction of this document, social isolation and loneliness are likely to follow a social gradient, particularly affecting those at the bottom of the social stratum. The following summarizes the few results that have been documented in the literature about social isolation and/or loneliness among socially disadvantaged groups in Switzerland.

#### Low socio-economic status

Individuals with a lower educational status and those who are unemployed (including those who are unemployed because of their age) report more often that they do not receive sufficient support when needed (e.g., when they are confined to bed or need someone to talk to). Older women with low educational status and limited personal resources, in particular, are at higher risk for inadequate support [74].

#### Caregivers

Family caregivers of elderly persons in the German-speaking of Switzerland have a relatively high average score for social isolation (based on the Trier Inventory of Chronic Stress Meter [78]). This implies that family caregivers experience an additional social burden of providing informal caregiving for a relative, which may be intensified by the increased financial burden often associated with this form of care arrangement.

#### Immigrants

Regardless of their socioeconomic status, foreigners in Switzerland receive significantly less social support than Swiss citizens. According to the 2012 Swiss Health Survey, younger immigrants in Switzerland feel lonelier than older immigrants (25-39 years: 49.2% vs. 65+: 35.1%). However, results have to be interpreted in light of the limited data available: the health survey is only conducted in German, French or Italian and people without sufficient language skills are therefore not involved [74].<sup>6</sup>

#### Practical considerations

Overall, there is very little knowledge on the distribution of social isolation and loneliness in older and socially disadvantaged groups<sup>7</sup> in Switzerland. A lack of evidence may prevent existing programs from addressing social isolation and loneliness more systematically, and it may keep these concepts off of the policy agenda focused on other important risk factors for health, such as obesity.

# Existing programs in German-speaking Switzerland – difficulty in finding socially isolated and lonely older individuals and often non-targeted program goals

For this policy brief, interviews were conducted with a small (non-representative) group of program managers.<sup>8</sup> A total of 11 people were interviewed in the cantons of Aargau, Bern, Basel-Stadt, Basel-Land and Lucerne. Organizations were identified through internet searches and were selected based on their program approach (e.g., interest in social participation, activities with other seniors or multi-generation involvement) and/or their target groups (e.g., immigrants). The interviews aimed at gaining a baseline understanding of their overarching program goals (for example, whether topics such as reducing social isolation and loneliness were primary goals of the programs). Additional information that was collected includes target populations, outreach methods and to what extent programs and related activities have been evaluated.

<sup>&</sup>lt;sup>6</sup> Insufficient coverage of immigrants in the Swiss Health Survey led to two surveys in 2004 and 2010 to provide information on health status, health behavior, health literacy and health care for specific immigrant groups [79]. Information on loneliness from these two health surveys of immigrant populations has not been studied [74].

<sup>&</sup>lt;sup>7</sup> In particular, there is currently no Swiss evidence on other disadvantaged groups, including people with disabilities or people from LGBTI communities (lesbian, gay, bisexual, transsexual, intersex). A 2007 study found, based on data from Geneva's gay study (ranging from under 24 years to over 55 years of age), that a large proportion (nearly two-thirds) were affected by mental disorders, with low levels of associated treatment. [80].

<sup>&</sup>lt;sup>8</sup> Organizations or programs that interviewees worked for included: Forum 60 plus Aargau, Graue Panther Nordwestschweiz, Pro Senectute, Schweizerisches Rotes Kreuz Aargau, Tavolata Region Bern, Senioren-Drehscheibe Littau-Reussbühl, Café Balance - Programm Alter und Gesundheit – Gesundheitsdepartement des Kantons Basel-Stadt, Fachstelle für Altersfrage - Stadt Luzern, Luzerner Infostelle Demenz.

#### Program goals

Two programs explicitly stated that reducing social isolation was their program goal. For the majority of programs, however, the aim is to create a platform for the engagement of older people, to support active aging and to promote participation of the older generation. Other programs cited goals such as "help for self-help", "exchange between generations" and "representation of the elderly".

#### Socially isolated and socially disadvantaged individuals as target group

Nine of the eleven interviewees stated that their programs would target a broad audience and not specifically vulnerable populations. Programs that target vulnerable populations are aimed primarily at people with reduced mobility, dementia, people living alone (often widows) or low-income individuals. The indicated number of participants of the programs ranged from less than ten to over 600 participants.

#### Methods to reach socially isolated individuals

Different outreach methods targeting elderly people are used. Besides advertising through the internet, which is used by every organization, four organizations try to reach elderly people in writing. Another approach is the access to the elderly via their relatives. An important strategy mentioned by two people is seeking direct contact with individuals. This includes door-to-door visits to ask older individuals about their general (health) condition. One interviewee considered this approach an important strategy to reach socially isolated people. Other approaches, each mentioned by at least two organizations, are "raising awareness for the topic through other organizations", "providing information at events" and "word of mouth". One obstacle that has been mentioned by several organizations is the difficulty of reaching socially isolated people because they are very hard to find. In addition, two organizations mentioned that incorporating other ethnicities was a challenge. As a result, program participants are unlikely to be fully representative of the entire Swiss population.

#### Program evaluations

The type and scope of evaluations vary among programs. For some programs, a formal evaluation will only take place if sufficient funds are available. Most programs evaluate their effectiveness either through written surveys or through verbal feedback.

#### Cooperation with other programs and networking

All programs work with at least one other program. This happens through the exchange of information or ideas, as well as participation in joint workshops or congresses. Many programs mentioned the important and supportive role of "Pro Senectute", a nationally active foundation to support elderly individuals in the population. Moreover, different cantonal departments of the home care organization Spitex were mentioned as important partners by the interviewees. Two organizations expressed the wish for more exchange with other organizations.

## Limited actionable evidence available on how to address social isolation and loneliness in socially disadvantaged older people

There is still relatively little known about how to address the problem of social isolation and/or loneliness in the elderly, and in particular for those from socially disadvantaged backgrounds.

Overall, there is a clear lack of high-quality evidence in scientific literature. For example, there are only a few studies that include a control group or baseline data collected prior to the taking place of the program. Furthermore, studies do not directly compare different interventions (or programs), nor do they investigate differences in the frequency or intensity of different interventions (for example, it is not known if twice weekly shorter interventions are better than once weekly longer interventions). There is also much variety of intervention types, populations studied and outcomes measured, making it more difficult to compare results of different studies and to draw general conclusions.

The vast majority of scientific literature focuses on the evaluation of interventions and ignores the question of how to find socially isolated or lonely people and how interventions can be reconciled with the appropriate target group. Because there are several factors that can lead to social isolation and loneliness, it may also take a multi-faceted approach to solve the problem. Without understanding the nature of someone's loneliness and tailoring the approach accordingly, interventions run the risk of being a one-size-fits-all approach that only works for some of the participants, if at all.

For this policy brief, eleven systematic, narrative and meta-analytical reviews of interventions that aimed at reducing social isolation and/or loneliness in the elderly were reviewed. They were based on 128 individual (published) articles, which were checked for participants' demographic information, type of intervention, effectiveness of intervention, and country context. Only nine studies specifically addressed socially disadvantaged groups (mostly low income (7 studies), but also minorities (2 studies)).

The reviewed interventions were of different types (mostly individual or group activities, see Annex II A for more information on the activities) and were offered in a community or institutional setting to populations for which typically only gender and average age were recorded. Most of the published literature comes from the US, the Netherlands, Australia, Canada and the UK. While many review authors pointed out that more research is needed, several common themes across multiple systematic reviews regarding effective programs emerged (for a summary, see Figure 3).

#### Figure 3: Common themes across reviews of effective programs

- activities focused on social or educational/cultural themes of interest for participants
- development of programs taking into account specific target groups (common examples of groups include bereavement or caregiver support groups)
- involvement of participants in the planning, implementation and evaluation of programs
- programs may offer a therapeutic component (e.g., stress reduction techniques, cognitive behavior change)
- programs may be one-on-one or group based (e.g., visiting frail elderly at their residence or group meetings to discuss specific topics)
- programs may include technology (that is, be internet or computer based) to enhance contact with other persons.

Source: Authors' own compilation based on review of systematic reviews

A report from the UK in 2015 [81] that reviewed many of the same systematic reviews and interviewed numerous experts in this subject area argues that there is still much to be done in the following areas:

- a) reaching lonely individuals,
- b) understanding the nature of the loneliness of individuals,
- c) supporting lonely individuals in their access of relevant services.

These points can be considered fundamental aspects in order to ensure alignment between the needs of the individuals and program design to effectively combat social isolation and loneliness in the elderly population.

# Recommendations to strengthen social participation of socially disadvantaged older adults in Switzerland

In view of the factors described in the previous section, promoting greater social participation of socially disadvantaged older people in Switzerland is a challenge. Addressing the causes of social isolation and loneliness is complex and a single approach will not work for all concerned and in all cases. Since there are multiple pathways to social isolation and loneliness, multiple pathways out are needed [82]. In this context, it is important to reiterate that further research is needed to better understand social isolation and loneliness in socially disadvantaged elderly, and to develop targeted interventions to solve the problem.

Despite the existing research gaps, we identified three main recommendations for deliberation to address the problem of social isolation and/or loneliness in older adults in Switzerland (Figure 4).





Source: Own representation based on the review of systematic reviews.

These three recommendations are considered viable, independent options to address the problem of social isolation and loneliness in the elderly. However, the options are not mutually exclusive and, when combined, can make a significant contribution to the increased social participation of older people. The options were identified based on a comprehensive literature search and the current state of evidence, and were selected for a more detailed description. Implementation considerations are presented in the last part of this policy brief.

Recom	mendation	Rationale for selection
1)	Improved methods of find- ing older people at risk for or experiencing social isola- tion and loneliness.	A number of reports stated that the methods used to reach those affected were considered ineffective, which was also confirmed by the program managers inter- viewed for this policy brief.
2)	Inclusion of target groups in the planning and implemen- tation of programs	Several reviews reported this as best practice. Also, to address health inequalities, target populations for inter- ventions should be the persons negatively affected by them.
3)	Improved program evalua- tion while taking into ac- count socially disadvantaged groups	Various reports documented the lack of high-quality evi- dence on existing programs. Monitoring program out- comes and sharing evidence will strengthen existing programs and improve the design of new interventions to the benefit of participants. Including detailed de- mographics will allow program leaders to evaluate pro- gram effectiveness for vulnerable groups.

## Recommendation 1: Improved methods to reach vulnerable or affected individuals

One of the major obstacles to reducing social isolation and loneliness in the elderly is the identification of those who are threatened or already affected by the problem. Successful programs must go beyond the reach of traditional media and word of mouth in order to reach socially isolated or lonely people, as they often fail to sufficiently reach those affected. Programs should be proactively offered to vulnerable individuals rather than being generally available [81].

In view of the potential social stigma attached to social isolation and loneliness, it should also

Much of this section is based on three reports from the UK's "Campaign to End Loneliness":

- Hidden citizens: how can we identify the most lonely older adults? [83]
- The missing million: in search of the loneliest in our communities [84]
- Promising approaches to reducing loneliness and isolation in later life [81]

be noted that persons identified by the existing or new methods should not be classified as "socially isolated" or "lonely" or even "vulnerable". Communication is a challenge in this area – while talking about social isolation and loneliness will help normalize these conditions for

society and potentially lessen any stigma, it is still important to respect the feelings and wishes of the affected individuals.

Recommendations for identifying those who are threatened or already affected by social isolation and/or loneliness can be broadly divided into three main strategies, summarized in the following Table 4:

Table 4: Categorization of strategies to identify individuals at risk for or experiencing social isolation and/or loneliness

Strategy	Description/Examples
1) Use of better data to identify risk ar- eas	In Gloucestershire (UK), so-called "heat maps" have been cre- ated using public health variables linked with isolation and loneliness (e.g., head of household aged 65+, one occupant, health issues, low income, etc.) that are then linked with cen- sus/neighborhood information. This helped the council to identify areas with the greatest needs in terms of social isola- tion, which then was used to set up focus groups to better understand specific needs for locally implemented programs.
	The same type of heat map can be overlaid with geographic locations of existing programs to identify potentially under-served areas.
2) Engage networks and gateway ser- vices	This approach involves setting up networks for existing pro- grams and institutions. These networks are designed to facil- itate the provision of appropriate programs and to ensure that vulnerable or affected individuals have access to advice and support where they need it so that they can continue to live independently [85]. Networks can be agency-based (a central organization that manages the network), people-based (espe- cially so-called community navigators that identify vulnerable individuals and refer to appropriate programs) or group-based (local groups that provide relevant information and services in a community).
3) Form/strengthen partnerships with entities that are al- ready interacting with the elderly	Strengthen cooperation with other organizations that already offer programs for older people in a different context, so that relevant information on existing programs that enhance so- cial participation can be shared (which seems to happen al- ready in Switzerland to some extent based on our interviews with program leaders).

There are several good practice examples of partnerships between programs for older people and other community entities. These are briefly presented below. In each of the examples, elder program information is provided in advance to the partners. In order to protect the privacy of individuals receiving any materials, the partner institutions do not share any information about them with the elder program managers.

#### Public administration

Given that certain life events are associated with an increased risk of social isolation and/or loneliness, programs may be able to leverage the interaction when someone registers a change at public administration (e.g., death of spouse, relocation). Public administrations may provide these persons with relevant information about programs during or shortly after registration. For example, this approach<sup>9</sup> is successfully used in Sefton, UK [83]. In addition, public administrations often have personal information that can serve as an indicator of a higher risk for social isolation and/or loneliness, in addition to age, also citizenship, one-person households or if someone receives social assistance (as an indicator of low income or low socio-economic status in general).

#### Fire and rescue services

In addition to initial contact due to emergency events, fire and rescue services provide another means of contacting older people who are or may be affected by social isolation and/or loneliness. In the UK, for example, based on National Health Service (NHS) data for patients registered with GPs, as well as other indicators of loneliness and social isolation from public data sources, households were ranked and prioritized according to their risk for social isolation and loneliness. For example, older people living alone and who already experienced a fall have a higher risk of domestic fires as well as loneliness. Local fire and rescue service officers carried out home visits to these households and brokered contact between these individuals and a range of local support services. Given the high level of trust in the officers, the home visits led to a high success rate in engaging individuals and connecting them with local services [84].

#### Partner with businesses that may have a higher proportion of older clientele

Good examples include pharmacies, hair salons, libraries, local restaurants, cafes, handyman services, hearing aid providers and foot clinics. These potential partner companies and institutions often interact with older adults and may be willing to provide information about programs on a periodic or ongoing basis.

#### Partner with health care providers

One advantage of partnerships with health care providers is that they often already have access to key information related to risk factors of social isolation and/or loneliness. Furthermore, they are often considered very trustworthy, typically have existing relationships with their patients, and may be one of the few people with whom socially isolated and/or lonesome individuals are still in contact. Healthcare providers may be able to ask more relevant questions to find out if someone is indeed socially isolated or lonely. They have the possibility to assess the situation relatively early and subsequently refer individuals to programs to prevent, or at least mitigate, social isolation and reduce associated negative health outcomes [33].

Good practice examples can be found in the hospital discharge planning (to identify individuals with a lack of relationships that could impact recovery) or in "social prescribing" schemes, in which a family doctor assesses the risk of social isolation and loneliness of older patients.

<sup>&</sup>lt;sup>9</sup> A pamphlet with information about bereavement support groups is shared when the death of a spouse is registered.

Based on this, people can be visited directly at home by a consultant who can further investigate social needs and, together with those affected, choose and refer to a suitable program.

# Recommendation 2: Include target populations in the planning and implementation of programs that aim at reducing social isolation and loneliness

Several systematic reviews have shown that participatory programs can reduce social isolation and loneliness. A participatory approach assumes that individuals are not just recipients of a planned intervention, but are actively involved in all phases of a program. Similarly, various studies have shown that community involvement (as a participatory approach) is one of the key success factors in recruiting and retaining socially disadvantaged groups [86-90].

Much of the success of programs aimed at reducing social isolation and loneliness among socially disadvantaged individuals depends on the identification of the target group(s). Program planners have to consider the heterogeneity between different population groups and efforts should focus on clearly defined target groups, e.g., older women from a specific cultural or local community. Yet, planners must also master the growing complexity of the target groups. Factors such as ethnicity, culture, religion or socioeconomic background interact with each other, affecting the composition of the target group(s) and potentially making the identification process a difficult task. The identification of target group(s) must therefore be considered as an iterative process [89, 91].

Building (formalized) partnerships with community organizations and working with counseling centers can help identify appropriate target groups and develop relevant programs. The formation or incorporation of Community Advisory Boards can be particularly helpful here to connect with the appropriate target groups or individuals who tend to remain undetected or disregarded by traditional recruitment and retention methods [86, 90, 92, 93]. Such advisory groups should involve important persons of the local community, such as community leaders or persons prominently involved in local affairs (such as senior church staff or organizers of cultural events). Local counseling centers should be actively involved in the planning and implementation of programs as they can help to [94, 95]:

- recruit the right people for the program, including important contact persons who promote the program;
- develop and review suitable recruitment methods;
- identify and take into account possible obstacles to programs in a local or cultural context;
- ensure cultural competence of all program elements;
- review evaluation methods and program-specific data collections.

A promising success factor of interventions aimed at reducing social isolation and loneliness are activities that broaden and, in particular, strengthen social networks. Older people tend to emphasize the importance of family and preservation of already existing connections. However, programs often tend to focus on building new connections or providing support by strangers [47, 96, 97]. This point highlights the need for more participatory programs, building on existing relationships, to strengthen and improve overall program planning and delivery.

Based on the current state of research in the literature, the following features are considered key factors in building successful programs that address the diversity of target groups<sup>10</sup>:

*Table 5: Key factors for participatory programs with diverse target groups* 

Participatory Program Planning

Individual Engagement

- Early involvement of people from the relevant target groups (older and socially disadvantaged groups) in the design and planning of the program to ensure that potential barriers and enablers to participation are identified in advance.
- Inclusion of people from the relevant target groups in all phases of the program (not only in the planning, but also in the implementation and evaluation) and recognition of these persons as a source of knowledge and skills.
- Involvement of secondary target groups (caregivers, family members, etc.) affected by the program and who could play an important role as mediators/multipliers.
- Community Advisory Groups
- (Forming and) involving Community Advisory Boards, which should include representatives or persons from the elderly and/or specific socially disadvantaged target groups (e.g., individuals from lower SES or individuals with immigrant backgrounds); also, to assure that programs and interventions reflect the target group's interests and values.
- Involvement (and proactive networking) of representatives of health and social services, places of worship and other community-based groups.
- Considering and incorporating existing community-based structures and groups that can act as a proxy for community advisory boards, especially when the formation of new groups is difficult or impossible.

Formative Research

- Identification (and if possible) analysis of relevant demographic or other data to gain a better understanding of the target group.
- Conduct a needs assessment (e.g., through focus groups, interviews or short surveys) to assess the needs, desires and expectations of the target group. The needs may vary depending on the target group, e.g., for
  - seniors: transport, location, program activities, day of the week

<sup>&</sup>lt;sup>10</sup> Recommendations are based on publications and reports on (1) the design of interventions aimed at reducing social isolation in the elderly, (2) evidence-based guidelines on health promotion interventions in the elderly, and (3) research on community-based approaches to socially disadvantaged population groups.

#### socially disadvantaged: language, costs, fear of authority, name of the program

#### Participatory Program Implementation

Recruitment and Retention

- Involvement of local peer or community members to recruit participants and identify individuals at risk for social isolation/loneliness.
- Involvement of Community Advisory Boards, not only in program planning, but also in the recruitment of participants and retention (the program may be perceived as more community-driven, and thus more responsive to the current needs).
- Recruitment of participants through formal and informal intermediaries, including already existing formal and informal groups and networks.
- Establishment of reciprocal relationships with community-based organizations and institutions that already offer their services to older people in order to better identify potential participants more easily.
- Use appropriate language for recruitment, regardless of which channels are used to ensure cultural and age-appropriate communication (this should be reviewed in advance by individuals from the target group).

Participatory Program Evaluation

- Involvement of target groups/advisory groups in the program evaluation, both as respondents and as administrative staff (e.g., survey management, interviews).
- Involvement of target groups in the interpretation of the results.

Program planners should acknowledge that involving the target group(s) at all stages of a program not only makes these groups co-producers of the program, but also supports the program's sustainability. Sustainability is further promoted when the reciprocity of the relationship is recognized by all parties. This means that program planners: (a) are actively involved in the integration and recruitment of socially disadvantaged older people, and (b) support these groups within their own existing communities and activities (e.g., as advisors or volunteers in the respective activities) and thus build mutual relationships and trust.

Self-assessment of the programs helps to identify potential gaps where older people and socially disadvantaged groups are not yet fully involved or addressed, and where there may be obstacles to participation in the program. An example for such a self-assessment tool can be found in Appendix II B [see also 98].

## Recommendation 3: Improved program evaluation, taking into account socially disadvantaged groups

Several systematic reviews and reports [87, 91, 96, 99, 100-103] on interventions to reduce social isolation and/or loneliness in older people have found that there is limited quality evidence for the effectiveness of interventions. Furthermore, very few of the reviewed programs specifically focus on vulnerable older populations.

Performing high-quality summative evaluations<sup>11</sup> facilitates the search for effective programs, as they can be clearly distinguished from ineffective programs. Much of this section is based on the report "Measuring your impact on loneliness in later life" from the UK "Campaign to End Loneliness" [83]. While the report concentrates primarily on measuring loneliness, the information it contains can also be applied to the measurement of social isolation.

Likewise, programs may take advantage of the results of summative evaluations, e.g., in justification for further funding. Collecting detailed demographic and socio-economic information from participants also helps measure the impact of programs on specific target groups. It should be noted that programs that are not primarily focused on reducing social isolation and/or loneliness may nevertheless have an effect on these conditions and that including related outcome variables would be helpful in an overall evaluation.

Two guiding principles are important in the evaluation process: independence, so that evaluations are conducted objectively and independently (not influenced by expected or desired outcomes) and transparency to make both methods and results accessible. When evaluating a program that addresses social isolation and/or loneliness in socially disadvantaged older people, particular attention should be paid to the following aspects (Table 6):

<sup>&</sup>lt;sup>11</sup> A summative evaluation assesses program results in terms of their achievement of objectives, therefore it is rather summative and balancing. It should be differentiated from a formative evaluation, which assesses the processes and interventions already during a program, for the continuous improvement of ongoing measures [104].

#### Table 6: Important questions for program evaluation

Questions	Description	
Which outcome varia- bles <sup>12</sup> should be included and which measurement tools should be used?	Social isolation and loneliness can be measured with different instruments. For example, social isolation can be assessed us- ing demographic data, such as marital status and number of household members. These should be supplemented with spe- cific questions on relatives and friends: the frequency of con- tacts, the ease of discussing private matters, and the number of people you can ask for help. A guide for specific measurement tools and examples of questions on loneliness can be found in Appendices II C and D. Ideally, the outcome variables should be measured before and after program intervention and compared to a control group. The inclusion of a suitable control group may be difficult for various reasons, e.g., due to ethical and fi- nancial considerations, but is essential for a credible evaluation and measurement of effectiveness.	
How will the evaluations be administered?	Program evaluations can be either written or verbal. These can be done on site or sent by post at a later stage. It is important to check if participants have certain limitations (such as hear- ing, vision, ability to complete a written survey) and would need help or assistance in completing the survey.	
Who will perform the evaluations and how of- ten?	For surveys, interviews or focus groups conducted in person with a volunteer or co-worker, it is important to minimize in- terviewer bias. This person should ask questions in a clear, con- sistent and neutral manner. His or her reaction to each participant's response must acknowledge what has been said without empathizing or encouraging, as otherwise this could cause participants to change responses to elicit certain re- sponses.	
	Ideally, three or more measurements are conducted over time in order to see if the outcome variables change. At least two measurements are required: one before participating in the program (or, if this is not possible, early in the program) and one at a later time, e.g. 3, 6 or 12 months after the intervention to measure also medium to long-term effects.	

<sup>&</sup>lt;sup>12</sup> It is important to note that although program attendance is an indicator of engagement and participation, it is not necessarily a measurement of program impact [105]. It is therefore important to consider other outcome measures beyond program participation.

How will the evaluation process be communi- cated?	<ul> <li>Program participants should understand the following:</li> <li>participation in the evaluation is voluntary and confidential,</li> <li>participation in the program is in no way affected by the answers in the evaluation,</li> <li>the information gained from the evaluation helps to improve future interventions.</li> </ul>
	Program staff should be aware of the following:
	<ul> <li>the purpose and meaning of the questions, and</li> <li>their special role in the evaluation process, e.g., their neutrality when they ask program participants questions.</li> </ul>
	The program leadership should try in advance to receive "in- formed consent" from the participants. Such informed consent means that participants fully understand that an evaluation is being conducted, have given permission to the program to ask questions, and store and use the gathered information in a con- fidential way, and to use the data for the improvement of the program equally as confidentially.
How will participants be selected for the evalua-tion?	In some cases, all participants in a program can be asked for feedback. In other cases, especially with a large number of par- ticipants, a sample of people can be drawn and only these are included in the evaluation. Sample selection should be random, as using a non-random approach to selecting respondents would not make the sample representative of program partici- pants, making it difficult to assess the program's effectiveness.
Which demographic and socio-economic back- ground information should be collected?	Detailed socio-economic and demographic data of program participants (beyond age, gender and place of residence) are important to measure the impact of the program on specific target groups. Collection of this information also helps to as- sess whether the needs of the target groups are adequately taken into account. Some of the data can be considered sensi- tive. Concerns about privacy and the way the information is used may cause certain questions to be answered incompletely or people to abandon the survey. Some typical examples of questions on socio-economic and demographic characteristics can be found in Annex II E.
How to ensure proper us- age and storage of confi- dential information?	Given that personal information must be kept confidential, it is important that information that could potentially identify peo- ple go unused or made anonymous. The collected data should

be stored in a secure location and should be password pro-
tected, and access is limited to the program manager(s).

## Implementation Considerations

Based on different categories of groups of people, the following two tables summarize possible barriers (Table 7) and opportunities (Table 8) in the implementation of the three recommended actions outlined above:

#### Table 7. Potential barriers to implementation

Groups	Recommen- dation 1: Finding indi- viduals who are affected	Recommendation 2: Inclusion of tar- get groups	Element 3: P	rogram Evaluation
Elderly people	The terms "social isola- tion" and "loneliness" can be per- ceived as stigmatizing.	N/A	Possible reserva- tions about	N/A
Socially disadvan- taged groups		Possible reserva- tions about part- nering/collabo- rating with large partner organiza- tions	sharing personal data Possible cogni- tive/phy-si- cal impair- ments	Language, com- munication and/or literacy problems
General popula- tion, in particular potential media- tors/multipliers (family members, neighbors)	Lack of awareness of the problem and existing programs		N/A	1
Existing programs (including poten- tial partners al- ready serving elderly persons)	Lack of interest in identifying vulnerable people Time and resource constraints			
Potential partners and institutions (including public offices)	Lack of incentives to address the is- sue Time and resource constraints		N/A	

Health care pro- viders		
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 Table 8. Potential windows of opportunity for implementation

Groups	Recommendation 1: Finding indi- viduals who are affected	Recommendation 2: Inclusion of target groups	Element 3: Pro- gram Evaluation
Elderly people	Existing informal groups (e.g., church groups) that can act as partners		N/A
Socially disadvantaged groups	Certain population groups (e.g., mi- grants) may already be organized in communities that may be involved as potential partners		
General population, in par- ticular potential media- tors/multipliers (family members, neighbors)	May be willing to help once they become aware of the issue(s)	N/A	
Existing programs (includ- ing potential partners al- ready serving elderly persons)	Frequent touchpoints with older per- sons; can serve as intermediaries to identify affected or vulnerable peo- ple		Many programs already carry out various forms of evaluations that could be ex- panded.
Potential partners and in- stitutions (including public offices)	Frequent touchpoints with older per- sons; can pass on information about existing programs		N/A
	Some of these touchpoints may al- ready have information about vul- nerable people (e.g., death reporting).		
Health care providers	Frequent touchpoints with older per- sons; can pass on information about existing programs		
	Healthcare providers may already have information about those at risk		

(especially health-related factors as- sociated with social isolation and/or loneliness).	
Relatively easy access to data collec- tion to inquire about social isolation and / or loneliness	

## Summary

This policy brief summarizes the issues of social isolation and loneliness among the elderly and how these two concepts intersect with health inequalities. It presents the current state of research evidence on effective interventions and steps organizations can take to increase social participation of socially disadvantaged older people.

The challenge of increasing social participation of socially disadvantaged older adults includes recognizing the problem of social isolation and loneliness; two closely related concepts that are not easy to address because of their complexity.

The difficulty of the issue is a consequence of four main factors:

- Social isolation and loneliness can be measured in different ways. Furthermore, both states may be transient states related to a life event or chronic.
- Social isolation and loneliness are not adequately monitored in Switzerland and systematic information on both conditions is lacking for socially disadvantaged older people.
- It is difficult to find and reach the socially isolated and lonely using typical methods of outreach such as traditional media and word of mouth recommendations.
- There is limited actionable evidence from the literature regarding effective programs to reduce social isolation and loneliness among older adults and socially disadvan-taged populations.

An evaluation of existing systematic reviews of interventions to reduce social isolation and/or loneliness in the elderly, and a review of recent reports by experts in the field, suggest that effective programs share a number of characteristics (notably group activities of shared interest, but also interventions with therapeutic component). However, it has also been shown that more opportunity lies in the following two areas: (a) the identification of persons who are particularly vulnerable to social isolation and/or loneliness, and (b) the evaluation of the effectiveness of programs. A common best practice that was mentioned is the inclusion of specific target groups in the planning, implementation and evaluation of programs.

This leads to three main recommendations for action to address the growing challenge of social isolation and loneliness among socially disadvantaged older people:

- 1. Improved methods to reach out to vulnerable people, including better data and innovative use of data, creating the role of a community navigator and partnerships with other entities that already interact with (socially disadvantaged) older people.
- 2. Inclusion of socially disadvantaged target groups in the planning and implementation of programs, as well as the implementation of formative research, and the involvement of community advisory groups and individuals of the target groups.
- 3. Enhanced program evaluation, taking into account socially disadvantaged groups, including the collection of specific demographic information (in addition to outcome measures) to systematically measure the impact of the programs.

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#### References

Systematic reviews used in this policy brief

- [39] Findlay, R., & Cartwright, C. (2002). Social isolation & older people: A literature review. Ministerial Advisory Council on Older People.
- [66] Cattan, M., White, M., Bond, J., & Learmouth, A. (2005). Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. Ageing & Society, 25(1), 41–67.
- [87] Dickens, A., Richards, S., Greaves, C., Campbell, J.L. (2011). Interventions targeting social isolation in older people: a systematic review. BMC Public Health. 11(1),647-668.
- [96] Cohen-Mansfield, J., Perach, R. (2015). Interventions for Alleviating Loneliness Among Older Persons: A Critical Review. American Journal of Health Promotion. 29(3) e109-e125.
- [99] Choi, M., Kong, S., Jung, D. (2012). Computer and internet interventions loneliness and depression in older adults: A meta-analysis. Health Care Information Research. 18(3), 191-8.
- [101] Franck, L., Molyneux, N., Parkinson, L. (2016). Systematic review of interventions addressing social isolation and depression in aged care clients. Quality of Life Research. 25(6), 1395-1407.
- [102] Masi, C.M., Chen, H.Y., Yawkley, L.C., Cacioppo, J.T. (2013). A meta-analysis of interventions to reduce loneliness. Personality and Social Psychology Review. 15(3).219-266.
- [103] Stojanovic, J., Collamati, A., Mariusz, D., Onder, G., La Milia, D., Ricciardi, W., Moscato, U., Magnavita, N., Poscia, A. (2017). Decreasing loneliness and social isolation among the older people: systematic search and narrative review. Epidemiology, biostatistics and public health, 14(2).
- [106] Chen, Y.-R.R., Schulz, PJ. (2016). The effect of Information communication technology Interventions on Reducing Social Isolation in the Elderly: A Systematic Review. Journal of Medical Internet Research. 18(1), e18.
- [107] Hagan, R., Manktelow, R., Taylor, B. J., & Mallett, J. (2014). Reducing loneliness amongst older people: a systematic search and narrative review. Aging & mental health, 18(6), 683-693.
- [--] Morris ME, Adair B, Ozanne E, Kurowski W, Miller KJ, Pearce AJ, et al., (2014). Smart technologies to enhance social connectedness in older people who live at home. Australasian Journal of Ageing. 33(3), 142-52.

#### Complete reference list

- [1] Bundesamt für Gesundheit (BAG) (Hrsg.) (2013). Gesundheit 2020. Die gesundheitspolitischen Prioritäten des Bundesrates. Bern: BAG.
- [2] Bundesamt für Statistik (Hrsg.) (2015) Szenarien zur Bevölkerungsentwicklung der Schweiz 2015–2045. Stat Schweiz.
- [3] Niccoli, T., Partridge, L. (2012). Ageing as a Risk Factor for Disease. Current Biology, 22(17), 741-752.
- [4] Balogun, J. A., Akindele, K. A., Nihinlola, J. O., & Marzouk, D. K. (1994). Age-related changes in balance performance. Disability and rehabilitation, 16(2), 58-62.
- [5] Luppa, M., Sikorski, C., Luck, T., Ehreke, L., Konnopka, A., Wiese, B., Weyerer, S., König, H.-H., Riedel-Heller, S. G. (2012). Age- and gender-specific prevalence of depression in latest-life – Systematic review and meta-analysis. Journal of Affective Disorders, 136(3), 212–221.
- [6] Olivera, J., Benabarre, S., Lorente, T., Rodríguez, M., Pelegrín, C., Calvo, J. M., ... & Arnal, S. (2008). Prevalence of psychiatric symptoms and mental disorders detected in primary care in an elderly Spanish population. The PSICOTARD Study: preliminary findings. International journal of geriatric psychiatry, 23(9), 915-921.
- [7] Richardson, T. M., Simning, A., He, H., & Conwell, Y. (2011). Anxiety and its correlates among older adults accessing aging services. International journal of geriatric psychiatry, 26(1), 31-38.
- [8] Chandola, T., Ferrie, J., Sacker, A., & Marmot, M. (2007). Social inequalities in self reported health in early old age: follow-up of prospective cohort study. BMJ, 334(7601), 990.

- [9] Huisman, M., Kunst, A. E., Andersen, O., Bopp, M., Borgan, J. K., Borrell, C., Costa, G., Deboosere, P., Desplanques, G., Donkin, A., Gadeyne, S., Minder, C., Regidor, E., Spadea, T., Valkonen, T., Mackenbach, J.P. (2004). Socioeconomic inequalities in mortality among elderly people in 11 European populations. Journal of Epidemiology & Community Health, 58(6), 468-475.
- [10] Huisman, M., Kunst, A. E., Bopp, M., Borgan, J. K., Borrell, C., Costa, G., ... & Minder, C. (2005). Educational inequalities in cause-specific mortality in middle-aged and older men and women in eight western European populations. The Lancet, 365(9458), 493-500.
- [11] Etman, A., Burdorf, A., Van der Cammen, T. J., Mackenbach, J. P., & Van Lenthe, F. J. (2012). Sociodemographic determinants of worsening in frailty among community-dwelling older people in 11 European countries. Journal of epidemiology and community health, 66(12), 1116-1121.
- [12] Gehlert, S., Sohmer, D., Sacks, T., Mininger, C., McClintock, M., & Olopade, O. (2008). Targeting health disparities: A model linking upstream determinants to downstream interventions. Health Affairs, 27(2), 339-349.
- [13] Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspectives on Psychological Science, 10(2), 227-237.
- [14] Wilkinson, R. G., & Marmot, M. (Eds.). (2003). Social determinants of health: the solid facts. World Health Organization.
- [15] Mathieson, J., Popay, J., Enoch, E., Escorel, S., Hernandez, M., Johnston, H., & Rispel, L. (2008). Social Exclusion Meaning, measurement and experience and links to health inequalities. A review of literature. WHO Social Exclusion Knowledge Network Background Paper, 1, 91.
- [16] Piachaud, D., Bennett, F., Nazroo, J., & Popay, J. (2009). Report of task group 9: social inclusion and social mobility. Task group submission to the Marmot Review.
- [17] Durcan, D., Bell, R. (2015). Reducing social isolation cross the lifecourse. Public Health England.
- [18] Umberson, D., & Karas Montez, J. (2010). Social relationships and health: A flashpoint for health policy. Journal of health and social behavior, 51(1\_suppl), 54-66
- [19] de Jong Gierveld, J, van Tilburg, T.G, & Dykstra, P.A. (2016). New Ways of Theorizing and Conducting Research in the Field of Loneliness and Social Isolation. In *Anita Vangelisti & Daniel Perlman (eds), The Cambridge Handbook of Personal Relationships, second edition, Cambridge University Press* (pp. 1–30).
- [20] Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. American journal of public health, 103(5), 813-821.
- [21] Ferrara, H. (2009). Seniors' social isolation: A scoping study. Centre for Social and Community Research, Murdoch University, Perth, Western Australia.
- [22] Rokach, A. (2012). Loneliness updated: an introduction. The Journal of psychology, 146(1-2), 1-6.
- [23] Courtin, E., & Knapp, M. (2017). Social isolation, loneliness and health in old age: a scoping review. Health & social care in the community, 25(3), 799-812.
- [24] Luanaigh, C. Ó., & Lawlor, B. A. (2008). Loneliness and the health of older people. International journal of geriatric psychiatry, 23(12), 1213-1221.
- [25] Holwerda, T. J., Beekman, A. T., Deeg, D. J., Stek, M. L., van Tilburg, T. G., Visser, P. J., Schmand, B., Jonk & Schoevers, R. A. (2012). Increased risk of mortality associated with social isolation in older men: only when feeling lonely? Results from the Amsterdam Study of the Elderly (AMSTEL). Psychological medicine, 42(4), 843-853.
- [26] Steptoe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and allcause mortality in older men and women. Proceedings of the National Academy of Sciences, 110(15), 5797-5801.
- [27] Hawkley, L. C., Masi, C. M., Berry, J. D., & Cacioppo, J. T. (2006). Loneliness is a unique predictor of age-related differences in systolic blood pressure. Psychology and aging, 21(1), 152.
- [28] Hawkley, L. C., Thisted, R. A., Masi, C. M., & Cacioppo, J. T. (2010). Loneliness predicts increased blood pressure: 5-year cross-lagged analyses in middle-aged and older adults. Psychology and aging, 25(1), 132.
- [29] Shankar, A., McMunn, A., Banks, J., & Steptoe, A. (2011). Loneliness, social isolation, and behavioral and biological health indicators in older adults. Health Psychology, 30(4), 377.

- [30] Faulkner, K. A., Cauley, J. A., Zmuda, J. M., Griffin, J. M., & Nevitt, M. C. (2003). Is social integration associated with the risk of falling in older community-dwelling women?. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 58(10), M954-M959.
- [31] Mistry, R., Rosansky, J., McGuire, J., McDermott, C., & Jarvik, L. (2001). Social isolation predicts rehospitalization in a group of older American veterans enrolled in the UPBEAT Program. International journal of geriatric psychiatry, 16(10), 950-959.
- [32] British Columbia Ministry of Health (2004). Social Isolation Among Seniors: An Emerging Issue.
- [33] Nicholson, N.R. (2012). A review of social isolation: an important but underassessed condition in older adults. The journal of primary prevention, 33(2-3), 137-152.
- [34] Hanson, B. S. (1994). Social network, social support and heavy drinking in elderly men-a population study of men born in 1914, Malmo, Sweden. Addiction (89), 725–732.
- [35] Eng, P. M., Rimm, E. B., Fitzmaurice, G., & Kawachi, I. (2002). Social ties and change in social ties in relation to subsequent total and cause-specific mortality and coronary heart disease incidence in men. American Journal of Epidemiology, 155, 700–709.
- [36] Locher, J. L., Ritchie, C. S., Roth, D. L., Baker, P. S., Bodner, E.V., & Allman, R. M. (2005). Social isolation, support, and capital and nutritional risk in an older sample: Ethnic and gender differences. Social Science and Medicine (60), 747-761.
- [37] Brewer, M. B. (2005). The Psychological Impact of Social Isolation: Discussion and Commentary. In K. D. Williams, J. P. Forgas, & W. von Hippel (Eds.), Sydney Symposium of Social Psychology series. The social outcast: Ostracism, social exclusion, rejection, and bullying (pp. 333-345). New York: Psychology Press.
- [38] Cacioppo, J. T., & Hawkley, L. C. (2003). Social isolation and health, with an emphasis on underlying mechanisms. Perspectives in biology and medicine, 46(3), S39-S52.
- [39] Findlay, R., & Cartwright, C. (2002). Social isolation & older people: A literature review. Ministerial Advisory Council on Older People.
- [40] Machielse, A. (2015). The heterogeneity of socially isolated older adults: A social isolation typology. Journal of Gerontological Social Work, 58(4), 338-356.
- [41] Owen, T. (2001). The high cost of isolation. Working with older people, 5(1), 21-23.
- [42] Tomaka, J. Thompson, S. & Palacios, R. (2006). The relationship of social isolation, loneliness and social support to disease outcomes among the elderly. Journal of Aging and Health. 18(3).
- [43] Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: cross-sectional., and longitudinal analyses. Psychology and aging, 21(1), 140.
- [44] Drageset, J., Espehaug, B., & Kirkevold, M. (2012). The impact of depression and sense of coherence on emotional and social loneliness among nursing home residents without cognitive impairment–a questionnaire survey. Journal of Clinical., Nursing, 21(7-8), 965-974.
- [45] Levasseur, M., Richard, L., Gauvin, L., & Raymond, É. (2010). Inventory and analysis of definitions of social participation found in the aging literature: Proposed taxonomy of social activities. Social Science & Medicine, 71(12), 2141–2149.
- [46] Glass, T. A., Leon, C. M. de, Marottoli, R. A., & Berkman, L. F. (1999). Population based study of social and productive activities as predictors of survival among elderly Americans. BMJ, 319(7208), 478–483.
- [47] Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social Relationships and Mortality Risk: A Meta-analytic Review. PLoS Medicine, 7(7).
- [48] Golden, J., Conroy, R. M., & Lawlor, B. A. (2009). Social support network structure in older people: Underlying dimensions and association with psychological and physical health. Psychology, Health & Medicine, 14(3), 280–290.
- [49] James, B. D., Boyle, P. A., Buchman, A. S., & Bennett, D. A. (2011). Relation of Late-Life Social Activity With Incident Disability Among Community-Dwelling Older Adults. The Journals of Gerontology: Series A, 66A(4), 467–473.
- [50] Ichida, Y., Hirai, H., Kondo, K., Kawachi, I., Takeda, T., & Endo, H. (2013). Does social participation improve self-rated health in the older population? A quasi-experimental intervention study. Social science & medicine (94), 83-90.

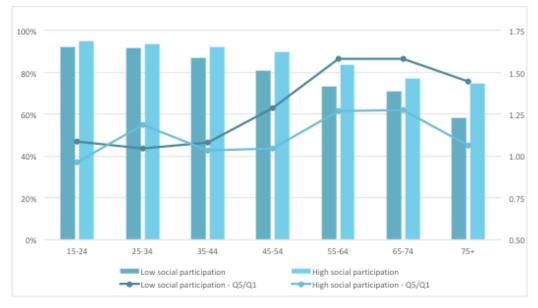
- [51] Lee, H. Y., Jang, S.-N., Lee, S., Cho, S.-I., & Park, E.-O. (2008). The relationship between social participation and self-rated health by sex and age: A cross-sectional survey. International Journal of Nursing Studies, 45(7), 1042–1054.
- [52] Goll, J. C., Charlesworth, G., Scior, K., & Stott, J. (2015). Barriers to Social Participation among Lonely Older Adults: The Influence of Social Fears and Identity. PLOS ONE, 10(2), e0116664.
- [53] Maier, H., & Klumb, P. L. (2005). Social participation and survival at older ages: is the effect driven by activity content or context?. European Journal of Ageing, 2(1), 31-39.
- [54] Lehning, A., Kim, K., Smith, R., & Choi, M. (2017). Does economic vulnerability moderate the association between transportation mode and social activity restrictions in later life? Ageing & Society, 1–20.
- [55] Levasseur, M., Roy, M., Michallet, B., St-Hilaire, F., Maltais, D., & Généreux, M. (2017). Associations Between Resilience, Community Belonging, and Social Participation Among Community-Dwelling Older Adults: Results From the Eastern Townships Population Health Survey. Archives of Physical Medicine and Rehabilitation.
- [56] Niedzwiedz, C. L., Richardson, E. A., Tunstall, H., Shortt, N. K., Mitchell, R. J., & Pearce, J. R. (2016). The relationship between wealth and loneliness among older people across Europe: Is social participation protective? Preventive Medicine, 91(Supplement C), 24–31.
- [57] Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. Journal of personality and social psychology, 39(3), 472-480.
- [58] Byrne, David (2005). Social Exclusion. Berkshire, England. Open University Press.
- [59] Schmocker, H. (2014). Pro Senectute Kanton Bern. Zwäg ins Alter. Strategie 2014-2018.
- [60] Weber, D., Abel, B., Ackermann, G., Biedermann, A., Bürgi, F., Kessler, C., Schneider, J., Steinmann, R.M., Widmer Howald, F. (2016). Gesundheit und Lebensqualität im Alter, (Bericht 5)
- [61] Pinquart, M., & Sorensen, S. (2001). Influences on loneliness in older adults: A meta-analysis. Basic and applied social psychology, 23(4), 245-266.
- [62] Victor, C. R., Scambler, S. J., Bowling, A., & Bond, J. (2005). The prevalence of, and risk factors for, loneliness in later life: a survey of older people in Great Britain. Ageing & Society, 25(6), 357-375.
- [63] Wenger, G.C., Davies, R., Shahtamasebi, S., & Scott, A. (1996). Social Isolation and Loneliness in Old Age: Review and Model Refinement. Ageing & Society (16) 333-358.
- [64] Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., von Renteln Kruse, W., Beck, J. C., & Stuck, A. E. (2006). Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. The Gerontologist, 46(4), 503-513.
- [65] Valtorta, N., & Hanratty, B. (2012). Loneliness, isolation and the health of older adults: do we need a new research agenda?. Journal of the Royal Society of Medicine, 105(12), 518-522.
- [66] Cattan, M., White, M., Bond, J., & Learmouth, A. (2005). Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. Ageing & Society, 25(1), 41–67.
- [67] Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. Journal of personality assessment, 66(1), 20-40.
- [68] de Jong Gierveld, van Tilburg (1999)
- [69] Weiss, R. S. (1973). Loneliness: The experience of emotional and social isolation. Cambridge, MA: The MIT Press.
- [70] Cann P., Jopling, K. (2011). Safeguarding the Convoy: The challenge. AgeUK Oxfordshire, 9-22.
- [71] Cattan, M. (2010). Preventing Social Isolation and Loneliness among Older People. Lambert Academic Publishing, Saarbrucken.
- [72] de Jong Gierveld, J., Fokkema, T., Van Tilburg, T. (2011). Safeguarding the Convoy: Alleviating loneliness among older adults. AgeUK Oxfordshire, 40-45.
- [73] Meyer, K. (2009). Gesundheit in der Schweiz. Nationaler Gesundheitsbericht 2008. Bern: Verlag Hans Huber.
- [74] Bachmann, N. (2014). Soziale Ressourcen als Gesundheitsschutz: Wirkungsweise und Verbreitung in der Schweizer Bevölkerung und in Europa (Obsan Dossier 27). Neuchâtel: Schweizerisches Gesundheitsobservatorium.

- [75] Barger, S. D., Messerli-Bürgy, N., & Barth, J. (2014). Social relationship correlates of major depressive disorder and depressive symptoms in Switzerland: nationally representative cross sectional study. BMC public health, 14(1), 273.
- [76] Richard, A., Rohrmann, S., Vandeleur, C. L., Schmid, M., Barth, J., & Eichholzer, M. (2017). Loneliness is adversely associated with physical and mental health and lifestyle factors: Results from a Swiss national survey. PloS one, 12(7), e0181442.
- [77] Ellaway, A., Wood, S., & Macintyre, S. (1999). Someone to talk to? The role of loneliness as a factor in the frequency of GP consultations. Br J Gen Pract, 49(442), 363-367.
- [78] Perrig-Chiello, P., & Hutchison, S. (2010). Family caregivers of elderly persons: A differential perspective on stressors, resources, and well-being. Geropsych: The Journal of Gerontopsychology and Geriatric Psychiatry, 23(4), 195.
- [79] Bundesamt für Gesundheit (BAG) (Hrsg.) (2011). Gesundheitsmonitoring der Migrationsbevölkerung (GMM) in der Schweiz - Schlussbericht Bern: BAG
- [80] Wang, J., Häusermann, M., Ajdacic-Gross, V., Aggleton, P., & Weiss, M. G. (2007). High prevalence of mental disorders and comorbidity in the Geneva Gay Men's Health Study. Social Psychiatry and Psychiatric Epidemiology, 42(5), 414-420.
- [81] Jopling, K. (2015). Promising approaches to reducing loneliness and isolation in later life. Age UK: London.
- [82] Cattan, M. (2011). Safeguarding the Convoy: Alleviating social isolation and loneliness in older people. AgeUK Oxfordshire, 46-51.
- [83] Goodman, A., Adams, A., Swift H.J. (2015). Hidden citizens: How can we identify the most lonely older adults? The Campaign to End Loneliness: London
- [84] Broome, S. (2016). The Missing Million: In Search of the Loneliest in our Community. Campaign to End Loneliness.
- [85] Rodden, M. (2013). Excluded Groups Working Group 'First Contact' Schemes Extent and Impact Edition 1. (Elderly Accommodation Counsel (EAC): London).
- [86] Bonevski, B., Randell, M., Paul, C., Chapman, K., Twyman, L., Bryant, J., ... Hughes, C. (2014). Reaching the hard-to-reach: a systematic review of strategies for improving health and medical research with socially disadvantaged groups. BMC Medical Research Methodology, 14, 42.
- [87] Dickens, A., Richards, S., Greaves, C., Campbell, J.L. (2011). Interventions targeting social isolation in older people: a systematic review. BMC Public Health. 11(1),647-668.
- [88] Gardiner, C., Geldenhuys, G., & Gott, M. (2016). Interventions to reduce social isolation and loneliness among older people: an integrative review. Health & Social Care in the Community.
- [89] Lis, K., Reichert, M., Cosack, A., Japelj, M. Š., Blažun, H., & Kokol, P. (2008). Evidence-based guidelines on health promotion for older people. Austrian Red Cross Vienna.
- [90] UyBico, S. J., Pavel, S., & Gross, C. P. (2007). Recruiting vulnerable populations into research: a systematic review of recruitment interventions. Journal of General Internal Medicine, 22(6), 852–863.
- [91] Cattan, M., White, M., Bond, J. (2005). Preventing social isolation and loneliness among older people: a systematic review of health promotion interventions. Ageing Society. 25(1), 41-67.
- [92] Giuliano, A. R., Mokuau, N., Hughes, C., Tortolero-Luna, G., Risendal, B., Ho, R. C., ... Mccaskill-Stevens, W. J. (2000). Participation of minorities in cancer research: the influence of structural, cultural, and linguistic factors. Annals of Epidemiology, 10(8), 22–34.
- [93] Swanson, G. M., & Ward, A. J. (1995). Recruiting minorities into clinical trials toward a participantfriendly system. JNCI Journal of the National Cancer Institute, 87(23), 1747–1759.
- [94] Levkoff, S., & Sanchez, H. (2003). Lessons Learned About Minority Recruitment and Retention From the Centers on Minority Aging and Health Promotion. The Gerontologist, 43(1), 18–26.
- [95] Newman, S. D., Andrews, J. O., Magwood, G. S., Jenkins, C., Cox, M. J., & Williamson, D. C. (2011). Peer reviewed: community advisory boards in community-based participatory research: a synthesis of best processes. Preventing Chronic Disease, 8(3).
- [96] Cohen-Mansfield, J., Perach, R. (2015). Interventions for Alleviating Loneliness Among Older Persons: A Critical Review. American Journal of Health Promotion. 29(3) e109-e125.

- [97] Lee, M. (2006). Promoting mental health and well-being in later life. London: Mental Health Foundation and Age Concern.
- [98] Novek S, Menec V, Tran T, Bell S. (2013). Exploring the Impacts of Senior Centres on Older Adults. Winnipeg, MB: Centre on Aging.
- [99] Choi, M., Kong, S., Jung, D. (2012). Computer and internet interventions loneliness and depression in older adults: A meta-analysis. Health Care Information Research. 18(3), 191-198.
- [100] Findlay, R. A. (2003). Interventions to reduce social isolation amongst older people: where is the evidence? Ageing & Society, 23(5), 647-658.
- [101] Franck, L., Molyneux, N., Parkinson, L. (2016). Systematic review of interventions addressing social isolation and depression in aged care clients. Quality of Life Research. 25(6), 1395-1407.
- [102] Masi, C.M., Chen, H.Y., Yawkley, L.C., Cacioppo, J.T. (2013). A meta-analysis of interventions to reduce loneliness. Personality and Social Psychology Review. 15(3).219-266.
- [103] Stojanovic J, Collamati A, Mariusz D, Onder G, La Milia D, Ricciardi W, Moscato U, Magnavita N, Poscia A. (2017). Decreasing loneliness and social isolation among the older people: systematic search and narrative review. Epidemiology, biostatistics and public health, 14(2).
- [104] Stockmann R. (2006). Evaluation in Deutschland. In: Stockmann R. (Hrsg.) Evaluationsforschung: Grundlagen und ausgewählte Forschungsfelder. 3. Auflage. Waxmann. Kapitel 1.
- [105] Fenney, D. (2013). "Let's Start Assessing Not Assuming" A Report about the Approaches to Tackling Social Isolation within Welsh Local Authorities. Welsh Government Social Research, 2013.
- [106] Chen, Y.-R.R., Schulz, P.J. (2016). The effect of Information communication technology Interventions on Reducing Social Isolation in the Elderly: A Systematic Review. Journal of Medical Internet Research. 18(1), e18.
- [107] Hagan, R., Manktelow, R., Taylor, B. J., & Mallett, J. (2014). Reducing loneliness amongst older people: a systematic search and narrative review. Aging & mental health, 18(6), 683-693.

# Appendix I

Subjective health status by social participation and age group (bars) and relative differences between highest and lowest income quintiles (lines)



Source: Swiss Health Survey 2012

Notes: The left vertical axis (for the bar chart) shows the proportion of persons who have a good or very good state of self-reported health (highest two categories on a 5-point scale). The darker (lighter) bar on the left (right) for each age group represents those with low (high) social participation, as measured by reported frequency of participating with clubs or groups. High social participation reflects daily-weekly participation frequency. Across all age categories, those with high social participation report higher levels of self-reported health than those with lower social participation. As age increases, the gap between these two groups increases.

The right vertical axis (for the line graph) indicates the ratio of persons with good or very good health in the highest income quintile (Q5) relative to the lowest income quintile (Q1). A value of one means that there is no incomerelated health inequality. Values greater (less) than one mean better (worse) health in Q5 compared to Q1. The darker (lighter) line shows this ratio for people with low (high) social participation. At age 45 and higher, the ratio for the low social participation group is consistently higher than the ratio for those with high social participation, indicating a greater degree of income-related health inequalities for those who report low social participation.

# Appendix II A

Interventions included in systematic reviews focused on reducing social isolation and/or loneliness in older adults by setting (community or institution) and delivery mode (group-based or one-to-one):

Table 9: Examples of effective interventions identified in systematic reviews researched and identified for this policy brief

Delivery mode Setting	Group-based	One-to-one
Community based	<ul> <li>Specific/targeted support groups (bereaved, caregiv- ers)</li> <li>Exercise groups</li> <li>Psychosocial support (e.g., mindfulness)</li> <li>Groups focused on educa- tional, cultural, practical life topics</li> <li>Technology (internet, games)</li> </ul>	<ul> <li>"Gatekeeper" programs (training people in the com- munity to refer socially iso- lated adults to relevant services)</li> <li>Home visits</li> <li>Technology (internet, games)</li> </ul>
Institution based	<ul> <li>Psychosocial support</li> <li>Technology (internet)</li> <li>Miscellaneous topics (humor, culture reminiscence, gar-dening)</li> </ul>	<ul> <li>Psychosocial support</li> <li>Animal assisted therapy</li> <li>Videoconferencing</li> </ul>

Sources: Authors' compilation adapted from studies referenced in the following systematic reviews: [87, 91, 96, 99, 100, 101, 102, 106, 107]

### Appendix II B

The report "Social Participation and Its Benefits" [98] provides an instrument for senior centers. The instrument should help to assess how well the institution supports the social inclusion of seniors. It has been slightly modified to be more applicable to programs for older adults.

Figure 5: Measuring instrument "social integration of seniors"

Are seniors involved in the program through par- ticipation in:		No	Not sure	Doesn't apply
Program planning				
Providing services				
Evaluating programs				
Does the program effectively include the follow- ing groups:		No	Not sure	Doesn't apply
Women				
Men				
Individuals with				
low income				
lower education and/or literacy				
reduced social networks				
experience of loss (spouse, home)				
non-German speaking background				
different cultural background/ethnic minorities				
disabilities				
chronic disease(s) or poor health				
mental health issues				

Other groups (e.g., sexual minorities)				
Are effective measures taken to address the fol- lowing barriers to participation:		No	Not sure	Doesn't apply
Transportation issues				
Low income				
Language				
Cultural differences				
Lack of confidence				
Are efforts made to approach older people who are isolated by:	Yes	No	Not sure	Doesn't apply
Direct outreach or in-home service				
Connecting via telephone				
Connecting with gatekeepers such as building managers, churches and mosques				
Partnering with other organizations or volunteers from appropriate cultural and linguistic communi- ties				

Source: Adaption based on "Social Participation and Its Benefits" [98]

# Appendix II C

The report "Measuring your impact on loneliness in later life" [83] presents four separate scales that program managers of interventions to reduce loneliness may consider in order to monitor the effectiveness of their efforts.

Appendix II D includes the questions/statements included in these four tools.

Table10: Instruments to measure social isolation and loneliness

	"The Campaign to End Loneli- ness Measure- ment Tool"	"De Jong Gierveld Lone- liness Scale"	"The UCLA Loneliness Scale"	"Single-item Screener"
Number of questions	3	6	3	1
Language	Positive word- ing	Mixes positive and negative wording	Negative word- ing	Negative word- ing
Initially deve- loped for	Program provi- ders	Researchers	Program provi- ders	Researchers
Does it men- tion lone- liness?	No	No	No	Yes
For program providers who wish to have:	a short and sensitively worded tool that is easy to use	an academi- cally rigorous tool that dis- tinguishes be- tween different causes of lone- liness	A short and ac- ademically rig- orous tool, with a simple scoring system	One simple question, not concerned about possible under-report- ing

Source: Adaptation based on "Measuring your impact on loneliness in later life" [83]

# Appendix II D

#### Four instruments for measuring loneliness

This section of the Appendix provides an overview of the questions of the four measuring instruments listed in Appendix II C.

The report "Measuring Your Impact on Loneliness in Later Life" [83] provides a helpful and thorough overview of the four measurement tools, including their strengths and weaknesses. The report describes how the instruments were developed and should be used. For detailed information, the reader is referred to this report. An example of the loneliness question posed in the 2012 Swiss Health Survey is also listed below.

#### "Campaign to End Loneliness" Measurement Tool

This tool has three statements to which someone indicates his/her level of agreement: strongly disagree / disagree / neutral / agree / strongly agree / don't know.

- I am content with my friendships and relationships
- I have enough people I feel comfortable asking for help at any time
- My relationships are satisfying as I would want them to be

#### "The De Jong Gierveld 6-item Loneliness Scale"

This tool contains three statements on emotional loneliness (EL) and three statements on social loneliness (SL), with the following answer options: yes / more or less / no.

- I experience a general sense of emptiness (EL)
- I miss having people around me (EL)
- I often feel rejected (EL)
- There are plenty of people I can rely on when I have problems (SL)
- There are many people I can trust completely (SL)
- There are enough people I feel close to (SL)

#### "UCLA 3-Item Loneliness Scale"

This scale is based on three questions that measure three different dimensions of loneliness relating to relationships, social connectedness, and perception of isolation. Answer options are: hardly ever / some of the time / often.

- How often do you feel that you lack companionship?
- How often do you feel left out?
- How often do you feel isolated from others?

#### "Single-item Questions"

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Examples of single-item questions and responses include the following:

From the "English Longitudinal Study of Ageing" (ELSA):

- How often do you feel lonely?
  - $\circ$  hardly ever or never / some of the time / often

From the 2012 Swiss Health Survey:

How often do you experience feelings of loneliness? • very frequently / somewhat frequently / sometimes / never

From the CES-D ("Center for Epidemiologic Studies Depression Scale"), which is used as a screening questionnaire for depression, there is one question about loneliness:

- During the past week, have you felt lonely:
  - rarely or none of the time / some or a little of the time / occasionally or a moderate amount of time / all of the time

## Appendix II E

The following indicators are based on the report "*Measuring your impact on loneliness in later life*" [83]. Modifications for this policy brief include the inclusion of an indicator for education, which is often used as a proxy for socio-economic levels instead of income for older adults, and an indicator of citizenship.

*Figure 6: Demographic Indicators* 

We are asking these questions in order to better understand who is taking part in our pro- gram. This information will remain confidential and will not be shared with anyone else.
Question Categories (specific questions not included here)
Gender
Age
Highest level of education achieved
Marital Status
Citizenship
Sexual Orientation

Source: Adaptation based on "Measuring your impact on loneliness in later life" [83]

