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Executive Summary

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Rapid review of reviews: what remotely delivered interventions can reduce social isolation and loneliness among older adults?

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Background

During the 2020 coronavirus (COVID-19) crisis, millions of older adults (70+) across the UK (and elsewhere) are being advised to be particularly stringent about social distancing, and to avoid contact with those outside their household. Older adults are already more likely to have long-term illness or disability, to live alone and to be widowed, all of which are risk factors for loneliness. Social distancing places them at even higher risk than normal of social isolation and loneliness, which can adversely affect quality of life, wellbeing and mental health, and are associated with physical ill health and mortality.

However, what works to prevent or mitigate loneliness is less clear. The requirement for older adults to restrict their activities during the COVID-19 pandemic has put a spotlight on the need to understand how to minimise the impact of loneliness and isolation.

In the voluntary and community sector, many existing social care services are no longer operating as conventionally commissioned and there is a shift to providing remote support instead, often via the telephone. The call for NHS Volunteer Responders includes roles to make 'regular phone calls to check on people isolating at home', which means that there is a need to ensure that:

- i. the programmes and interventions that will be staffed by these volunteers are effective and have minimal adverse consequences for older people; and
- ii. the volunteers making phone calls and providing other forms of support are adequately trained and supported to fulfil these roles. Training and guidance is essential to equip volunteers to support others, and measures need to be put into place to support the retention of trained volunteers.

What did we set out to do?

We set out to review the evidence on interventions that seek to ameliorate loneliness or social isolation, or both, through remote interventions. Against a backdrop of mandatory social distancing, our interest was to understand how remote interventions may be effectively delivered. The question of whether remotely delivered interventions can be as effective as face-to-face interventions was not considered.

We followed a 'review of reviews' methodology with a view to synthesising evidence from related (but differing) remote interventions for social isolation and loneliness, to help inform decisions about different approaches. We sought to synthesise evidence presenting descriptive characteristics, using narrative synthesis, Intervention Component Analysis (ICA), Qualitative Comparative Analysis (QCA)¹, and through creating evidence maps.

To help to identify studies as systematic reviews, we drew on the Database of Abstracts of Reviews of Effects (DARE) criteria. Inclusion criteria for our review of reviews were, broadly:

- Population: older adults (50+); community dwelling; socially isolated, or at risk of loneliness.
- Intervention: befriending, social support, or low intensity psychological interventions (e.g. iCBT (internet Cognitive Behavioural Therapy)), delivered remotely (e.g. by telephone, videoconferencing, online interaction, social networks).
- Comparator: most forms of control group (randomised and non-randomised) and those without a control group (pre-post designs). Reviews focussed on the implementation of interventions, including qualitative evidence syntheses were also in scope, to identify mechanisms of interest for parts of the later synthesis.
- Outcome: measures of loneliness, social isolation (or close proxy measures e.g. social contact).

What do we mean by social isolation and loneliness?

- We conceptualise loneliness as an emotional response within individuals when there is a deficit between their desired and actual quality and quantity of social engagement and relationships.
- We define social isolation as having minimal quantity and quality of both structural support (i.e. the number and diversity of social contacts and social roles in one's life) and functional support (i.e. the meaningful functions that these social relationships play in supporting and enriching one's life). The social networks of socially isolated people therefore involve few people with infrequent meaningful contact with those people.

Findings

How many existing reviews did we identify?

From a total of 2057 records screened manually on title and abstract, 75 were selected for full text screening. Of these, nine existing systematic reviews were relevant for this piece of work. In view of the need for rapid evidence synthesis, we prioritised five of the included reviews for further synthesis, as the remaining four were focussed solely on caregivers and not on the general older adult population. The five reviews included 18 primary studies (reporting 16 different interventions) that met our inclusion criteria (out of a total 112 studies included in the five reviews). The reviews covered a range of populations, using different definitions and age thresholds for 'older adults', with a combined age range of 50-95. The settings were not always clearly stated, but were primarily older adults' own homes, nursing homes, or supported living facilities, in North America, Europe and Taiwan. A variety of study designs were included in the reviews, with RCTs, quasi-experimental cohort studies, survey studies, and qualitative studies (semi-structured interviews and focus groups) all represented.

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The interventions reported in the 18 primary studies fell into five categories:

- Supported videoconferencing to alleviate loneliness.
- Telephone befriending to reduce social isolation.
- Online discussion groups/forums to reduce social isolation and/or loneliness, or to improve/maintain social connectedness.
- Supported use of social networking sites for mitigating social isolation and loneliness.
- Multi-tool interventions (provision of equipment, training, messaging, chat groups) to reduce loneliness or social isolation, or increase social connectedness.

Are different modes of remote intervention effective?

Concepts of loneliness and social isolation vary between studies, making comparisons and conclusions challenging. Nevertheless, findings from the narrative synthesis indicate that:

- **Supported video-communication interventions** were regarded positively by older adults, with some evidence of decreases in feelings of loneliness and increases in social support scores.
- **Telephone contact** was only used in two studies. Qualitative findings showed reduced feelings of loneliness and social isolation. Older adults felt more connected to others and were more able to cope.
- **Online discussion groups and forums** showed mixed results with regard to loneliness and social isolation. The majority of studies showed increases in social support, but only two showed reductions in loneliness, with four studies not measuring loneliness at all.
- **Social networking sites** have the potential to reduce loneliness in older adults, but the evidence here is weak. Perceived value and the strength of ties within a social networking site appeared to be issues for older adults.
- **Multi-tool interventions** included in this

review demonstrated significant decreases in loneliness, but not always increases in social support. The nature and content of these interventions varied, so it is difficult to isolate the effective elements.

Which processes are aligned with the most successful interventions?

Findings from the Qualitative Comparative Analysis demonstrate that remote interventions with each of the following characteristics are most effective:

- **Supporting development of close relationships:** Intervention supports participants to express feelings freely and without self-consciousness (e.g. opportunities for unstructured discussions with peers).
- **Supporting interactions through ensuring participants share experiences/ characteristics:** Target population has shared experience (e.g. being a carer, stroke survivor etc.) and shared characteristics (e.g. women only, similar age/socioeconomic status etc).
- **Support interactions through pastoral guidance:** Services include some form of pastoral care (e.g. light-touch oversight of a discussion forum by professionals or opportunities for participants to contact professionals for advice).

Other processes around ensuring that participants feel that their participation is beneficial for others as well as themselves, ensuring participants have a stake in the intervention design or the way they can participate, and ensuring that participants can take part through different channels and modes (i.e. in real time and nonparallel modes), may also be important and were more frequently observed in successful interventions. However, successful interventions tended to ensure that all three processes above took place in the intervention. Taken together, these can serve as design principles for future interventions. Unsuccessful interventions either did not ensure all three processes took place simultaneously, or were ones where none of the processes took place.

What are the caveats to these findings?

In addition to the specific limitations set out in detail in the full report, three important caveats to the evidence should be borne in mind when considering the findings:

- This report does not suggest that remotely delivered interventions can be more, equally, or less effective than face-to-face interventions. This review was developed in the context of the COVID-19 pandemic where face-to-face contact was prohibited in large parts of the world because of social distancing rules. With face-to-face interventions being impractical, the focus is therefore on identifying effective ways of delivering remote interventions.
- Remote interventions require sets of circumstances for implementation that are necessary for delivery. In other words, without a certain set of circumstances being in place, the intervention would not run. For example, in the case of internet discussion forums, older people need to have an internet connection, access to a computer, smartphone or tablet, and the IT skills to access the forum and contribute fully. In the case of telephone befriending interventions, older people need to have access to a phone which may need to be internet enabled, and be able to use the phone in a way that allows them to fully participate. These necessary conditions are in addition to other factors such as making adaptations for older people with sensory deficits. How these necessary conditions are established is not directly considered here, and requires further examination.
- This study is a rapid overview of existing systematic reviews. This presents three important limitations. Firstly, not all of the studies included in the reviews are relevant to the research questions we wish to address (see details of our inclusion criteria); we overcome this limitation by focussing on a subset of more relevant interventions. Secondly, the review of reviews approach

means that new studies will have been published since our most recent included review. However, we believe that the focus on theory and understanding the consistent processes through the QCA may go some way to mitigate this, and that the substantive messages are likely to remain salient. Finally, a rapid approach increases the risk of studies not being identified and there being flaws in the data extraction, synthesis and interpretation. While the processes we employed were designed to minimise this risk, this limitation remains inherent to any rapid approach.

What should come next?

The findings from this review do not lead us to recommend particular modes of delivering befriending, social support, or low-intensity psychological interventions (e.g. videoconferencing, telephone calls, chat rooms or forums), but they do suggest that the principles outlined above should be incorporated into the delivery of an intervention. Although we believe all of the intervention modes in scope here have the capacity to include the processes found to lead to more successful interventions (supporting the development of intimate relationships; supporting interactions through ensuring participants share experiences/ characteristics; provide pastoral guidance), a more encompassing piece of research is needed in order to identify which mode is most effective, or has the greatest potential, for changing outcomes. A starting point to this may be in understanding how interventions incorporate these processes in their design, and where there is scope for their enhancement through engagement with voluntary sector and other providers.

¹ ICA is an approach to understanding why trials succeed or fail through drawing on informal evidence published in trial reports; Qualitative Comparative Analysis (QCA) is an approach for categorising studies into sets of 'unsuccessful' (less effective) and 'successful' (most effective) studies and examining the distinct characteristics of successful sets of studies.

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Please contact the NIHR Older People and Frailty PRU for assistance.

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