

Testimony re: combatting social isolation and loneliness during the COVID-19

Senate Special Committee on Aging

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Introduction:

Chairman Collins, Ranking Member Casey, and distinguished members of the Committee, thank you for the opportunity to testify today on the topic of social isolation and loneliness during the COVID-19 pandemic. And an additional expression of gratitude for allowing me to testify remotely given these unprecedented times.

My name is Dr. Carla Perissinotto. I am an Associate Professor of Medicine at the University of California, San Francisco. I am a Geriatrician and Palliative Medicine Physician and have devoted my career to the clinical care of older adults, many of whom are underserved, vulnerable and homebound. I am a first Generation American of Mexican and Italian descent, who cares deeply about the care of our older adults who come from diverse backgrounds and I profoundly respect the immigrant roots of our nation. In addition to providing clinical care, I have been researching the health effects of loneliness and isolation in older adults for over 10 years. In 2012, I published a seminal paper in JAMA Internal Medicine, which highlighted the health effects of loneliness in older adults and demonstrated that older adults who are lonely have a 59% increased risk of losing their independence (as measured by Activities of Daily Living (ADL), mobility, climbing stairs and performing upper extremity tasks) and 45% increased risk of death. Most recently, my work has focused on the role of health care systems in understanding and measuring the health effects of loneliness and social isolation and incorporating this into clinical care. In addition, because of my own work in community-based settings I am interested in evaluating community-based programs that focus on loneliness and isolation. Indeed, loneliness and isolation are a national and global public health problem whose widespread effects may be even more pressing now, in the midst of the COVID-19 pandemic. Lastly, I have had the distinct pleasure of serving as a committee member for the National Academy of Sciences Consensus Report: The Health and Medical Dimensions of Social Isolation and Loneliness in Older Adults.¹

Background on Social Isolation and Loneliness:

As my friend and colleague Dr. Julianne Holt-Lunstad previously reported to you in 2017, being connected to others is widely considered a fundamental human need—crucial to both well-being and survival. This need has been described extensively in the literature² and current day examples of harm exist and demonstrate what happens to us without social contact. These include the effects of solitary confinement, and separating infants from socialization, among others. Yet, as described in the National Academy of Sciences Report, there are increasing numbers of adults in the United States (and across the world) who are experiencing both loneliness and isolation at rates that are alarming and thus raising this to the level of a public health crisis. Anecdotally, the World Health Organization has recognized social isolation as a determinant of health. Prevalence rates for loneliness and isolation range from 20-50%³ and the corresponding health effects are disquieting. When the risks of loneliness and isolation are examined, both have dramatic effects on our health even after accounting for usual confounding factors such as depression, medical comorbidities and social economic status (SES). To remind the committee, loneliness is the subjective feeling of being isolated—or the discrepancy between actual and desired relationships; and social isolation relates to the quantifiable numbers of a relationships a person may have. These two can co-exist but they do not always.

The list of health effects include, but are not limited to the following:

- Both isolation and loneliness have an increased risk of all-cause premature mortality (risk variable by study)^{3,4}
- 50% increased risk of developing dementia⁵
- When people with heart failure experience loneliness, they have an almost four-fold increased risk of death, a 68% increased risk of hospitalization and 57% increased risk of emergency room use.⁶

Given these associated health care risks, it is not surprising that a study by AARP found that social isolation results in increased Medicare spending, by an estimated 6.7 billion dollars a year, thought to be due to increased inpatient care costs and skilled nursing home spending.⁷

Highlights from the National Academy of Sciences (NAS) Report:

These statistics and evidence form the justification for delving into the topic of loneliness and isolation in greater detail via the National Academy of Sciences Consensus Report. Ultimately, while I cannot encapsulate all the findings today, there are key outcomes that are worth bringing to this committee's attention. The committee formulated its final recommendations in accordance with 5 goals:

1. Develop a more robust evidence base for effective assessment, prevention, and intervention strategies for social isolation and loneliness;
2. Translate current research into health care practices in order to reduce the negative health impacts of social isolation and loneliness;
3. Improve awareness of the health and medical impacts of social isolation and loneliness across the health care workforce and among members of the public;
4. Strengthen ongoing education and training related to social isolation and loneliness in older adults for the health care workforce; and
5. Strengthen ties between the health care system and community-based networks and resources that address social isolation and loneliness in older adults.

Social Isolation and Loneliness during COVID-19:

Given the findings from prior research, and the NAS report, like many, I became concerned about the downstream effects that we would see during this COVID-19 pandemic. Seemingly overnight, we saw our social structures dissolve as we were all forced to socially-distance ourselves. Of note, the term physically distance may be more appropriate. The policies and recommendations regarding physical distancing are clear, as we saw evidence from across the globe that strict quarantine, isolation and minimizing human contact could alter the course of the pandemic. We saw this in examining neighboring provinces in Northern Italy and saw varying rates of transmission dependent upon whether enforced physical distancing was occurring. Yet, the challenge of all of this, is that to protect our lives and our health now, we have had to subject ourselves and others to the potential risks that we may be worsening our health and shortening our life expectancies in the future. The reality is that to some extent, we are in a data-free zone, where we do not know how long we have to be lonely or isolated, or how severe this must be for us to have lasting negative consequences—either economic or health wise.

Given these concerns and this heightened awareness of what could occur, together with my colleague Dr. Ashwin Kotwal, we rapidly designed a study to understand the magnitude of loneliness and isolation during the pandemic, particularly in areas of the country with shelter-in place orders. We postulated that for some, worsened loneliness would be probable because many of the policies that were put in place were specifically focused on isolation older adults because they have been experiencing the highest rates of morbidity and mortality from COVID-19. We also were concerned about worsened health conditions and functional status because many older adults already were experiencing limitations from prior medical conditions, cognitive impairment and functional limitations. As Geriatricians, we were also interested in understanding whether the physical distancing had other unintended consequences such as leaving our older adults with difficulty accessing health care services and other services related to maintaining independence. Our study is currently ongoing and unfunded at this time, but I wanted to share some of the preliminary findings as we suspect that our findings likely represent the experience of other older adults across the country. It is important to note however, that our study sample may be more diverse and more underserved than other areas of the country such that we may have to be careful with generalizability.

Preliminary Research Findings on COVID-19, Social Isolation and Loneliness: CO-PI: Ashwin Kotwal, Carla Perissinotto

By definition, shelter-in-place orders have isolated older adults from most in-person interactions, and this could be made worse for many who struggle to navigate any interactions that are not in person. We hope that our findings will help to guide evolving health policies and strategies for effective clinical and social support during pandemics and in general. Unfortunately, it is even more apparent that ageism runs deep, and the needs of older adults and the health effects of COVID-19 on older adults has largely been an afterthought.

We are conducting a mixed-methods study of community-dwelling older adults primarily in San Francisco during the shelter-in-place order, which started March 16th and our study recruitment started in mid-April and is ongoing. Our objectives are to: 1) investigate the experiences of loneliness and social isolation over time, and 2) examine unmet health needs and psychological distress related to deficits in social interactions.

Who is in our sample:

- Fairly diverse sample, though not quite reflective of the US (Latinx, African-American under-represented; Asian and multi-ethnic over-represented):

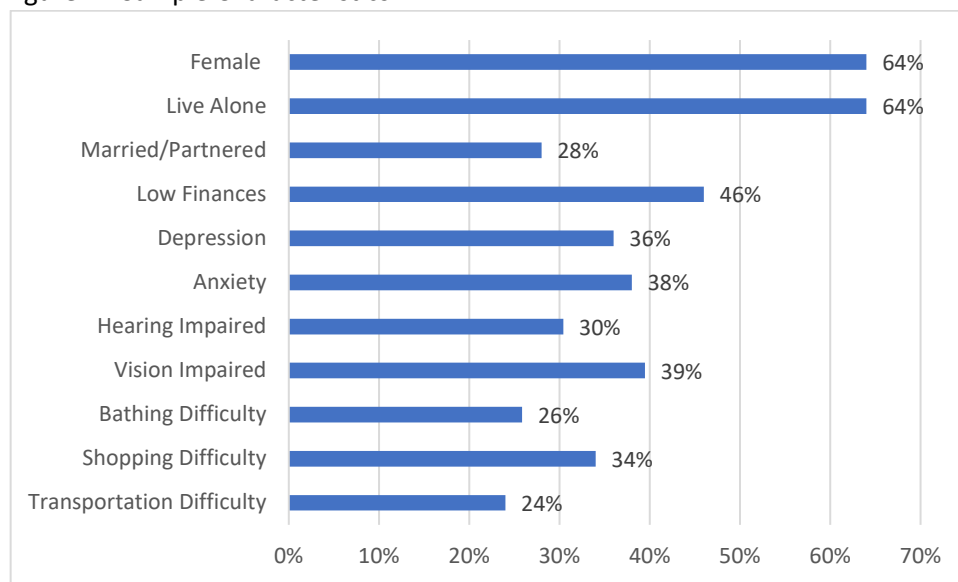
Table 1: Ethnic Composition

Race/Ethnicity		
	AA	8%
	Latino	5%
	Asian	8%
	White	70%
	Multi-ethnic	6%

Other 3%

- Primarily women
- 64% live alone (this is higher than the average across the United States)
- Almost half report low finances
- Quarter to a third experiencing functional impairments at baseline, depression, anxiety, and visual or hearing impairments.

Figure 1: Sample Characteristics



Highlights from our Preliminary Findings:

- High percentage of loneliness at baseline (73%), **41% experiencing worsening because of COVID-19**
- Depression and anxiety also worse (**33% and 29% respectively**)
- Overall poor self-efficacy related to health, social life and finances (Table 2)

Table 2: Perceptions of Coronavirus and Impacts on Well-Being		All Baseline
Loneliness	Any loneliness	73%
	High loneliness	30%
Change attributed to coronavirus:	Worse	41%
	Same	55%
	Better	5%
Anxiety	High Anxiety	29%
Change attributed to coronavirus:	Worse	29%

	Same	68%
	Better	4%
Depression	High Depression	23%
	Worse	33%
Change attributed to coronavirus:	Same	63%
	Better	4%
Self-Efficacy		
Control over Health	Little (0-4)	18%
	Neutral (5)	20%
	A lot (6-10)	62%
Control over Social Life	Little (0-4)	42%
	Neutral (5)	20%
	A lot (6-10)	38%
Control over Finances	Little (0-4)	26%
	Neutral (5)	10%
	A lot (6-10)	64%

Social Connection Summary (Table 3):

- Most have reduced the socializing and community participation
- Most concerning regarding cancelled activities: decrease in volunteers and case management
- Only **highlighted** items change over time

Table 3. Social connections and personal activities		All Baseline
Measure		
Overall Impact on socializing	More than usual	3%
	Same	12%
	Less	46%
	Rarely or stopped	39%
Community Participation	None	88%
	1-2 times	7%
	3 or more	5%
Cancelled Activities	Community centers	55%
	Social Activities	53%
	Social Gatherings	73%
	Volunteering or Caregiver	33%
	Worship service	35%
	Classes or Education	42%
Continued activities	Pray privately	36%
	Reading	79%
	Watching television	80%

Word games	40%
Playing Games (e.g. chess)	19%
Writing	40%
Using computer	73%
Home or car maintenance	34%
Special Baking or cooking	26%
Making clothes, knitting	11%
Hobbies	33%
Playing Sports	43%
Walking >20 mins	49%
Online Classes	15%
Other	21%

Summary of Unmet Needs and Social Contacts:

- 80% had difficulty obtaining medications
- Food security was not as big of a concern in our sample (18%)
- There were unmet functional needs (bathing, medications and transportation in over 30% of the sample)
- 77% of sample had video contact 0-2 times a week, and 29% did not use the internet at all

Figure 2: Unmet Needs

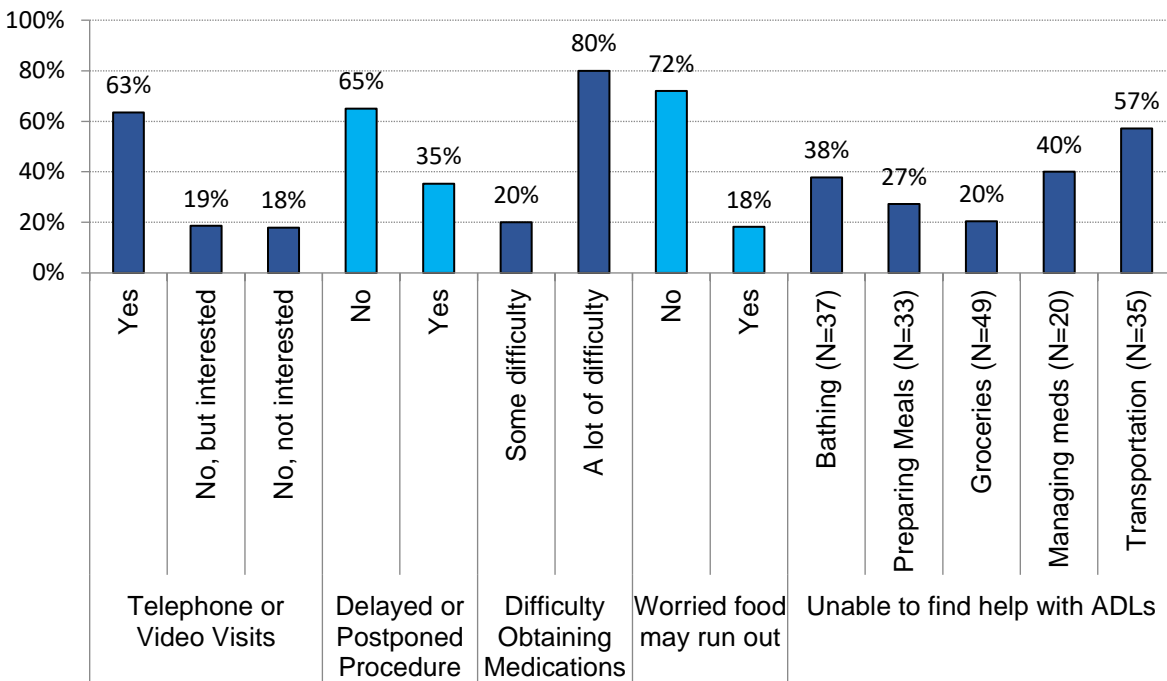
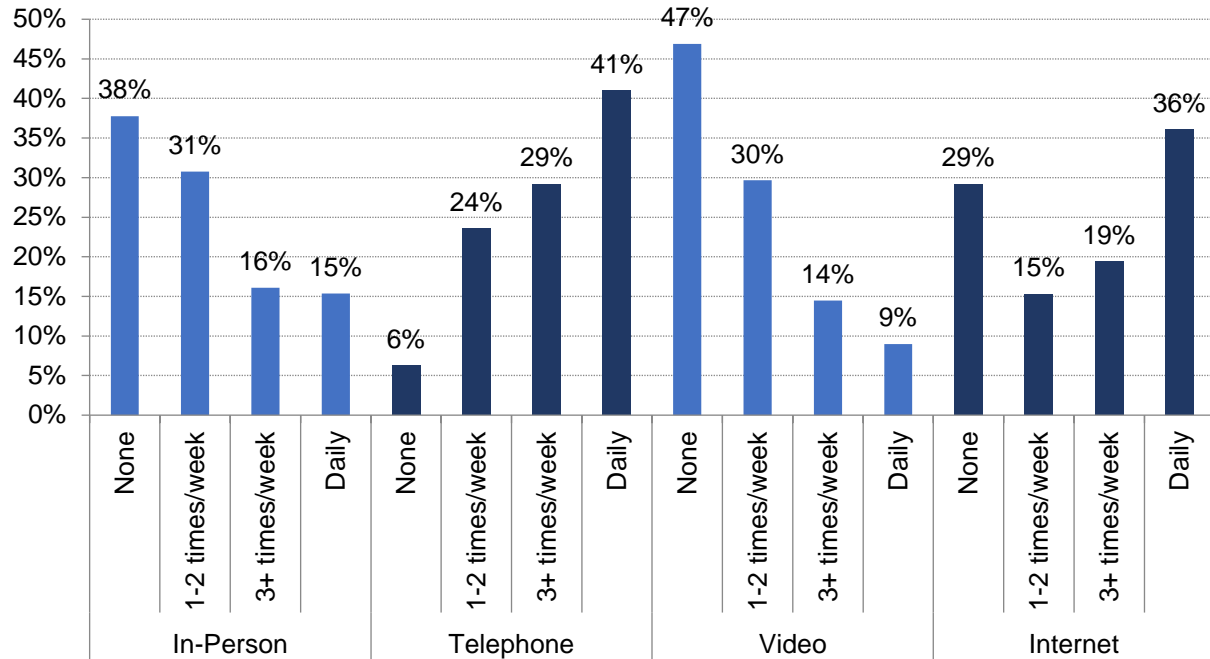


Figure 3: Types of Social Contact:



Overall Summary of Preliminary Findings and what we have learned:

Though our findings are preliminary, there are some areas that are already giving us evidence of what may be happening across the country and where we might expect to see downstream effects. These 4 key findings are in-line and can be addressed by some of the recommendations put forth by the NAS report.

For example:

1. Social isolation and loneliness are worse (even after adjusting for depression and other factors) during the pandemic as early as one month into shelter in place and persisting into month two.
2. 67% of older adults are not concerned or only somewhat concerned about their health worsening because of not being able to see their health care providers.

See Recommendation 8.1 and 8.2:

- *The U.S. Department of Health and Human Services should advocate for including measures of social isolation and loneliness in major large-scale health strategies (e.g., Healthy People) and surveys (e.g., National Health Interview Survey).*

- *Health and aging organizations, relevant government agencies, and consumer-facing organizations should create public awareness and education campaigns that highlight the health impacts of social isolation and loneliness in adults.*
3. Effects on unmet needs are concerning—especially functional needs and medication access
See recommendation 9.1:
- *Health care providers, organizations, and systems should partner with social service providers, including those serving vulnerable communities, in order to create effective team-based care (which includes services such as transportation and housing support) and to promote the use of tailored community-based services to address social isolation and loneliness in older adults.*
4. A large proportion of older adults may not have access to technology (video or internet).
See recommendation 9.6:
- *System designers as well as those who are developing and deploying technology in interventions should ensure that technological innovations related to social isolation and loneliness are properly assessed and tested so as to understand their full range of benefits and potential adverse consequences in order to prevent harm, and they should work to understand and take into account contextual issues, such as broadband access and having sufficient knowledge and support for using the technology.*

What is also concerning is that because of physical distancing, many health care and social programs have shifted to technological solutions, and this may be leaving out many older adults who do not have access to these technologies and these may be more difficult for those with vision and hearing impairments (in our sample approximately 30% of the sample).

We also know that underrepresented minority groups and other marginalized already were at risk for loneliness and isolation and poor health outcomes prior to the pandemic, and these are the exact groups that are disproportionately being affected the most by COVID-19.

Gaps in the Evidence:

During the pandemic and before, we have seen a sudden rise in telephone-based outreach programs or video-based programs both on the non-for-profit and private-for-profit sector. These have been scaled quickly, yet as the NAS report concluded: we do not yet have the evidence to support the scaling of these interventions as the majority have not been rigorously studied or implemented. This means that we must be cautious as we trial and scale some of these programs. Yet during the urgency of this pandemic, and given the likelihood that we will have another surge in the Fall, it seems reasonable to outreach to older adults because as we can see, through research and asking pointed questions, there are unmet needs that are identified and where health care systems, community organizations and our government could intervene. But we do not know if this will ultimately have lasting positive effects or introduce any harms or risks.

Additional gaps in the evidence include knowing which programs or which interventions will work for specific populations. For example, it is important to understand that if an individual is experiencing loneliness, does the program proposed meet the needs of the individual and address the underlying

reason for the loneliness? A paper by Masi et al, provides a helpful framework for how we understand the types of interventions that are possible.⁸ This means that even as we try to apply population health principles, there is a degree of individualization that needs to occur. In essence, is it the right intervention for the right person or population at the right time. It is equally important to understand what the intervention is trying to accomplish. Are you trying to help the person feel more connected, or help them have more opportunities for connection? Or trying to decrease mortality and health care costs. All of these have an impact on how the intervention or program needs to be designed, implemented, funded and scaled. This also means that the length of time of an intervention matters. For example, what if programs develop during COVID-19 and temporarily help but then end post-COVID. What happens post-pandemic? Will these programs still exist if effective?

Conclusions and Next steps:

Our experience thus far with COVID-19 echo the NAS report recommendations (shared above) such that some of the key recommendations are relevant and can help us move to the next steps. I would like to provide clear examples of what has worked during the pandemic, but the truth is that we do not yet have an evidence base to draw conclusions and it would be incorrect to support programs and interventions prematurely. However there is hope. Drawing directly from the report, some of the key findings that can help us learn from this pandemic and help older adults both during and outside of pandemics include:

- **Funding:** Ensuring adequate funding for research and evaluations of proposed programs and interventions so that we can know what works, what should be scaled, what the return on investment is, and how it should be funded. Given the large public health impact, this will require a national approach.

See Recommendation 9-2: Given the public health impact of social isolation and loneliness, the U.S. Department of Health and Human Services should establish and fund a national resource center to centralize evidence, resources, training, and best practices on social isolation and loneliness, including those for older adults and for diverse and at-risk populations.

- **Accountability:** As noted above and in recommendation 9-6 this means clearly evaluating and ensuring that solutions that are proposed actually do what they propose to do and have a focus on improving the lives of older adults.
- **Education and learning:** We may have opportunities to learn from our colleagues abroad and see what has worked and consider the concept of “social prescribing” and we have an opportunity to educate the health care sector on the importance of incorporating assessments into practice.

See recommendation 7-2: Health care systems should create opportunities for clinicians to partner with researchers to evaluate the application of currently available evidence-based tools to assess social isolation and loneliness in clinical settings, including testing and applications for specific populations.

- **Understanding the needs of marginalized populations:** The evidence base for these groups is even more scant, and this gap is even more important now given the current national discourse

and the awareness that this pandemic is unequivocally affecting older adults and minority populations at alarming rates.

The solutions ahead of us may not be readily apparent, but starting with addressing the underlying ageism and other discrimination will need to be part of our response. Our challenge will be in making systematic changes that are evidence-based fair and timely.

I am incredibly grateful that a topic and population that I care deeply about is being recognized by this committee, and will further bring this topic the attention it needs given the magnitude of the public health implications. I welcome any opportunity to further advance the knowledge base and improve the care of our older adults.

Thank you again for the opportunity to testify before you and I will welcome any questions.

1. National Academy of Sciences EAM. Social isolation and loneliness in older adults: Opportunities for the health care system. Washington DC: The National Academies Press; 2020.
2. Cacioppo JT, Hawkley LC. Social isolation and health, with an emphasis on underlying mechanisms. *Perspectives in biology and medicine* 2003;46:S39-52.
3. Perissinotto CM, Stijacic Cenzer I, Covinsky KE. Loneliness in older persons: a predictor of functional decline and death. *Archives of internal medicine* 2012;172:1078-83.
4. Holt-Lunstad J, Robles TF, Sbarra DA. Advancing social connection as a public health priority in the United States. *The American psychologist* 2017;72:517-30.
5. Penninkilampi R, Casey AN, Singh MF, Brodaty H. The Association between Social Engagement, Loneliness, and Risk of Dementia: A Systematic Review and Meta-Analysis. *J Alzheimers Dis* 2018;66:1619-33.
6. Manemann SM, Chamberlain AM, Roger VL, et al. Perceived Social Isolation and Outcomes in Patients With Heart Failure. *J Am Heart Assoc* 2018;7.
7. Medicare spends more on socially isolated older adults. 2017. (Accessed 11/12/2019, 2019, at <https://www.aarp.org/content/dam/aarp/ppi/2017/10/medicare-spends-more-on-socially-isolated-older-adults.pdf>.)
8. Masi CM, Chen HY, Hawkley LC, Cacioppo JT. A Meta-Analysis of Interventions to Reduce Loneliness. *Pers Soc Psychol Rev* 2011;15:219-66.