# Systematic Review of Measures of Social Connection Used in Long-term Care Home Research

SONNET study

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# **OBJECTIVE**

We will systematically review the measures of social connection that have been tested in long-term care (LTC) home residents, including both dementiaspecific and general measures, using COnsensusbased Standards for the selection of health Measurement Instruments (COSMIN) methods.

## INTRODUCTION

- Social connection is a basic human need, and essential to quality of life and care in long-term care (LTC) homes.<sup>1</sup>
- Social connection has not been clearly conceptualized leading to inconsistent terminology and ambiguity when quantifying the constructs.
- There are unique considerations when assessing social connection in LTC residents, including that most have complex health needs and many have dementia.<sup>2,3</sup>
- There is no consensus on best approaches to measuring social connection in LTC homes.
- The SONNET study aims to develop and test a new measure of social connection for LTC home residents.

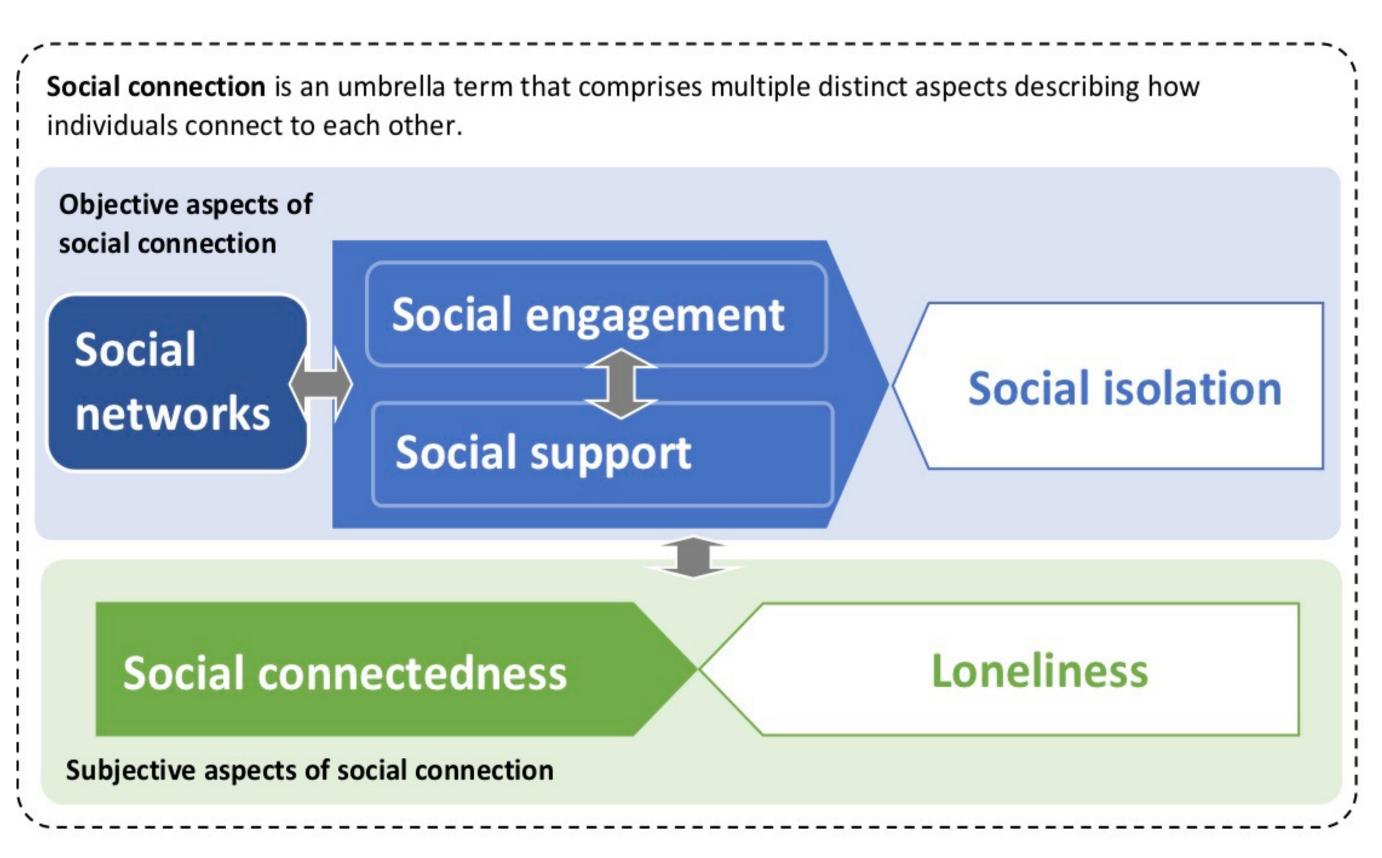


Figure 1. Preliminary Conceptual Model of Social Connection. Aspects are related but distinct. Bidirectional arrows indicate the associations that exist between aspects. Source: https://www.sonnetstudy.com

## **METHODS**

### **Search Strategy:**

- MEDLINE ALL (Ovid), Embase Classic and Embase (Ovid), Emcare Nursing (Ovid), APA PsycInfo (Ovid), Scopus, CINAHL Complete (EBSCOhost), AgeLine (EBSCOhost), and Sociological Abstracts (ProQuest); primary research papers, no language limit, published from inception to Nov. 2021 and updated in Apr. 2022
- **Search 1:** social connection AND LTC AND COSMIN filter
- Search 2: identified social connection measures from existing systematic reviews and search 1 AND LTC AND COSMIN filter

#### **Inclusion Criteria:**

- **Setting:** LTC home/care home/nursing home, >2/3 residents
- Population: adult residents, >2/3 aged over 65 years
- **Concept:** Measures that assess any aspect(s) of social connection
- **Study:** Reported at least one psychometric property of the measure(s)

Data Extraction included social connection constructs (e.g., loneliness); target population (e.g., residents living with dementia); mode of administration (e.g., self-report); measurement properties assessed (i.e., content validity, structural validity, internal consistency, cross-cultural validity, reliability, measurement error, criterion validity, construct validity and responsiveness).

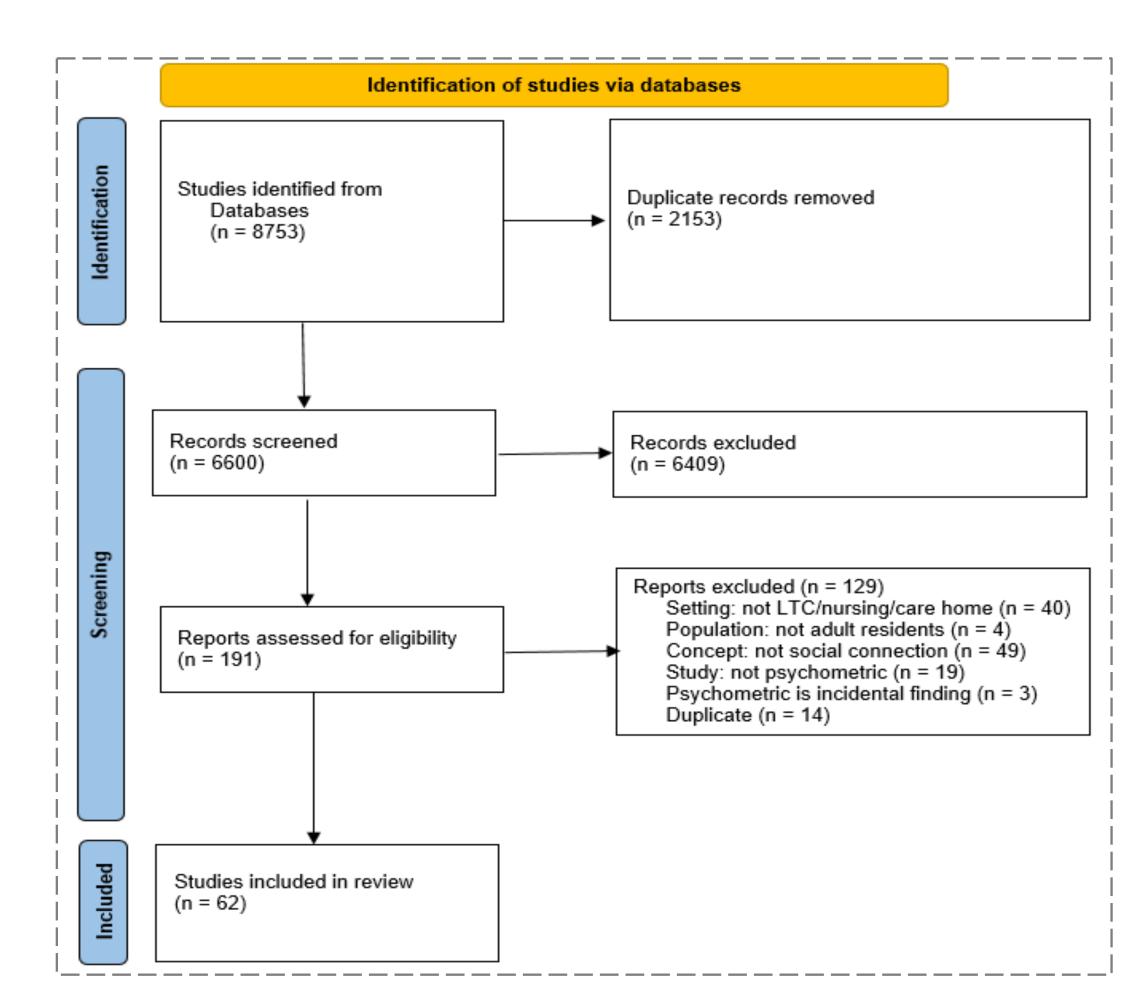


Figure 2. PRIMSA flow diagram

on Care and Outcome Measurement grant

# ONGOING RESULTS/NEXT STEPS

We identified 62 studies reporting on 35 measurement tools

1) QUALIDEM 20) Social Observation Behaviors Index (SOBRI) 2) Quality of Life in late-stage Dementia (QUALID) 21) Social Support Scale in Chronic Diseases (SSCII) 3) Revised Index of Social Engagement (RISE) 22) Quality of Life Scale 4) Quality of Life Alzheimer's Disease (QoL-AD) 23) Socially Supportive Activity Inventory (SSAI) 5) Alzheimer's Disease Related Quality of Life 24) SAR Foundation's Satisfaction and Quality of Life Scale (SyCV-FSAR) 6) Nottingham Health Profile (NHP) 25) Social Connectedness Index (from MDS 3.0) 7) Dementia Quality of Life (DQOL) 26) Social Quality (from MDS) 8) Multidimensional Observation Scale for Elderly 27) World Health Organisation Quality of Life Subjects (MOSES) (WHOQOL)-BREF 9) ICEpop CAPability measure for Older people 28) Satisfaction measure for elderly residents in (ICECAP-O) 10) Time Use (from Minimum Data Set (MDS)) 29) Quality of Life-Alzheimer's Disease scale in 11) Nursing Home Adjustment Scale (NHAS) Nursing Homes (QOL-AD NH) [Intra & interpersonal environment-related QoL] [relationship development] 12) Lubben Social Network Scale Revised (LSNS-R) 30) World Health Organization's Quality of Life 13) Social Well-being Of Nursing home residents- Questionnaire-version for older people (WHOQOLscale (SWON scale) 14) Engagement of a Person with Dementia Scale 31) Philadelphia Geriatric Center Morale Scale 15) The Index of Social Engagement Scale (ISE) 32) Sociability of Aged Persons 16) interRAI Self-Report Nursing Home Quality of 33) Salamon-Conte Life Satisfaction in the Elderly Life Survey Scales (LSES) 17) Laurens Well-Being Inventory for 34) Nursing Home Outcomes 35) Comprehensive Ability of Older People Gerontopsychiatry 18) Maastricht Electronic Daily Life Observation Assessment scale (CAOPAs) tool (MEDLO-tool) 19) Nursing Home Care-related Quality of Life

- A separate content analysis will describe these measurement tools according to the aspect(s) of social connection assessed.
- We are currently rating the quality of the included studies and psychometric properties of the measures using COSMIN methods.<sup>4</sup>
- We will report our findings by summarizing the evidence for each measure and providing an overall rating using a modified Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach.<sup>5</sup>

# CONCLUSION

- We will create a detailed inventory of measures of social connection and the evidence for their psychometric properties.
- Our results will improve measurement of social connection for LTC residents including those living with dementia.
- Our findings will direct the next step for SONNET to develop a new measure that will assess social connection among LTC residents including those living with dementia

## REFERENCES

- Bradshaw SA, et al. Age Ageing. 2012 Jul;41(4):429-40.
- 2. Mick P, et al. Can Fam Physician. 2018 Jan;64(1):e33-e41.
- 3. Pinquart, M., & Sorensen, S. Basic and Applied Social Psychology. 2001; 23:245 266.
- 4. Prinsen CAC, Mokkink LB, Bouter LM, et al. Qual Life Res. 2018; 27 (5):1147 57
- 5. Guyatt G. H. et al. BMJ 2000; 336(7650):924–926.

# **STUDY** INFORMATION

**PROSPERO** registration:

www.crd.york.ac.uk/prospero/display record.php?ID=CRD42022303526

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