

MINNESOTA GERONTOLOGICAL SOCIETY

FREE WEBINAR
September 27, 2023
12:00 - 1:00 pm

Handouts: mgso.org
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A Community-Based Approach to Social Connection
with
Steven M Hoover, PhD
Fyzeen Ahmad

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A Community-Based Approach to Social Connections

Steve Hoover, Ph.D.
Fyzeen Ahmad

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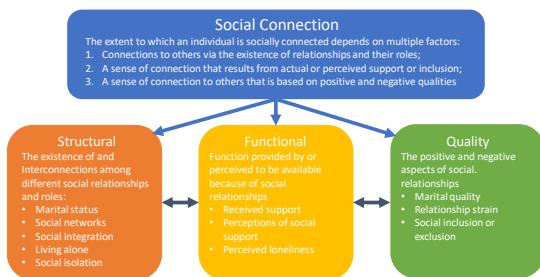
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Social Isolation and Loneliness

- Key Terms and Definitions:
 - **Social Isolation:** The *objective* lack of social contact with others.
 - **Loneliness:** The *subjective* perception of feeling lonely – of not having another person(s) with whom to have meaningful connection(s).
 - **Social Connection:** an umbrella term that encompasses aspects of how individuals connect to one another.



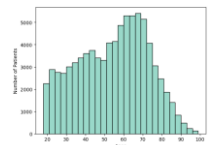
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*Adapted from: Social Isolation and Loneliness in Older Adults: Consensus Study Report of the National Academies of Sciences, Engineering and Medicine, 2020

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CentraCare™ Isolation Data



- To **assess** social connections, you *need* local data!
- We partnered with **CentraCare** (local healthcare system)
- Pulled from pre-appointment questionnaire and EMR
- Data collected May 2020 – January 2023
- n = 83,075, 18+ y.o.

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<p>Patient Background</p> <ul style="list-style-type: none"> • Age • Primary Care Physician Department/Clinic Name • Home zip code • Race (White, Black, Hispanic, Asian, Native American, Hawaiian/Pacific Islander) • Ethnicity (Hispanic or non-Hispanic) • Gender (M, F, X) • Language (Many possibilities, primarily English) • LGB (Heterosexual, Gay, Lesbian) 	<p>Health Conditions/Determinants</p> <ul style="list-style-type: none"> • Diabetes (Y/N) • Depression (Y/N) • Hypertension (Y/N) • Tobacco Use (Y, N, Passive) • Vape User (Y/N) • COPD (Y/N) • Congestive Heart Failure (Y/N) • Alcoholism (Y/N) • Active Care Coordination (Y/N) • Isolation (Y/N) – Berkman-Syme Social Network Index (SNI) <small>(Berkman & Syme, 1979)</small>
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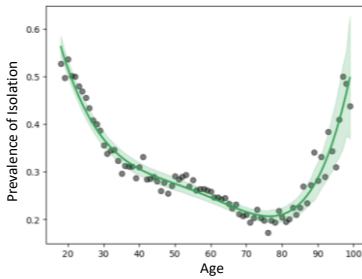
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Berkman-Syme SNI



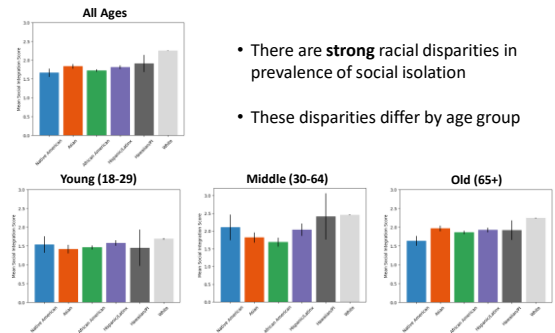
- Measures **structural aspects** of social connections
- Patients receive 1 point for:
 1. Being married or living with someone in a partnership
 2. Averaging 3+ interactions (phone/in-person) per week with other friends, family, etc.
 3. Attending religious services 4 or more times per year
 4. Reporting that they participate in a club or organization (e.g., church group, union, athletic group, school group, etc.)
- Score $\leq 1/4$ labeled as "isolated"

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Social isolation **most affects** older and younger adults

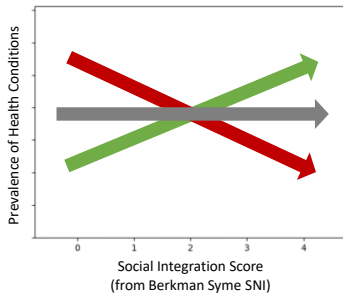
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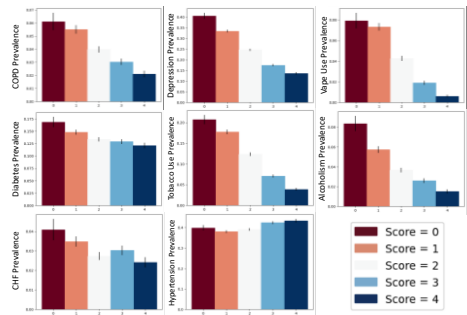
- There are **strong** racial disparities in prevalence of social isolation
- These disparities differ by age group

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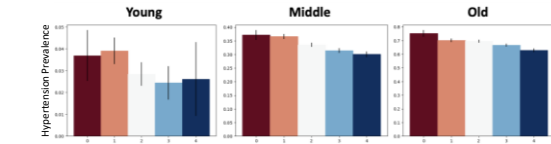
How is social isolation related to patient health?



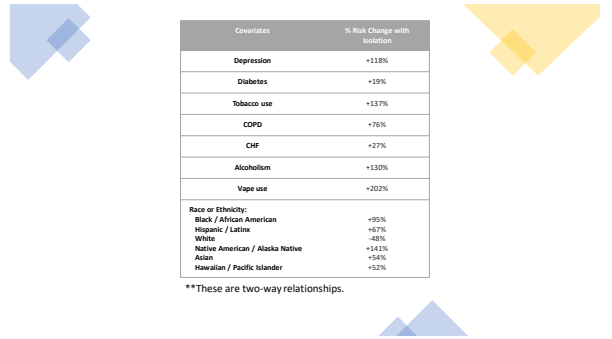
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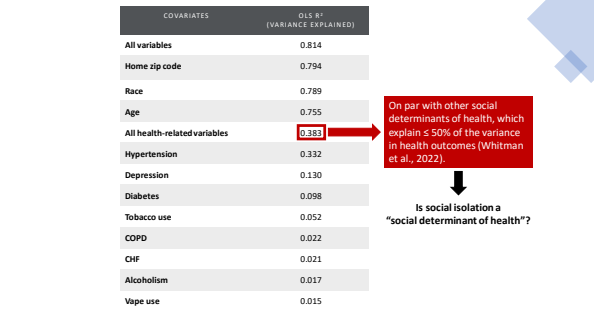
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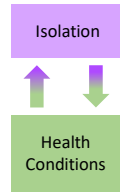
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Is social isolation a "social determinant of health"?

- Existing research shows risk of premature mortality at a population level
- Some biological pathways (via blood pressure, neuroendocrine dysregulation, etc.) have also been proposed
- Results not definitive because the relationships are bidirectional
- We wanted to leverage the size of this dataset to disentangle these relationships using machine learning

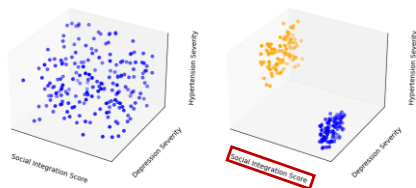


Holt-Lunstad, Annual Review of Public Health, 2022; National Academies of Sciences, Engineering, and Medicine, 2020

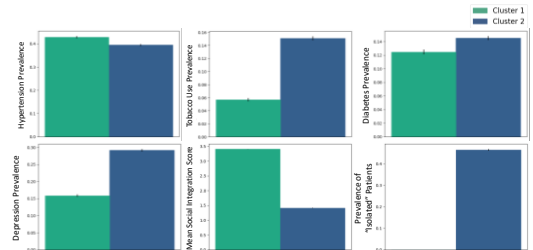
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Machine Learning Method: "Hierarchical Clustering"

- Asks the computer to see if it can find internal structure in the data by clustering



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The computer finds clusters that are most differentiated by social isolation! → Social isolation may be a social determinant of health

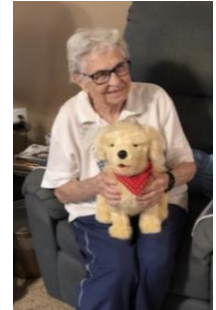
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How do we apply insights from local data?

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Greater St. Cloud Coalition to End Social Isolation & Loneliness

- Offer classes twice: Tai Ji, Mindful Presence, Aging Mastery, Health Coaching for Hypertension, Diabetes Prevention Program, Social Connect, Guided Autobiography
- Purchase and distribution of robotic pets (60+)
- Men's Health Series
- Created Greater St. Cloud Men's Shed
- Presentations: local service organizations, KNSI radio, Wilder Foundation panel (radio); MPR Interview.



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Project Blue Star

- Students hold sessions that include music (making and listening), card making, origami, and *above all conversation*
- Building **connections** between the young and old
- Currently operates at senior facilities in Central MN and Plymouth, MN areas
- Received grant from MIT AgeLab for being among the most creative, cost-effective intergenerational programs in the country

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Men's Shed

An international movement designed to provide senior and retired men the opportunity to share stories, work on projects and provide service to their community

Men do not talk face to face, we talk *shoulder to shoulder*

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Get Involved!

- Pay special attention to patients' social needs in the clinic – as we have seen, it is **strongly associated with overall health!**
- Start a Coalition to End Social Isolation in your community
- Starting Project Blue Star programming
- Advocate for social engagement-related items in their healthcare systems' social determinants of health
 - SDOH1 and SDOH2 are **required** by the Centers for Medicare and Medicaid Services (CMS, 2023 IPPS Final Rule) in 2024
- Analyze social engagement-related data in your community

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Questions?

Feel free to contact us with any more questions!

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 Fyzeen Ahmad: fyzeen.ahmad@gmail.com

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Questions or comments?
Contact info@mngero.org

Next webinar: Wednesday October 18 12N-1PM

What Matters?—The Foundation of Age Friendly Health Systems

with
Edward Ratney, MD
Minneapolis VA Geriatrics Research Education Clinical Center
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