

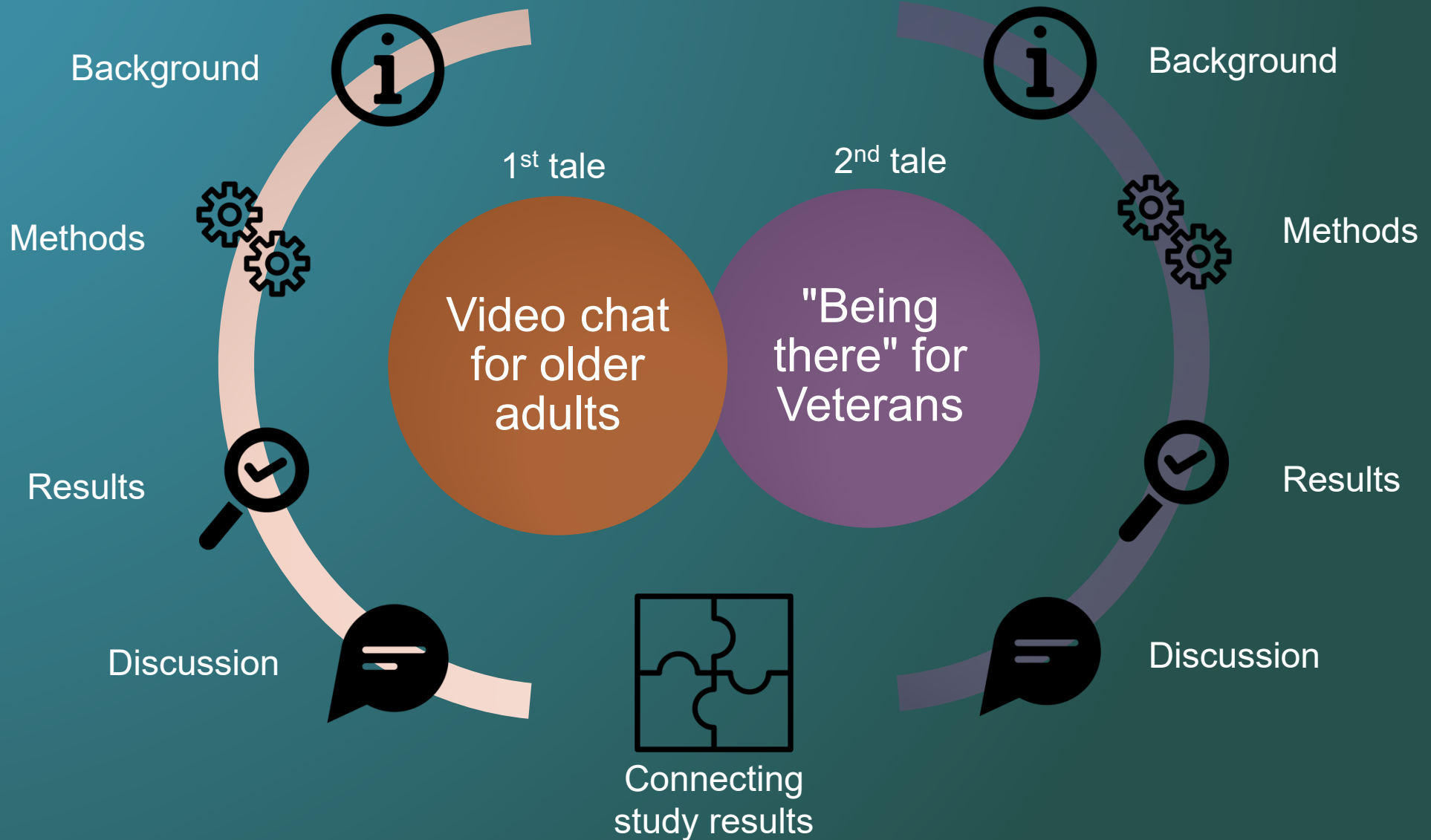
Social Connectedness and Depression in Older Adults and Veterans: A Tale of Two Studies

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HSR&D Cyberseminar
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Overview



Tale 1: Video chat for older adults

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Photo credit: [Nicole De Khors](#)



Using Skype to Beat the Blues: Longitudinal Data from a National Representative Sample


American Journal of Geriatric Psychiatry, October 2018


Older adults who use video chat such as Skype, but not other common communication technologies, have a lower risk of developing depression.

Video chat for older adults

 **Background:** Social connectedness and technology

 Methods: Designing the study

 Results: Key findings

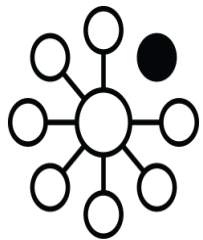
 Discussion: Future study opportunities and other considerations

Terminology related to social connectedness



Loneliness

Subjective measure



Social isolation

Objective measure



Loneliness is common...

~1 in 3

U.S. adults age 45 and older are lonely.

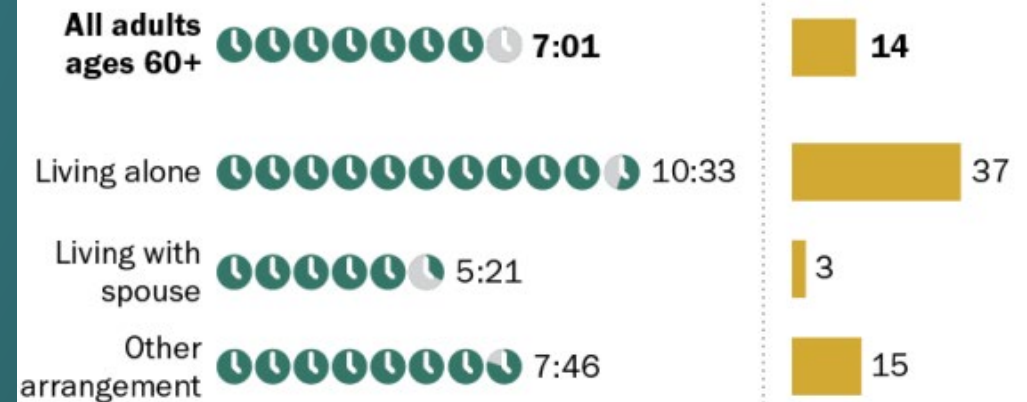
Anderson, G. Oscar and Colette E. Thayer. *Loneliness and Social Connections: A National Survey of Adults 45 and Older*. Washington, DC: AARP Research, September 2018. <https://doi.org/10.26419/res.00246.001>

As is living alone and time spent alone among older adults...

Over 10 hours of daily time alone for older Americans living on their own

Daily time spent alone (hours:minutes)
of all measured time, among those ages
60 and older

% of people who spent
all measured time
alone, among those
ages 60 and older



Note: Based on non-institutionalized people ages 60 and older. Measured time includes all waking hours, other than time spent in personal activities. "Living with spouse" includes those living with a cohabiting partner.

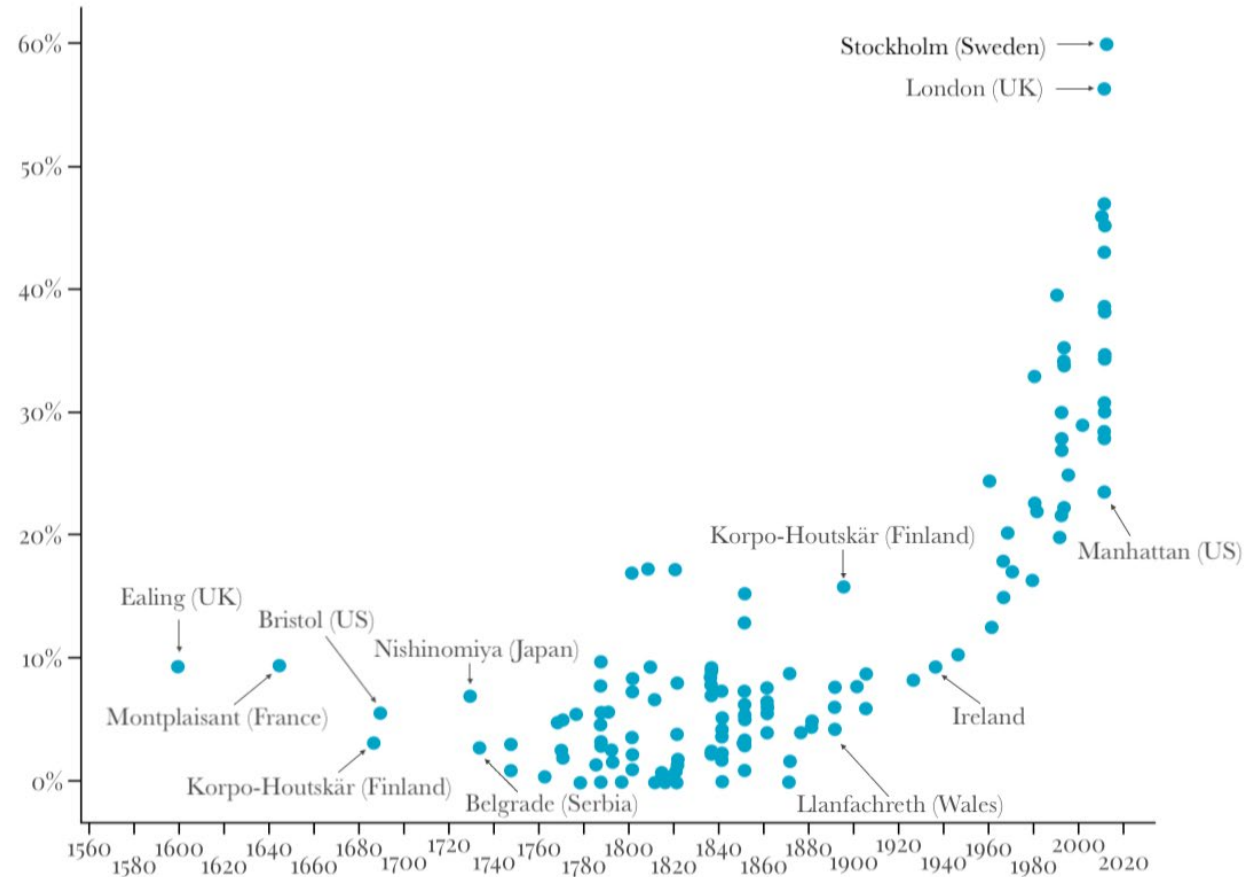
Source: Pew Research Center analysis of 2014-2017 American Time Use Survey (IPUMS).

PEW RESEARCH CENTER

And these shifts appear to be getting more common.

The rise of one-person households

Each dot corresponds to the number of single-person households as a percentage of all households in a given city or village. Estimates rely on available historical records and more recent census data across cities and villages in Europe, North America and Britain.

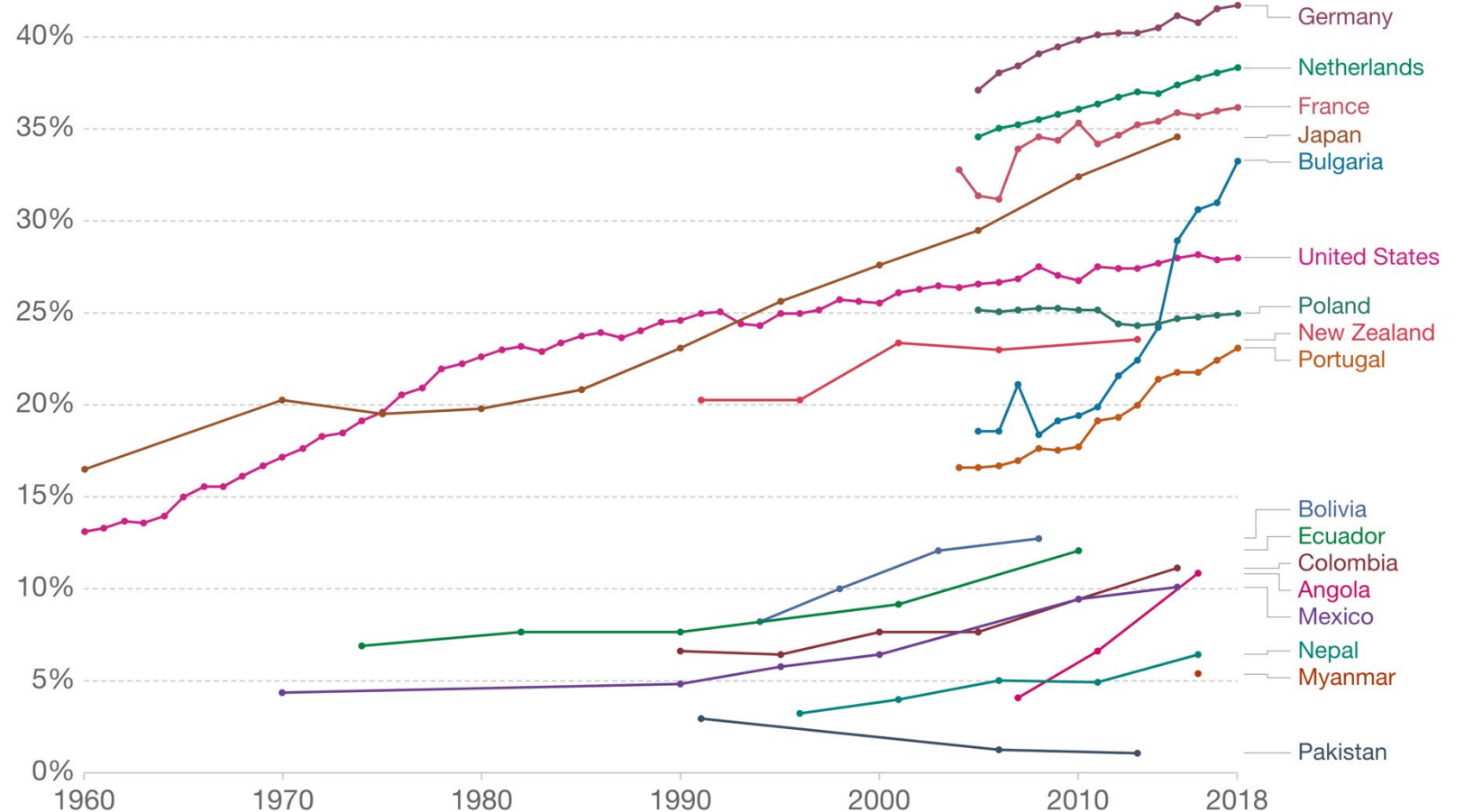


And these shifts appear to be getting more common.

Percentage of one-person households, 1960 to 2018

Our World in Data

Number of one-person households as a share of the total number of households. Estimates combine multiple sources, including cross-country surveys and census data.



Source: OWID based on UN and other sources

CC BY

And these shifts appear to be getting more common.

Since 2010, approximately **5 million more** midlife and older adults are lonely due to growth in this age group among the population.

2018: **47%** → 2020: **61%**

Anderson, G. Oscar and Colette E. Thayer. *Loneliness and Social Connections: A National Survey of Adults 45 and Older*. Washington, DC: AARP Research, September 2018. <https://doi.org/10.26419/res.00246.001>
Cigna. Loneliness and the Workplace, 2020 U.S. Report [Internet]. Available from: <https://www.cigna.com/static/www-cigna-com/docs/about-us/newsroom/studies-and-reports/combating-loneliness/cigna-2020-loneliness-factsheet.pdf>

*"As a force in shaping our health and well-being,
medical care pales in comparison with the
circumstances and properties of the communities
in which we live.*

*Few aspects of the community are more powerful
in this regard than is the degree of connectedness
and social support for individuals."*

- Donald M. Berwick, MD, MPP



Social isolation and loneliness are linked to many negative health outcomes



Depression



Cognitive decline



All-cause mortality

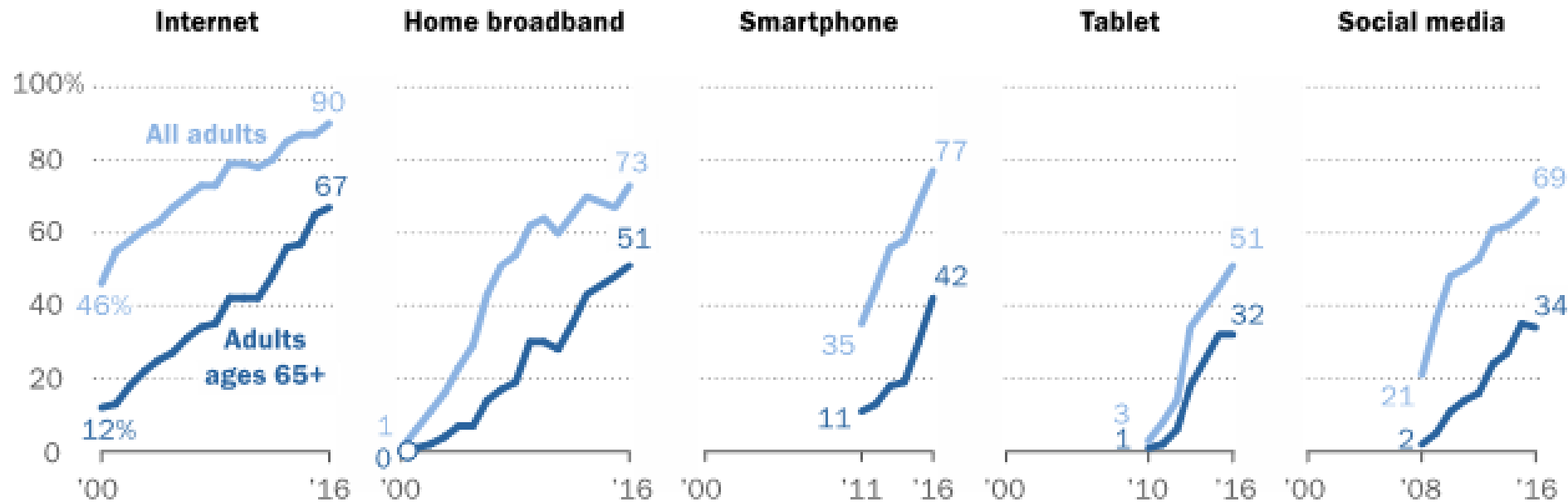


Functional decline

Trends in tech adoption by older adults

Smartphone adoption among seniors has nearly quadrupled in the last five years

% of U.S. adults who say they have or use the following

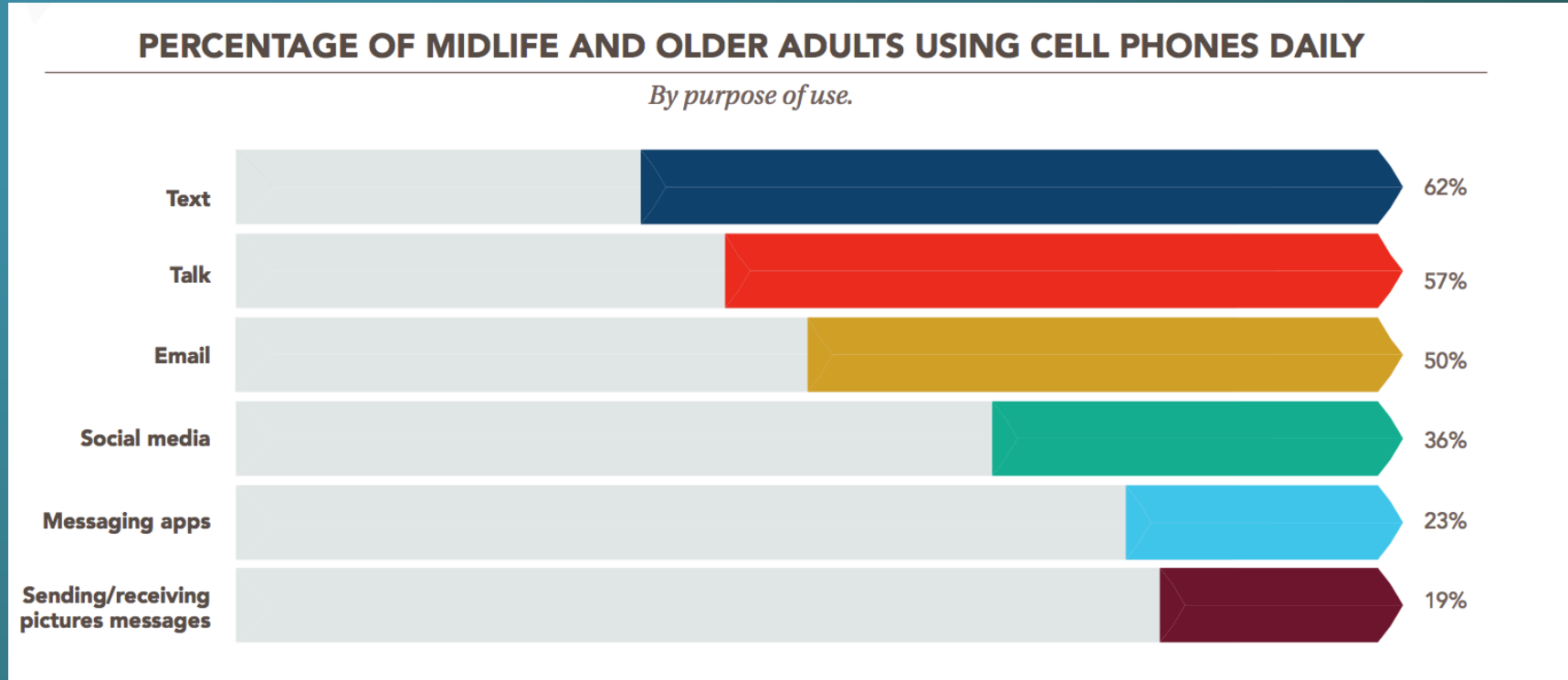


Source: Survey conducted Sept. 29-Nov. 6, 2016. Trend data are from previous Pew Research Center surveys.

"Tech Adoption Climbs Among Older Adults"

PEW RESEARCH CENTER

And frequent use is common too



In older adults, does social contact mediated through digital technology prevent or promote the development of depression?

Video chat for older adults



Background: Social connectedness and technology



Methods: Designing the study



Results: Key findings



Discussion: Future study opportunities and other considerations

Methods

Data source

Health and Retirement Study (HRS)

Data period

Survey waves in 2012 and 2014

Sample size

1,424 community-residing older adults



Measures

Predictors (in 2012)

Use of 4 online communication technologies
(yes/no)



Outcome (in 2014)

Depressive symptoms
(8-item CES-D > 4)



Statistical analysis

Model 1: Unadjusted

Model 2: Demographic-adjusted

Age

Gender

Education

Marital status

Race and ethnicity

Model 3: Fully-adjusted

Demographic-adjusted model
covariates +

Baseline depressive symptoms

Impairment in ADLs

Fully-adjusted models presented here.

Survey weights used to account for complex survey design and maintain population representativeness.

Video chat for older adults



Background: Social connectedness and technology



Methods: Designing the study



Results: Key findings



Discussion: Future study opportunities and other considerations

Summary of study participants at baseline (N=1,424)



64.75 years old



46.9% Male



65% Married or living with partner



51% High school or GED



13.7% Depressive symptoms



0.25 Number of ADLs with impairment



20% Racial or ethnic minority

Frequency of use of communication technologies



Email

58.3%



Social networks

28.0%



Video chat

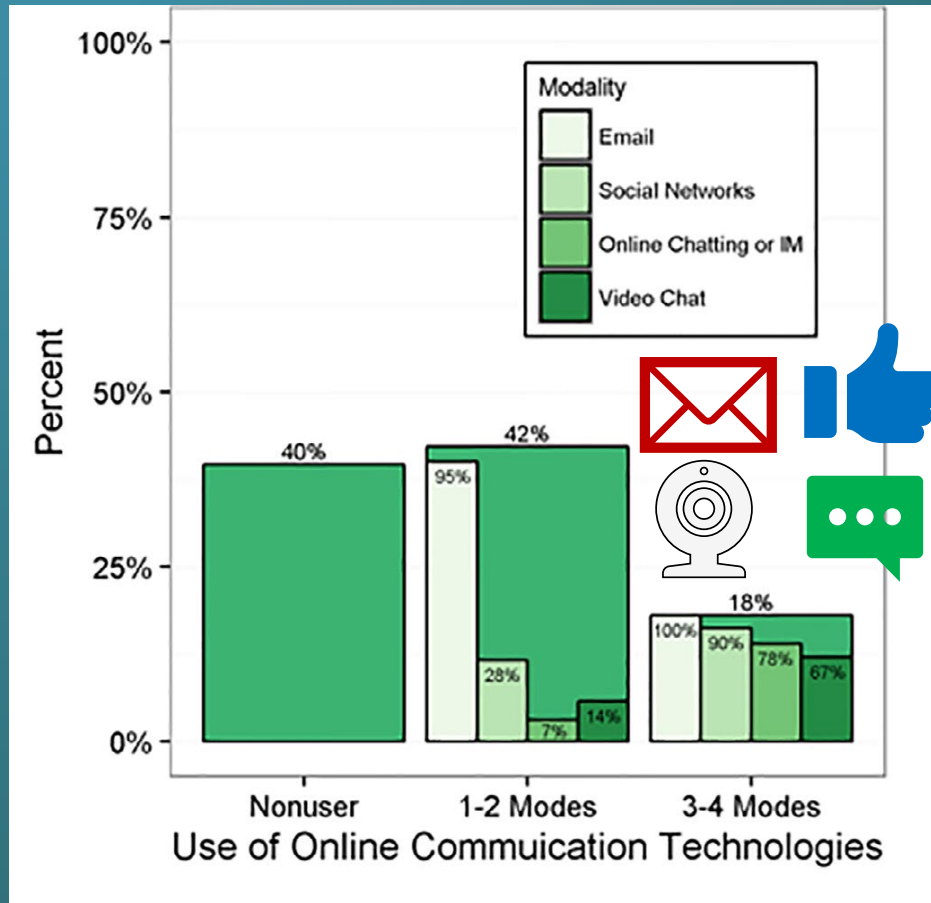
17.9%



Instant messaging/online chat

17.2%

Frequency of use of communication technologies

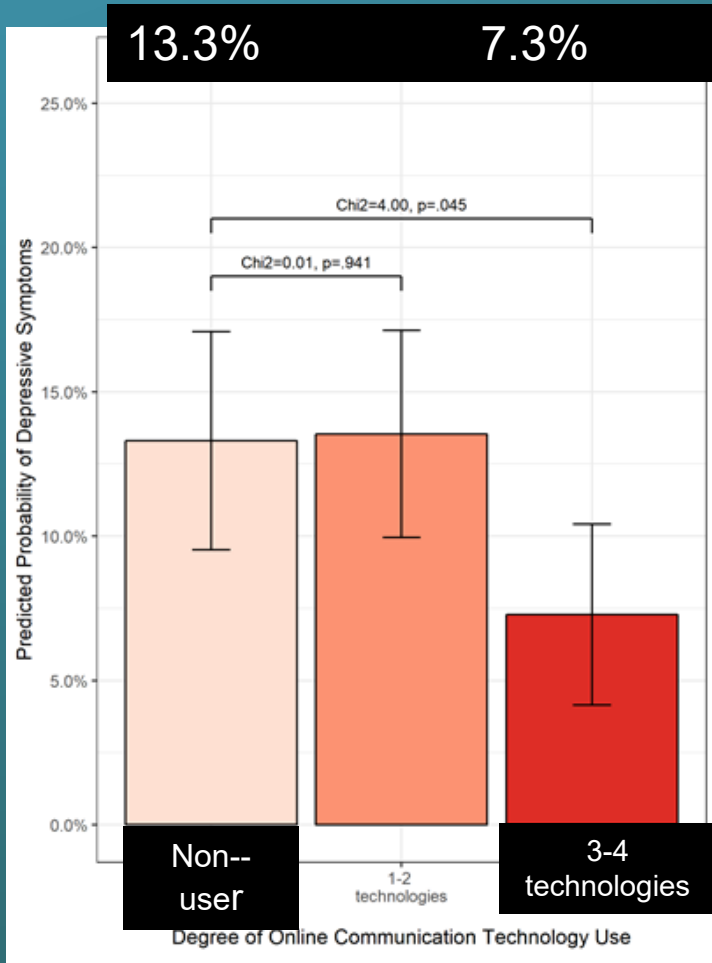


42% of the sample used 1-2 modalities

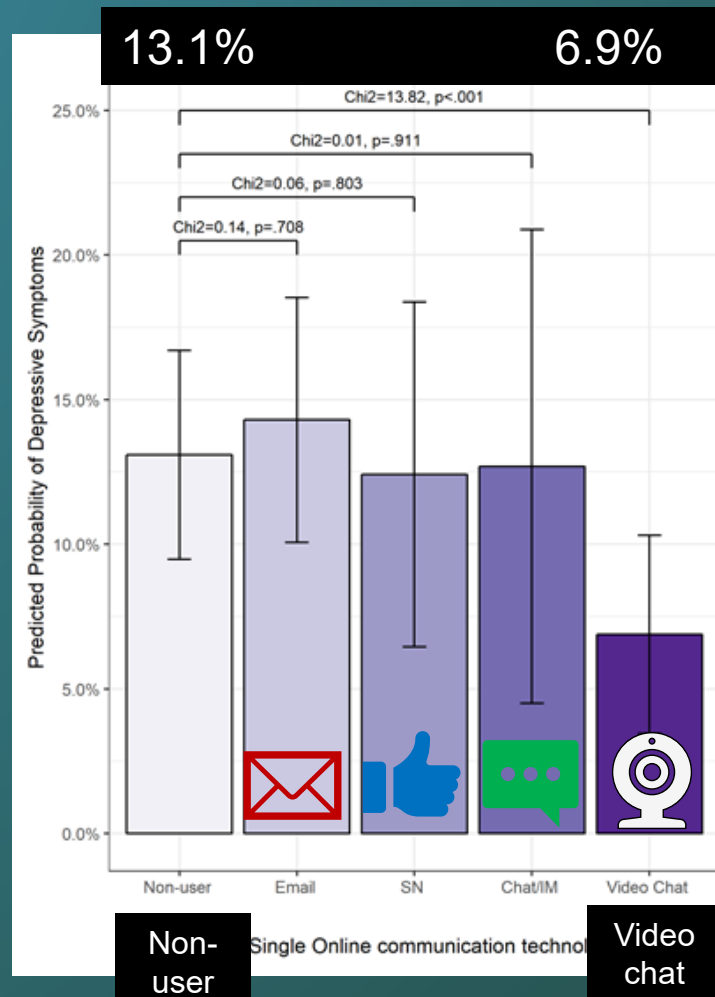
18% of the sample used 3-4 modalities

Predicted probability of depressive symptoms two years later based on...

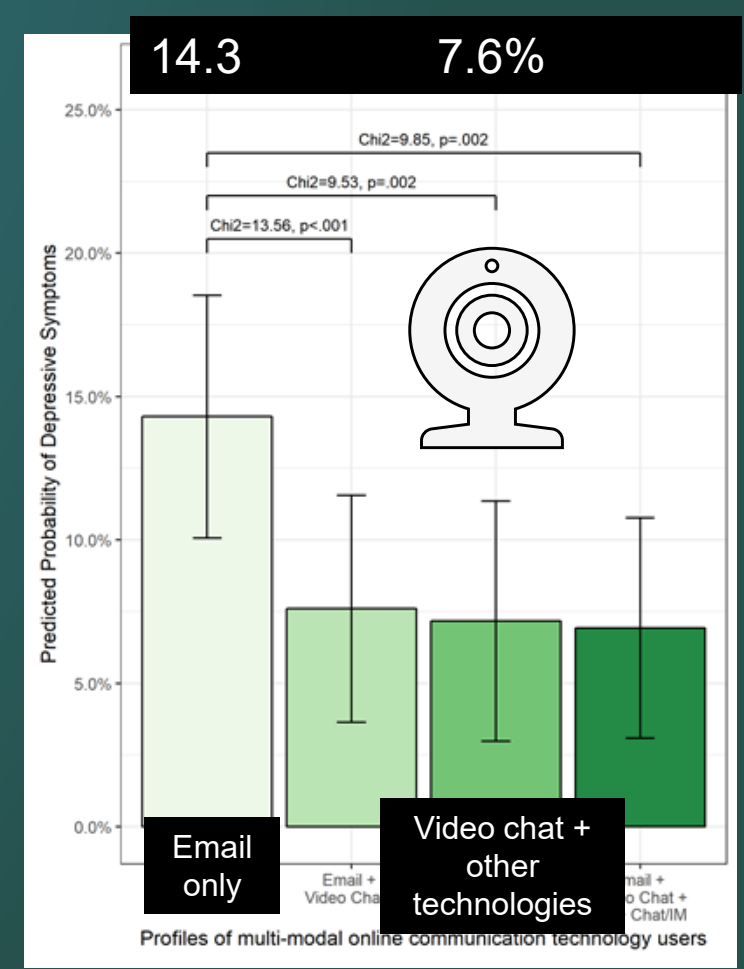
Number of technologies used



Type of technologies used



Combination of technologies used



Video chat for older adults



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Limitations and future study opportunities

Characterize specific features of communication technology use

- Examples include frequency, length, quality, or relationship between communicators

Expand study outcomes

- This study's outcome (CES-D score) is not equivalent to clinical diagnosis of MDD

Examine causality

- This study was observational

Pilot intervention

- Examine video chat as an intervention feature, and explore it as a way to promote social connection with members of one's social network

Conclusions

Use of **video chat** predicts lower risk for subsequent depression in older adults.

It may be that the more an online communication technology provides a **“rich” social interaction**, the greater the potential for social and emotional connectedness.

Tale 2: “Being There” for Veterans

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The Importance of “Being There”: a Qualitative Study of What Veterans with Depression Want in Social Support

Journal of General Internal Medicine, February 2020

“Being there” represents a novel, patient-generated way to conceptualize and talk about social support. [Read the manuscript here.](#)

“Being There” for Veterans



Background: Social connectedness and depression



Methods: Designing the study



Results: Key findings



Discussion: Study implications

Social connectedness and depression

Stronger, more supportive social relationships linked to lower incidence of major depression, higher remission rates, and lower burden of depressive symptoms.

A systematic review of 51 studies on social relationships and depression found:

- strongest evidence for **social support** and a **large social network** being as protective factors against depression
- weaker evidence of **social isolation** (living alone or without a partner) being associated with depression

Typology of social support

Social support typically conceptualized as having 3 or 4 components:

1. **Emotional support** – provision of trust, empathy, and love
2. **Instrumental support** – lending or giving resources such as money, time, skill
3. **Informational support** – advice or information necessary to solve a problem or make a decision
4. **Appraisal support** – evaluative feedback

Objective: Understand how Veterans' relationships with their close supports might be leveraged to improve outcomes for primary care patients with depression and at risk for suicide

“Being There” for Veterans



Background: Social connectedness and depression



Methods: Designing the study



Results: Key findings



Discussion: Study implications

Methods

Data source

In-person interviews

Data period

January 2018 - February 2019

Sample size

30 VA primary care patients with major depression and at least one “close support”

Data analysis

Thematic analysis

Inductive and deductive

Interview Question Domains

- 1) Description of close supports
- 2) Awareness and involvement of close supports in veterans' depression care
- 3) Barriers and facilitators to involving close supports in depression care
- 4) Preferences around an intervention to enhance involvement of close supports

“Being There” for Veterans



Background: Social connectedness and depression



Methods: Designing the study



Results: Key findings



Discussion: Study implications

Summary of study participants (N=30)



60.3 years old
(range: 27 – 72)



47% Married or
living with partner



80% Male



Household size = 2.1



13% Racial or
ethnic minority



Mean number of
close supports = 3.7
(range: 1 – 18)

Summary of study participants (N=30)



Mean PHQ-9 score = 14.8



50% on antidepressants past 6 months



27% screened positive for suicidality

Emergent theme: “being there”



Close physical contact

“He’s just there. I can go wrap myself around him and just get a hug. That feels good. So I just stay there and get a kiss and then go back to doing what we were doing.”



Frequent check-ins

“She’s always there for me. No matter what and if I don’t get a hold of her, she gets a hold of me.”



Perceived availability

“I’ve never had her cut a phone conversation short, or try to put me off. She just really tries to make me feel better.”

Skills useful to “being there”

Sensing the patient's emotional state

“I mean, she is pretty in-tuned. We've been together a long time, so she reads me pretty well. She knows where there's a point where it's not going to get any farther so she kind of stops pushing on things. She takes me past my comfort level for sure, but she also knows there's definitely this stage, 'Okay we worked enough on this'”



Communicate indirectly about it

“We just discuss what's going on. It's not exactly that I say I'm depressed. We just discuss what going on, and all the new stuff that's happening. All the fiascos.”

Barriers to a close support “being there”



Patient’s belief that they are a **burden**

Patient’s perception that close support’s knowledge of the patient’s depression would cause unnecessary **worry**



Patient’s tendency to be **self-reliant**

“He’s busy and unavailable at times. So it’s not really something he deliberately does. He’s got family and grandkids in the area, and he’s got friends that he goes camping, fishing. And he’s got a girlfriend so he spends time with her. There’s times when he’s just not—lack of availability for a better word.”

What does “being there” mean?

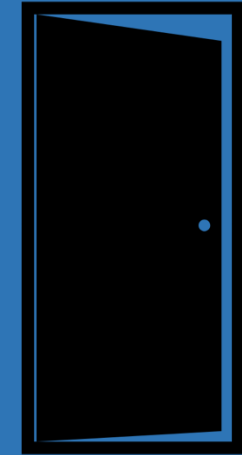
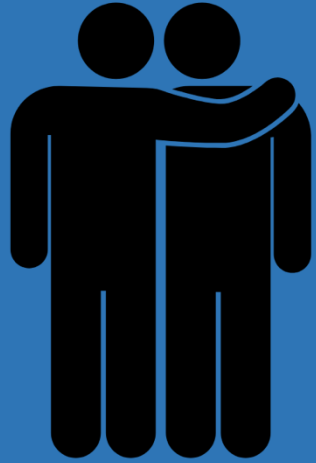
Physical proximity

or

Frequent and/or responsive social contact

or

Perceived availability



What are barriers to involving close supports?

Don't want to **burden** others

Don't want to **worry** others

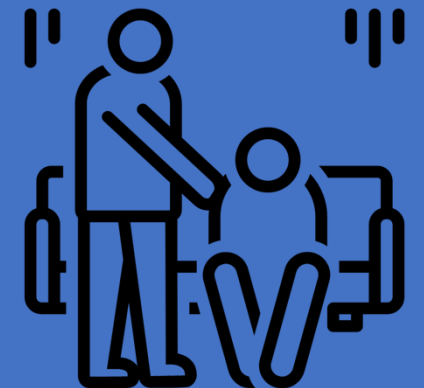
Desire to be **self-reliant**



“...she just has a way of letting you know, ‘Hey, I’m here. You’re not alone..’”

What skills allow a close support to “be there?”

- Sensing emotions
- Indirect communication



“Being There” for Veterans



Background: Social connectedness and depression



Methods: Designing the study



Results: Key findings



Discussion: Study implications

Implications

Veterans with depression view have a unique way of describing—and perhaps even conceptualizing—social support called “being there.”

Interventions that address “being there” are likely to be complex, nuanced, and require significant training.

The connection to the VA’s #BeThere suicide prevention campaign is intriguing.



Connecting study results

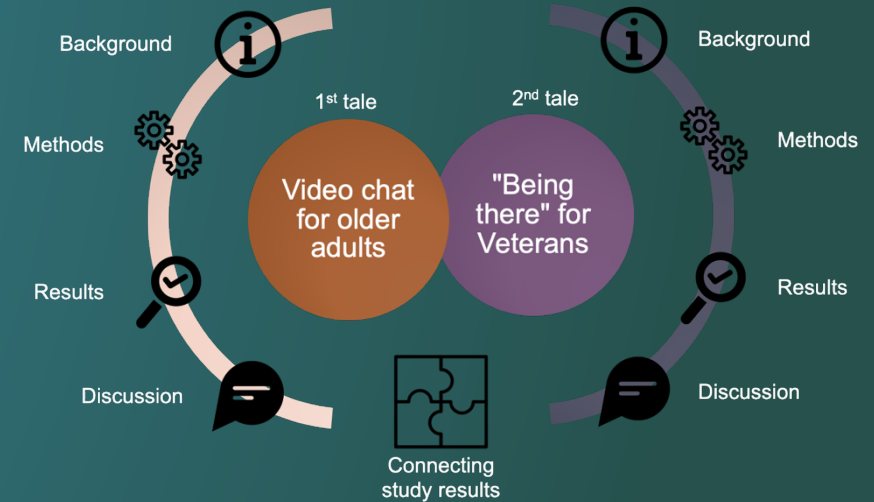
Generalizable to other populations?

- Younger adults
- Older veterans

Who to focus interventions on?

- People who are *currently* isolated
- People *at risk of becoming* isolated

Does video chat fulfill aspects of “being there” (frequent check-ins, close physical contact, perceived availability)?



The Importance of “Being There”: a Qualitative Study of What Veterans with Depression Want in Social Support

Journal of General Internal Medicine, February 2020

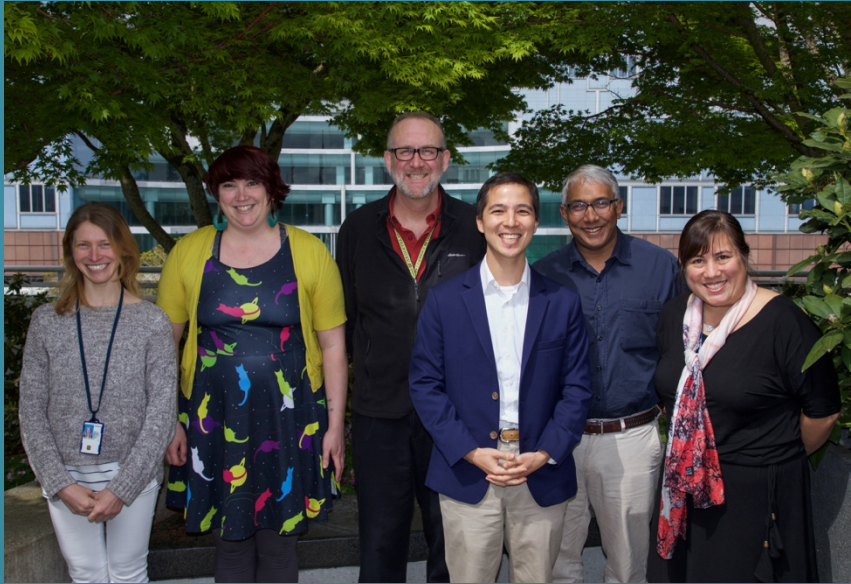
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Poll question

What surprised you the most about this presentation?

1. Nothing surprises me. Ever.
2. Loneliness may be getting more common in the U.S.
3. Using video chat—but not instant messaging—was associated with lower rates of depression in older adults.
4. Being able to “sense” how a Veteran with depression is feeling appears especially important to “being there” for him or her.
5. What presentation?