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A Resource Center for Today's Case Manager

Technology in Case Management: Telehealth for at-risk populations



Casey S. Pierce, PhD
Assistant Professor

University of Michigan School of Information



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Chief Industry Relations Officer
Commission for Case Manager Certification

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Agenda

- Welcome and Introductions:
 - Nancy Freeborne, DrPH, MPH, PA-C
Senior Advisor for Educational Programming
Health2 Resources
 - Vivian Campagna, MSN, RN-BC, CCM
Chief Industry Relations Officer
Commission for Case Manager Certification
- Presentation:
 - Casey S. Pierce, PhD
Assistant Professor
University of Michigan School of Information



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Learning Outcomes

After this presentation, the successful participant will be able to:

1. Describe the application and benefits of telehealth for vulnerable patients with chronic disease or ongoing conditions;
2. Discuss how to schedule and prepare for virtual visits with patients with complex medical, social and psychological needs;
3. Identify how to coordinate care for geriatric patients with multiple health providers via virtual platforms;
4. Evaluate how patient privacy concerns differ during a virtual visit.

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- Workforce Development Assessment
- 2017 Compendium
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COVID-19 Virus Information

To assist our community & protect our staff & volunteers taking several immediate steps.

READ MORE



Save the Date



OCTOBER 12-14, 2021

Virtual SYMPOSIUM

Access to stable internet



Language



Crowded living conditions



Barriers for at-risk populations

Computer-literacy



Low income



Shift to telehealth or telemedicine



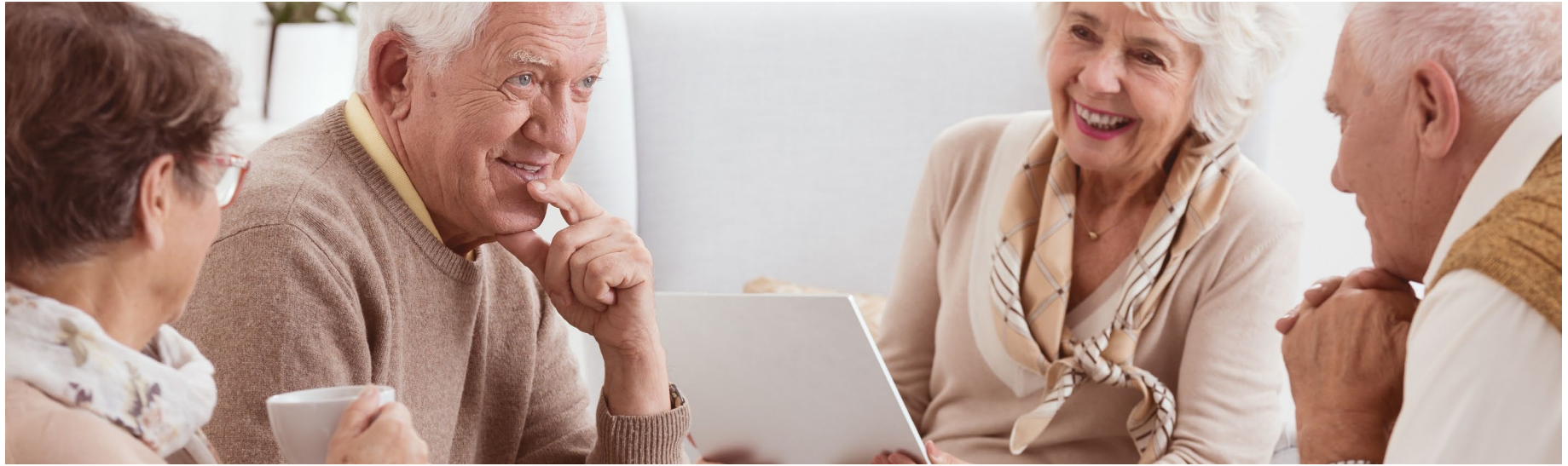


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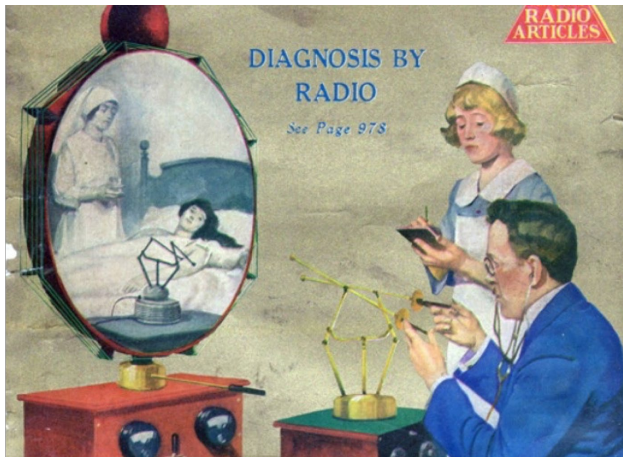
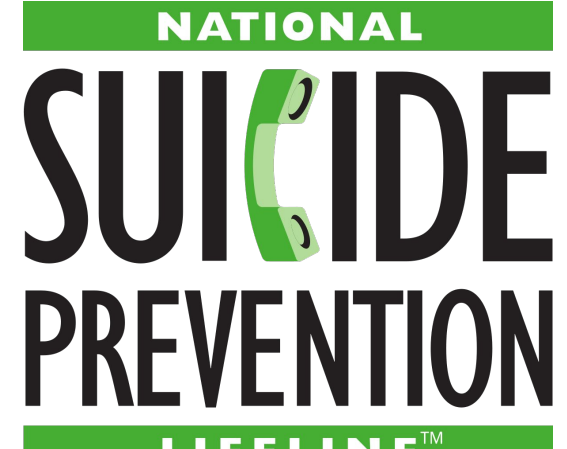
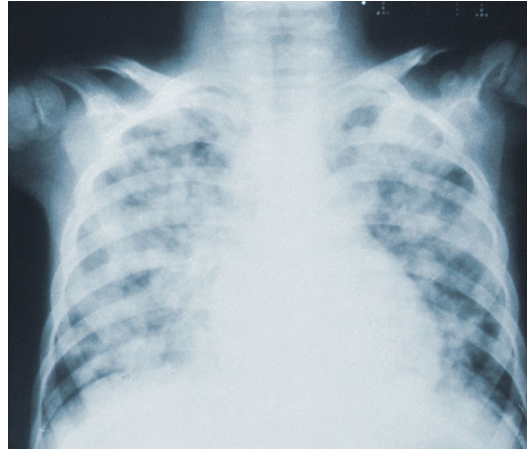
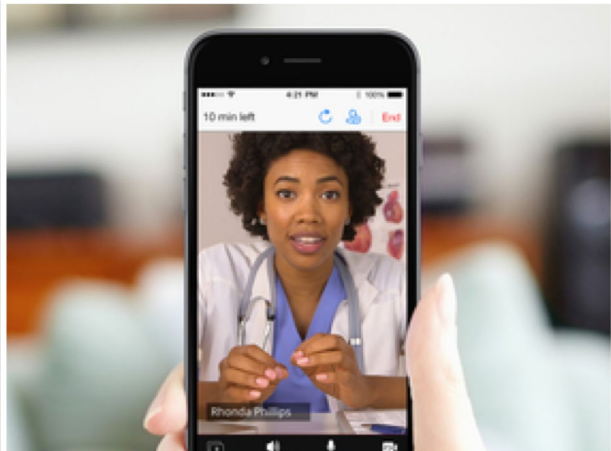
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(brief) History of Telehealth



Social + Technical Framework

-  People
-  Place
-  Technology

Case Study #1

Implementing telehealth at a community senior center



Case Study #2

Using voice assistants for health information seeking



Case Study #3

Understanding ecosystem of telehealth apps for mental health



**Social +
Technical**
People
Place
Technology



People

Technology typically is not designed by or for a diversity of users



Different Mental Models & Technology Frames



How we come to understand technology is shaped by our understanding of the world



Digital Divide among Underserved Populations



People who are older, lower SES, lower educational level are more distant from technology

Pew Research Center, 2017



Internet Use & Broadband Adoption

67% of seniors go online

51% of seniors have high-speed internet at home

Adoption varies greatly by age, income, & education

Pew Research Center, 2017







Care networks important for technology access



Caregivers can have important influence on how at-risk populations can use, access and troubleshoot technology

People Takeaways

-  What are my client's existing mental models / framing of technology in their daily activities?
-  How might my client's age, educational background, SES influence their adoption of telehealth?
-  Does my client have adequate broadband access at home or at a local, safe location nearby?
-  Does my client have people in their care network to help them set-up and troubleshoot any issues prior to or during their telehealth appointment?



Place

Telehealth changes the physical boundaries of where we can access care.



Infrastructure & Resources

Challenges implementing telehealth in rural areas or areas with lacking broadband access

Available resources and support on-site at community center
(e.g., volunteers, computer lab, social interactions)







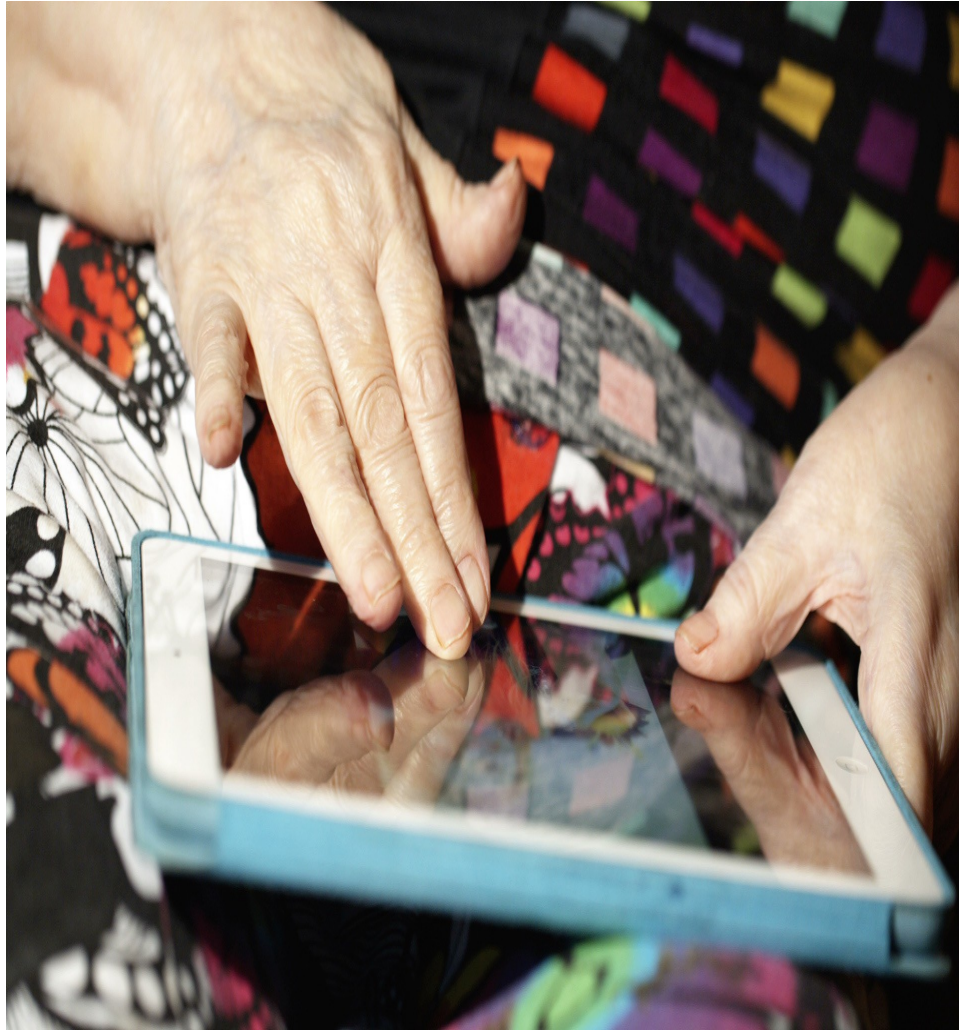
Privacy Concerns

For some clients, their home may not be the most private location to use telehealth:

- private, quiet space to share confidential information
- sharing devices or using public Wi-Fi
- safety concerns at home

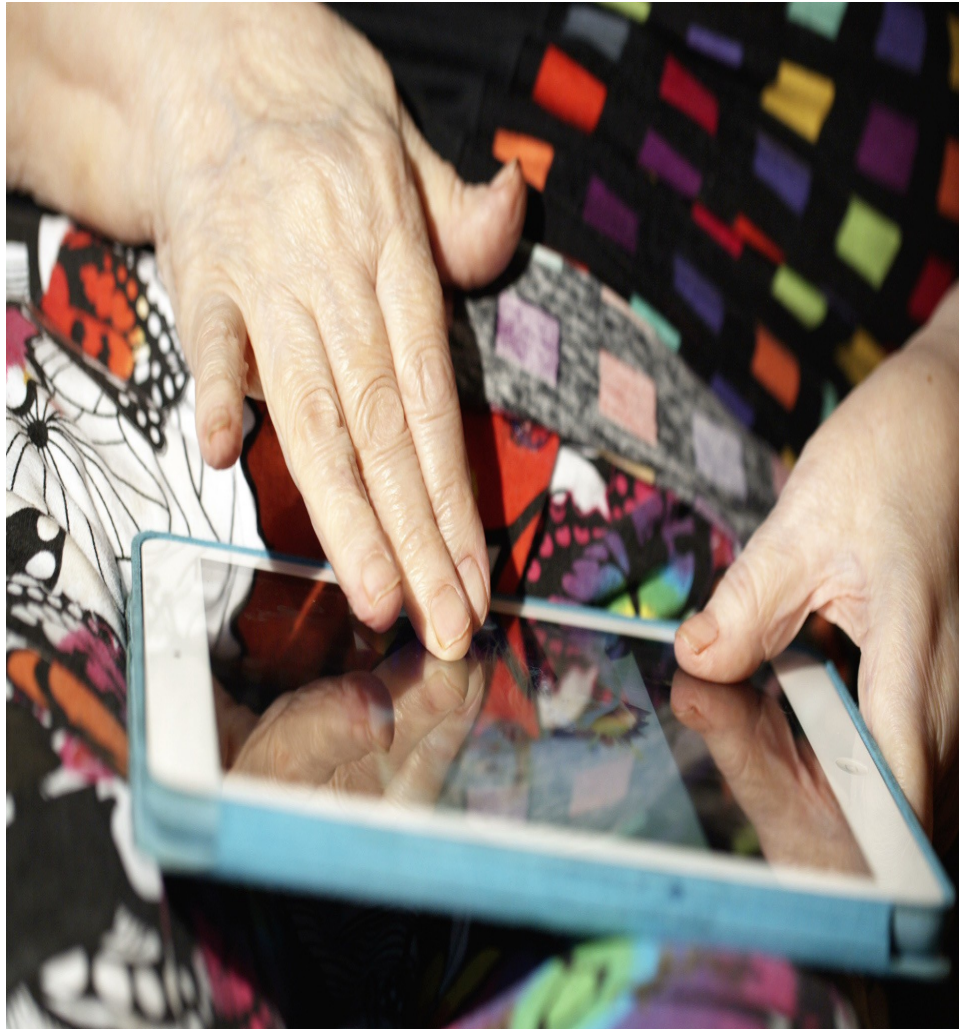
Place Takeaways

-  Does my client have adequate broadband access at home or at a local, safe location nearby?
-  If my client needs to take a telehealth appointment outside the home, will they need to access via public wifi?
-  Does my client feel safe to access telehealth at home?
-  Does my client feel they will be in a private space to discuss confidential health information openly?



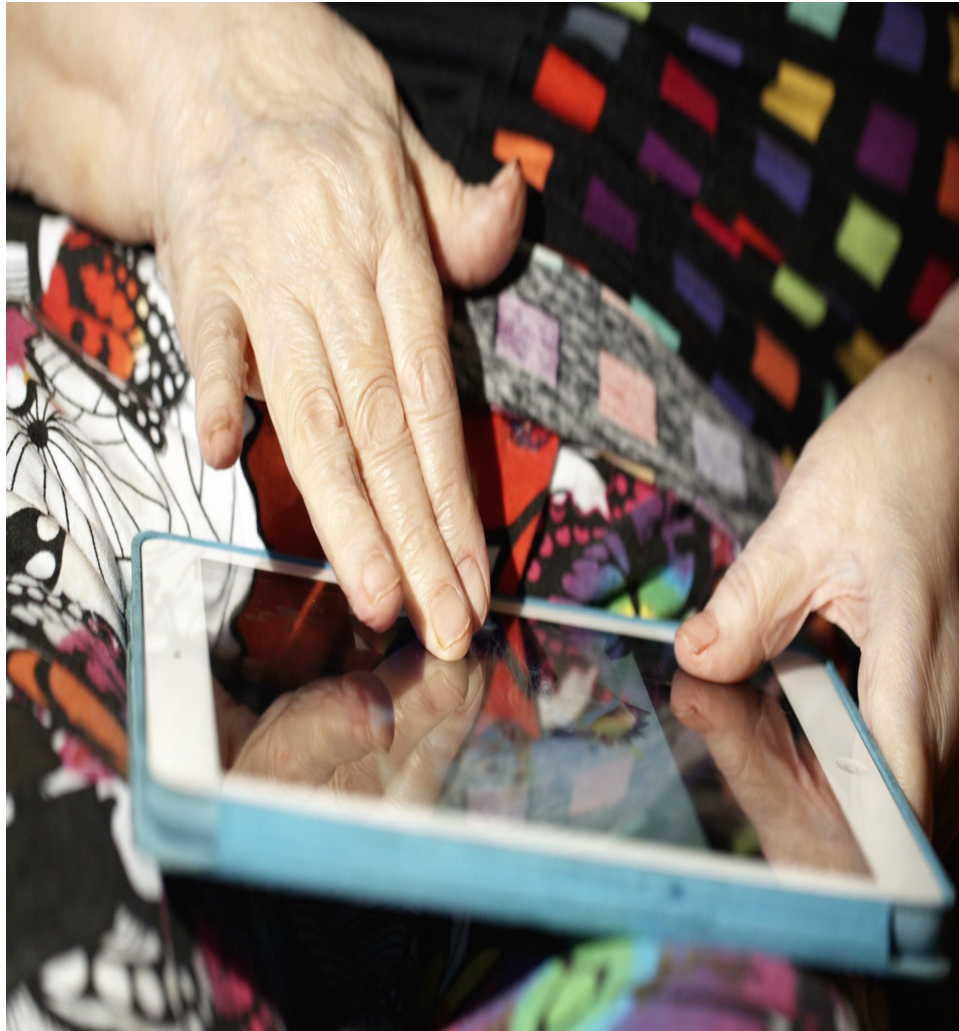
Technology

Important to align the technology with the social factors (people + place) before deciding on the most advanced telehealth offering available



Technology

Different modalities can present barriers for differently abled technology users.



Understanding the telehealth ecosystem






Direct-to-consumer
telehealth

vs.

Hospital/provider
telehealth

Technology Takeaways

-  Does the telehealth technology my client will use align with their social factors?
-  What is the simplest telehealth option for my client's given needs?
-  Can my client establish the continuum of care with the telehealth option?

Case Study #1

Implementing telehealth at a community senior center



Case Study #2

Using voice assistants for health information seeking



Case Study #3

Understanding ecosystem of telehealth apps for mental health



**Social +
Technical**
People
Place
Technology

Case Study #1

Implementing telehealth at a community senior center

- *Located in rural area of SE Michigan*
- *Not a residential facility*
- *Members 50+ years old*
- *1,000+ members*



People

Seniors' general technology adoption & access impacted their willingness to use telehealth.

Place

Supporting older adults to “age in place” requires moving sites of care beyond traditional clinical boundaries. Rural location limited broadband access.

Technology

Adding “high-touch” to “high-tech”

Case Study #2

Using voice assistants for health information seeking

- *Pilot study of 35 older adults (75+) using voice assistants (VA) devices*
- *Participants used VA devices for simple and complex health topics*
- *Analyzed how participants interacted with VA devices*



People

Expectations that VA devices should engage in conversation like humans, but most VA's not equipped to provide full answers to health queries.

Place

Ease of use accessing at home during personal routines.

Privacy concerns using VA devices; "is my device always listening to me?"

Technology

Engaging without screen simple communication form. However, difficult for users to reformulate their health queries in ways that the VA device will understand.

Implications for receiving misleading, inaccurate information.

Case Study #3

Understanding ecosystem of telehealth apps for mental health

- *Analyzing over 100+ telemental health mobile apps in the Apple Store and Google Play*
- *Analyzing policies and features for these apps*



People

Many of these apps marketed for technologically proficient users.

Marketed for consumers who expect on-demand care and flexibility to change providers.

Not appropriate for those with urgent/crisis mental health needs.

Subscription costs can still be cost prohibitive.

Place

There are still telehealth policies that limit accessing providers across state lines.

Consumers have flexibility to access wherever they are as long as they have internet access.

Technology

Different features to connect with therapists using talk therapy (teleconferencing, chat, journaling, guided meditation)

Privacy concerns using D2C apps.

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Elizabeth Marquis
University of Michigan Edward Ginsberg Center



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Telehealth Providers Target Growing Senior Care Market

<https://mhealthintelligence.com/news/mhealth-telehealth-providers-target-growing-senior-care-market>

Telehealth Intervention Programs for Seniors

<https://seniorcitizens.westchestergov.com/nutrition-health-safety/telehealth-intervention-programs-for-seniors>

Thank you!

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