

Telemedicine /Video-Based Data Collection

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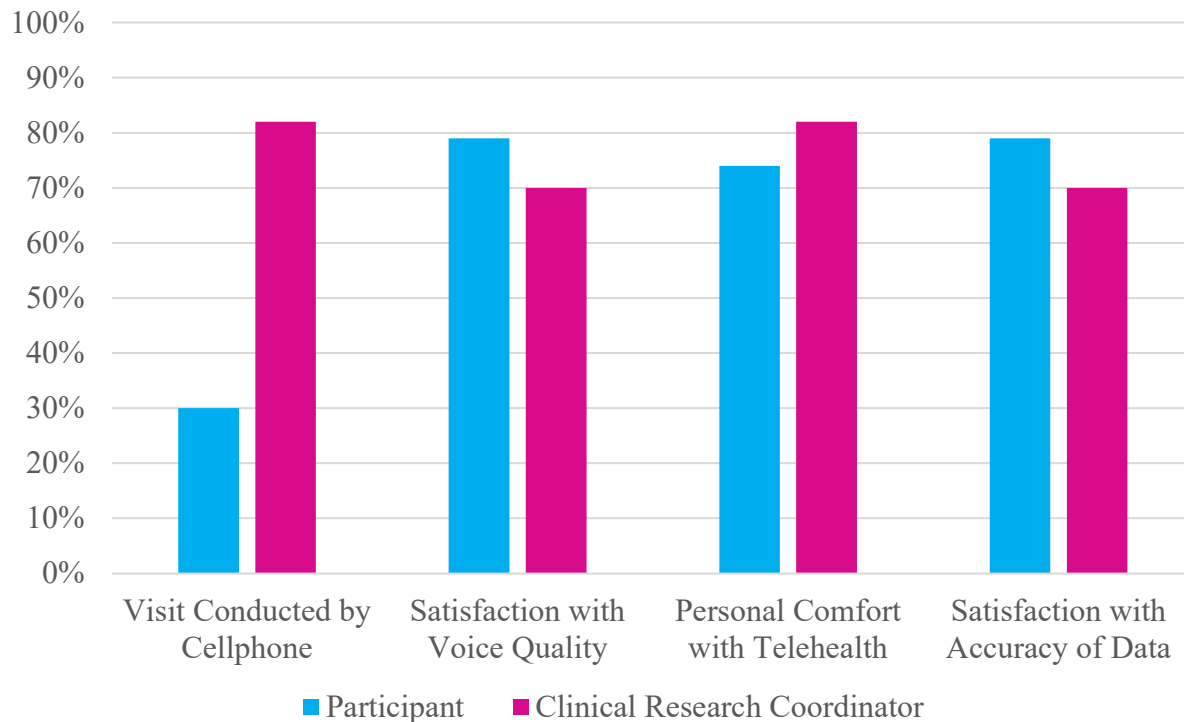
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I Digress

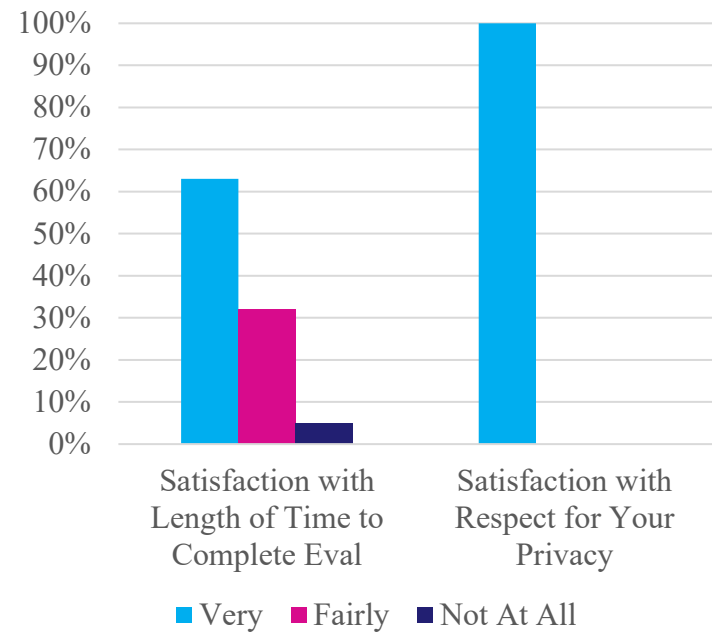
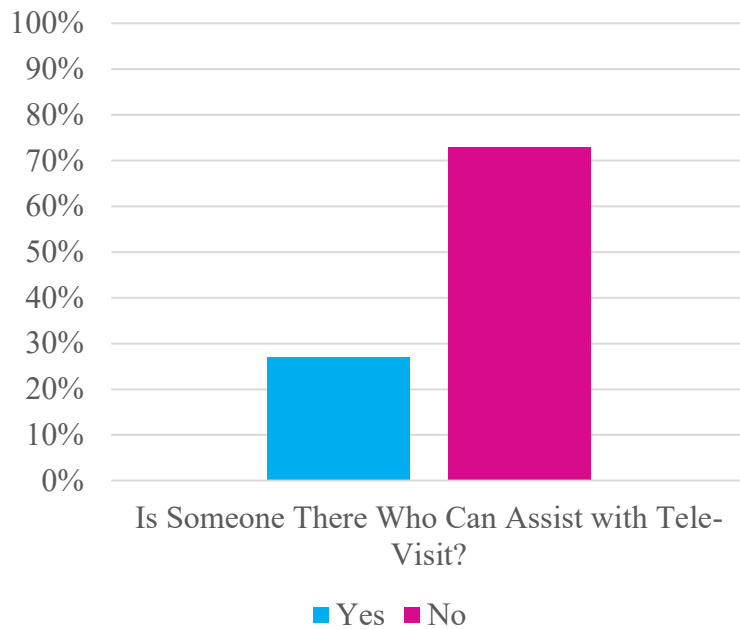
Telephone visit Satisfaction Questionnaire

Televisit Satisfaction Questionnaire Items Shared By Both Participants and Clinical Research Coordinators



Telephone visit Satisfaction Questionnaire

Televisit Satisfaction Questionnaire Items Specific to Participants



Telemedicine/Video

- Tele-video more closely mimics the clinical experience than phone visit
- Has demonstrated effectiveness in conducting sensitive physical exams including neurological and psychiatric exams.
- Established utility in dementia management
- Potentially cheaper and more convenient
- Most patients (and providers) are relatively unfamiliar with telemedicine

Tele-Video in Research

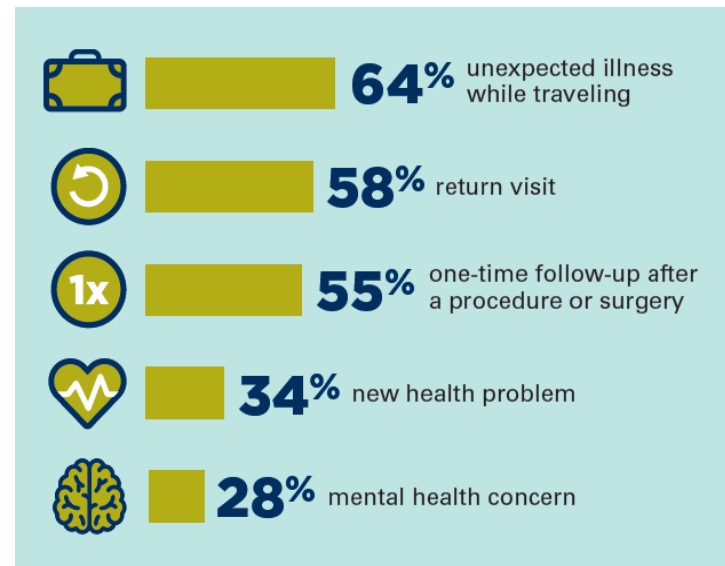
Issues for implementation

- Acceptability and Satisfaction
- Reliability: Achieving reliable data and diagnosis
- Comparability: Is data interchangeable with F2F
- Change: Detection of progression
- Setting: home vs. center/assist
- Burden: Both participant and staff
- Sampling Bias: Who is excluded with this medium

Interest in Telehealth Among Adults Age 50-80

- Only 4% had a telehealth visit
- Perception: Telehealth vs. In-person
 - Convenience: same or better 65% better(T)
 - Clinically:
 - Feeling cared for (56%) IP
 - Communicating (55%) IP
 - Time with HCP (53%) IP
 - Quality of care (58%) IP

When Telehealth holds advantage¹



Latino & African American Concerns²

- Privacy and Confidentiality

¹ Survey: N=2,256; resembles US population; 50-80 yo; May 2019

² George et al 2012

Neurological Exam Comparability

- Time:
 - remote exam 12.6 min (8-21 min) vs Inperson 8.9 min (5-18 min)
- Kappa: ranged from 0.32 (muscle tone) - 0.82 (language) fair to excellent agreement
- Kappa in stroke evals: (weighted) 0.85-0.99.

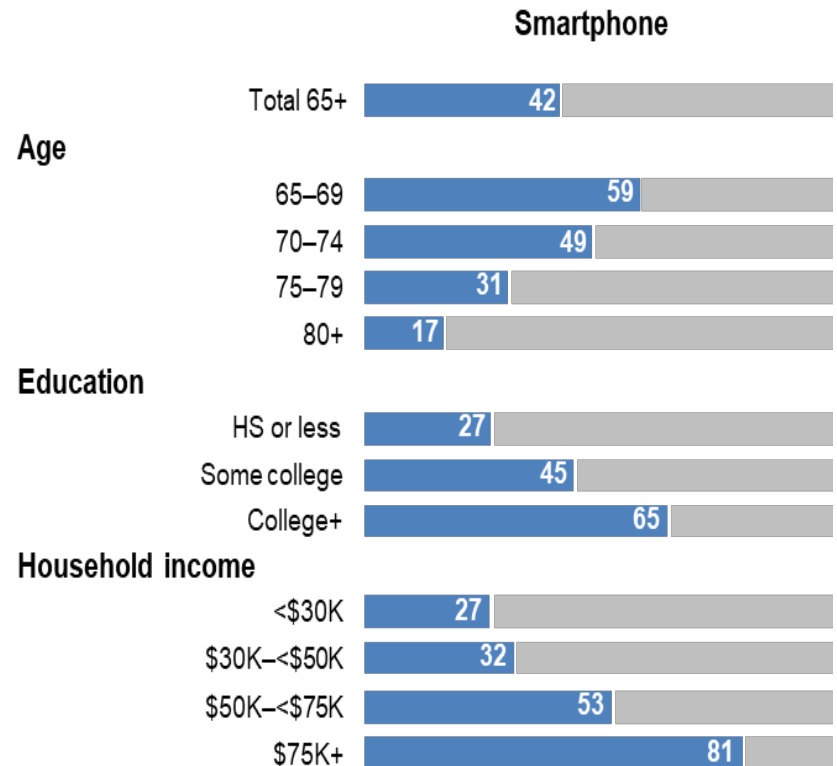
Tele-neuropsychology

- High comparability for discriminating diagnostic groups for TM vs. IP
- Limitations
 - Most studies assess TM in clinic, with standard equipment
 - Minimal technical difficulty
 - Reliability assessed within brief intervals (2-3 hrs)
 - Little data on change over time
 - Few studies conducted in-home or with different platforms***

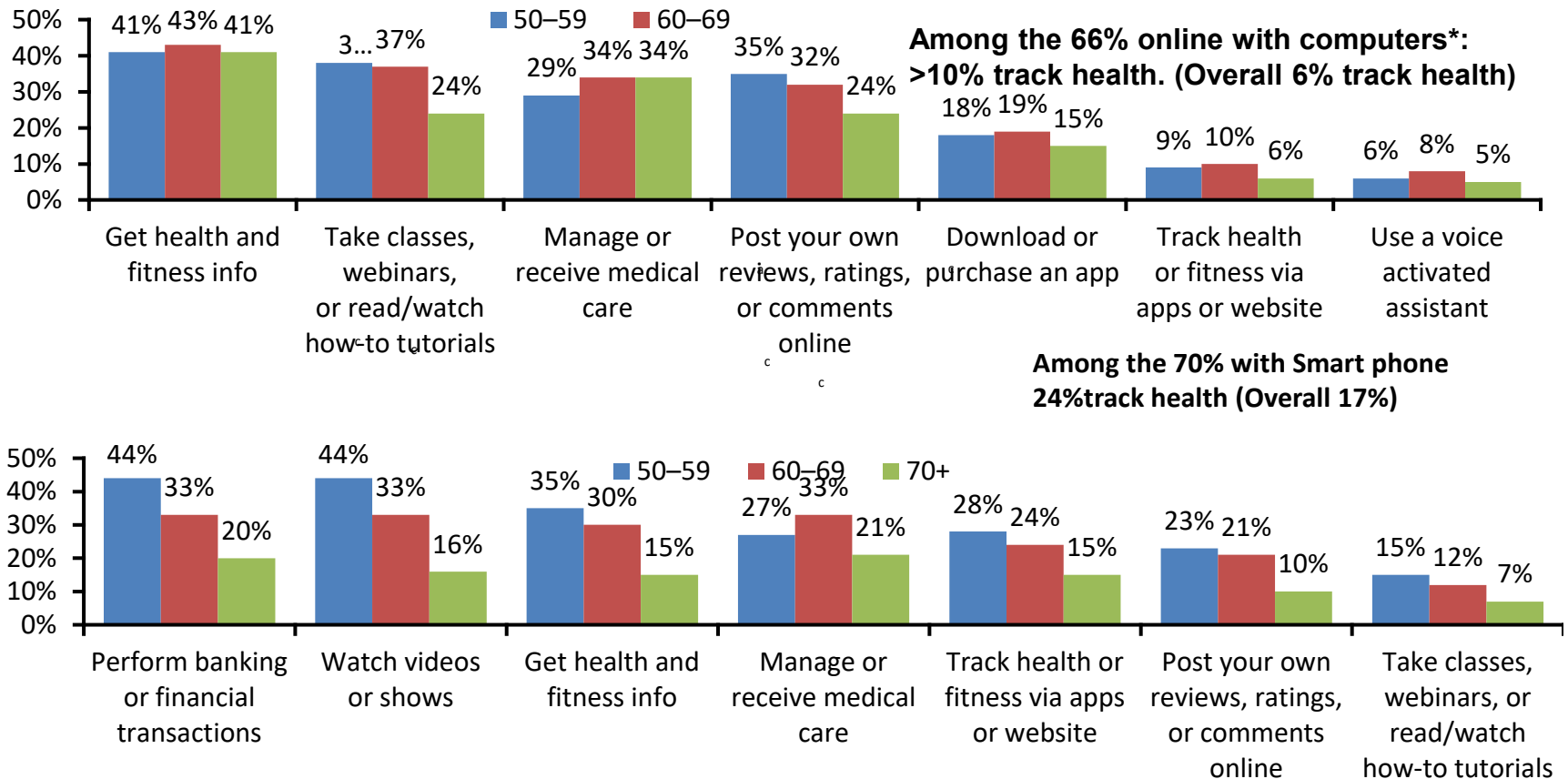
Who uses; Who excluded

- Center assisted:
 - Provides human and technical assistance
 - Helpful in rural or remote areas
- Home use:
 - Extends reach
 - Requires resources and equipment, excluding URG the very old , or those living alone

Roughly four-in-ten seniors are smartphone owners^{2,b}



What do (Cognitively Intact) Older Adults do online & on phone



Summary

- Tele(Video)medicine
 - May extend outreach
 - Increased convenience; if time is managed well
 - May reduce burden; some comfort of being in home
 - Highly reliable diagnostically, especially for clinical exam
 - Increase efficiency; fewer missed visit, or delays with travel, more cost effective
- Challenges
 - Limited reach for URG
 - Unknown reliability for in-home assessment
 - Speech recognition over internet may hinder cognitive assessment (IH vs IC)
 - Site distractions may not be easy to monitor
 - Dependent on technology availability and expertise
 - May reduce biomarker characterization
- Recommendations: Strong for clinical evaluation; limited for cognitive until stable platforms can be assured

