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Supplemental Materials for

Qualitative Interview with Older Adults and Caregivers on their Perspectives with Self- Management and Remote Vital Sign Monitoring

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- Appendix S1

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Appendix S1

EBE (OLDER ADULTS & CAREGIVERS) INTERVIEW GUIDE: CLINICAL DETERMINATION AND USABILITY TESTING FOR CONTACTLESS MONITORING AND REMOTE CARE FOR OLDER ADULTS

Phase 1: Clinical Needs Assessment

DEMOGRAPHICS

I am a...

Older Adult (60+ years old) / Caregiver for an Older Adult

What is your age group?

Older Adult: 60-65 / 66-70 / 71-75 / 76-80 / 81+

Caregiver: n/a (no range given)

What language(s) do you speak, read and write?

Options: Arabic, Cantonese, English, Filipino/Tagalog, French, German, Hindi, Indigenous language (please specify), Japanese, Korean, Mandarin, Other, Persian/Farsi, Prefer Not to Answer, Punjabi, Russian, Spanish, Urdu, Vietnamese

Do you identify with the following? (optional)?

Options: Arab, Black, Chinese, Filipino, First Nations, Indigenous peoples of Canada, Inuit, Japanese, Korean, Métis, South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.), Southeast Asian (e.g., Cambodian, Laotian, Thai, Vietnamese, etc.), West Asian (e.g., Afghan, Iranian, etc.), White, Latin, Central, or South American (e.g., Brazilian, Chilean, Colombian, Mexican, etc.)

What city/town are you currently living in?

How would you describe your living arrangement?

Options: alone at home, with a partner (spouse), with caregiver, long-term care housing, private senior residence, etc.

How close are you to the nearest hospital/clinic?

Example: < 5km / 5-10km / 11-20km / 21km+

How would you describe the size of the current residence?

Options: <200, 200-1000, 1001-5000, 5001-10,000, 10,001-50,000, 50,001-100,000, 100,001-499,999, 500,000+

[Patients Only] Do you have a caregiver? Who acts as a ‘caregiver’ for you? (e.g., family, friend)

What kind of support do you get from this caregiver?

Prompts: Assist with activities of daily living? Transportation? Accessing healthcare services (e.g., making appointments)? Companionship? Medication monitoring? Meal preparation? Assist with mobility and transfers? Housekeeping?

[Patients Only] What are your medical history/comorbidities?

[Caregiver Only] Who do you act as a ‘caregiver’ for? What kind of support do you provide?

Prompts: Assist with activities of daily living? Transportation? Accessing healthcare services (e.g., making appointments)? Companionship? Medication monitoring? Meal preparation? Assist with mobility and transfers? Housekeeping?

Do you experience any challenges with the following daily activities? (EQ-5D-5L)

Under each heading, please tick the ONE box that best describes your health TODAY

MOBILITY	
I have no problems in walking about	<input type="checkbox"/>
I have slight problems in walking about	<input type="checkbox"/>
I have moderate problems in walking about	<input type="checkbox"/>
I have severe problems in walking about	<input type="checkbox"/>
I am unable to walk about	<input type="checkbox"/>
SELF-CARE	
I have no problems washing or dressing myself	<input type="checkbox"/>
I have slight problems washing or dressing myself	<input type="checkbox"/>
I have moderate problems washing or dressing myself	<input type="checkbox"/>
I have severe problems washing or dressing myself	<input type="checkbox"/>
I am unable to wash or dress myself	<input type="checkbox"/>
USUAL ACTIVITIES (e.g. work, study, housework, family or leisure activities)	
I have no problems doing my usual activities	<input type="checkbox"/>
I have slight problems doing my usual activities	<input type="checkbox"/>
I have moderate problems doing my usual activities	<input type="checkbox"/>
I have severe problems doing my usual activities	<input type="checkbox"/>
I am unable to do my usual activities	<input type="checkbox"/>
PAIN / DISCOMFORT	
I have no pain or discomfort	<input type="checkbox"/>
I have slight pain or discomfort	<input type="checkbox"/>
I have moderate pain or discomfort	<input type="checkbox"/>
I have severe pain or discomfort	<input type="checkbox"/>
I have extreme pain or discomfort	<input type="checkbox"/>
ANXIETY / DEPRESSION	
I am not anxious or depressed	<input type="checkbox"/>
I am slightly anxious or depressed	<input type="checkbox"/>
I am moderately anxious or depressed	<input type="checkbox"/>
I am severely anxious or depressed	<input type="checkbox"/>
I am extremely anxious or depressed	<input type="checkbox"/>

Self-Management (*Patient Activation Measure PAM-13*)

1. I am the person who is responsible for taking care of my health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
2. Taking an active role in my own health care is the most important thing that affects my health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
3. I am confident I can help prevent or reduce problems associated with my health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
4. I know what each of my prescribed medications do.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
5. I am confident that I can tell whether I need to go to the doctor or whether I can take care of a health problem myself.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
6. I am confident that I can tell a doctor or nurse concerns I have even when he or she does not ask.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
7. I am confident that I can carry out medical treatments I may need to do at home.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
8. I understand my health problems and what causes them.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
9. I know what treatments are available for my health problems.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
10. I have been able to maintain lifestyle changes, like healthy eating or exercising.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
11. I know how to prevent problems with my health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
12. I am confident I can work out solutions when new problems arise with my health.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A
13. I am confident that I can maintain lifestyle changes, like healthy eating and exercising, even during times of stress.	Disagree Strongly	Disagree	Agree	Agree Strongly	N/A

How do you manage your overall well-being and health?

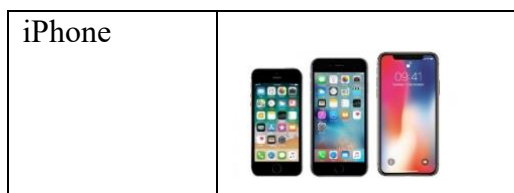
Prompts: Diet, brain health, physical health, other kinds of health


What healthcare provider(s) have you met with during the past year/currently meeting? (e.g., family physician, nurse practitioner, nurse, PT/OT, specialists, etc.)

- Have you had any virtual visits (e.g., phone, video call, etc.)?
- How many times did you use each service over the past year? Has this frequency changed over the years?
- What were some challenges with the indicated services? *Prompts:* distance, provider availability, transportation, etc.

REMOTE MONITORING

What kind of devices do you have experience using?



Android Phone	
Apple Tablet (iPad)	
Other Tablet (please specify)	
Computer	
Smartwatches (e.g., Fitbit, Apple Watch)	
Other Wearables (e.g., fall alert necklace, pulse oximeter,	

glucose meter, etc.)?	
Other (please specify)	

Do you have access to the internet?

[*Patients Only*] Have you ever monitored your own vital signs such as HR, blood pressure, blood glucose or oxygen saturation? / [*Caregivers Only*] Have you monitored vital signs such as HR, blood pressure, blood glucose or oxygen saturation?

If yes, why and how frequent?

Prompts: because you were interested in managing your own health? Because you wanted to measure and bring information to HCP? To manage a health condition? Etc.)

Examples: taking your own blood pressure using a monitor and cuff, measuring blood glucose levels, etc.

NOTE TO INTERVIEWER: Moving forward, as follow-up to responses about remote monitoring, add questions specifically about using video cameras. As an example, if they mention that they think remote monitoring is important – clarify what kind of technology they think would be ideal, and if the use of video cameras to monitor would be efficient.

[*Patients Only*] What are your thoughts on having your vital signs measured and monitored while being at home?

Definition: Remote Monitoring Definition: using technology and medical devices to gather health data (e.g., vital signs) to be sent wirelessly to healthcare professionals at certain frequency.

[*Caregivers Only*] What are your thoughts on measuring and monitoring vital signs of those you are caring for at home?

Definition: Remote Monitoring Definition: using technology and medical devices to continuously gather health data (e.g., vital signs) to be sent wirelessly to healthcare professionals at certain frequency.

Who would you want to share this information (vital signs) with?

Prompts: healthcare provider (if so, which ones?), caregiver, family, etc.

Do you have concerns about being monitored remotely? What do you think could be done to mitigate some of these concerns?

Follow-Up: How can we build confidence in the use of video cameras for monitoring?

What do you think are the most important factors to consider? Can you expand on what you mean by this?

Prompts: privacy, stigma, ease of use, perceived benefit, other

In what situation would you be willing to use remote monitoring? Why would you want to use remote monitoring in these situations?

Prompts: How do you want the remote monitoring to work?

Prompts: Do you want to be able to turn it on? Automatically turn on/off? How subtle do you want it to be?

Prompts: How would you like this remote monitoring system to be integrated in your daily routine?

[*Patients Only*] Do you see remote monitoring being able to help you manage your health/conditions? How so or why not?

Prompts: Who (Health conditions? Age? Demographic of patients) do you think this would be helpful for?

E.g., having vital signs to share with HCP, being able to better take care of own health, etc.

[*Patients Only*] What would be helpful for you to manage your health while you stay in your own home/place of choice?

[*Caregivers Only*] What would be helpful for you to care for someone in their own home/place of choice?

Any other comments, questions, or feedback?