

A Nurse-Led Care Model to Improve Access to Rural Survivorship Care

Pam Baker DeGuzman, PhD, RN, CNL
Associate Professor, UVa School of Nursing

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Rural Cancer Survivors

** Survivorship phases: acute, extended, permanent*

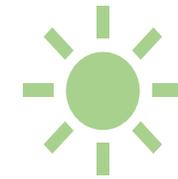
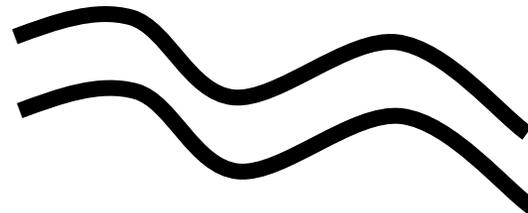
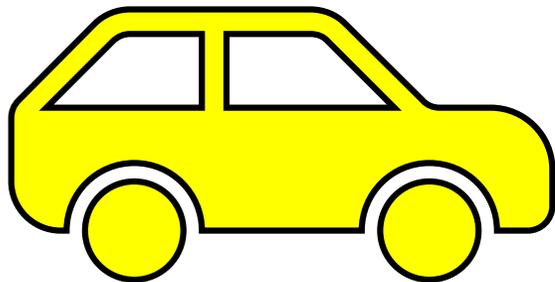
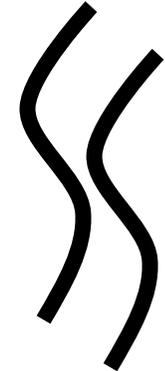
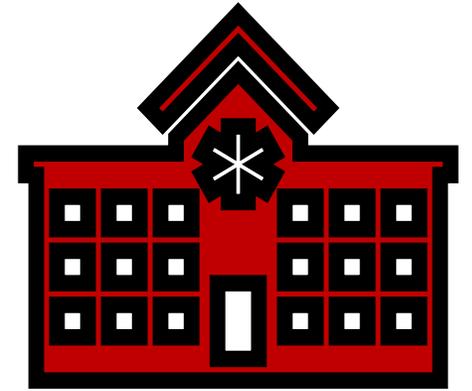
- Longer distance to active cancer care
- Limited PCP education in survivorship
- Lower survival rates, lower quality of life



Traveling for Post-Treatment Care

Rural survivors are less willing to travel for supportive care than for treatment *(Lavernge, Pesut, Opie)*

Travel distance is independently associated with more unmet needs and poorer QoL during survivorship *(So)*





Identifying Barriers to Navigation Needs of Cancer Survivors in Rural Areas

October 2015 Vol 6, No 5

- Rural survivors do not know how to access survivorship resources once primary treatment is completed
- Rural survivors do not always have supportive care needs recognized/addressed during treatment

✓ ***How do we connect rural survivors with appropriate care once treatment has concluded?***

Survivors May Not Be Ready for SCP Information at the End of Treatment

- SCPs? “...oh that pile of papers”
- At their “end of treatment” appointment, focus on having survived – not what is coming next
- Knowledgeable about *medical* aspects of survivorship.
 - ✓ ***Survivorship assessment and education needs to occur at a time distant from the end of treatment***
 - ✓ ***Uncoupled from the medical aspects of treatment***

Survivorship Care Plans: Rural, Low-Income Breast Cancer Survivor Perspectives

👤 Pam Baker DeGuzman  Kaitlyn Colliton Carmel J. Nail Jessica Keim-Malpass 

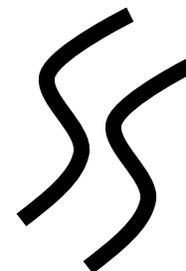
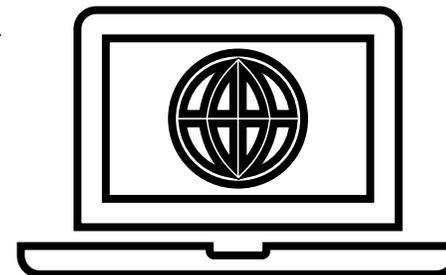
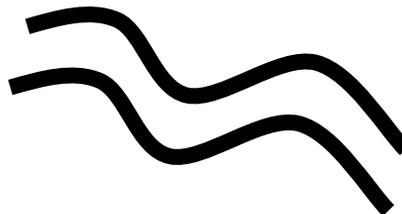
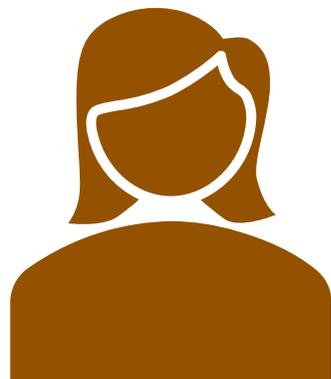
📄 Survivorship Care Patient Education

CJON 2017, 21(6), 692-698 DOI: 10.1188/17.CJON.6



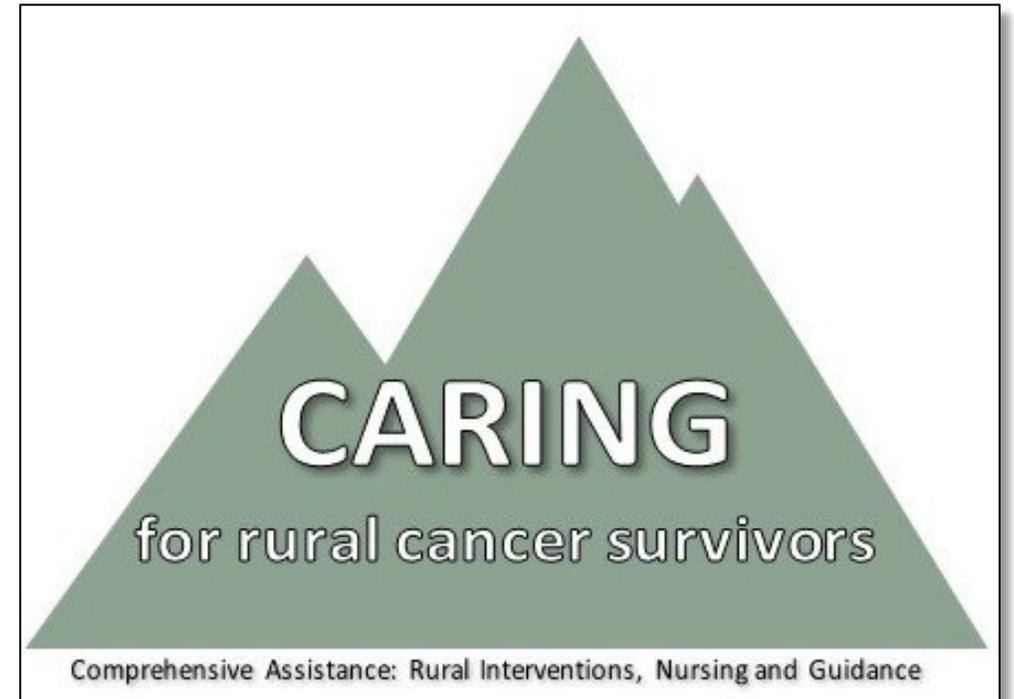


Hypothesis: *Delivering survivorship care to rural survivors after the end of active treatment, will reduce unmet needs during extended survivorship.*



CARING is a telemedicine-delivered nursing visit for cancer survivors delivered several weeks after treatment has been completed. The intervention has three main components:

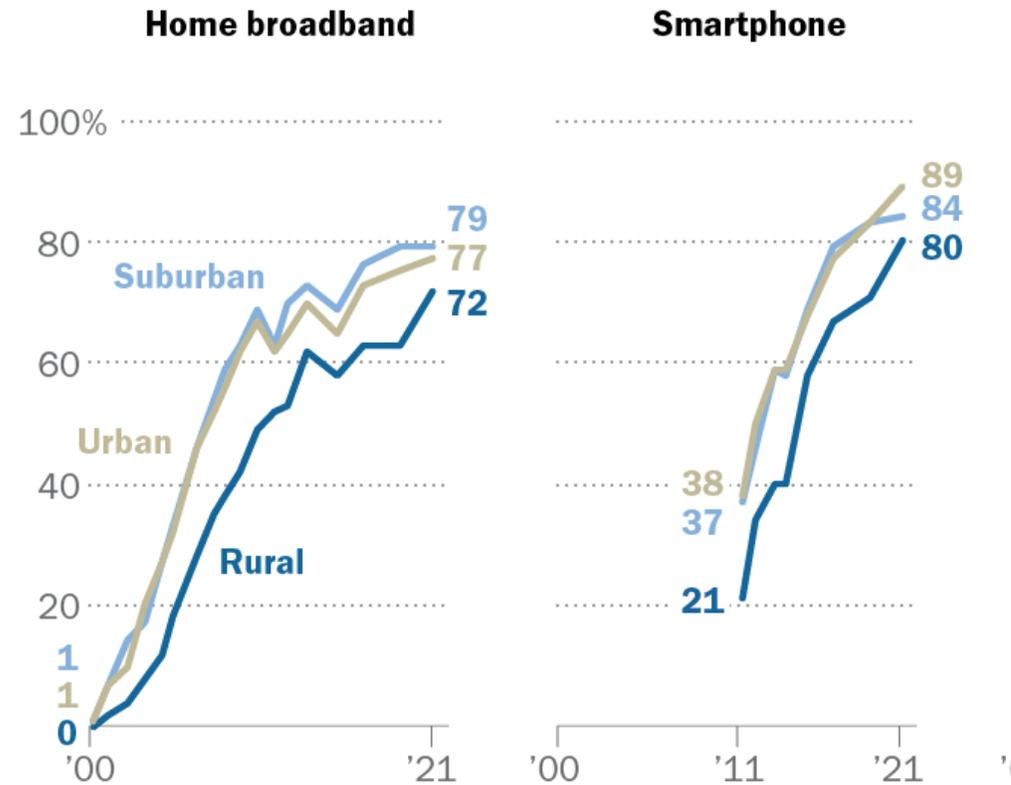
**assessment,
education, and
referral.**



Known Barriers to Telemedicine in Rural Areas

- Rural residents' broadband access
 - Fewer have broadband
 - Fewer places to go if you do not have broadband
 - Less likely to own a smartphone

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

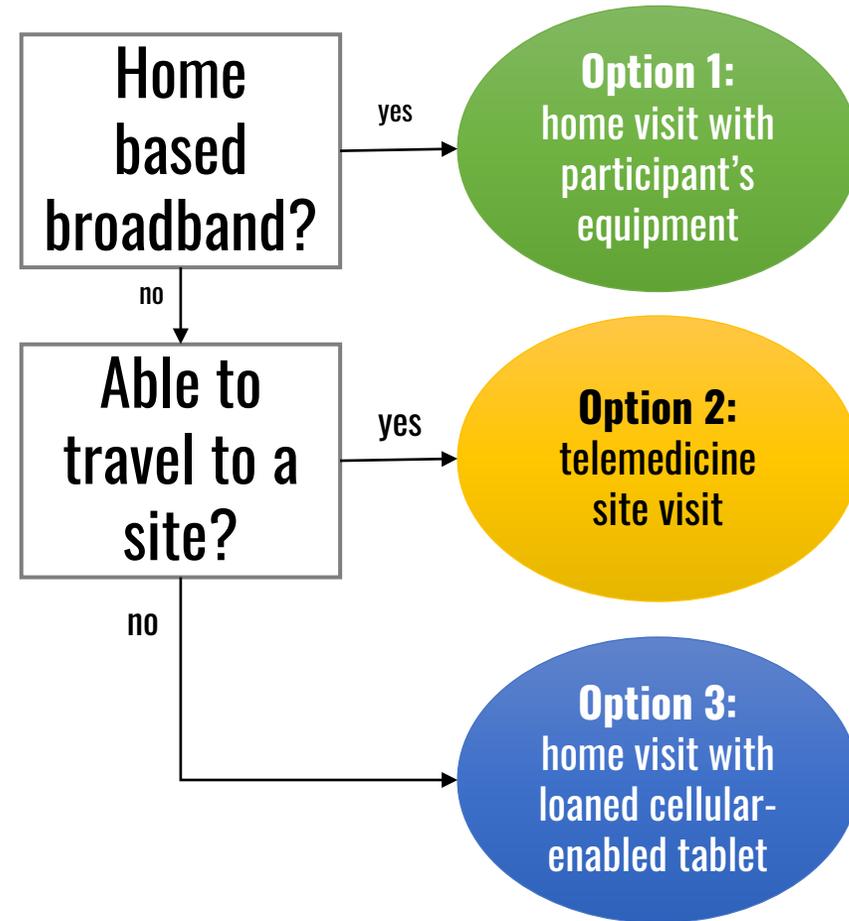


Source: Survey conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER

Known Barriers to Telemedicine in Rural Areas

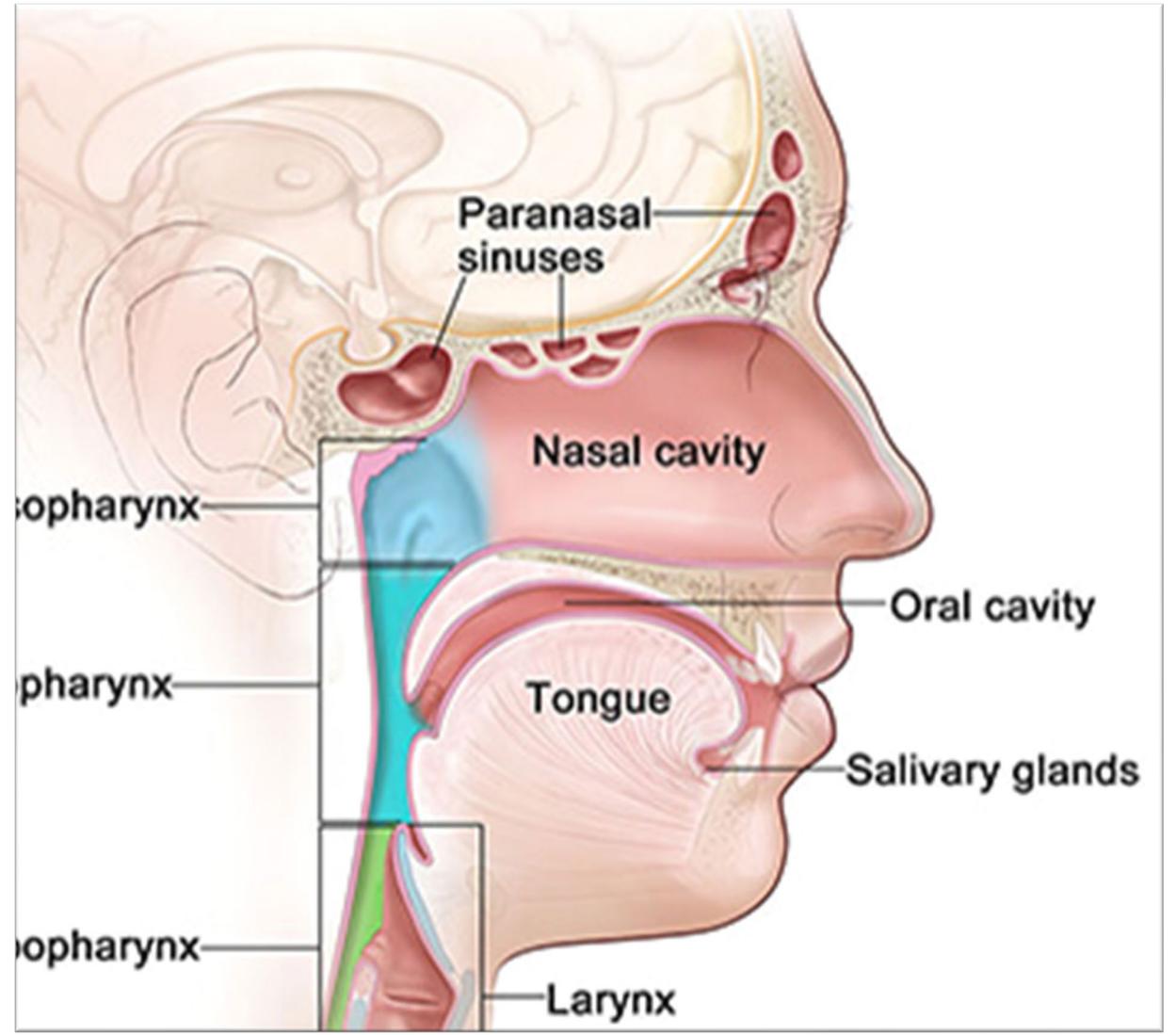
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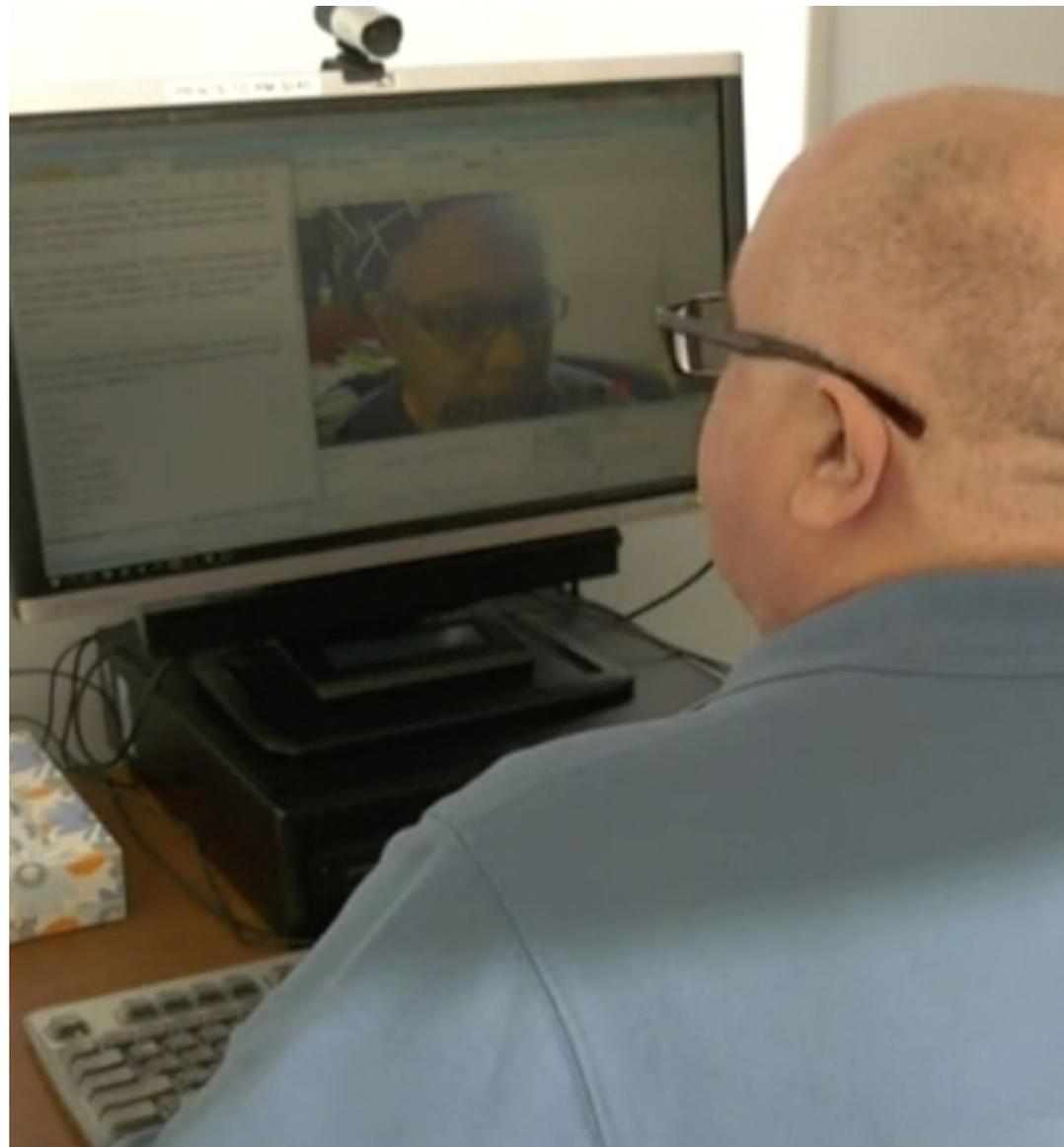


HNC Survivors' Persistent "Unmet Needs"

2nd highest rate of suicide.

- Two-thirds have unmet needs during survivorship
- 3.7 unmet needs per person 4-5 years post-treatment
- Unmet Needs significantly impact HNC survivors' Quality of Life

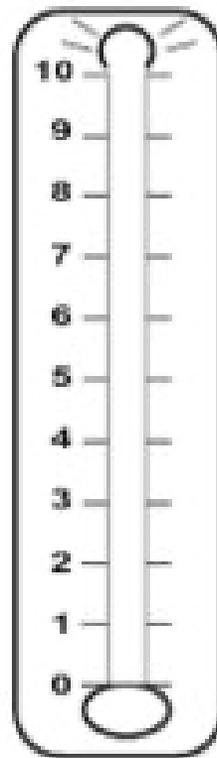




FOR MEASURING DISTRESS

PLEASE circle the number (0-10) that best describes the level of distress you have been experiencing in the past week including today.

Distress



Distress

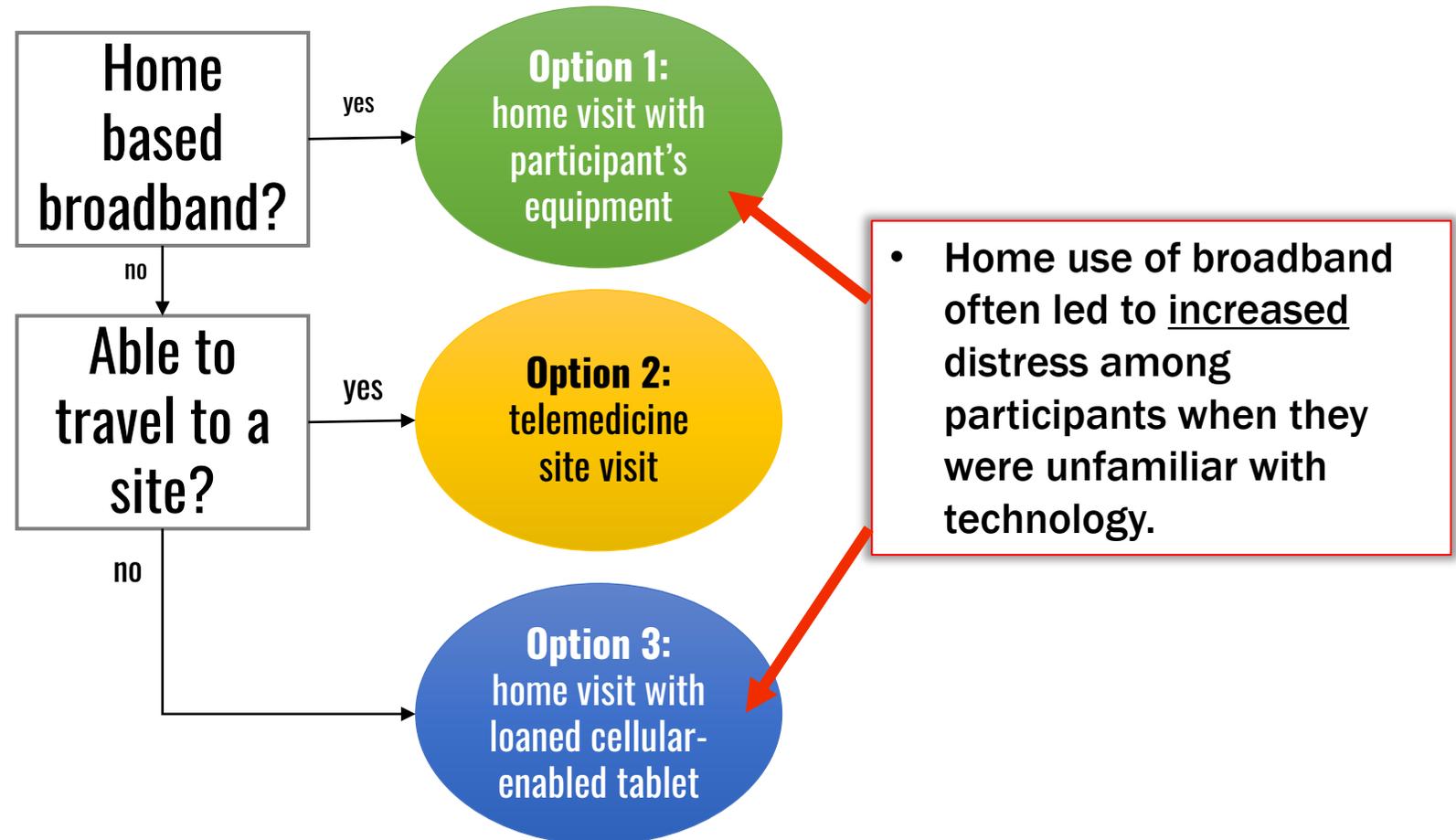
Second, please indicate if any of the following are problems for you in the past week including today. Check YES or NO for each.

- | YES | NO | Problem | Y |
|--------------------------|--------------------------|--------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <u>Practical Problems</u> | |
| <input type="checkbox"/> | <input type="checkbox"/> | Child care | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Housing | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Insurance/financial | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Transportation | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Work/school | <input type="checkbox"/> |
| | | <u>Family Problems</u> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Dealing with children | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Dealing with partner | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Ability to have children | <input type="checkbox"/> |
| | | <u>Emotional Problems</u> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Depression | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Fears | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Nervousness | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Sadness | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Worry | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | Loss of interest in usual activities | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>Spiritual/religious concerns</u> | <input type="checkbox"/> |

Other Problems: _____

Finding #1

**Digital Inclusion Impacts Telemedicine- even when broadband challenges are overcome*



**Digital Inclusion includes both broadband access AND digital literacy/skills*

Finding #1
*Digital
Inclusion
Impacts
Telemedicine-
even when
broadband
challenges are
overcome*

“It was just not connecting! And you know that’s just nerve wracking when something doesn’t work and you’re trying, you know?”

-rural cancer survivor

Published: 11 May 2020

Beyond broadband: digital inclusion as a driver of inequities in access to rural cancer care

[Pam Baker DeGuzman](#) , [Veronica Bernacchi](#), [C. Allen Cupp](#), [Brian Dunn](#), [B. J. Ferrebee Ghamandi](#), [Ivora D. Hinton](#), [Mark J. Jameson](#), [Debra Lynn Lewandowski](#) & [Christi Sheffield](#)

[Journal of Cancer Survivorship](#) (2020) | [Cite this article](#)

Finding #2

Rural Cancer Survivors with High Distress Refuse Further Intervention

- **90%** had self-identified high distress
- The nurse referred **50%** for further support
 - **Intervention was associated with a 13x chance of a referral!**
- ***But,*** of those offered a psychosocial referral, fewer than one-third accepted the referral.

Examination of a distress screening intervention for rural cancer survivors reveals low uptake of psychosocial referrals

[Pam Baker DeGuzman](#) , [David L. Vogel](#), [Bethany Horton](#), [Veronica Bernacchi](#), [C. Allen Cupp](#), [B. J. Ferrebee Ghamandi](#), [Ivora D. Hinton](#), [Christi Sheffield](#) & [Mark J. Jameson](#)

[Journal of Cancer Survivorship](#) (2021) | [Cite this article](#)

1775 Accesses | 10 Altmetric | [Metrics](#)

Finding #3

Reluctance to Accept Psychosocial Help Aligns with Known Rural Social Norms

- When explaining their reasons for turning down further help, rural survivors minimized their distress, and described stigma associated with seeking help, particularly from those outside their immediate family.

“I don’t want to learn [sic] the appearance that as I’m getting older, I am less able to handle my situation, and that’s a protection on my part. I try not to view anybody else that way, but I tend to view myself more critical [sic].”

-rural cancer survivor

Finding #4

Rural Survivors are Willing to Overcome these Barriers to Discuss Distress with a Nurse over Telemedicine

Telemedicine Satisfaction and Use Questionnaire (scored 1-5)	Mean
A nurse can get a good understanding of my condition during a visit	4.20
My nurse answers my questions	4.20
My nurse deals with my problems	4.27
My nurse engages me in my care	4.33
I can explain my problems well enough during a video visit	4.47
I can always trust the equipment to work	3.00
My privacy is protected during video visits	4.20
The telemedicine equipment is easy to use	3.73
Video visits make it easier for me to contact the nurse	3.73
Video visits are a convenient form of healthcare for me	3.73
Video visits save me time	3.87

*under review at Oncology Nursing Forum



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Finding #4

Rural Survivors are Willing to Overcome these Barriers to Discuss Distress with a Nurse over Telemedicine

- Survivors explained that the biggest benefit of participating in the visit was being able to speak with the nurse about their distress.

“[I appreciated the nurse] taking the time to ask me the questions. And you know, identifying with my needs...It’s good to have someone ask these kinds of questions.”

-rural cancer survivor

Finding #5

A nurse-led telemedicine intervention reduces survivors' unmet emotional needs.

Change in Unmet Needs (n=11)

**Negative number indicates reduction in unmet needs; scale is 1-4*

	mean	sd
Overall	-0.24	0.46
Information Needs	-0.24	0.84
Work and Financial Needs	-0.02	0.22
Access and Continuity of Care Needs	-0.21	0.37
Coping, Sharing and Emotional Needs	-0.39	0.81

** in press at Oncology Nursing Forum*



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Conclusions

- **Consider digital inclusion, not just broadband accessibility when connecting to rural survivors over telemedicine.**
- **Rural survivors can benefit from discussing distress with a nurse over a virtual connection.**
 - **Social norms may prevent willingness to speak to other members of the healthcare team**
 - **They will openly discuss distress with a nurse**
- **Targeted identification and discussion of distress with a nurse can improve unmet needs.**

Next Steps

- Testing *self-affirmation* intervention
 - Will this improve uptake of psychosocial referrals?
- Incorporating *warm hand-off* to social worker
 - Ensures that patients who accept are more likely to connect to help.



