Enhancing Cancer Care of Rural Dwellers Through Telehealth and Engagement

June 11, 2021
12:00 PM - 1:00PM EST
Using WebEx and Webinar Logistics

- All lines will be in listen-only mode
- Submit comments at any time using the Chat Panel and select *All Panelists*
- You may need to activate the appropriate panel using the menu option found at the bottom of your screen
- If you have questions or feedback following the presentation, please contact HCTcyberdiscussions@nih.gov
- This webinar is being recorded
Debra L. Friedman, M.D., M.S.
Associate Director for Community Science and Health Outcomes
Co-Leader, Cancer Health Outcomes and Control Research Program
E. Bronson Ingram Chair in Pediatric Oncology
Professor of Pediatrics (Pediatric Hematology and Oncology)
Director, Pediatric Hematology and Oncology
Vanderbilt University

Title: Enhancing Cancer Care of Rural Dwellers Through Telehealth and Engagement
Background: Rural Health

20% of Americans live in rural areas

Elevated cancer incidence and/or mortality in rural compared to urban communities

Rural counties have amongst the highest rates of poverty

Challenges: Cancer treatment, supportive care services, transportation & finances

Providers have limited access to comprehensive care
EXPANDING OPPORTUNITIES AND BUILDING CAPACITY TO BRING CANCER PREVENTION AND CONTROL EFFORTS TO RURAL DWELLERS
Expanding Opportunities and Building Capacity to Bring Cancer Prevention and Control Efforts to Rural Dwellers

- Multi-level cancer care needs assessment in 70 rural counties of the VICC catchment area
- Establish network of rural healthcare providers
Community Health Needs Assessments: Comparison of Rural vs. Urban Hospitals

Priorities Selected:

| Area                          | Total | Urban Hospital | Rural Hospital |
|-------------------------------|-------|----------------|----------------|
| Cancer                        | 46%   | 52%            | 39%            |
| Obesity                       | 87%   | 82%            | 39%            |
| Physical Activity             | 67%   | 50%            | 61%            |
| Access to Care                | 61%   | 61%            | 61%            |
| Smoking                       | 56%   | 55%            | 57%            |
| Social Determinants of Health | 34%   | 39%            | 29%            |

Implementation Strategies:

| Area                          | Total | Urban Hospital | Rural Hospital |
|-------------------------------|-------|----------------|----------------|
| Physical Activity Focused     | 98%   | 94%            | 75%            |
| Obesity Focused               | 82%   | 82%            | 82%            |
| Cancer Screening              | 94%   | 54%            | 47%            |
| Smoking Focused               | 36%   | 64%            | 64%            |
| Health Fairs                  | 73%   | 50%            | 35%            |
| Provider Education            | 11%   | 12%            | 9%             |
Telehealth Interest Survey:

High/Very High Interest in Services by Rural Classification
Advisory, Focus Groups & Key Informant Interviews

Top Needs:
1. Access to educational information
   • Nutrition & behavioral changes to decrease cancer risk (prevention) & enhance health after cancer care

2. Barriers to care
   • Fear of detecting cancer, lack of education
   • Distance to facilities, inadequate transportation
   • Insurance concerns

3. Better support for patients and caregivers
   • Support groups and patient navigators

Recommended Strategies:
• Access Barriers: Telehealth services and local on-site patient navigators
• Improved coordination between oncology and primary care
EXPANDING RURAL HEALTH CANCER CONTROL CAPACITY: FOCUS ON CANCER SURVIVORSHIP

P30CA068485-24S3
Focus on Cancer Survivorship

To improve long-term health outcomes for underserved rural cancer survivors by building capacity to deliver risk-adapted guideline-based care focused on the unique needs of cancer survivors

Aim 1
Pilot test the implementation of guideline-based survivorship care planning in a rural setting using patient navigation plus telehealth

Aim 2
Identify the facilitators & barriers to future larger scale implementation of guideline-based survivorship care planning in rural settings
ENHANCING CANCER CARE OF RURAL DWELLERS THROUGH TELEHEALTH AND ENGAGEMENT (ENCORE)

R01CA240093
Aims

Aim 1
Test a multi-level telehealth-based intervention for rural hospitals

Provider level:
Molecular tumor board

Patient level:
Supportive care intervention

Aim 2
Study facilitators & barriers to large-scale dissemination & implementation
Study Sites

- Baptist Memorial Hospital – North Mississippi – Oxford, MS
- Baptist Memorial Hospital – Golden Triangle – Columbia, MS
- Baptist Memorial Hospital – Bartlett, TN
- Baptist Cancer Center Memphis, TN
- Baptist Cancer Center Memphis, TN – Breast Multi-Disciplinary
- Baptist Cancer Center – Grenada, MS
- Baptist Cancer Center – New Albany, MS
- Ballad Health Cancer Care – Kingsport, TN
- Ballad Health Cancer Care – Bristol, VA
## Outcomes

| Provider | Patient |
|----------|---------|
| Use of and adherence to Molecular Tumor Board Recommendations | **Primary:**
| |  - Adherence to oncology treatment plan |
| | **Secondary:**
| |  - Psychosocial and functional wellbeing |
| |  - Patient-provider communication |
| |  - Progression-free survival |
Aim 2

Implementation Questions

Potential barriers/facilitators to “real-world” implementation in rural areas?

Potential modifications to maximize implementation?

Problems associated with intervention delivery and translation to real-world implementation in other rural settings?

Evaluation of process evaluation data to explain or provide context for outcome findings?

Promising potential implementation strategies?
# Patient Intervention Arms

| Intervention Arms | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | POST-SUPPORT INTERVENTION |
|-------------------|-------|-------|-------|-------|-------|-------|---------------------------|
| **Cancer Thrive & Survive:** (virtual group program) | Fatigue Management | Problem Solving | Dealing with Emotions | Physical Activity | Pain Management | Changes to Your Body | Complete all post-intervention surveys |
| Example Content: | **Example Content:** | | | | | | |
| | **Example Content:** | | | | | | |
| Location: | Patient will participate via reliable device with internet from home. If reliable device is not available, satellite site will be needed by patient. | | | | | | |

| **Control Arm:** (online education program) | Overview of Self-Management | Cancer & Changes to Your Body | Making Treatment Decisions | Addressing Cancer Related Challenges | Physcial Activity & Exercise | Pain Management | Complete all post-intervention surveys |
|-------------------------------------------|-----------------------------|----------------------------|---------------------------|-----------------------------------|-----------------------------|----------------|---------------------------|
| Example Content: | | | | | | | |
| Location: | Patient will be able to access educational material comprised of 10 main categories from any reliable source with internet/wifi. | | | | | | |

*Self-navigated arm will be monitored based on web tracking to determine which educational material is most referenced and used.*
FOLLOW-UP INTERACTIVE LONG-TERM EXPERT RANKING (FILTER)

R01CA240093-02S1
Aim 1
Create FILTER using expert opinion to identify combinations of disease, treatment, demographic and non-oncologic health factors that contribute to the risk-stratified classification of low, medium and high needs for survivorship care.

Aim 2
Develop a REDCap tool, which will translate the algorithm into a clinical practice calculator.
**Approach**

Develop a risk-stratified survivorship model

Ranking to judge the relative contribution to survivorship follow-up complexity

With iterations, a survivorship follow-up complexity score will be determined with elements will be partitioned into high, medium, and low risk categories

Using REDCap, an online calculator will be created to allow providers to enter the data and receive a recommendation of complexity survivorship follow-up needs.
The Products

Online expert crowdsourcing platform to assign risk scores for survivorship care using synthetic cases, generated from treatment, sociodemographic, and comorbidity risk factors.
The Products

A provider-facing REDCap risk calculator which will collect factors based on risk scores in the platform and return the risk level based on scores.

| INSTRUCTIONS |
|--------------|
| To calculate relative risk in survivorship, to guide survivorship care, please select all risk factors applicable to the patient. The risk score will be returned below, along with resources for the associated level of care. |

### SURGICAL RESECTIONS

Please check all that apply:

- [ ] bladder resection
- [ ] brain resection
- [x] breast resection
- [ ] colon resection
- [ ] esophagus resection
- [ ] extremity resection
- [ ] kidney resection
- [ ] larynx resection
- [ ] liver resection
- [ ] lung resection
- [x] lymph node resection
- [ ] ovary resection
- [ ] pancreas resection
- [ ] prostate resection
- [ ] small intestine resection
- [ ] testis resection
- [ ] uterus resection

**Surgical resection sub-score:** 2

### SURGICAL REMOVALS

Please check all that apply:

- [ ] bladder removal
- [ ] breast removal
- [ ] colon removal
- [ ] esophagus removal
- [ ] extremity removal
- [ ] kidney removal
- [ ] larynx removal
- [ ] liver removal
- [ ] lung removal
- [x] lymph node removal
- [ ] ovary removal
- [ ] pancreas removal
- [ ] prostate removal
- [ ] small intestine removal
- [ ] stomach removal
- [ ] testis removal
- [ ] thyroid removal
- [ ] uterus removal

**Surgical removal sub-score:** 1

## RADIATION THERAPY

Please check all that apply:

- [ ] uterus removal

**Radiation therapy sub-score:**
TOOL FOR INHERITED CANCER PREDISPOSITION COUNSELING AND TESTING (TIPS) STUDY

3R01CA240093-02S1
Aims

Aim 1: Develop and pilot test point of care genetic testing and germline genetic testing among rural cancer patients.

Aim 2: Assess barriers and facilitators to and impact of the process on patients and providers.
Point-of-Care Testing Schema

**Current Paradigm vs. Proposed Future Point-of-Care Genetic Counseling & Testing**

**BAPTIST**
- Patient identified for inherited cancer risk assessment
- Healthcare provider refers patient for genetic counseling

**Proposed Paradigm**
- Patient completes online: 1) POC study consent & medical record release forms 2) Initial survey w/family history collection
- Patient completes automated pre-test genetic counseling to inform testing consent
- Genetic counselor reviews to give testing recommendation (meets testing criteria & genes to test)
- Genetic counselor interprets result w/ patient's personal/family history to triage result disclosure

**VANDERBILT**
- Sample collection and genetic test ordered by provider (testing informed consent & family authorization forms)
- Genetic test report received and interpreted
- Post-test genetic counseling w/ result disclosure
- N = 10
- Additional post-test genetic counseling

N = 50
N = 40
N = 10
No further post-test genetic counseling is needed
## Value Added

### Prior to testing:

**Provide**
- Inherited cancer education to patient

**Generate**
- Family history

**Determine**
- Whether patient meets clinical testing criteria

**Guide**
- Specific tests that may be indicated

### After testing:

- Interpret results in context of family history
- Identify discrepant or complicated results
- Offer additional thoughts to interpret/clarify results for individual/family members
Differences exist in cancer screening, early detection, incidence and mortality among rural counties.

Rural communities are eager for increased services for their population.

Partnerships must be bidirectional and take time to cultivate.

Telehealth can be used to bring both research and clinical care to rural communities.
Acknowledgments

Our Team

INVESTIGATORS
Debra Friedman, MD, MS
Pamela Hull, PhD
Anne Washburn, MPH
Philip Lammers, MD
Tatsuki Koyama, PhD
Alex Cheng, PhD

Tuya Pal, MD
Ben Ho Park, MD, PhD
Rebecca Selove, PhD
Travis Osterman, DO, MS
Lynne Berry, PhD

RESEARCH and COMMUNITY OUTREACH TEAM
Kelsey Fetters, MPH
Claudia Barajas, BA
Jacob McArthy, BA

Ann Tezak, MA, MPH
Denise Martinez, BA
Li Wen, PhD

Our Funding

P30CA068485-23S4
P30CA068485-24S3
R01CA240093
R01CA240093-02S1
Questions?
NCI Funding Opportunity

Centers on Telehealth Research for Cancer-Related Care (P50 Clinical Trial Required)

RFA-CA-21-029

Please direct all inquiries to:

Roxanne Jensen, PhD
National Cancer Institute (NCI)
Telephone: (240) 276-7588
Email: roxanne.jensen@nih.gov
Next Session – October 12, 2021

Dr. Ana Maria Lopez
Sidney Kimmel Cancer Center at Jefferson

Optimizing Telehealth Across the Cancer Care Continuum
During the COVID 19 National Emergency

Register: http://healthcaredelivery.cancer.gov/cyberseminars/
Thank You!
