NCI’s Telehealth Initiatives: Request for Information Summary and Centers on Telehealth Research for Cancer-Related Care

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Timeline of Activities

March 2020
COVID-related lockdowns begin

April 2020
Division-wide Telehealth Working Group formed; COVID-19 and Telehealth Cancer Center Supplements

July 2020
RFI released

Dec. 2020
RFA P50 Telehealth Centers Concept Approved

March 2021
RFI webinar; Presentation to the NCI Council of Research Advocates
Background: Rise of Telehealth Use Due to COVID-19

- Following the onset of the COVID-19 pandemic, there has been a dramatic increase in use of telehealth to deliver cancer-related care.
- This has been attributed to:
  - Limiting COVID-19 infection risk
  - Changes in reimbursement and regulatory policies that previously limited the use of telehealth
  - Increasing comfort with and availability of teleconference technology
Telehealth: Interaction Type and Communication Format
Challenges and Opportunities in Telehealth Research

- Continued use of telehealth to deliver cancer-related care is expected after the current pandemic subsides.
- However, research gaps exist:
  - Research in this area is often focused on small targeted efforts, such as on how to adapt an in-person intervention to a web or mobile format.
  - A limited established evidence base for integrating telehealth into models of cancer care delivery.
- As a result, telehealth remains an understudied means of delivering cancer-related care.
Request for Information

Stakeholder Input on Scientific Gaps and Research Needs Related to Delivery of Cancer-related Care via Telehealth (NOT-CA-20-080)

July 2020
Request for Information (RFI)

- The RFI sought information on:
  1. **Scientific gaps** that need to be addressed as cancer-related care via telehealth becomes a more common part of routine clinical practice.
  2. **New resources or approaches** that may be needed to address these gaps

- The RFI focused on **enduring and sustainable evidence-based approaches** in the use of telehealth to advance cancer prevention, detection, and control rather than short-term responses to the current pandemic.

Respondent Type (N=46)

- Academic Institution, Healthcare System, or Research Network (n=30) - 65%
- Patients or Patient Advocate Group (n=7) - 15%
- Professional Association (n=5) - 11%
- Private Company (n=3) - 7%
- Government Agency (n=1) - 2%
Research Themes

What cancer care delivery models are well suited to telehealth?

What process and health outcomes can be used to evaluate the delivery of telehealth care?

How can patient-centered communication be supported in telehealth interactions?
Stages of the Cancer Care Continuum

Stages of Cancer Care Continuum, by Number of Mentions

Categories are not mutually exclusive
What cancer care delivery models are well suited to telehealth?

- Respondents reported interest in **supportive care options** (i.e., behavioral health and ancillary services) and **services across the cancer control continuum**

- Additional opportunities for research include:
  - Patient education (e.g., medication adherence, wound care)
  - Remote monitoring for treatment side effects, care transitions
  - Integration into palliative care
  - Optimizing telehealth options to facilitate access to specialty care (i.e., connecting cancer patients at smaller medical practices to larger research hospitals)
What process and health outcomes can be used to evaluate the delivery of telehealth care?

- **Suggested patient-level outcomes:**
  - Healthcare utilization (e.g., hospital [re]admission rate)
  - Health outcomes (e.g., symptoms/side effects, survival)
  - Patient-reported outcomes (e.g., quality of life)

- **Suggested system-level outcomes:**
  - Cost-effectiveness (e.g., telehealth infrastructure, IT support)
  - Billing / reimbursement

- **Suggested healthcare provider-level outcomes:**
  - Workflow
  - Burn-out
  - Coordination of patient care with other providers
How can patient-centered communication be supported in telehealth interactions?

- Are patients and providers comfortable with using telehealth, even for difficult conversations?
  - How are non-verbal cues interpreted via telehealth?
  - How are sensitive issues related to treatment planning, palliative care, and end-of-life discussions handled via telehealth?
  - Do virtual patient navigators increase patient self-efficacy and comfort with technology?
  - Can telehealth-specific physician training improve communication?
    - “Soft skills” and practicing medicine via telehealth
Health Equity Concerns

Benefits
• Who can benefit from telehealth care?

Access
• Is access to telehealth care equitable?

Delivery
• Is telehealth care delivered equitably?
Population Groups of Interest

Number of Times Specific Population Groups Were Mentioned

Categories are not mutually exclusive
Who can benefit from telehealth care?

- The removal of travel burdens may be especially beneficial for:
  - Specialty care (i.e., pediatric oncology, rehabilitation), as these sites may be more geographically dispersed than treatment sites for standard care
  - Medically-fragile patients
  - Patients with time constraints due to work, childcare, and/or eldercare responsibilities
  - Patients in rural and geographically remote areas
Is access to telehealth care equitable?

- Factors affecting access include:
  - A lack of broadband internet connection
  - A lack of a compatible digital device (e.g., smartphones, computers)
  - Limited digital literacy
  - Lower socioeconomic status, age, geography
- Can partnerships with community organizations be established to minimize travel burden and/or provide reliable access to devices and/or the internet?
- What is the efficacy and cost-effectiveness of providing devices and/or internet access to populations in need?
Is delivery of telehealth care equitable?

- Telehealth-delivered care may be impacted by:
  - Language barriers
  - Ineffective communication
  - Lack of cultural competency
- Is the patient care experience comparable to an in-person visit?
- Does involvement from family members, interpreters, or other care workers in the telehealth visit increase patients’ ease of use?
- Can telephone-only telehealth meet the needs of specific patients?
Centers on Telehealth Research for Cancer-Related Care

P50 RFA

Approved by BSA, December 2020
What is Needed

Rapid development of a telehealth-focused evidence base across the cancer care continuum, highlighting:

- Telehealth as a modality of cancer care delivery
- Large, pragmatic trials to establish evidence-based telehealth practices in cancer-specific areas of need
- Innovative technology and research methods
- Explicit focus on health disparities and access to care
Centers on Telehealth Research for Cancer-Related Care: Goals

Leverage the P50 mechanism to:

1. Create national centers for advancing cancer-related telehealth research in a rapidly changing environment

2. Establish a robust evidence base for patient-centered, sustainable telehealth models of cancer care delivery

3. Foster the development, evaluation, and dissemination of evidence-based models of cancer-focused telehealth
Research Centers: Design Overview (Structure)

- **Administrative Core**
  - Evaluation, communication, partnerships, fiscal management

- **Research & Methods Core**
  - Research development & analysis
  - High impact, pragmatic research

- **Clinical Practice Network**
  - Network of clinical partners

- **Pragmatic RCT**

- **Two Pilot Projects**
  - Iterative, rapid cycle research
Example: Patient-Centered Communication in Cancer Care

Pragmatic Trial:
- Telehealth communication skills training for patients and providers
- Expected outcomes: Improvements in patient/provider communication, quality of care, utilization of cancer-related care (e.g., receipt of adjuvant therapy, reductions in re-hospitalization and ED visits)

Pilot Projects:
- Approaches to engage patients with low digital literacy (e.g., engaging cancer caregivers and/or family members)
- Optimal utilization of patient-generated data (e.g., ePROs, adverse events, activity monitors during telehealth visit)
Summary of Telehealth and Cancer Centers Initiative

- Leverages an unprecedented opportunity to build an evidence base for use of telehealth across all aspects of cancer care delivery
- Research has the potential to improve access, care quality, and health outcomes across the cancer care continuum
- Built-in flexibility for clinical care, policy, and technology changes
- Opportunity to promote innovative approaches to address long-standing cancer care delivery challenges and related health disparities
- Creation of a national initiative at the forefront of cancer-related telehealth research
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