Randomized Trial of a Supportive Care Mobile Application to Improve Symptoms, Coping, and Quality of Life in Patients With Advanced Non–Small Cell Lung Cancer

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Condition: Non–small cell lung cancer

Institution: Massachusetts General Hospital

The goal of this study is to develop, refine, and test the feasibility and preliminary efficacy of a supportive care mobile application (app) to improve symptoms, coping skills, and quality of life (QoL) in patients with advanced non–small cell lung cancer (NSCLC). Many patients with advanced NSCLC experience debilitating symptoms, emotional distress, and poor QoL. To help address these concerns, national guidelines now recommend that patients with advanced cancer and those with high symptom burden receive early palliative care integrated with oncology care from the time of diagnosis and throughout the course of disease. These guidelines are based on accumulating evidence from clinical trials demonstrating the beneficial effects of early, integrated palliative care on patient QoL, mood symptoms, and end-of-life care. However, most patients with advanced lung cancer throughout the United States do not receive early palliative care in the ambulatory setting due to the lack of specialty trained clinicians and limited integration of palliative care in oncology. To enhance access to supportive care interventions aimed at improving QoL, our research team has begun to develop and test several mobile apps that patients can self-administer and learn skills for enhancing symptom management and adaptive coping with serious illness. We will draw on this expertise to adapt our prior validated mobile app interventions to the specific supportive care needs of patients with lung cancer, incorporating the symptom management and coping elements of the early, integrated palliative care intervention that our team has been testing for more than a decade. Such innovative technology possesses great promise for broad dissemination of evidence-based palliative care interventions in a timely, scalable, convenient, and cost-effective manner.

The proposed study will proceed in 2 phases. The first phase will focus on development of the mobile app intervention, including content design, refinement, and numerous rounds of user testing with technology specialists, a multidisciplinary team of clinicians, and patients with cancer. For the second phase of the study, we will conduct a 2-group, parallel design randomized controlled trial of the supportive care mobile app versus usual care in a sample of patients newly diagnosed with advanced NSCLC.

Primary Objectives/Aims:
- Develop a novel supportive care mobile app to address the specific symptom management and coping needs of patients with advanced NSCLC.

HIGHLIGHTS OF THE NCCN ONCOLOGY RESEARCH PROGRAM

The NCCN Oncology Research Program (ORP) strives to improve the quality of life for patients and reduce cancer-related deaths by advancing cancer therapies through research. Since the program’s establishment in 1999, the NCCN ORP has brought millions of dollars in research grants to investigators at NCCN Member Institutions. Research grants are provided to NCCN through collaborations with pharmaceutical and biotechnology companies; these grants are in turn used to support scientifically meritorious cancer research efforts.

NCCN ORP studies typically explore new avenues of clinical investigation and seek answers to important cancer-related questions. All studies are approved and funded through a scientific peer-review process and are overseen by the ORP.

This feature highlights an NCCN study funded through the grant mechanism.

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For more information on specific trials, including patient selection criteria, use the contact information listed with each study.

For more information on the NCCN ORP, including a complete detailing of the clinical studies currently underway at NCCN Member Institutions, go to www.nccn.org/education-research/nccn-oncology-research-program/orp-main-page.
Examine the feasibility and acceptability of a novel mobile app to improve symptoms, coping skills, and QoL in patients with advanced NSCLC

Test the preliminary efficacy of a novel mobile app to improve symptoms, coping skills, and QoL in patients with advanced NSCLC

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