

**Cancer Center Supplement to Partner with Comprehensive Cancer Control Coalitions to Study Implementation of Evidence-based Interventions**

**UNC Lineberger Comprehensive Cancer Center**

**Catchment Area**

The UNC Lineberger Comprehensive Cancer Center (LCCC) is centrally located in the state of North Carolina (NC). Based on its decades-long history of conducting impactful research and delivering cancer care across all 100 North Carolina counties, and as the only public comprehensive cancer center in North Carolina, LCCC has defined its catchment area as the entire state (figure 1). Our catchment area is highly diverse, with 29.9% of North Carolinians identifying as minority races and 10.2% as Hispanic, 43% living in a nonmetropolitan area, 13% living in poverty, 15% without broadband internet, and 30% with less than a college education, according to data from the 2021 U.S. Census Bureau and 2020 North Carolina Office of State Budget and Management. A contiguous region in central and eastern North Carolina comprising over 50% of the total North Carolina population accounts for 91% of all cancer patients diagnosed and/or treated for cancer at the University of North Carolina, Chapel Hill according to N.C. Basnight Cancer Hospital data (figure 2). This wide clinical care footprint contains large swaths of rural areas and reflects UNC LCCC’s longstanding position as the only public comprehensive cancer center committed to serving North Carolina.

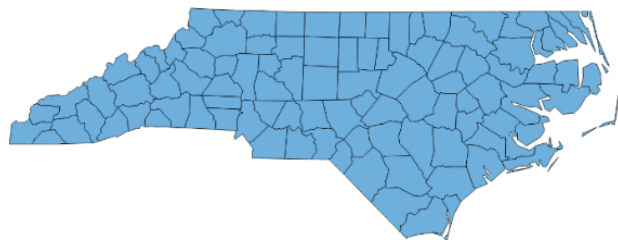


Figure 1. UNC LCCC Catchment Area – North Carolina

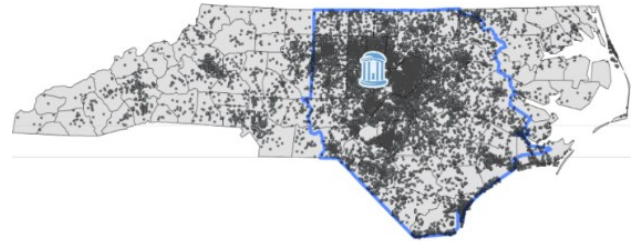


Figure 2. N.C. Basnight Cancer Hospital Cancer Clinical Catchment Area

**Public Health Focus**

The vision of the UNC LCCC Center of Outreach and Engagement (COE) office is to develop and sustain a community that actively partners with our cancer center to reduce the burden of cancer and eliminate cancer disparities in North Carolina and beyond. One approach that the COE office uses to pursue this vision is to engage communities throughout the research life cycle to translate research evidence into practice and policy. The best and most impactful research translation ideas are those generated directly from the communities targeted. The focus of this COE supplement award, therefore, was to support community-driven evidence translation by building capacity for assessing and addressing cancer needs in diverse, nonacademic communities through training, technical assistance, funding, and evaluation.

**At a Glance**

UNC LCCC is committed to preventing and controlling cancer by promoting implementation of evidence-based interventions (EBIs). The COE office collaborated on this supplement with internal, state, and national stakeholders and partners. The aim was to support and build capacity for implementing and sustaining cancer-focused EBIs that are responsive to local needs, fit the local context, and

address catchment area priorities across diverse North Carolina communities. Supplement activities included training, technical assistance, funding support, and evaluation. The supplement aims were (1) to develop community capacity to identify, adapt, and implement evidence-based cancer prevention and control interventions in North Carolina; and (2) to launch and evaluate the use of community grants to support and sustain the implementation of interventions through partnership with diverse community organizations.

## Collaborators

Our collaborators included the NC Cancer Prevention and Control Branch of the NC Division of Public Health, its affiliated Community Cancer Network, the Cancer Prevention and Control Research Network (CPCRN), and the LCCC COE Community Advisory Board (CAB). Our team consisted of members with expertise in health services research, implementation science, community engagement, community health education, and cancer health equity: Dr. Stephanie Wheeler (Lead), Dr. Jennifer Leeman (Co-Lead), Ms. Mary Wangen, and Ms. Veronica Carlisle.



## The Approach

### EBI Training and Technical Assistance Support Opportunity

The Cancer Prevention and Control Branch (CPCB) of the NC Division of Public Health convenes and coordinates the statewide Community Cancer Network (CCN). The

CCN's purpose is to "bring together a diverse group of stakeholders committed to reducing the burden of cancer and other chronic diseases and connect communities to resources and support services." CCN includes public health and health care agencies, community-based and faith-based organizations, Tribal groups/councils, support groups, resource services, survivors, nurses, cancer advocates, patient navigators, community health workers, health coaches, outreach workers, health educators, case managers, businesses, YMCAs, coalition/task group representatives, military/veterans, neighborhood community groups, beauty salons, barbershops, and others focused on reducing cancer risks, improving early detection, care and treatment, and advancing survivors' quality of life. Regular regional meetings occur around the state and focus on understanding barriers that contribute to the cancer burden and health of communities as well as networking and resource-sharing to advance possible solutions, informed by evidence-based interventions (EBIs). Members of the supplement team introduced and offered Putting Public Health Evidence in Action (PPHEIA), a CPCRN curriculum, to CCN to enhance their capacity to select, implement, and sustain EBIs in community practice. We also introduced the opportunity to recipients of our existing community grant pilot program at UNC LCCC. In addition to the training, the opportunity included technical assistance (pre- and post-award) and financial support in the form of grants up to \$20,000.

The PPHEIA curriculum was developed to build practitioners' general capacity for evidence-based decision-making (figure 3). Prior work describes in detail the premises on which PPHEIA was developed.<sup>1</sup> Delivery of CPCRN's training has been shown to have a positive impact on participants' competencies related to EBI adoption and implementation. The training was tailored to three one-hour sessions for 24 unique attendees to address organizations' specific needs and to assist with community grant application preparation.

“ I will learn more in my understanding as I prepare our [community pilot grant] proposal. In areas in which I don’t yet feel confident, I expect I will still glean much from having the slide shows, my notes, and other resources made available to us and from having access to your team. Thank you all for your helpfulness and apparent interest in us being successful.”

—Community Organization Training Participant and Applicant

Table 1. PPHEIA training outcomes: change in trainees’ competencies

Self-reported Change in Confidence*	Pre-Training	Post-Training
To collect data to assess community cancer needs	38%	100%
To assess EBI on its effectiveness	30%	80%
To collect reliable & valid performance data	29%	75%
To write eval questions	43%	75%
To identify measurable outcomes related to aims	43%	75%

All (100%) of attendees indicated high satisfaction with the training

\*Among 24 attendees representing community organizations, clinics and health departments

**Community Grant Request for Applications**

The community grant request for applications was released at the conclusion of the training, and applicants had six weeks to prepare applications. With feedback from LCCC’s CAB, we tailored the application template to the community with the goal of reducing barriers to applying and specified a five-page maximum page limit. We also provided technical assistance sessions to support application development. Two tiers of funding were available: planning awards (with funding up to \$10,000) and implementation awards (with funding up to \$20,000). Planning awards were intended for organizations to engage partners and stakeholders in collecting data to assess community cancer health needs and selecting an EBI and planning for its implementation. The implementation awards were available to organizations that demonstrated clear planning and selection of an EBI and proposed to use the award to implement and evaluate one or more EBIs.

**Outcomes:** Six applications were received, and two sessions of pre-award technical assistance were provided.



Figure 3. PPHEIA Training Modules

### Application Review Process

Each application was reviewed and scored by three reviewers: a CAB member or NC CPCB member, a researcher, and a COE staff member. A review panel was convened to determine which proposals would be funded.

**Outcomes:** One application was awarded with no contingencies, four applications had contingencies, and one application was denied. Additional technical assistance was provided to one of the community organization applicants. Four applicants were awarded funding—three tier 2 implementation awards (\$20,000 each) and one tier 1 planning award (\$10,000). After completing required documentation, applicants received half of their funding up front to assist with program start up, with the second half of funds being awarded halfway through the funding period after sufficient progress had been demonstrated.

### Evaluation of Training and Application Process

Evaluation included a pre-/post-training survey completed by all trainees and a content analysis of all community grant applications. Pre-/post-training surveys revealed increased confidence among participants in collecting community cancer health assessment data and prioritizing cancer health needs, assessing EBI effectiveness, selecting an appropriate EBI to address community health needs, collecting reliable and valid performance data, and evaluating implementation (table 1). Two supplement team members analyzed each of the application's content to determine how well they addressed each of the following expectations: (1) used local data, (2) selected an appropriate EBI to fit community problem/context, (3) articulated Specific, Measurable, Achievable, Realistic and Timely (SMART) objectives, and (4) proposed reliable/feasible methods to assess relevant processes/outcomes (table 2).

**Outcomes:** Analyses of application quality assessments revealed that although most community applicants were able to successfully describe data-driven cancer health needs in their communities and relevant EBIs to address those needs, problem areas were writing SMART objectives and using reliable and feasible methods to assess relevant outcomes.

Table 2. Findings from application quality assessment

Application	Uses local data to document problem <sup>†</sup>	EBI fits local problem and context <sup>†</sup>	Objectives are SMART <sup>†</sup>	Evaluation measures are reliable & feasible <sup>†</sup>
A	1	2	2	2
B	2	1	2.5	1
C	1.75	1.25	1.25	1
D	3	2.75	2	2.75
E	1.5	2	2.5	2.5
F	1	1	1.5	1.75

<sup>†</sup>Rated on a scale of 1 to 3 (1 = fully meets criteria and 3 = does not or barely meets criteria)

## Implementation Guidance

- Provide training to aid community organizations in selecting and implementing one or more relevant EBIs. See <https://cpcrn.org/training>.
- Provide partial community grant funding up front to help sites get started—improves feasibility of delivering products in resource-constrained environments and builds in accountability structure.
- Encourage applicants to partner/engage with other community organizations to aid in EBI selection or implementation—leverages resources and aids in community sustainability.
- Offer a tiered funding mechanism to allow for variation in readiness to select and implement an EBI.
- Adapt training and evaluation infrastructures as needed to fit community needs—PPHEIA was created for public health practitioners and was modified for community partners with more limited experience.

## Reference

<sup>1</sup> Mainor AG, Decosimo K, Escoffrey C, Farris P, Shannon J, Winters-Stone K, et al. (2018). Scaling up and tailoring the “Putting Public Health in Action” training curriculum. *Health Promot Pract.* 2018;19(5): 664-672. doi:10.1177/1524839917741486

## Find Out More

Cancer Center grant number 5P30CA016086

COE activities at UNC LCCC focus on the following goals:

- Gather, assess, and describe North Carolina’s cancer burden.
- Educate, train, and provide technical assistance to support EBI development and implementation.
- Link researchers and community partners.
- Communicate relevant and timely cancer research information and resources internally and externally.
- Facilitate improved access to cancer prevention, treatment, and support.
- Fund community–academic research teams.
- Catalyze and build capacity internally and externally.

URL: <https://unclineberger.org/community-outreach/>

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## Cancer Center Supplement to Partner with Comprehensive Cancer Control Coalitions to Study Implementation of Evidence-based Interventions

National Cancer Institute (NCI)-Designated Cancer Centers’ community outreach and engagement (COE) efforts should span all cancer center programs, including basic, clinical, translational, and population research. The FY21 COE supplement is designed to increase COE activities and partnerships among center staff and comprehensive cancer control coalitions. The long-term goal is to build greater connections between cancer centers and state, Tribe, territory, and Pacific Island Jurisdiction-level coalitions that will lead to smoother translation of center research findings and products into use in clinical and community settings.

To learn more, visit us at: <https://cancercontrol.cancer.gov/research-emphasis/supplement/coe>