Utilizing the N.C. Cancer Burden Document to Make Targeted Intervention Recommendations

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N.C. Cancer Burden Document Purpose

The N.C. Comprehensive Cancer Control Program (CCCP) released Reducing the Burden of Cancer in North Carolina: A Data and Resource Guide to Communities Fighting Cancer (N.C. Cancer Burden Document) in November 2017. The document uses data visualization to provide a one-stop shop of easy-to-understand data to show where N.C.’s six priority cancers—lung, colorectal, female breast, prostate, melanoma (and non-melanoma), and cervical—are concentrated the highest, which groups are most affected by them, and what state and local partners can do in their communities to address these cancers.

N.C. Cancer Plan

CCCP serves as the critical link facilitating the implementation of the Call to Action: North Carolina Comprehensive Cancer Control Plan 2014-2020 (N.C. Cancer Plan). The N.C. Cancer Plan provides a blueprint for addressing N.C.’s six priority cancers across the cancer continuum; from prevention of cancer, to screening for and early detection of cancer, to the care and treatment of cancer, to addressing cancer survivors’ quality of life. The N.C. Cancer Burden Document serves as a companion document to the N.C. Cancer Plan, providing a mid-cycle update on targets established in the N.C. Cancer Plan, updating recommended evidence-based interventions for each of the six priority cancers, and making data-informed recommendations for where interventions should be targeted.

Poster Objective

Provide an overview of the data included in the N.C. Cancer Burden Document for each of N.C.’s priority cancers, and examples showing how state and local partners could utilize the N.C. Cancer Burden Document to make informed decisions about which cancers should be targeted, and where resources should be targeted for those cancers.

Examples of State Level Data

Heat Map - Prostate Cancer Statistics by N.C. County

M.C. Percentage of Discharged Patients at Cervical Cancer Diagnosis by AHFMR Region 2015-2016

Examples of Local Level Data

Scenario 1: State Partner**

A statewide non-profit organization that focuses on colorectal cancer prevention is applying for a grant to combat colorectal cancer in rural communities. Their goal is to identify two regional clusters with at least three rural counties to pilot a new outreach strategy. In selecting these regional clusters, each county within the cluster must have colorectal cancer incidence rates and distant stage diagnosis rates that exceed the state average. Distant stage is defined as when the cancer has spread from the original tumor to distant organs or lymph nodes.

County Cluster 1: Granville, Vance, Warren
County Cluster 2: Randolph, Montgomery, Stanly

Utilizing the Incidence Rate by County map, the organization identifies three bordering counties, Granville, Vance, and Warren. Each exceeds 50% colorectal cancer cases per 100,000 individuals, much higher than the state average. Utilizing the Heat Map and the Distant Stage Diagnosis by County map, the organization finds that each of these counties also exceeds the state average for the percentage of colorectal cancer cases diagnosed at a distant stage. Using these same data visualization tools, the organization identified Randolph, Stanly, and Montgomery as another cluster of counties in which incidence rates and distant stage diagnosis rates for colorectal cancer exceed the state average.

After identifying and connecting with potential partners, the organization can utilize recommended resources within the document to determine which communities within these counties would be most likely to need increased access to colorectal cancer prevention and screening services. After that, they can consult the list of evidence-based interventions included within the colorectal cancer section in the N.C. Burden Document to determine feasible strategies for increasing access to healthy lifestyle and behavior programs for prevention of colorectal cancer, and access to colorectal cancer screenings.

Scenario 2: Local Partner**

X County Health Department (XCHD) is debating the form that its cancer prevention and early detection efforts should take; including which cancers they should target, and which areas of the county could most benefit from intervention strategies. Their ultimate goal is to reduce cancer deaths and to be at or below the state average mortality rate for all of N.C.’s priority cancers.

X County vs. NC Cancer Mortality Rates 2011-2015

Consulting the heat maps within each cancer’s section, XCHD finds that lung cancer is responsible for the most cancer-related deaths within the county. Utilizing state level data, they learn that men (64.9 per 100,000) have a 75% higher lung cancer mortality rate than women (37.1 per 100,000). Additionally, by consulting the heat maps, they discover that X County’s prostate cancer mortality rate is higher than the statewide average. Looking at statewide data, they learn that prostate cancer, in terms of incidence and mortality rates, is highest among the African American male population, and that risk for death from prostate cancer significantly increases as one ages. Equipped with this data, XCHD consults the N.C. Cancer Burden Document’s evidence-based intervention strategies, and decides to focus its initial outreach efforts for lung cancer in youth settings by supporting a media campaign aimed at reducing tobacco use initiation. XCHD also decides to reach out to local partners with access to senior centers and African American churches to encourage men to discuss the appropriateness of prostate cancer screening with their providers.

* Scenario 1 and 2 are just examples of how the N.C. Burden Document could be utilized to improve targeted intervention efforts, and are not indicative of actual ongoing projects.