

# Addressing Cancer Health Disparities in a Multilateral Collaboration in an Independent Community Cancer Clinic: Translating Words Into Action

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**DESPITE RANKING AMONG** the top 6 wealthiest economies in the world per capita, the United States still has sizable health disparities among its citizens rooted in racial, social, economic, and environmental factors. In cancer care during the past 2 decades, we have seen great progress, with the overall cancer death rate declining. However, the progress against cancer has not been shared equally by all segments of the US population.<sup>1</sup>

Today, there is a 15-year difference in life expectancy between the most advantaged and disadvantaged citizens in the United States. This difference is correlated with geographic characteristics and health behaviors that are influenced by historical and social factors. Racial and ethnic minority populations, who have long experienced cancer health disparities, continue to face striking disparities in cancer incidence and death.<sup>1-4</sup>

Cancer health disparities (CHDs) are not just a moral problem—resulting in almost 34% of cancer deaths in Americans aged 25 to 79 years—but also an economic one because they are estimated to result in an additional \$230 billion of spending.<sup>5,6</sup> In 2020, the American Association of Cancer Research found that addressing disparities in cancer care would result in an estimated indirect savings of up to \$1 trillion over 3 years.<sup>6</sup>

The factors contributing to CHDs are complex and multifactorial, and they often exist before a patient's cancer journey even begins. They include the inability to access health care due to socioeconomic factors that include a lack of insurance, underinsurance, and payer-related factors; a lack of access to cancer screening; a lack of access to precision medicine testing and other cutting-edge treatment options; economic factors during care, such as burdensome out-of-pocket (OOP) costs; and a lack of access to clinical trials.<sup>6</sup> These are all compounded by a distrust of the clinical trial system by certain patient populations that have historically suffered from health disparities, as well as the fact that many US population groups that experience cancer health disparities are also among those hardest hit by the ongoing COVID-19 pandemic.<sup>7</sup>

For uninsured or underinsured Americans, the financial toxicity of cancer treatment is shockingly easy to achieve. Consider these facts: Today 6 million (19%) of Medicare fee-for-service beneficiaries do not have supplemental coverage. They may incur annual OOP costs of approximately \$2500 to \$15,000—up to approximately 58% of the median per capita income of Medicare beneficiaries—that can quickly lead to financial toxicity. Increasing financial toxicity can very easily result in either noncompliance or abandonment of treatment.<sup>8-16</sup>

Because of high costs, many people with cancer and those who have survived cancer experience financial hardship, including problems paying bills, depletion of savings, delaying or skipping needed medical care, and potential bankruptcy. These costs and hardships do not impact all patients with cancer equally—certain factors make a patient more likely to experience financial hardship. In fact, data from Han et al show that most patients who face financial toxicities are already somewhat marginalized and underserved, as well as suffering from socioeconomic disparities (**Figure 1**).<sup>17</sup>

Against this backdrop, CHDs are an enormous and complex public health challenge in the United States. To truly address CHDs, a comprehensive approach is needed to bring a groundswell of resources together. This must include support for public policies aimed at a better understanding of the issue by all segments of ecosystems, including, but not limited to, inadequate funding from state, federal, and local resources; local health care providers and health systems; pharmaceutical and diagnostic companies; the science and research communities; and more.

## No One Left Alone Program

Carolina Blood and Cancer Care Associates (CBCCA) is an independent oncology practice serving diverse patient populations in rural areas, with locations in Rock Hill and Lancaster, South Carolina. The catchment areas in South Carolina that the practice serves include some of the most vulnerable and marginalized patients by CHDs. US Census Bureau data show that most households across the 5-county region have incomes less than \$75,000 a year. The area includes pockets that are comparatively well-off and those that are surrounded by poverty (**Figure 2**).<sup>18-22</sup>

**LOWER INCOMES IN SERVICE AREA.** The 5 counties in the CBCCA service area have median household incomes that range from near the US median income of \$67,521 in 2020 to well below the South Carolina median income of \$56,227.<sup>23</sup> Although the Brookings Institution reports multiple definitions of “middle class,” most use income bands around US median income; the closest cut point in census county-level data is \$75,000.<sup>24</sup>

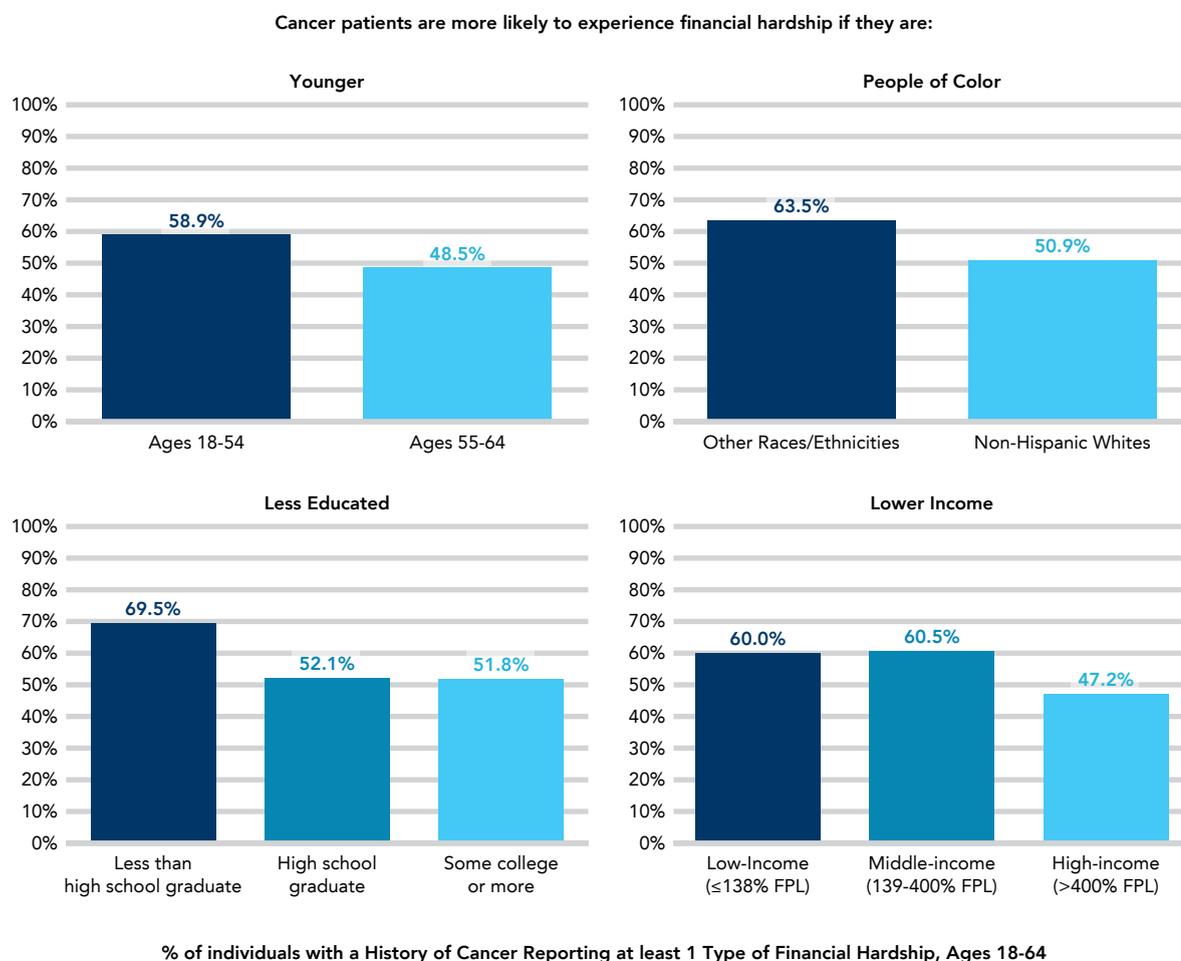
York (centered by Rock Hill) and Lancaster counties have median household incomes below the US median but above the South Carolina median, whereas Kershaw County was just below the South Carolina median. Chester and Cherokee counties are well below the South Carolina median, with more than half of households making less than \$50,000; the uninsured rate in both counties is more than 10.5%.<sup>18-22</sup> Of note, South Carolina has not expanded Medicaid to adults earning up to 133% of the federal poverty level (FPL), per the Affordable Care Act; in 2021, the FPL for a family of 4 was \$26,500.<sup>25</sup>

**FOCUS ON ACCESS TO CARE.** Seeking to better address CHDs, the CBCCA team decided to undertake an initiative to study CHDs, identify priorities, and then prepare a road map to operationalize solutions. The pilot launched within CBCCA would both serve patients within the practice and provide a replicable road map that could be shared with other practices around the country.

After significant research and evaluation into the root causes of CHDs, as well as personal experience with patient care, we believe that access to care offers the greatest potential to reduce all factors leading to CHDs. Specifically, we believe that access to care due to socioeconomic factors including being uninsured or underinsured, payer-related barriers to care, or high and burdensome OOP costs all result in little or no access to cancer screening services or subsequent access to precision medicine diagnostics, such as biomarker testing (**Figure 3A**).

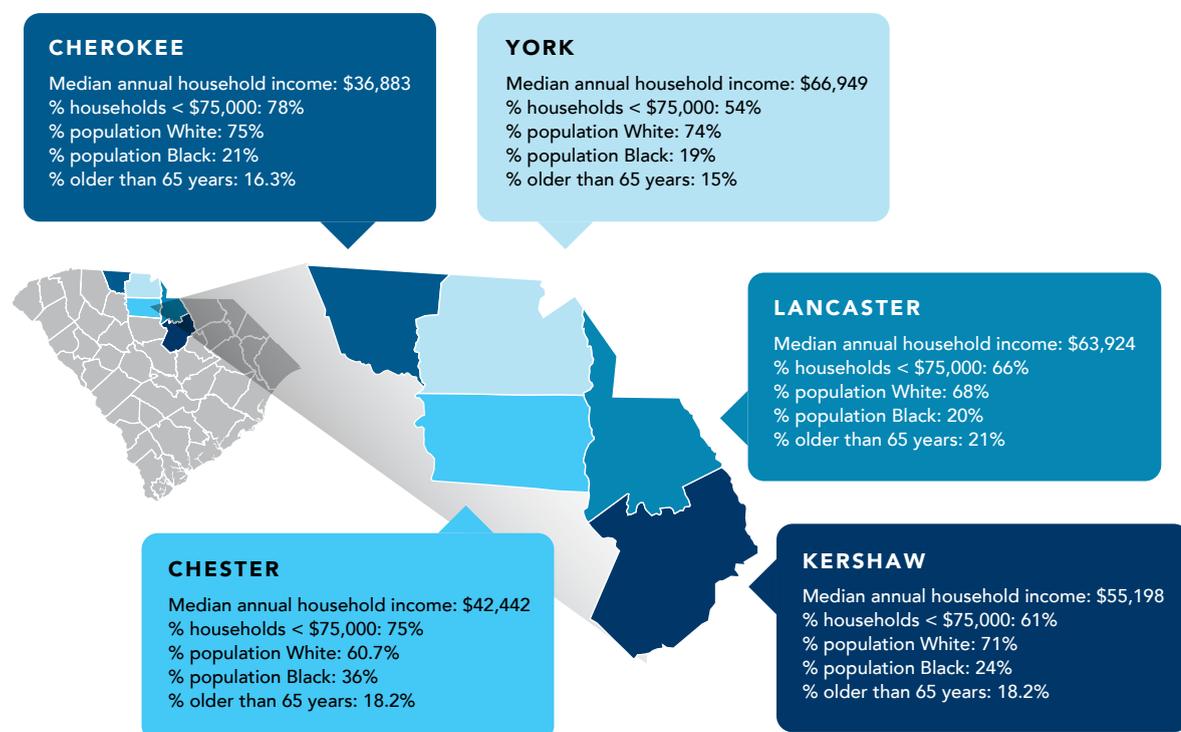


**FIGURE 1.** Characteristics Associated With Financial Toxicity in Cancer Care



FPL = Federal Poverty Level  
 Source: Han X, Zhao J, Zheng z, de Moor JS, Virgo KS, Yabroff KR. Medical financial hardship intensity and financial sacrifice associated with cancer in the United States. *Cancer Epidemiol Biomarkers Prev.* 2020;29(2):308-317. doi:10.1158/1055-9965.EPI-19-0460  
 Note that similar patterns of disparities exist in the over-65 population.

**FIGURE 2.** Characteristics of Counties in CBCCA Service Area



Source: US Census Bureau; CBCCA indicates Carolina Blood and Cancer Care Associates

Looking at the complexities of the CHDs and the fact that there is no ready-made playbook to address them, we also recognize that any efforts to address CHDs will not be solved by policymakers alone. We surveyed other colleagues and practices across the country and did not find a clear path forward. To the contrary, the most recent survey by the Association of Community Cancer Centers found out that 10% of cancer programs had no financial advocates.<sup>25</sup> Additionally, only 36% of programs have enough full-time staff to meet the demand for financial advocacy services, with 36% of survey respondents noting they do not and 34% replying, “not always.” Of those practices that do have financial advocates on staff, the majority (60%) employ just 1 to 3 advocates.<sup>26</sup>

As president of the Community Oncology Alliance, medical director of the AmerisourceBergen International Oncology Network (ION) Solutions Network, and CEO of CBCCA, Kashyap Patel, MD, held multiple meetings and discussions with leadership teams from each of these organizations and conducted a literature review of more than 300 articles to understand the factors contributing to CHDs.

Based on extensive research and brainstorming, CBCCA developed a solutions-oriented pilot program called No One Left Alone (NOLA) to cover the practice’s patient service area. NOLA has the following objectives:

1. Promulgate awareness and promote education around the steps to reduce barriers to access to equitable cancer care.
2. Support local and national initiatives to improve health care equity and reduce CHDs for all Americans.
3. Encourage efforts to track, measure, monitor, and research CHDs.
4. Better understand and make use of financial and other support available to patients in need.
5. Develop a lasting, scalable program for addressing CHDs and improving access to cancer care.

Prior to this, CBCCA had 1 dedicated full-time staff member to cope with the additional work needed to address issues related to CHDs, so financial advocacy was not tracked meticulously. Therefore, CBCCA undertook an effort to analyze each aspect of CHDs, focusing on access to care and socioeconomic factors, and subsequently invested practice resources to launch NOLA.

**Phase 1 of NOLA (Pilot)**

Phase 1 of NOLA, the pilot phase, occurred at CBCCA from January through December 2021. The practice deployed 2.5 staff full-time equivalents with the sole purpose of understanding, tracking, and addressing the socioeconomic aspects impacting patients’ access to care—starting with a lack of insurance but including transportation and other issues impeding treatment. In addition, the practice hired a full-time pharmacist to streamline the process of financial navigation and assistance and to track data.

CBCCA took the following steps: (1) Once a physician decided on a treatment plan for the patient, coverage and OOP costs were estimated and resources identified. (2) Dedicated financial counselors completed required paperwork on behalf of patients; this sometimes required applying to multiple foundations to ensure the patient had no or minimal OOP costs, (**Figure 3B**).

Fundamental to the NOLA pilot program was collaboration across multiple stakeholders and entities, including financial assistance foundations and pharmaceutical companies providing drugs. Instead of working in silos, CBCCA decided to partner with multiple stakeholder groups including local nonprofits, congressional offices, state health departments, state Medicaid agencies, and others to improve access to resources that would benefit patients in need.

### Phase 1 Results

Through December 31, 2021, the pilot phase of NOLA has achieved the following:

- A total 319 patients received cancer treatment during phase 1 of NOLA, and 154 patients were covered. Nearly half (48%) of patients receiving cancer treatment at the practice were identified as needing financial support that was ultimately provided through NOLA.
- Of the 319 patients receiving cancer treatment, 29 did not report income data. Of the 290 who did report income data, two-thirds (67%) of the households reported an annual income below \$75,000.
- NOLA generated \$1,769,520.58 in financial help relating to parenteral drugs for patients.
- Not a single patient was turned away for treatment regardless of their ability to pay.
- Additionally, for patients on oral cancer drugs, the CBCCA pharmacy team identified resources to cover \$253,218 in OOP costs for 61 patients involving 374 prescriptions processed.
- A total of 101 patients' OOP costs were covered by pharmaceutical company foundations totaling \$135,931 (**Appendix A**). A total of 25 foundations have contributed grants ranging from \$15 to more than \$6600 for individual patients; most foundations have assisted 1 to 3 patients, 1 foundation has assisted 14 patients, and another has assisted 32 patients.
- Over 12 months, 53 patients received free drugs with a total value of more than \$1.63 million (**Appendix B**).
- Of the 154 total patients who received financial assistance and/or free drugs, 85% reported an annual income of less than \$75,000. Their median income was \$38,766—or 68% of the South Carolina median income and 57% of the US median income. This group included 71% White patients and 26% Black patients.
- Besides OOP costs and free drugs for 154 patients, the practice raised direct and indirect contributions of \$11,490.38.

These results do not include support for oral cancer drugs because we are in the process of streamlining patient assistance programs for these therapies.

**COST TO CBCCA.** During phase 1 of NOLA, CBCCA incurred direct costs of approximately \$150,000 for additional staff hired and program-related resources. Indirect costs incurred were approximately \$60,000 in excess physician time, an additional 1000 hours of study and research, and 200 hours of other staff time, including business office time calculating

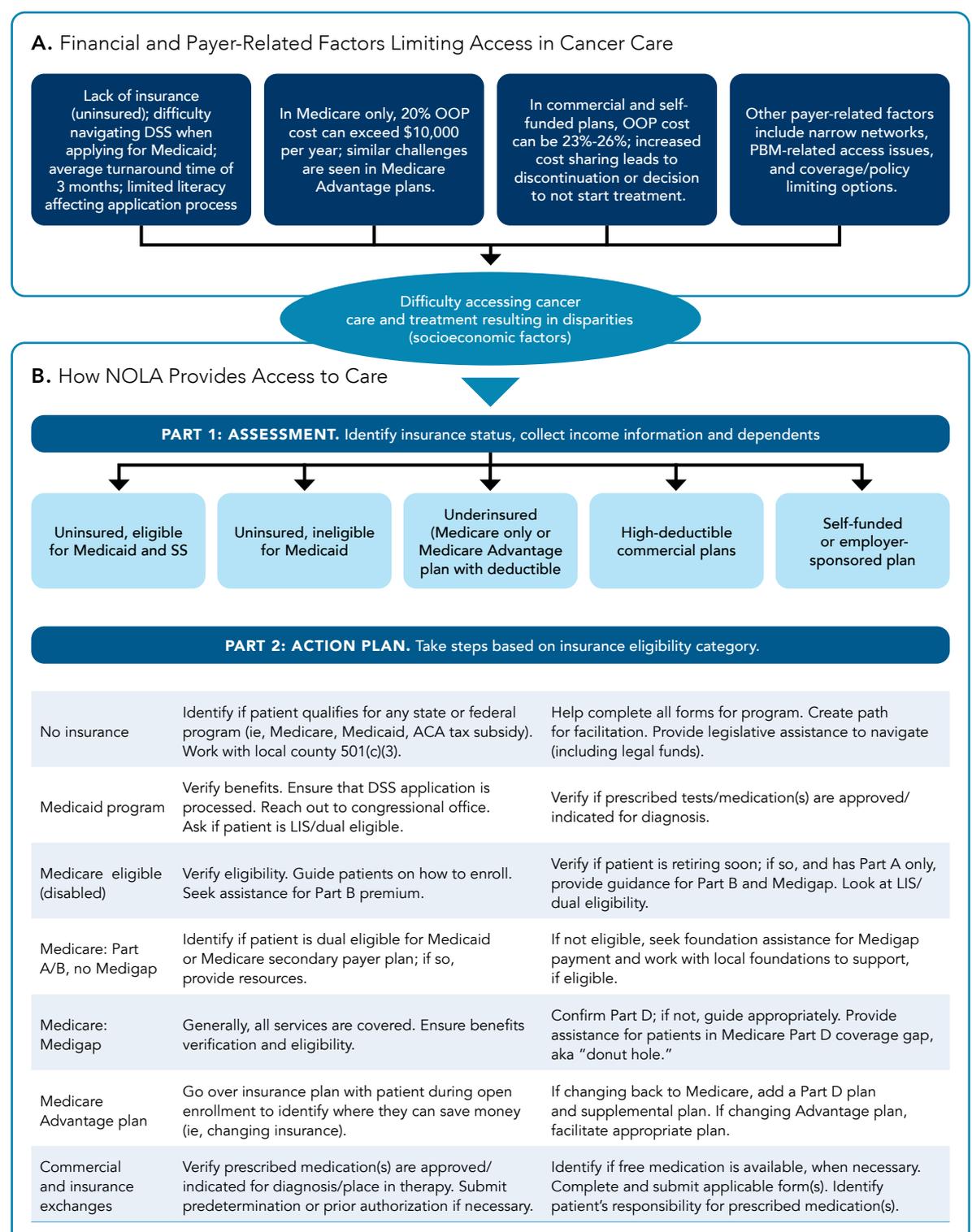
OOP costs for patients based on the treatment they were receiving.

### What Is Next for NOLA?

With the success of phase 1 of the NOLA project, we begin to look to the expansion of the pilot program. We believe that what was undertaken as a local pilot involving just our practice can be streamlined and standardized—and then scaled at the national level.

As next steps, we are planning to expand this project to other practices in South Carolina and to Georgia. We will be reaching out to other community

**FIGURE 3.** NOLA Addresses Access to Cancer Care in a 2-Step Process



ACA, Affordable Care Act; DSS, Department of Social Services; LIS, low-income subsidy; Medigap, Medicare supplement insurance; NOLA, No One Left Behind; OOP, out of pocket; PBM, pharmacy benefit manager.

practices in both states to share our experience and to look for resources to expand the pilot and collect data on prospective service areas.

CBCCA also plans more phases of the existing pilot during the next 12 to 18 months, starting with phase 2. In phase 2, we will focus on providing biomarker and germline testing, as well as funding for testing. Phase 2a will focus on ensuring that eligible minority patients receive next-generation sequencing (NGS) testing to guide treatment after cancer is diagnosed. The need for this is critical because only 1 in 4 eligible patients with cancer receive biomarker testing, which can help determine the most effective course of treatment, and only 14% of eligible Black patients receive this testing.<sup>27</sup>

**PHASE 2A.** For this phase, NOLA, CBCCA, and its research enterprise, the Community Clinical Oncology Research Network (CCORN), have developed a research study in partnership with 2 large genomic testing laboratories. The study seeks to ensure NGS testing is made available to more than 5000 patients at multiple sites. The target is to ensure that at least 80% of eligible patients receive appropriate biomarker testing. This phase has been underway at CBCCA since July 2021 and has already succeeded in getting 50% of eligible patients with cancer NGS testing. In addition, 2 other studies relating to CHDs and genomic testing are underway, with more than 235 patients enrolled.<sup>28</sup>

**PHASE 2B.** This phase will focus on hereditary cancer testing, as less than 20% of eligible patients in cancer treatment receive germline testing.<sup>29</sup> CBCCA is in discussions with a laboratory partner with expertise in this area, with target launch for this phase in the first half of 2022.

**PHASE 3.** This phase will focus on data collection to better identify and address needs in cancer screening, including screenings for lung, breast, cervical, colorectal, and prostate cancers. Data collection on social determinants of health is ongoing; future reports on NOLA will discuss the program's impact on food insecurity.

**PHASE 4.** In this phase, NOLA will address the issues related to access to clinical trials. To prepare for this phase, CBCCA and CCORN are currently collaborating with Labcorp Drug Development (previously Covance), AmerisourceBergen, and pharmaceutical companies.

In launching these subsequent phases of NOLA, CBCCA will follow the same path as with the deployment of phase 1, including undertaking a full assessment of resources available; developing an implementation plan; training, developing, and hiring staff as needed; screening all patients; and rolling out the program to the larger community.

## Conclusion

NOLA is a multiphase program that seeks to address health care disparities by improving access to cancer treatment. In its first year, NOLA generated financial assistance worth more than \$1.7 million and assisted 154 patients whose median income was \$38,766, an amount well below both US and South

Carolina median income levels. To create NOLA, CBCCA invested staff resources and physician time, and enlisted partners helped meet the needs of patients with cancer who faced financial toxicity or the possibility of not continuing their care. Future phases of NOLA will address access to NGS and germline testing as well as to clinical trials. ♦

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