



Cancer Health Disparities; Challenges and solutions through NOLA (No one left Alone)

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Private and confidential

AACR Cancer Disparities Progress Report 2020

34% of cancer deaths among all U.S. adults ages 25 to 74 could be **prevented if socioeconomic disparities were eliminated** (45).

Eliminating health disparities for racial and ethnic minorities from 2003 to 2006 would have reduced

Direct medical costs by:
\$230 BILLION

Indirect costs associated with illness and premature death by:
>\$1 TRILLION



U.S. Cancer Health Disparities at a Glance

Adverse differences in numerous measures of cancer burden exist among certain population groups in the United States. Examples of such disparities include:

111% and 39% HIGHER RISK	African American men and women have a 111 percent and 39 percent higher risk of dying from prostate cancer and breast cancer , respectively, compared with their white counterparts (4).
20% and 38% MORE LIKELY	Hispanic children and adolescents are 20 percent and 38 percent more likely to develop leukemia than non-Hispanic white children and adolescents, respectively (5).
TWICE AS LIKELY	Asian/Pacific Islander adults are twice as likely to die from stomach cancer as white adults (6).
TWICE AS LIKELY	American Indian/Alaska Native adults are twice as likely to develop liver and bile duct cancer as white adults (6).
3.5X HIGHER	Men living in Kentucky have lung cancer incidence and death rates that are about 3.5 times higher than those for men living in Utah (7).
<HALF AS LONG	Patients with localized hepatocellular carcinoma, the most common type of liver cancer, who have no health insurance have overall survival that is less than half as long as those who have private health insurance (8 months versus 18 months) (8).
35% HIGHER	Men living in the poorest counties in the United States have a colorectal cancer death rate that is 35 percent higher than that for men living in the most affluent counties (6).
70% MORE LIKELY	Bisexual women are 70 percent more likely to be diagnosed with cancer than heterosexual women (9).

As of 2018, nearly **80 percent** of individuals included in genome-wide association studies—the most common type of research that detects genetic alterations that are associated with disease risk—**were of European descent; 10% were Asian, 2% African, 1% Hispanic, and less than 1% other population groups** (92).

DEATH RATES*

Cancer Type	African Americans	Whites	Rate Ratio
Prostate, males	38.4	18.2	2.11
Stomach	5.3	2.6	2.04
Multiple myeloma	6.0	3.0	2.00
Cervix uteri, females	3.1	2.2	1.41
Breast, females	27.3	19.6	1.39
Colorectal	18.3	13.4	1.37
Liver and intrahepatic bile duct	8.5	6.3	1.35
Pancreas	13.3	11.0	1.21
Lung and bronchus	40.2	39.3	1.02
Kidney and renal pelvis	3.4	3.7	0.92

*Both sexes unless otherwise specified

Data from: SEER Cancer Statistics Review 1975-2016 (Howlander N, Noone AM, Krapcho M, Miller D, Brest A, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). SEER Cancer Statistics Review, 1975-2016, National Cancer Institute. Bethesda, MD, https://seer.cancer.gov/csr/1975_2016/, based on November 2018 SEER data submission, posted to the SEER website, April 2019.

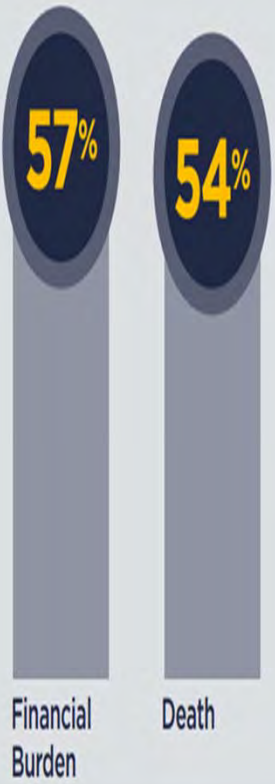
Our limited knowledge of cancer biology in racial and ethnic minorities diminishes the potential of precision medicine in these populations.

Map of life expectancy: disparities in New Orleans, Louisiana. NOTE: The average life expectancy gap for babies born to mothers in New Orleans can reach up to 25 years. SOURCE: RWJF, 2013b.



Cancer's Financial and Access Challenges

Just as many Americans are worried about cancer's financial impact as about dying of cancer



61% of caregivers say they or a loved one have taken at least one onerous step to pay for cancer care including:

- 35% dipped into savings account
- 23% worked extra hours
- 14% postponed retirement
- 13% took on an additional job

43% of cancer patients experienced barriers to accessing the best possible care due to health insurance coverage



Transportation
Some patients have to travel significant distances to medical appointments and the pharmacy



Lodging
Some cancer patients must travel to receive treatments, like specialized surgeries, and need a place to stay near their treatment site



Lost wages or income
Some cancer patients must stop working temporarily or permanently, or reduce their work schedules



Secondary Effects
Some patients must treat or deal with secondary effects of cancer or treatment, like fertility treatments, wigs and cosmetic items, or the cost of special food



Caregiving costs
Some patients may need to pay for help at home to care for themselves, or for their children

Access to cancer care is bigger than just financials

Disparities in cancer screening

Rates of breast and CRC screening in uninsured age-eligible adults are

50%

lower than those in insured age-eligible adults.²

6/10

Women eligible for breast, cervical, and CRC screenings are not up-to-date with these screenings. The proportion is even higher among women with a high school degree or less.³

Rates of CRC screening among men in low-income counties are

35%

lower than in high-income counties.⁴



Individuals in non-Medicaid expansion states are least likely to be up-to-date with CRC screening compared to those in expansion states.⁵

Racial and ethnic disparities persist in access to timely cancer screening and detection.¹

How do health outcomes compare across groups?

- ❖ individuals have the highest incidence and mortality rates for CRC. About half of the racial disparity in CRC mortality rates is attributed to a combination of less screening and lower state-specific survival among Black individuals.⁴
- ❖ Cervical cancer incidence and mortality rates are highest among non-Hispanic Black, American Indian, Alaska Native, and Hispanic individuals, largely reflecting socioeconomic disparities and a lack of access to care, including cervical cancer screenings.⁴

Black individuals with cancer are more likely than white individuals to be diagnosed at later stages for breast, CRC, and cervical cancers, partly due to lower screening rates and timely follow-up for abnormal results (Source: ACS)

Lung Cancer Screening Rates for Eligible Patients with Coverage Through Medicaid or Medicare

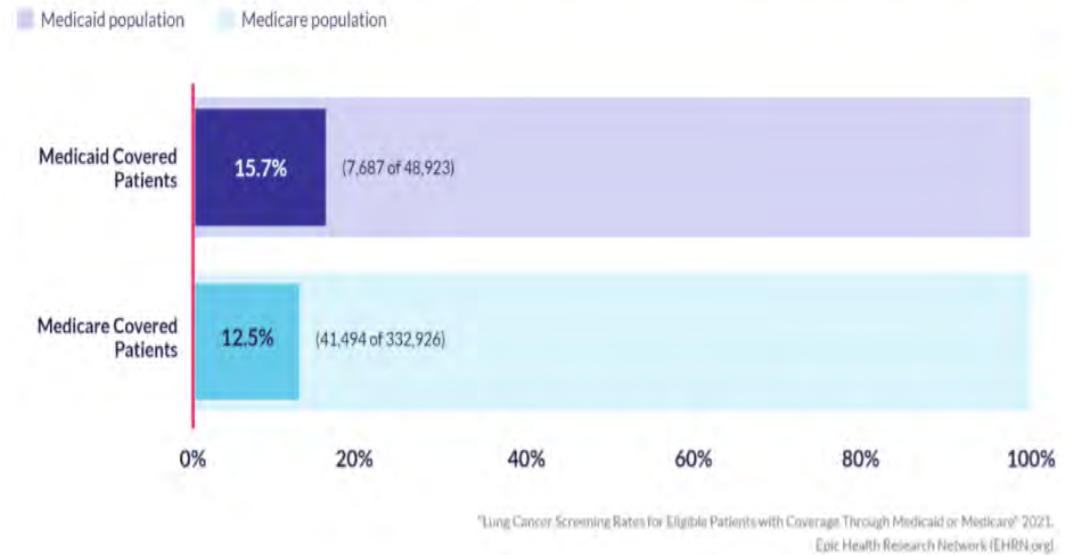


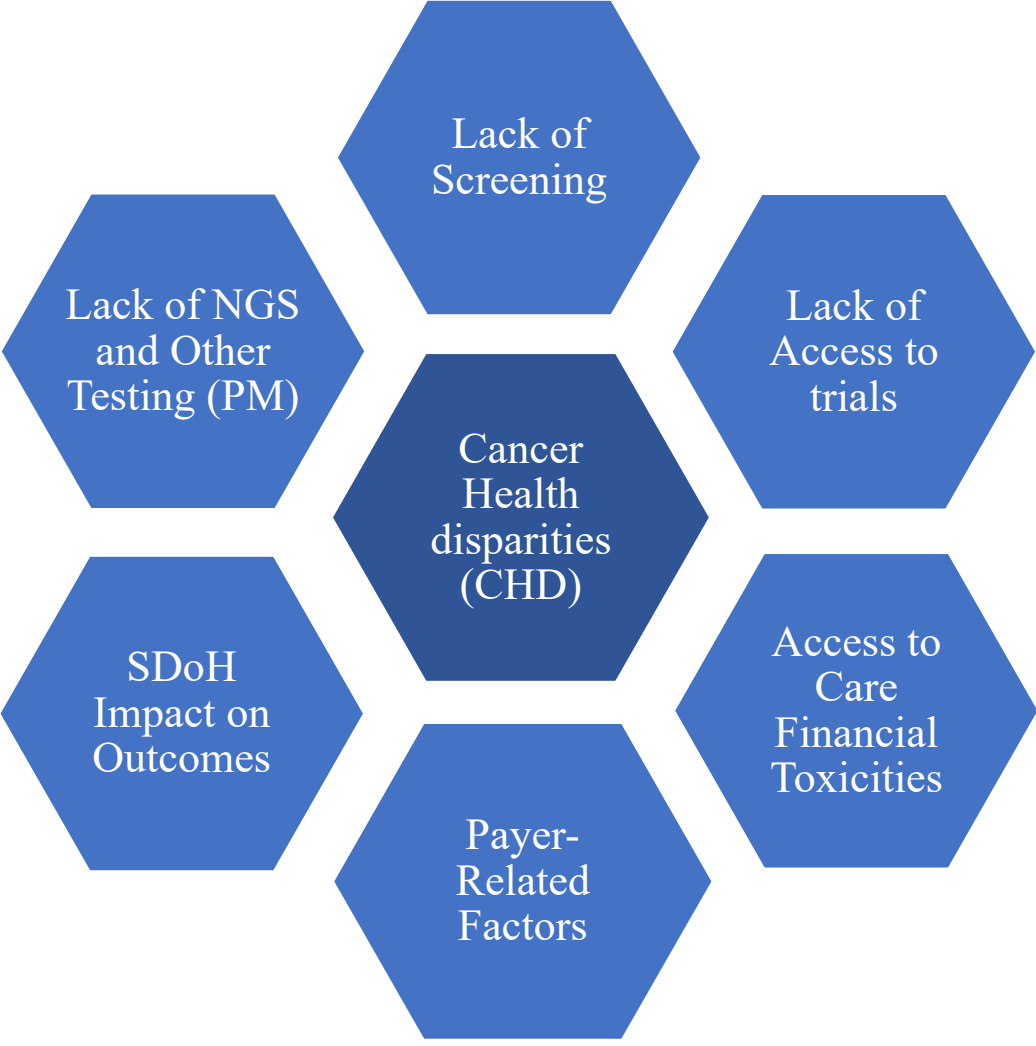
Figure 1. The percentage of patients whose Medicaid or Medicare coverage includes lung screening exams who received a lung cancer screening exam, had a documented pack-year value of at least 30, and had at least one office visit or telemedicine encounter in 2019 and 2020.

Social Determinants of Health (SDOH)

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code / geography	Literacy Language Early childhood education Vocational training Higher education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination Stress	Health coverage Provider availability Provider linguistic and cultural competency Quality of care

Health Outcomes
 Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

Summary
of Factors
Leading to
Disparities



No One Left Alone (NOLA)

Solving cancer health disparities through new value-based care models



Improve SDoH data collection

Mandate the collection and reporting of key data elements to better understand the sub-populations and their health outcomes



Improve access to cancer care

Increase access to cancer screening
Extend clinic availability, including after hours and weekends
Reduce financial toxicities



Improve access to testing and therapies

Include appropriate biomarker testing
Leverage biomarker findings to select most appropriate treatment options
Lower costs through the use of generics and biosimilars



Increase in clinical trial participation

Identify community clinics serving these patient populations
Provide customized patient materials to increase participation
Leverage real world evidence studies to better understand the impact of disparities on patient outcomes

SDoH: Social Determinants of Health

Private and confidential

NOLA PATIENT INTAKE FORM/Cancer screening/SDOH/Cognitive assessment needs

TODAYS DATE	Chart No.
FIRST NAME	LAST NAME DOB:
1. What is your country of birth: USA, including Puerto Rico / Other	
2. How many years have you lived in the United States	
3. WHAT IS YOUR RACE?	
4. What is your Gender/sexual orientation: Male / Female/ Transgender /Prefer not to identify	
5. Sexual orientation: heterosexual/bisexual/LGBT/prefer not to identify	
6. EDUCATION status	Less than High school/high school/Undergraduate/Graduate/Doctorate
7. WHAT IS YOUR MARITAL STATUS?	Married/living as married/Widowed/ Divorced/ Separated/ Never married/ Other
8. ANNUAL INCOME? (household)	< than \$25,000/ \$25,000-\$49,999/ \$50,000-\$74,999/ \$75,000-\$100,000/\$100,000-149,999/\$150k-\$199,999/ \$200,000 or more How many members live on this income
9. HOW OFTEN DO YOU FEEL THIS	I DON'T HAVE ENOUGH MONEY TO PAY MY BILLS NEVER / RARELY/ SOMETIMES/OFTEN/ALWAYS
10. EMPLOYMENT	FULL TIME/PARTIME/ UN EMPLOYED/RETIRED/SELF EMPLOYED/STUDENT
11. IF SELF- EMPLOYED (OR EMPLOYED-FIELDS)	Sales/ IT/Hardware Software/Transportation/Homemaker/education/ clergy/ healthcare /hospitality

Access to healthcare/Transportation

Do you have a doctor or clinic for your regular care? <i>If <u>no</u> where do you get your care</i>	Yes	No	FQHC/ER/Urgent care
In the past year, was there a time when you needed health care but could not get	Yes	No	If <u>not</u> why
Do you have any problems with transportation to your health care visits?	Yes	No	

Language/literacy/Mental Health

Are you able to communicate with your doctor in your language?	Yes	No	Preferred language
Do you have cell phone/ access to the internet, if yes, do you use for visit	Yes	No	
Do you often feel anxious, depressed, or worried? Are you experiencing any memory lapses or forgetfulness? Do you ever feel confused?	Yes	No	If yes, cognitive assessment
Are you under care from a psychologist and/or mental health counselor	Yes	No	
Are you on any medications like <u>anti anxiety</u> , sleep or opioids	Yes	No	

Food insecurity

In the past 12 months has there been a point where the food you bought just didn't last and you didn't have money to get more?			If yes, is it often or sometimes
Within the past 12 months, have you worried that your food would run out before you got money to buy more			If yes, is it <u>often</u> or sometimes

Family responsibilities for family members/friends/social support/community activity

Are you responsible for child/elder care in your family? Do problems getting childcare make it difficult for you to work/study	Yes	No	
Do problems getting childcare make it difficult for you to get healthcare?			
Do you have friends or neighbors support	Yes	No	

Housing: access, utility services, household density

Do you have any of these problems with your housing? Pest infestation/Mold/ <u>Lead</u> paint or pipes/ Inadequate heat/ Oven or Stove not working/ Water Leaks/ No or non-function smoke detector/ None of the above	Yes	No	If yes, how often
How many people live in your house/apartment?			
Do you exercise	Yes	No	
Do you drink alcohol	yes	No	If yes; daily or a social drinker
Do you smoke	yes	No	Pack years
Do you take any recreational drugs	yes	No	

PERSONAL AND FAMILY HISTORY OF CANCER

12. FAMILY H/O	CANCER	(WRITE IN) TYPE OF CANCER?	AGE/YEAR AT DIAGNOSIS
a. SELF	Yes/ No	_____	_____— <u>or</u> Don't know
b. Sibling	Yes/ No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know
c. Birth mother	Yes/ No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know
d. Her Parents	Yes/No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know
e. Her Siblings	Yes/No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know
f. Father	Yes/No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know
g. His Parents	Yes/No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know
h. His Siblings	Yes /No	_____— <u>or</u> Don't know	_____— <u>or</u> Don't know

Colon Cancer Screening Assessment

Does any of your family members had colon cancer	Yes (at what age)	No
Do you have ulcerative colitis/ Crohn's disease or IBD		
Have you been screened or provider discussed colon cancer screening		

Lung Cancer Screening Assessment

Do/Did you smoke	Yes	No
How many packs and years		
Have you been screened for lung cancer		
No insurance/did not know/never heard about it (is eligible)		

BREAST Cancer Screening

Have you ever had a discussion with your doctor about the risk/benefits of breast cancer screening with mammogram?	Yes	No	
Have you ever had a mammogram? If yes,	If Yes; when	No	
Have you ever had a breast biopsy?	Yes	No	
If "Yes", result of biopsy	Right/left	. Result: Breast cancer/pre-cancerous	
Have you or anyone in your family been tested breast cancer gene mutation?	Yes	No	If yes, type of mutation

CERVICAL CANCER ASSESSMENT

Have you ever had a Pap smear?	Yes	No/ Don't know
27b. If "No", is there a reason why you have not had a Pap smear yet/in the past 2 years?		

Prostate Cancer Screening:

Have you ever had your PSA checked	Yes	No/ Don't know
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Bone density

Have you ever had Bone density checked for osteoporosis	Yes	No/ Don't know
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Advanced Care Planning

Do you have a living will or have you completed advance care planning? Do you want us to help you? (will not cost you)	Yes	No/ Don't know
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Research: Our cancer center participates in multiple national research studies to develop understanding about cancer, how it occurs, what tests help us, how best to develop new treatments and how to bring equity, equality and better access to all socioeconomic class of individuals (all of these studies are in full compliance of regulatory agencies like Office of Human Research Protection ACT)

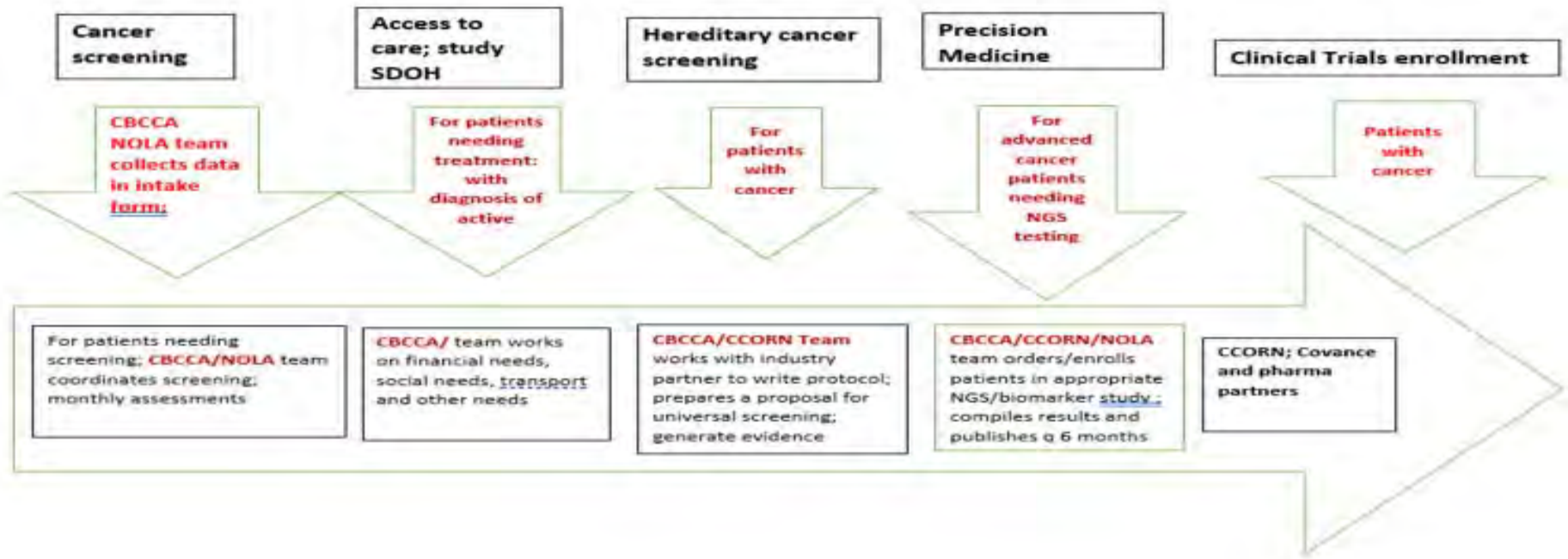
Would you be willing to participate in research to better understand disease process by certain tests (blood or tissue)	yes	no	If not why
Would you be willing to participate in a research that helps develop newer drugs for cancer patients (including for you or future)	yes	No	If not, why

PATIENT SIGNATURE _____ date

TASK List

Reviewed by and action plan

CANCER SCREENING SERVICES Needed	Yes/No	Scheduled
BREAST		
CERVICAL		
COLORECTAL		
LUNG		
PROSTATE		
Bone density		
SMOKING CESSATION		
Alcohol counselling		
Depression/Mental health counselling/cognitive screening		
Research participation		
Advance Care Planning		
Other		
Other SERVICES; DSS/Financial counsellor	YES/No	Referral/assistance
Medicaid/Dual Eligibility? LISS/DSS		Catawba agency on ageing/Norrell/Congressional office
Health Insurance/ACA/Other		
Foundation support		CBCCA financial counsellor/Pharmacy team
Free drugs		CBCCA financial counsellor/Pharmacy team
Mental Health Services		
Transportation		
Housing/Free clinics/FQHC/Food/Utility/Other		



Identified 700 plus patients who did not have cancer screening and arrangements being made for same

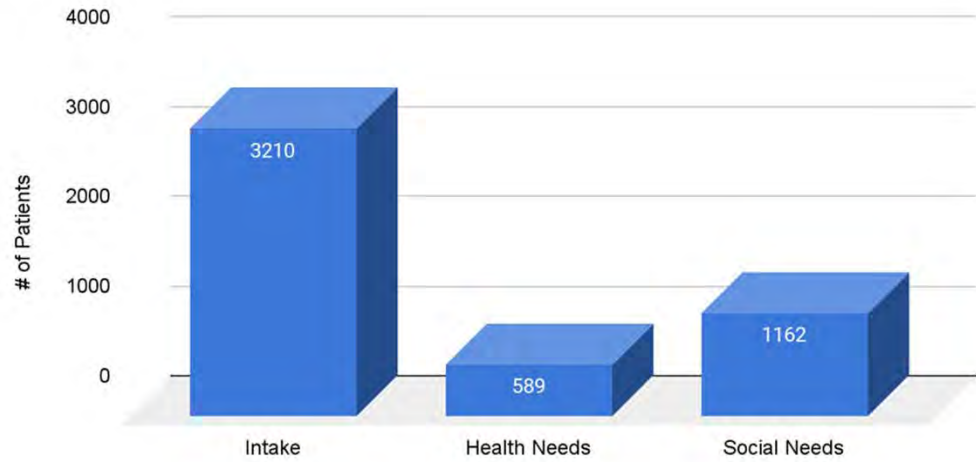
Raised close to \$3 million last year for OOP cost or free drugs; Created insurance fund and already supported 20 plus patients

Pilot already in place with a large lab with purpose to identify gaps in germline tests; paper expected soon

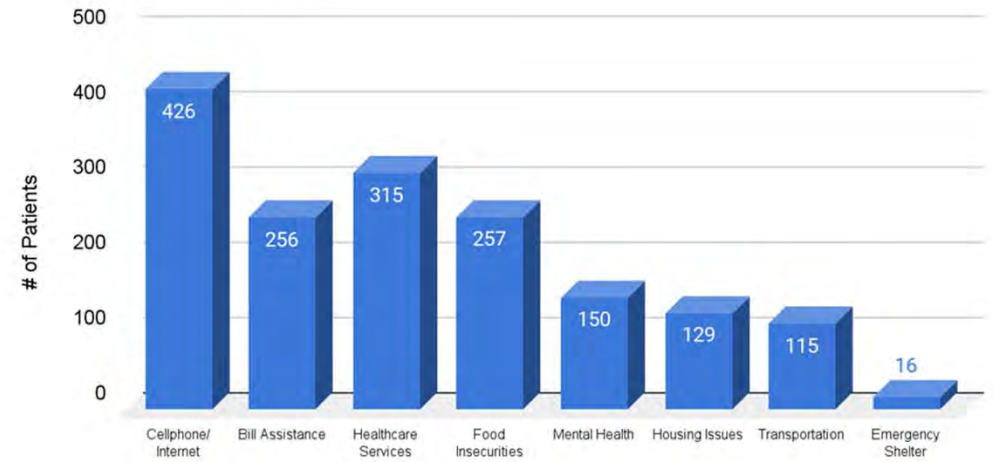
Three large studies; reached NGS testing rate to 80% plus

Starting 3 phase III studies soon

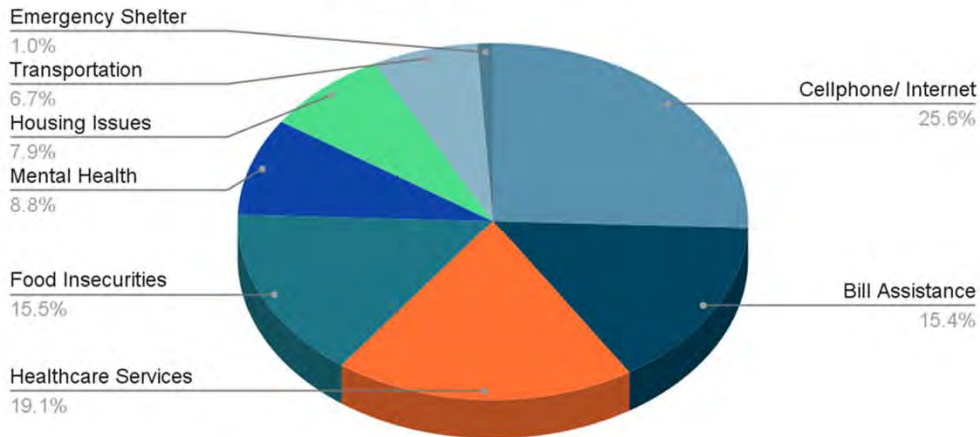
NOLA Intake



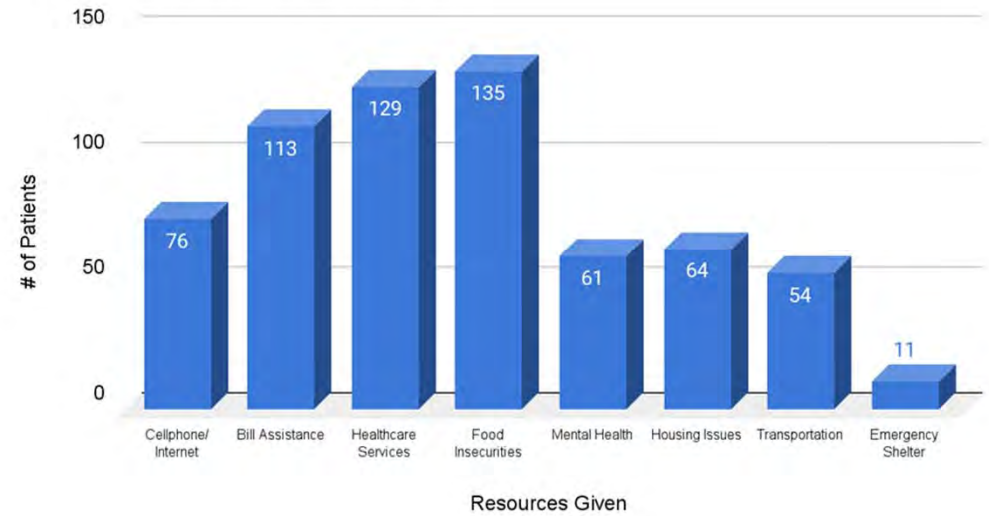
Type of Social Need



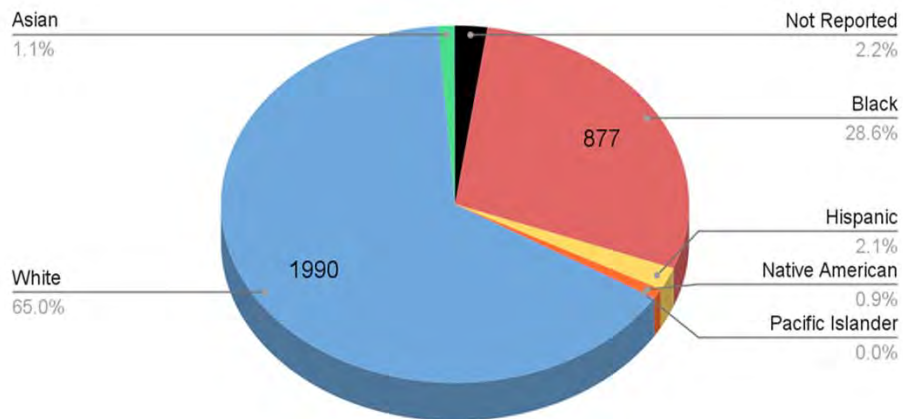
Type of Social Need



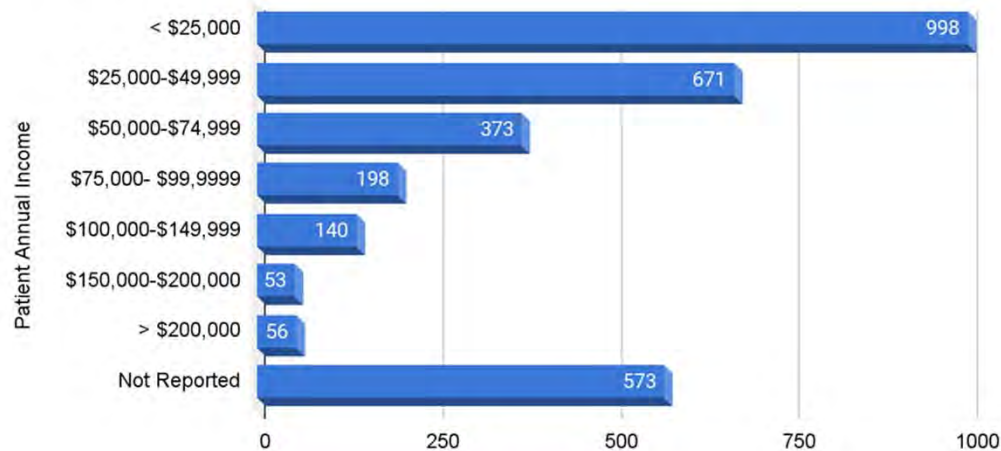
Types of Resources Given



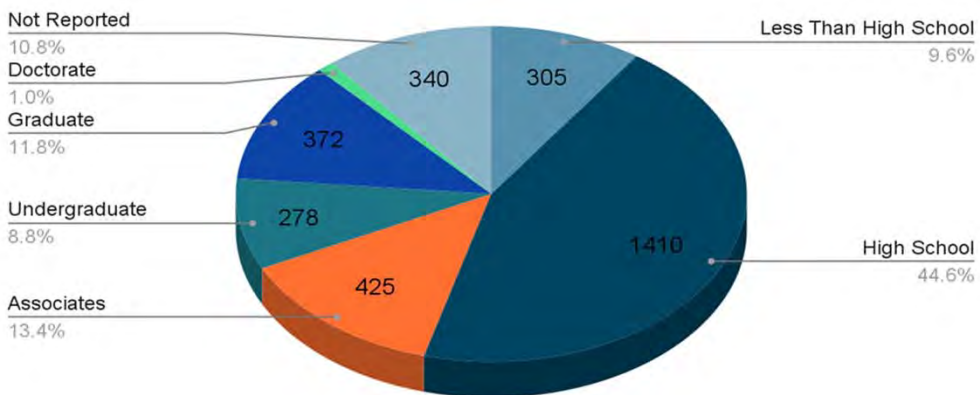
NOLA Patient Demographics, by Race



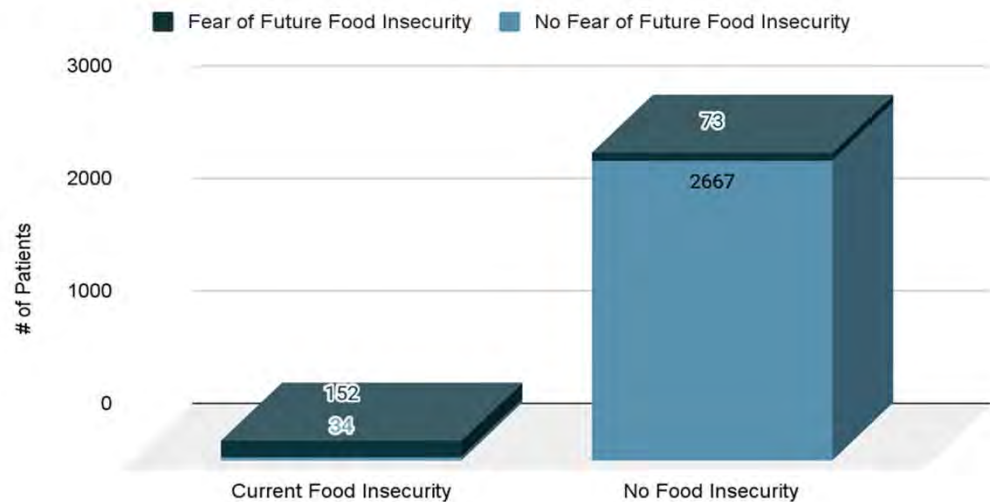
Annual Income



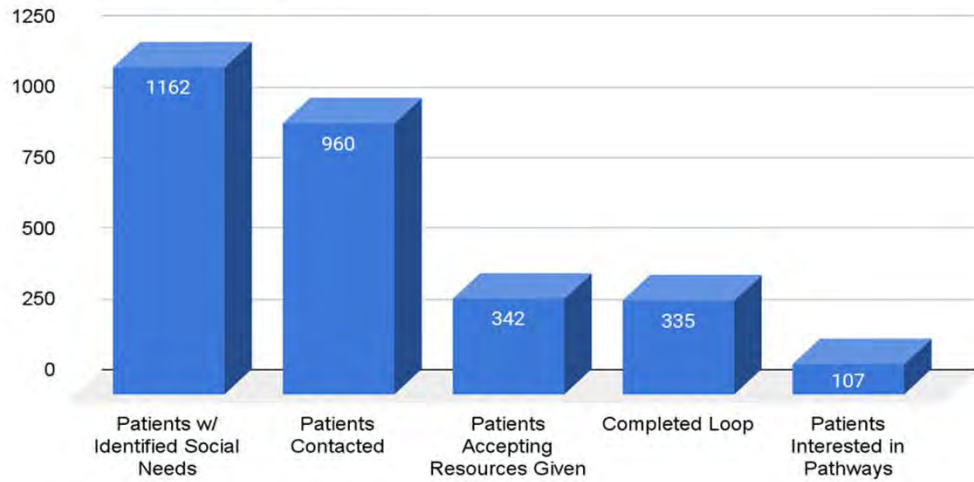
Education



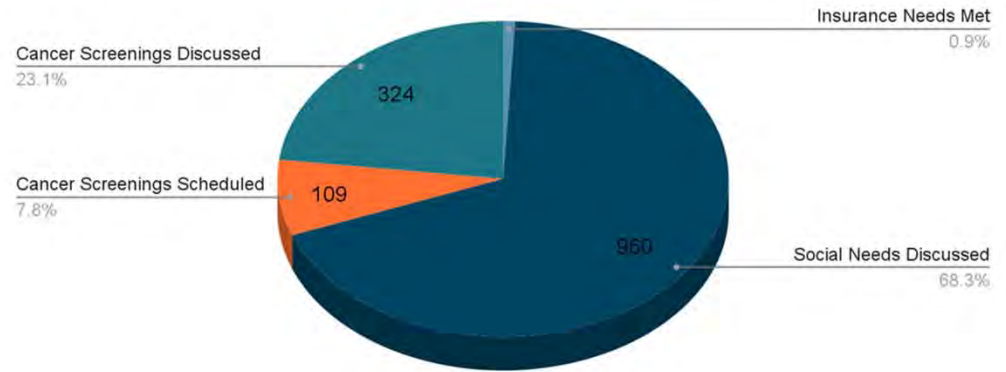
Food Insecurity



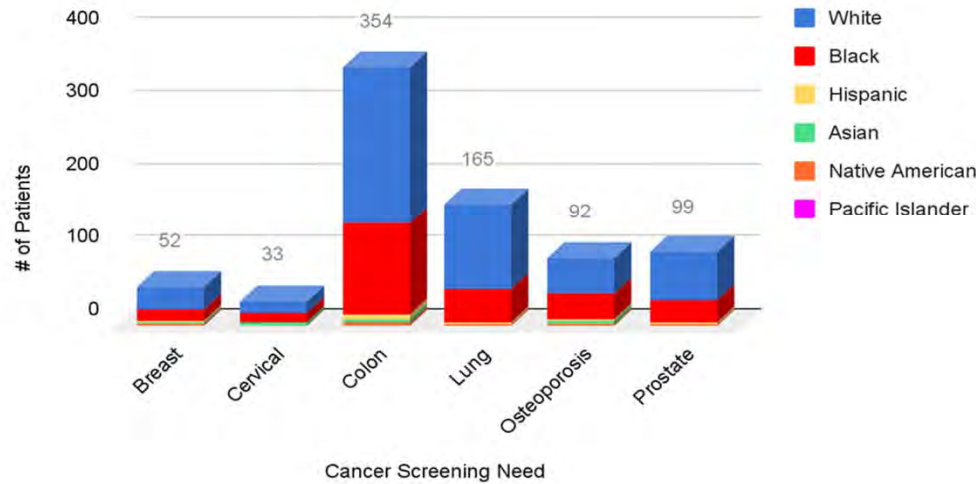
Social Needs Progress



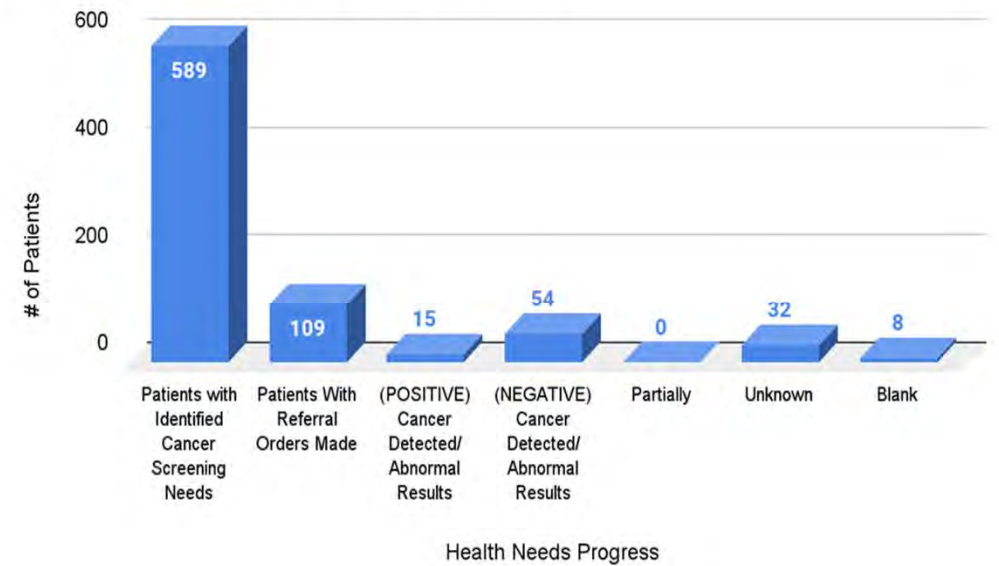
Patients Assisted Through NOLA



Cancer Screening Need Type vs. Race



Cancer Detected/ Abnormal Results





TRANSPORTATION



CLOTHING



BENEFITS (HEALTH
INSURANCE, SNAP,
WIC, ETC.)



IDENTIFICATION
(STATE ID, BIRTH
CERTIFICATE,
SOCIAL SECURITY
CARD)



FINANCIAL AND
UTILITY
ASSISTANCE



FOOD (PANTRY
AND MEALS)



SHELTER (DAY
SHELTER,
EMERGENCY
SHELTER,
TRANSITIONAL
HOMES)



HELP TO FIND
AFFORDABLE
HOUSING



EMPLOYMENT (JOB
TRAINING,
INTERVIEW
COACHING,
PLACEMENT)



EDUCATION (LIFE
SKILLS, LITERACY,
GED, ETC.)



MEDICAL HEALTH
(ASSESSMENTS)



CRIMINAL RECORD
(EXPUNGEMENT
AND PARDON)



MENTAL HEALTH
AND SUBSTANCE
USE SUPPORT
(COUNSELING,
TREATMENT,
RECOVERY
GROUPS)