

Introduction

Headquartered in Detroit, Michigan (Wayne County), the Barbara Ann Karmanos Cancer Institute, a subsidiary of the McLaren Health Care system, is one of 51 National Cancer Institute (NCI) Designated Comprehensive Cancer Centers in the United States. NCI-Designated Comprehensive Cancer centers are recognized for their leadership, resources, scientific excellence, and ability to discover and deliver state of the art approaches to cancer prevention, diagnosis and treatment. Having held the NCI comprehensive cancer center recognition over 40 years, Karmanos has demonstrated expertise in research, laboratory, clinical and population-based research, including early-phase clinical trials. In addition, Karmanos has strong community ties, providing community outreach and educational activities throughout the region. Affiliated with Wayne State University School of Medicine, Karmanos enjoys a partnership that enhances the collaborative nature of critical research and academics related to cancer care.

Karmanos is the largest cancer research and provider network in Michigan and remains Michigan's only hospital dedicated exclusively to fighting cancer. It has one of the largest clinical trials programs in the nation, giving patients innovative cancer treatments and the newest cancer-fighting drugs. Karmanos has16 treatment locations, including expansion to the Toledo Clinic Cancer Center in Maumee, Ohio. Karmanos facilities include an inpatient hospital comprised of three medical/surgical oncology units, a stem cell transplant unit, and a critical care unit. Ambulatory services include the Joseph Dresner Family Clinic for Hematologic Malignancies and Stem Cell Transplantation, the Eisenberg Center for Translational Therapeutics (Phase I Clinical Trials Program), the Alexander J. Walt Comprehensive Breast Center, the Vic and Lucille Wertz Clinic and Infusion Center. Karmanos also has infusion and radiology services at the Lawrence and Idell Weisberg Cancer Treatment Center, located in Farmington Hills, Michigan (Oakland County).



Background

In 2018, the Community Health Needs Assessment (CHNA) core team reviewed previous survey materials and developed, reviewed, and evaluated the CHNA surveys. These surveys were distributed directly at community education events, from the fall of 2016 through the winter of 2018. The CHNA core team focused on embracing the culturally and economically diverse population in the metro Detroit area. The surveys were also translated into Spanish and Arabic, languages some of the patients and families speak who are serviced at Karmanos. The report has been made available to the public.

The survey results highlighted improvements on access to nutrition, prevention and screening guidelines, and services. A plan was developed to improve and promote access to healthy food options, evidence-based cancer screening and prevention guidelines, and programs that improve access to care and services in the metro Detroit area. Unfortunately, due to the pandemic in 2020, there were limited resources available to implement the proposed plan and many of the planned activities were placed on hold. One improvement made was updating the new patient portfolios with a food assistance resource list to improve patient access to healthy food options in Oakland, Macomb, and Wayne County.

Service Area and Population Demographics

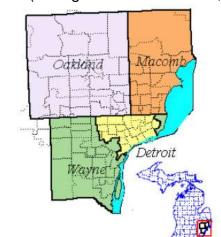
Michigan Population Demographics

Most of the patients serviced by Karmanos resided in southeastern Michigan. The majority of patients resided in southeast Michigan's most populated counties – Wayne, Oakland, and Macomb. In 2019, the Michigan Department of Health and Human Services (MDHHS) categorizes each of these counties having approximately 1 million residents (Michigan Health Statistics, 2020). To provide inclusive population information, the 2019 MDHHS Health Department Profiles were reviewed to allow information about Detroit City to be observed. For the Health departments of Wayne,



Macomb, Oakland and Detroit City, the gender majority was women and the age distribution ranged from 18 to 44 for each health department (Michigan Health Statistics,

2020). The racial and ethnic distribution in Oakland, Macomb and Wayne County was approximately 80 percent White, 14 percent Black, 5 percent Asian, 4 percent Hispanic, and less than 1 percent American Indian, and Detroit City was approximately 83 percent Black, 15 percent White, 9 percent Hispanic, 2 percent Asian, and less than 1 percent American Indian (Michigan Health Statistics, 2020). It is also important to mention that according to Arab American Institute,



Michigan has one of the largest populations of Middle Eastern residents in the United States (Arab American Institute, 2021). Much of the information derived from the previous CHNA continues to reflect statistics available for this report.

Karmanos Population Demographics

The majority of Karmanos services occur in an ambulatory setting. Most patients were Wayne County residents, followed by Macomb and Oakland County. The patients served were predominantly female and the races and cultures represented at Karmanos, were American Indian/Eskimo/Aleut, Asian Pacific Islander, Black, Other, Spanish/Hispanic, Unknown, and White. The majority of visits were covered by Medicare, Medicare advantage, BX Trust, and Medicaid HMO insurance plans.

Process and Relevant Findings

The pandemic of 2020 caused many resource constraints on the CHNA core team, and an adaptive plan was created to gain insight on the community Karmanos services. The information contained in the 2021 CHNA was obtained with limited access to the community and limited staffing resources due to staff relocation to critical service areas. The CHNA core team created two surveys that were distributed in the clinic



areas from 2019 to 2020 to a small, focused number of patients/clients and providers/partners who frequently interacted with Karmanos. For the patients/clients, the survey included nine questions targeted to gain insight on the perception of health, access to care, cancer prevention and screening knowledge, and perceived barriers to care (see Appendix A). For the providers/partners, the survey included ten questions to gain insight on their perception of patient health care concerns, access and perceived barriers to care that impact the health of those serviced at Karmanos, see (Appendix B). The demographics of the patients/clients who responded to the CHNA survey self-identified as mostly women, African American/Black, Caucasian/ White, Hispanic, and other race, with the average age being 43 years old.

Patient/Client Response

Patients/clients responded that most of them use a doctor's office for routine and annual health care services and have a primary health care provider. One person reported not participating in routine health care or having a primary health care provider. The benefits of having a primary care provider include health maintenance and early detection of disease. Increased visits with primary care may improve patient compliance with vaccination, colonoscopy, and mammography (Hostetter et al, 2020). This is especially important, because routine cancer screening offer the best chance of finding cancer early, improving quality of life and survivorship.

Most patients/clients denied barriers to routine healthcare. Several identified barriers as lack of insurance or ability to pay. Inadequate health insurance may cause people to delay or miss regular medical care appointments due to out of pocket medical care costs and medical debt (Healthy People 2020, 2022). Some chose fear or not being ready to discuss health issues and lack of transportation as barriers. Lack of transportation remains a major barrier for Southeastern Michigan. Metro Detroit residents continue to encounter a lack of reliable public transportation or handling the high-priced cost of owning, renting, and insuring a vehicle. Delaying or missing appointments due to transportation barriers could possibly be associated with a late



diagnosis of a medical condition (Healthy People 2020, 2022). Additionally mentioned was limited access to health care, language and other issues. Although not mentioned on the surveys, cultural/religious beliefs may also have an impact on someone receiving routine healthcare.

Patients/clients indicated that in the past five years they have received various cancer screenings including mammograms, pap smears, colorectal cancer screening, skin cancer screening, and prostate cancer screening. A few said they have not had any cancer screenings. According to the American Cancer Society, an estimated 42% of cancer cases are attributed to potentially modifiable risk factors, and cancer prevention and early detection through screening can further reduce the cancer burden (ACS Cancer Facts & Figures, 2021). For those that delay routine screening, this may have a significant impact on their future cancer outcomes.

When patients/clients were asked to identify what could be done to improve their overall health, they listed being more active, losing weight, consuming healthier food, and managing stress as the top issues. A few responses reported that nothing was needed to improve their health. It is important to note that no one in the survey group selected to stop smoking to improve their overall health. Although not mentioned on the surveys, smoking is still a prevalent health issue, continues as the leading cause of preventable death, and causes about 30% of all cancer deaths (ACS Cancer Facts & Figures, 2021).

Having access to community resources can have an impact on health. Patients/clients identified access to local grocery, safe places to walk/exercise, organizations that provide education, reliable transportation and more cost-of-living wage jobs as services that would improve the health in their community. These improvements are comparable to findings on previous CHNA.

The majority of the patients/clients responded that COVID-19 did not influence their health. However, one person noted that COVID-19 had a negative effect stating



they "put on the COVID-15", relating to weight gain due to the pandemic. Although those who completed the survey reported COVID-19 did not impact their health, many people may have been influenced physically and mentally. People may have adopted many negative behavior changes during the pandemic, such as weight gain, physical inactivity and increased alcohol consumption (ACS Cancer Facts & Figures, 2021). The health implications of the pandemic are still unknown.

Provider/Partner Response

Providers/partners identified cancer as the biggest health issues/concern in the community. Cancer remains the second leading cause of death (ACS Cancer Facts & Figures, 2021). They also identified mental health as a health issue/concern. Mental health issues may be on the rise due to the stress and emotional response to the pandemic. Providers/partners also noted that heart disease, obesity, and diabetes, stroke and other issues were mentioned as other health concerns. These improvements are comparable to findings on previous CHNA reports.

Most providers/partners responded that the doctor's office was where the majority of Karmanos clients/patients receive non-cancer related health care. A few providers/partners responded with the emergency room and other as places where patients receive non-cancer related medical care. Primary care providers offer a usual source of care, early detection and treatment of disease, chronic disease management, and preventative care (Healthy People 2020, 2022). Patients are more likely to receive recommended preventative services when they have a primary care provider (Healthy People 2020, 2022).

Providers/partners identified free/ low-cost health care clinics, mental health services, education, livable wages, access to culturally sensitive health care, healthier food, and safe places to walk, and other resources as things that clients/patients need to improve their overall health. Improving the access to these resources may help



improve the overall health of the community. These improvements are comparable to findings on previous CHNA.

Providers/partners reported that a lack of reliable transportation is an issue that prevents patients/clients from seeking healthcare. Metro Detroit residents continue to encounter the barriers with a lack of reliable transportation. Fear of discussing health-related issues and lack of insurance or ability to pay were also issues some seeking healthcare. Lack of insurance could be influencing clients/patients choice to complete preventive appointments and screenings and could be related to poor health outcomes (Healthy People 2020, 2022). Caregiver and childcare issues, cultural religious beliefs, and language barriers were also identified. Those who speak a language other than English at home may have negative experiences with access to primary care and screening programs (Healthy People 2020, 2022).

Most providers/partners stated that clients/patients receive recommended cancer screenings. A few providers/partners reported clients/patients do not receive the recommended cancer screening. One provider made the comment that, "most do not worry about their health until something is wrong, they have other things to worry about (childcare, missing work, reliable transportation)". Lack of education about cancer screenings in clients/patients may cause them to delay screening or reject screening reminders.

The majority of providers/partners identified the internet, family and friends, and their primary care provider as resources where Karmanos clients/patients seek information about health and wellness. A few providers/partners mentioned that patients/clients used television as their source, and some reported that clients/patients do not seek health/wellness information. Patients/clients may seek information from sources that are not reliable or credible. Advances in medical care and easy access to medical information have made the doctor-patient relationship challenging (Chandra et al, 2018).



Although a few providers/partners said clients/patients had sufficient access to community social service assets, most providers/partners do not think clients/patients have sufficient access to community social service assets to meet their needs. They made comments about the need for community social service assets, which would include access to financial navigators, assistance with disability paperwork, reliable transportation to and from appointments, ready access to physical and mental health resources, and education about healthy choices. Improving providers/partners knowledge of the community social service assets can improve clients/patients access to the resources they may need.

Providers/partners provided a variety of responses when asked about the influence of COVID-19 on the clients/patients ability to access care. There were comments about the patients not having access to their primary care physician, avoiding appointments due to fear of getting COVID, and limiting access with restrictions on patients bringing family members with them to appointments. The health implications of the pandemic are still unknown.

Discussion

The 2021 Karmanos CHNA identified topics around access to cancer screening and prevention education, healthcare services and resources, nutritional food, and physical activity resources. Karmanos' commitment to southeastern Michigan provides structures that help to decrease many of these barriers. Karmanos resources and processes that continue to support and address these needs are described below:

Karmanos' multidisciplinary team approach to patient triage helps to individualize care across the continuum. Each of the 13 multidisciplinary team consists of Wayne State University-affiliated oncologists, radiologists, surgeons, pathologists, geneticists, and counselors. Each multidisciplinary team has a registered nurse team leader to serve as the patients' primary navigator, supported by physician assistants, nurse



practitioners, social workers, and dieticians. The Karmanos Cancer Institute Call Center has also been trained to triage patient calls and concerns 24/7.

Karmanos provides cancer education to medical professionals and the community. All cancer symposiums are held free to the public annually. The Patient and Community Education department provides education to the community through health fairs and cancer prevention presentations. There are existing community programs that provide resources to patients that require assistance throughout all phases of their cancer journey. American Cancer Society provides free cancer educational booklets for our patients, which are available in our Education and Resource Center (ERC).

The Karmanos Departments of Marketing and Communication, Development, Patient/Community Education, Volunteer Services, Social Work, Case Management Services, Nutrition, and Patient Care Services can have a direct impact on increasing community awareness and access to health services. Karmanos staff consistently participates and fosters a relationship with community organizations, including the Breast and Cervical Cancer Control Program (BCCCP), the Arab Community Center for Economic and Social Services (ACCESS), the tri-county tobacco cessation coalitions, and several area Federally Qualified Health Centers (FQHC).

Karmanos' social work team acts as an integral part of the multidisciplinary team, providing information and referrals to various community resources and programs (i.e., transportation, housing, financial, legal, Medicaid/Medicare, Supplemental Security Income (SSI)/ Social Security Disability Insurance (SSD). In addition to counseling and day and evening support groups, there are healing art workshops and programs designed to reduce the stress patients and their families go through due to cancer. The Karmanos core team can collaborate with these departments to address the health needs identified in the CHNA.



Activities

Addressing the barriers of the CHNA, planned activities will be to improve access to cancer screening and prevention education, access to healthcare services and resources, and access to nutritional food and physical activity resources. These follow below:

- 1. Increase access to cancer screening and prevention education
 - Increase engagement in the community through health fairs and education presentations
 - Translate cancer awareness health fact sheets into the languages of those that Karmanos serves
 - c. Collaborate with community partners to increase screening and prevention awareness
- 2. Increase access to healthcare services
 - a. Collaborate with multidisciplinary teams to improve Karmanos processes to educate patients/clients on financial concerns and assistance
 - b. Collaborate with multidisciplinary teams to create a free or low-cost clinics and mental health community resource guide
- 3. Increase access to healthy food options and physical activity resources
 - Collaborate with multidisciplinary teams to create a resource guide for local healthy food and local parks/ community activities
 - b. Collaborate with multidisciplinary teams to develop nutrition and physical activity classes at Karmanos Cancer Institute.



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Appendix A.: Patient/client Community Health Needs Assessment Survey

1.	Where	do you go for "routine/annual" healthcare services?
	0	Doctor's office
	0	Health Department
	0	Urgent Care Center
	0	Emergency room
	0	I do not get "routine" healthcare
	0	Other
2.	Do you	have a primary healthcare provider (Doctor, Physician Assistant, Nurse Practitioner)?
	0	Yes
	0	No
3.	What is	ssues might keep you/community from getting routine healthcare? (Check all that apply)
	0	Limited access to healthcare services
	0	Fear (not ready to discuss health care issues)
	0	Language barriers
	0	Cultural/religious beliefs
	0	Lack insurance/ability to pay
	0	Lack transportation
	0	N/A
	0	Other
4.	What s apply)	ervices are needed in the community to improve your/community health? (Check all that
	0	More cost-of-living wage jobs
	0	Reliable transportation/transportation systems
	0	Access to local grocery stores that offer "healthy" food
	0	Safe places to walk/exercise
	0	Organizations that provide education/prevention services
	0	Other



Which of the following cancer screenings did you have in the past 1-5 years?

	0	Mammogram	0	Skin
	0	Pap smear	0	Lung
	0	Colorectal	0	None, why:
	0	Prostate	0	Other
5.	What c	an you do to improve your overall healt	th?	
	0	Eat healthier food	0	Be more active/exercise
	0	Lose weight	0	Don't know
	0	Manage stress better	0	n/a
	0	Stop smoking	0	Other
6.	Has CO	VID-19 affected your health?		
	0	Yes, if yes how:		
	0	No		
7.	How do	you self-identify?		
	0	Female		
	0	Male		
	0	Other		
8.	What is	s your age?		
9.		s your ethnicity/race/culture?	_	
		African American/Black		Hispanic
		Arabic		Indigenous American
	0	Caucasian	0	Other

Thank you for completing the 2021 KCC Community Health Needs Assessment. Your input will help to improve cancer care in the community.



Appendix B.: Provider/partner Community Health Needs Assessment Survey

1.	What are the biggest health issues/concerns in your community? Check all that apply.							
	0	Heart disease						
	0	Cancer						
	0	Diabetes						
	0	Stroke						
	0	Mental Health						
	0	Obesity						
	0	Other						
2.	Where do the majority of Karmanos clients/patients go for non-cancer related medical care?							
	0	Doctor's office						
	0	Community Health Department						
	0	Emergency room						
	0	Urgent Care Center						
	0	Do not seek medical care						
	0	Other						
3.	What issues prevent Karmanos clients/patients from seeking non-cancer related health care? Check all that apply.							
	0	Cultural/religious beliefs						
	0	Fear (not ready to discuss health information)						
	0) Language barriers						
	0	Lack insurance/ability to pay						
	0	Lack reliable transportation						
	0	Caregiver/Childcare issues						
4.	What do Karmanos clients/patients need to improve their overall health? Check all that apply.							
	0	Access to healthier food	0	Education				
	0	Access to safe places to walk	0	Mental Health Services				
	0	Access to culturally sensitive health information		Livable wages Other				



	O Free/low-cost healthcare clinics
5.	Where do the majority of Karmanos clients/patients seek information about health/wellness?
	O Primary Care Provider
	O Family/Friends
	O Internet
	O Television
	O Do not seek health/wellness information
	O Other
6.	How has COVID-19 affected clients/patients ability to access care at Karmanos?
	Do Karmanos clients/patients receive recommended cancer screenings? O Yes O No If you answered no, why do your clients/patients not receive recommended cancer screenings?
9.	In your opinion do Karmanos clients/patients have sufficient access to community social service assets to meet their needs?
	O Yes
	O No
10.	If you answered no, what community social services are needed to meet your clients/patients needs?

Thank you for completing the 2021 KCC Community Health Needs Assessment. Your input will help to improve cancer care in the community.