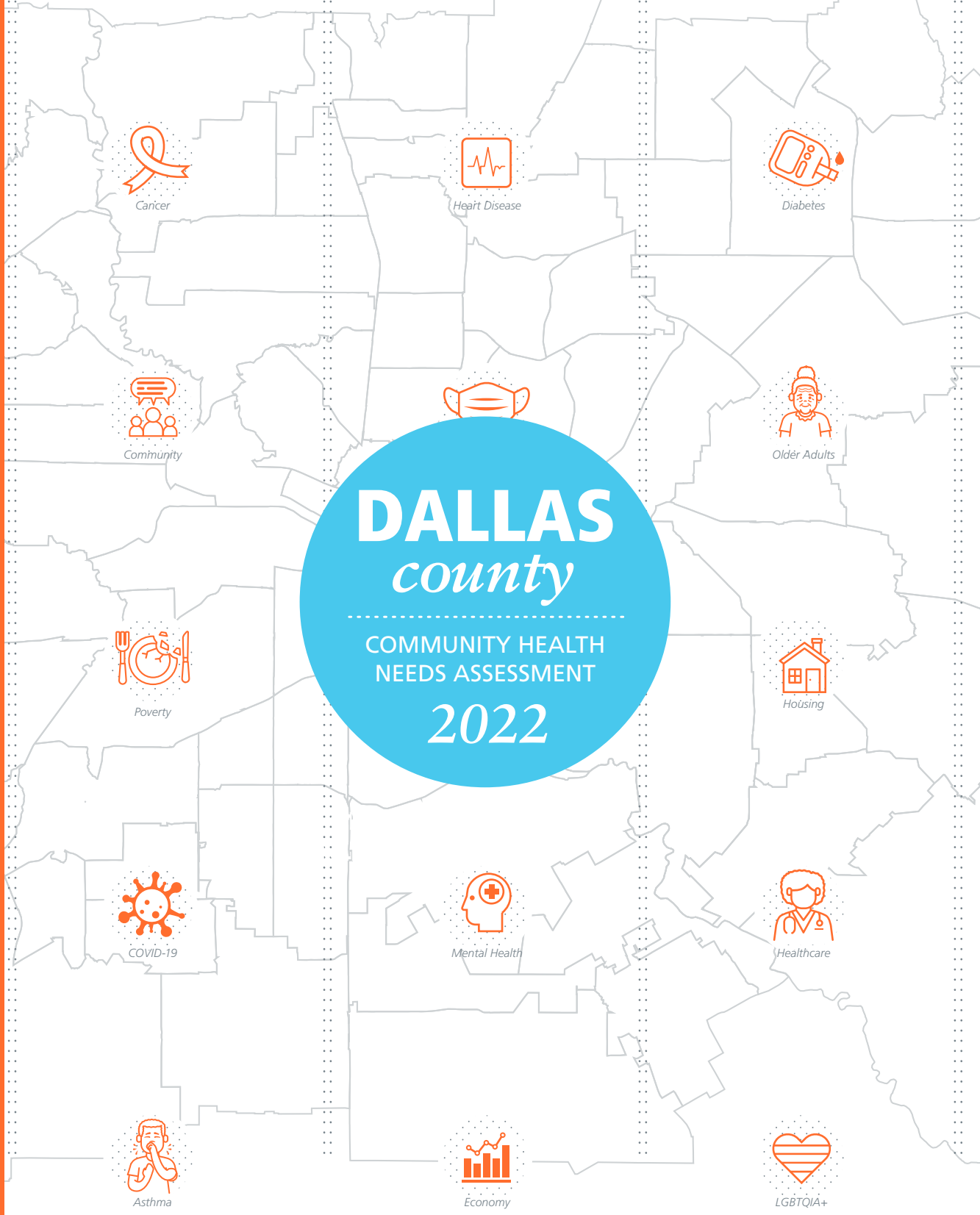

DALLAS *county*

COMMUNITY HEALTH NEEDS ASSESSMENT

2022

Parkland | *Care. Compassion. Community.*

DCHHS
Dallas County Health and Human Services
Healthy People Healthy Communities
Health and Social Equity

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Executive Summary

Parkland Health (Parkland) and Dallas County Health and Human Services (DCHHS) present the 2022 Dallas County Community Health Needs Assessment (CHNA). The assessment serves two purposes, fulfillment of the Patient Protection and Affordable Care Act (ACA), Section 501(r) which requires non-profit and governmental hospitals to conduct a CHNA and compliance with the accreditation process for public health departments. As set forth by ACA, this CHNA report was accepted by Parkland's Board of Managers on October 26, 2022.

The last CHNA report was released on September 30, 2019, and the corresponding CHNA Implementation Plan followed on February 15, 2020. Within a month, Dallas County along with the world became engulfed in a deadly COVID-19 pandemic. This report highlights the impact that COVID-19 had on Dallas County communities and the accompanying 2019 CHNA Partial Evaluation report serves as a testament to Parkland and DCHHS staff who remained focused on addressing health inequities while simultaneously responding to the COVID-19 pandemic. A full evaluation of the 2019 CHNA Implementation Plan will follow upon completion of the 2019 CHNA cycle in February 2023.

The spirit of the CHNA is to bring hospitals, public health systems, health related entities, not-for-profit agencies, and community members together to identify critical health priorities more effectively, collaboratively, and efficiently for Dallas County residents and to drive high quality decision-making in the planning and deployment of community health programs.

In this assessment considerable effort and resources were allocated to strengthen both the quantitative data and qualitative data.

1 **First,** the voice of the community was enhanced through increasing the number of participants and focus groups and the number of referring community partners. An additional opportunity for input was provided with a survey. Focus groups and the survey were in English and Spanish.

2 **Second,** the quantitative data sources were expanded to include mental health data sources– North Texas Behavioral Health Authority (NTBHA) and to Centers for Disease Control and Prevention (CDC), Behavior Risk Factors Surveillance System (BRFSS). Several state level and national databases were curated including information from several departments within the Texas Health and Human Services agency (HHSC) and others for multiple indicators.

3 **Third,** use of new healthcare analytics platforms to forecast demand in services and collaboration with Parkland Center for Clinical Innovation (PCCI) to develop a chronic disease vulnerability index have been incorporated to this CHNA as the means to gain a deeper understanding of the health status of Dallas County and the socio-economic drivers that affect the health of county residents.

4 **Fourth,** the effect of social determinants on health has been more sensitively delineated in neighborhoods through the inclusion of the University of Wisconsin Area Deprivation Index (ADI). These are measures created by the Health Resources & Services Administration (HRSA) which have been refined, adapted, and validated to the Census Block Group Neighborhood. This allows ranking of neighborhoods by socioeconomic disadvantage in a region or ZIP Code of interest. It includes factors such as employment, income, education, housing quality, built environment, etc. PCCI has factored these indicators into chronic disease burden, creating a vulnerability index (VI) which reflects an individual's health and social conditions.

Key findings are summarized below:

1. HEALTH CONCERNS

a. Chronic Diseases

While chronic diseases are treatable and often preventable, they remain a major health risk to Dallas County residents. Between 2000 and 2020, heart disease and cancer have been the leading causes of death. Chronic diseases emerged as the top health concern among focus group participants, particularly diabetes. The mortality rate associated with diabetes increased from 18 to 21 per 100,000 between 2019 and 2022. The volume of diabetes outpatient services in Dallas County is expected to grow by 22% between 2019 and 2024, and 44% by 2029.

Whereas the mortality rate for heart disease and cancer in Dallas County are below the U.S. rates, the mortality rate among Hispanics and Black/African American, non-Hispanic for these two diseases exceeds by far the county rates. This is an important finding given that Dallas County Hispanics and Black/African American, non-Hispanic population rates are higher than the national rates.

b. Behavioral Health

Mental health ranked second behind all other chronic diseases among the health concerns focus group participants view as health risks to the community. Focus group participants described that overall financial stress and COVID-19 related issues such as isolation are a cause of anxiety and depression.

c. Preventive Care

Availability of preventive services, including education, ranked as the third health concern among focus group participants.

2. MATERNAL AND CHILD HEALTH

The proportion of Hispanic and Black/African American women who reside in the southern region of Dallas County who have diabetes and chronic hypertension experience worse prenatal and postpartum outcomes than women who reside in other sectors of the county. Women in this region also face barriers to care due to the limited physical clinic availability.

a. Pediatric Asthma

Pediatric asthma prevalence is higher in the southern region of Dallas County.

b. Pediatric Behavioral Health

The demand for pediatric behavioral health services continues to grow in Dallas County.

3. COMMUNITY EQUITY

Specific geographic areas with concentrated low economic investment and low infrastructure as defined by the Center for Health Disparities Research at the University of Wisconsin are correlated with worse health outcomes including maternal and child health indicators in Dallas County. Consistent negative characteristic features of these well-defined areas are higher poverty rates, low access to food, higher mortgage forbearance rate, higher uninsured rates, shortage of physicians and limited access to healthcare facilities. A higher concentration of Black/African Americans, non-Hispanic and Hispanics reside in these areas.

4. PUBLIC HEALTH PRACTICE

a. The process and restrictions pertaining to data sharing across public health and healthcare systems delay preemptive planning and response to chronic conditions.

b. The increase in chronic disease rates in Dallas County calls for health systems and stakeholders to reevaluate their approach to patient activation and chronic disease self-management strategies.

c. The lack of standard collection of REAL (race, ethnicity, and language) and SOGI (sexual orientation and gender identity) data across health programs and health organizations remains a challenge.

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President & CEO, Parkland Health

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INTRODUCTION

This assessment of Dallas County health needs is both an imperative and a strategic roadmap to advance and strengthen the public health and healthcare infrastructure within the county. The roadmap should include planning and developing programs with strong emphasis on the inclusivity of community voice.

The Patient Protection and Affordable Care Act (ACA) through the Internal Revenue Code, requires a hospital organization treated as tax-exempt under 501(c)(3) to conduct a CHNA (also known as a Community Health Needs Assessment) at least once every three years and to implement a responsive strategy to address the findings. Commencing in 2013, Parkland Health has completed and disseminated the assessment's findings every three years.

Public health departments require a CHNA for accreditation. The Dallas County 2016 CHNA enabled the DCHHS to successfully achieve National Public Health Accreditation in November 2016. Similar to the requirements for hospitals, ongoing updates are required. Therefore, it is a central informant of a broader responsive Community Health Improvement Plan comprised of priorities, strategies, tasks, logistics and resources for action along with accountability and tracking to move negative health indicators in a favorable direction.

PARKLAND OVERVIEW

Parkland has been caring for Dallas County's most vulnerable residents since 1894.

Today, Parkland is an integrated health system comprised of a state-of-the-art acute care hospital, 30 community-based outpatient clinics, a health plan for those who qualify and numerous educational and outreach programs. As a preeminent public academic medical center, Parkland has developed countless innovations that save lives, improve access to services and reduce healthcare costs. Today, the health system averages 56,000 admissions and 1.1 million outpatient visits annually. Premier services include a Level I Trauma Center, the only verified burn center in North Texas that treats adult and pediatric patients, and a Level III Neonatal Intensive Care Unit. Its Emergency Department is one of the busiest in the country with an average of 205,000 patients treated per year. Parkland is the primary teaching hospital for The University of Texas Southwestern Medical Center

In August 2015, Parkland opened a replacement state-of-the-art facility. The new campus added much needed space for expanded access to quality healthcare to a growing population, particularly in critical areas such as the ED, operating room, burn center and neonatal intensive care unit. The 2.8-million-square-foot campus includes an 882-bed acute care hospital, outpatient clinic buildings, logistics building, parking for 7,700 vehicles and a central utility plant.

For more information, visit www.parklandhealth.org

PARKLAND IN THE COMMUNITY

Parkland pioneered a Community Oriented Primary Care (COPC) program in 1987. With 16 primary care clinics, 5 school-based clinics and mobile medical vans, this network offers high-quality, affordable, and accessible medical care throughout Dallas County. Healthcare services include preventive care checkups, management of chronic diseases, sick visits, urgent care, chronic disease management, optometry, podiatry, dentistry, and behavioral integrated healthcare services including substance use disorder treatment. Support services at select locations include social work, nutrition, pharmacy, pathology, radiology, and some subspecialty access.

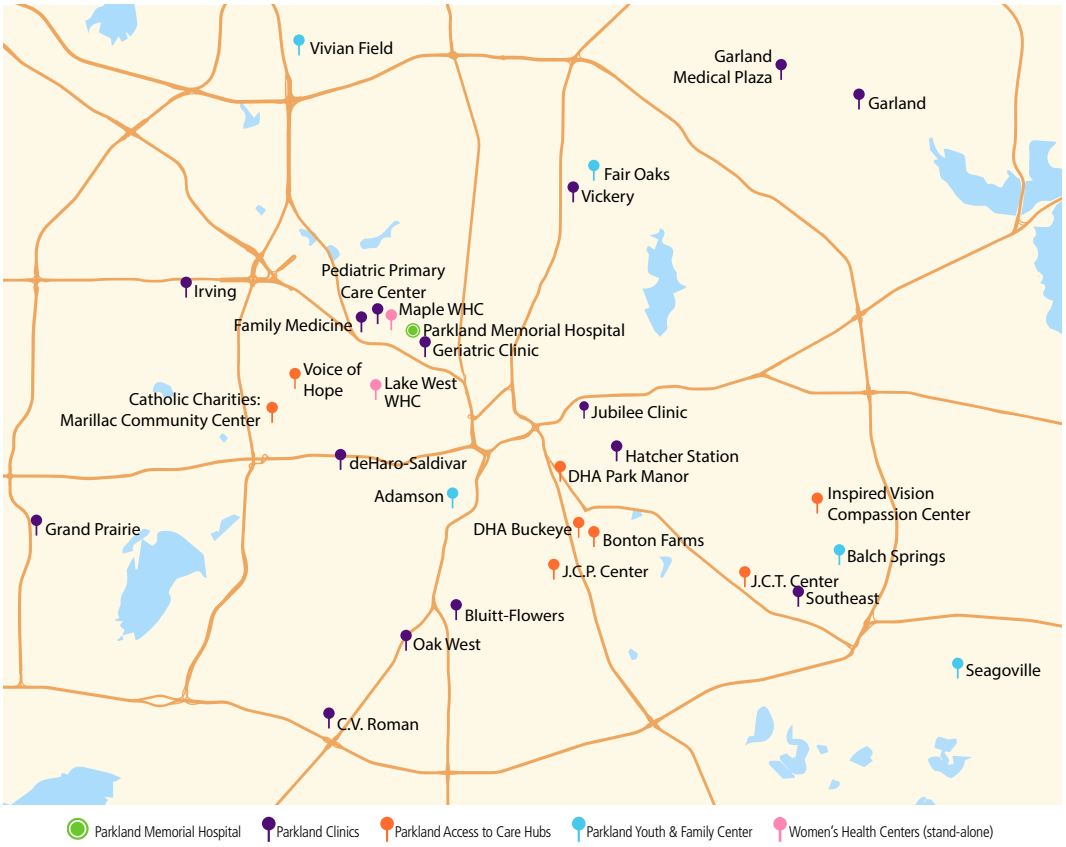
The goal of the COPC network is to provide a medical home for patients, building strong, long-term relationships with their physicians and other care providers. The community clinics have achieved National Committee for Quality Assurance as Physician Practice Connections-Patient Centered Medical Home (PCMH) designation with recertification annually for several years. Figure 1 shows the network's footprint in Dallas County. These health centers along with the Women's Health Centers cared for Dallas County residents by providing 1,007,081 visits in fiscal year 2021.[1]

Parkland is the main provider of healthcare services to persons experiencing homelessness. Its Homeless Outreach Medical Services (HOMES) program is a Federally Qualified Health Center under HRSA PHS Act section 330(h), and provides healthcare for the homeless at shelters, meal centers also referred to as soup kitchens, and areas throughout Dallas County where the homeless congregate.

Parkland's Correctional Health Services provides high-quality medical and behavioral healthcare services for inmates in three adult towers at the Dallas County Jail as well as five Dallas County Juvenile Center sites. It is accredited by the National Commission on Correctional Health Care.

In 2020, Parkland established a series of prevention and wellness hubs in the heart of communities with historically limited healthcare facilities, targeted by the 2019 CHNA–see Figure 1.

FIGURE 1. Parkland's Footprint in Dallas County.



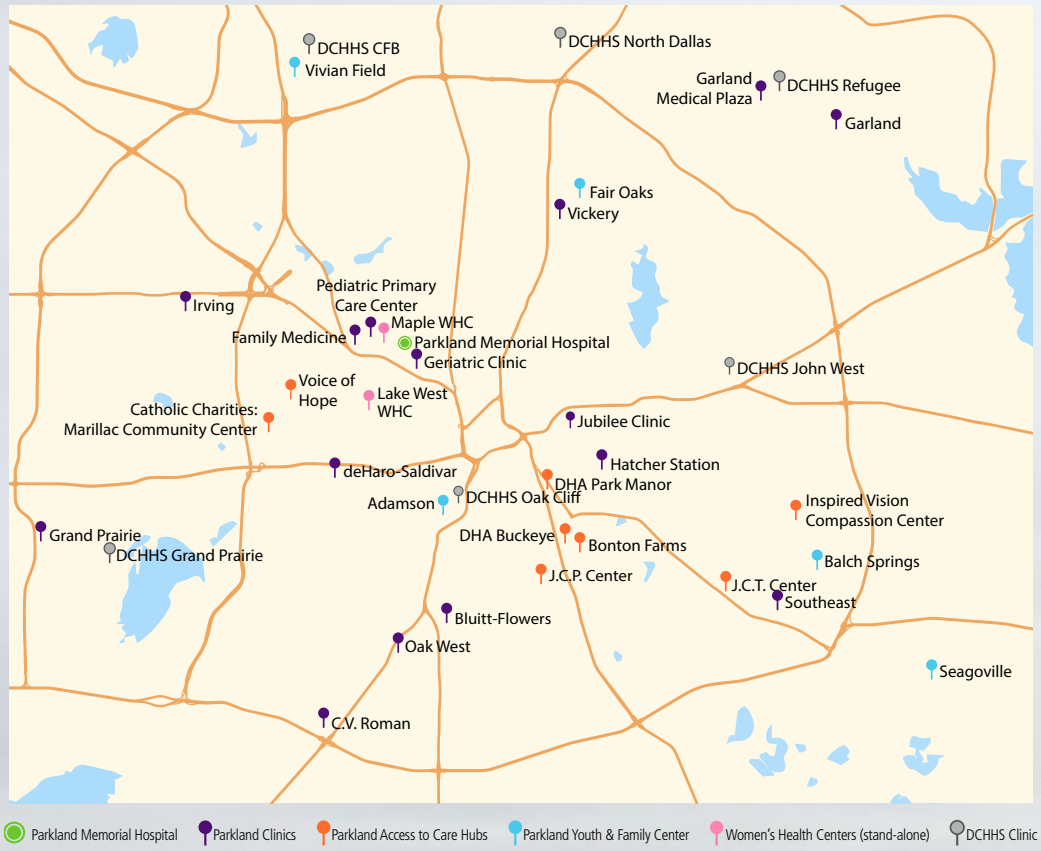
DALLAS COUNTY HEALTH AND HUMAN SERVICES

DCHHS is a nationally accredited public health department serving a diverse population of over 2.6 million residents. Public health activities in Dallas County date back to 1873 with the appointment of the first City Health Officer and early efforts in waste disposal and food safety. Services provided by DCHHS have since expanded greatly to include a wide range of essential public health and social services for the community–see Figure 2.

The mission of DCHHS is to optimize and protect the health and well-being of all Dallas County residents and support the achievement of better health outcomes for all. This is accomplished through leading community health strategy, disease monitoring, prevention and control, promotion of a healthy community and environment, community assessment, health education, policy making, and the provision of effective public health and social services. Using the best science and evidence-based practices and ensuring good stewardship of public resources, DCHHS directs activities toward areas where they will have the greatest impact on addressing disparities and achieving health and social equity.

DCHHS has been at the forefront of the local response to major public health issues and emergencies including the recent monkeypox outbreak, the COVID-19 pandemic, and threats from Ebola, H1N1, West Nile, and Zika viruses. DCHHS also leads or participates in preparedness efforts for North Texas related to bioterrorism and natural disasters. Additionally, DCHHS provides free or low-cost public health and social services to low-income residents of Dallas County.

FIGURE 2: DCHHS and Parkland Clinics in Dallas County



DCHHS manages an annual budget of over $258 million and employs nearly 600 highly skilled and diverse public health and social service staff, from the frontline to executive level, in support of optimal health and well-being for all of Dallas County. Below is an overview of the major programs and services DCHHS provides:

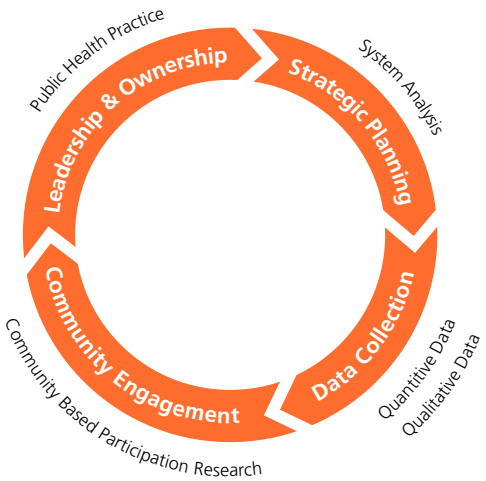
- Epidemiology and disease surveillance
- Clinical prevention of tuberculosis, sexually transmitted infections, and vaccine preventable illness (via immunizations)
- Refugee health services
- Environmental health and restaurant inspections
- Emergency preparedness and bioterrorism surveillance
- Chronic disease prevention
- Social service programs (welfare, housing vouchers, weatherization, and energy assistance)
- Services for older adults
- Community outreach and health education

Purpose of the CHNA

The mission of the Dallas County CHNA is to advance the health of Dallas County residents by highlighting opportunities to improve public health indicators, address systemic issues and respond to the health concerns raised by community members.

The central theme is multi-sector collaboration by community stakeholders invested and positioned to advance the health of Dallas County's communities. The results of the CHNA are expected to drive a community health implementation plan to address health inequities illustrated by disparity indicators and thereby improving the overall health and wellness of Dallas County residents.

FIGURE 3: CHNA Framework



CHNA Methodology

There are four components of the CHNA methodology framework–see Figure 3.

Leadership and Ownership

The core principle of the CHNA framework is a shared responsibility, if not a moral obligation of hospitals, public health agencies and the community at large to the health and well-being of all served. As the county's primary public health leaders, Parkland and DCHHS are responsible for establishing the vision to advance the health of county residents. This includes strengthening the public health infrastructure by integrating medical and public health data as to dynamically respond to changing needs as they arise and mobilizing the community partnerships toward a common goal.

A summary of the 2022 CHNA work plan is provided in Table 1.

CHNA Work Plan

#	Component	Description	Method	Outputs
1	Shared ownership	Common agenda/plan Shared metrics Structured process	Full collaboration and participation of Parkland and DCHHS teams Multi-sector engagement and participation	Joint written report Use of multiple data sources Integration of public health data and primary care data Community input
2	Defining Community	Assessments that expand jurisdictions Geographical distribution of healthcare services and facilities Concentration of unmet needs	County profile City profile Area Deprivation Index (ADI) Chronic Disease Vulnerability Index (CDVI) development	Spatial distribution of CDVI scores Spatial ADI distribution Spatial distribution by race and ethnicity One summary profile per city
3	Data Collection & Analysis	Disease incidence and prevalence County demographics Inpatient, ED, and outpatient utilization Household income, poverty, unemployment, etc. Stakeholder input	Quantitative data Qualitative data: Focus groups and survey	Demographics profile Health profile
4	Prioritization & Sustainability	Logic model Evaluation	Implementation plan Five-year budget planning Staffing Metrics	Program Descriptions Impact Evaluation Report

Strategic Planning:

Parkland and DCHHS will use the results of this CHNA to develop strategic initiatives and programs to improve health and reduce disparities as well as to inform public health policy.

Data Collection

Parkland and DCHHS conducted an in-depth quantitative and qualitative data collection in accordance with public health practice principles. Given the broad number of data sources, wherever possible, race and ethnicity categories are grouped and labeled in accordance with recommendations from the CDC. This is not possible in some instances where secondary data has been used, and in these cases, categories are grouped and labeled as provided by the source when possible. All cases reporting Hispanic ethnicity are classified into the Hispanic category.

Quantitative Data Sources

1. Behavioral Risk Factors Surveillance System (BRFSS)
2. Dallas County Health and Human Services
3. Dallas County Child Death Review Team
4. Dallas-Fort Worth Hospital Council Foundation (DFWHC)
5. DFWHC Healthy North Texas
6. HOMES Uniform Data System (UDS) Annual Report, 2016–2018
7. HRSA UDS Maps
8. SG-2, LLC
9. Metro Dallas Homeless Alliance
10. Parkland Center for Clinical Innovation (PCCI)
11. Parkland Health
12. Texas Department of State Health Services
13. The Federal Reserve Bank of Dallas
14. The Federal Reserve Bank of St. Louis
15. Centers for Disease Control and Prevention (CDC)
16. United States Census Bureau

Community-Based Participatory Research (CBPR)

Community-Based Participatory Research (CBPR) was adopted to ensure the community had meaningful participation during the CHNA development through focus groups, community-wide survey and email via the following https://www.parklandhealth.org/dallas-community-health. The results of the qualitative data are in the following section, Community Input.

COMMUNITY INPUT

To obtain and represent the community voice, Parkland and DCHHS conducted a series of focus group sessions and administered a survey to gather the collective opinion of community members (Parkland and DCHHS patients, Parkland and DCHHS staff, members of medically underserved communities and individuals who represent them) between late March and early June 2022–refer to Attachment A for a full list of community organizations that were invited to participated in the focus groups. A total of 278 individuals attended one of 40 focus group sessions and 437 responded to the survey.

The focus groups aimed to obtain an in-depth understanding of participant's views of the following:

1. Community and patient engagement
2. Most important health topics
3. Information for service delivery improvement and patient satisfaction
4. Preferred ways to seek and obtain health information
5. Preferred ways to obtain health information
6. Health concerns

Focus Groups Results

Responses were analyzed with MAXQDA, a data analysis software that assigns responses into categories. Categories were given a score (0 to 100) based on the volume of responses assigned, with higher volume of responses corresponding to a higher score. Key themes and subsets that emerged from the data analysis and supported with participants' quotations are summarized below.

Community and Patient Engagement

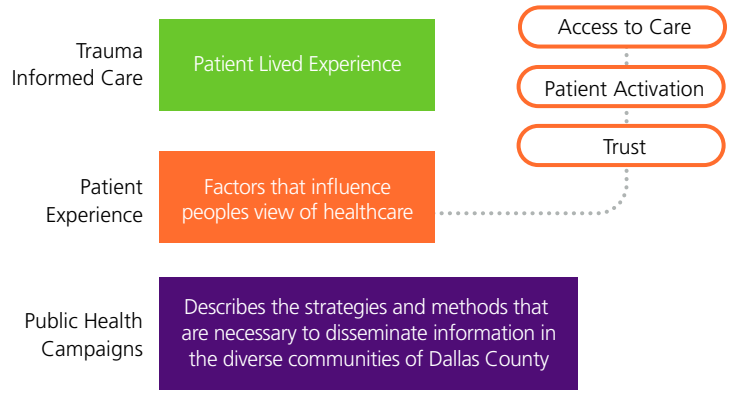
Participants described patient engagement as a natural progression of relationships that start in the community and continue to grow through interactions with "doctors" and staff during medical appointments. Responses describing this progression fell into three sub-categories listed below–see Figure 4.

Public Health Campaign: This category includes the different strategies and methods that focus group participants identified as their preferred ways to access health information.

Patient Experience: This subcategory describes the factors that influence focus group participants view of healthcare and it was divided in three smaller categories: Trust, Patient Activation and Access to Care.

Trauma Informed Care: This subcategory describes the overall concerns that focus group participants have with their own individual adverse experience.

FIGURE 4: Patient Engagement Framework



Public Health Campaign

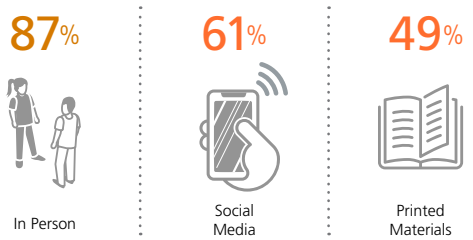
This content describes preferred ways to access health information. Focus group participants highlighted the importance of communication and community presence. A summary of participants' articulations include:

"Be out in the community and deliver in different languages. Use flyers, social media but face to face is best."

"Go out there and connect with people and go out to events and establish a bond with people. Loosen your sleeves and do home visits. Give self and go out and do outreach and let people know they are part of the community."

"There is a great need in our community for services. I think having health fairs would help. That may bring people out to get services."

FIGURE 5: Preferred Way to Deliver Health Information



"In person" or "face to face" was by far the preferred way to obtain health information, followed by social media and printed materials.

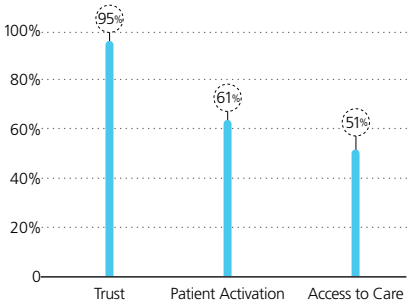
Participants value in person education as it easily facilitates follow-up with questions when they do not understand medical or pharmaceutical terms–see Figure 5.

In person sessions complemented with printed materials and other visual aids helps them better understand what to do, particularly when talking about diabetes and other chronic diseases.

"In person is the best method, although it's nice to have pamphlets in our own language that we can take home."

"Especially those with the most need, they need the face to face interaction, also using a hard copy is best."

FIGURE 6: Patient Experience



Patient Experience

This includes input by focus groups on what influences their view of health systems. The responses were divided into three key sub themes: Trust, Patient Activation, and Access to Care–see Figure 6.

Trust

Unequivocally and above all, trust is the most valuable and important driver of a positive experience between participants and healthcare providers and/or workers. Trust was discussed at length in all focus group sessions receiving the highest score (95) from the analysis–see Figure 6.

Expressions of this created a distinct social construct built over time and with transfer to next generations:

"Trust is critical, it's going to take years to build."

"Trust is passed on to children, if parents don't trust the health system, children won't either."

There was common agreement that healthcare workers must earn trust. This trust is a direct consequence of building relationships with patients.

"Need to build a relationship with the people, with the communities. They need to know you're not just checking a box."

Trust is the building block of positive experiences, participants described how trust or lack thereof evokes feelings and emotions.

"We need to feel that the person providing the information has good intentions."

"We need to feel like they are listening, and that we are accepted.

"People need to feel that they can identify with the providers. If I saw a doctor with tattoos, it would make me feel safer."

"My mom is a Parkland patient, and she loves going to her PCP appointments. She has established a relationship with the staff and feels comfortable. Building a relationship makes trust grow."

Patient Activation

These responses detail how interactions with physicians or providers can lead to positive or negative experiences and whether healthcare providers and staff know and understand the patients.

"I want to be part of my medical care. They don't always treat me like I'm part of it. If my white mother comes with me, they acknowledge her and put me to the side. It should not be like that since I'm the patient."

This also means talking to them according to their education or literacy level– *"explain things in a way we understand and make me feel comfortable asking questions"* and *"… I get embarrassed when people talk to me with intelligent words."* Participants stated that providers show compassion by acknowledging who they are, and challenges encountered– *"…my language is not English"* and *"… took four hours off their work schedule for a 15-minute visit."* The last statement reflects a common concern as having and maintaining a job supersedes health as a priority.

"It's better to die than not being able to work."

"I can't afford to go without a pay."

"If I don't work, I will lose my house and then I will lose custody of my daughter."

Access to Care

An individual's narrative surrounding "access" i.e., ease and ability to get healthcare, is a fundamental determinant of a negative or positive experience. Responses detailed how long it takes on the phone when scheduling an appointment, openings for appointments are far away, and the wait at the clinics on the day of the appointment is too long.

"You can't get through on the phone to make an appointment–you can press 0, but that doesn't do any good because no one answers."

"The biggest issue I continue to face is getting hold of clinics and the long wait times for some appointments. I will be very sick and still have to wait 3-4 months for a specialist appointment and end up in the ED waiting."

"There are days I check in and my appointment will be at 9 a.m. but I don't get my turn for 4-5 hours."

Trauma Informed Care

The pervasive and invasive presence of trauma in the community and the importance of adopting Trauma Informed Care as a strategy to create safe environments and build trust with community members was discussed.

"Patients have concerns with coping but the anticipation that they may not be heard because of their race/ethnicity creates a barrier. They do not believe that they will be taken seriously–generational trauma–especially in the African American population."

"The staff needs to be trauma informed so the individuals feel safe and trust us. You need to meet people where they are, so they believe in you."

"African American and Hispanic communities are in trauma and shock. It's not about handing out a card but dealing with other issues/barriers which cause trauma."

Health Concerns

When asked to discuss the major health issues affecting the community, chronic disease ranked as the number one issue followed by mental health–see Figure 7 and Figure 8. Diabetes, due to high volume and limitations in knowledge, was the most serious chronic disease concern.

FIGURE 7: Top Community Health Concerns

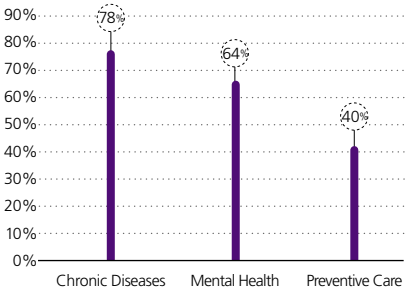
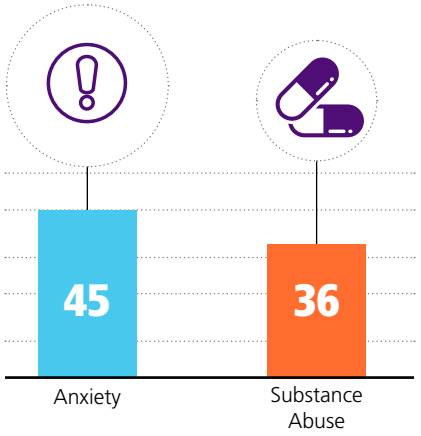


FIGURE 8: Mental Health Concerns



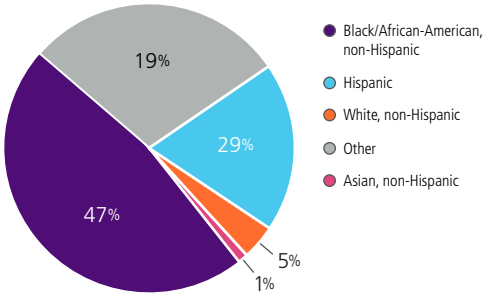
Survey Results

Community members unable to participate in a CHNA focus group session were offered a survey administered between April 27 and June 4, 2022. English and Spanish versions were made available online, at health centers and during community events hosted by Parkland and DCHHS. A total of 437 individuals responded. The highest number of responses came from Black/ African Americans, non-Hispanic (47%), followed by 29% Hispanics, 4% whites, non-Hispanic and 1% Asians–see Figure 9 and Figure 10.

Survey Participants' Demographics

Seventy eight percent (78.1%) of participants self-identified as female, 21% males and less than 1% were sexual minorities. Five percent (5%) of survey participants were gay or lesbian and less than 5% were bisexual or asexual–see Figure 11 and Figure 12.

FIGURE 9: Community Input Survey Participants by Race and Ethnicity



All cases reporting Hispanic ethnicity are classified into the Hispanic category

FIGURE 10: Community Input Survey Participants by Primary Language

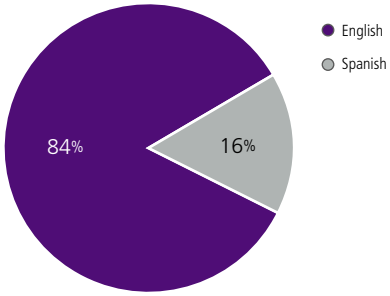


FIGURE 11: CHNA Survey Participants by Gender

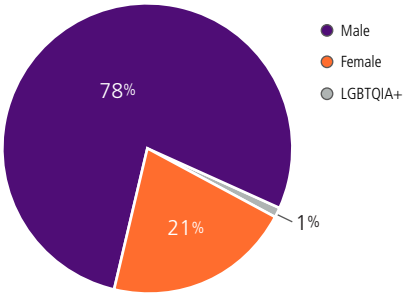


FIGURE 12: CHNA Survey Participants by Sexual Orientation

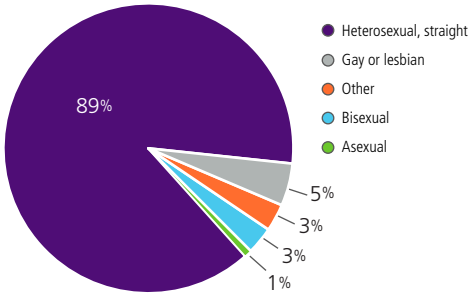
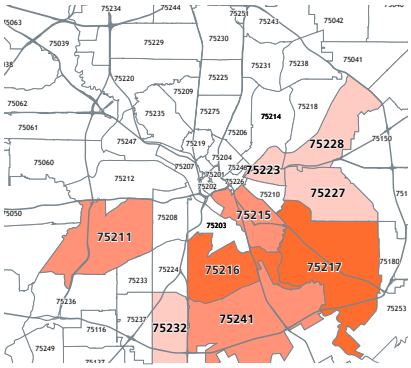


FIGURE 13: CHNA Survey Participants' ZIP Codes of Residence



◀ Most of the survey participants live in ZIP Codes:

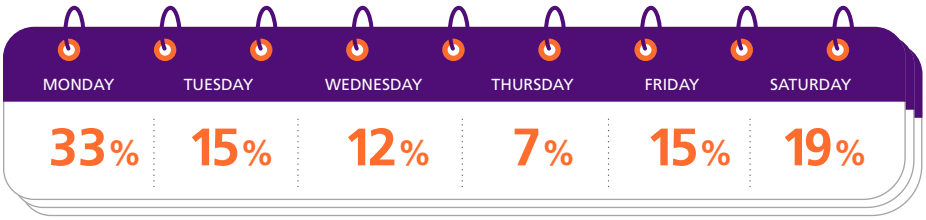
- 75217 (15%)
- 75216 (10%)
- 75215 (6%)
- 75211 (5%)
- 75241 (5%)

All other ZIP Codes had 3% or less participation –see Figure 13.

QUESTION 1

Which days of the week work best for you to have a medical appointment?

FIGURE 14: Results to Question 1



Monday was selected as the preferred day of the week for medical appointments, followed by Saturday. Thursday was the least preferred day for an appointment–see Figure 14.

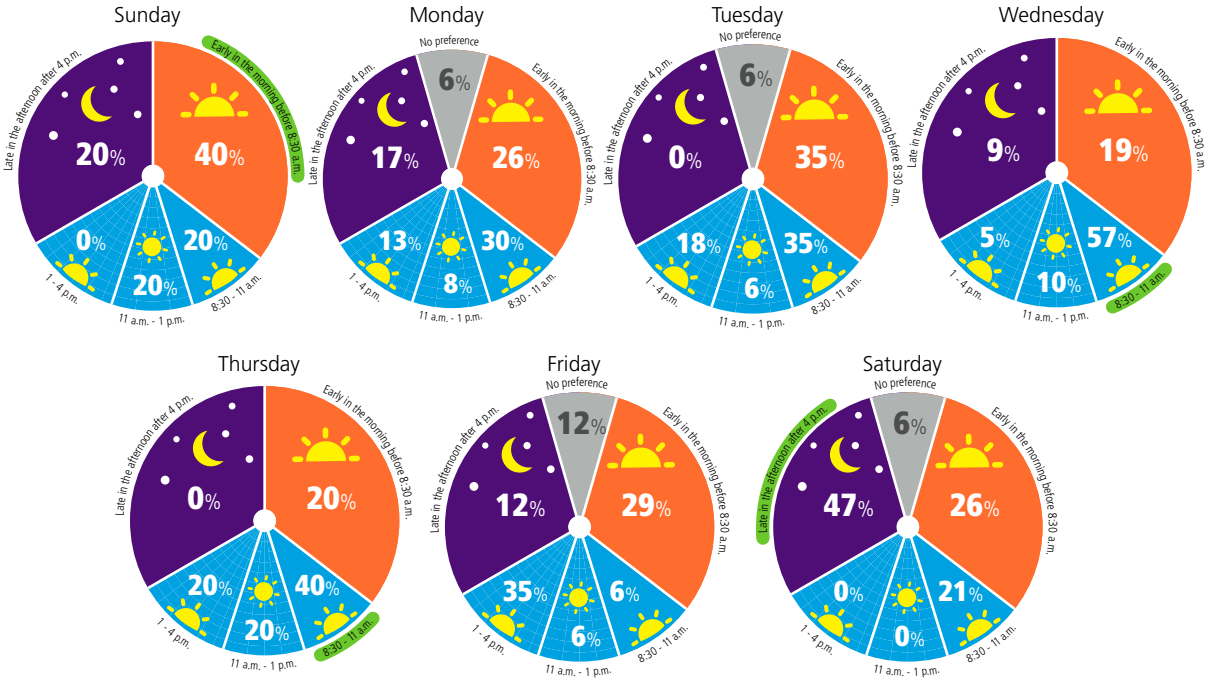
QUESTION 2

When is the best time of day to set up a medical appointment?

Although Monday was selected as the preferred day of the week for appointments–see Figure 15

- 57% of the participants chose Wednesday between 8:30 and 11:30 a.m. as the best time to schedule their medical appointments
- Saturday late in the afternoon after 4 p.m. ranked second, while
- Sundays before 8:30 a.m. and Thursdays between 8:30 and 11 a.m. ranked third

FIGURE 15: Results to Question 2



QUESTION 3

What might prevent you from going to your medical appointments?

FIGURE 16: Results to Question 3

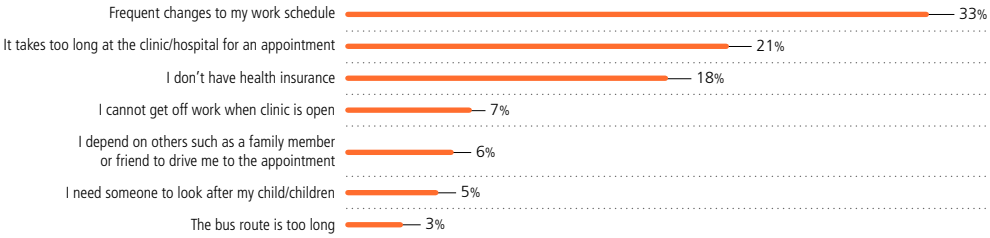


Figure 16 describes the reasons for missing a medical appointment in order of frequency are:

- Frequent changes to work schedule
- It takes too long at the clinic/ hospital for an appointment
- I don't have health insurance

Transportation concerns (distance, time, and cost), needing an interpreter, and needing help looking after a family member were the least reported as reasons for missing appointments.

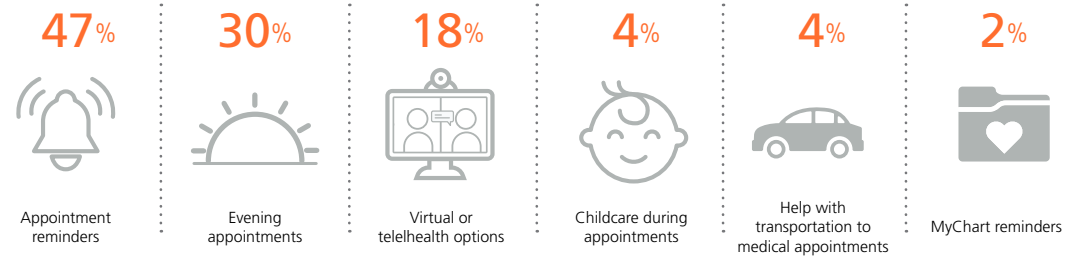
Reasons selected by less than 1% of the participants include:

- The nearest bus stop is too far away
- The time it takes to get to the doctor's office is too long
- I need someone to look after an adult family member who needs care
- Transportation is too expensive
- I always need an interpreter

QUESTION 4

What services will make attending medical appointments easier for you?

FIGURE 17: Results to Question 4

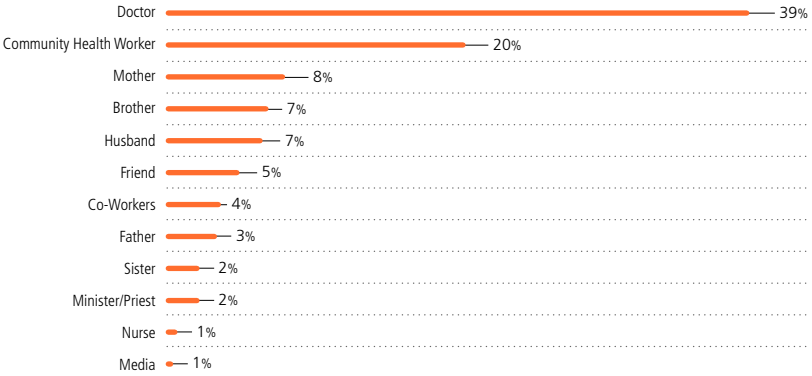


Appointment reminders were the most preferred service identified as way to encourage individuals to attend medical appointments, whereas MyChart (patient facing web portal) reminders were least important–see Figure 17.

QUESTION 5

Who do you trust the most to provide health information when you need it?

FIGURE 18: Results to Question 5

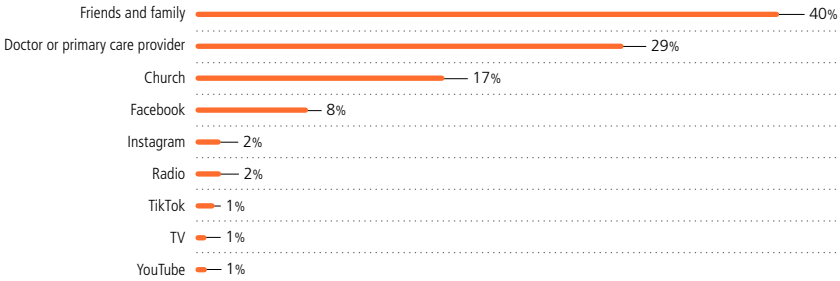


"Doctor" was selected by 39% of the survey participants as the most trusted person to provide health information, followed by Community Health Workers (CHW) at 20%, and nurses and media figures were the least trusted persons for health information–see Figure 18.

QUESTION 6

What sources do you use most often to receive health information?

FIGURE 19: Results to Questions 6



Participants seek health information from friends and family most often, followed by doctors or primary care providers. Television and social media platforms including YouTube and TikTok were used the least often as sources for health information–see Figure 19.

QUESTION 7

What is the best way to contact you?

FIGURE 20: Results to Question 7

Text messaging was the most preferred way of contacting participants, followed by phone calls and emails. Regular mail was the least preferred method of contact–see Figure 20.

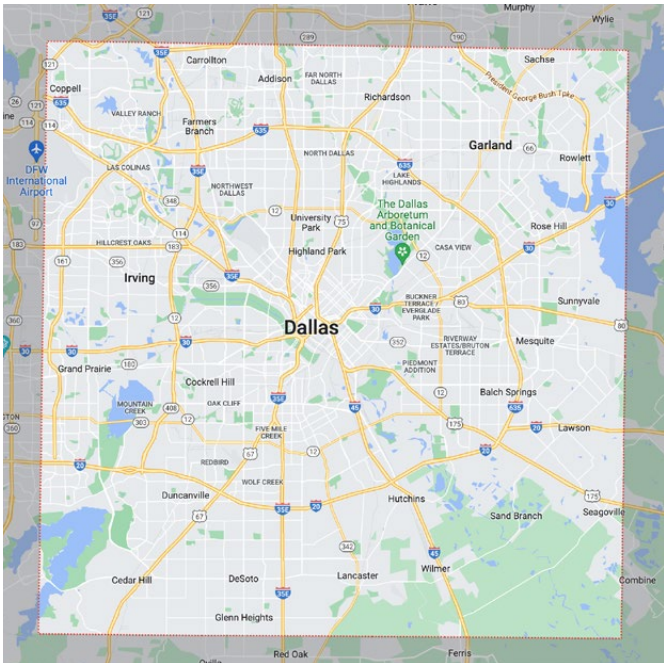
DALLAS COUNTY SOCIAL DETERMINANTS OF HEALTH (SDOH)

This section describes the current state of Dallas County key SDoH. SDoH are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.[2] The SDoH encompass an array of variables including but not limited to demographics, economic stability, access to food, housing instability, and healthcare. This concept is synonymous with recent evolutions in healthcare literature such as Social Drivers of Health and non-Medical Drivers of Health.

DALLAS COUNTY DEMOGRAPHICS

Dallas County has 872.1 square miles of land area and is the 177th largest county in Texas by total area. Dallas County is bordered by Collin, Ellis, Rockwall, Tarrant, Denton, and Kaufman counties.[3]

FIGURE 21: Dallas County Key Characteristics, 2016–2020



Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Total Population
2,613,539

Median Household Income
$61,870

Bachelors Degree Or Higher
32.5%

Employment Rate
65.4%

Total Housing Units
1,038,656

Without Health Care Coverage
20.8%

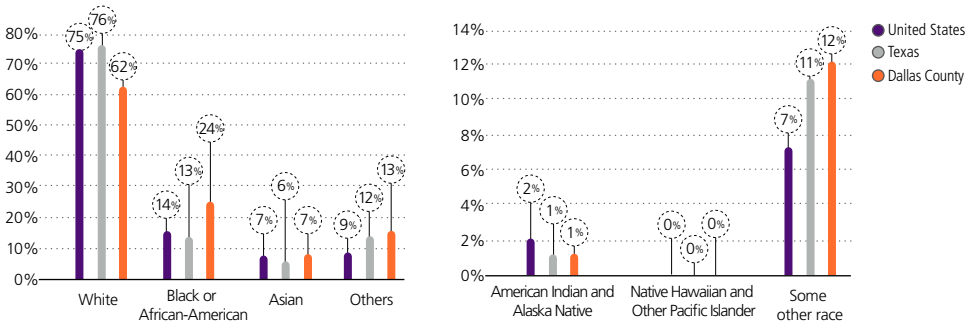
Total Households
945,996

Total Employer Establishments
67,311

Hispanic or Latino (of any race)
1,057,835

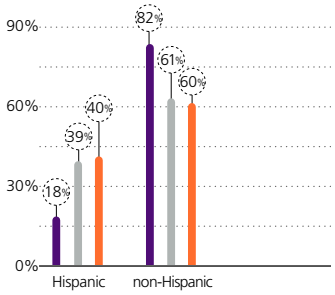
Dallas County's total population is 2.6 million (see Figure 21) and with higher ethnic and racial diversity when compared to the U.S. and Texas' population; 24% of its population is Black/African American, non-Hispanic and 40% Hispanic (see Figure 22 and Figure 23). The diversity is reflected by language spoken at home: 43% of Dallas County residents speak a language other than English at home–see Figure 24.

FIGURE 22: Population by Race, U.S. Texas, Dallas County by Race



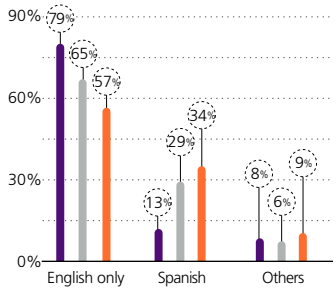
**U.S. Census Bureau allows individuals to identify as more than one race and allowing to add more than 100% of population*
Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimate

FIGURE 23: Population by Ethnicity, U.S. Texas, Dallas County by Ethnicity



Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

FIGURE 24: Population by Language Spoken at Home, U.S. Texas, Dallas County



Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

FIGURE 25: Population by Sex, U.S. Texas, Dallas County

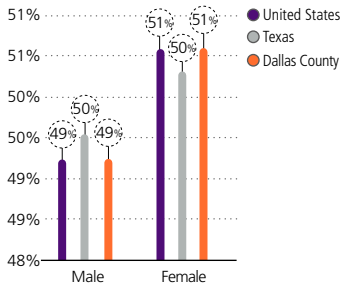
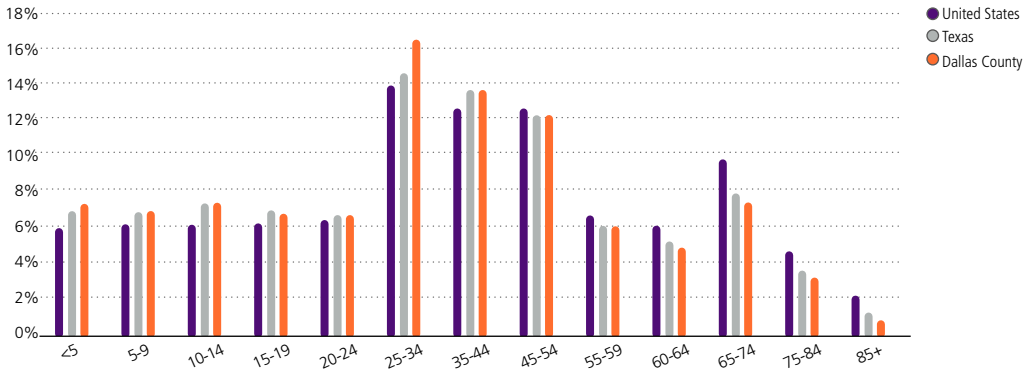


FIGURE 26: Population by Age Groups, U.S. Texas, Dallas County by Age Distribution



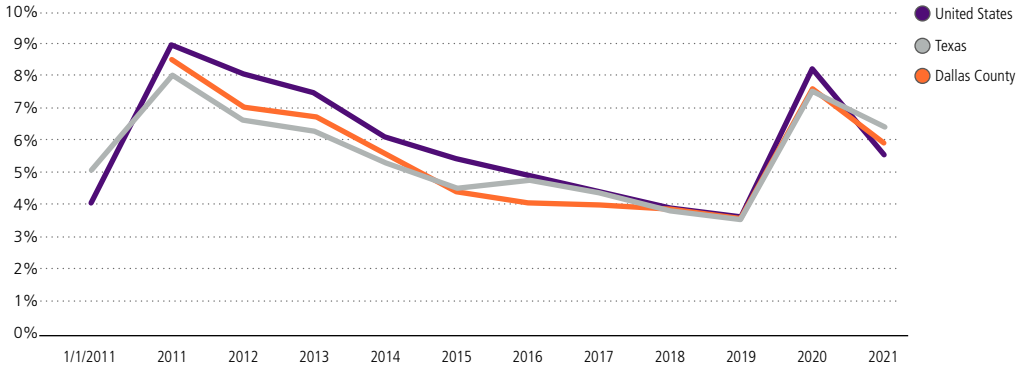
Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Economy

Dallas County is well known for its economic vitality and over the past 30 years, it has seen a strong job growth. In 2019, prior to the COVID-19 pandemic, Texas ranked 9th in the nation for job growth and Dallas County has been a major economic hub with an expanding job market. In the past two years, Texas' job growth has been robust and is one of four states to have regained all jobs lost during the pandemic.[5]

Since 2015, Dallas County's unemployment rate has remained below the U.S. and Texas rates and in terms of the pandemic economic recovery, the county's unemployment rate declined from its peak in April 2020 but remains above pre-pandemic levels–see Figure 27.

FIGURE 27: Unemployment Rate: U.S., Texas, Dallas County, 2011–2020



Data Source Federal Reserve Bank of St. Louis

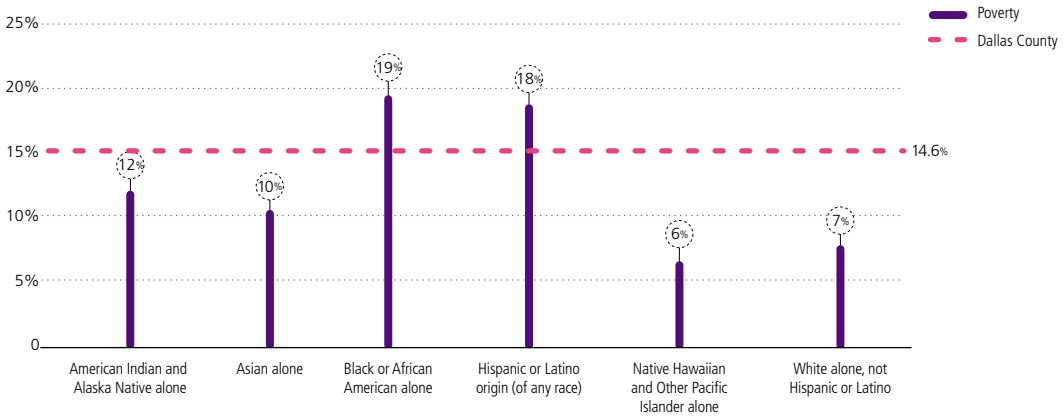
As Dallas County recovers from the economic shock of the pandemic, there is an opportunity to leverage the current state to advance economic development of underinvested populations and communities.

The financial hardship caused by the COVID-19 pandemic is widespread and exacerbated the preexisting economic distress prevalent among Black/African Americans, non-Hispanic and Hispanics, especially women. Both populations are more likely to work in low paid industries, representing 30% of all jobs and 56% of jobs lost during the pandemic. Pre-pandemic, the poverty rate among people of color in the U.S. was more than double of white, non-Hispanic people. In this late phase of the pandemic, 44% of Black/African American, non-Hispanic households and 38% of Hispanic households reported having difficulties covering their expenses.[6]

Poverty

Poverty thresholds are established by the U.S. Census Bureau according to household size and household members' ages.[7] Figure 28 shows Black/African Americans, non-Hispanic (19.10%) and Hispanics (18.40%) experience the highest rates in the county.

FIGURE 28: Poverty by Race–Ethnicity in Dallas County, 2016–2020

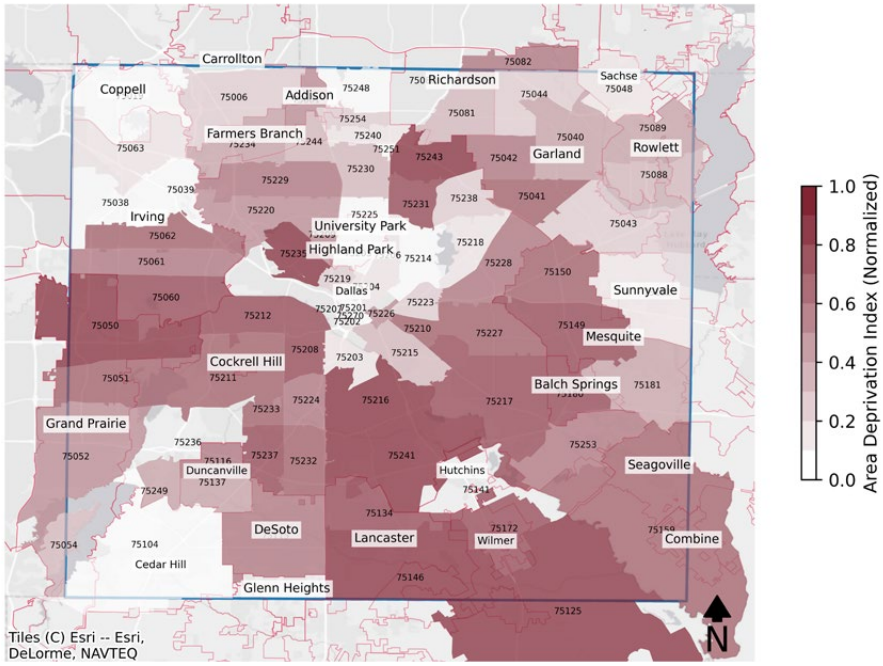


Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

More densely populated areas with Black/African Americans, non-Hispanics and Hispanic populations have high ADI scores–see Figure 29 and Figure 30. The ADI is an index comprised of multiple indicators such as poverty, education, housing, and employment at the block level to highlight neighborhoods with high risk for poor health outcomes related to cardiovascular disease, cancer, and childhood mortality (risk level is scaled between 0-1, 0 being lowest and 1 being highest risk).[8] Individuals who reside in areas with worse ADI scores are depicted in the darker colored areas in the maps shown in Figure 29. These residents are much more likely to have uncontrolled blood pressure and cholesterol, and higher rates of ED visits and hospitalizations related to diabetes complications than individuals residing areas with a lower ADI. Related healthcare billing may intensify preexisting financial stress in these households.

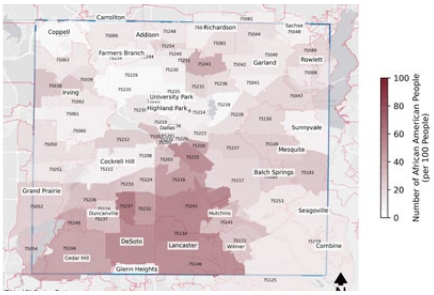
Nationally 66.5% of all bankruptcies were tied to medical issues. In Dallas County 22.5% of people with credit records have medical debt and are therefore at risk for bankruptcy.[9] Significantly and consistent with health inequities, Black/African American, non-Hispanic adults are 50% more likely than white, non-Hispanic adults to have medical debt, and Hispanic adults are 35% more likely than white, non-Hispanic adults to have medical debt.[10]

FIGURE 29: Deprivation Areas in Dallas County, 2020

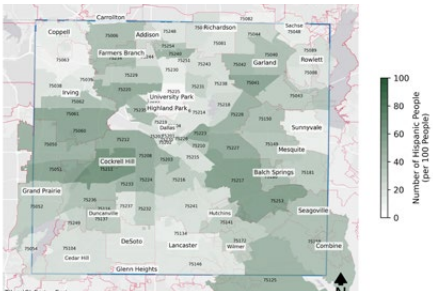


Data Source: Neighborhood Atlas®. Center for Health Disparities arities Research.8
Prepared by PCCI

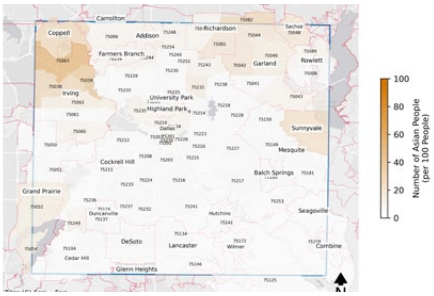
FIGURE 30: Population Densities of Racial and Ethnic Populations in Dallas County



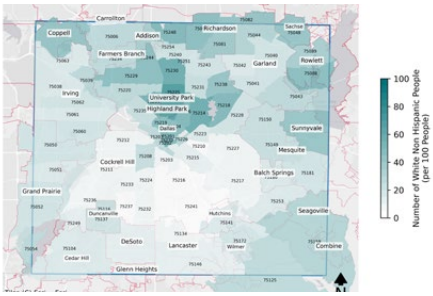
African-American



Hispanic



Asian

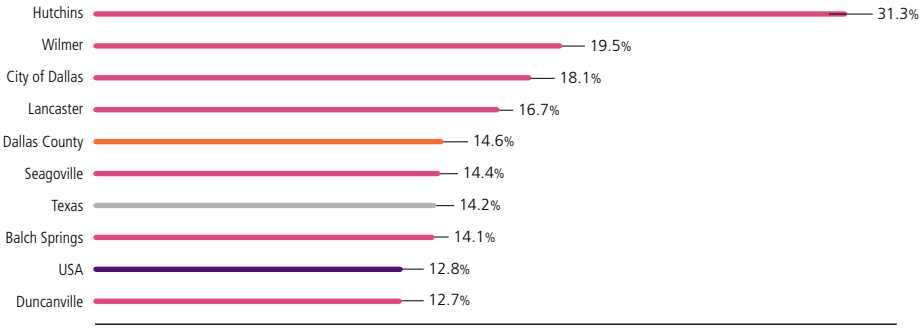


White, non-Hispanic

Dallas County's poverty rate (14.6%) is slightly higher than the state of Texas' rate and above the U.S. rate (12.8%)–see Figure 31.

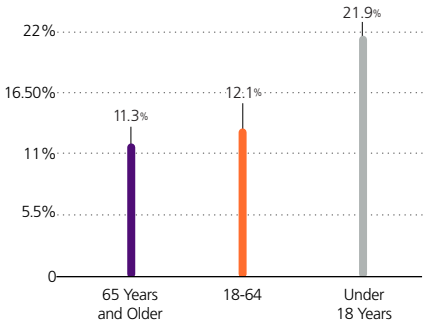
Hutchins has the highest poverty rate of all cities in the county at 31.3%, followed by Wilmer (19.5%), the city of Dallas (18.1%), and Lancaster (16.7%). These four cities experience poverty rates that surpass the overall poverty rate for Dallas County (14.6%)–see Figure 31.

FIGURE 31: Poverty in U.S., Texas, Dallas County, and Select Cities in Dallas County 2016–2020



Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

FIGURE 32: Individuals Living in Poverty by Age Group, Dallas County, 2016–2020

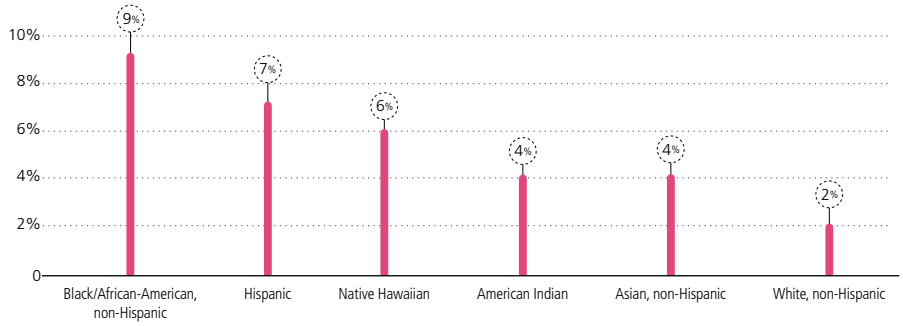


Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

One in five children live in poverty (21.9%) followed by 18-64 years old (12.1%), and 11.30% of those 65 years and older–see Figure 32. Approximately 150,000 children under 18 years of age live in poverty in Dallas County.[11] More than 75% of young children in poverty are Black/African American, non-Hispanic or Hispanic who live in the southern section of the county.[12] Children living in poverty are more likely to have low academic achievement, low high school graduation rates, become unemployed, experience economic hardship, experience trauma, and become involved in the criminal justice system.[13]

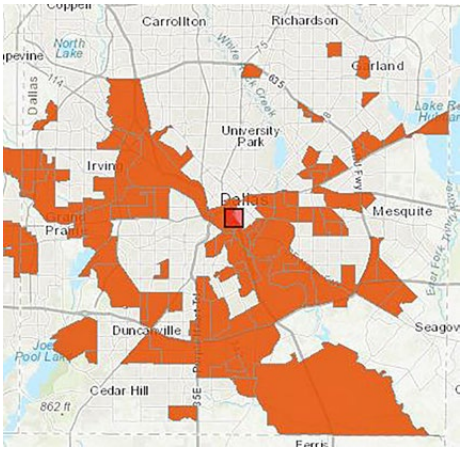
During the pandemic, U.S. Black/African American, non-Hispanic and Hispanics adults were more than twice as likely as white, non-Hispanic adults to report their households did not get enough to eat.[14] Of 76,797 people who responded to the food insecurity question in the DCHHS Contact Tracing V2 survey administered to COVID-19 positive individuals and those in close proximity to a person with COVID-19 between August 2020-June 2022, 8.9% of Black/African Americans, non-Hispanic and 7% of Hispanics responded "No," when asked whether they had access to food; whereas only 2.1% of white, non-Hispanic respondents answered "No" to this question–see Figure 33.

FIGURE 33: Percent of DCHHS Contact V2 Survey Respondents that Sated They Did Not Have Access to Food by Race, Dallas Count, June 2020–2022



Data Source: DCHHS Contact Tracing V2 Survey

FIGURE 34: Low Income, Low Access, Dallas County



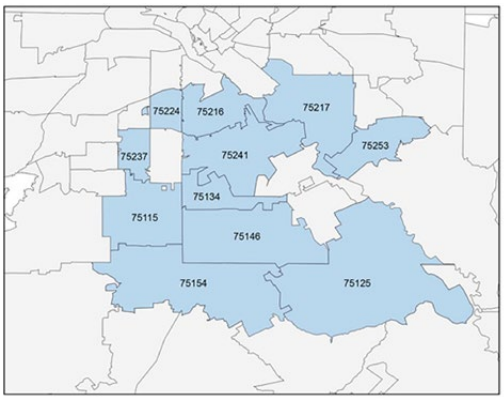
Source: USDA Economic Research Service

The areas highlighted in orange in Figure 34 show the distribution of low income and low access to food. The areas further away from downtown have a higher unemployment rate and less access to food.[15,16] There is significant overlap with high ADI areas shown in Figure 29.

Housing

People of color and renters with children consistently reported higher rates of financial hardship, which impacts and interrupts housing continuity. The Federal Reserve Bank of Dallas identified possible vulnerable ZIP Codes in Texas, where mortgage forbearance (temporary lower or paused mortgage payment) and delinquent mortgage payments were high, signaling vulnerability to financial hardship. The southeastern portion of Dallas County is particularly affected–see Figure 35. While the average forbearance rate in non-vulnerable ZIP Codes is 4.4% as of August 2021, the average rate is twice as high at 8.9% in ZIP Codes in vulnerable areas. Within the vulnerable ZIP Codes, southern Dallas County has three of the top 10 with the highest rates of forbearance in the state and one ZIP Code, an outlier, has a mortgage forbearance rate around 15%–75253 in Dallas.[17] These areas are aligned with areas that contain high densities of Black/African American, non-Hispanic or Hispanic populations–see Figure 30.

FIGURE 35: Clusters ZIP Codes Vulnerable to Mortgage Delinquency Rates in Dallas County, August 2021

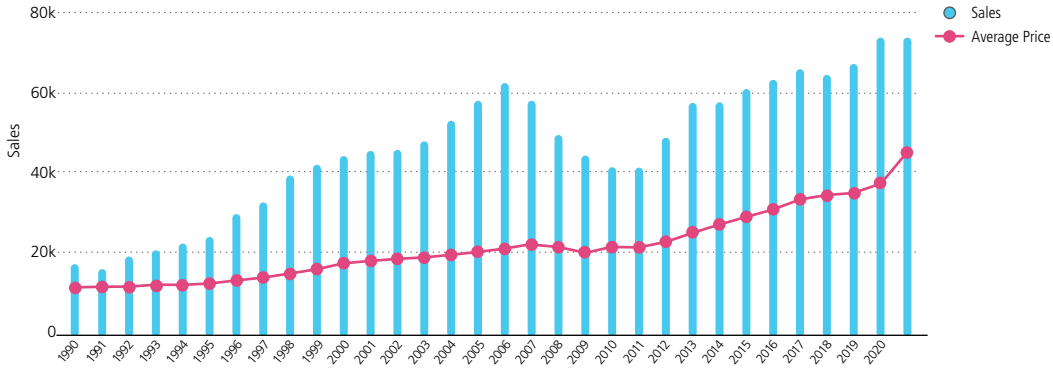


Note: Clusters are based on mortgage forbearance rates and Equifax delinquency rate in August 2021. Adopted from the Federal Reserve Bank [13]

Other significant demographic differences exist between vulnerable and less-vulnerable ZIP Codes. For example, the average percentage of people of color in vulnerable ZIP Codes is 74%, versus 47% in less-vulnerable ones. Additionally, the average FICO® Scores are 30 points lower in those ZIP Codes identified as the most vulnerable (674 versus 705). FICO scores are generated by financial institutions to assess credit worthiness and used by landlords and top lenders to assess customers credit qualifications.[18]

Low-income households also face challenges associated with the local housing market demand and supply, particularly of affordable homes. Housing sales have increased with the average price now reaching nearly $450,000 (median $365,000) and inventory is less than one month. Since 2015, in Dallas County, home sales prices have climbed 50%, while the median household income in Dallas County has grown about 25%.[19]

FIGURE 36: Homes Sales and Average Price, Dallas County, 1990–2020



Source: Texas Real Estate Center, Dallas-Plan-Irving

As housing costs continue to rise at a higher pace than income, access to affordable housing is declining. In the Dallas/Fort Worth/Arlington metro area, there are 20 affordable and available rental units per 100 Extremely Low Income (ELI) renter households, and 85% of ELI renter households spend more than 50% of their household income on housing. Policy updates to address housing disparities in the market have lagged or stalled considerably behind needs. For instance, landlords in the state of Texas have broad discretion to accept or reject renters based on the source of their rental payment[20] compared to other markets which offer incentives to landlords. These incentives create opportunity for low-income households.[21]

In summary, Dallas County's economy is characterized by uneven and widely disparate geographic effects with Black/African American, non-Hispanics and Hispanics concentrated neighborhoods shut out of opportunity. A community-centered economic agenda that focuses on geographically inclusive investment while engaging, linking, and incentivizing small businesses[22] to the robust economy and strengthening the public health infrastructure are linchpins of reversing persistent negative health trends. In short, the issues brought to light by the COVID-19 pandemic can shine a hopeful light on an emerging economic model that integrates economics, public health strategies and policies.

Health and Healthcare

Access to health services is defined as the timely use of personal health services to achieve the best health outcomes and is central to achieving better health outcomes.[23] Access to care encompasses four key elements: health insurance coverage, health services, workforce, and timelines.[24]

Health Insurance Coverage

Healthcare coverage (coverage) is defined as having any type of public or private health insurance or healthcare plan, including those obtained by employment, direct purchase, and government programs. Health insurance is a necessary gateway to accessing affordable quality healthcare.[23] Coverage supports the individuals' and communities' health and well-being because individuals with coverage are more likely to obtain preventive care, screenings, early diagnosis and treatment, which are drivers of improved health outcomes.

Individuals with health coverage are four times more likely to receive preventive care and more likely to have a personal primary care physician, access to prescription drugs and timely surgeries.[25]

Compared to adults with coverage, uninsured adults are more likely to have:

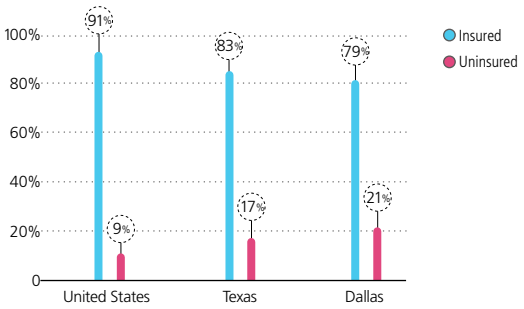
i. higher rates of cancer mortality
ii. greater risk of late-stage cancer diagnosis
iii. inadequate access to quality care, including preventive services[26]

In the U.S., health coverage is provided by private health insurance and public coverage. Private health insurance is predominantly purchased through employer-sponsored insurance, also known as the group market and by a lesser extent through individual policies or individual market. Combined, these two types of private health insurance cover approximately 64.9% of the U.S population.

Texas has the highest number and highest percentage of individuals without health coverage in the U.S. A recent study conducted by the Texas Alliance for Health Care estimates the number of uninsured individuals in Texas could reach 6.1 million by 2040.[27]

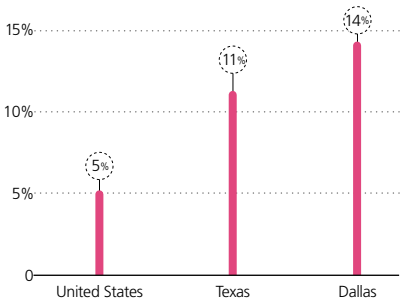
The percentage of uninsured individuals in Dallas County is higher than the state's as shown in Figure 37 and Figure 38. It is important to note that Hispanics have the lowest health coverage rate in Dallas County at 66.2% when compared to other racial and ethnic groups–Table 2.

FIGURE 37: Health Insurance Coverage in Dallas County



Data Source: U.S. Census Bureau, 2016-2020 American Community Survey

FIGURE 38: No Health Insurance Coverage, Individuals Under 19 Years of Age, Dallas County 2016–2020



Data Source: U.S. Census Bureau, 2016-2020 American Community Survey

When compared to the U.S. and Texas, Dallas County residents under the age of 19 have a higher uninsured rate–see Figure 38.

Seven of the 31 cities in Dallas County have a higher percentage of its population without health coverage (also referred to as uninsured) when compared to the county's rate. In Balch Springs where the percentage of the population 19 years and younger is higher than the county's percentage, 30% of the population is without health insurance, and in Cockrell Hill, a city where 89% of its population is Hispanic, 29% of the population is without health coverage versus 3% of University Park's population–see Figure 39.

TABLE 2: Health Insurance Coverage in U.S., Texas, Dallas County, 2020

Demographics	United States Covered %	Texas Covered %	Dallas County Covered %
Civilian non-institutionalized population	91.3%	82.7%	79.2%
Under 19 years	94.8%	88.8%	86.3%
Race and Ethnicity			
White alone	92.2%	83.6%	78.8%
Black/African Americans alone	90.1%	85.0%	84.1%
American Indian and Alaska Native alone	81.0%	78.4%	73.5%
Asian alone	93.6%	88.8%	88.5%
Hispanic or Latino (of any race)	82.3%	73.2%	66.2%
White alone, not Hispanic or Latino	94.1%	90.1%	90.7%

Data Source: U.S. Census Bureau, 2016-2020 American Community Survey

The pandemic caused the largest health coverage loss in the nation's history. Texas ranked second in the number of workers who lost healthcare coverage, which accounted for 659,000 newly uninsured due to job losses between February and May 2020.[28] A portion of this loss has been buffered by the enrollment in Medicaid, a public health coverage, which increased during the pandemic. This is likely attributed to the increased job and income loss coupled with the continuous Medicaid coverage created by the Families First Coronavirus Response Act. [29]

FIGURE 39: Percentage of Population Without Health Coverage by Cities in Dallas County, 2016 -2020

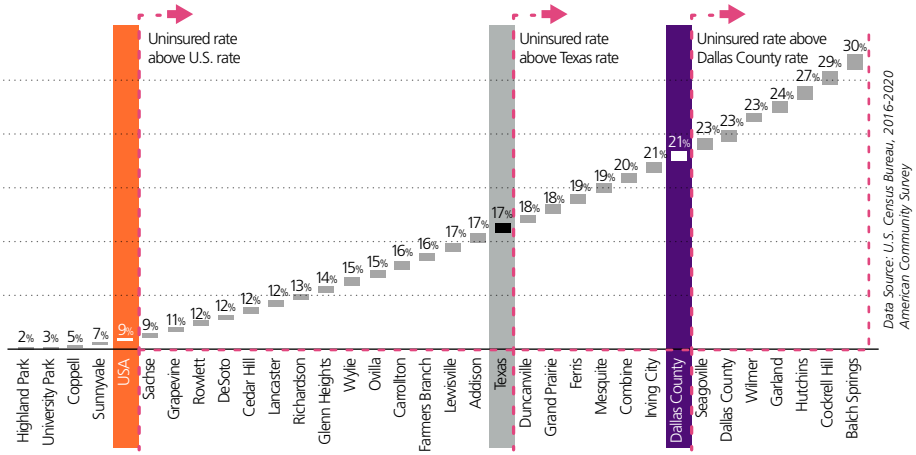
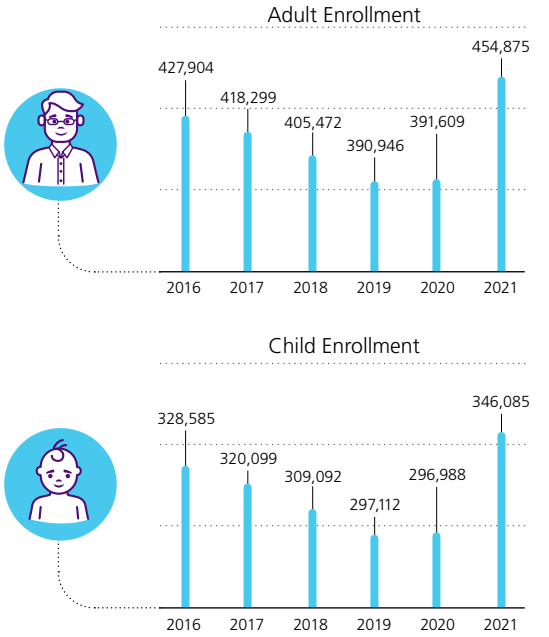


Figure 40 shows the increase in the number of Medicaid enrollees between 2020 and 2021 for adults and children.

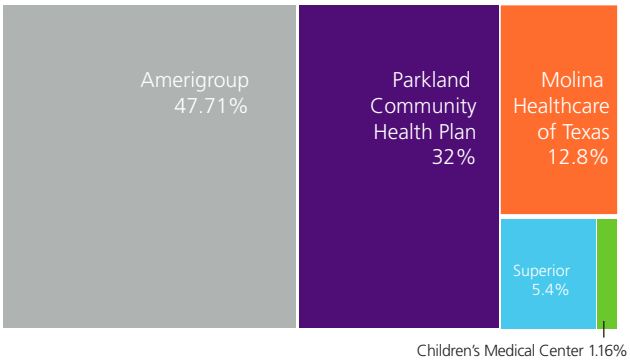
FIGURE 40: Dallas County Medicaid Enrollment, 2016–2020



Data Source: Texas Health and Human Services Health Care Statistics

Dallas County's Medicaid enrollment per managed care organization is depicted in Figure 41.

FIGURE 41: Dallas County Medicaid Enrollment by Manage Care Organization, 2021



Data Source: Texas Health and Human Services Health Care Statistics

Healthcare

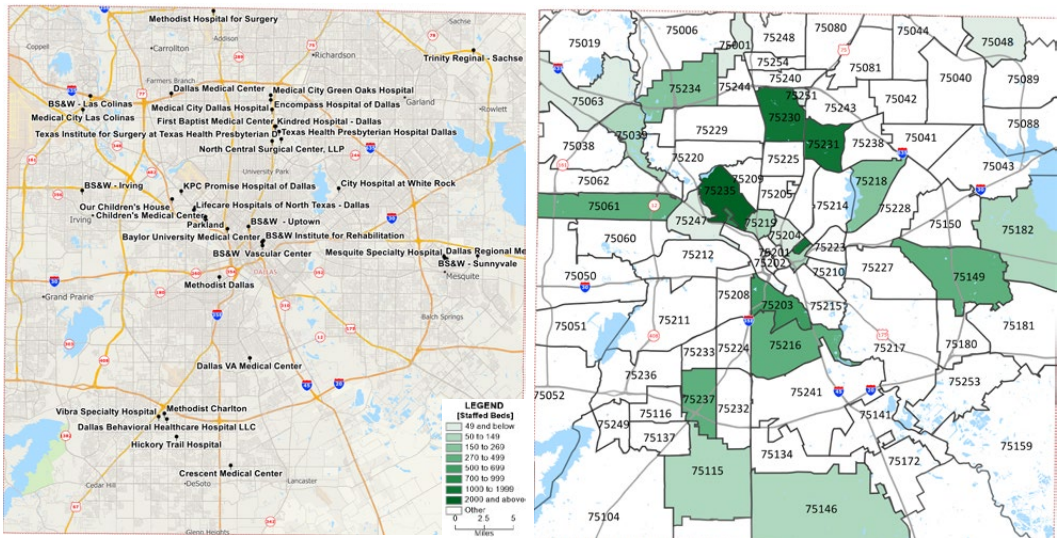
Healthcare in Dallas County is provided by several health systems. A health system is an organization that includes at least one hospital and at least one group of physicians who provide comprehensive care including primary and specialty care and relate to each other and with the hospital through common ownership or joint management.[30] Since the 2019 CHNA, the number of beds in Dallas County increased from 6,073 to 6,293. Table 3 lists hospitals and their bed capacity as of 2022.

TABLE 3: Dallas County Hospitals

#	Dallas County Hospitals	2022 Staffed Beds
1	Baylor Scott &White (BS&W) Heart and Vascular	53
2	BS&W Medical Center Sunnyvale	70
3	BS&W Medical Center Irving	233
4	BS&W Medical Center Uptown	24
5	Baylor Surgical Las Colinas	12
6	Baylor University Medical Center	857
7	White Rock Medical Center	151
8	Crescent Medical Center Lancaster	43
9	Dallas Medical Center	71
10	Dallas Regional Medical Center	127
11	Dallas Veterans Affairs Medical Center	853
12	Medical City Dallas	898
13	Medical City Las Colinas	72
14	Methodist Charlton Medical Center	273
15	Methodist Dallas	387
16	North Central Surgical Center	23
17	Parkland Memorial Hospital	858
18	Pine Creek Medical Center	15
18	Legent Orthopedic Hospital	18
20	Texas Health Dallas	638
21	Texas Institute for Surgery	9
22	UT Southwestern William P. Clements Jr. University Hospital	460
23	Zale Lipshy University Hospital	148
	Total	**6,293**

Data Source: American Hospital Directory–Individual Hospital Statistics for Texas (ahd.com)

FIGURE 42: Dallas County Hospital Spatial Distribution and Hospital Bed Availability



Data Source: American Hospital Directory–Individual Hospital Statistics for Texas (ahd.com)

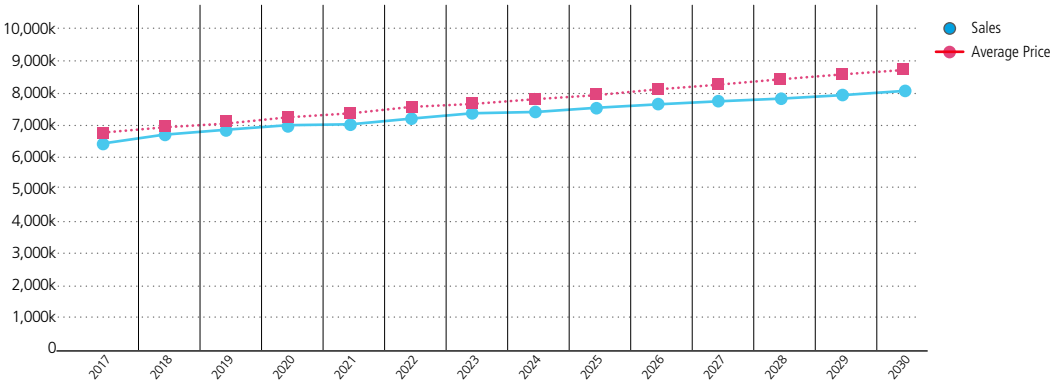
The geographic distribution of high-quality, high-volume healthcare facilities are not located where the individuals with the greatest healthcare needs reside. In Dallas County, there are few medical facilities located south of I-30. The Veterans Affairs Medical Center is among these facilities–see Figure 42.

In addition to their role of safeguarding the local community's health, hospitals also play a role as an employer and typically contribute significantly to the local economy.[31] Responding to this and stated in the 2019 CHNA, community members recognized Parkland as an anchor organization to address local economic development. Parkland updated its strategic plan to include its status as a healthcare anchor institution in Dallas County. As an anchor, Parkland will leverage its economies of scale in the county to impact the social and economic health of the communities it serves. Specific focused metric driven initiatives include targeting job recruitment, expanding, funding and deepening staff development, paying a living wage, and buying local when possible.[32]

Healthcare Workforce

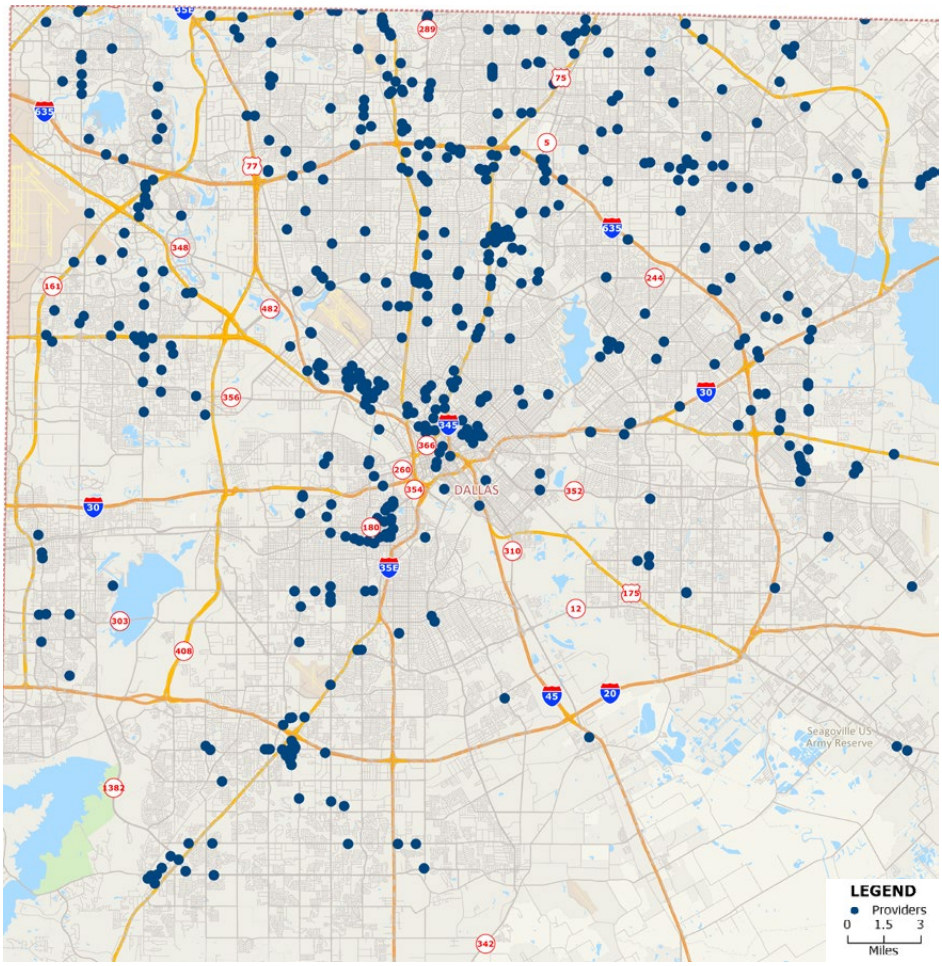
Access to healthcare services means having an ongoing source of care such as a primary care provider (PCP) or facility where care can be received regularly.[1] The county ratio of population to primary care physicians is 88.7 to 100,000 population ranking 36th and among the top 15% of Texas counties. In the North Texas public health region, the demand for physicians is expected to continue outpacing supply for primary care physicians[33]–see Figure 43. This region is identified as a critical healthcare professional shortage area for family medicine, cardiology, pediatrics, physical medicine and rehabilitation, and psychiatry, Table 4.

FIGURE 43: Supply and Demand of Primary Care in North Texas, 2017–2030



Adopted From: Texas Health and Human Services, Department of State Health Services. Texas Physician Supply and Demand, 2018–2032.[34]

FIGURE 44: Primary Care Physicians Geographic Distribution, Dallas County



Data Source: Texas Department of State Health Services Texas Primary Care Office

There is an insufficient number of physicians to address the demand for care in communities located in the southern sector, particularly in the southeast section of Dallas County–see Figure 44.

The coexisting nursing shortage exacerbated by the pandemic is also an important threat to the healthcare landscape. Pre-pandemic, studies had preemptively deduced that the U.S. would have a shortage of half a million Registered Nurses (RN) by 2030. [35] Historically, to offset the demand, hospitals have relied on contract labor firms however, the prices charged by contract labor firms surged in the pandemic and demand is at an all-time high. According to the American Hospital Association, the median hourly rates hospitals billed for contract nurses more than tripled between January 2019 and January 2022 and reached $148.20/hour in January 2020.[36]

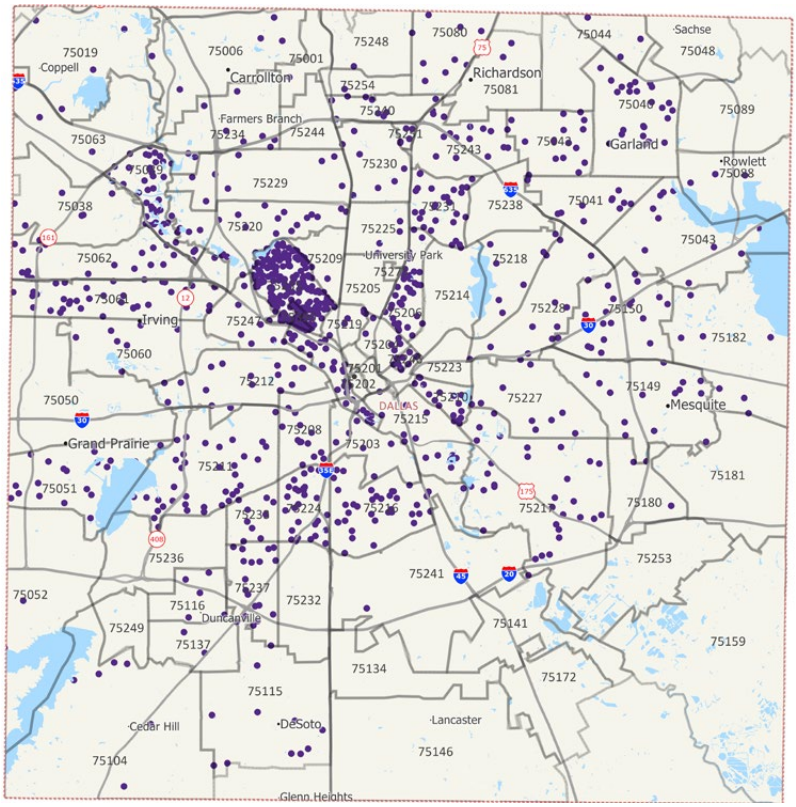
TABLE 4: Projection of Physician Shortage, North Texas

Specialty	2032 Supply (FTE)	2032 Demand (FTE)	2032 % Demand Met
Cardiology	611	993	61.5%
Pediatrics	1,239	1,972	62.8%
Physical Medicine and Rehabilitation	306	566	54.2%
Psychiatry	803	1,229	67.5%

Adopted From: Texas Health and Human Services, Department of State Health Services. Texas Physician Supply and Demand, 2018–2032. Retrieved May 11, 2022[10]

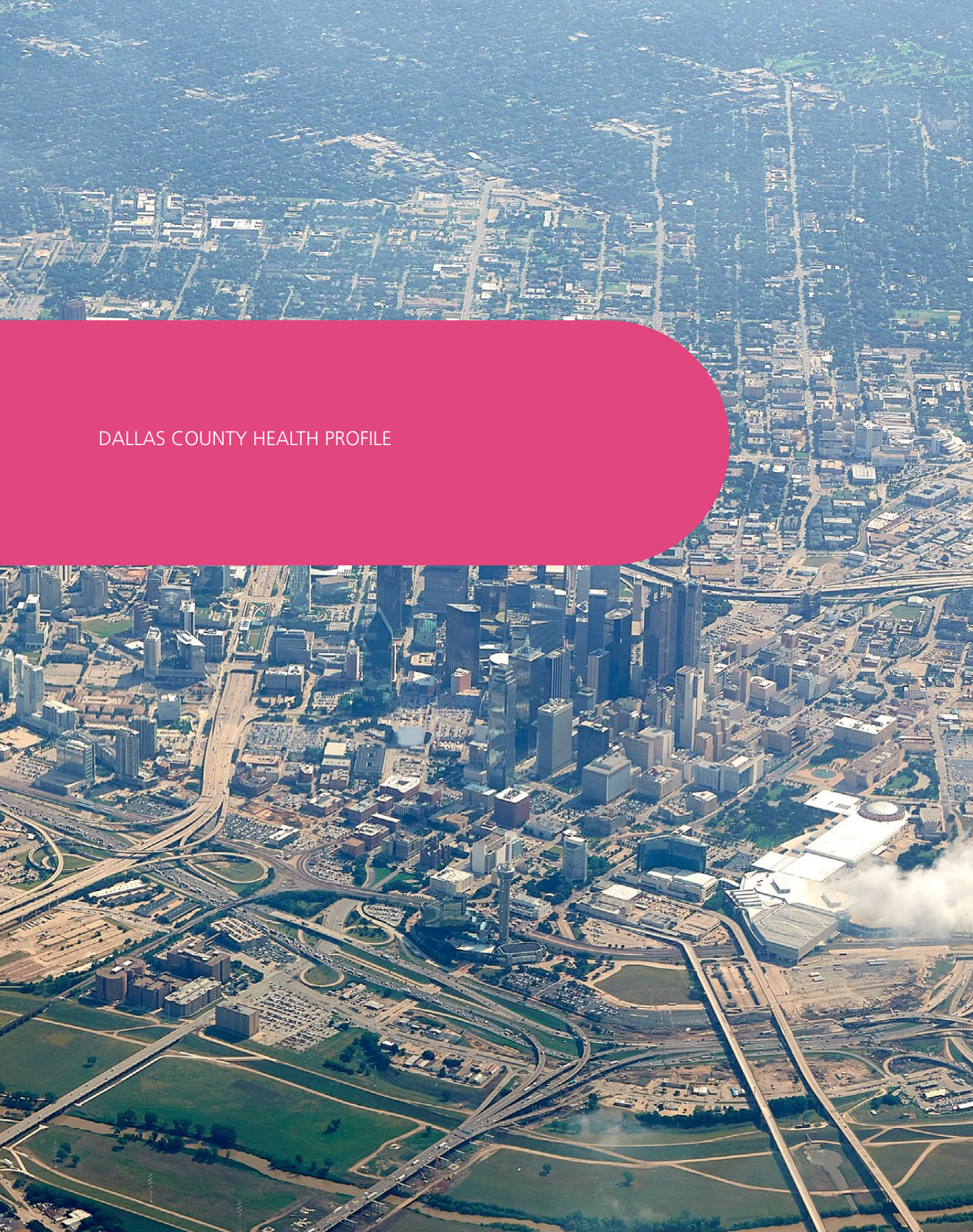
The shortage of PCPs and specialty provider physicians pose a challenge for managed care organizations serving residents who live in areas with limited availability of providers. To offset this, Parkland Community Health Plan, a Medicaid Managed Care Organization, contracts with providers located outside of the county limits to improve access to care for its members in the county's southern area.

FIGURE 45: Parkland Community Health Plan, Primary Care Provider Network, Dallas County 2022



Data Source: Parkland Community Health Plan

DALLAS COUNTY HEALTH PROFILE



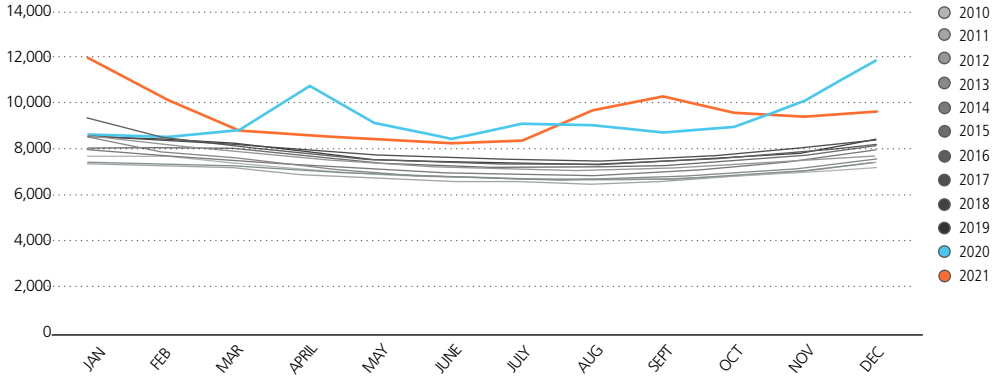
Mortality

The overall age adjusted mortality rate in Dallas County for 2016-2020 was 755.9 per 100,000, and the impact of the pandemic on mortality is reflected in the increase to 854.2 per 100,000 in 2020.[37]

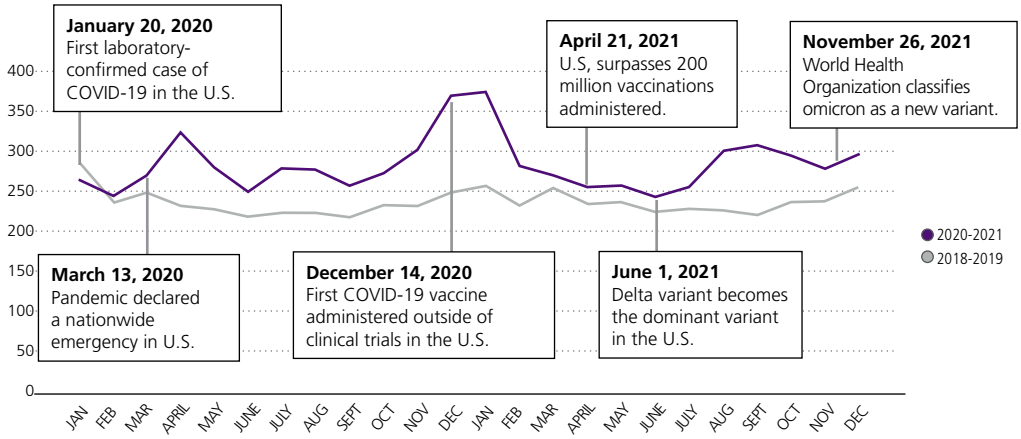
Trends in mortality for leading causes of death are important public health indicators as they are the terminal result of the performance of the system as a whole. The attributes and causal narratives of the deceased inform public health officials in leading the charge for multi-sector and multi-stakeholder urgency to strategically plan, invest and execute plans to decrease preventable premature death.[38,39] The COVID-19 pandemic eliminated a century of gains in life expectancy as a result of the number of COVID-19 related deaths. Between 2019 and 2020, there was a 19% increase in deaths, which remain consistent in 2021–see Figure 46. Mortality trends are assessed for the planning and deployment of Emergency Preparedness & Response programs, which represent the worst impact of crisis on health.[40] Under the Infectious Diseases section, the COVID-19 response by Parkland and DCHHS officials illustrates the innovative use of data to effectively address any public emergency.

FIGURE 46: U.S. Mortality Patterns

Average Daily Deaths by Month in the United States: 2010-2021



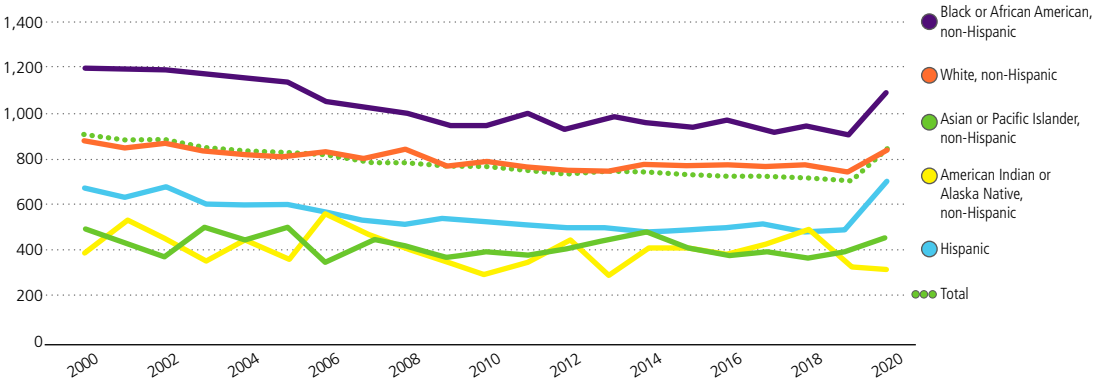
COVID-19 Pandemic: Monthly Deaths and Major Milestones *(in thousands)*



Adopted from U.S. Census Bureau. Pandemic Disrupted Historical Mortality Patterns, Caused Largest Jump in Death in 100 Years.[41]

Mortality by Race and Ethnicity

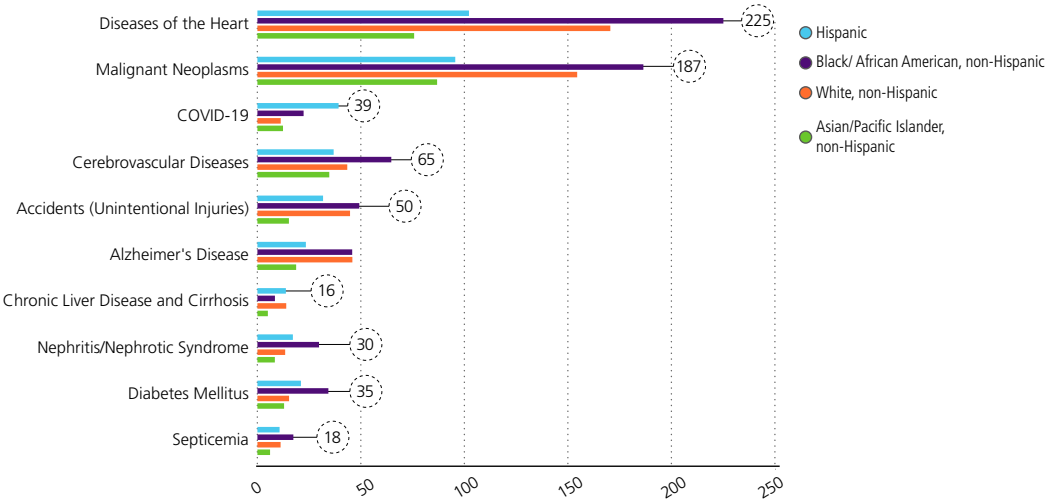
FIGURE 47: All-Cause Mortality Rate by Race and Ethnicity, Dallas County, 2000–2020



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

Pre-pandemic mortality rates were markedly higher for Black/African American, non-Hispanic– see Figure 47. An analysis of mortality data from the National Vital Statistics System and the American Community Survey population found the national all-cause mortality rate among population was 24% higher when compared to white, non-Hispanic. Moreover, city level mortality rates for race and ethnicity vary substantially from city to city.[42] Thus, highlighting the importance of stratifying mortality rates at the city level because in contrary to neighborhoods, ZIP Codes and census tracks, cities are political jurisdictions. Government officials, public health professionals and advocates can influence public policy and distribution of funds to strengthen the public health infrastructure and directionally correct health inequities by optimizing social determinants of health, including but not limited to employment, access to healthy foods, access to healthcare facilities, housing, public transportation, and employment.[43,44]

FIGURE 48: 10 Leading Causes of Death by Race-Ethnicity in Dallas County, 2016–2020



All cases reporting Hispanic ethnicity are classified into the Hispanic category. Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

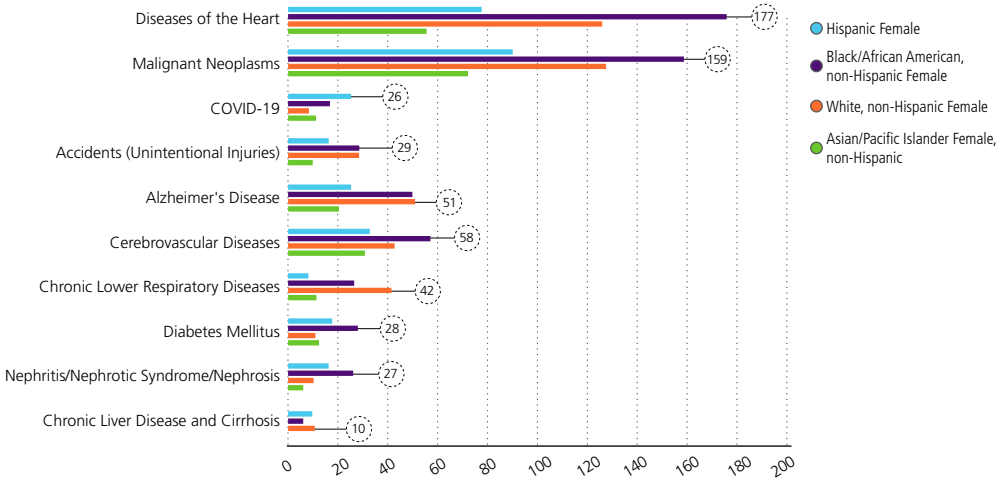
Counterintuitively, historic Hispanic mortality rates have been lower than for white, non-Hispanic populations. Since the socioeconomic status of Hispanics is lower than white, non-Hispanics, the lower mortality rates among Hispanics are an epidemiological paradox under investigation–see Figure 47 and Figure 48.[45] During the pandemic, COVID-19 ranked as the leading cause of death among Hispanics in Dallas County in 2020–see Figure 48 and Figure 49.

The COVID-19 mortality rate is higher among Hispanics and Black/African Americans, non-Hispanic when compared to the white, non-Hispanic population–see Figure 50 and Figure 51. According to the Kaiser Family Foundation, Hispanics and Black/African American, non-Hispanics are twice as likely to die from COVID-19 than their white, non-Hispanic counterparts.[46]

Race and ethnicity are proxies for systemic conditions that affect health, such as socioeconomic status, access to healthcare and exposure to COVID-19 associated to occupations including but not limited to frontline, essential and critical infrastructure workers.[47]

Throughout the pandemic Hispanics have remained at higher risk for COVID-19 related hospitalization compared to other racial and ethnic groups resulting in enormous personal, family network and societal loss and financial hardship. Fifty-two percent (52%) of Hispanic adults in the U.S. say a family member or close friend has been hospitalized or died from COVID-19 and a similar percentage of Hispanics state they or another member of their household took a pay cut or lost their job.[48]

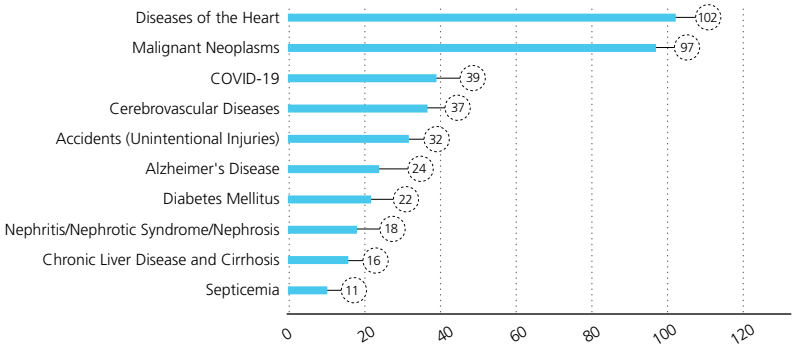
FIGURE 49: 10 Leading Causes of Death by Race–Ethnicity in Dallas County in 2020



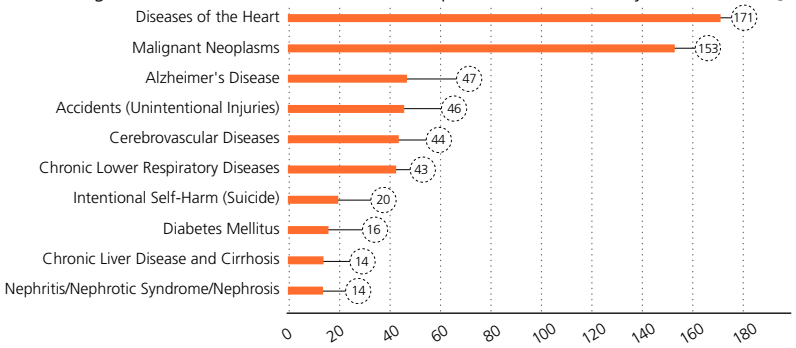
All cases reporting Hispanic ethnicity are classified into the Hispanic category. Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

FIGURE 50: 10 Leading Causes of Death by Race and Ethnicity* in Dallas County, 2016–2020

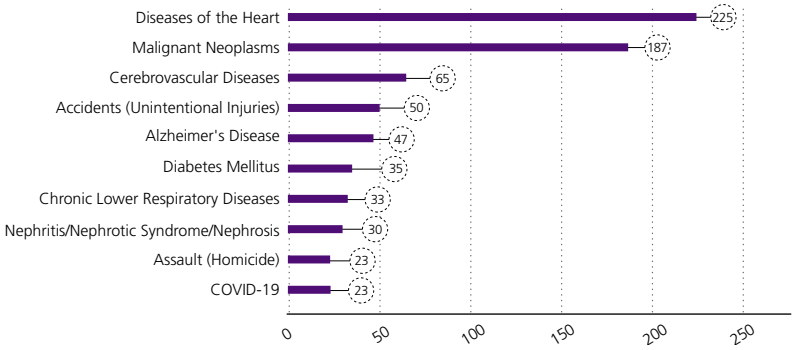
10 Leading Causes of Death for Hispanics in Dallas County, 2016-2020 *(age-adjusted rate per 100,000)*



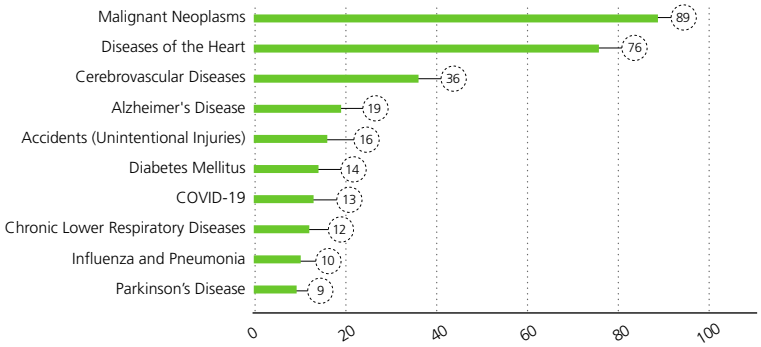
10 Leading Causes of Death for Whites, non-hispanic in Dallas County, 2016–2020 *(age-adjusted rate per 100,000)*



10 Leading Causes of Death for Blacks/African American, non-Hispanic in Dallas County 2016–2020 *(age-adjusted rate per 100,000)*



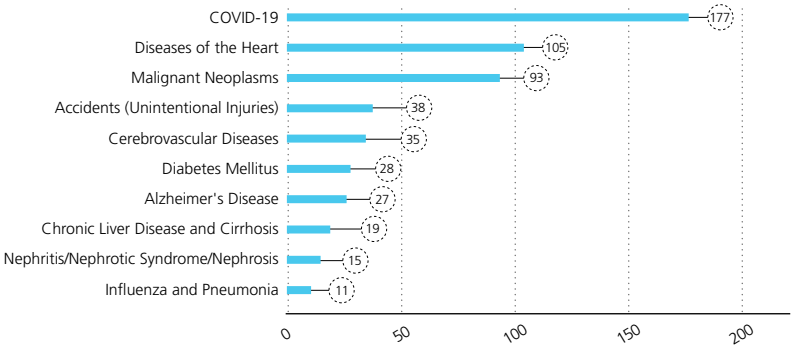
10 Leading Causes of Death for Asians/ Pacific Islander, non-Hispanic In Dallas County, 2016–2020 *(age-adjusted rate per 100,000)*



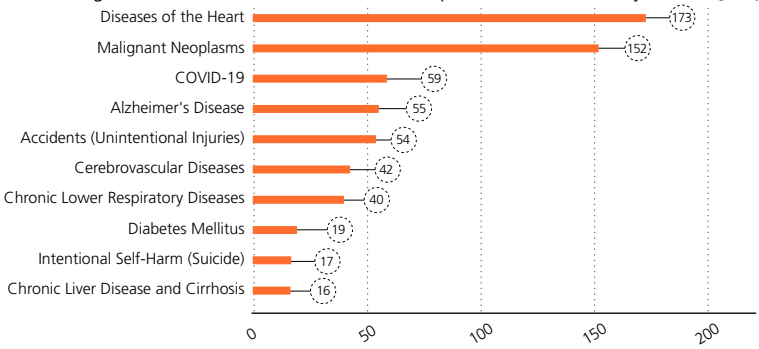
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

FIGURE 51: 10 Leading Causes of Death by Race and Ethnicity* in Dallas County, 2020

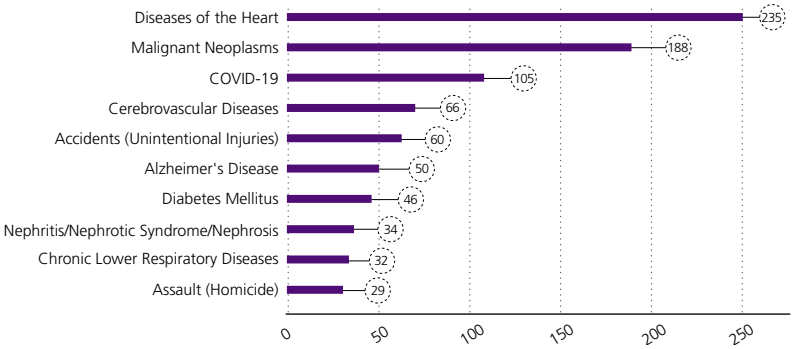
10 Leading Causes of Death for Hispanics in Dallas County, 2020 *(age-adjusted rate per 100,000)*



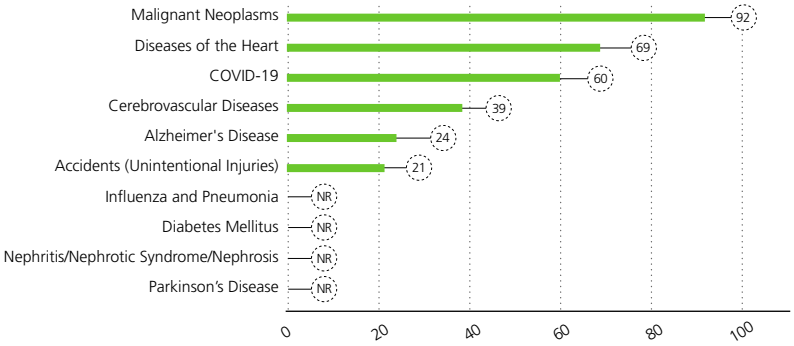
10 Leading Causes of Death for Whites, non-hispanic in Dallas County, 2020 *(age-adjusted rate per 100,000)*



10 Leading Causes of Death for Blacks/African American, non-Hispanic in Dallas County 2020 *(age-adjusted rate per 100,000)*



10 Leading Causes of Death for Asians/ Pacific Islander, non-Hispanic In Dallas County, 2020 *(age-adjusted rate per 100,000)*

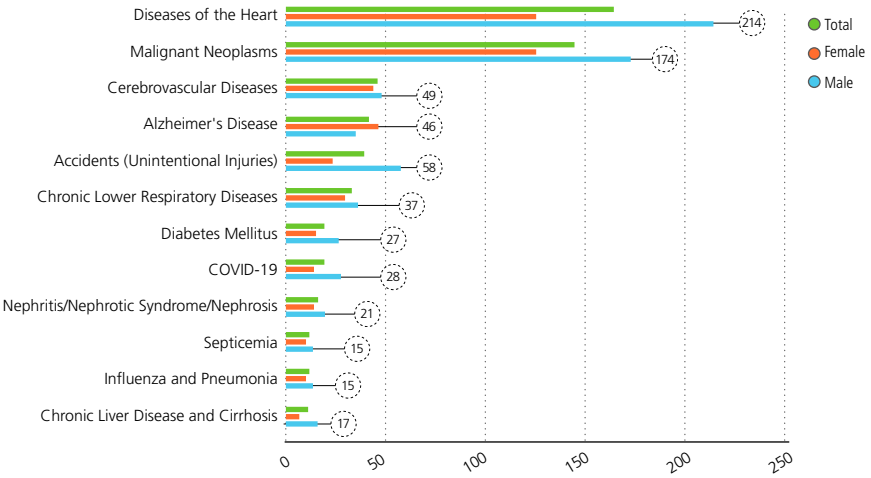


*All cases reporting Hispanic ethnicity are classified into the Hispanic category
Age Adjustments uses the 2000 Standard Population. NR: Not Reliable
Data Source: CDC Wonder

Mortality by Sex

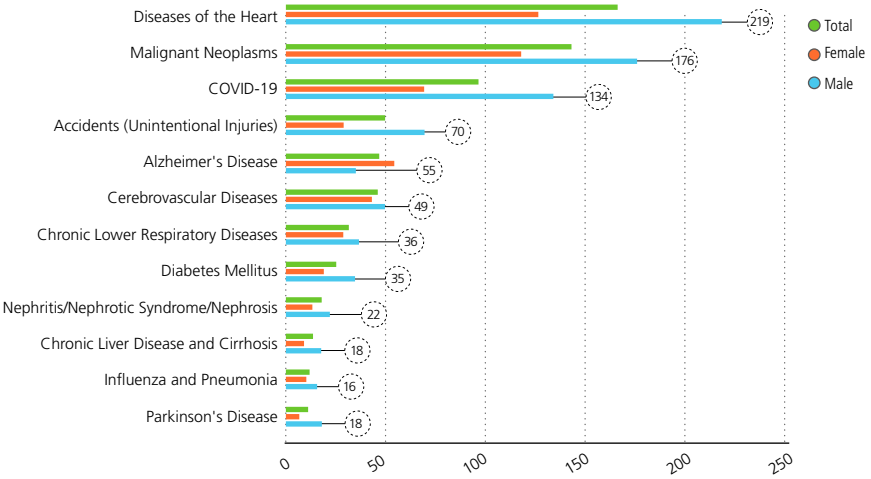
Except for Alzheimer's disease, in Dallas County the female population has a lower mortality rate for all leading causes of death when compared with the male population. For heart disease and cancer, a strikingly wide mortality gap exists between males and females–see Figure 52 and Figure 53.

FIGURE 52: Leading Causes of Death in Dallas County by Sex, 2016-2020



Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

FIGURE 53: Leading Causes of Death in Dallas County by Sex, Dallas County 2020

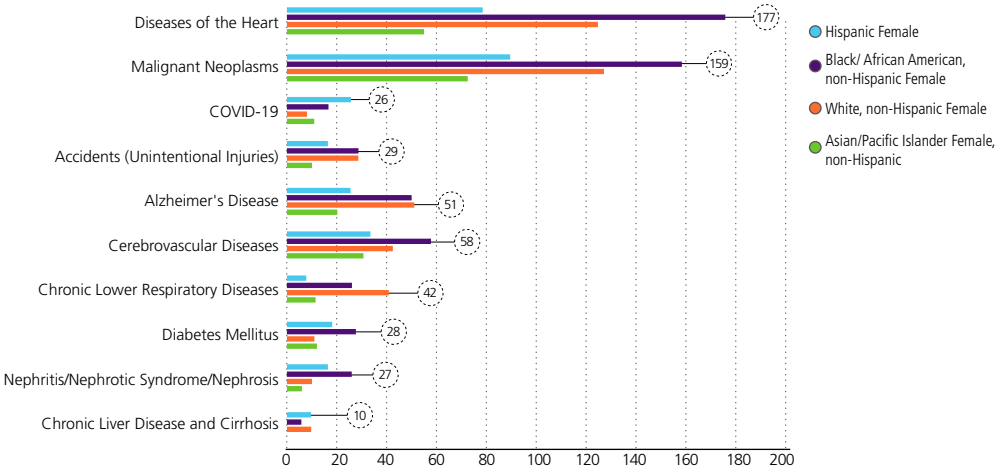


Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

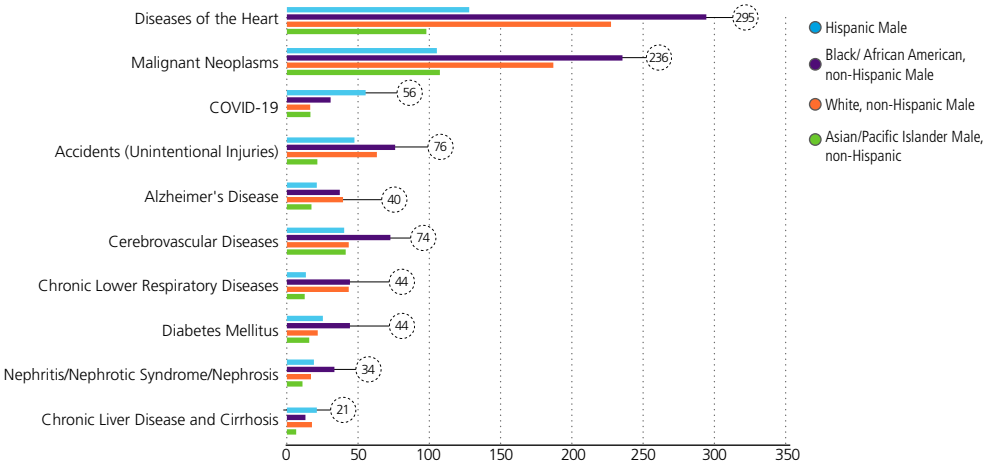
In Dallas County, Black/African American, non-Hispanic males by far have highest mortality rate when compared to males from other ethnic and racial groups and the female population. The heart disease mortality rate for Black/African American, non-Hispanic males was 295 per 100,000 population from 2016-2020 and 303 per 100,000 population in 2020 alone–see Figure 53 and Figure 54.

FIGURE 54: Leading Causes of Death for Females and Males by Race and Ethnicity* in Dallas County, 2016 2020

Leading Causes of Death for Females by Race-Ethnicity* in Dallas County, 2016 2020



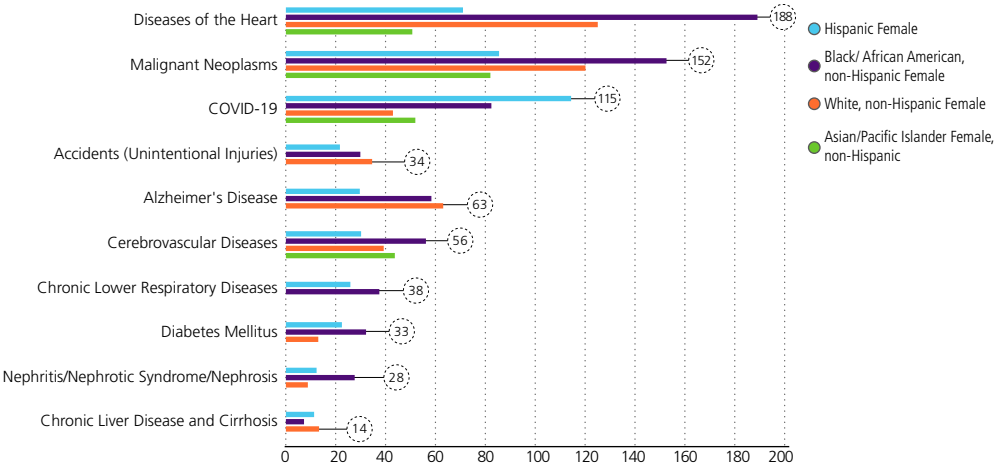
Leading Causes of Death for Males by Race-Ethnicity* in Dallas County, 2016 2020



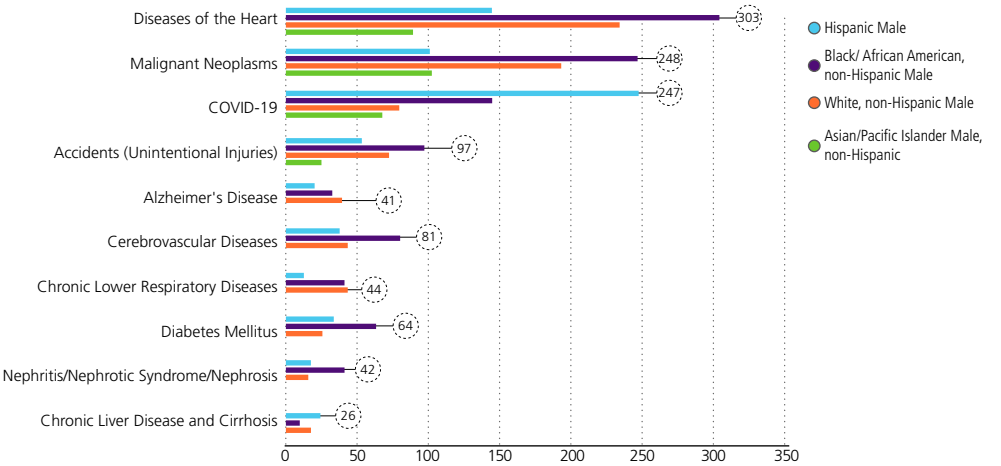
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Age Adjustments uses the 2000 Standard Population. U: Unreliable
Data Source: CDC Wonder

FIGURE 55: Leading Causes of Death for Females and Males by Race and Ethnicity* in Dallas County, 2020

Leading Causes of Death for Females by Race-Ethnicity* in Dallas County, 2020



Leading Causes of Death for Males by Race-Ethnicity* in Dallas County, 2020



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Age Adjustments uses the 2000 Standard Population. U: Unreliable
Data Source: CDC Wonder

The COVID-19 pandemic had a significant impact among Hispanics, particularly in Hispanic males–see Figure 51. In 2020, the COVID-19 mortality rate for Hispanic men was 248 per 100,000 population versus 146 for African American, non-Hispanic males, 80 for white, non-Hispanic males and 69 for Asian, non-Hispanic males. Likewise, Hispanic females also had the highest COVID-19 mortality rate (115 per 100,000 population) when compared to other racial and ethnic female populations.

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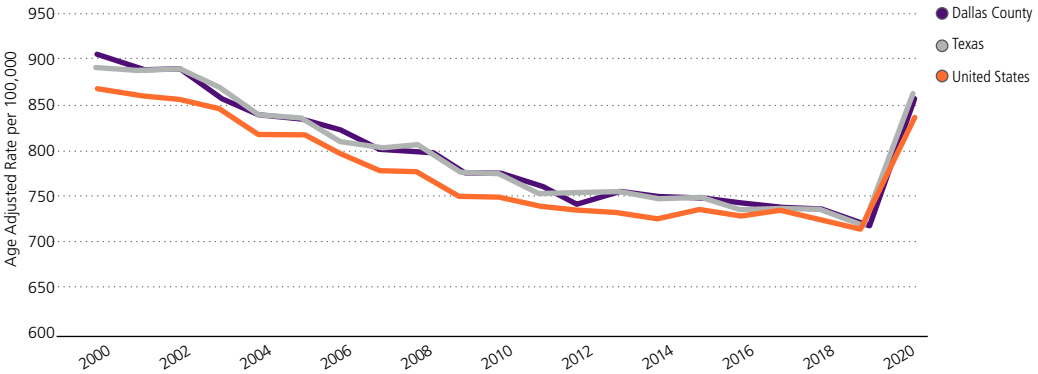
COVID-PCR
RN

Leading Causes of Death

Prior to the onset of the COVID-19 pandemic, the mortality rates in Dallas County declined steadily for the past 20 years–see Figure 56. The steady decline in deaths for diseases of the heart (heart disease) and malignant neoplasms (cancer) are attributed to better treatment and disease management[49] however, these two chronic diseases remained the leading causes of death in Dallas County between 2016 and 2020–see Figure 57. In 2020, the heart disease mortality rate was 167 per 100,000. In 2020, the heart disease mortality rate of 167 per 100,000 and cancer mortality rate of 143 per 100,00 continued to outpace the COVID-19 mortality rate of 97 per 100,000–see Figure 58. In addition, the rate of heart disease is expected to grow exponentially over the next few years because of the pandemics expected long-term effects.[50]

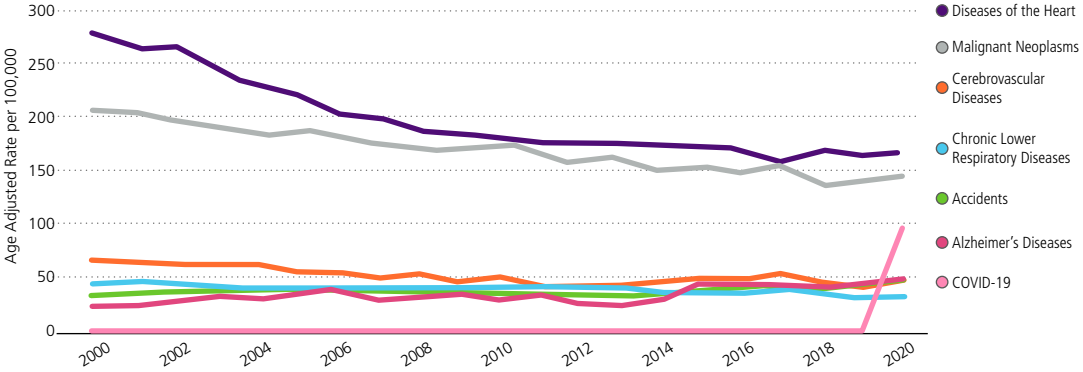
FIGURE 56: Mortality Rate Trends in Dallas County, Texas, and the U.S. 2000–2020



Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

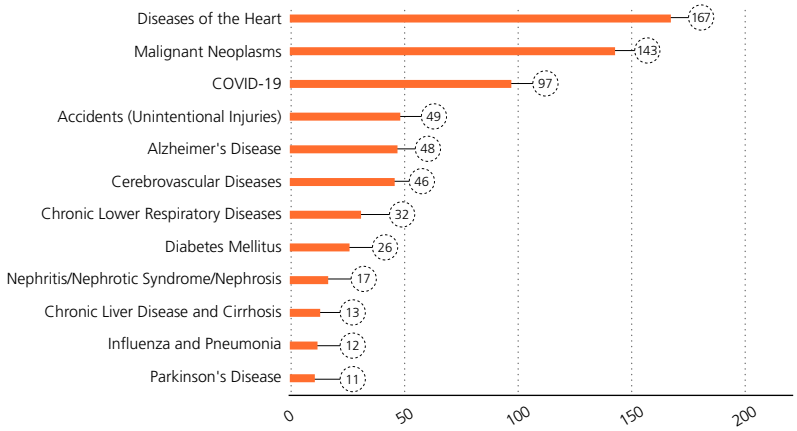
In comparison to the 2019 CHNA, the mortality pattern for Alzheimer's disease has noticeably changed. It climbed from the sixth to the fourth leading cause of death in the county–see Figure 59. Comparably, Alzheimer's disease ranks higher in Dallas County than it does in the U.S. (7th) and the state of Texas (5th) among leading causes of death. According to the CDC, Alzheimer's-related deaths have increased over the last 16 years regardless of race, sex, and ethnicity and is projected to quadruple by 2050, affecting 14 million of adults 65 years of age and older.[51]

FIGURE 57: Mortality Trends for Top Seven Leading Causes of Death in Dallas County, 2000–2020



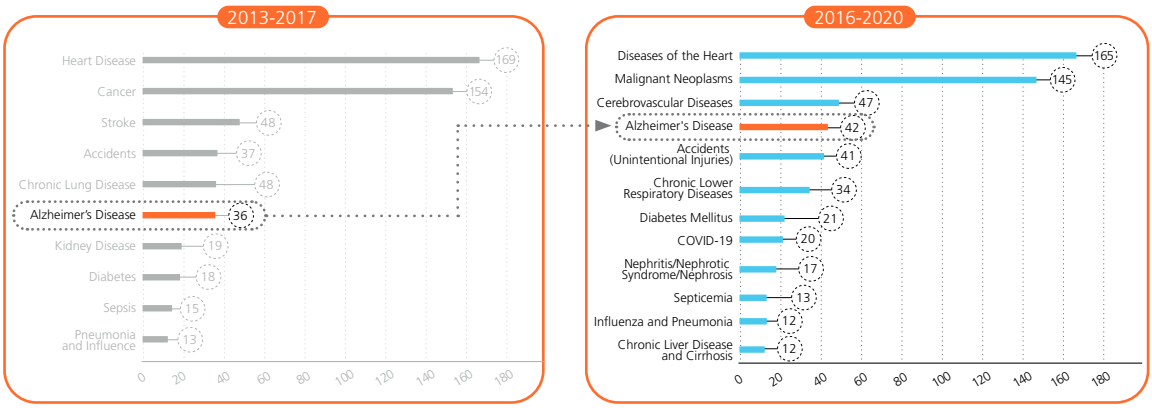
Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

FIGURE 58: Leading Causes of Death in Dallas County in 2020



Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

FIGURE 59. Leading Causes of Death Comparison Between 2016-2020 and 2013-2017



Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

Heart Disease Mortality

Although an estimated 80% of cardiovascular disease is preventable, [52] in the U.S. one person dies every 36 seconds of heart disease.[53] Heart disease includes a range of heart conditions and is the leading cause of death in the U.S., Texas, and Dallas County–Table 5. Although heart disease affects all races and ethnic groups, Black/African Americans, non-Hispanic are 30% more likely to die from heart disease than white, non-Hispanic.[54] Since 2000, Black/African American, non-Hispanics have had the highest heart disease mortality rate in Dallas County–see Figure 60.

Hypertension, known as high blood pressure, is the most common risk factor for heart disease, and nearly half of the adults in the U.S. have hypertension. Regrettably, only 1 in 4 (24%) of these adults have their condition under control. In 2019, high blood pressure was a primary contributing cause of death for more than half a million individuals.[56] Based on the prevalence of hypertension, experts estimate the national adjusted annual cost to treat this population is $131 billion higher compared to those without hypertension.[57]

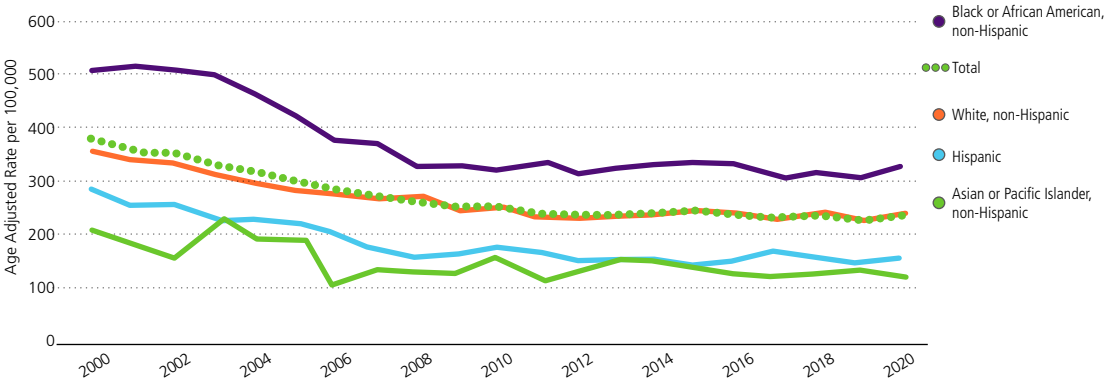
TABLE 5: Leading Causes of Death, U.S., Texas, and Dallas County, 2016–2020

Leading Causes of Death in U.S., Texas, Dallas County, 2016–2020
Age Adjusted Rate per 100,000

	U.S.		Texas		Dallas County	
#	Disease	Rate	Disease	Rate	Disease	Rate
1	Heart Disease	165	Heart Disease	169	Heart Disease	165
2	Cancer	149	Cancer	144	Cancer	145
3	Accidents–unintentional injuries	50	Cerebrovascular Disease	41	Cerebrovascular Disease	47
4	Chronic Lower Respiratory Diseases	39	Accidents–unintentional injuries	40	Alzheimer's Disease	42
5	Cerebrovascular Disease	38	Alzheimer's Disease	40	Accidents–unintentional injuries	41

Data Source: CDC Wonder

FIGURE 60: Heart Disease Mortality Rate by Race and Ethnicity* in Dallas County 2000 -2020



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

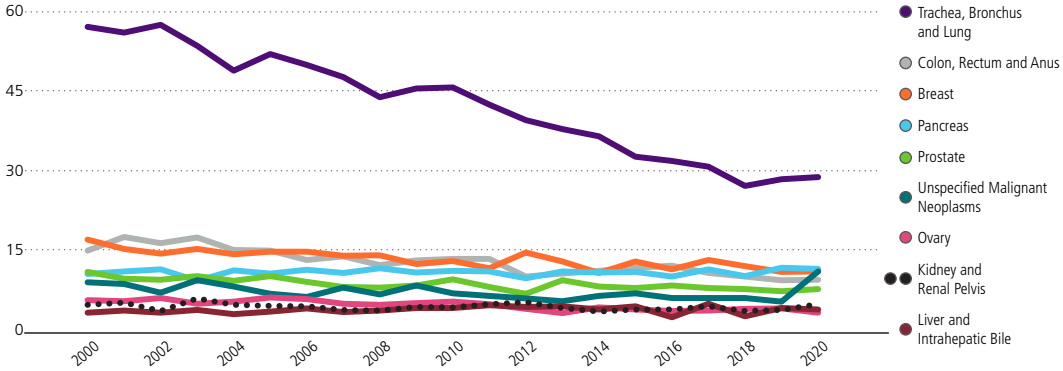
Cancer Mortality

Since 2000, cancer has been the second leading cause of death in Dallas County including during the COVID-19 pandemic, as illustrated previously in Figures 57 and 58. In a span of 27 years between 1991 and 2018, the cancer mortality rate fell 31% and experienced a record one-year drop of 2.4% between 2017 and 2018. Despite these advances, cancer ranks as the second leading cause of death in the U.S., Texas, and in Dallas County, see Table 5. In the U.S. every year more than 1.6 million people are diagnosed with cancer, and approximately 600,000 individuals die from it.

Lung cancer stands out in comparison to deaths caused by other cancers. According to the American Cancer Society, every year more people die of lung cancer than breast, prostate, and colon cancers combined.[58,89] Cancer diagnoses rates are impacted by changes in exposure to risk factors, screening tests, and improvement in treatment. Smoking is the leading risk factor for lung cancer and 80% to 90% of lung cancer is associated with smoking.[60,61,62]

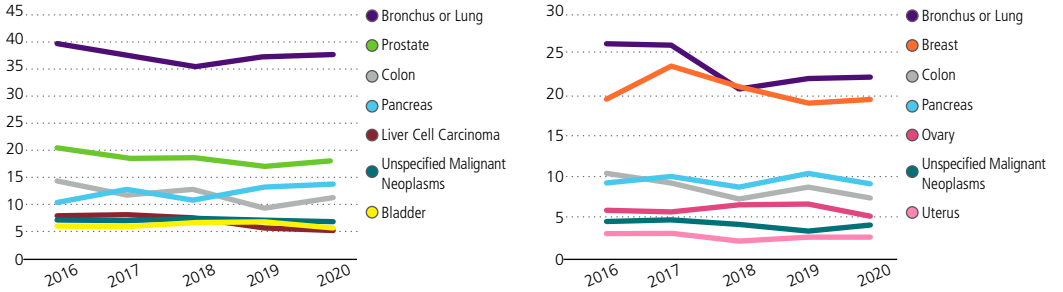
Black/African American, non-Hispanics diagnosed with lung cancer have worse outcomes when compared to their white, non-Hispanic counterparts because they are more likely to be diagnosed in advanced stages, less likely to receive surgical treatment, and more likely to not receive any treatment.[63] In Texas, Black/African American, non-Hispanics have the highest lung cancer mortality rate and in Dallas County, it's the leading cause of death by cancer type, for both women and men–see Figure 61 and Figure 62.

FIGURE 61: Cancer Mortality Rate by Type of Cancer, Dallas County, 2000–2020



Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

FIGURE 62: Leading Cancer Deaths Among Males and Females in Dallas County, 2016–2020



Age Adjustments uses the 2000 Standard Population
Data Source: CDC Wonder

In the U.S. breast cancer is the most common cancer in women and accounts for approximately 30% of all new female cancers every year.[64] After lung cancer, breast cancer is the second leading cause of death among Dallas County women.

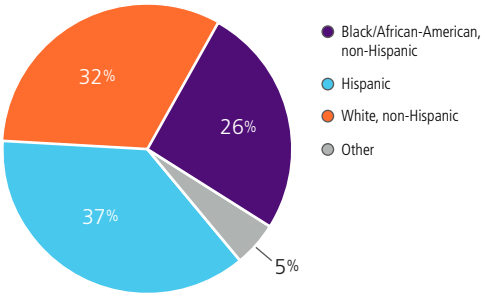
Significant gains have been achieved in the last 30 years as breast cancer mortality rates declined by 41% due to increased availability of mammography screening, early detection, awareness, and improved treatment.[65] From 2013 to 2018, the mortality rate decreased by 1% per year.[21]

Unfortunately, breast cancer mortality rates vary by race and ethnicity, thus impairing overall gains that could be attained if all groups benefited equally from advances in early detection and treatment. Black/African American, non-Hispanic women have the highest probability of developing breast cancer and are 40% more likely to die of this cancer when compared to white, non-Hispanic women. In Dallas County where there is a high concentration of late-stage incidence, the highest of which is in Black/African American, non-Hispanic women, the breast cancer age-adjusted mortality rate is almost twice that of white, non-Hispanic women.[26]

COVID-19

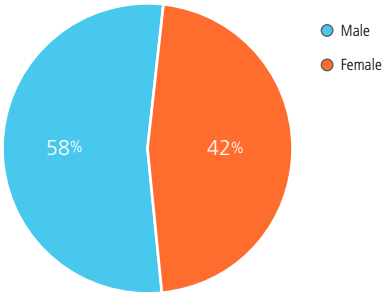
As depicted earlier in Figure 58, COVID-19 was the third leading cause of death in 2020. As of July 2022, there were 6,575 deaths related to COVID-19. Hispanics made up the largest proportion of all COVID-19 related deaths in Dallas County in 2020 (37%), followed by white, non-Hispanic (32%) and by Black/African American, non-Hispanic (26%). Refer back to Figure 22 and Figure 23 for details on how these percentages compare to the general population.

FIGURE 63: COVID-19 Mortality by Race and Ethnicity*, Dallas County, as of July 2022



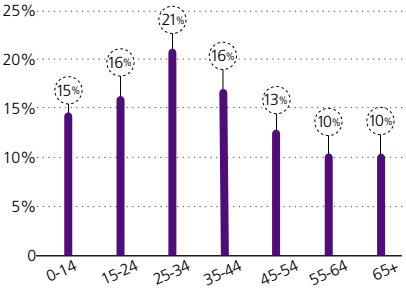
All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data source DCHHS

FIGURE 64: COVID-19 Mortality Sex, Dallas County, as of July 2022



Data source DCHHS

FIGURE 65: COVID-19 Deaths by Age Distribution, Dallas County, 2019–2020 (As of May 24, 2022)



Data Source: DCHHS

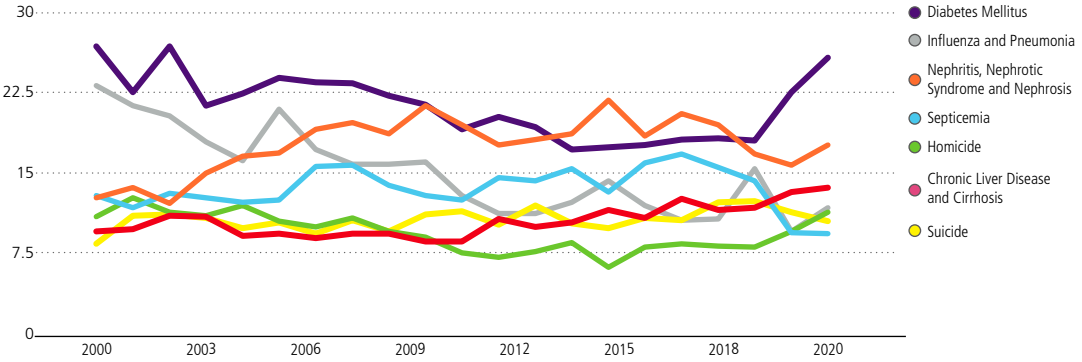
Other Leading Causes of Death

Diabetes mortality sharply increased from 2018 to 2020. A study by Reuters from 2009 to 2016, revealed that diabetes hospitalization for hyperglycemic crises soared by 73% and diabetes-related deaths increased by 55%. A recent study showed this trend continued in 2019, when U.S. diabetes mortality reached the highest rate in eight years, and in 2020 rose faster than any other leading causes of death in the U.S.[66]

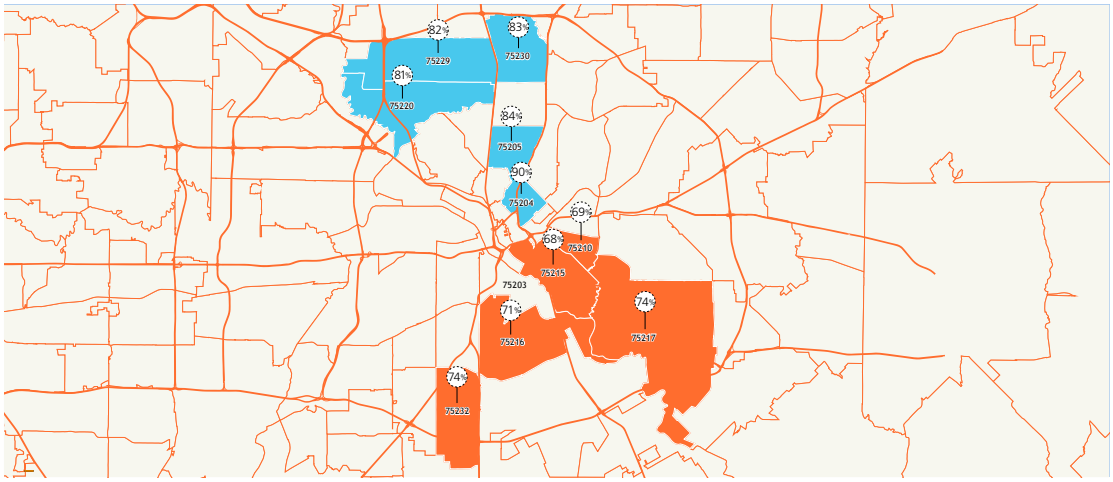
Causal attribution is varied. Some researchers attribute the increase to a COVID-19 pandemic disruption in healthcare delivery and delayed access to COVID-19 testing deployment. Others attribute the higher diabetes morbidity and mortality rates to lockdowns which induced sedentary lifestyles compounded by the pandemic, medication costs, inconsistent access to care, avoidance of out-of-pocket costs associated with high deductible plans and the overall lack of health insurance.[23,67]

The 2021 National Clinical Care Commission Report to Congress has sounded the alarm regarding the diabetes health crisis by warning that if the current trend continues, one in three Americans will develop diabetes in their lifetime.[68]

FIGURE 66. Mortality Trends for Other Leading Causes of Death in Dallas County, 2000–2020



Age Adjustments uses the 2000 Standard Population. Data Source: CDC Wonder



Life Expectancy

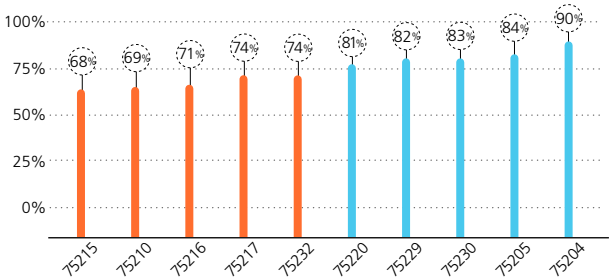
Life expectancy, defined as the expected average number of years of life remaining at a given age,[69] differs by race, ethnicity, gender and ZIP Code in Dallas County and there is a stark contrast in life expectancy between geographic areas–see Figure 67.

Life expectancy, a public health indicator measured in years from birth, shows clear evidence of the differential impact of COVID-19 on survival, as it is unaffected by the age distribution of the underlying populations. While life expectancy in the U.S. has increased little in previous decades, it has declined in recent years and become more unequal across the country. From 2019 to 2020, life expectancy declined from 78.8 to 77.3 years and are mainly attributed to COVID-19's disproportionately higher number of deaths in the Hispanic population.

Researchers estimate Hispanic populations will experience 3 to 4 times the reduction in life expectancy than white, non-Hispanics because of the pandemic, and expect COVID-19 will reverse more than 10 years of progress closing the Black/African American, non-Hispanic and white, non-Hispanic gap in life expectancy by reducing the Hispanic mortality advantage by 70%.[70,71,72]

The ZIP Codes with lower life expectancy are correlated with higher chronic disease burden and high ADI scores or low community investment.

FIGURE 67: Life Expectancy Variances Between ZIP Codes Dallas County, 2019



Data Source: University of Texas Southwestern Medical Center, UT Health

Morbidity

This section describes the disease burden present in Dallas County and includes data from multiple sources including but not limited to the BRFSS, Parkland EHR disease registries and North Texas Behavioral Health Authority. While the BRFSS provides information to make informed decisions for the planning of public health programs, there are some limitations to this study. Primarily, the BRFSS is a cross-sectional, self-report survey and as such is subject to recall bias and social desirability bias, which may influence which events respondents recall or report at the time of the interview.[73]

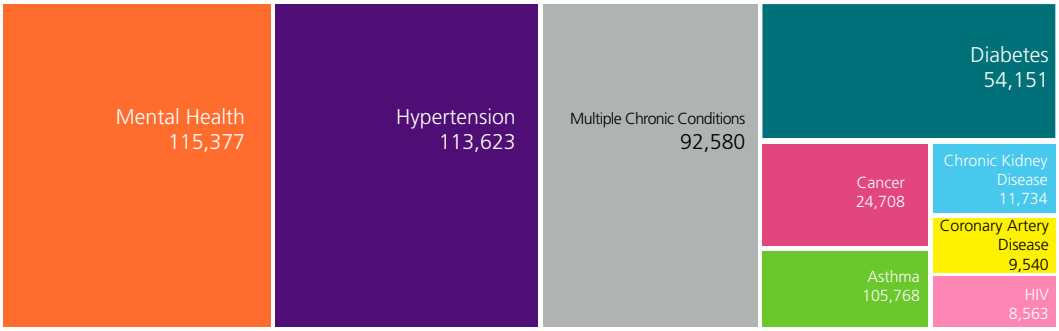
Understanding prevalence trends of chronic conditions such as asthma, cancer, diabetes, hypertension, and mental health within Dallas County is essential for healthcare providers, related sectors, and public health officials to generate urgency, design and craft programs and outreach efforts to target at-risk communities, and efficiently allocate funds and resources.

Chronic Diseases

The National Center for Chronic Disease Prevention and Health Promotion defines chronic diseases as conditions that last one year or more and require ongoing medical treatment or limits an individual's daily living or both. In the U.S., six in 10 adults have a chronic disease and four in 10 have two or more. 90% of the U.S. annual healthcare costs are linked to individuals with chronic disease.[74,75] In Texas, the costs related to chronic diseases between 2016 and 2030 is projected to reach $3.5 trillion if prevention and treatment strategies are not improved.[76]

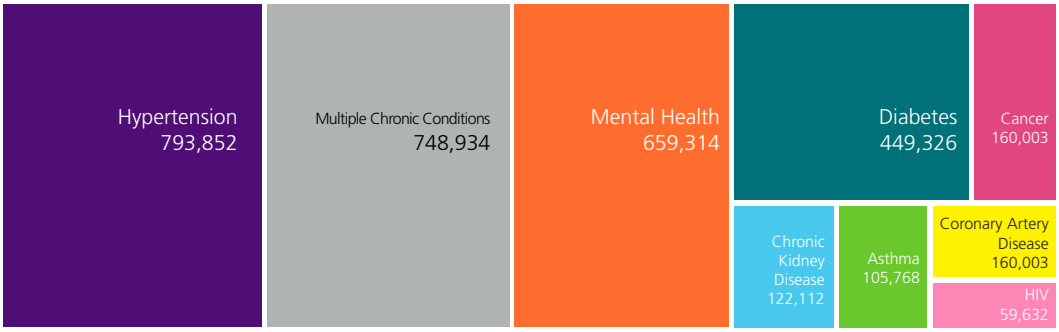
While chronic diseases are the leading causes of death, there is limited information available to the public to support informed decision-making about chronic disease prevention and monitoring disease prevalence.[77] To fill this significant gap, Parkland and DCHHS in collaboration with PCCI are developing a series of chronic disease surveillance systems to improve public health practice strategies. Until the system is fully deployed, Parkland fills the gap with registries to capture information pertaining to chronic conditions. Registry data extraction created subpopulation health profiles. A future state forecast analysis of chronic diseases in Dallas County was completed to drive prevention strategies and strengthen the healthcare delivery response. Forecasts were generated using SG-2, LLC a healthcare intelligence platform that combines population, epidemiology, economics, innovation and technology, and systems of care to estimate outpatient services volume for a disease.

FIGURE 68: Parkland Patient Count by Leading Chronic Disease Type, FY21



Cancer registry includes deceased patients
Data Source: Parkland Chronic Disease Registries
Some of the conditions included in the "multiple chronic conditions" category are diabetes, cancer, mental health, asthma, etc.

FIGURE 69: Visits by Chronic Disease Type, Parkland, FY21



Data Source: Parkland Decision Support, Strategy & Business Development
Some of the conditions included in the "multiple chronic conditions" category are diabetes, cancer, mental health, asthma, etc.

Mental Health

Diabetes

Hypertension

The three leading chronic diseases among Parkland patients in Fiscal Year 2021 (FY21) were mental health conditions, hypertension, and diabetes however, the number of patients with multiple chronic conditions stands out–see Figure 68. Figure 69 shows the volume of visits by Parkland patients with chronic diseases in FY21.

Chronic Diseases Vulnerability Index

Although chronic diseases are the leading causes of death, there is limited public health data readily available to inform prevention and monitoring strategies at local and city levels.[78] Local health departments have limited capacity to respond to the emerging health crisis associated with the post pandemic impact.[79] The COVID-19 pandemic brought to the forefront how chronic diseases such as cancer, diabetes, and heart disease disproportionately affect some populations and brought an additional load to the weakly funded public health systems in three consequential life altering and life expectancy ways:

1) Ongoing effect of COVID-19 on those with chronic diseases

2) Post pandemic prevention, identification, and management of chronic diseases

3) Long-term COVID-19 sequela, including "long covid" as a disease agent at the population level[80]

To sensitively and specifically combat these challenges Parkland, DCHHS and PCCI developed the Dallas County Chronic Disease Vulnerability Index (CDVI) to identify communities and populations at higher risk for chronic disease. The model integrates age stratified disease prevalence and chronic disease mortality data, and the ADI introduced earlier in this report. The CDVI builds upon the 2019 CHNA findings and is a milestone accomplishment of the Parkland and DCHHS joint long-term plan to focus on ZIP Codes with a high ADI rate. The goal is to use the CDVI to design programs that provide early intervention, social services support, improved access to healthy foods, physical activity, and tobacco-free environments, concentrated clinical activities, targeted employee recruitment, hiring and development, and community investment with procurement using local vendors. Strategies also include ongoing analysis of community and public health data to inform coordinated public health and clinical service interventions.[5]

Table 6 lists the five ZIP Codes with the highest and lowest scores.

The CDVI generates a score of 1.0 or less, the higher scores indicate higher vulnerability.

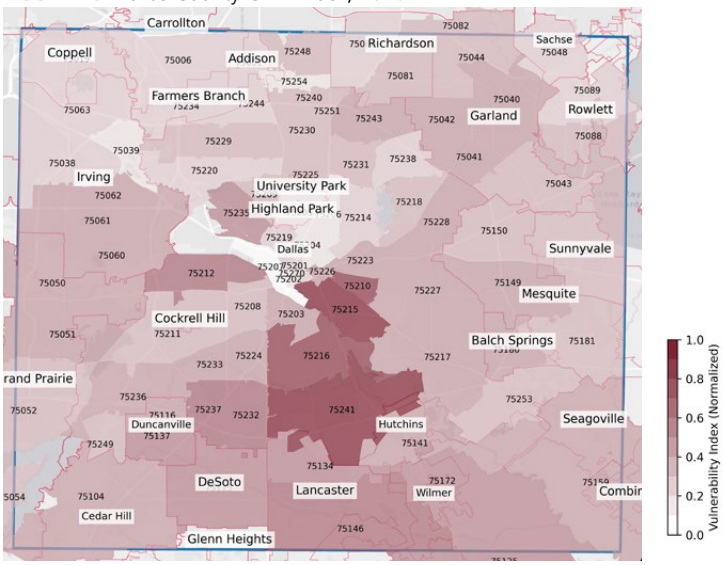
TABLE 6: List of ZIP Codes with highest and lowest CDVI, Dallas County, 2020

ZIP Code	Total Population	Total Adult Population (18+)	Total Population with Disease	Disease Prevalence in Adults (per 100 Adults)	Disease Prevalence (normalized)	CDVI	Vulnerability Type
75215	17,184	12,781	4,880	38	1.000	1.000	High
75241	30,863	21,913	7,249	33	0.859	0.908	High
75216	54,253	38,460	12,308	32	0.829	0.873	High
75210	9,504	6,093	1,941	32	0.825	0.858	High
75212	28,017	18,881	4,821	26	0.650	0.693	High
75205	24,726	19,534	1,562	8	0.165	0.161	Low
75204	32,032	29,362	2,034	7	0.136	0.146	Low
75039	20,627	16,768	1,140	7	0.132	0.132	Low
75206	39,653	34,408	2,162	6	0.118	0.128	Low
75202	2,739	2,600	154	6	0.108	0.116	Low

Data Source: PCCI

The map in Figure 70, is a visual representation of CDVI scores for the county's ZIP Codes and highlights 75215, 75241, 75216, 75210, 75212 in the darker shade of red, as priority areas.

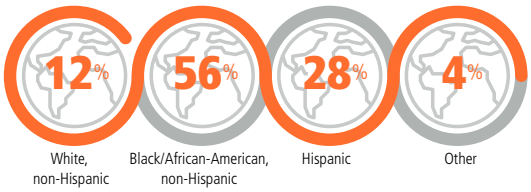
FIGURE 70: Dallas County CDVI Index, 2020



Data Source: Dallas Fort Worth Hospital Council, Neighborhood Atlas®. Center for Health Disparities Research, U.S. Census Bureau American Community Survey. Prepared by PCCI

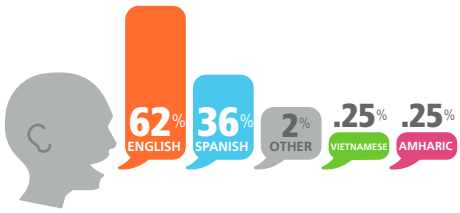
Parkland Chronic Diseases: Demographics

FIGURE 71: Parkland Patients, Chronic Disease Registry by Race and Ethnicity*, 2021



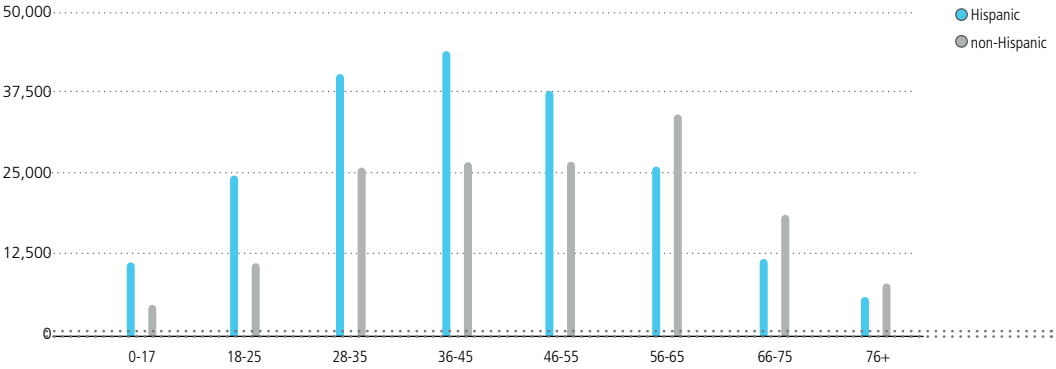
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Parkland EHR Chronic Disease Registries, 2021

FIGURE 72: Parkland Patients with Chronic Diseases by Primary Language Spoken, 2021



Data Source: Parkland EHR Chronic Disease Registries, 2021

FIGURE 73: Parkland Patients with a Chronic Diseases Age Distribution by Ethnicity, 2021

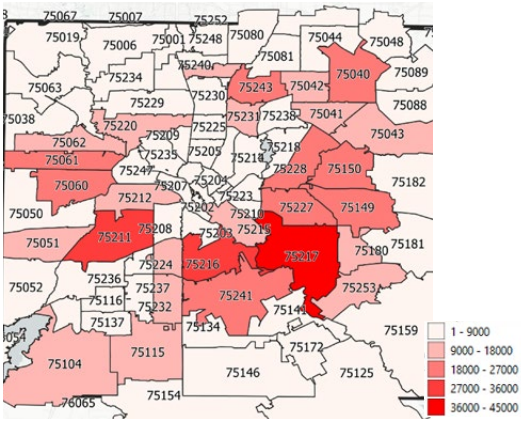


Data Source: Parkland EHR Chronic Disease Registries, 2021

Asthma

Asthma is the most common chronic disease in children in the U.S. The condition is characterized by episodic difficulty in breathing due to inflammation, swelling, and narrowing of the airways that carry air to the lungs and exacerbated by allergens, air pollution, animal dandruff, smoke, etc.[81] One in 12 children in the U.S. age 0–17 has asthma. Asthma prevalence among Black/African American, non-Hispanic children and white, non-Hispanic children is 16% and 7%, respectively. In Dallas County, the southern sector has the highest prevalence of pediatric asthma–see Figure 74. According to the BRFSS, 14% of the adult population report having asthma. In addition, it is more prevalent in women than men, 16% vs 12%.

FIGURE 74: Prevalence Pediatric Asthma by ZIP Code in Dallas County

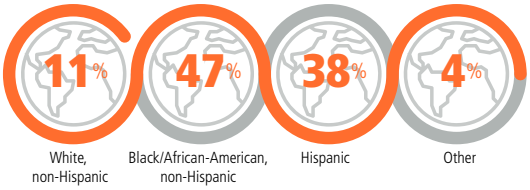


Data Source: PCCI

Parkland Asthma: Demographics Description

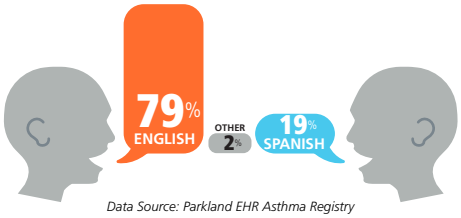
In 2021, Parkland's asthma registry had a total of **17,795** patients listed.

FIGURE 75: Parkland Patients, Asthma Registry by Race and Ethnicity*, 2021



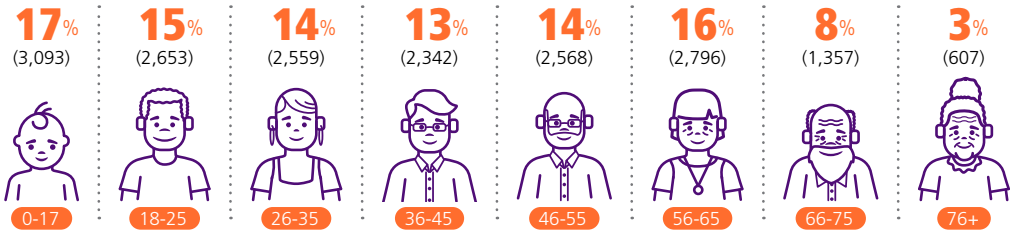
*All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data Source: Parkland EHR Asthma Registry

FIGURE 76: Parkland Patients, Asthma Registry Primary Language Spoken, 2021



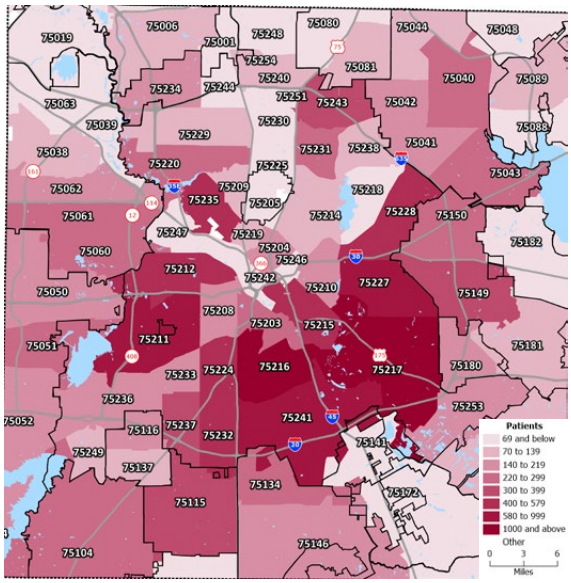
Data Source: Parkland EHR Asthma Registry

FIGURE 77: Parkland Patients, Asthma Registry Age Distribution, 2021



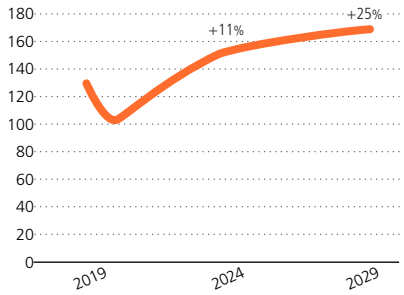
Data Source: Parkland EHR Asthma Registry

FIGURE 78: Parkland Patients, Asthma Registry by ZIP Code, 2021



Data Source: Parkland EHR Asthma Registry

FIGURE 79: Asthma 10-Year Outpatient Forecast, Dallas County 2019–2029



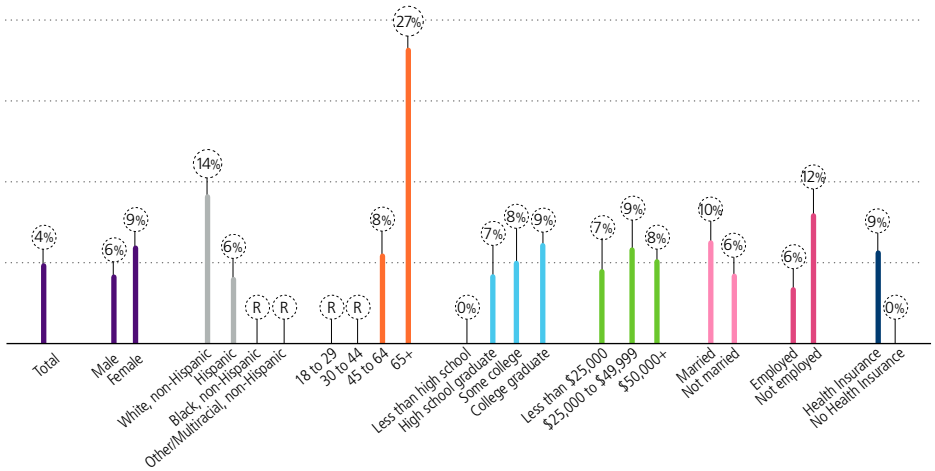
Prepared by SG02, LLC

Between 2019 and 2024, the asthma outpatient services volume is estimated to increase 11% by 2024 and 25% by 2029–see Figure 79. The Dallas County population pattern (population size, births, deaths, distribution, etc.) is the main factor behind the increase.

Cancer

Cancer remains the second leading cause of death in Dallas County and its prevalence is higher among those 65 years and older–see Figure 80.

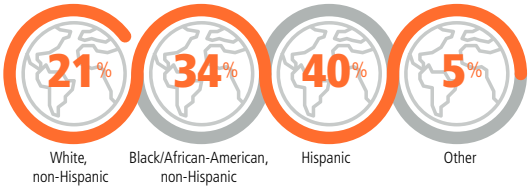
FIGURE 80: Prevalence of Any Cancer Among Adults 18 + years, Dallas County, 2016–2020



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services.
Note: R = Relative Standard Error greater than 30.0%, estimate unreliable and not displayed.

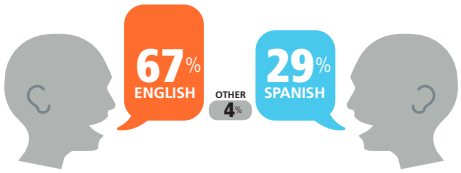
Parkland Cancer: Demographics Description

FIGURE 81: Parkland Patients, Cancer Registry by Race and Ethnicity, 2021



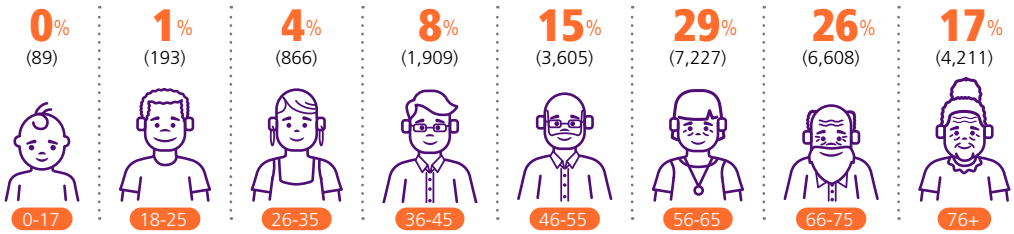
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Parkland EHR Cancer Registry, 2021

FIGURE 82: Parkland Patients, Cancer Registry by Primary Language Spoken, 2021



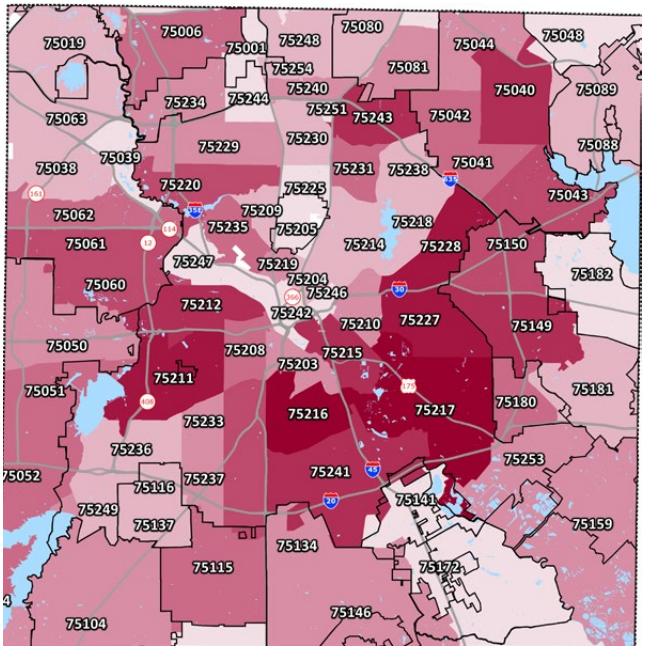
Data Source: Parkland EHR Cancer Registry
Parkland EHR Cancer Registry, 2021

FIGURE 83: Parkland Patients, Cancer Registry by Age Distribution, 2021



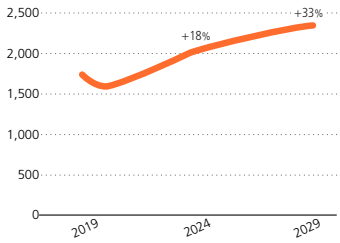
Data Source: Parkland EHR Cancer Registry, 2021

FIGURE 84: Parkland Patients, Cancer Registry by ZIP Code, 2021



Data Source: Parkland EHR Cancer Registry, 2021

FIGURE 85: All Cancer Types Outpatient Forecast, Dallas County, 2024 -2029



Between 2019 and 2024, the All-Cancer Types outpatient services volume is predicted to increase 18% by 2024 and 33% by 2029–see Figure 85. The cancer forecast is predicted by the Dallas County population pattern (population size, births, deaths, distribution, etc.).

FIGURE 86: Breast Cancer Outpatient Forecast, Dallas County, 2024–2029

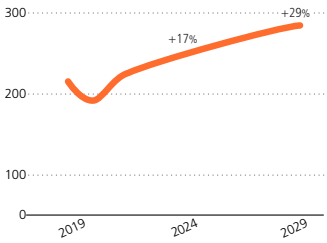
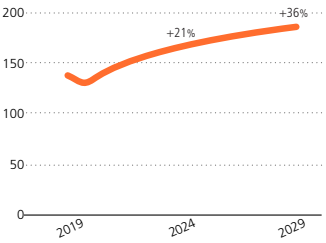


Figure 86 shows the outpatient services forecast for breast cancer and Figure 87, for lung cancer. The volume increase for both cancers is driven by the Dallas County population pattern (population size, births, deaths, distribution, etc.).

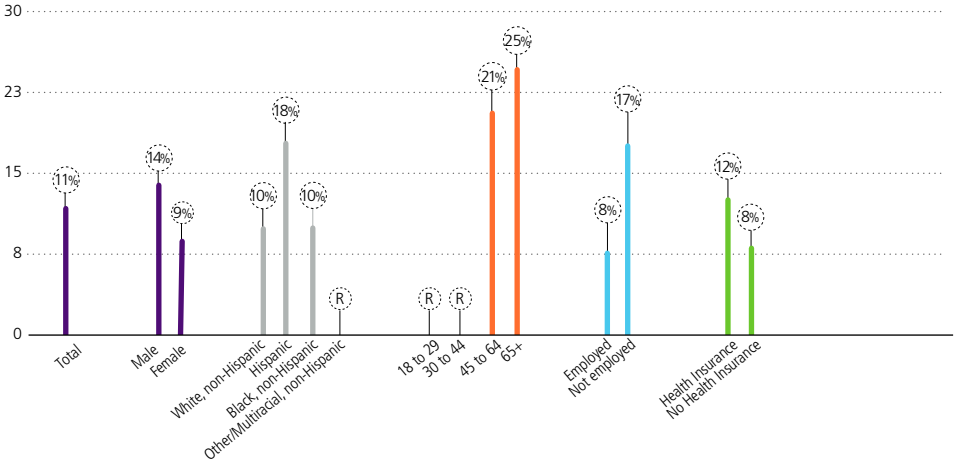
FIGURE 87: Lung Cancer Outpatient Forecast, Dallas County, 2019–2029



Diabetes

9.4% of the U.S population has diabetes. This is approximately 30.3 million people of which 7.2 million have not been diagnosed. Approximately 90% of persons with diabetes have type 2 (adult onset) diabetes.[82] In Dallas County, individuals 65 years and older experience higher diabetes prevalence compared to other ages, and non-Hispanics have a higher prevalence compared to other racial and ethnic groups.

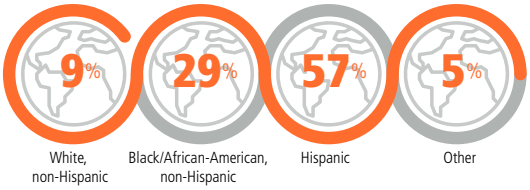
FIGURE 88: Prevalence of Diabetes, Dallas County, 2016–2020



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services.
Note: R = Relative Standard Error greater than 30.0%, estimate unreliable and not displayed

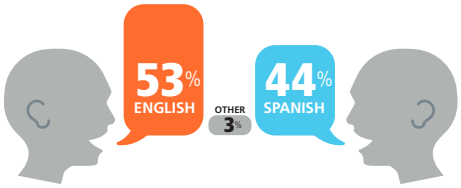
Parkland Diabetes: Demographics Description

FIGURE 89: Parkland Patients, Diabetes Registry by Race and Ethnicity,* 2021



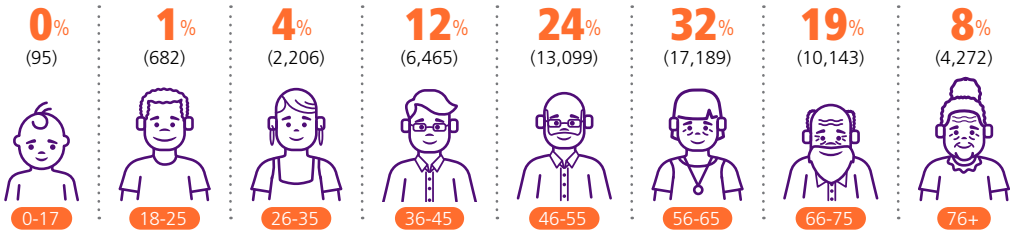
*All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data Source: Parkland Diabetes Registry

FIGURE 90: Parkland Patients, Diabetes Registry by Primary Language Spoken, 2021



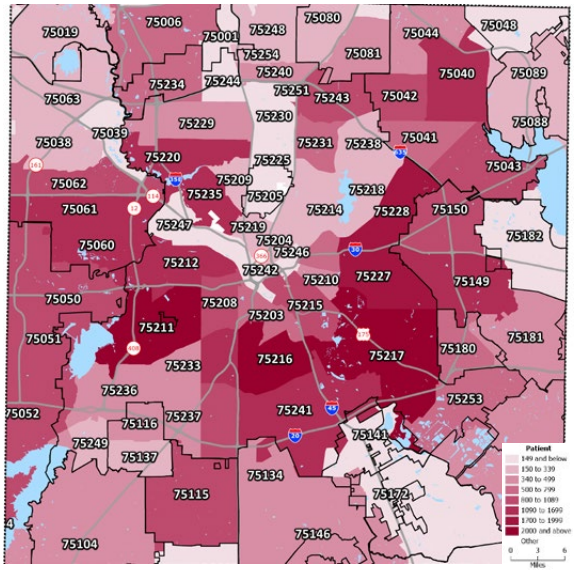
Data Source: Parkland EHR Diabetes Registry

FIGURE 91: Parkland Patients, Diabetes Registry by Age Group, 2021



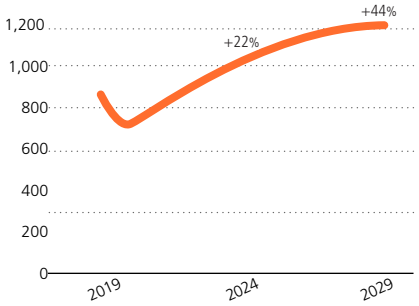
Data Source: Parkland EHR Diabetes Registry

FIGURE 92: Parkland Patients, Diabetes Registry by ZIP Code, 2021



Data Source: Parkland EHR Diabetes Registry

FIGURE 93: Diabetes 10-Year Outpatient Forecast, Dallas County, 2019–2029



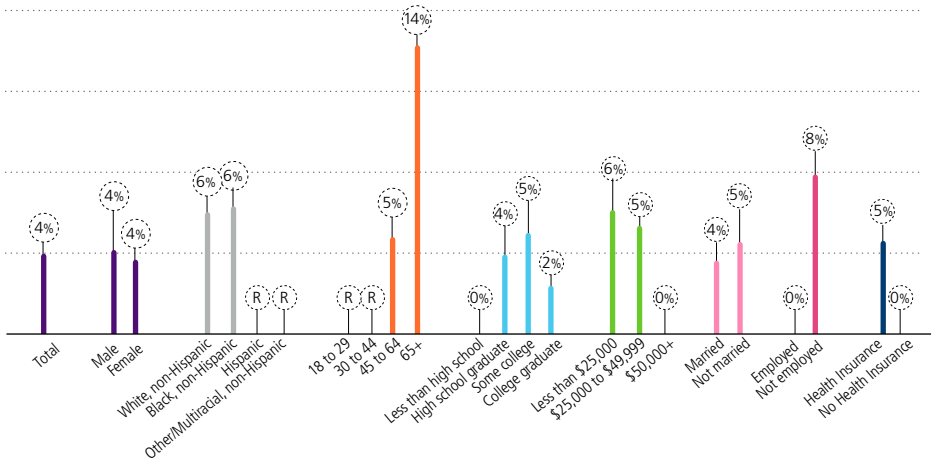
Prepared by SG02, LLC

Between 2019 and 2024, the projected volume of diabetes outpatient services in Dallas County will grow by 22%, and 44% by 2029–see Figure 93. The main driver is the Dallas County population pattern (population size, births, deaths, distribution, etc.).

Heart Disease

Heart disease is the leading cause of death in Dallas County and according to the BRFSS survey, 14% of the population 65 years and older have heart disease–see Figure 94.

FIGURE 94: Heart Disease Prevalence, Dallas County, 2016–2020

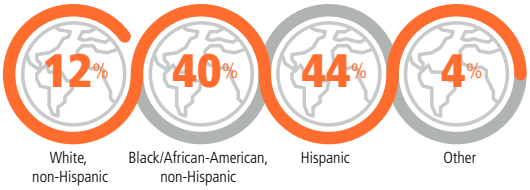


Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services.
Note: R = Relative Standard Error greater than 30.0%, estimate unreliable and not displayed

Parkland Hypertension: Demographics

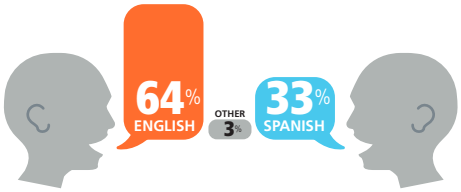
Hypertension is among the most common risk factors for heart disease.
In 2021, there were **113,623** patients listed on the Parkland Hypertension registry.

FIGURE 95: Parkland Patients, Hypertension Registry by Race and Ethnicity*, 2021



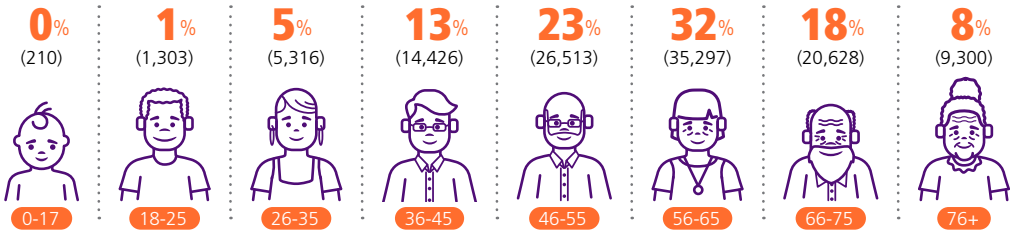
*All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data Source: Parkland EHR Hypertension Registry

FIGURE 96: Parkland Patients, Hypertension Registry by Primary Language Spoken



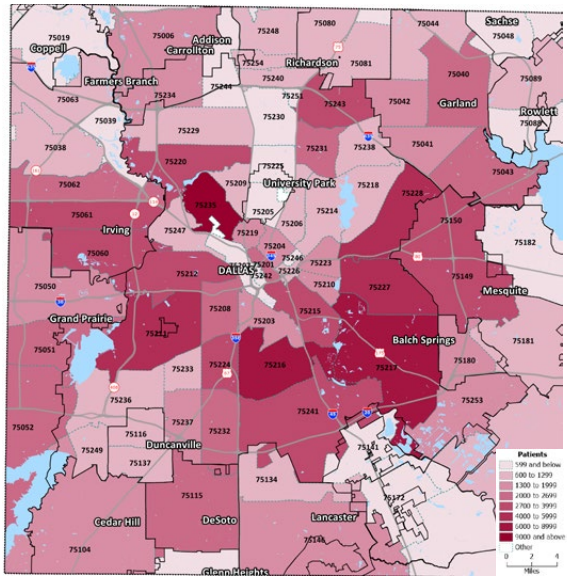
Data Source: Parkland EHR Hypertension Registry

FIGURE 97: Parkland Patients, Hypertension Registry by Age Groups, 2021



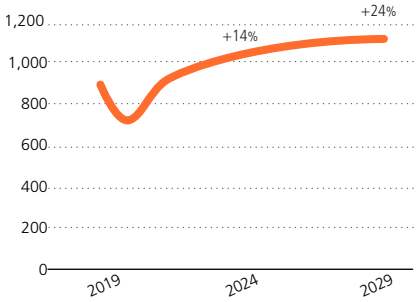
Data Source: Parkland EHR Hypertension Registry

FIGURE 98: Parkland Patients, Hypertension Registry by ZIP Code, 2021



Data Source: Parkland EHR Hypertension Registry

FIGURE 99: Hypertension Outpatient Services Forecast, Dallas County 2024–2029



Prepared by SG02, LLC

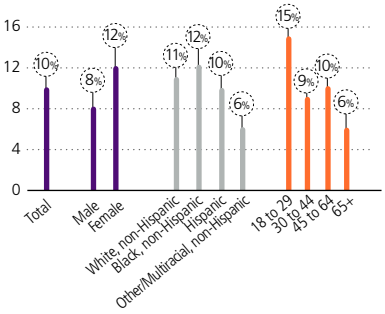
The volume of hypertension outpatient services in Dallas County is expected to grow by 14% by 2024 and by 24% by 2029–see Figure 99. Growth will be driven by the Dallas County population patterns (population size, births, deaths, distribution, etc.).

Mental Health

The CDC defines mental health as an individual's emotional, psychological, and social well-being, the essential determinant of overall health and quality life.[83,84]

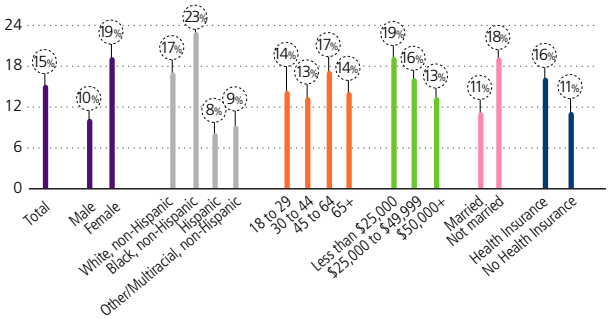
In Texas, 33% of children experience a behavioral health disorder annually[85] and in 2020 alone, there was a 24% increase in mental health-related ED visits for children ages 5 to 11.[86] BRFSS for Dallas County, indicates 10% of the population reported poor mental health for 14 days or more (Figure 100) and 15% have a diagnosis of depressive disorder with a higher prevalence among non-Hispanics (23%)–see Figure 101.

FIGURE 100: Percent of Residents Reporting Poor Mental Health for 14+ Days, Dallas County, 2016-2020



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services.

FIGURE 101: Prevalence of Residents Diagnosed with a Depressive Disorder, Dallas County, 2016-2020



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services

TABLE 7: Top Mental Health Diagnosis for Adults and Children, NTBHA, 2019 -2021

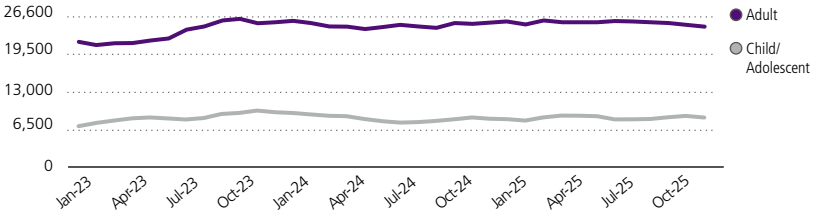
2019		2020		2021	
Diagnosis Code	Diagnosis Description	Diagnosis Code	Diagnosis Description	Diagnosis Code	Diagnosis Description
F902	Attention-deficit/ hyperactivity disorder	F331	Major depressive disorder, Recurrent episode	F331	Major depressive disorder, Recurrent episode
F331	Major depressive disorder, Recurrent episode	F902	Attention-deficit/ hyperactivity disorder	F902	Attention-deficit/ hyperactivity disorder
F250	Schizoaffective disorder, Bipolar type	F250	Schizoaffective disorder, Bipolar type	F250	Schizoaffective disorder, Bipolar type
F319	Bipolar I disorder, Episode unspecified	F319	Bipolar I disorder, Episode unspecified	F319	Bipolar I disorder, Episode unspecified
R69	Diagnosis Deferred	F332	Major depressive disorder, Recurrent episode	F332	Major depressive disorder, Recurrent episode

Data Source: NTBHA

The North Texas Behavioral Health Authority (NTBHA) is the state-designated local mental health authority for Dallas, Kaufman, Rockwall, Ellis, Hunt, and Navarro counties. In addition to crisis behavioral health services, NTBHA ensures that services are available to individuals with low or no income who also have a qualifying diagnosis. The following charts include individuals authorized for both Medicaid and non-Medicaid/indigent services. While the information will include all of NTBHA's counties, the majority of individuals resided in Dallas County.

Consistent with BRFSS findings, the most common mental health diagnosis among NTBHA patients is major depressive disorder, recurrent episode followed by attention deficit-hyperactivity disorder and schizoaffective disorder, bipolar type–see Table 7.

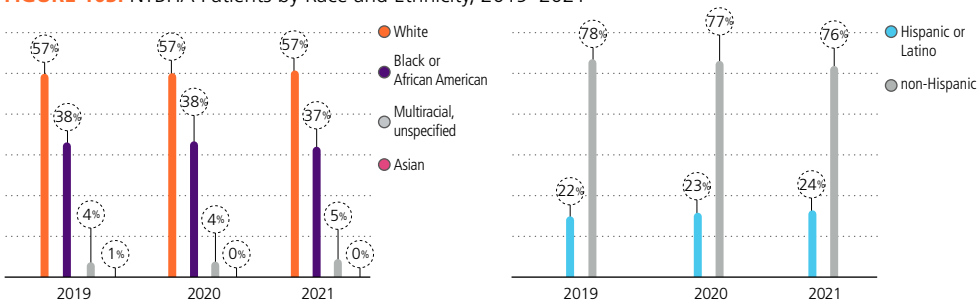
FIGURE 102: Number of Individuals in Mental Health Services, NTBHA, 2019–2021



Data Source: NTBHA

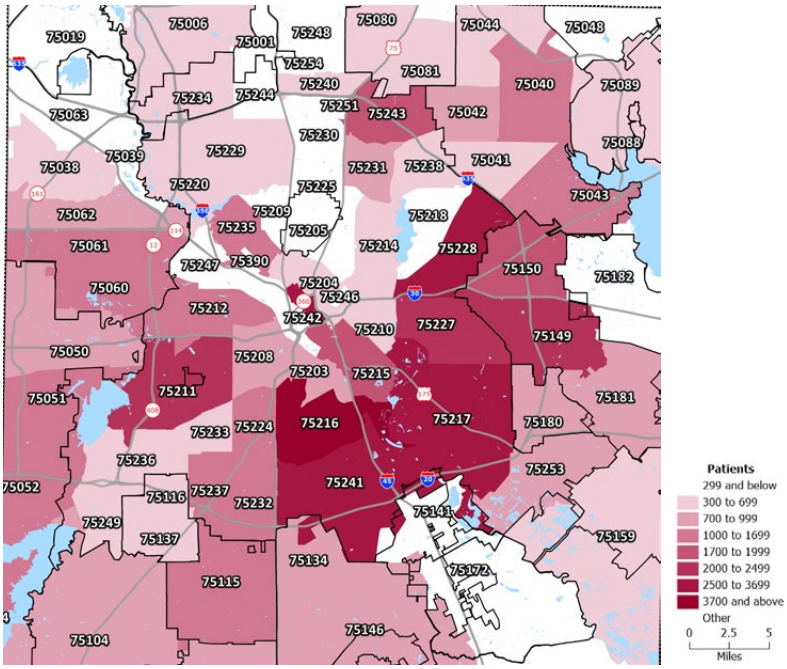
As illustrated in Figure 102, nearly 25,000 adults and 10,000 children/adolescents per month access behavioral health services through NTBHA.

FIGURE 103: NTBHA Patients by Race and Ethnicity, 2019–2021



Data Source: NTBHA

FIGURE 104: Mental Health Patients by ZIP Code, NTBHA, 2021

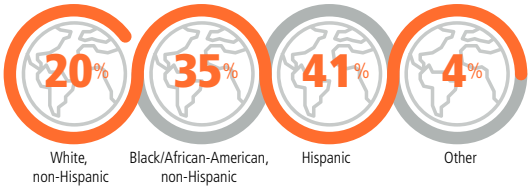


Data Source: NTBHA

Mental Health Demographics

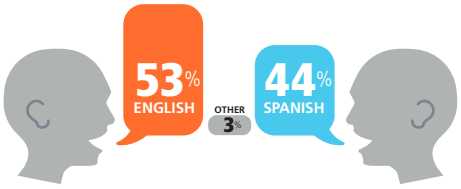
Parkland's Mental Health Registry in 2021 had a total of **115,377** patients listed.

FIGURE 105: Parkland Patients, Mental Health Registry by Race and Ethnicity*, 2021



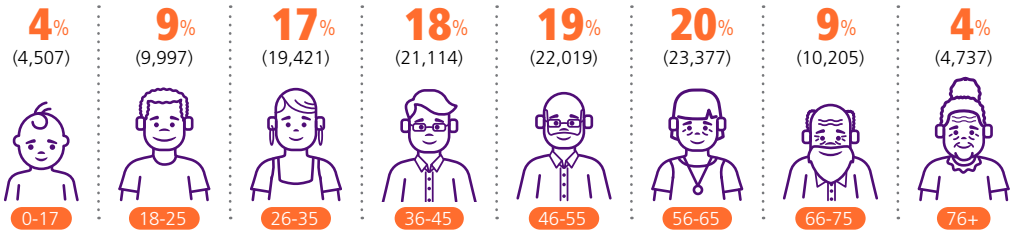
*All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data Source: Parkland EHR Mental Health Registry, 2021

FIGURE 106: Parkland Patients, Mental Health Registry by Primary Language Spoken, 2021



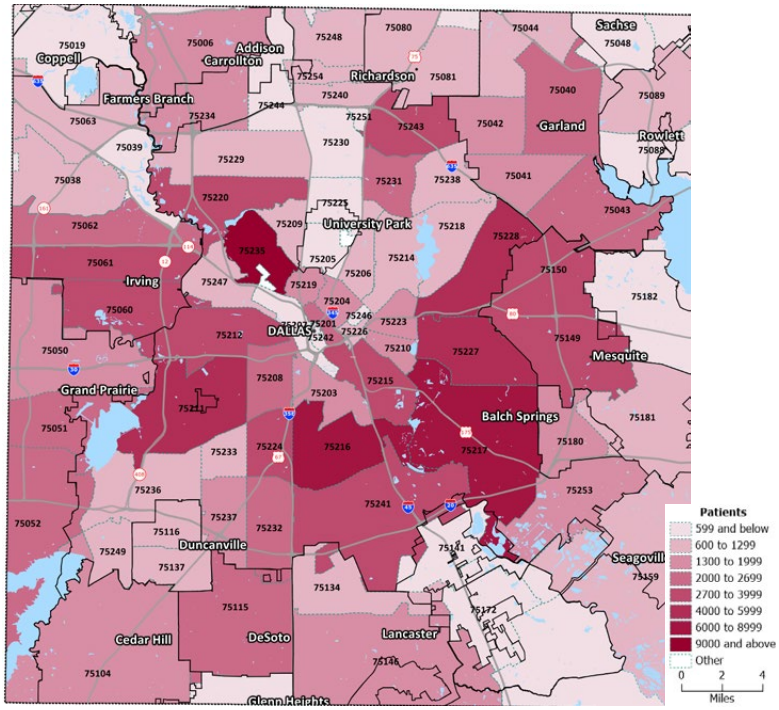
Data Source: Parkland EHR Mental Health Registry, 2021

FIGURE 107: Parkland Patients, Mental Health Registry by Age Groups, 2021



Data Source: Parkland EHR Mental Health Registry

FIGURE 108: Parkland Patients by ZIP Code, Mental Health Registry, 2021



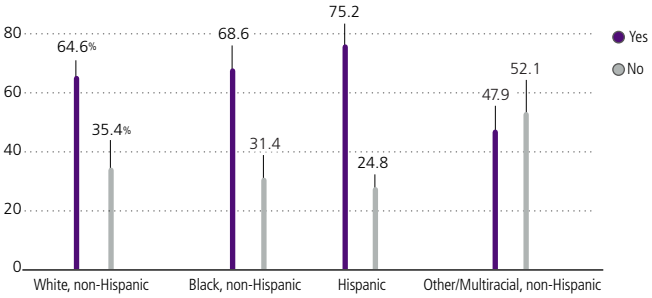
Data Source: Parkland EHR Mental Health Registry

Other Health Risk Factors

Obesity

Obesity is a complex, serious, and costly chronic disease. In the U.S. obesity rates are higher among individuals of low social economic status. Obesity is correlated to the continuous exposure to environmental risk factors.[87] Access to culturally acceptable healthy, affordable foods and beverages, safe and convenient places for physical activity are the drivers of healthy weight and fitness. The racial and ethnic disparities in obesity underscore the need to address social determinants of health such as poverty, education, food deserts, neighborhood safety (including walkability), and housing to remove barriers to health.[88]

FIGURE 109: Prevalence of Obesity, Dallas County, 2016–2020

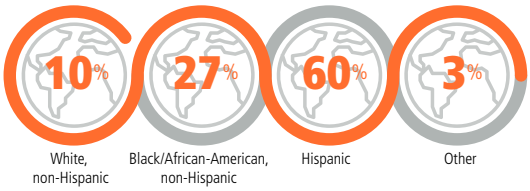


Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services.

According the BRFSS results, Hispanics suffer from the highest obesity rate (75%) in Dallas County and Black/African American, non-Hispanics (69%) ranked second from 2016 to 2022–see Figure 109.

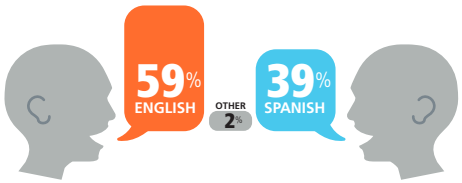
Parkland Obesity: Demographics

FIGURE 110: Parkland Patients, Obesity Registry by Race and Ethnicity*, 2021



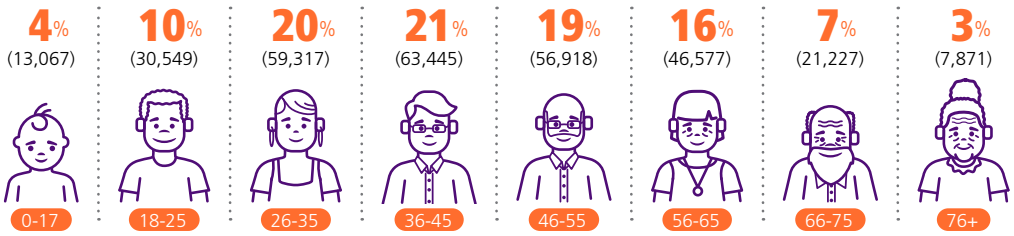
**All cases reporting Hispanic ethnicity are classified into the Hispanic category Data Source: Parkland EHR Obesity Registry*

FIGURE 111: Parkland Patients, Obesity Registry by Primary Language Spoken, 2021



Data Source: Parkland EHR Obesity Registry

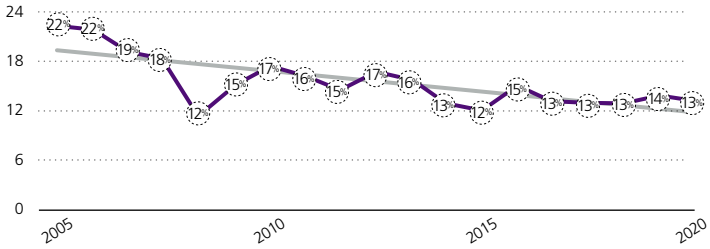
FIGURE 112: Parkland Patients, Obesity Registry by Age Distribution, 2021



Data Source: Parkland EHR Obesity Registry

Smoking

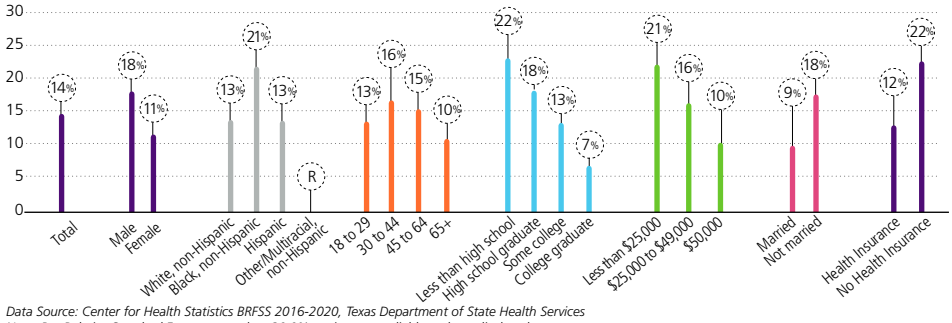
FIGURE 113: Percentage of Adults Smokers, Dallas-Plano-Irving, TX Metroplex, 2000–2022



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services

Smoking prevalence in adults in the Dallas-Plano-Irving, TX Metroplex area declined from 22% to 12% between 2000 to 2006. Since then, the rate has fluctuated between 17% and 13%, remaining close to 13% since 2016–see Figure 113. Black/African American, non-Hispanics have the highest smoking rate (21%) when compared to other racial and ethnic groups. Individuals with less than a high school education have a higher smoking rate (22%) versus individuals with higher education attainment. Likewise, individuals without health insurance also have a higher smoking rate (22%) when compared with those who have health insurance–see Figure 114.

FIGURE 114: Prevalence of Current Smokers, Dallas County, 2016–2020

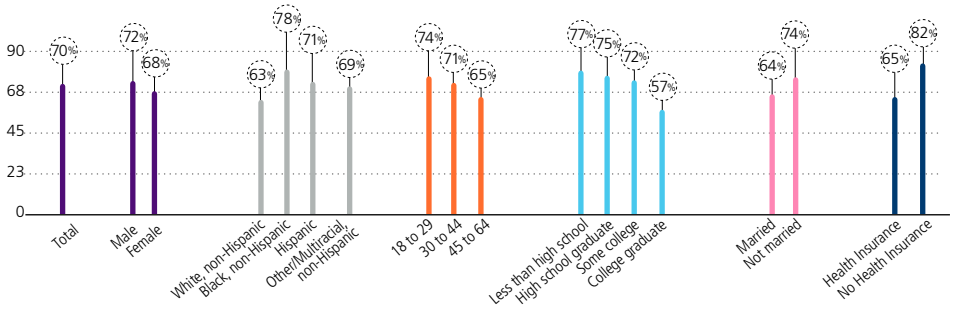


Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services
Note: R = Relative Standard Error greater than 30.0%, estimate unreliable and not displayed.

Flu (Influenza) Vaccine

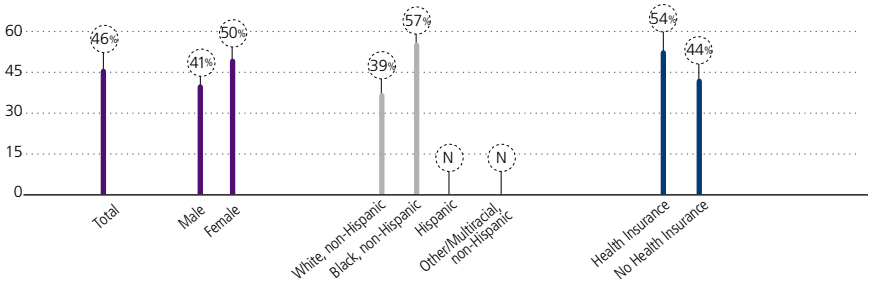
Seasonal influenza can be serious and deadly in older, immunocompromised individuals and in those with underlying chronic conditions. The best line of defense against infection and complications is the flu vaccine.[89] Figure 115 and Figure 116 illustrate the unvaccinated rate among Dallas County residents from 2016–2020. The main opportunity is in the older age and more vulnerable group, but with barriers to receiving the seasonal vaccine.

FIGURE 115: Percent of Residents Who Did Not Receive a Flu Shot in the Past Year, Adults 18-64 Years, Dallas County, 2016-2020



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services
Note: R = Relative Standard Error greater than 30.0%, estimate unreliable and not displayed

FIGURE 116: Percentage of Adults 65+ years who did not receive a flu shot in the past year, Dallas County, 2016–2020

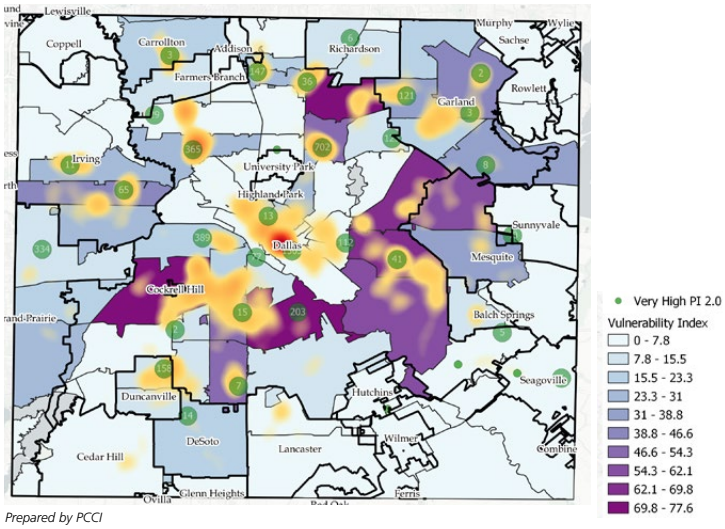


Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services
Note: R = Relative Standard Error greater than 30.%, estimate unreliable and not displayed

Infectious Diseases

Texas Health & Safety Codes require cases of illness deemed public health emergencies, outbreaks, Sexually Transmitted Infections (STIs), human immunodeficiency virus (HIV) /Acquired Immune Deficiency Syndrome (AIDS) and other diseases be reported to the Texas Department of State Health Services (DSHS).[90] During a public health emergency such as the COVID-19 pandemic and more recently the monkeypox outbreak, surveillance was necessary for public health officials to quantify the gravity, evolution, risk and mitigating factors of the crisis to assess, decision make and implement public health infection control interventions.[91] In February 2020, when the pandemic mortality risk emerged it was critical to identify, educate and care for individuals most at risk of exposure to the coronavirus. Thus, Parkland and DCHHS in collaboration with PCCI developed a COVID-19 Vulnerability and Proximity Index to identify communities with greater risk–see Figure 117. This was achieved by combining the clinical healthcare delivery model with core public functions of collecting and analyzing data, contract tracing, outbreak investigation, immunization, isolation, quarantine, and social services support.

FIGURE 117: Dallas County COVID-19 Vulnerability and Proximity Index

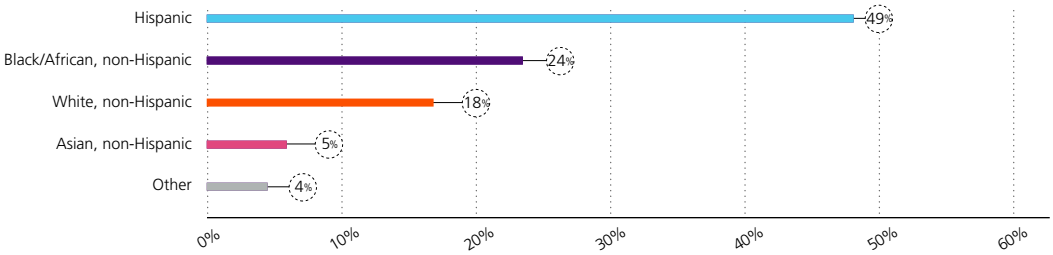


Prepared by PCCI

As described earlier in this report, the outputs of these indexes were used by health and local officials to select the best sites to place two federally sponsored large-scale "mega" drive-thru testing sites in Dallas County that were easily accessible to high-risk populations. The sites served more than 200,000 individuals. When COVID-19 vaccines became available, given the particular risk of death and hospitalization for certain population, significant energy, resources, and innovations were developed to engage highly vulnerable individuals and communities. Parkland and DCHHS worked collaboratively with PCCI to implement the prioritization of patients based on their vulnerability. The vulnerability index encompasses both health conditions and social risk. PCCI also helped inform city and county leaders regarding locations for future vaccine sites using a combination of their vulnerability risk scores, geo-mapping (maps showing the geographic distribution of a disease) and hot spotting (areas with higher number of cases), ADI, and data from the vaccine registration database to help identify the most at-risk and vulnerable populations with lowest vaccination rates.

By July of 2022, over 77% of COVID-19 vaccinations administered by Parkland were to minority individuals and at rates that matched or surpassed the Dallas County minority population rate–see Figure 118.

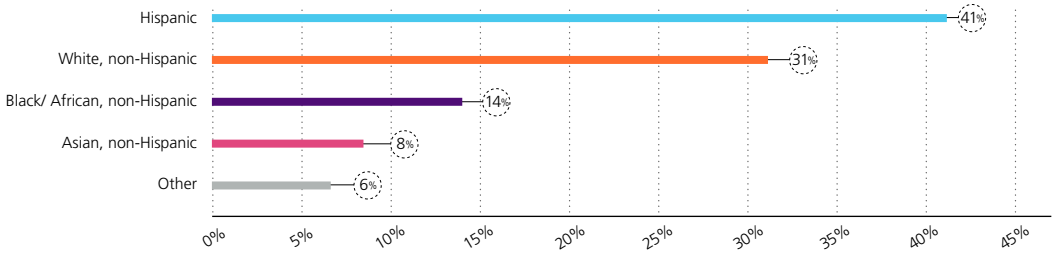
FIGURE 118: Parkland COVID-19 Vaccines Administered by Race and Ethnicity*, Dallas County



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Parkland EHR

DCHSS administered a total of 549,249 vaccines of which 63% were to minority individuals–see Figure 119.

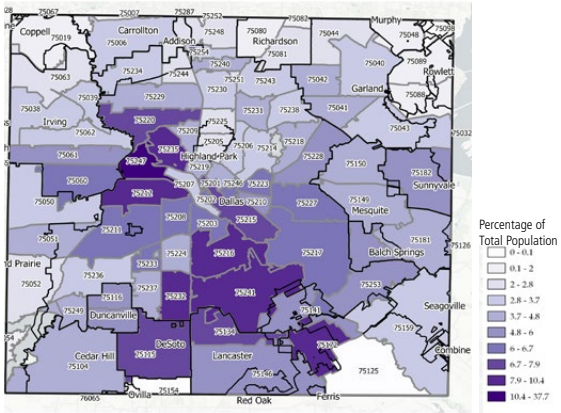
FIGURE 119: DCHHS COVID-19 Vaccines Administered by Race and Ethnicity, Dallas County



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: PCCI

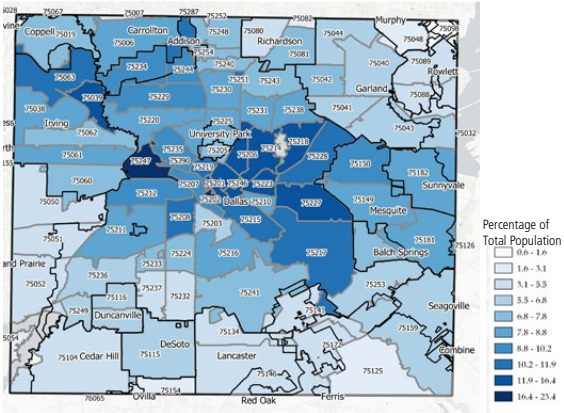
Figures 120 and 121 delineate the geographic distribution of COVID-19 vaccines administered by Parkland and DCHHS between January 2021 and June 2022. In Parkland's map the darker areas illustrate efforts in the southern sector with high COVID-19 Vulnerability Index, ADI and CDVI scores as well as concentration of African Americans. DCHHS' vaccination effort also focused on areas with a similar demographic makeup as well as COVID-19 Vulnerability Index, ADI and CDVI scores.

FIGURE 120: Cumulative COVID-19 Vaccinations administered by Parkland, Dallas County, January 2021–June 2022



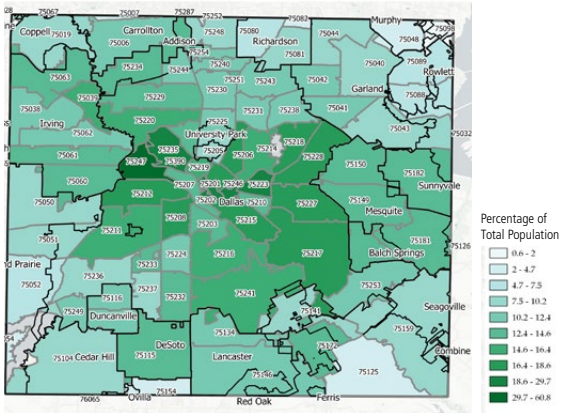
Data source: IMMTrac Vaccination Data

FIGURE 121: Cumulative COVID-19 Vaccinations administered by DCHHS, Dallas County, January 2021–June 2022



Data source: IMMTrac Vaccination Data

FIGURE 122: Cumulative COVID-19 Vaccinations administered by Parkland DCHSS, Dallas County, January 2021–June 2022

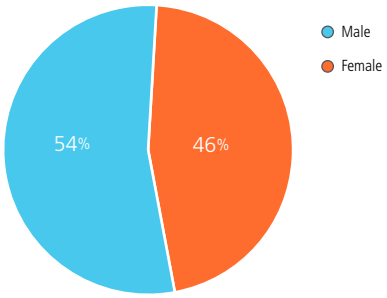


Data source: IMMTrac Vaccination Data

COVID-19

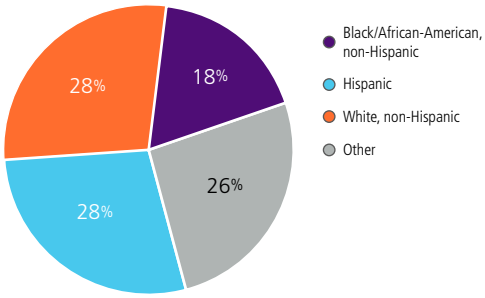
As of July 11, 2022, there have been **637,000** COVID-19 cases in Dallas County.

FIGURE 123: COVID-19 Cases by Sex, Dallas County as of July 11, 2022



Data Source: DCHHS

FIGURE 124: COVID-19 Cases by Race and Ethnicity*, Dallas County as of July 11, 2022



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: DCHHS

FIGURE 125: COVID-19 Cases by Age Group, Dallas County as of July 11, 2022

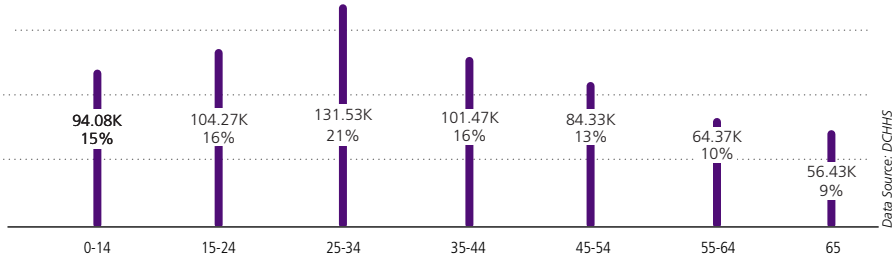
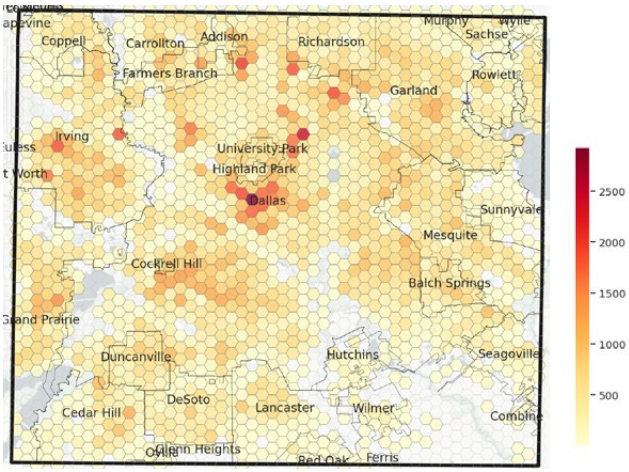


FIGURE 126: COVID-19 Cumulative Cases in Dallas County, March 2020–July 2022



Data Source: DCHHS Salesforce Positive COVID-19 Data
Prepared by PCCI

◀ The Hex map in Figure 126 highlights the cumulative distribution of COVID-19 positive cases within Dallas in Dallas County. The darker markers represent the areas with the higher case counts.

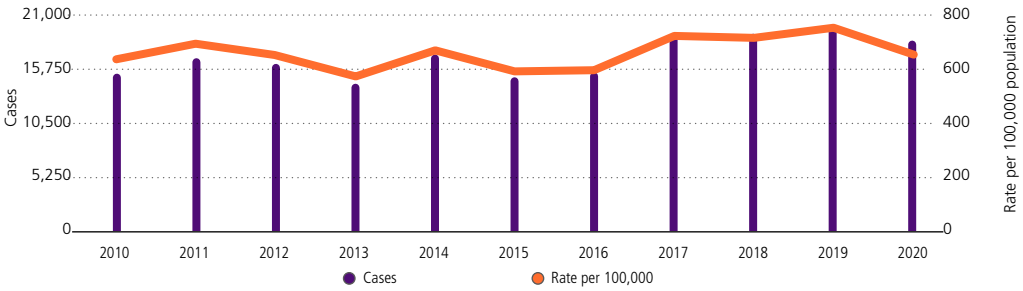
Sexually Transmitted Infections (STI)

Although largely preventable, STIs are among the most common infections found in the U.S. Prevention of STIs is an essential strategy for safeguarding and improving sexual and reproductive health.[92]

Chlamydia

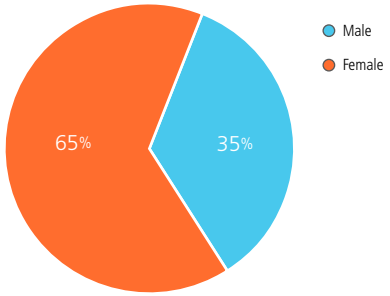
Between 2010 and 2020, the number of new chlamydia cases in Dallas County fluctuated, with the highest peak in 2019 but essentially remained steady–see Figure 127.

FIGURE 127: New Chlamydia Cases in Dallas County, 2010–2020



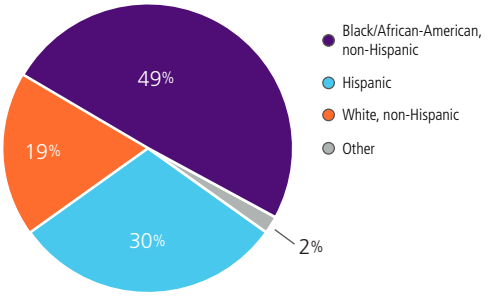
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 128: New Chlamydia Cases by Sex, Dallas County in 2020



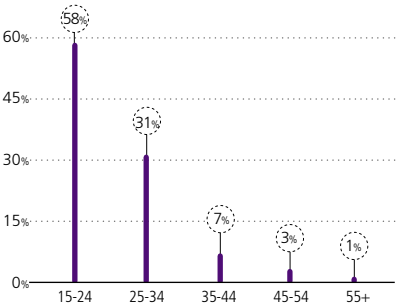
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 129: New Chlamydia Cases by Race-Ethnicity* in Dallas County in 2020



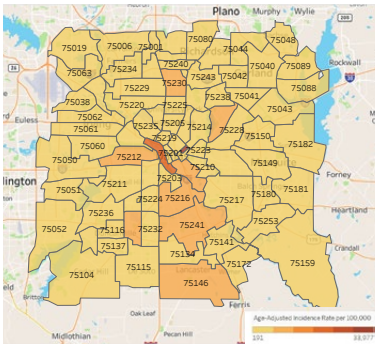
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 130: New Chlamydia Cases by Age Categories in Dallas County in 2020



Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 131: Chlamydia Incidence Rate by ZIP Code, Dallas County, 2016–2020

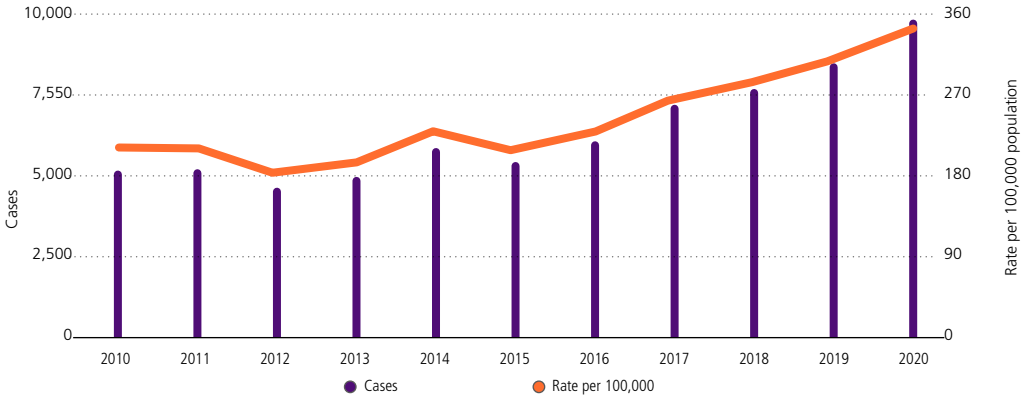


Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services

Gonorrhea

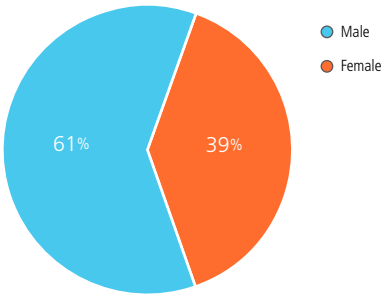
Gonorrhea infections have been increasing in Dallas County since 2015–see Figure 132.

FIGURE 132: New Gonorrhea Cases in Dallas County, 2010-2020



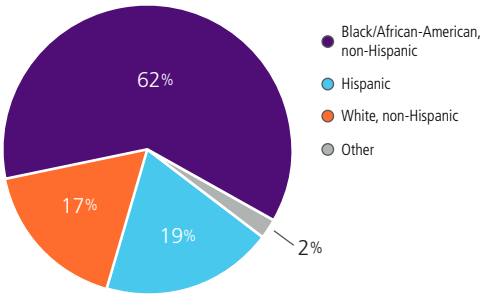
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services

FIGURE 133: New Gonorrhea Cases by Sex, Dallas County, 2020



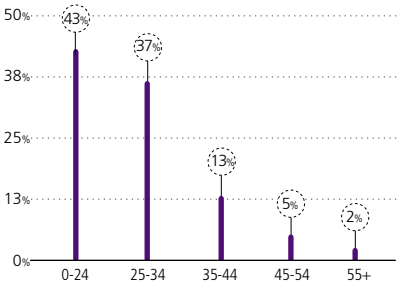
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services

FIGURE 134: New Gonorrhea Gender by Race and Ethnicity*, Dallas County in 2020



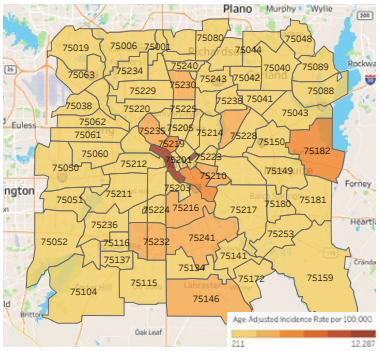
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services

FIGURE 135: Gonorrhea Cases by Age Categories in Dallas County in 2020



Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services

FIGURE 136: Gonorrhea Incidence Rate by ZIP Code, Dallas County, 2016–2020

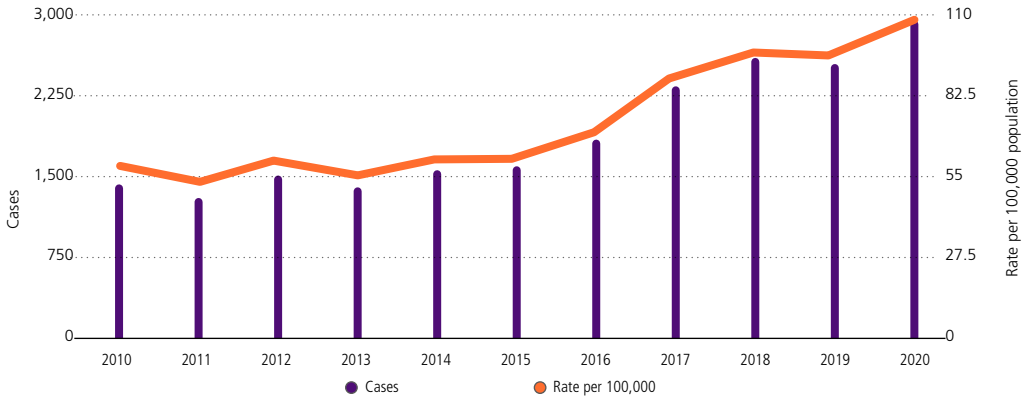


Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services

Syphilis

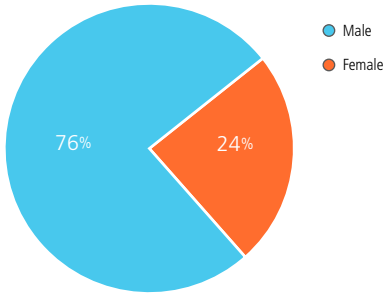
Syphilis cases have increased consistently since 2013–see Figure 137.

FIGURE 137: New Syphilis Cases and Rates in Dallas County, 2010-2020



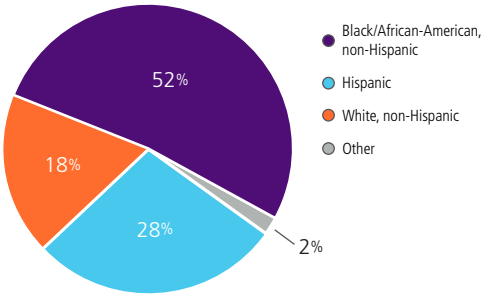
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 138: New Syphilis Cases by Sex in Dallas County in 2020



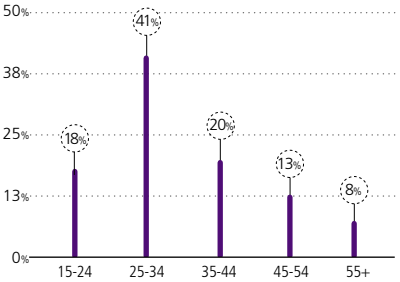
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 139: New Syphilis Cases by Race and Ethnicity in Dallas County in 2020



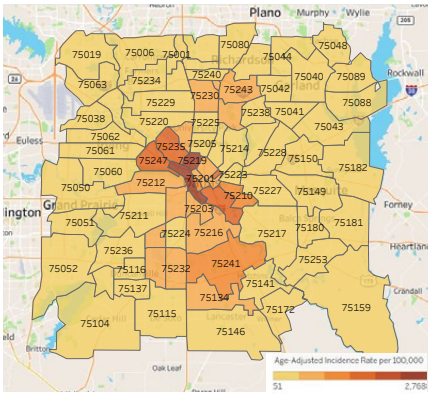
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 140: New Syphilis Cases by Age Distribution in Dallas County in 2020



Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

FIGURE 141: Syphilis Incidence Rate by ZIP Code, Dallas County, 2020



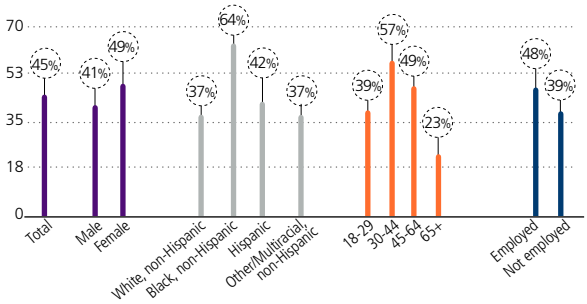
Data Source: Texas 2020 STD/HCV Surveillance Data, Texas Department of State Health Services.

Selected Reportable Diseases

HIV

Human Immunodeficiency Virus (HIV) once acquired is a long-term infection, that if left untreated, weakens the immune system, and leads to acquired immunodeficiency syndrome (AIDS). While not all individuals with HIV will develop AIDS, there is no effective cure for it. However, effective viral suppression with medication can maintain an individual's health indefinitely and prevent spread to sexual contacts. Dallas and cities across the U.S. have unacceptable new HIV case rates despite significant advances in early detection and effective antiretroviral therapy (ART).[93,94]

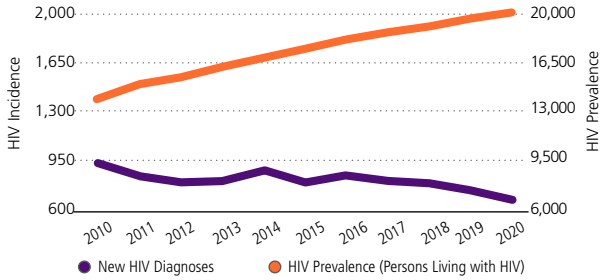
FIGURE 142: Percentage of Adults (18+) Who Have Ever Been Tested for HIV, Dallas County, 2016-2020



Data Source: Center for Health Statistics BRFSS 2016-2020, Texas Department of State Health Services

Testing is the only way to determine a person's HIV status. The CDC recommends that individuals between 13 and 64 years of age get tested at least once as part of routine healthcare and annually if risk factors are present.[95] In Dallas County, 45% of the population 18 years and older have been tested for HIV at least once–see Figure 142.

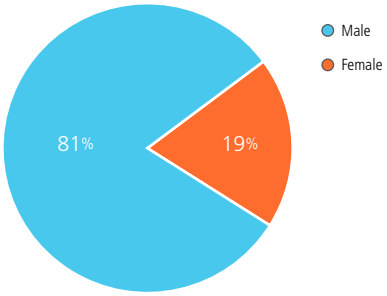
FIGURE 143: New HIV Diagnoses and Cumulative number of persons living with HIV in Dallas County, 2010-2020



Data Source: Texas 2020 STD Surveillance Report, Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Austin Texas
http://healthdata.dshs.texas.gov/dashboard/diseases/people-living-with-hiv

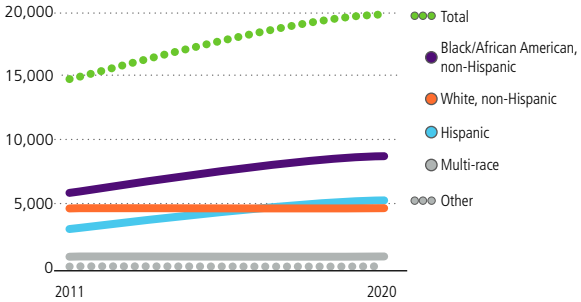
Between 2010 and 2020, the number of new HIV diagnoses in Dallas County decreased however, the number of people living with HIV has increased–see Figure 143. The latter is attributed to the advances in HIV treatment resulting in HIV-infected individuals living longer with the disease through prevention of the onset of AIDS.[96]

FIGURE 144: New HIV Diagnosis by Sex in Dallas County in 2020



Data Source: Texas 2020 STD Surveillance Report, Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Austin, Texas

FIGURE 145: Number of Persons Living with HIV by Race and Ethnicity in Dallas County, 2010-2020

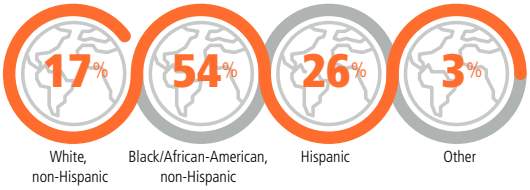


Data Source: Texas 2020 STD Surveillance Report, Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Austin, Texas

In 2020, there were 672 new HIV cases in Dallas County, with men accounting for 81% of new cases as shown in Figure 144.

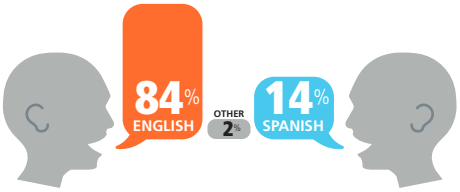
Parkland HIV: Demographic Description

FIGURE 146: Parkland Patients, HIV Registry by Race and Ethnicity, Dallas County, 2021



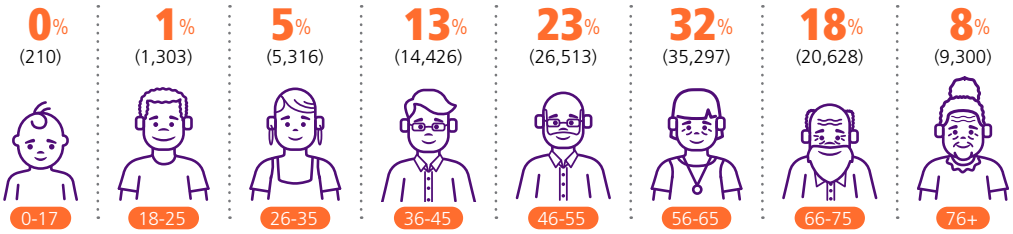
Data Source: Parkland EHR HIV Registry

FIGURE 147: Parkland Patients, HIV Registry by Primary Language Spoken, 2021



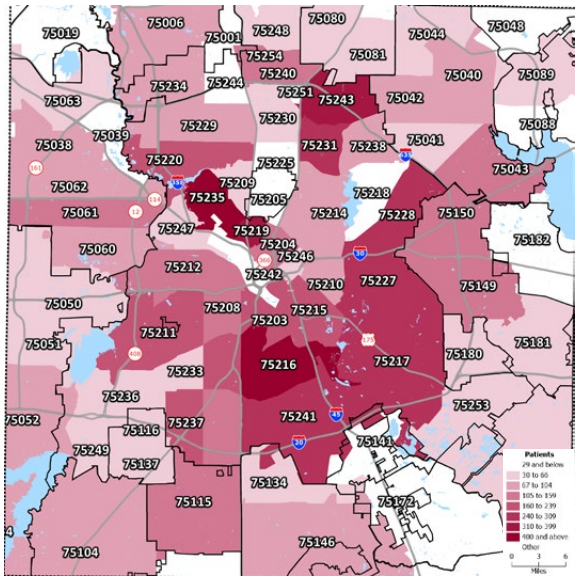
Data Source: Parkland EHR HIV Registry

FIGURE 148: Parkland Patients, HIV Registry by Age Distribution, 2021



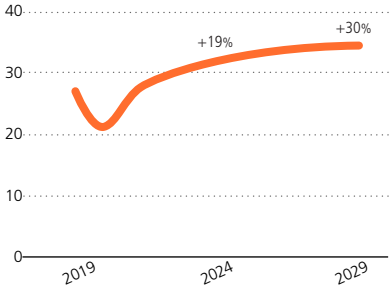
Data Source: Parkland EHR HIV Registry

FIGURE 149: Parkland Patients by ZIP Code, HIV Registry, 2021



Data Source: Parkland EHR HIV Registry

FIGURE 150: HIV Outpatient Services Forecast, Dallas County, 2024–2029



Prepared by SG-2, LLC

▲

Between 2019 and 2024, HIV outpatient services is projected to grow 19% by 2024, and 30% by 2029–see Figure 150. The main driver of these projections is the Dallas County population pattern (population size, births, deaths, distribution, etc.).

Maternal and Child Health

Maternal and child health programs address the well-being of women, children, and families. Programs focus on maternal health, infant and maternal mortality prevention, newborn screening, child nutrition, and services for children with special healthcare needs, among others.[97] This report addresses maternal health and infant mortality.

Maternal Health

Each year at least 700 women die from pregnancy-related complications.[98-99,100] This burden is not shared equally as considerable racial and ethnic disparities exist.[101,102] The U.S. pregnancy-related mortality rate for Black/African American, non-Hispanic women is more than three times their white, non-Hispanic counterparts–see Figure 151.[103] The scope of this burden was highlighted in 2022 in the "White House Blueprint for Addressing the Maternal Health Crisis" and mirror findings from the U.S. Department of Health and Human Services.[104,105]

Similar disparities exist when comparing severe maternal morbidities.[95] This tragic national trend is also consistent among women in Texas.[106] Multiple reports now identify that some of these deaths are potentially preventable, and more than 70% of pregnancy-related deaths occur after delivery.[106] Furthermore, an increasing number of pregnant women have chronic health conditions such as diabetes mellitus, mental health disorders, and chronic hypertension, which place a woman at higher risk of complications during pregnancy and postpartum.[107,108]

FIGURE 151: Maternal mortality rates, by race and Hispanic origin: United States, 2018–2020.

2019 Community Health Needs Assessment and response

In Dallas County, the 2019 CHNA identified substantial health disparities in southern Dallas County.[109] These areas have the highest social needs using six indicators: poverty, income, unemployment, occupation, education, and language, as well as high CDVI scores. Access to care in the area is also challenged by limited physical clinic availability in the region. Significantly higher proportions of Black/African American, non-Hispanic women in this region carry diagnoses of diabetes mellitus and chronic hypertension during pregnancy, compared to those who live outside the target region–see Figure 152.[110] When examining Black/African American, non-Hispanic women living outside this region between January 2011 and December 2020, there were significantly higher rates of chronic hypertension. With such co-morbidities, these Black/African American, non-Hispanic women suffer significantly worse perinatal outcomes.[111]

Parkland's community-based program, Extending Maternal Care After Pregnancy (eMCAP), was developed to address these disparities and enhance access, attendance, and quality of care after delivery for women living in the CHNA region who are disproportionately affected by medical comorbidities–see Figure 152.[112] This program has established a postpartum care model to replace the typically fragmented traditional care women receive after birth. The eMCAP program is a multi-disciplinary effort of nurses, nurse home visitors, physicians, advanced practice providers (APRNs), CHWs, social services, behavioral health teams, and pharmacists working within a specially designed electronic health registry linked to existing electronic medical records and obstetric quality database.

FIGURE 152: 2019 CHNA all-cause mortality with target region of high social needs and limited access to clinics

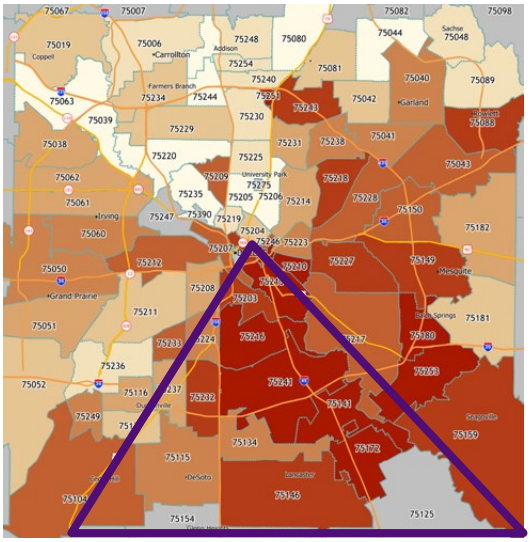
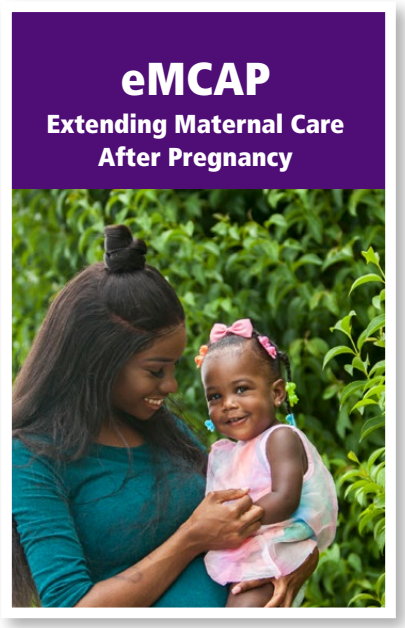


FIGURE 153: eMCAP program responding to 2019 CHNA



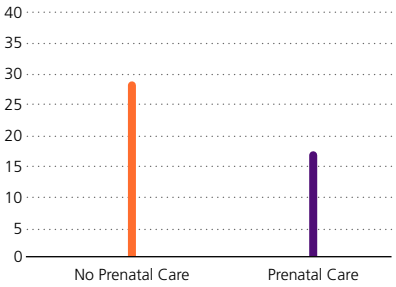
Existing barriers to care

As part of the continued effort to understand barriers to maternity services before and after birth, current efforts are targeting access to care gaps and social service needs. A potential barrier to maternity or postpartum care is physical access to a clinic site to provide timely diagnosis and treatment. In Dallas County, women who deliver without having received prenatal care reside in areas that rely more heavily on public transportation and require longer public transit times with more bus stops–see Figure 154.[113]

Furthermore, 15% of women in the eMCAP program report transportation as a barrier to care. Although virtual care eliminates the need for transportation, access to reliable Wi-Fi for virtual visits is limited in the city of Dallas. Up to 15% of eMCAP participants report limited access to Wi-Fi. In response, the city of Dallas is committing a multi-million dollar program to close the digital divide by increasing Wi-Fi throughout Dallas.[114]

During the COVID-19 pandemic, pregnant women reported positive attitude toward telehealth visits.[115] Additionally, implementation of audio-only virtual visits for this predominantly Hispanic and Black/African American, non-Hispanic population was associated with improved visit attendance and without adverse perinatal outcomes.[116] Expansion of access to digital services and virtual visits is a current effort to improve access to healthcare. Healthcare does not exist in a vacuum with social needs influencing care needs. Social needs, such as inability to pay bills and lack of transportation, significantly correlate with higher depression and anxiety screening scores.[117,118]

FIGURE 154: Mean Number of Bus Stops



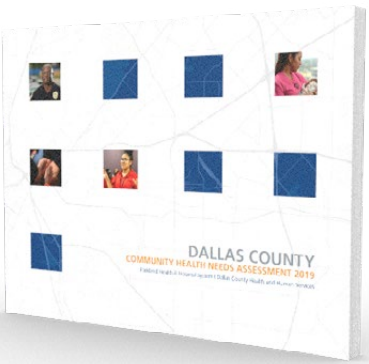
Adopted from Holcomb. Consequences to absence of prenatal care. Am J Obstet Gynecol MFM 2021

Patients without prenatal care have significantly greater demand for public transportation.

FIGURE 155: Key Findings from the 2019 Dallas County CHNA

The 2019 Dallas County Community Health Needs Assessment (CHNA) identified geographic areas and populations that experience health disparities. A central theme of access to care-or lack thereof-plays a significant role in the health of the individual and community. A summary of key findings of need from the 2019 Community Health Needs Assessment were:

1. **Access to Care.** There is a high-uninsured rate in Dallas County, and there is a high volume of uninsured patients cared for at Parkland.
2. **Behavioral health resources.** Dallas County does not have enough behavioral health capacity to support the high demand for these services, and there is a lack of integration between behavioral health and physical health.
3. **Health Literacy.** There is a general lack of understanding of how to obtain and use health coverage as well as navigate the health system, especially among racial and ethnic minorities living in the southeast area of Dallas County.
4. **Cultural Competency.** Dallas County is a diverse community and greater resources to educate towards cultural competency are needed.
5. **Health Disparity.** There are significant health disparities by race and ethnicity as well as by geographic location within the county. African American and people living in ZIP codes located in Southeast Dallas continue to experience the highest burden of disease and mortality.
6. **Chronic conditions.** Chronic conditions, such as hypertension and diabetes, are among the leading causes of death and contributors to high volume of inpatient hospitalizations.
7. **Infectious Diseases.** There is a significant number of sexually transmitted diseases in Dallas County.



Data Source: Dallas County Community Health Needs Assessment 2019

FIGURE 156: Texas Maternal Mortality Review Committee Recommendations

Summary of Recommendations from Texas Maternal Mortality Review Committee, 2020
Increase access to comprehensive health services during pregnancy, the year after pregnancy, and throughout the preconception and interpregnancy periods to facilitate continuity of care, enable effective care transitions, promote safe birth spacing, and improve the lifelong health of women.
Engage Black communities and apply health equity principles in the development of maternal and women's health programs.
Improve access to integrated behavioral health care from preconception through one-year postpartum for women with mental and substance use disorders.
Improve statewide infrastructure and programs to address violence and intimate partner violence at the state and community levels.
Implement statewide maternal health and safety initiatives to reduce preventable maternal mortality and morbidity.
Foster supportive community environments and leverage programs and services that help women of childbearing age achieve their full health potential.
Support coordination between emergency and maternal health services, and implement evidence-based, standardized protocols to identify and manage obstetric and postpartum emergencies.
Improve postpartum care management and discharge education for patients and families.
Continue and strengthen activities to increase public awareness and prevention.
Support strategies to continuously improve maternal mortality investigation and case review processes.

Texas Maternal Mortality and Morbidity Review Committee and Department of State Health Services Joint Biennial Report. 2020.

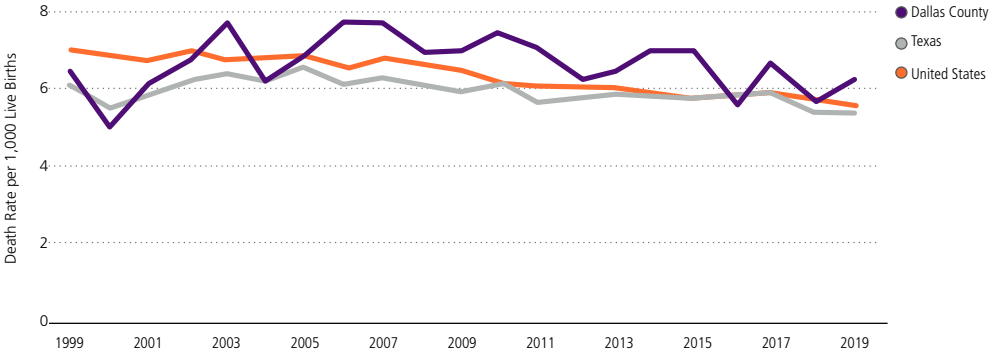
Infant Mortality

Infant mortality is the death of an infant before the first birthday.[119] According to the CDC, in 2020 the leading causes of infant mortality in the U.S. were:

1. Birth defects
2. Pre-term birth and low birth weight
3. Sudden Infant Death Syndrome (SIDS)
4. Injuries
5. Maternal pregnancy complications[120]
6. Infant mortality rate is the number of infant deaths per 1,000 live births. It is an all-encompassing health indicator that reflects not only healthcare delivery and medical outcomes but the underlying necessary infrastructure which requires economic stability, safety regulation and complex social organization and benefit structure.[119] It is such a robust indicator of overall community well-being that it is a consistent inclusion on the list of indicators used to stratify the development of countries.

Figure 157 illustrates the infant mortality rates in the U.S., Texas and Dallas County and shows that overall, Texas' infant mortality pattern has remained at or below the national rate since 1999.

FIGURE 157: Infant Mortality Pattern in the U.S, Texas, and Dallas County, 1999–2019



Data Source: CDC Wonder

Although Dallas County infant mortality rate has remained above the state rates since 2001 it has declined approximately 13% between 2009 and 2019[119] see Figure 158.

FIGURE 158: Infant Mortality Rate, Dallas County and Texas, 2000 -2019

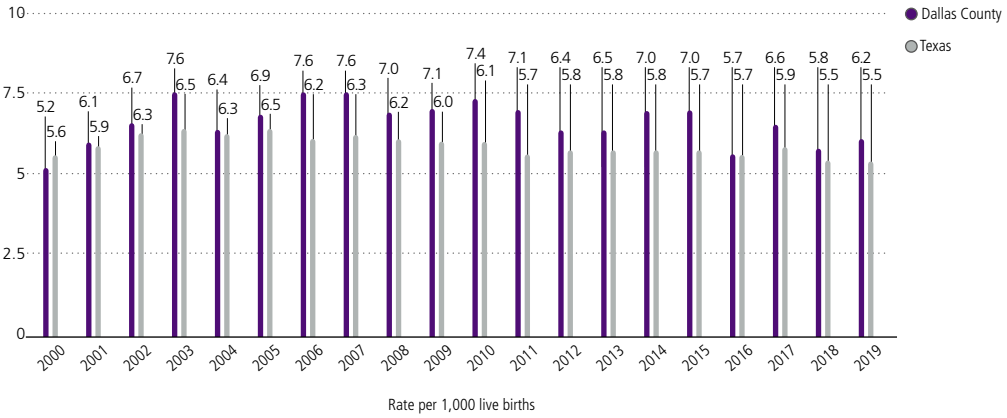
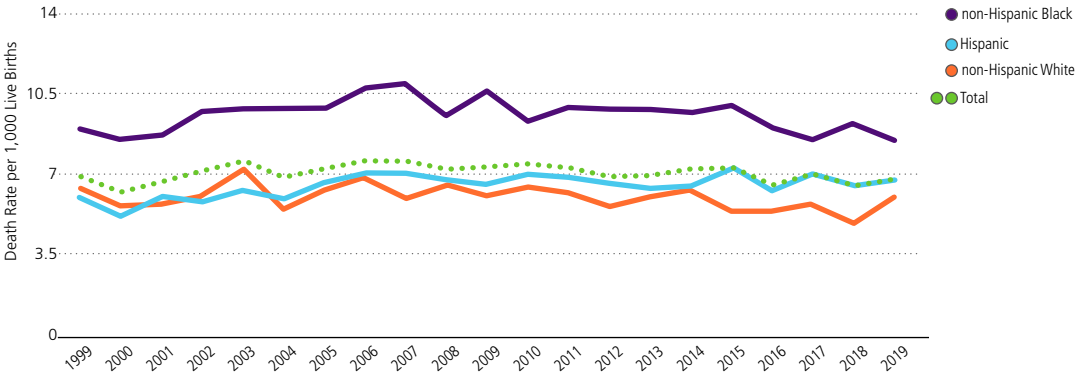


Figure 159 represents the infant mortality patterns by race and ethnicity in Dallas County and Texas and highlights the steep gap between the Black/African American, non-Hispanic infants when compared to other racial and ethnic groups. According to the Office of Minority Health, in the U.S. the infant mortality rate for Black/African American, non-Hispanics is 2.3 times the rate for white, non-Hispanic. In addition, Black/African American, non-Hispanic infants are four times more likely to die of complications associated with low birthweight than white, non-Hispanics. Black/African American, non-Hispanic women are more likely to receive either late or no prenatal care compared to white, non-Hispanic women.

FIGURE 159: Infant Mortality Rate by Race and Ethnicity* in Dallas County, 1999–2019



** The Hispanic category displayed here was originally labeled as 'Mexican' from the data source (CDC Wonder). For Dallas County, the infant mortality for "Other" categories that may have Hispanic origin (Puerta Rican, Cuban, Other and Unknown Hispanic) were suppressed on the CDC Wonder page. 'Suppressed' appears instead of death, birth, and rate values when the death value represents 0-9 sub-national events.*
Data Source: CDC Wonder

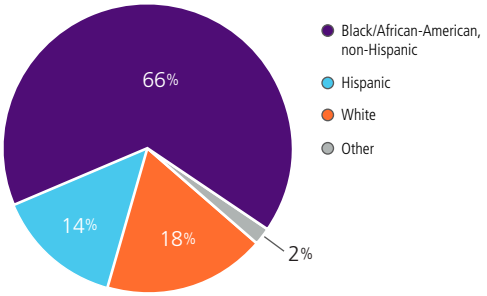
Infants Deaths by Injury

Another useful tool available to understand and prevent infants' deaths is the Child Death Review Report issued by the Dallas County Child Death Review Team (CDRT). The CDRT is charged with assessing the circumstance of child injury deaths and use that information to:

- Understand the causes and incidences of child death in Texas
- Identify procedures to reduce the number of preventable child deaths
- Promote public awareness, and
- Make recommendations for changes in law, policy, and practice. These changes are intended to reduce the number of preventable deaths.[121]

According to the CDRT, 45% of the 125 child deaths by injury that occurred in Dallas County in 2020 were infants (≤1 Year old).

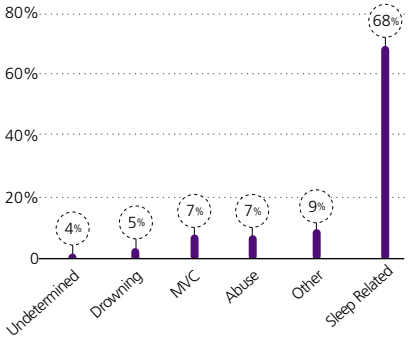
FIGURE 160: Infants Deaths by Injury, Race and Ethnicity*, Dallas County, 2020



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Dallas County Child Fatality Review Team

The largest percentage by Race/Ethnicity comprised of Black/African American, non-Hispanics at 66%, followed by Hispanics at 18%, white, non-Hispanics (14%), while Asian, non-Hispanics (2%) had the lowest rates.

FIGURE 161: Leading Causes of Infants Deaths by Injury, Dallas County, 2020



Data Source: Dallas County Child Fatality Review Team

Leading Causes

Most infant fatalities in 2020 occurred in an unsafe sleep environment, making sleep-related the leading cause at 68%. Homicidal/abuse accounted for 7%, and motor vehicle crash (MVC) at 7%. Undetermined cases did not have any specific external factors attributed to the loss of life.

Sleep-Related Deaths

Sleep-related deaths occur when a child is placed to sleep in an environment that may deprive them of oxygen, resulting in asphyxiation. These deaths include unintentional (accidental) overlay, roll-over, wedging between surfaces, obstructing bedding, pillows, toys, persons or pets. Positional asphyxia is a result of sleep position and/or soft sleep surface.

TABLE 8: Sleep Related Deaths in Infants, Dallas County, 2020

2020 Factors	Not in Crib	Not Supine	Unsafe bedding/ toys	Co-Sleeping	Smoke-Exposed	NICU or Premature	Not exclusively Breastfed
Factors are not mutually exclusive	28 (74%)	15 (39%)	20 (53%)	24 (63%)	2 (5%)	3 (8%)	24 (63%)

Data Source: Dallas County Child Fatality Review Team

Other Observations

79% of the sleep-related deaths presented with multiple external factors

24% had a crib or portable play spaces present but not utilized at the time of death

32% had no cribs or portable play spaces

71% of the households had more than 1 child

47% had 2 or more other children in the household

29% had breastmilk exclusively, an additional 13% supplemented with breastmilk

Please note: Percentages are based on the grand total of incidences despite some missing or unknown data within the factors. For example, breastfeeding and smoke-exposed factors are unknown in some instances (10%).

Recommendations for Infant Death Risk Mitigation

- Safe-Sleep coalition to partner with African American communities to reach parents of Black/African American, non-Hispanic children for Safe Sleep Education
- Providers to increase utilization of Forensic Assessment Center Network to enhance child-abuse early detection
- In-home mentoring, education, and support for households with multiple children
- Assign case managers for parents suffering from poor mental health-postnatal
- Collaborate with law enforcement on ensuring appropriate child passenger seat

Although some leading causes such as MVC incidences slightly decreased, sleep-related and drowning causes increased.

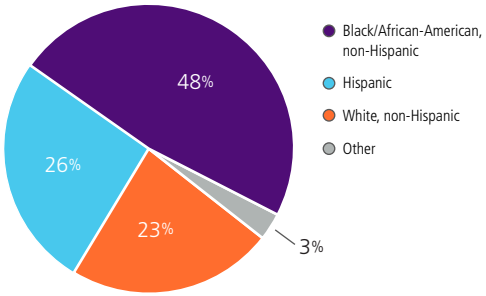
Correctional Health

Parkland is responsible for providing healthcare for inmates in the Dallas County Jail. A team of on-site medical providers, registered nurses, mental health professionals, pharmacists, and other clinical staff offer a comprehensive list of services. Services include but are not limited to health screenings, acute/intermediate infirmary care, chronic/urgent medical care, mental health services, infectious disease management, OB/Gyn care, dental, dialysis, and optometry. All individuals at book-in receive an in-depth physical and mental health screening by Parkland RNs under protocol. Conditions identified are triaged and treated in a timely manner.

Correctional Health Population Demographics

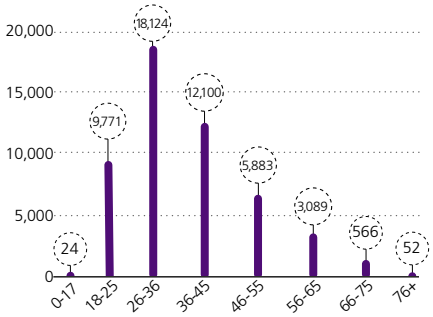
While Black/African American, non-Hispanics make up 24% of Dallas County population, they make up 48% of individuals in the Correctional Health system–see Figure 162.

FIGURE 162: Correctional Health Population by Race, Correctional Health, 2021



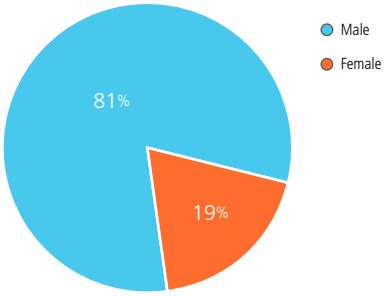
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

FIGURE 163: Correctional Health Population by Age Distribution, 2021



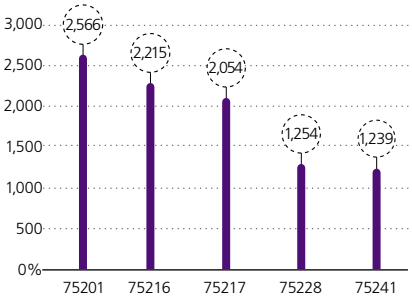
Data Source: Pearl, Correctional Health

FIGURE 164: Correctional Health Population by Sex, 2021



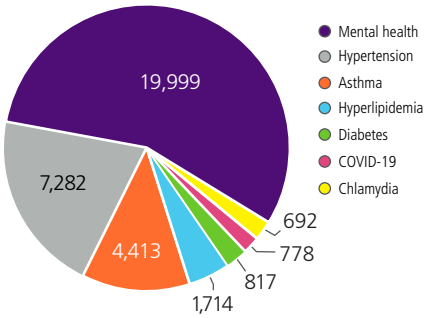
Data Source: Pearl, Correctional Health

FIGURE 165: Correctional Health Population by Top 5 ZIP Codes, 2021



Data Source: Pearl, Correctional Health

FIGURE 166: Correctional Health Unique Patients Leading Chronic Disease Type, 2021



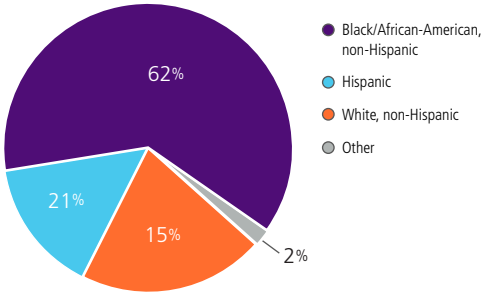
Data Source: Pearl, Correctional Health

According to the CDC, among the common diseases reported by individuals in the correctional health system are chronic diseases, STI and HIV, and more recently COVID-19.[122]

In the Dallas County correctional health system, the three leading health conditions diagnosed are mental health disorders, hypertension, and asthma–see Figure 166.

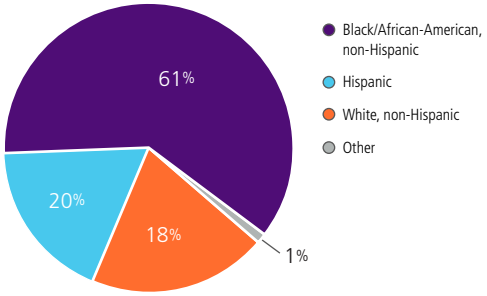
While Black/African American, non-Hispanics represent 48% of the correctional health patients (see Figure 162), they are largely overrepresented in the burden of asthma (63%), diabetes (61%), hypertension (62%) and hyperlipidemia (59%)–see Figures 167 through 170.

FIGURE 167: Correctional Health Patients with Asthma by Race and Ethnicity*, 2021



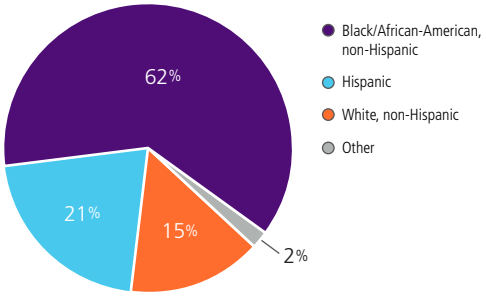
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

FIGURE 168: Correctional Health Patients with Diabetes by Race and Ethnicity*, 2021



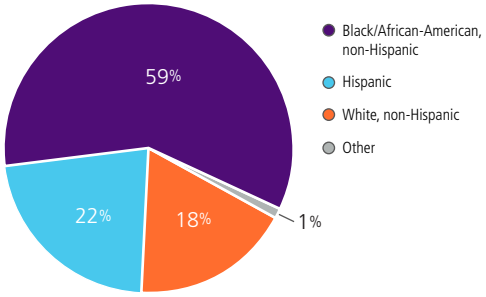
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

FIGURE 169: Correctional Health Patients with Hypertension by Race and Ethnicity*, 2021



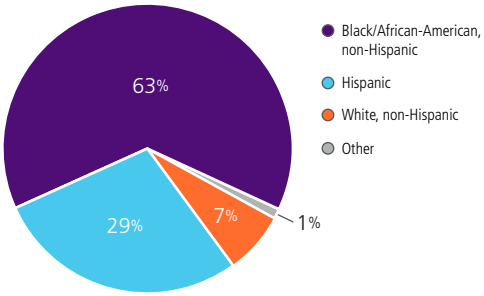
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

FIGURE 170: Correctional Health Patients with Hyperlipidemia by Race and Ethnicity*, 2021



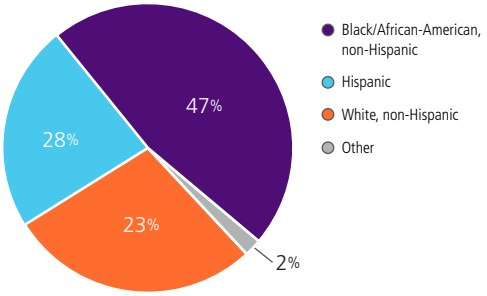
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

FIGURE 171: Correctional Health Patients with Heart Failure by Race and Ethnicity*, 2021



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

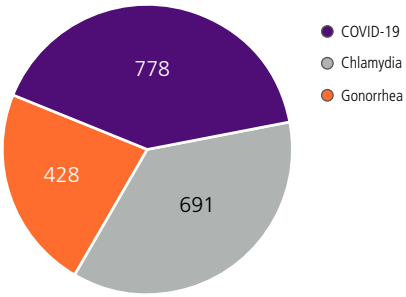
FIGURE 172: Correctional Health Patients with Mental Health Diagnosis by Race and Ethnicity*, 2021



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

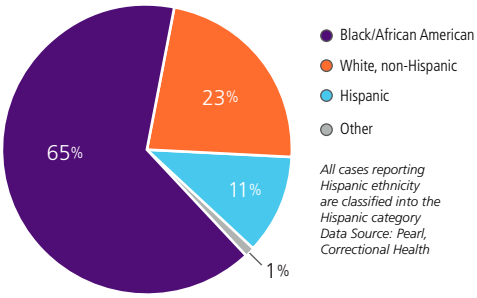
During 2021, 28% of patients with a mental health diagnosis were white, non-Hispanics, 47% were Black/African American, non-Hispanics and 23% Hispanics–see Figure 172.

FIGURE 173: Correctional Health Unique Cases by Selected Infectious Disease Type, 2021



Data Source: Pearl, Correctional Health

FIGURE 174: Correctional Health Patients with HIV by Race and Ethnicity*, 2021



All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data Source: Pearl, Correctional Health

**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Pearl, Correctional Health

According to the CDC, the most common diseases reported by individuals in correctional health systems were sexually transmitted infections, HIV and more recently COVID-19[123]–see Figure 173 and Figure 174.

Homelessness

For the purpose of health centers receiving a Health Center Program award or designation under section 330(h) of the Public Health Service Act, the homeless population is defined as individuals:

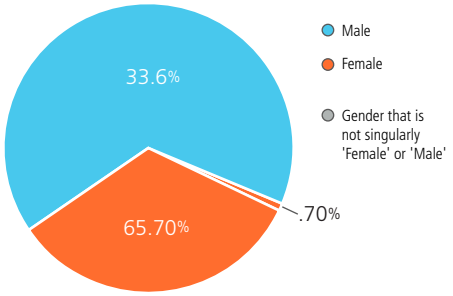
- Who lack housing (without regard to whether the individual is a member of a family)
- Whose primary residence during the night is a supervised public or private facility that provides temporary living accommodations
- Who reside in transitional housing; and/or
- Who reside in permanent supportive housing or other housing programs that are targeted to homeless populations[124]

According to the 2022 Dallas County and Collin County Point-in-Time (PIT) count, an annual count of sheltered and unsheltered individuals who experienced homelessness on a single night in January, there were approximately 4,000 individuals who experienced homelessness in Dallas County, 31% were unsheltered. The 2022 PIT has been the lowest count since 2019 and since then family homelessness decreased by 20%. According to the count, veterans' homelessness decreased 26%, and the increase of rapid housing beds from 200 to roughly 1,100 has contributed to an increase in the rate at which people leave homelessness, 16% to 30%. Despite these advances in the fight against homelessness, the chronically homeless population has increased 93% since 2019.[125]

Homeless Population Demographics

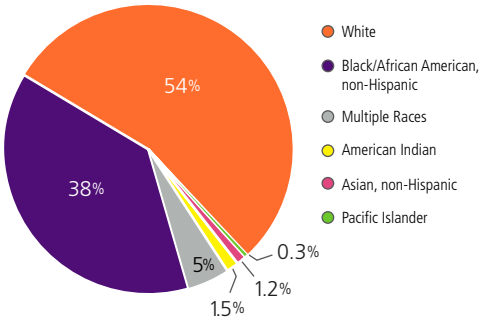
In Dallas County, men make up a much larger proportion of the homeless population than women, 65.7% versus 33.6%–see Figure 175. Among racial groups, Black/African American, non-Hispanics are overrepresented, making up 24% of the county population while accounting for 54% of the homeless population–see Figure 176.

FIGURE 175: Homeless Population by Sex, Dallas County, 2022



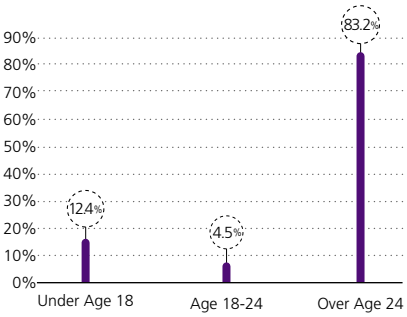
Data Source: Metro Dallas Homeless Alliance

FIGURE 176: Homeless Population by Race, Dallas County, 2021



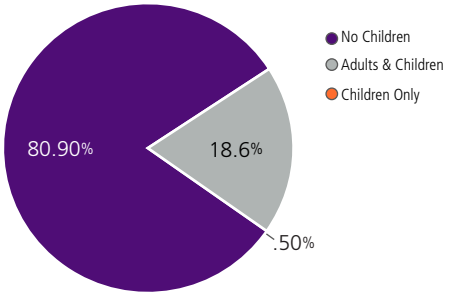
Data Source: Metro Dallas Homeless Alliance

FIGURE 177: Homeless Population by Age Distribution, Dallas County, 2022



Data Source: Metro Dallas Homeless Alliance

FIGURE 178: Homeless Population by Household, Dallas County, 2022



Data Source: Metro Dallas Homeless Alliance

Homeless Health

Parkland's Homeless Outreach Medical Services (HOMES) is a healthcare for the Homeless Federally Qualified Health Center under HRSA (Health Resources & Services Administration).

The HOMES program was established in 2000 to serve persons of all ages experiencing homelessness in Dallas County. It is the only program of its kind in the county that seeks to improve access to healthcare for individuals experiencing homelessness. Services are provided at more than 25 locations through two fixed sites, four mobile medical units, and one mobile dental unit. Locations include homeless shelters, domestic violence shelters, housing programs, drug treatment programs, day programs, and social service centers.

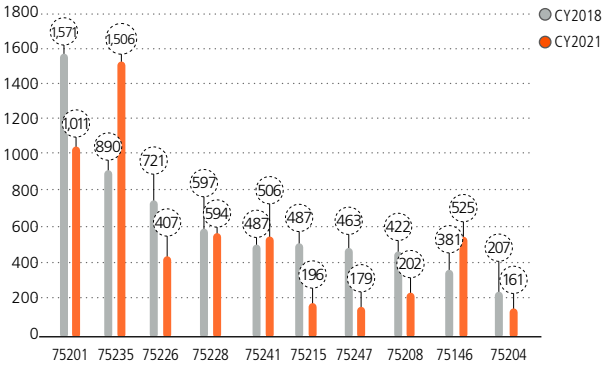
HOMES Patients Demographics

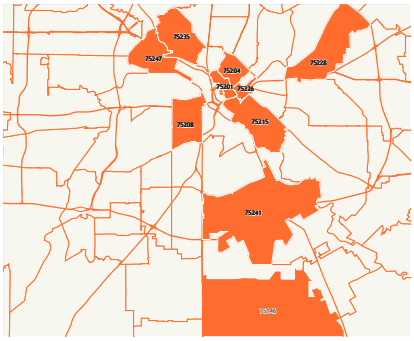
In 2021, HOMES served **7,219** unduplicated patients.

HOMES Patients Demographics

Most of these patients are seen in 10 ZIP Codes (see Figure 179) concentrated around large shelters and organizations that serve the homeless. The fluctuation in patients seen among the ZIP Codes is a result of COVID-19. Since the start of the pandemic, many shelter partners have experienced rolling closures, decreased capacity and workforce constraints. More individuals have also been placed in scattered permanent supportive housing with COVID relief monies. There was an increase in unsheltered individuals due to the reduced shelter capacity resulting from social distance infection prevention policies.

FIGURE 179: HOMES population by ZIP Code, Calendar Year (CY) 2018 and 2021

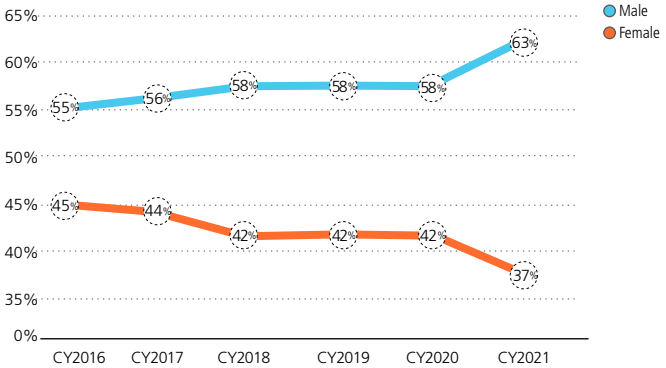




Data Source: HOMES Annual HRSA UDS Submission

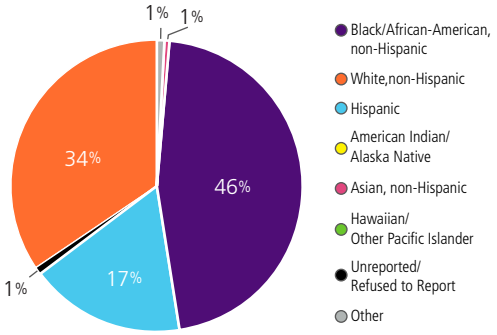
The percentage of male HOMES patients increased from 55% in 2016 to 63% in 2021, while the percentage of female patients decreased from 45% to 37% over the same period–see Figure 180.

FIGURE 180: HOMES Patients by Sex, CY2016–CY2021



Data Source: HOMES Annual HRSA UDS Submission

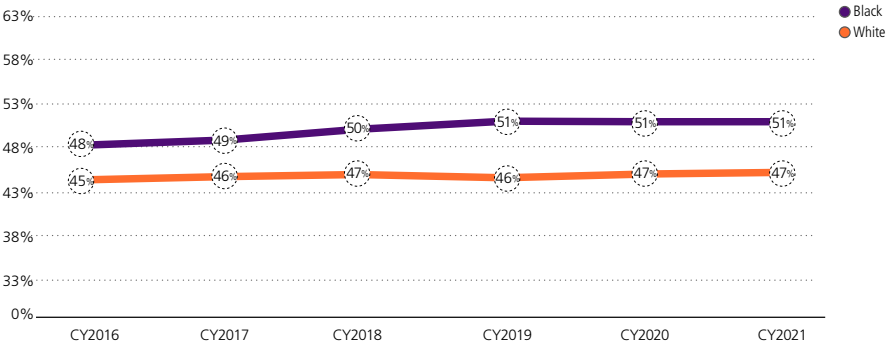
FIGURE 181: HOMES Patients by Race and Ethnicity, CY2021



Data Source: HOMES Annual HRSA UDS Submission

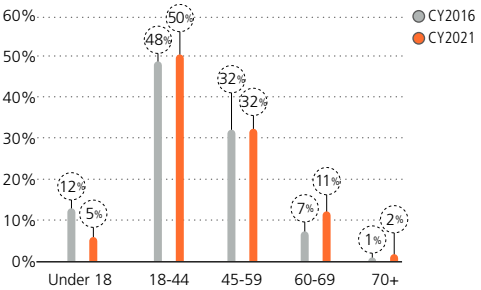
HOMES patients represented 46% Black/African American, and 17% Hispanic/Latino–see Figure 181.

FIGURE 182: HOMES Patients by Race, CY2016–CY2021



Data Source: HOMES Annual HRSA UDS Submission

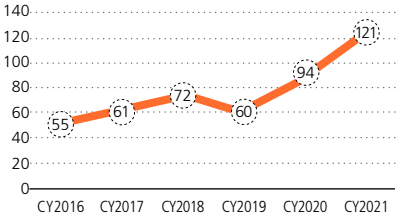
FIGURE 183: Homes Population Age Distribution, CY2016–CY2021



Data Source: HOMES Annual HRSA UDS Submission

The first and second largest age groups among HOMES patients are 18–44 years (50%) and 45–59 years (32%), respectively. The age group with the highest increase since 2016 is 60 to 69 years, which increased from 7% to 11%. On the opposite end, the percentage of patients under age 18 changed notably from 12% to 5%, mirroring the trend noted among the same age group in the county homeless population–see Figure 183.

FIGURE 184: Homes Veteran Population, CY2016–CY2021

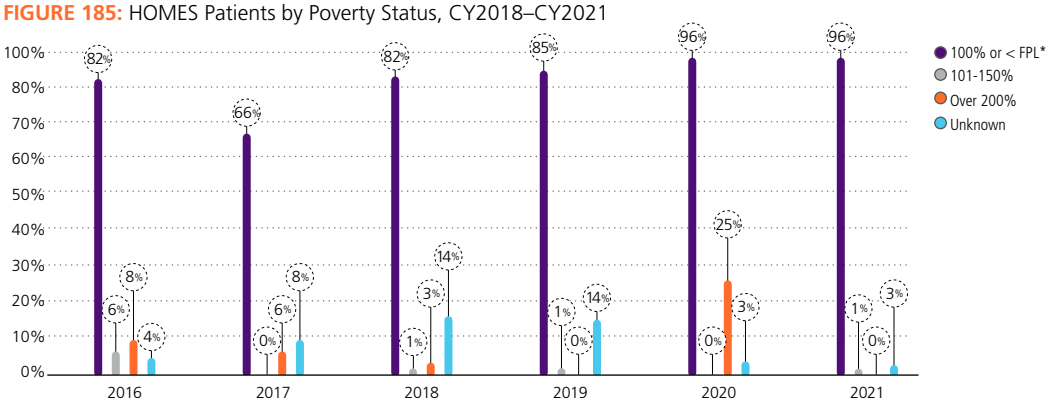


Data Source: HOMES Annual HRSA UDS Submission

Whereas homelessness among veterans decreased in the county by more than 26% since 2019, however HOMES continues to see an increase in the number of homeless veterans seeking medical care–see Figure 184.

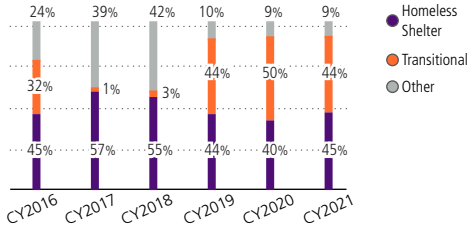
Consistently since 2018, more than 80% of HOMES' patients live at 100% or below the poverty level–see Figure 185. Over the last several years, HOMES has implemented process improvements including increased training and monitoring efforts to collect demographic data. These operational improvements have likely produced more accurate data collection as evidenced by decrease in the "Unknown" category.

FIGURE 185: HOMES Patients by Poverty Status, CY2018–CY2021



Data Source: HOMES Annual HRSA UDS Submission
**Federal Poverty Level*

FIGURE 186: HOMES Patients by Housing Status, CY2018–CY2021



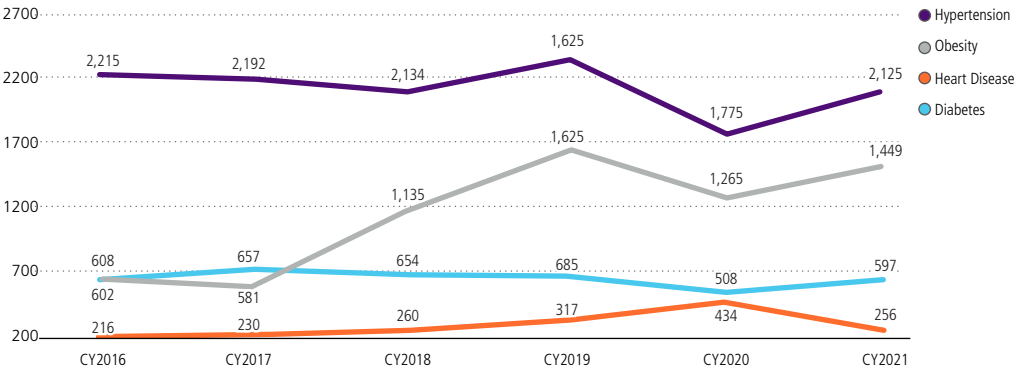
Data Source: HOMES Annual HRSA UDS Submission

The rate at which individuals exit homelessness to permanent housing is at an all-time high and may explain the growth in percentage of HOMES' patients living in transitional housing versus homeless shelters–see Figure 186. Rapid rehousing expeditiously connects people to permanent housing through rental assistance and wraparound services.

HOMES Health Profile

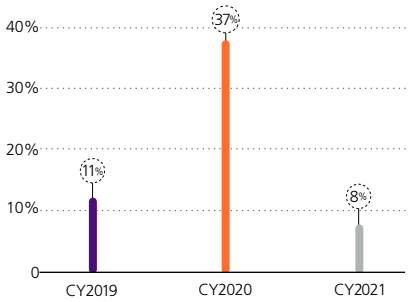
The leading conditions diagnosed among HOMES' patients are chronic diseases. Of these, in order of frequency are hypertension, obesity, heart disease, and diabetes–see Figure 187.

FIGURE 187: HOMES Top Chronic Conditions CY2016–CY2021



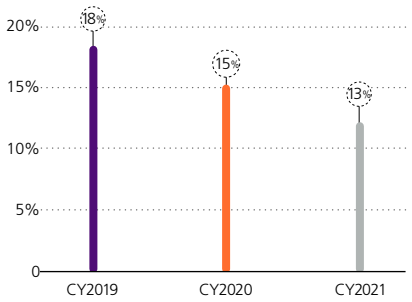
Data Source: HOMES Annual HRSA UDS Submission

FIGURE 188: Percentage of women (50–73 years) who had a screening mammogram, HOMES, CY2019–CY2021



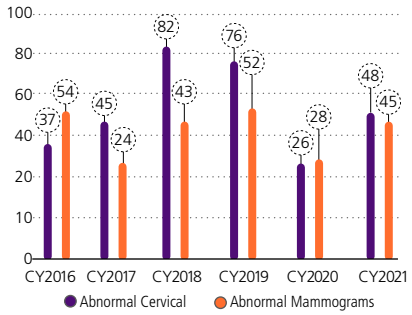
Data Source: HOMES Annual HRSA UDS Submission

FIGURE 189: Percentage of women (21–64 years) screened for cervical cancer, HOMES, CY2019–CY2021



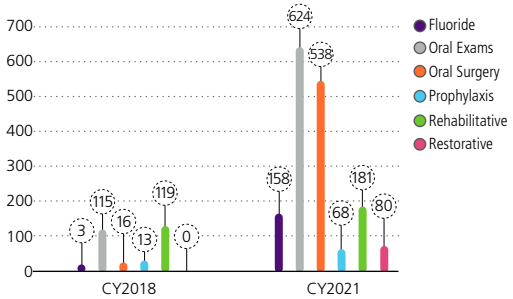
Data Source: HOMES Annual HRSA UDS Submission

FIGURE 190: HOMES, Women's Selected Medical Conditions Diagnosis, CY2019–CY2021



Data Source: HOMES Annual HRSA UDS Submission

FIGURE 191: HOMES, Dental Services, CY2018 and CY2021



Data Source: HOMES Annual HRSA UDS Submission

Oral Health

Oral services provided by HOMES are a comprehensive approach to dental care. The team provides screenings, preventive care, manageable extractions, dentures, and minor procedures–see Figure 191.

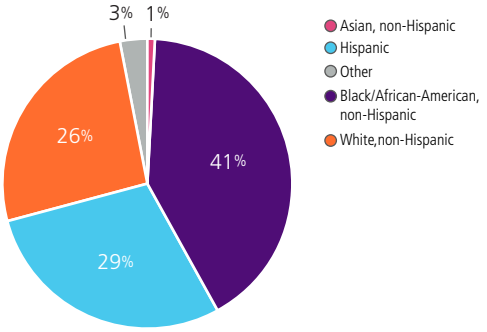
LGBTQIA+ (Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual, and More)[126]

The lack of consistently collecting and reporting Sexual Orientation and Gender Identity (SOGI) remains a challenge. Collection of population level data is key to understanding and meeting the needs of LGBTQIA+ individuals; nevertheless, the routine collection of SOGI data in the electronic health record is not standardized across healthcare institutions nor mandated at the national level.[127]

The LGBTQIA+ population faces many barriers that prevent them from accessing healthcare while facing a higher rate of chronic disease, mental health issues, alcohol and substance use as well as eating disorders, and STIs. For instance, in the U.S. gay and bisexual men comprise almost 50% of all people living with HIV while they only account for 2% of the total population, and lesbian/bisexual women are less likely to have regular mammograms or pap smears. The collection of SOGI information is necessary to optimize care for LGBTQIA+ patients and increase preventive health screenings among the LGBTQIA+ population.[128]

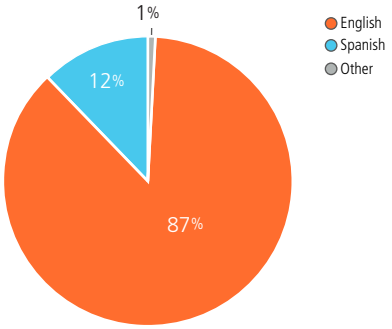
To improve SOGI data collection and reporting in the U.S. health system, the Department of Health Humans Services' Healthy People program includes objectives to advance SOGI collection. Parkland included this as an objective in combination with improving collection of race, ethnicity, and language (REAL) data in its 2019 CHNA Implementation Plan and used this information to generate a health profile for the LGBTQIA+ population. As of June 25, 2022, 5,052 Parkland patients identified themselves as LGBTQIA+. Figure 192 shows the breakdown by REAL. Parkland will continue to refine its SOGI data collection and reporting process to generate a reliable health profile of LGBTQIA+ patients.

FIGURE 192: Parkland LGBTQIA Patients by Race and Ethnicity*, as of June 25, 2022



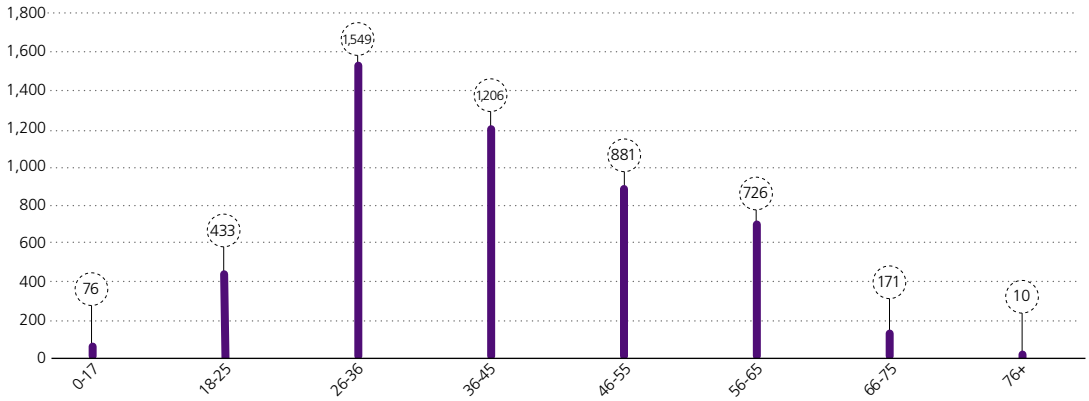
All cases reporting Hispanic ethnicity are classified into the Hispanic category
Data Source: Parkland EHR, 2021

FIGURE 193: Parkland LGBTQIA+ Patients by Primary Language, as of June 25, 2022



Data Source: Parkland EHR, 2021

FIGURE 194: Parkland LGBTQIA+ Patients by Age Distribution as of June 25, 2022



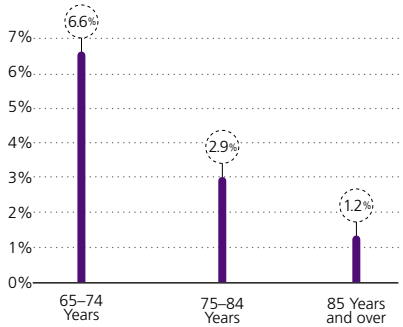
Data Source: Parkland EHR, 2022

Older Adults

In Dallas County, 10.7% of the total population is 65 years or older[129]– see Figure 195. This percentage will continue to grow over the next 40 years.[130] The landscape of the U.S. population is undergoing a historical demographic shift toward aging.[131] More than 10,000 people turn 65 every day in the United States[132] and 51% of individuals in this age group reside in nine states, including Texas.[133] Projections indicate that Americans age 65 and older will nearly double from 52 million in 2018 to 95 million by 2060, raising their share of the total population from 16% to 23%.[134] Figure 196 illustrates the impact of the changing American population over the years and the projected growth rate.

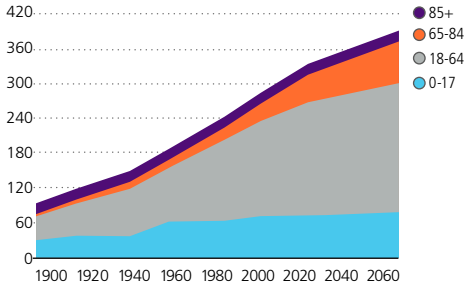
Besides growing at fast pace, this segment of the population is also increasing in diversity. Between 2018 and 2060, the rate of whites, non-Hispanic is projected to decline from 77% to 55%. Corresponding with this demographic shift, an economic gap is emerging between racial and ethnic groups. 17.1% of Hispanics, 18% of Black/African American, non-Hispanic and 9.3% of Asians, non-Hispanic 65 years and older live below the poverty level, versus 6.8% of their white, non-Hispanic counterparts.[135]

FIGURE 195: Percentage of Population 65 years and over, Dallas County, 2016-2020



U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimate

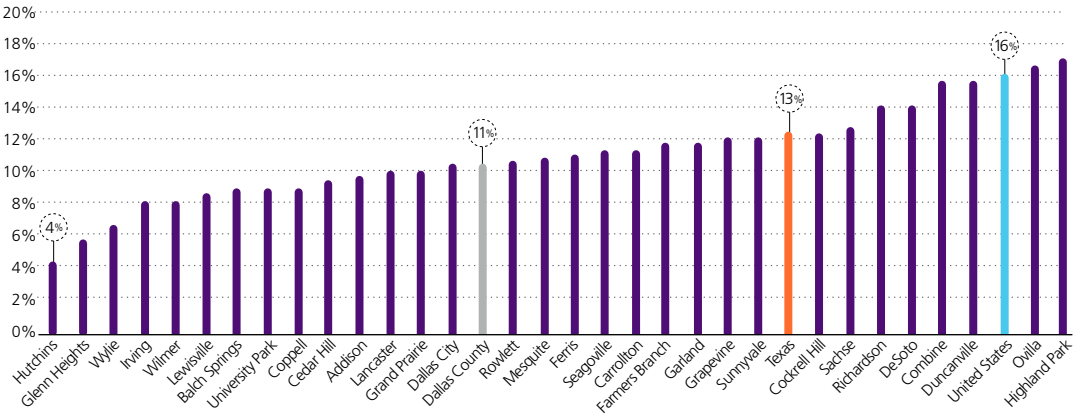
FIGURE 196: U.S. Population change Overtime by Age Group (millions), 1900 to 2060



Adopted from: U.S. Census Bureau, decennial censuses and vintage 2017 population projections (2020-2060)

In Dallas County, Hutchins is an outlier with the lowest rate of individuals 65 years and older, i.e., 4% while Ovilla and Highland Park have the highest rate at 17%–see Figure 197.

FIGURE 197: Percentage of Individuals 65 Years and Older in the U.S, Texas, Dallas County and Dallas County Cities, 2016-2020



Data Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

Changes in population composition can bring both opportunities and challenges in advancing health and wellness. While life expectancy may improve, chronic health conditions, mental health, and falls will rise and challenge healthcare systems.[136] Older adults are more likely to have "at least one chronic condition and many have multiple conditions".[137]Elderly women and people of color, will experience a disproportionate burden of this trend.[138]

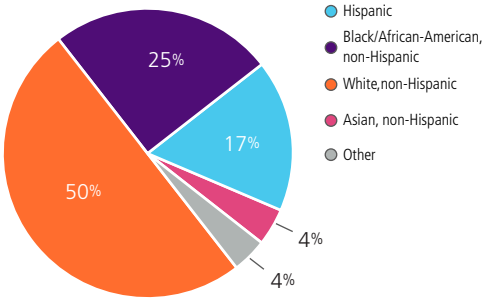
Hospital Utilization by Individuals 65 years and older

A total of 354,743 patients 65 years and older accessed healthcare (inpatient and outpatients) services in hospital systems in Dallas County during 2021.

Dallas County Older Adults Utilization by Demographics

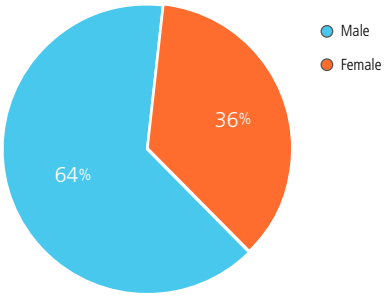
Overall Hispanics have a lower utilization of inpatient and outpatient services in Dallas County compared to other racial and ethnic groups. People over 65 were 50% white, non-Hispanic, 25% Black/African American, non-Hispanic and 17% Hispanic–see Figure 198.

FIGURE 198: Patients 65 Years and Older Race and Ethnicity, Dallas County, 2021



**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: DFWHC Foundation Regional Data, 2021

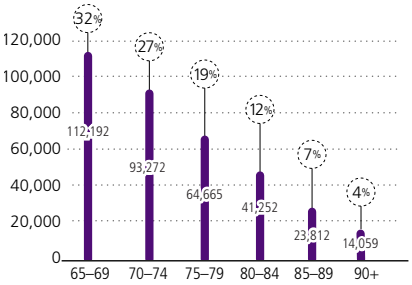
FIGURE 199: Patients 65 + by Sex, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data, 2021

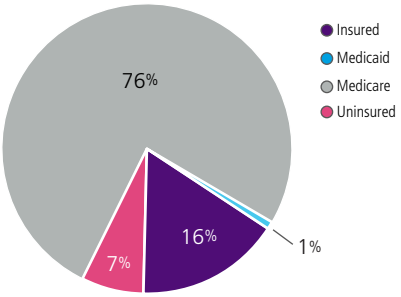
Historically, women are more likely to obtain healthcare services than their male counterparts. They represent 51% of the total population 65 years and older, and 64% of those using inpatient and outpatient services. While men over 65 years account for 49% in Dallas County, they represent just 36% of those receiving inpatient and outpatient services–see Figure 199.

FIGURE 200: Patients 65 + Age Distribution, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data, 2021

FIGURE 201: Percent Patients 65 Years and Older by Payor Type, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data, 2021

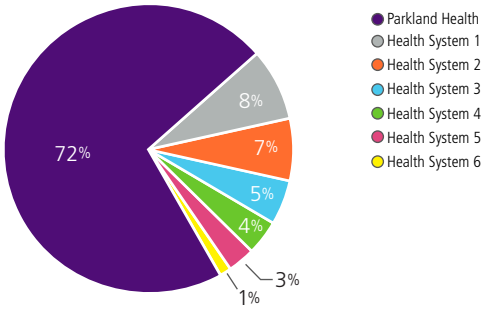
Health Insurance and Coverage

Figure 201 shows 7% of patients 65 years and older who accessed healthcare in Dallas County were uninsured and 72% of those patients were treated by Parkland–see Figure 202.

Parkland Older Adults and Chronic Diseases

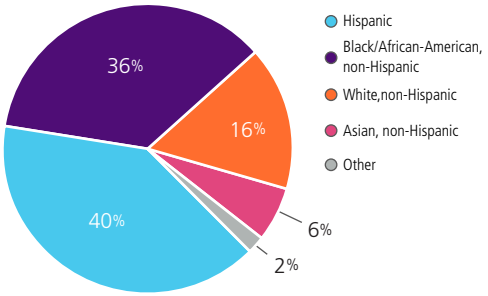
Of the total number of patients (363,395) listed in Parkland's chronic disease registries 13% (45,670) are patients 65 years and above; and of the patients with chronic diseases, 36% are Black/African American, non-Hispanics, 40% Hispanics, 16 white, non-Hispanics and 6% Asian, non-Hispanics–see Figures 203.

FIGURE 202: Uninsured Patients 65+ by Hospital System, Dallas County, 2021



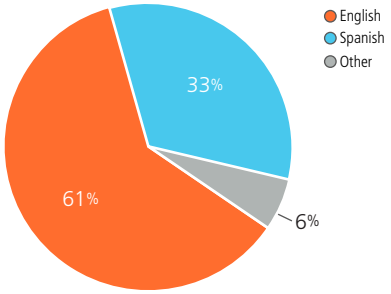
Data Source: DFWHC Foundation Regional Data, 2021

FIGURE 203: Parkland Older Adults Patients, Chronic Disease Registries by Race and Ethnicity*, 2021–2021



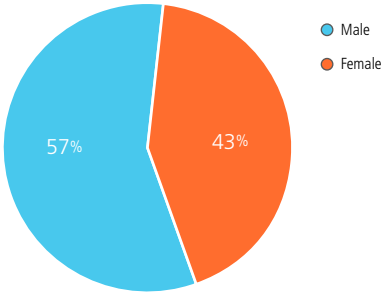
**All cases reporting Hispanic ethnicity are classified into the Hispanic category*
Data Source: Parkland Chronic Disease Registries

FIGURE 204: Parkland Older Adults Patients, Chronic Disease Registries by Primary Language, 2021



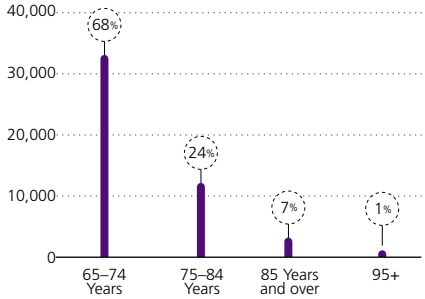
Data Source: Parkland Chronic Disease Registries

FIGURE 205: Parkland Older Adults Patients, Chronic Disease Registries by Sex, 2021



Data Source: Parkland Chronic Disease Registries

FIGURE 206: Parkland Older Adults Patients, Chronic Disease Registries by Age Group, 2021



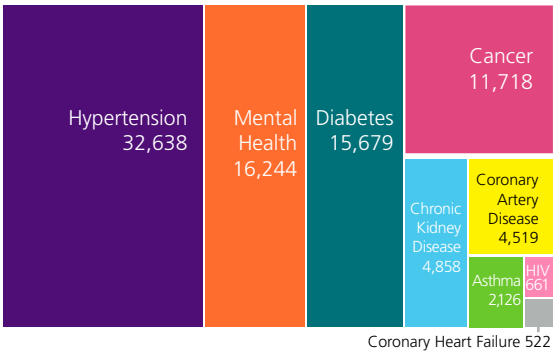
Data Source: Parkland Chronic Disease Registries

▲

The proportion of older female (57%) is higher than male adults (43%) listed in Parkland's registry–see Figure 205.

Leading Chronic Diseases Among Older Adults

FIGURE 207: Parkland Older Adults Patient Count, Chronic Disease Registries by ZIP Code, 2021

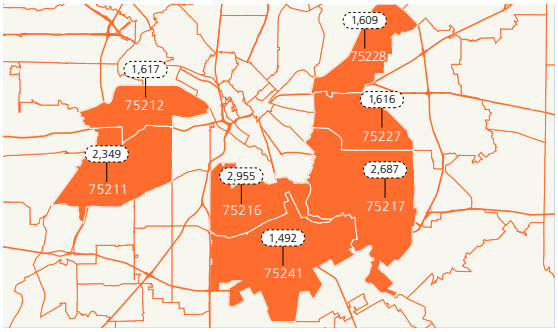


Parkland Chronic Diseases Registries, 2021

Hypertension is the leading chronic disease among Parkland's older adult patients. Mental health is second and diabetes the third most common chronic condition–see Figure 207.

According to the Administration for Community Living (ACL), between the end of 2020 and early 2021 there was an increase in symptoms of anxiety and depression among older adults in the U.S. Since the onset of the COVID-19 pandemic, 21% of Medicare beneficiaries reported feeling more lonely or sad, 15% reported they felt less financially secure and 38% reported feeling less socially connected to friends and family.[139]

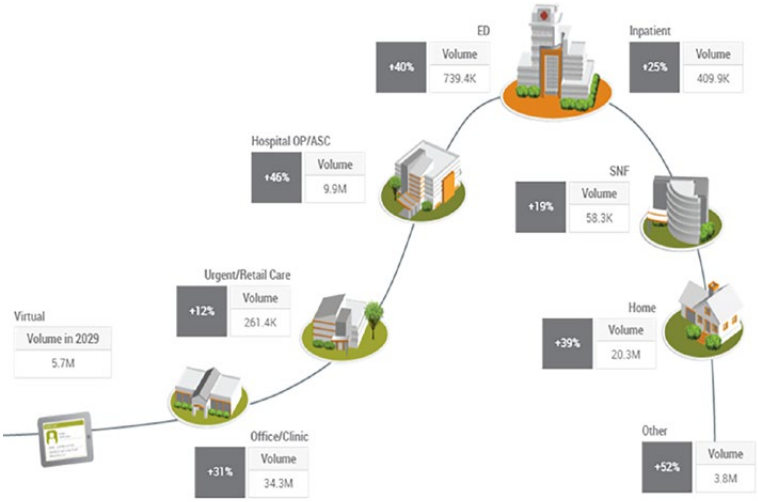
FIGURE 208: Parkland Older Adults Patient Count by ZIP Code, Parkland



Parkland Chronic Diseases Registries, 2021

The ZIP Codes with the highest number Parkland's older adult patients with chronic disease are 75216, 75217 and 75211–see Figure 208.

FIGURE 209: Health Services Forecast for Older Adults, Dallas County, 2019–2029



Source: SG-2, LLC.

Demand is forecasted to grow for services for older adults in Dallas County between 2019 and 2029. Specifically, hospital outpatient and ambulatory surgery center services is projected to increase by 46%, ED by 40% and office clinic by 31%–see Figure 209.

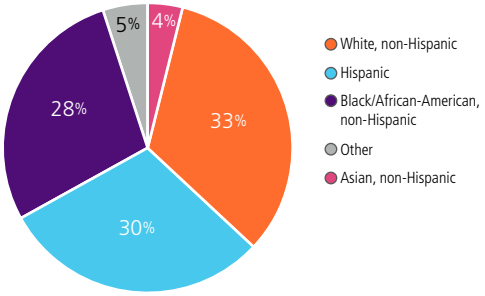
UTILIZATION

Described here is an overview of inpatient and ED discharges in Dallas County and Parkland.

Inpatient Discharges by Race and Ethnicity

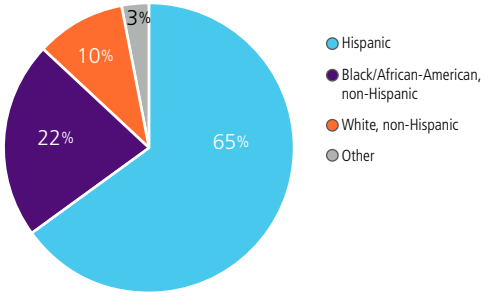
Inpatient discharges broken down by race shows that in 2021, 33% of the total discharges in Dallas County were white, non-Hispanic patients. The Black/African American, non-Hispanic inpatient discharge rate (28%) was slightly higher than the county's population (24%)–see Figure 210. Parkland's inpatient discharges during the same period were 65% for Hispanic patients and 22% for Black/African American, non-Hispanics–see Figure 210. For ethnicity, 30% of Dallas County's inpatient discharges were Hispanic patients, a lower rate than Hispanics in the county's general population rate (40%). For Parkland, Hispanics accounted for 65% of inpatient discharges–see Figures 210 and 211.

FIGURE 210: Inpatient Discharges by Race and Ethnicity, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

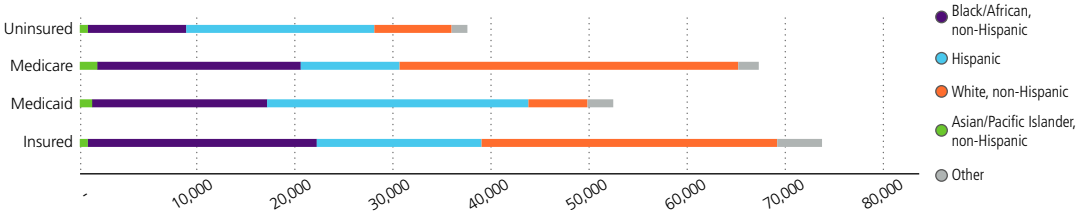
FIGURE 211: Inpatient Discharges by Race, Parkland, 2021



Data Source: DFWHC Foundation Regional Data

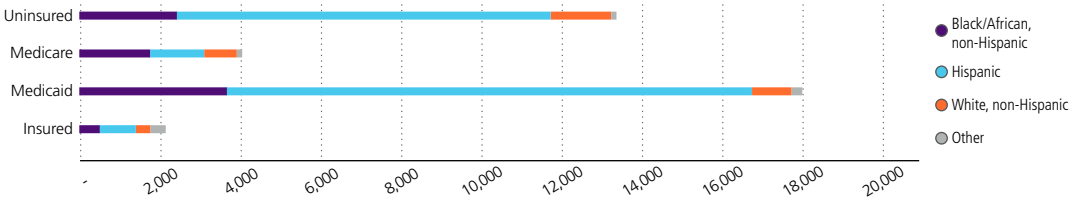
Inpatient Discharges by Payor Type

FIGURE 212: Inpatient Discharges by Ethnicity, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

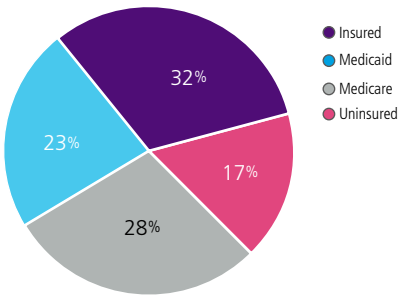
FIGURE 213: Inpatient Discharges by Ethnicity, Parkland, 2021



Data Source: DFWHC Foundation Regional Data

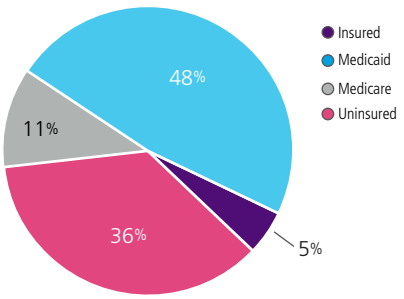
The most frequent coverage for inpatient discharges in 2021 was private insurance 32%, followed by Medicare 29%. Parkland accounted for the largest volume of inpatient discharges, of which 48% were covered by Medicaid, 36% uninsured and 5% insured–see Figures 214 and 215.

FIGURE 214: Inpatient Discharges by Payor Type, Dallas County 2021



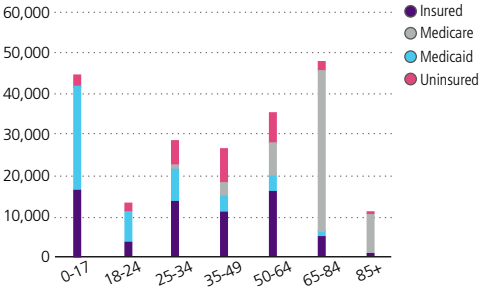
Data Source: DFWHC Foundation Regional Data

FIGURE 215: Inpatient Discharges by Payor Type, Parkland 2021



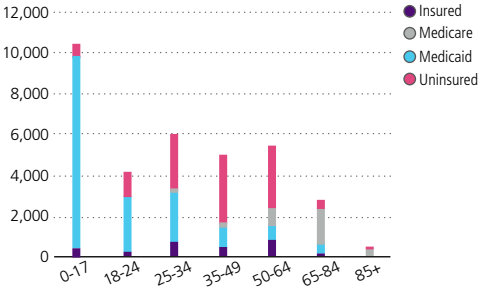
Data Source: DFWHC Foundation Regional Data

FIGURE 216: Inpatient Discharges by Age Distribution & Primary Payor Group, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

FIGURE 217: Inpatient Discharges by Age Distribution & Primary Payor Group, Parkland, 2021

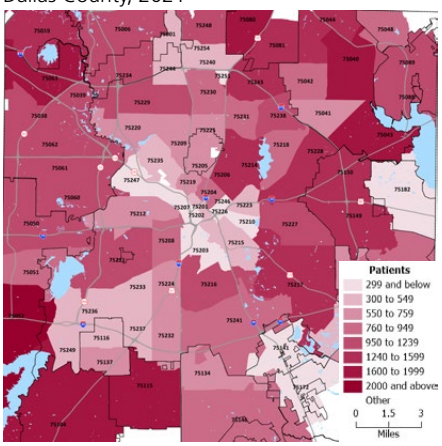


Data Source: DFWHC Foundation Regional Data

Figures 218 and 219 depict the volume of inpatient discharges by patients' ZIP Code.

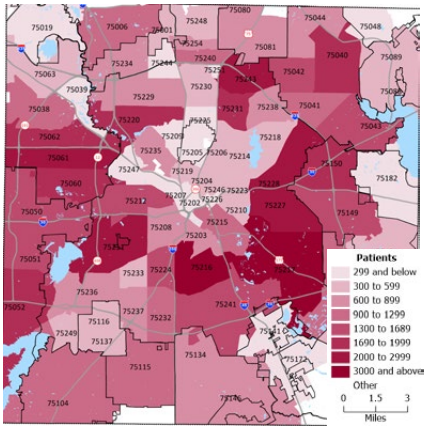
The three ZIP Codes with the highest number of inpatient discharges are 75217, 75216 and 75211, which are among the ZIP Codes with lower ADI & CDVI scores.

FIGURE 218: Inpatient Discharges Insured, Dallas County, 2021



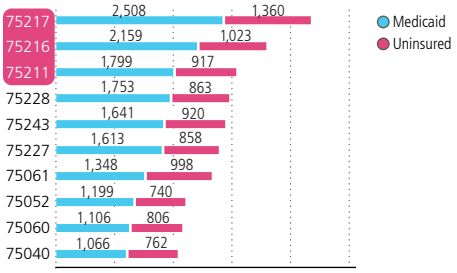
Data Source: DFWHC Foundation Regional Data

FIGURE 219: Inpatient Medicaid and Uninsured Discharges, Dallas County, 2021



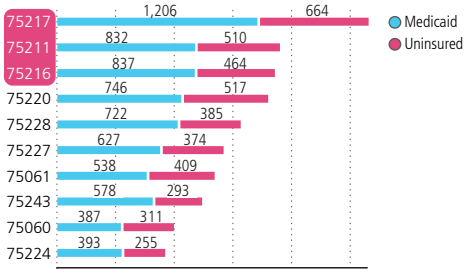
Data Source: DFWHC Foundation Regional Data

FIGURE 220: Inpatient Medicaid and Uninsured Discharges by Top ZIP Codes, Dallas County, 2021



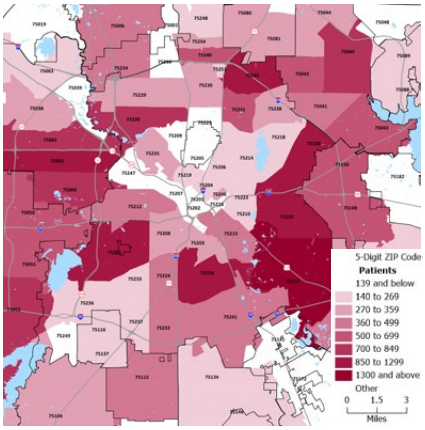
Data Source: DFWHC Foundation Regional Data

FIGURE 221: Inpatient Medicaid and Uninsured Discharges by Top ZIP Codes, Parkland, 2021



Data Source: DFWHC Foundation Regional Data

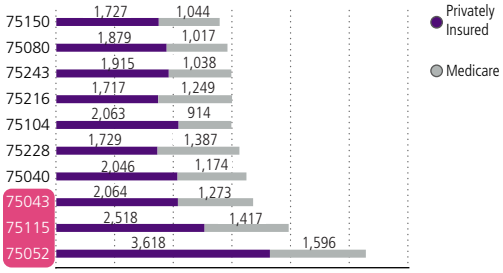
FIGURE 222: Inpatient Discharges Uninsured, Parkland, Dallas County 2021



Data Source: DFWHC Foundation Regional Data

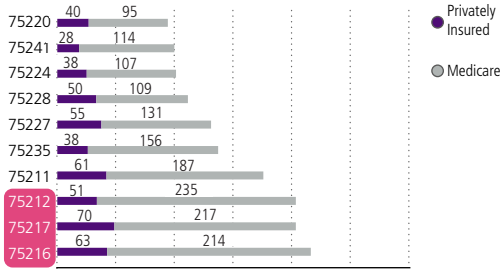
The ZIP Codes with the highest volume of inpatient discharges for Medicare and private insured patients Dallas County are 75052, 75115 and 75043–see Figure 223. For Parkland patients with the same type of coverage, the ZIP Codes are 75216, 75217 and 75212–see Figure 224.

FIGURE 223: Inpatient Medicare and Privately Insured Discharges by Top ZIP Codes, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

FIGURE 224: Inpatient Medicare and Privately Insured Discharges by Top ZIP Codes, Parkland, 2021



Data Source: DFWHC Foundation Regional Data

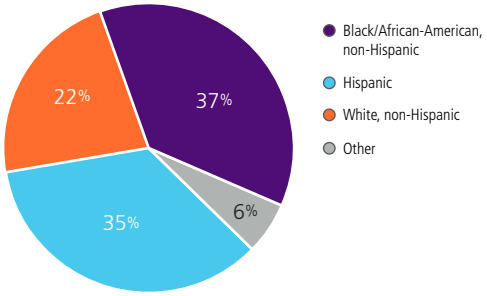
ED Discharges by Race and Ethnicity

Parkland's Emergency Department operates 24\7. The highly-trained emergency medical staff includes Board-certified emergency medicine physicians, primary and specialty trained physicians, medical residents, mid-level providers, registered nurses, and other staff.

The Dallas County distribution of ED discharges by race in 2021 was 22% white, non-Hispanic patients and 37% Black/African American, non-Hispanics. In 2021, Parkland's ED discharges of white, non-Hispanic patients was 12%, while Black/African American, non-Hispanic patients were 33%–see Figures 225 and 226. Parkland had a higher volume of ED discharges for Hispanic patients at 51% versus 35% at the county level–see Figures 225 and 227.

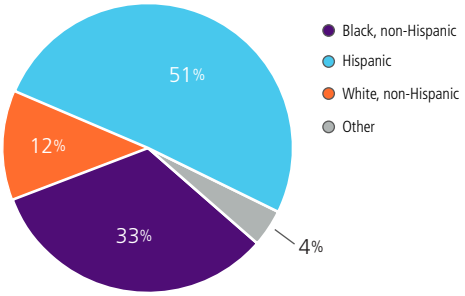
The uninsured rate for Parkland, 63%, is double than Dallas County at 32%–see Figures 227 and 228. The 2019 priority CHNA ZIP Codes 75211, 75216 and 75217 were among the highest uninsured ED discharges by ZIP Codes in Dallas County–see Figure 232.

FIGURE 225: ED Discharges by Race, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

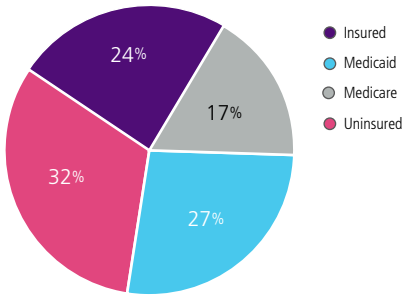
FIGURE 226: ED Discharges by Race, Parkland, 2021



Data Source: DFWHC Foundation Regional Data

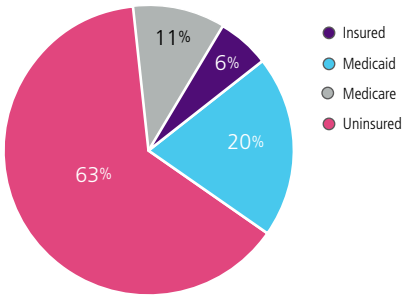
ED Discharges by Payor Type

FIGURE 227: ED Discharges by Payor Type, Dallas County 2021



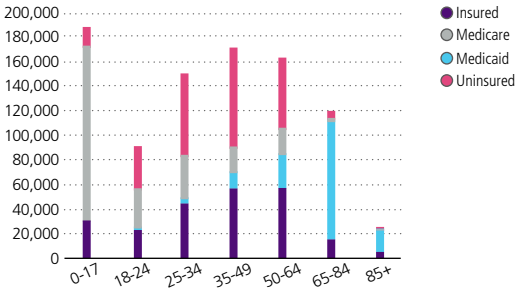
Data Source: DFWHC Foundation Regional Data

FIGURE 228: Discharges by Payor Type, Parkland 2021



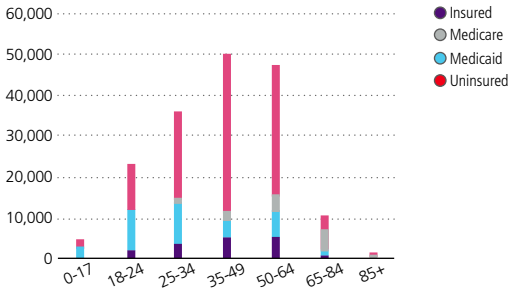
Data Source: DFWHC Foundation Regional Data

FIGURE 229: ED Discharges by Age Distribution, Dallas County 2021



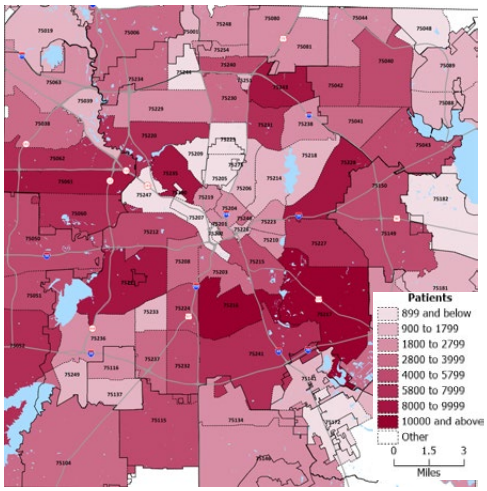
Data Source: DFWHC Foundation Regional Data

FIGURE 230: ED Discharges by Age Groups, Parkland 2021



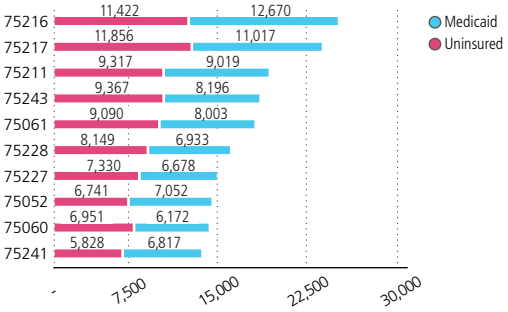
Data Source: DFWHC Foundation Regional Data

FIGURE 231: Uninsured ED Discharges by ZIP Code, Dallas County, 2021



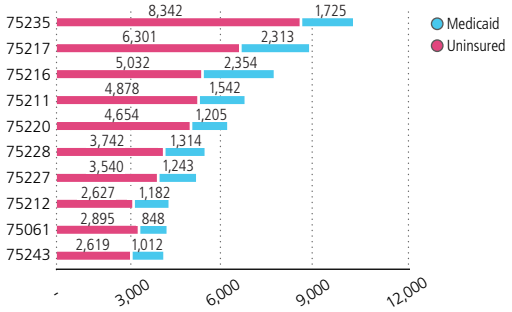
Data Source: DFWHC Foundation Regional Data

FIGURE 232: Medicaid and Uninsured ED Discharges by Top ZIP Codes, Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

FIGURE 233: Medicaid and Uninsured ED Discharges by Top ZIP Codes, Parkland, 2021

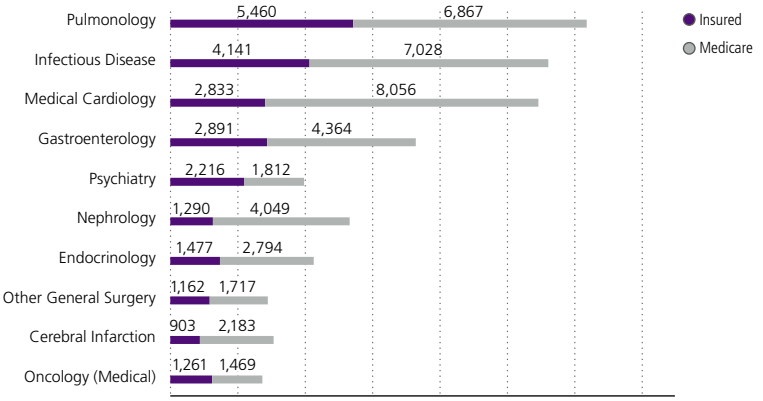


Data Source: DFWHC Foundation Regional Data

Prominent Hospital Diagnoses

Hospital discharge data are routinely used for different purposes such as public safety and injury surveillance and prevention, public health disease surveillance, diseases registries, and community health needs assessment and planning. This section includes inpatient and ED discharge data based on diagnosis-related group (DRG) to identify utilization patterns across uninsured, Medicaid, Medicare, and privately insured patients.

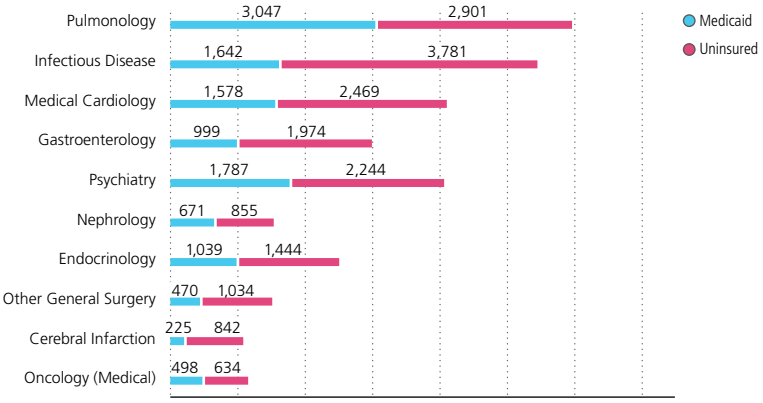
FIGURE 234: Inpatient Hospital Discharges Diagnoses Medicare and Insured Dallas County, 2021



Data Source: DFWHC Foundation Regional Data

For instance, Figure 234 shows that in 2021 pulmonology, infectious diseases and medical cardiology were the top three prominent hospital diagnoses among inpatient discharges covered by Medicare or private insurance.

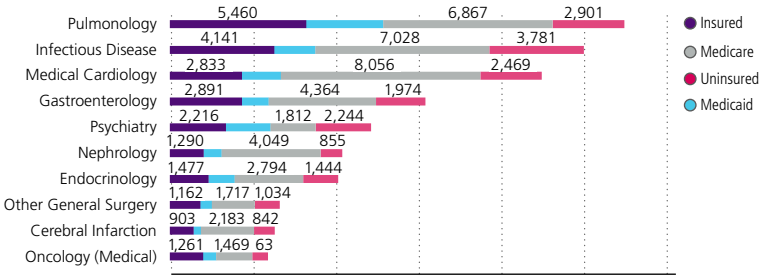
FIGURE 235: Inpatient Hospital Discharges Diagnoses Medicaid and Uninsured, Dallas County 2021



Data Source: DFWHC Foundation Regional Data

The graph in Figure 235 shows that for Medicaid and uninsured patients, the leading discharge diagnoses were psychiatry, stroke, and pulmonology.

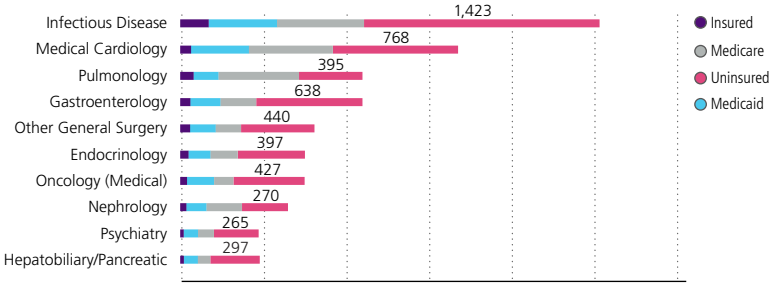
FIGURE 236: Inpatient Discharges Diagnoses, Dallas County 2021



Data Source: DFWHC Foundation Regional Data

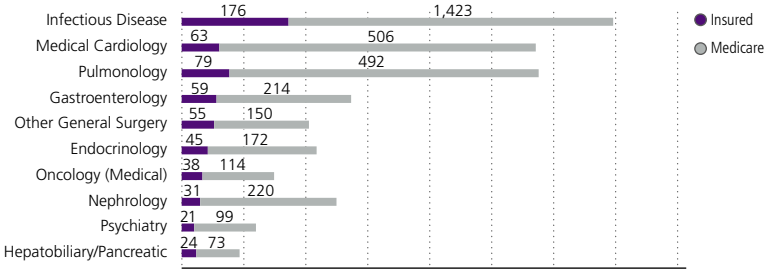
Figure 236 and Figure 237 illustrate the leading disease categories by payor type for Dallas County and Parkland, respectively.

FIGURE 237: Inpatient Discharge Diagnoses Parkland 2021



Data Source: DFWHC Foundation Regional Data

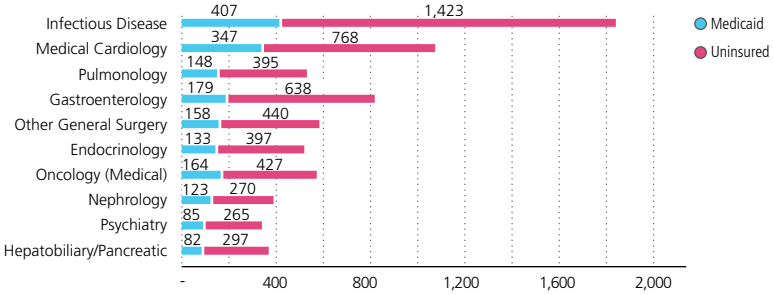
FIGURE 238: Inpatient Discharge Diagnoses Medicare and Insured Parkland 2021



Data Source: DFWHC Foundation Regional Data

Inpatient discharges for Medicare and private insured patients are displayed in Figure 238, and for Medicaid and uninsured in Figure 239.

FIGURE 239: Inpatient Diagnosis Medicaid and Uninsured Parkland 2021



Data Source: DFWHC Foundation Regional Data

FIGURE 240: Dallas County ED Visits Top Diagnosis 2021

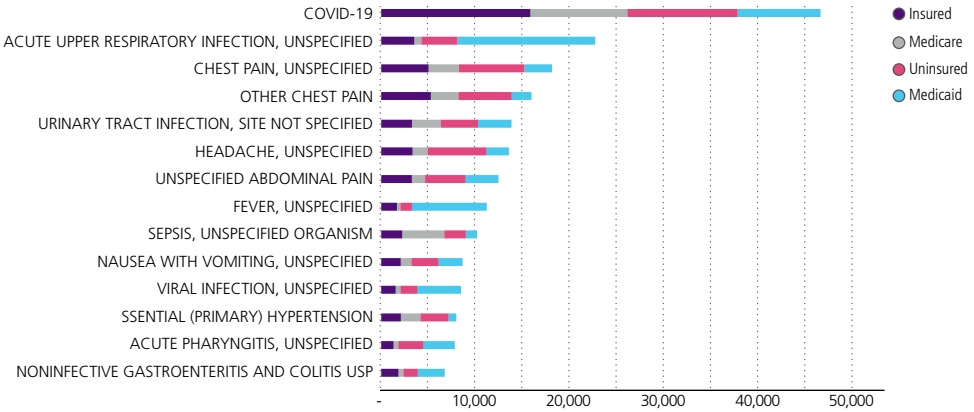
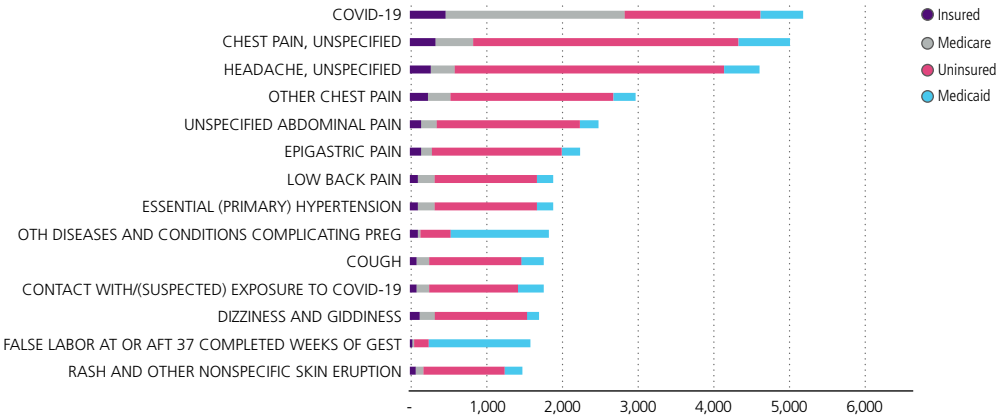


FIGURE 241: Parkland ED Visits Top Diagnosis 2021



Data Source: DFWHC Foundation Regional Data

SUMMARY OF FINDINGS

Health in Dallas County continues to be characterized by significant inequities. Hispanics and African Americans continue to experience an undue burden of death and decreased quality of life from preventable and controllable chronic diseases.

In this 2022 CHNA assessment, the representation from community members was expanded and deepened through focus groups and a survey. The voice of the focus groups echoed the concerns shown in the quantitative data and analytics including local socioeconomic factors.

The 2019 CHNA Implementation Plan addresses most of the findings. It is expected that the evaluation results in December 2022 will show early promise and gains toward tempering and reversing disparities in the health and well-being of the Dallas County community.

Chronic Diseases

- Heart disease and cancer, remain the top two leading causes of death in Dallas County.
- African Americans continue to have the highest mortality rate for heart disease and cancer.
- Hispanics bear the highest COVID-19 mortality rate when compared to other races and ethnic groups. In 2020, the leading cause of death for Hispanics was COVID-19.
- Diabetes mortality rate increased from 18 to 21 per 100,000 from the previous CHNA.
- The demand for diabetes outpatient services for adults is driven by change in population patterns. Between 2019 and 2024, the demand is expected to grow 22% by 2024 and to 44% by 2029.

Behavioral Health

- The pandemic increased stress levels related for low income individuals and created challenges related to food access, housing costs, access to healthcare providers and health outcomes among Hispanics and African Americans.

Next Steps

As required by the ACA, Parkland and DCHHS will make this report available to the public by posting at the website addresses provided below and making hard copies available to the public.

Parkland
https://www.parklandhealth.org/home

DCHHS
https://www.dallascounty.org/departments/dchhs/

The findings of this report will be used to make informed decisions in the planning and development of an implementation plan.

Social Risk Factors

Poverty

- African Americans have the highest poverty rate (19.10%) in Dallas County followed by Hispanics (18.40%).
- The city of Hutchins' poverty rate (31.3%) is higher than all other cities. It is followed by Wilmer (19.5%), Dallas (18.1%) and Lancaster (16.7%).

Access to Food

- Dallas County has large areas deemed low income and low access to food, particularly in the southeast area.

Access to Care & Coverage

- Balch Springs and Cockrell Hill have the highest rate of uninsured populations (30% and 29%, respectively) followed by Hutchins (27%).
- The southeast area of the county has limited availability of healthcare providers.
- 22.5% of the Dallas County population has medical debt.

Maternal and Child Health

- Pregnant Hispanic and Black/African American non-Hispanic women in the southern sector of the county with diabetes and chronic hypertension experience worse prenatal and postpartum outcomes than women who reside in other areas of the county.
- Children who reside in the southern sector of Dallas County have higher risk of asthma.
- Demand for pediatric behavioral health continues to grow.

Burden Related to Housing Costs

- ZIP Codes located in the southeast region of the county have a higher mortgage forbearance rate than other ZIP Codes.
- There are 20 affordable and available rental units per 100 Extremely Low Income (ELI) renter households.
- 85% of extreme low-income renter households spend more than 50% of their household income on housing.

Community Engagement

- The CHNA on-line survey responses demonstrate that patients prefer texting as a communication method.
- The survey also found that patients trust their doctor the most when needing health information.

Public Health System

- The process and restrictions pertaining to data sharing across public health and healthcare systems delay preemptive planning and response to chronic conditions.
- The increase in chronic disease rates in Dallas County calls for health systems and stakeholders to reevaluate their approach to patient activation and chronic disease self-management strategies.

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NOTES

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