

Executive Statement

OU Medical Center is the only comprehensive academic hospital in the state, offering the widest range of medical and surgical services in the region. As a safety net hospital, a majority of OU Medical Center's patient population has highly complex health needs and are often underserved including low-income older adults. The variety of patients served, along with the work performed, aligns with the principles of OU Medicine's mission to improve the lives of all people. In the summer of 2019, OU Medicine began its first, triennial community health needs assessment – the 2020 Community Health Needs Assessment (CHNA). This section's purpose is to explore prioritized health needs and to identify the specific health-impacting factors, health disparities and community strengths.

Approach

OU Medical Center's patient population consists of people who come from all over Oklahoma but are concentrated the Oklahoma City metropolitan area. As such the focus of this portion of the larger community health needs assessment effort will mirror larger statewide impact as well as within the primary service area and the neighborhoods closest to OU Medical Center. The CHNA concentrates on finding potential gaps in health outcomes and identifiable health disparities. Data sources used included Centers for Disease Control and Prevention, the US Census Bureau, Oklahoma State Department of Health, Oklahoma Department of Mental Health and Substance Abuse, and more.

Along with exploring statistical evidence, the OU Medicine CHNA team worked with an OUMC-specific advisory committee to gather input from organizational leaders. By having hospital-specific outreach combined with the community-wide effort, the aim was to create a holistic approach to unearth gaps and opportunities to improve health outcomes. This needs assessment will continue to be revisited as we gain a deeper understanding of the true impacts of the COVID 19 pandemic on the Oklahoma community.



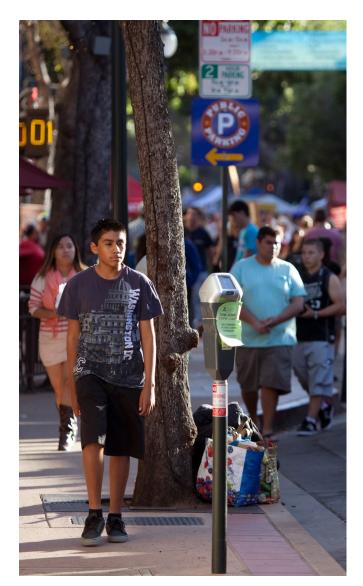
Estimated Median Household Income

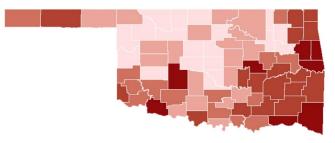
\$76,000 \$73,965 \$72,000 \$70,000 \$68,000 \$66,644 \$64,000 \$63,574 \$60,000 \$58,000 Oklahoma City Oklahoma United States

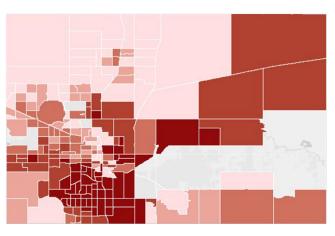
Source: Estimated median family income for the Oklahoma City area, state and nation (U.S. Census Bureau, American Community Survey 5-year estimates (2018)).

Community Context

In rural and urban areas of Oklahoma, poverty restricts access to safe communities by limiting opportunities for safe homes, quality education and healthy food. Surrounding OU Medical Center and the Oklahoma Health Center are a variety of middle and low income neighborhoods which include some of the most disinvested environments in the city. The poverty level among people living in proximity to the OU Medical Center contributes to the area exhibiting some the worst health outcomes in the state and, at times, even nationally. In Oklahoma City, we see this lived out with the inequitable distribution of life expectancy. For neighborhoods in zip code 73145, we see that the average life expectancy from 2013 to 2015 was approximately 64 years, while in zip code 73131 the average life expectancy was 82 years.



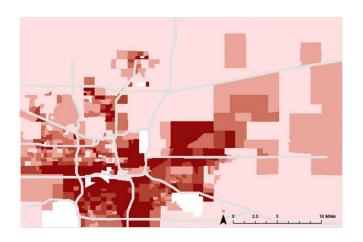




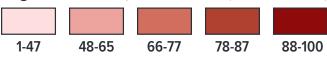
Legend | Percentage of Adults Reporting Experiencing Poor Health

0-10 11-12 13-14 15-18 19-31

Notably, for all members of a family living in poverty, health outcomes grow worse as poverty and associated stresses increase. More Oklahomans are likely to die from intentional injuries - homicide or suicide - than the average American and those statistics worsen among Oklahoma City residents." In particular, the rate at which people die from gun-related deaths is highest in neighborhoods adjacent to the Oklahoma Health Center. III During this CHNA process, stakeholders identified communityled organizations that have been able to perform transformative work aiding in navigation of that environment: the church community, black-owned business networks, and organizations such as the Urban League, Restore OKC the OKC Health Taskforce, the Black Chamber of Commerce and more. These organizations are critical engines of hope.



Legend | Area Deprivation Index (National Rank)



Likewise rural communities also experience disproportionately poor health outcomes. Average county life expectancies in Oklahoma range from 71.2 to 79.7 years while the national average is 78.54 years. Those with some of the lowest average life expectancies are rural areas of the state. This geographic distribution of opportunity mirrors poverty and education levels and can serve as a guide to better understand where intervening may be the most effective.

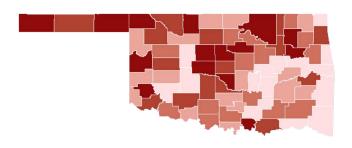
Prioritized Population

The OU Medical Center advisory committee identified mental health, older adult health, housing and access to care to be prioritized health needs.

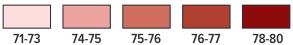
Older Adult Health

Age is a demographic characteristic that innately impacts health outcomes. Biological and genetic factors that influence cognitive and physical functioning increase an older person's likelihood of experiencing poor health. Age also may be related to use of Medicare and Medicaid resources.

Likewise when social supports and relationships, are limited, people may be at increased risk for poor health outcomes, including myocardial infarction, autonomic disregulation, cardiovascular disease, cancer and high blood pressure. VI, VIII Through COVID 19, older adults' vulnerabilities are highlighted through their higher likelihood of dying if infected. Notably, older adults who are socially isolated are at increased risk for depression and Alzheimer's disease as well as heightened risk for falls. VIII, IX Falls are both a leading cause of death among older adults in Oklahoma as well as the most common reason older patients are brought into the trauma center. As the impacts of COVID 19 unfold, OU Medicine will be monitoring the needs of and serving older adults.





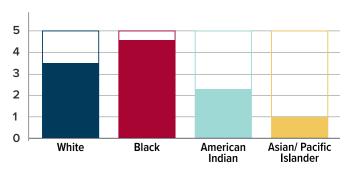


Prioritized Health Outcomes

Mental Health

Based on heightened levels of adverse childhood experiences (ACE) and high suicide and homicide rates, stakeholders recognized the need to prioritize mental health in the 2020 community health needs assessment. While improvement in mental health services is a statewide priority, the need is particularly notable in neighborhoods surrounding the Oklahoma Health Center, given historical and ongoing structural trauma in the area.

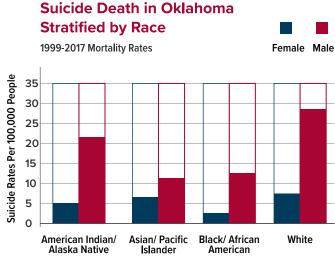
Mental Health Hospitalizations among Oklahomans 2016 Crude Hospital Discharge Rate



Source: Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2018, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at http://www.healthok.gov/ok2share.

Gender bias, racism and other systems that limit opportunities to achieve health, operate through all social environment levels. These systems influence perceived levels of health, mental health, social exclusion, isolation, heightened exposure to violence, greater incidents of hospitalization and extended recovery times, and mortality rates.x,xi,xii,xiii,xiv,xv For immigrants, social isolation is often experienced through few culturally appropriate services, discrimination, language barriers, social insecurity and unemployment. As a result of these behaviors, immigrants can be at increased risk for poor mental health outcomes including behavioral disorders, posttraumatic stress disorder and depression. Certain mixtures of identities are associated with suicide: white males are notably at greatest risk for dying by suicide. Exposure to interpersonal violence, poor mental health

behaviors including depression and posttraumatic stress disorder, and substance-use disorders can also lead to higher rates of self-harm and suicide.^{vii}

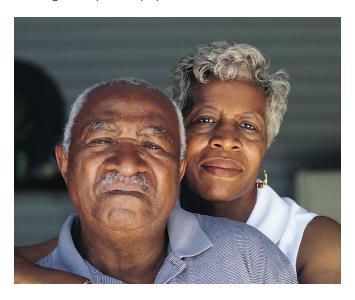


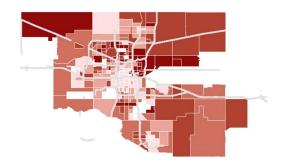
Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, released Dec. 2018. Data are from the Multiple Cause of Death Files, 1999-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.qov/ucd-icd10.html on Dec. 31, 2019

Prioritized Social Determinants of Health:

Access to Healthcare

Access to healthcare is a tremendous challenge for Americans and Oklahomans alike. Through the external advisory process, several Oklahoma-specific barriers to care were identified including: access to general resources, healthcare delivery system, provider shortage and patient population influencers.





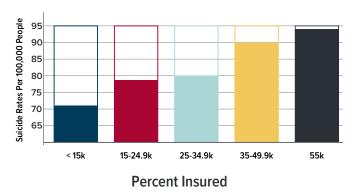
Legend | Estimated Percent of Adults Who Received a Checkup in the Last Year



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. 500 Cities Project Data [online; Accessed: Jan. 5, 2020]

Patient population influencers and access to resources: Poverty is known to create barriers to healthcare access. Barriers to healthcare often perpetuate poor health outcomes and health inequities. Studies identify three prevalent barriers to care associated with poverty: transportation, childcare and information about free and discounted healthcare options. Additionally, poverty has undeniable impacts on individual health, which impacts care utilization, including: poor overall physical health, low birth weight, lead poisoning, depression, stunted growth, learning disabilities and developmental disabilities. Poverty and income levels are tied to a lack of health insurance which has clear connections to negative health outcomes., To illustrate why this is a need, Oklahoma's uninsured rate among women who are in their birthing years is almost double the national average.ix

Percent of the Oklahomans Who are Insured by Income Levels (2018)

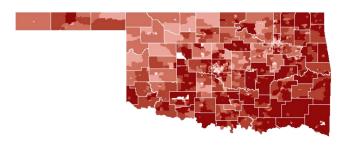


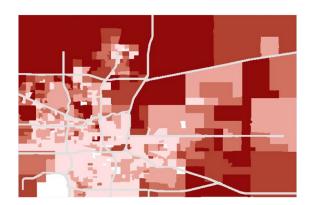
Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. [accessed Jan. 10, 2020]. URL: https://www.cdc.gov/brfss/brfssprevalence/.

Healthcare Delivery System and Provider Shortage:

Oklahoma has 131.2 primary care physicians per 100,000 people compared to the national average of 159.6 per 100,000 people.xxv This difference heightens when exploring the frequency of physicians from different racial groups, and rural and urban environments. A person's nativity can also impact how they interact with the healthcare system. Immigrants may experience healthcare-limiting social isolation through many mechanisms: limited culturally appropriate services as well as unemployment and language barriers.xxvi Approximately 31,000 households in Oklahoma are considered limited English-speaking households.xxvii Likewise, race has real implications for healthcare access as well.xxviii It is well known that insurance rates between races differ, largely due to financial inequities.xxix Studies also show when individuals receive care from providers of the same race, they have improved experiences. However many of the race-specific perceptions among patients of color may be related to individual experiences outside of the healthcare institution.xxx

Percent of Household Income Devoted to Housing and Transportation





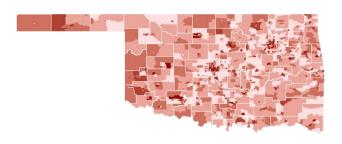
Source: Tegeler, Philip, and H. Chouset. "The "housing+ transportation index" and fair housing." JOURNAL OF POLICY ANALYSIS AND MANAGEMENT 811 (2007): 811-830. https://htaindex.cnt.org/map/ Accessed: Jan 2020

Housing

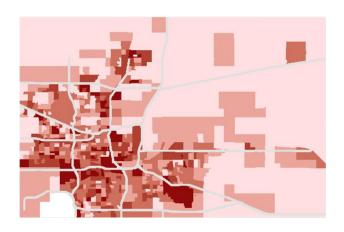
When people spend a high percentage of their income on housing, fewer dollars remain to purchase necessities, such as healthcare, education, clothing, transportation and food. Stress levels and mental health can be improved by consistent access to quality, stable housing. Housing instability has strong ties to poor access to healthcare, childhood malnourishment, developmental disabilities, poor mental health outcomes and drug use. For Oklahomans, there is an uneven distribution of housing instability. Costburdened homes ranges from 4% to 23% of households from county to county.xxxi 12% of all Oklahoma household devote more than half of available income on housing.xxxii Almost half of Oklahoma children living in poverty (44%) are in households where more than half of household income is spent on housing. This fact creates barriers to transportation, medical care and healthy foods. In addition, the neighborhood

and general location of housing have tremendous impact on health outcomes.xxxiii Those who reside in neighborhoods with access to quality amenities, including parks, fresh and healthy food options, stable employment opportunities and a variety of transportation options, tend to experience more positive health outcomes. Similar to the experience of many communities of color in the United States, the area surrounding OU Medicine's downtown campus is a food desert without direct access to healthy foods, has a comparatively high volume of brownfield sites, and exhibits other environmental risk factors which lead to poor health outcomes.xxxiv, xxxv

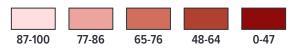
Percent of Household Living in Owner Occupied Units



Percent of Household Living in Owner Occupied Units in Oklahoma County



Legend | Percentage of Households Living in Owner Occupied Units



End Notes & Citations -

i Oklahoma City-County Wellness Score, Oklahoma City-County Health Department Accessed: Jan. 2020

ii Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2018, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at http://www.health.ok.gov/ok2share.

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iv Timiras, Paola S. Physiological basis of aging and geriatrics. CRC Press, 2002.

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vi Morrell, S., Taylor, R., & Kerr, C. (1998). Jobless. Unemployment and young people's health. Medical Journal of Australia., 168(5), 236-240 vii Umberson D, Montez JK. Social Relationships and Health: A Flashpoint for Health Policy. Journal of health and social behavior. 2010; 51(Suppl):S54-S66. doi:10.1177/0022146510383501.

viii Research Summary 2: Social Inclusion as a determinant of mental health and wellbeing (2005). VicHealth. Retrieved from:

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ix Pohl JS. Falls and the Social Isolation of Older Adults in the National Health and Aging Trends Study. Nursing – Seattle.

http://hdl.handle.net/1773/37198 Accessed: March 2020

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xiii Green, Mark A., Clare R. Evans, and Subu V. Subramanian. "Can intersectionality theory enrich population health research?." (2017).

xiv López, Nancy, and Vivian L. Gadsden. "Health inequities, social determinants, and intersectionality." NAM Perspectives (2016).

xv Burnette, Catherine Elizabeth, and Charles R. Figley. "Historical oppression, resilience, and transcendence: can a holistic framework help explain violence experienced by indigenous people?" Social Work (2016): 1-8.

xvi Stewart M, Anderson J, Beiser M, Mwakarimba E, Neufeld A, Simich L, Spitzer D. Multicultural Meanings of Social Support among Immigrants and Refugees. International Migration. 2008; 46: 123–159. doi:10.1111/j.1468-2435.2008.00464.x

xvii American Psychological Association. Undocumented Americans. http://www.apa.org/topics/immigration/undocumented-video.aspx#vii xviii Litaker, David, Siran M. Koroukian, and Thomas E. Love. "Context and healthcare access: looking beyond the individual." Medical care (2005): 531-540.

xix Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. Smedley BD, Stith AY, Nelson AR, editors. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington (DC): National Academies Press (US); 2002. xx Ahmed, Syed M., et al. "Barriers to healthcare access in a non-elderly urban poor American population." Health & social care in the community 9.6 (2001): 445-453.

xxi Brooks-Gunn J, Duncan G. The Effects of Poverty on Children. The Future of Children. 1997; 7(2), 55-71. doi:10.2307/1602387

xxii Majerol M, Newkirk V, Garfield R. The uninsured: a primer: key facts about health insurance and the uninsured in America. Menlo Park, CA: Kaiser Family Foundation; 2015.

xxiii Institute of Medicine (US) Committee on Health Insurance. America's uninsured crisis: consequences for health and health care. Washington (DC): National Academies Press (US); 2009.

xxiv https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/Uninsured_women/state/OK Accessed: March 2020 xxv America's Health Rankings analysis of special data request for information on active state licensed physicians provided by Redi-Data,

Inc., Sept. 23, 2019; U.S. Census Bureau Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018, United Health Foundation, AmericasHealthRankings.org, Accessed 2020.

xxvi Shaw M. Housing and Public Health. Stewart M, Anderson J, Beiser M, Mwakarimba E, Neufeld A, Simich L, Spitzer D. Multicultural Meanings of Social Support among Immigrants and Refugees. International Migration. 2008; 46: 123–159. doi:10.1111/j.1468-2435.2008.00464.x xxvii US Census Bureau, American Community Survey 5-year estimates (2018)

xxviii Stone, John. "Race and healthcare disparities: overcoming vulnerability." Theoretical medicine and bioethics 23.6 (2002): 499-518. xxix Mueller, Keith J., Kashinath Patil, and Eugene Boilesen. "The role of uninsurance and race in healthcare utilization by rural minorities." Health Services Research 33.3 Pt 1 (1998): 597.

xxx Malat, Jennifer, and Michelle van Ryn. "African-American preference for same-race healthcare providers: the role of healthcare discrimination." Ethnicity and Disease 15.4 (2005): 740.

xxxi University of Wisconsin Population Health Institute. County Health Rankings 2019.

 $xxxii\ University\ of\ Wisconsin\ Population\ Health\ Institute.\ County\ Health\ Rankings\ 2019.$

xxxiii Shaw M. Housing and Public Health. Stewart M, Anderson J, Beiser M, Mwakarimba E, Neufeld A, Simich L, Spitzer D. Multicultural Meanings of Social Support among Immigrants and Refugees. International Migration. 2008; 46: 123–159. doi:10.1111/j.1468-2435.2008.00464.x xxxiv Oklahoma Food Banks. (2017). An Overview of Food Deserts in Oklahoma: June 2017.

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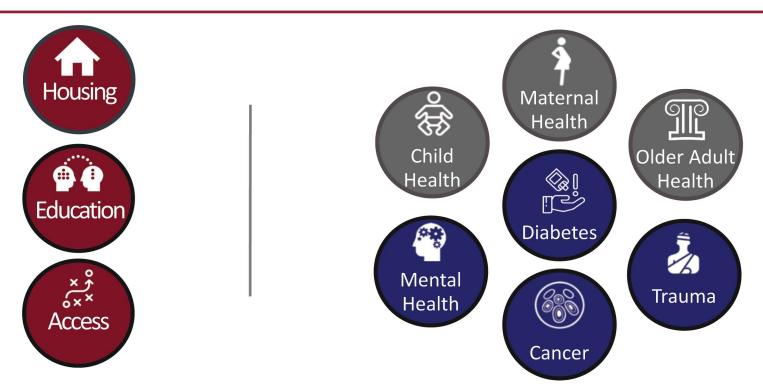
Implementation Plan



As both a premier healthcare provider and a member of the Oklahoma City community it is our duty to prioritize the well-being of our community. Through a Community Health Needs Assessments (CHNAs) priority areas of community need are identified. An implementation plan is then used to serve as an action-oriented effort to address and alleviate these needs wherever possible. Implementation Plans are built out of Initiatives that serve to apply resources to these priority needs in an effort to mitigate the impact on our community.



System-Wide Health Need Priorities



The OU Health 2020 Community Health Needs Assessment prioritized the following needs: Housing, Education, Access to Care, Mental health, Cancer, Diabetes, Trauma, and Child, Maternal and Older adult health. Some overlap exists between these priority areas and some initiatives address multiple priority areas.



University of Oklahoma Medical Center Priorities



Through the 2020 Community Health Needs Assessment the University of Oklahoma Medical Center prioritized the following needs: Housing, Access to Care, Mental health, and Older Adult Health. Some overlap exists between these priority areas and some initiatives address multiple priority areas. These hospital specific priority areas allow for the system to better collectively address the community needs.



Housing-Specific Activities

	Housing	Access	Mental Health	Older Adults
Establish Anchor Institution Strategies	•	0	0	0
Explore and Mitigate Role of Housing on Patient Outcomes	•	0	0	•
Older Adult Falls Prevention Efforts	•	0	0	•



Legend

- Likely Direct Impact on Priority
- O Likely Indirect Impact on Priority

Access-Specific Response

	Housing	Access	Mental Health	Older Adults
Improve Care Coordination through EPIC Apollo Mission and coordination with community resources	0	•	•	•
Actively Engage with the "All-Inclusive and Equitable OU Health" Initiative	0	•	•	0
Support the Breast Health Network		•		0
Further Healthcare Access Research Initiatives		•	0	0
Deepen and formalize key partnerships with community based clinics/ clinicians that reflect the community served		•		0
Doc Talks and Live to Give program		•	0	0



Legend

- Likely Direct Impact on Priority
- O Likely Indirect Impact on Priority

Initiatives: Housing

Establish Anchor Institution Strategies within Enterprise

Anchor Institutions are organizations that invest in their community with the intention of building bridges between the organization and the members of the surrounding community. This process can occur through a variety of efforts and investments including the addressing of social needs and social determinants of health. Anchor institution strategies can influence housing through its many pillars of community wealth building as well as place based investments. By establishing anchor institution strategies, The University of Oklahoma Medical Center is engaging and exploring opportunities to better influence housing insecurity within the community.

Explore and Mitigate Role of Housing on Patient Outcomes

As a complicating factor for both the length of stay among our patients as well as a contributor to poor community health outcomes, housing is a new area that the University of Oklahoma Medical Center is exploring how to impact. During the COVID-19 Pandemic partnerships have deepened with the Oklahoma City Community Foundation, Oklahoma City County Health Department, other area hospitals and local housing `non-profits to develop a COVID-specific housing response. Building off of these efforts and by partnering with the community based organizations and localities, the University of Oklahoma Medical Center and OU Health will develop a longer term approach to influence housing.



Initiatives: Housing

Older Adult Falls Prevention Efforts

For older adults who choose to age in place, supporting that effort not only has potential to positively impact mental health, it also may support longer economic independence. One major barrier to aging in place is falls; among older adults, falling a leading cause of death. In order to prevent falls the University of Oklahoma Medical Center has historically been a leader in our community's falls prevention efforts. This program partners with regional and statewide injury prevention efforts and maintains a train the trainer falls prevention curriculum to ensure the broadest impact.



Initiatives: Access

Improve Care Coordination through EPIC Apollo Mission and coordination with community resources

In addition to the work within the Apollo mission within Epic's Healthy Planet, this effort is intended to build off of community-based resources and ongoing initiatives to further enhance patient care inside and outside of OU Health. Through this effort, the University of Oklahoma Medical Center care coordination staff will coordinate with the larger EPIC implementation to ensure there is a solid continuum of care for patients to have the highest level of access possible when working with providers around the community. This will also involve engaging with community stakeholders to determine strong communication between organizations as well.

Actively Engage with the "All-Inclusive and Equitable OU Health" Initiative

A more equitable and inclusive environment is necessary to improve poor health outcomes in our community. It is the duty of any organization serious about improving health to explore and implement ways to be more equitable and inclusive. While OU Health provides a series of effective seminars on racial equity, it would be to the benefit of OU Health and our community to implement a more comprehensive, strategic initiative with a steering committee moving it forward. The steering committee should form throughout the 2021 fiscal year to determine the next course of action



Initiatives: Access

Support the Breast Health Network

The Breast Health Network is Oklahoma's largest and most comprehensive group of board-certified breast radiologists and breast health specialists. Supporting their work means providing opportunities for annual screenings, complete evaluation, and accurate diagnosis.

Further Healthcare Access Research Initiatives

Through alignment with existing clinical research efforts we aim to develop models by which to increase the overall impact of efforts on our community health goals. Through the aid of OPHIC, the PARTNER Council (Patient, Practice, & Academic Resource Team for New Evidence from Research) seeks to align community health related activities with their strategic direction. This work involves supporting the existing University of Oklahoma Medical Center practitioners engaged in this work as well as expanding the number of providers engaged. It also means supporting the community involvement in the direction of the research activities.



Initiatives: Access

Deepen and formalize key partnerships with community based clinics/ clinicians that reflect the community served

Working with our community partners, we are deepening the work we do and partnerships we work through.

Long lasting partnerships with community based clinicians are needed to strengthen bonds within the community. This effort is continuing those relationships and identifying new ways we can work together. These efforts may be outside of the traditional clinical model. Examples of this include supporting our educational efforts by partnering with clinics to serve as clinical hosts for our educational affiliates or working together on community outreach events.

Doc Talks and Live to Give program

The University of Oklahoma Medical Center and their staff are proud participant's in OU Health's Doc Talks initiative. Doc Talks are a tool to allow greater access to information via OU Health's provider pool. During COVID, doctors from across the OU Health enterprise have been made available to help guide community partners with any questions they may have. Coupled with the Live to Give program, OU Health volunteers give time supporting numerous charitable causes and made a positive difference throughout the community. This awareness and time is used to further promote healthful behaviors.



For more information about this document and its contents, please contact Halley Reeves, Vice President of Community Health Impact.

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