Texas Children's Hospital

2020–2022 Community Health Implementation Strategy

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Introduction

In order to fulfill the requirements of Section 501(r)(3) of the US Tax Code, not-for-profit hospitals must conduct a community health needs assessment (CHNA) at least once every three years, and adopt an Implementation Strategy to address the health needs identified in the CHNA, shortly thereafter. The Texas Children's Hospital 2019 Community Health Needs Assessment was approved by the Hospital's Board of Directors in November, 2019 and the Texas Children's 2020-2022 Implementation Strategy was approved in April, 2020.

Community Served

For Community Benefit reporting purposes, Texas Children's defines the community it serves as the Houston-The Woodlands-Sugar Land Metropolitan Statistical Area (MSA), also known as "Greater Houston." Greater Houston consists of nine counties: Harris, Fort Bend, Montgomery, Brazoria, Galveston, Liberty, Waller, Chambers, and Austin. Additionally, there are five major cities contained within Greater Houston: Houston, The Woodlands, Sugar Land, Baytown, and Conroe. Houston–The Woodlands–Sugar Land is currently the fifth-most populous MSA in the United States. While the Texas Children's Hospital Network of Care treats patients from around the world, the majority of our patients (90.9% in fiscal year 2018) come from Greater Houston.

Methods

Shared Initiative – Key Informant Interviews

In fulfillment of its 2018-2022 Strategic Plan to take a systems-focused approach to community health, the Episcopal Health Foundation (hereafter "the Foundation") coordinated a "Key Informant" interview initiative in 2018 to support four Greater Houston hospital systems in preparing their 2019 community health needs assessments. The collaborating hospitals include CHI St. Luke's, Houston Methodist Hospital, Memorial Hermann Health System, and Texas Children's Hospital.

The goal of the CHNA Shared Initiative was to collect qualitative data from a group of stakeholders representing diverse populations in Greater Houston. Through this collaborative

effort, the four hospitals sought to minimize burden to respondents who may receive multiple requests for interviews by the participating hospitals for their respective CHNAs.

The Foundation hired Health Resources in Action (HRiA), a nonprofit public health institute, to conduct interviews with respondents identified by the four hospitals and to analyze those interviews for prominent themes. This report summarizes the results of those analyses. Though the Texas Children's service area, Greater Houston, is only nine counties, respondents are distributed across ten counties. Interviews were conducted with stakeholders, community leaders, providers, and staff from a wide range of organizations across sectors, including public health, health care, education, housing, transportation, immigrant services, the faith-based community, local government, early childhood, and social services.

The University of Texas School of Public Health – Focus Groups

In the spring of 2019, Texas Children's formed a partnership with the University of Texas Health Science Center at Houston, School of Public Health (UTSPH) to afford public health graduate students the opportunity to gain real-world public health experience, by helping Texas Children's complete its 2019 Community Health Needs Assessment. Nine graduate students enrolled in the PH 1112 Community Needs Assessment class conducted focus groups with Texas Children's social workers, financial assistance program workers, and health care providers. Through a focus group discussion guide the team gathered information on community and systemic health factors and suggestions for improving community health. At each focus group, two students led the focus group questioning while one student took notes and recorded the session. Other students listened to the recordings, highlighted key themes, and presented key findings.

Ongoing Participation in Local Community Health Initiatives

Texas Children's Department of Government Relations and Community Benefits participates in several community health initiatives, workgroups, and councils throughout Greater Houston providing ongoing insight into the health needs of the communities we serve.

Prioritized Community Health Needs

Through the extensive process outlined in the methods section of this report, which included key informant interviews, focus groups, and ongoing participation in community health efforts in the region, Texas Children's identified six key health needs. Two teams of graduate students from the UT School of Public Health then utilized extant data sources and academic literature to thoroughly investigate each of these health needs. The findings were brought before the Hospital's Community Benefits Workgroup on June 4, 2019 for guidance on prioritization from the perspective of the Hospital's Network of Care.

The Community Benefits Workgroup consists of physician and administrative leaders from across the Texas Children's Network of Care, who provide critical guidance to the Community Benefits Department regarding community health issues. The Texas Children's Network of Care includes Texas Children's Hospital, Texas Children's Pediatric Associates, Texas Children's Health Plan and more. Texas Children's mission shapes the Community Benefit Workgroup's guidance: to create a healthier future for children and women throughout our global community by leading in patient care, education, and research. The workgroup's decision making on our initiatives aligns our System's four core values: embracing freedom, leading tirelessly, living compassionately, and amplifying unity. With this mission and core values to guide them, the workgroup prioritized Texas Children's CHNA key community health issues in the following order:

(1)   Mental and Behavioral Health

(2)   Access to Care

(3)   Social Determinants of Health

(4)   Maternal Health

(5)   Environmental Health (tie)

(5)   Obesity and Chronic Disease (tie)

2020–2022 Implementation Strategy Methods

In the Fall of 2019, Texas Children's Department of Government Relations and Community Benefits partnered with a team of graduate students from the UT School of Public Health to review the latest scientific literature on evidence-based interventions to address the community health needs identified and prioritized in the Hospital's 2019 Community Health Needs Assessment (CHNA). In addition to conducting a literature review, the students also conducted a series of subject matter expert (SME) interviews. This fieldwork helped determine the top evidence-based strategies for each of the six community health needs in the Texas Children's 2019 CHNA. Per the requirements of Section 501(r)3 of the tax code, the tables below provide a description of the actions the hospital plans to take over the next three years, the anticipated impacts of these actions, and analysis of potential community collaborations for each suggested action.

COVID-19 Considerations

Many of the needs identified in the Texas Children's 2019 Community Health Needs Assessment are more pronounced in low income, vulnerable communities. The effects of the COVID-19 crisis will likely exacerbate community health needs in the region, especially in vulnerable communities. While many of the proposed actions in this Implementation Strategy will likely be delayed or altered because of the COVID-19 crisis, they will undoubtedly become more important and impactful in its aftermath, as communities grapple with added physical, mental, and financial strain in the months and years ahead.

Implementation Strategies

(1) Mental and Behavioral Health

Respondents to 2019 CHNA key informant interviews and focus groups reported alarming rates of anxiety and depression among residents, as well as complex conditions like schizophrenia and bipolar disorders. They also noted rising rates of suicide in the community, as well as incident homelessness and incarceration, oftentimes linked to untreated mental health issues. Between 2007 and 2017, Montgomery County saw an 83% increase in suicide related deaths (McIntyre, 2019). Key informants identified several factors negatively affecting residents' mental health including stress, technology and media, and unstable family life. Several respondents reported that trauma associated with natural disasters, most recently Hurricane Harvey, also cause distress among community members.

Of great concern to respondents was untreated mental illness, which they attributed to lack of access to care, limited service availability, cost barriers, and stigma. Respondents further expressed that the demand for mental health services far exceeds the supply, as Texas remains among the lowest of the 50 states in terms of public investment in mental health services. An estimated 12 million individuals in Texas reside in federally designated Health Professional Shortage Areas (HPSA), requiring an estimated 585 additional practitioners to adequately cover each shortage area. Finally, several respondents commented on the growing number of mental health providers who choose not to accept insurance, and the lack of providers who speak languages other than English.

Action 1	Support school-based efforts aimed at prevention and early intervention in mental health.
Description	Mental Health America, the nation's leading community-based non-profit dedicated to mental illness, points out that schools provide an important opportunity for addressing the mental health and well-being of children. This is because they can provide students with the tools they need to be mentally well, while also identifying early signs that a child might need extra support (MHA, 2018).

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Anticipated Impact	In "The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions," Durlak et al demonstrate the value of developing comprehensive school mental health programs in helping students achieve academically and have access to experiences that build social skills, leadership, self-awareness, and caring connections to adults in their school and community (2011). Their analysis also points to a wealth of research indicating that when schools form partnerships with community-based organizations to promote mental health, significant improvements in school-wide truancy, discipline rates, and graduation rates are often realized (Durlak et al. 2011).
Resource Commitment	• In February of 2020, Texas Children's executed a multiyear gift agreement with the Girl Scouts of San Jacinto Council to promote their Girl Scouting in the School Day (GSSD) program. Girl Scouting in the School Day (GSSD) is a free leadership development program held during the school day, that provides an authentic Girl Scout experience to middle school girls in underserved communities where a lack of volunteers, transportation, and financial resources are often barriers to joining traditional Girl Scout troops. Preliminary analysis of pre and post surveys on the GSSD program in Dallas suggest that girls who participate see a 78% improvement in academic engagement, 84% improvement in stronger sense of self, 80% improvement in practical life skills, and 96% improvement in increased understanding of STEM (Tsikalas & Barnett, GSUSA 2012). • The Texas Children's supports an effort to disseminate technology-based interventions to aid in suicide prevention to school counselors and community-based mental health providers. Tools include: (1) The Safety Planning Assistant, a web-based tool that

	can aid behavioral health providers and school counselors in implementing the evidence-based Safety Planning Intervention (Stanley & Brown, 2012, 2018) with youth and their caregivers; and (2) The LEAD Intervention, a web-based intervention designed to reduce youth suicide risk by addressing perceptions of burdensomeness and social isolation. A free, web-based training and manual will be disseminated along with access to the intervention modules.
	• Texas Children's Department of Government Relations and Community Benefits, furthermore, is actively involved in the implementation of Texas Senate Bill 11, which was signed into law in June, 2019. The bill provides an additional $110 million over the next two years for school security and better access to mental health resources. It also requires districts to create multi-hazard emergency plans, use trauma-informed practices, and provide more training to staff.
Planned Collaborations	• The Girl Scouts of San Jacinto Council • Mental Health America of Greater Houston – Center for School Behavioral Health • Children at Risk

Action 2	Explore the logistics of forming an on-site crisis response team based out of the Texas Children's Trauma and Grief (TAG) Center.
Description	According the National Alliance on Mental Illness (NAMI), mental health crisis response services are a vital part of any mental health service system. A well-designed crisis response system can provide backup to community providers, perform outreach by connecting first-time users to appropriate services and improve community relations by providing reassurance that the person's needs are met in a mental health crisis.

	While the Harris Center for Mental Health and Intellectual or Developmental Disabilities (IDD) currently operates a mobile crisis outreach team for children and adults of Harris County, an additional crisis response team, based out of Texas Children's TAG Center, could potentially reach more people in other parts of the Hospital's community benefits service area. TAG is often called upon to provide mental health crisis outreach, including in the aftermath of Hurricane Harvey, the Santa Fe School shooting, Sutherland Springs Church shooting, and more. With a dedicated on-site crisis response team, TAG may be able to respond to more crises without significantly disrupting its operations.
Anticipated Impact	In a retrospective evaluation of mobile crisis response teams in the Atlanta area, researchers found that mobile crisis programs can decrease hospitalization rates for persons in crisis and can provide cost-effective psychiatric emergency services that are favorably perceived by consumers and police officers (Scott, 2000)
Resource Commitment	• The Texas Children's Trauma and Grief Center and the Department of Community Benefits are currently pursuing funding opportunities to support an on-site crisis response team.
Planned Collaborations	• The Harris Center for Mental Health and IDD • National Alliance on Mental Illness (NAMI) Greater Houston • Funding organizations

Action 3	Encourage collaborations between law enforcement agencies and mental health providers to decriminalize mental health crises.
Description	Individuals with mental illness are often detained and transported by law enforcement during instances of mental crisis. The National

	Alliance on Mental Illness (NAMI) estimates that over 2 million people with mental illness, most of which are non-violent offenders, are booked into the jail system annually instead of diverted into medical care to assess their mental health (NAMI, n.d.). The continued jailing of individuals committing non-violent crime who suffer from mental illness induces unnecessary stress, increases state and local law enforcement spending, and creates unwarranted burden on law enforcement.
Anticipated Impact	A 2019 economic assessment estimated that the cost for mental health treatment for one person per year at a local county jail ranges from $33,000-$168,000, while the cost for treatment for the same person through a jail diversion program is $35,000-$47,000; a potential savings per capita of up to $121,000 (Delgado et al., 2019). Utilizing only the most conservative estimates, jail diversion programs show potential savings of over 1.4 billion dollars per year compared with current spending (Delgado et al., 2019).
Resource Commitment	- Texas Children's Section of Public Health Pediatrics seeks to expand its collaboration with the Harris County Sheriff's Office and the University of Texas Medical Branch to study the needs of children with incarcerated parents. - Texas Children's is home to the Brief Behavioral Intervention (BBI), a short-term, evidence–based parent management training (PMT) intervention for children ages 2-6 years. This program aims to disrupt the "Preschool to Prison Pipeline" by providing parents with evidence-based tools to handle common behavioral problems in preschool-aged children, including non-compliance, attention-seeking behaviors, and aggression. Such interventions also improve the quality of the parent-child relationship, decrease parental stress, and provide parents with tools to advocate for their

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	children in the school setting (Axelrad, Butler, Dempsey, & Chapman, 2013).
Planned Collaborations	• Harris County Mental Health Jail Diversion Program • Houston Police Department-Mental Health Division • Pasadena Independent School District • The Harris Center for Mental Health and IDD • National Alliance on Mental Illness (NAMI) Greater Houston

(2) Access to Care

In the 2019 CHNA, many respondents and focus group participants noted that Houston has a substantial and well-respected health care infrastructure, but a large number of residents face challenges accessing medical care. Barriers include transportation, lack of insurance, cost, provider availability, and difficulty navigating the health care system. Access to care as a community health need substantially affects underinsured and uninsured residents, residents living outside of central locations in greater Houston, and residents requiring specialist appointments, particularly those with low incomes and/or whose preferred language is not English.

Respondents shared that despite passage of the Affordable Care Act (ACA), there are substantial numbers of adults and children who remain uninsured, in large part because the legislature failed to take up the issue of Medicaid expansion. Since Texas has the highest uninsured rate in the US for both children and adults, this is a significant challenge in access to care for both populations in Greater Houston (US Census Bureau). Several respondents, moreover, reported that health care services are concentrated in the urban areas, while outlying and more rural communities have fewer options. For those without cars, this creates an added burden since Houston does not have a well-developed public transit system.

Numerous respondents stated that access to specialists, such as mental health professionals, geriatricians, and providers experienced with developmental disabilities or co-morbidities, is particularly difficult, especially for people with lower incomes. Challenges in effectively utilizing health insurance and navigating a complex health care system are additional

barriers to accessing care. This complexity is often exacerbated by education levels, native language literacy, and cultural customs.

Action 1	Partner with community-based organizations to improve health insurance coverage in vulnerable communities.
Description	Extensive research indicates that health insurance coverage improves children's access to preventive checkups and medications, and to a medical home, where caregivers can meet health issues and developmental needs (CPPP, 2019). Medicaid, which serves over half of Texas newborns and two out of five Texas kids, is also linked to better educational outcomes and better health and economic well-being over time (CPPP, 2019). The Center for Public Policy Priorities (CPPP) estimates that of the 835,000 uninsured Texas children in 2017, at least 350,000 were eligible for Medicaid or CHIP.
Anticipated Impact	In "Outreach and Enrollment Strategies for Reaching the Medicaid Eligible but Uninsured Population," The Kaiser Family Foundation suggests that partnering with churches and other community organizations, including food banks, homeless shelters, and immigrant support organizations, is helpful for connecting with hard-to-reach communities (2016). In a study conducted on Latino families in California, who were eligible for Medicaid but not enrolled, most mothers (75.9%) reported that community organizations provided very useful help with children's insurance enrollment, and almost half (48.6%) preferred to receive enrollment assistance from community organizations (Manos, Leyden, and Resendez, 2001).
Resource Commitment	• For decades, Texas Children's has advocated for improving health insurance coverage policies, including efforts to expand

	Medicaid coverage for postnatal women for 12 months, and removal of income checks after 6 months of eligibility for children on Medicaid. Texas Children's Department of Government Relations and Community Benefits is currently coordinating a system-wide health literacy and health insurance enrollment campaign targeting YMCA locations, Boys and Girls Club locations, and schools in areas with high uninsured rates. Key personnel at community-based sites will be trained on how to identify and approach uninsured families and navigate them to staff that can provide application assistance.
Planned Collaborations	• The YMCA of Greater Houston • The Boys and Girls Club of Greater Houston • Houston Independent School District • Aldine Independent School District

Action 2	Continue to explore telehealth strategies to increase access to healthcare in vulnerable communities.
Description	The Health Resources and Services Administration (HRSA) defines telehealth as the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration.
Anticipated Impact	Dorsey and Topol, in the "State of Telehealth" argue that telehealth can expand the reach of medicine (2016). They point out that factors like age, sex, class, race, and geography are highly associated with the ability to access to care, which leads to profound social and geographic inequities in health care, but with the narrowing of the digital divide and the ubiquity of smartphones, telehealth can enable more people to receive care (Dorsey and Topol, 2016).

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Resource Commitment	• Established in 1993, the Texas Children's Center for TeleHealth was the first pediatric-based telemedicine program to go live. The Center for TeleHealth continues to facilitate timely diagnoses and treatments, link researchers and patient populations at a variety of sites throughout the world and promote networking among physicians, health care providers and institutions.
Planned Collaborations	• Texas Children's Centers for Women and Children • New Hope Housing Reed Location (Potential)

Action 3	Explore the use of ride-share services to help underserved communities access care.
Description	Lack of transportation, specifically for lower income residents, was identified by respondents in the 2019 CHNA as a top barrier to accessing health care. They noted that the large footprint of the city—and its sprawling nature—makes it difficult to get anywhere except by car. While there is a public bus system, respondents reported that using the system can be cumbersome and expensive.
Anticipated Impact	In a pilot study in Philadelphia, patients at an academic general internal medicine practice were offered a rideshare service during their reminder call 2 days before their appointment, and rides were prescheduled by research staff. In the adjusted model, controlling for patient demographics and provider type, the odds of showing up for an appointment before and after the intervention increased 2.57 times more in the rideshare practice than in the control practice (Chaiyachati, et al, 2018).
Resource Commitment	• Texas Children's Trauma and Grief Center, which is a subsidized health service primarily supported by grant funding, partners with

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	Lyft to help patients get to appointments. Texas Children's Department of Government Relations and Community Benefits will explore mechanisms to expand this model to other areas of the Texas Children's Hospital System, especially in underserved communities.
Planned Collaborations	• Ride-share companies (i.e. Uber, Lyft, etc) • The Texas Medicaid Program • Funding organizations

(3) Social Determinants of Health

Several respondents commented on the challenges posed by the social determinants of health, most importantly poverty, housing, education, and employment. Estimates suggest that as many as 19% of Texas children live in high poverty neighborhoods, which is linked to reduced quality in education, safety, access to healthy food, outdoor recreation areas, and health care resources (Nostikasari et al, 2017). This percentage is even higher for Hispanic children (30%) and Black children (23%) (Nostikasari et al, 2017).

Although respondents did not indicate that hospitals could play a singular role in addressing these issues, they suggest that the influence of larger systemic forces require more attention in order to improve health equity across the region. Some respondents shared that hospitals, with their stature in the community, could play a larger role in advocacy efforts. One suggested engaging with chambers of commerce, economic development councils, and local businesses to focus on issues like wages, housing development, and transportation.

Action 1	Advocate for evidence based programs and policies that improve the quality of life and health outcomes for children and families living in poverty.
Description	In "Poverty and Child Health in the United States," the American Academy of Pediatrics points out that almost half of young children in the United States live in poverty or near abstract poverty (2016). They further advise that poverty and related social determinants of health are linked to adverse health outcomes in childhood and adulthood, negatively affecting physical health, socioemotional development, and educational achievement (AAP, 2016). The American Academy of Pediatrics suggests that pediatricians and other pediatric health practitioners are uniquely equipped to assess the financial stability of families, link families to resources, and coordinate care with community partners (AAP, 2016). Facilitating pediatric health practitioners' capacity to provide this type of support and information to families served is vital to combatting poverty and related adverse health outcomes (2016).
Anticipated Impact	As the American Association of Pediatrics points out in "Blueprint for Children," Medicaid, SNAP, the EITC, Head Start, and other anti-poverty programs have had a demonstrable positive impact on health outcomes, school achievement, and workforce competitiveness (2016).
Resource Commitment	• Texas Children's is a charter member of the Greater Houston Coalition for Social Determinants of Health, whose stated mission is to establish a sustainable, data-driven, human-centered ecosystem of care that equitably addresses the social determinants of health among Greater Houston's communities. • In February of 2020, Texas Children's executed a multiyear

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	gift agreement with the Houston Food Bank to support their Food for Change initiative (FFC). Food for Change includes several programs aimed at creating economic and healthcare partnerships to address root causes and downstream effects of food insecurity. FFC's health programs include Food Rx, FIRST Link, and Core Connections Network.
Planned Collaborations	• Greater Houston Coalition for Social Determinants of Health • The Houston Food Bank

Action 2	Support efforts to increase access to quality early childhood education programs in economically disadvantaged communities.
Description	According to the Institute of Education Sciences, a branch of the US Department of Education, early childhood education is a broad term used to describe any type of educational program that serves children from birth through third grade. Early childhood education may consist of any number of activities and experiences designed to aid in the cognitive and social development of young children in their early formative years.
Anticipated Impact	In "Funding Childhood Poverty Programs is Key to Social Mobility," the Brookings Institute points out that children who participate in good early education programs are more likely to stay in school and to have strong educational outcomes (2017). Additionally, they point to research indicating that every $1 invested in high-quality early childhood education programs for children from low-income families saves $7 in social service costs (Brookings Institute, 2017).
Resource Commitment	• Through partnerships with child-serving organizations, local

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	governments, places of worship, school districts, public housing communities, WIC centers, public libraries, and safety net providers, Texas Children's Department of Public Health Pediatrics is focused on expanding the upWORDS program, a 14-week early language development program for low-resourced families with children aged 0-2 years. From 2016–2019 the upWORDS program served over 500 families.
	• Texas Children's will continue partnerships with The City of Houston Health Department and the Children's Museum to expand the Houston Basics Program, a free program empowering parents with skills and tools to support improved brain development in children for the first three years of life.
Planned Collaborations	• The City of Houston Health Department • The Children's Museum • UpWORDS Community Partners

(4) Maternal Health

According to a 2016 study published in the Medical Journal of Obstetrics and Gynecology, maternal mortality in the US skyrocketed by nearly 30% between 2000 and 2015 (Evans, 2018). Additionally, Texas maternal mortality rates doubled between 2010 and 2012 (Evans, 2018). Notwithstanding discrepancies between the Texas Department of State Health Services data and CDC data, as well as misreporting on death certificates, researchers argue that Texas' maternal mortality rate climbed to roughly 35 deaths per 100,000 live births since 2018 (UHF, 2019).

Lower income women were reported to be more likely to experience high-risk pregnancies and be affected by maternal health issues. Delayed access or inability to access prenatal care is a key concern for this group. One respondent shared that low-income women often delay accessing early prenatal care until they become approved for Medicaid coverage, a process that can take between 45 and 60 days. Another key informant stated that low-income women are more likely to change providers in mid-pregnancy, which disrupts continuity of care.

Several respondents also pointed out that lower income women generally have less access to basic gynecological services while also facing cost barriers to care for STD screening, treatment for gynecological conditions, and appropriate and effective contraception and family planning.

Action 1	Advocate for policies that increase access to health services during the year after pregnancy.
Description	In "It's Past Time to Provide Continuous Medicaid Coverage for One Year Postpartum," Emily Eckert argues that medical and behavioral health conditions must be managed and treated before the point of progressive severity to help curb maternal deaths in the postpartum period (2020). Extending Medicaid coverage for pregnant women from 60 days to 12 months postpartum, for example, would help women access the care they need to address health concerns after their pregnancy ends (Eckert, 2020). Current coverage does not allow ample time for women to access care for chronic conditions, treatment for substance use disorders, and behavioral or other mental health services, and this is a more critical barrier for mothers at lower SES (2020). The American College of Obstetricians and Gynecologists (ACOG) supports the suggestion to extend coverage, and at its June 2019 meeting, the American Medical Association's House of Delegates adopted a resolution supporting the extension of Medicaid coverage for women in the postpartum period (Eckert, 2020).
Anticipated Impact	A wealth of research suggests that extending coverage improves maternal health outcomes. Access to Medicaid expansion is associated with 1.6 fewer maternal deaths per 100,000 women compared with states without program expansion (Eckert, 2020).

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Resource Commitment	• Dr. Lisa Hollier, CMO at Texas Children's Health Plan, and Division Director in Obstetrics and Gynecology at Baylor College of Medicine, currently chairs the governor-appointed Texas Maternal Mortality and Morbidity Taskforce. • Dr. Hollier and Dr. Chris Greeley, Section Head of Public Health Pediatrics, are also on the Harris County Maternal Mortality Taskforce, which shares a similar mission as the state taskforce, but for Harris County. • Leaders at Texas Children's comprise a large part of the Texas Collaborative for Healthy Mothers and Babies (TCHMB) Executive Committee. The TCHMB is a multidisciplinary network of health professionals throughout the state whose mission is to advance health care quality and patient safety for all Texas mothers and babies, through the collaboration of health and community stakeholders in the development of joint quality improvement (QI) initiatives, the advancement of data-driven best practices, and the promotion of education and training.
Planned Collaborations	• The Texas Maternal Mortality and Morbidity Review Committee • The Texas Perinatal Advisory Council (PAC) • Texas Children's Health Plan - Centers for Women and Children • Texas Children's Pavilion for Women • The Nurse Family Partnership • Texas WIC • Healthy Texas Women • Healthy Futures of Texas

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Action 2	Support community-based care models to improve maternal health outcomes and promote postpartum wellness among vulnerable populations.
Description	Community-based care is an important component of providing a continuum of care for low-resource communities. The health and well-being of women, newborns, and children, furthermore, are inherently linked - when mothers are malnourished, ill, or receive insufficient care, their newborns are at increased risk of disease, morbidity, and premature death (Lassi, Kumar, and Bhutta, 2010).
Anticipated Impact	Results from a systematic review suggest that implementation of community-based interventions led to a 25 percent reduction in neonatal mortality; referrals to health facilities for pregnancy-related complication increased by 40 percent; rates of early breastfeeding increased by 94 percent; and health care seeking for neonatal illnesses increased by 45 percent, leading to decreases in neonatal and maternal morbidity (Lassi, Haider, and Bhutta, 2010).
Resource Commitment	• Texas Children's Section of Public Health Pediatrics was funded by the Texas Medical Center to work with Dr. Lucy Puryear, Medical Director of The Women's Place - Center for Reproductive Psychiatry, to pilot a home visitation program for women with postpartum depression. This pilot is aimed at narrowing the disparity gap in receiving mental health services.
Planned Collaborations	• The Texas Maternal Mortality and Morbidity Review Committee • The Texas Perinatal Advisory Council (PAC) • Texas Children's Health Plan - Centers for Women and Children • Texas Children's Pavilion for Women • The Nurse Family Partnership • Texas WIC

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	• Healthy Texas Women
	• Healthy Futures of Texas

(5)   Obesity & Chronic Disease (Tie)

With the latest recorded prevalence of obesity in Greater Houston at an average of 27.9% across counties, it is evident that obesity is a public health crisis (CDC Adult Obesity Facts). In fact, more than 1 in 3 adults in America are considered obese (CDC Adult Obesity Facts). Additionally, obesity accounts for healthcare costs ranging from $147 billion to $210 billion annually, due to related comorbidities such as hypertension, cardiovascular disease, and diabetes (RWJ - The State of Obesity). Several factors are associated with the rise in obesity rates, including sedentary lifestyles, dietary habits, and food insecurity. Many respondents mentioned that lack of access to healthy food, due to both lack of healthy food outlets and high cost of healthy foods, is a substantial barrier to healthy behaviors for lower income patients.

Action 1	Support community-based interventions that focus on diet and physical activity in families.
Description	Research suggests that community-based programs represent a feasible approach to assist individuals, families, and communities in developing healthy behaviors that promote and maintain weight loss.
Anticipated Impact	In a systematic review of community-based programs for obesity prevention and control, several of the studies found statistically significant improvements in healthy food choices, health-related quality of life, serum lipid and insulin levels, attitudes, efficacy, and perceived support on eating healthy and being physically active (Teixeria, 2011).
Resource Commitment	• Texas Children's partners extensively with the YMCA of Greater Houston, providing financial support for initiatives

	like the Diabetes Prevention Program and the Healthy Weight and Your Child Program. In addition, providers at Texas Children's Hospital and Baylor College of Medicine helped develop the YMCA's Kamp K'aana, nutritional summer camp for overweight children.
	• In the past, Texas Children's has supported an array of YMCA initiatives, including the construction of an adaptive sports complex for children with physical limitations, and the YMCA's Safety Around Water Initiative. In February of 2020, Texas Children's executed a multiyear gift agreement with the Houston Food Bank to support their Food for Change initiative (FFC). Food for Change includes several programs aimed at creating economic and healthcare partnerships to address root causes and downstream effects of food insecurity. FFC's health programs include Food Rx, FIRST Link, and Core Connections Network.
Planned Collaborations	• YMCA Greater Houston • Healthy Living Matters Collaborative • Houston Food Bank

Action 2	**Advocate for programs and policies that improve the nutritional quality of school lunches and breakfasts.**
Description	Researchers and advocates argue that schools play a unique role in influencing children's eating habits and lifelong behavior through the food and drink choices offered in cafeterias, hallway vending machines, and elsewhere on campus (Pew Charitable Trusts, 2017).
Anticipated Impact	In an analysis of improvements in the USDA's nutrition standards in the National School Lunch and Breakfast Program

	during the 2012–2013 school year, researchers found that post-implementation entrée consumption increased by 15.6% and vegetable consumption increased by 16.2% (Cohen et al, 2014).
Resource Commitment	• The Children's Nutrition Research Center (CNRC) is a unique cooperative venture between Baylor College of Medicine, Texas Children's Hospital and the U.S. Department of Agriculture/Agricultural Research Service (USDA/ARS) that has 50 faculty members conducting nutrition-related research. Research goals include establishment of evidence-based guidelines promoting health, growth and development through optimal nutrition for use by physicians, parents and others responsible for the care and feeding of children. • The Texas Children's Center for Childhood Obesity provides comprehensive help to the community and providers in caring for patients with weight management challenges, obesity and associated co-morbidities.
Planned Collaborations	• The Children's Nutrition Research Center (CNRC) • Healthy Living Matters Collaborative • Houston Food Bank • School Health Advisory Councils (SHACs)

(5)   Environmental Health (Tie)

Due to its proximity to the Gulf of Mexico and flat topography, Greater Houston is one of the most vulnerable regions in the United States for flooding (Chakraborty, Collins, & Grineski, 2019). Hurricane Harvey brought more attention to this threat, resulting in $125 billion worth of damage (NOAA, 2018). There remains, however, an unequal level of recovery among residents,

with those of lower socioeconomic status and minority populations experiencing longer periods of recovery and greater financial hardships as a result of the storm (Hamel et al., 2018).

In addition to flooding, air quality is an important issue in the Greater Houston MSA. While the region has made strides in improving air quality, Greater Houston consistently ranks among the top most polluted regions in America. According to the American Lung Association's 2018 "State of the Air" report, Houston ranked 9th for ozone pollution and 17th for year-round particle pollution (State of the Air, 2019). In 2018, Greater Houston experienced an average of 26.7 days of unhealthy air. Recent industrial accidents, including the ITC chemical fire and the Watson Grinding and Manufacturing plant explosion, in East Houston raise additional concerns (2019).

Finally, limited access to greenspace remains a critical issue in Greater Houston. While the region is home to four state parks, as well as portions of the Sam Houston National Forest, studies show that within the City of Houston, equitable access to parks is diminishing, especially in neighborhoods with high percentages of Black and Latino residents (Elliott et al., 2019). Strangely, the biggest positive predictor of park space is an absence of children. Researchers note that for "every 1% increase in the number of children under 18 in an area, there is a corresponding 0.48% decrease in the number of city parks nearby" (2019).

Action 1	Support evidence-based strategies to reduce the effects of mobile and industrial sources of pollution on health in Greater Houston.
Description	Mobile sources of pollution include cars, trucks, ships, planes, and trains. A wealth of research suggests that people who are disproportionality exposed to pollution from mobile sources suffer higher rates of asthma, cardiovascular disease, impaired lung development in children, pre-term and low-birthweight infants, childhood leukemia, and premature death (US EPA). Industrial pollution sources include chemical plants, oil refineries, and other "small area" sources that represent 90 percent of the worst urban toxic pollutants for human health (US EPA).

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	The American Public Health Association (APHA) recommends increasing EPA funding for ambient and community-scale air toxics programs, focusing more resources on environmental justice issues, developing and validating advanced monitoring and data analysis technologies, and promoting clean power programs to mitigate mobile sources of pollution (Public Health Opportunities to Address the Health Effects of Air Pollution, 2017).
Anticipated Impact	In 2011, the EPA issued a report that estimated the results of the Clean Air Act from 1990 to 2020. The report suggests that Clean Air Act Amendments will reduce ambient particulate matter enough to prevent over 230,000 early deaths. It furthers that net improvements in economic welfare are projected to occur because cleaner air leads to better health and productivity for American workers, as well as savings on medical expenses for air pollution-related health problems (EPA).
Resource Commitment	• Texas Children's Department of Government Relations and Community Benefits works closely with Air Alliance Houston, a local non-profit advocacy organization working to reduce the public health impacts of air pollution and advance environmental justice. In addition to partnering on research and advocacy efforts, representatives from Texas Children's sit on Air Alliance Houston's Policy Advisory Committee for the health impact assessment of the proposed I-45 highway expansion.
Planned Collaborations	• Air Alliance Houston • Baylor College of Medicine - Environmental Health Service • The City of Houston

Action 2	Explore strategies to improve access to green space for children and families in underserved communities.
Description	A wealth of evidence suggests a positive relationship between mental and physical well-being and access to green space, particularly in children. In fact, studies show that children with a green space nearby spend less time on the computer, watching television, or playing video games than children who have to walk more than 20 minutes to a green space (Aggio, Smith, Fisher, & Hamer, 2015).
Anticipated Impact	A study published by the University of Illinois Prevention Research Center compared 39 parks renovated as part of the Chicago Plays! Program, with 39 parks that without renovations. Results indicate that the renovated parks were used 61% more than parks that were not renovated. Additionally, visitors to renovated parks increased physical activity by 26% compared to visitors to non-renovated parks (CDC, n.d.).
Resource Commitment	• Texas Children's is working with The Episcopal Health Foundation, the City of Houston Parks Department, and the Memorial Hermann Community Benefit Corporation on an effort to improve park space in the Alief area of Houston, an economically disadvantaged community that is part of the Mayor's Complete Communities initiative. The effort is aimed at utilizing community benefit resources and foundation support to enhance programming and equipment at a park in Alief, and track utilization and health outcomes over time.
Planned Collaborations	• The Episcopal Health Foundation • Memorial Hermann Community Benefit Corporation • The City of Houston Parks Department • Healthy Living Matters Childhood Obesity Prevention Collaborative

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