Community Health Needs Assessment and Implementation Strategy

St. Luke's Medical Center

October 21, 2013

The Community Health Needs Assessment and Implementation Strategy for the St. Luke's Medical Center were conducted and developed between April 22 and October 18, 2013, in fulfillment of the requirements described in section 501(r)(3) of the Internal Revenue Code. The Community Health Needs Assessment was reviewed and the Implementation Strategy was approved by the St. Luke's Medical Center Board of Directors on November 17, 2013.

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Introduction

A Community Health Needs Assessment (CHNA) for the St. Luke's Medical Center (SLMC) was conducted by SLMC and Episcopal Health Charities (the Charities) between April 22 and October 4, 2013, in fulfillment of the requirements described in section 501(r)(3) of the Internal Revenue Code. The CHNA process involved the review of secondary data sources describing the health needs of the community served by SLMC and a series of focus groups with hospital, public health and community stakeholders to identify the priority community health needs. This CHNA document was developed with the SLMC hospital advisory team and includes a description of the community served by SLMC; the process and methods used to conduct the assessment; a description of how SLMC included input from persons who represent the broad interests of the community served by SLMC; a prioritized description of all of the community health needs identified through the CHNA; and, a description of the existing healthcare facilities and other resources within the community available to meet the community health needs identified through the CHNA. The accompanying Implementation Strategy provides an overview of SLMC's plan to address the identified priority community health needs.

Description of Community Served by the Hospital

The community served by St. Luke's Medical Center is defined as the contiguous zip codes determined by 2012 SLMC hospital discharge data. Located in Houston, Texas, the SLMC hospital service area includes a large metropolitan area that is home to over two million residents that spreads from Houston into many smaller suburban and rural communities. The SLMC Primary Service Area (PSA) is based on 75% of discharges during 2012; the Secondary Service Area (SSA) reflects an additional 5%. The SLMC hospital service area includes Harris County and nine other Texas counties, with the majority of the service area found within Harris, Galveston, Brazoria, and Fort Bend Counties.

To describe the health needs of the SLMC community, this report used data from the 2012 Behavioral Risk Factor Surveillance System (BRFSS) data from Harris, Galveston, Brazoria, and Fort Bend Counties for persons aged 18 and older**.** From here forward, the SLMC

community refers to PSA and SSA data that was matched to the available zip codes in the BRFSS, and the data was compared to BRFSS Texas state data as a reference. The SLMC primary and secondary service area map and zip codes are included in Appendix 1.

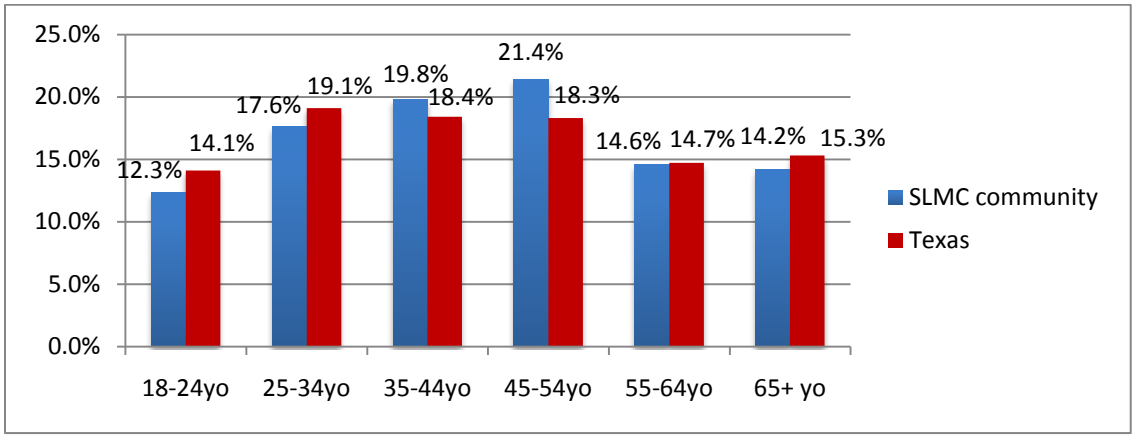
Community Demographics

Demographic data were collected and analyzed for the SLMC community and compared to the aggregated 2012 BRFSS county data for the State of Texas (Texas). Overall, the community served by SLMC has a similar age distribution to Texas, a smaller population of residents with higher education, and a more diverse racial/ethnic distribution. A full description of demographic data from the 2012 BRFSS survey for the SLMC community and Texas can be found in Appendix 2.

Below are additional details related to the demographics of the SLMC community compared with Texas:

- ***Age:*** One-fifth (21.4%) of those living in the SLMC community are between 45-54 years old, which is slightly higher than for Texas (18.3%). The second-largest age category in the SLMC community is 35-44 years old (19.8%). Texas has a higher number of residents aged between 25-34 years than the SLMC community (19.1% Texas vs. 17.6% SLMC community). Older adults comprise the fourth- and fifth-largest age categories in the SLMC community, with 14.6% aged between 55-64 years and 14.2% aged 65 years and older. Compared with Texas, the SLMC community reported a lower number of residents aged 18-24 years (12.3% SLMC community vs. 14.1% Texas) (Figure 1).

Figure 1. Age distribution for the SLMC community and Texas



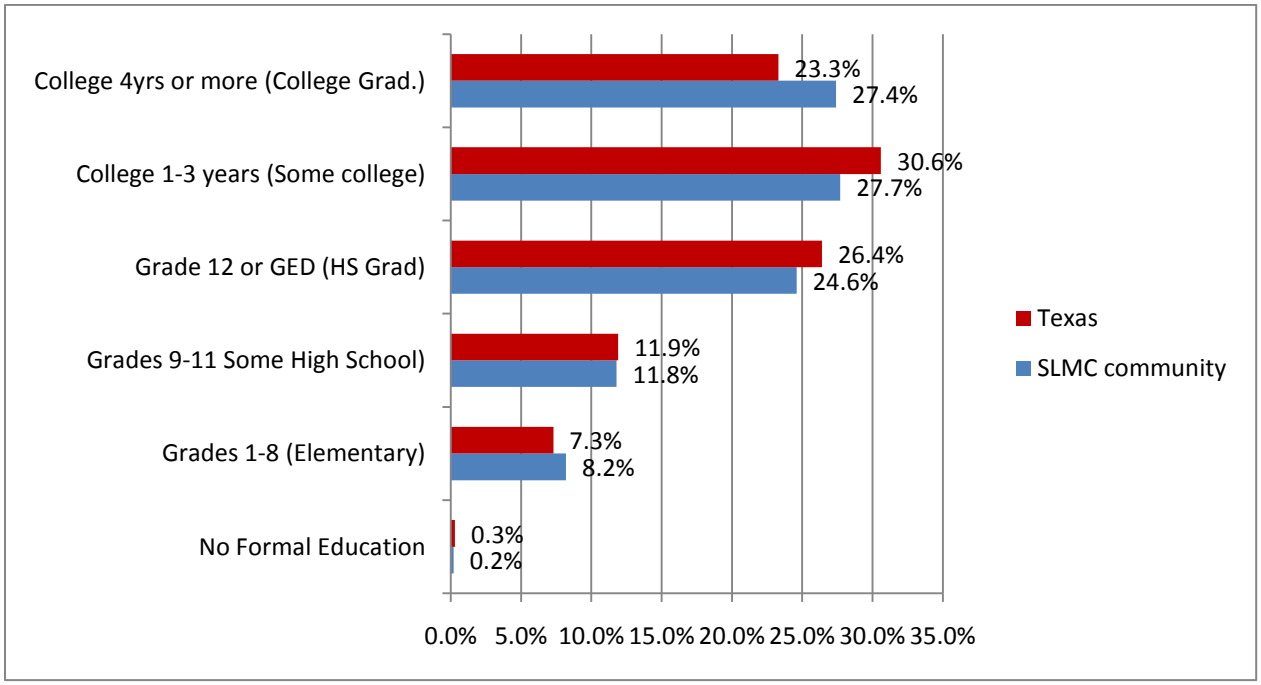
- ***Race/Ethnicity:*** Compared with Texas, the SLMC community reported more variability in racial/ethnic categories. Fewer residents self-identify as White non-Hispanic in the SLMC community (36.6%) than in Texas (46.6%). Compared with Texas, more residents of the SLMC community self-identify as Hispanic (36.4% SLMC community vs. 35.0% Texas) and as Black non-Hispanic (15.9% SLMC community vs. 10.7% Texas). Also, more residents in the SLMC community than in Texas self-identify as Asian non-Hispanic (6.0% SLMC community vs. 3.6% Texas) (Table 1).

Table 1. Racial/ethnic distribution for the SLMC community and Texas

Race/Ethnicity	SLMC community	Texas
White/non-Hispanic	36.6%	46.6%
Black/non-Hispanic	15.9%	10.7%
Hispanic	36.4%	35.0%
Asian/non-Hispanic	6.0%	3.6%
Multiracial/non-Hispanic	2.0%	1.5%

- ***Gender:*** Compared with Texas, the SLMC community reported a slightly different distribution of males and females: males accounted for 46.6% of the SLMC population and 49.1% of the Texas population, and females accounted for 53.4% of the SLMC population and 50.9% of the Texas population.
- ***Education:*** In both the SLMC community and Texas, most residents have more than or equal to a high school education/GED; however, the SLMC community has a lower percentage of residents with more than or equal to a high school education/GED (79.7% SLMC community vs. 80.3% Texas). Also, across Texas, more people reported having obtained some college education (30.6%) than in the SLMC community (27.7%) (Figure 2).

Figure 2. Educational attainment rates for the SLMC community and Texas



Description of the Process and Methods Used to Conduct the CHNA

Episcopal Health Charities was contracted to manage the Community Health Needs Assessment for St. Luke's Health System, which includes St. Luke's Medical Center. The Charities, affiliated with the Episcopal Diocese of Texas, is a research-informed grant-maker dedicated to funding programs that improve the health of underserved people throughout 57 counties in Texas. Founded in 1997, the Charities is a unique funder committed to taking healthcare beyond the walls of conventional healthcare and out into the community. A one-of-a-kind entity in Texas, the Charities utilizes research practices built on community partnerships that support more effective interventions and improved health outcomes. To date, the Charities has touched 17 million lives with $90 million distributed through 1,851 research-informed grants to nonprofit community health service programs throughout Southeast Texas. The Charities developed a nationally recognized Center for Community-Based Research through partnering with area institutions, universities, and national and local funders to help reduce health disparities. Using a mixed method approach, which includes epidemiological data and community-based participatory research, the Charities' has written twelve technical reports

and conducted nine community needs assessments with the goal of creating systemic change and measurable improvement in overall community health status and individual well-being.

The Charities collaborated with the SLMC hospital advisory team, subject matter experts from The University of Texas School of Public Health and Clarus Consulting Group, public health experts, community organizations, and community stakeholders to conduct the SLMC CHNA. The SLMC hospital advisory team met regularly with the Charities team in-person and communicated via email and conference calls to offer input and provide guidance on the CHNA. The SLMC hospital team consisted of executive leadership staff including the Vice President and Chief Financial Officer, the Vice President and Chief Nursing Officer, the Associate Section Chief of the Emergency Department, and the Director of Business Development. The Charities collaborated with The University of Texas School of Public Health to research secondary data sources to obtain quantitative information on existing needs assessments, community demographics, county resources, and hospital service data. Clarus Consulting Group facilitated focus groups and analyzed qualitative data obtained from community input focus groups. The names, titles, organizations, and roles of those involved in the CHNA, including the data analysis and community input portions, can be found in Appendix 3.

Public Health Data

Public health data collection, review, and analysis efforts were guided by two main questions: "What are the health needs of the community served by the hospital facility?" and "What are the characteristics of the populations experiencing these health needs?" Quantitative data were obtained and analyzed between April and October 2013, from various data sources including the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey and the 2012 St. Luke's Health System hospital discharge data.

The 2012 BRFSS database is maintained by the Centers for Disease Control and Prevention (CDC). Data for this report were analyzed for Harris County, as being representative of the SLMC's service area, and for the State of Texas to serve as a point of comparison. BRFSS items used in this report capture respondent characteristics and behaviors related to demographics, health status, healthcare access, preventive services, and risk factors. Analyses were conducted using responses from adults, that is, those 18 years of age or older. Cases were

weighted using the general BRFSS weighting variable for adult cases. Weighting corrects for the fact that potential respondents may have unequal probabilities of being contacted, and different segments of the population may have different response rates when contacted to participate. The weighted interview variables for Harris County were a total of 3,363,188 and for the state of Texas were 19,053,290. For Harris County, the weighted variable for insurance status was 3,345,935 and poverty status was 2,931,081. For Texas, the weighted variable for insurance status was 18,935,453 and for poverty status was 16,541,220. Differences between total responses for insurance status and poverty status within the SLMC community and the State of Texas can be accounted for by differential patterns of response to the relevant items. Thus, totals for insurance status do not equal totals for poverty status.

Hospital Discharge Data

Data on all hospital discharges for 2012 were provided by the St. Luke's Health System. Data were aggregated by the 5-digit ICD-9 diagnosis code and divided into inpatient and outpatient discharges. ICD-9 codes were further aggregated into more relevant and less clinically specific categories. Discharge data were summarized for SLMC, and the categories reflecting the most frequently occurring diagnoses were highlighted (Appendix 4).

For those diagnoses with high prevalence, the categories were disaggregated to a level that aided understanding if the main description was extremely broad. Classifications are presented for inpatient (n = 15,685), outpatient (n = 71,468), and total patient load (N = 87,153). Overall, the leading discharge categories were *Symptoms, Signs, and Ill-Defined Conditions* (23.7%); *Injury and Poisoning* (17.5%); *Diseases of the Respiratory System* (12.1%); and *Diseases of the Musculoskeletal System and Connective Tissue* (7.1%).

Of the 2012 SLMC inpatient discharges, 25.3% were for *Diseases of the Circulatory System*. Within this category, the most common conditions were *other forms of heart disease* (41.5%), *cerebrovascular disease* (18.7%), and *ischemic heart disease* (16.0%). *Diseases of the Digestive System* accounted for 16.9% of inpatient discharges. Within this category, the most common conditions were *other diseases of digestive system* (39.8%); *other diseases of intestines and peritoneum* (24.9%); *diseases of esophagus, stomach, and duodenum* (15.2%);

and *noninfective enteritis and colitis* (10.3%). *Diseases of the Respiratory System* accounted for 9.6% of inpatient discharges. Within this category, the most common conditions were *chronic obstructive pulmonary disease and allied conditions* (32.6%), *pneumonia and influenza* (32.4%), and *other diseases of respiratory system* (22.5%).

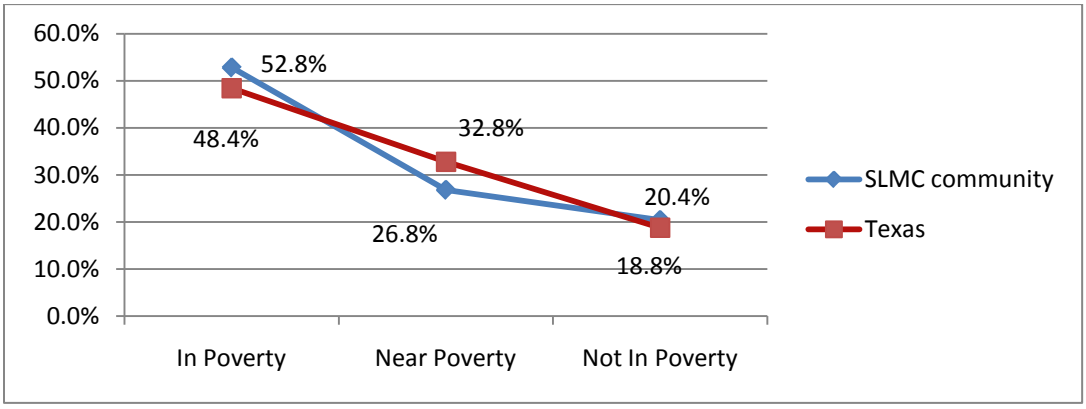
Of the 2012 SLMC outpatient discharges, 27.6% were for *Symptoms, Signs, and Ill-Defined Conditions*. Virtually all of these discharges were for *symptoms* (99.5%). *Injury and Poisoning* accounted for 19.4% of outpatient discharges. Within this category, the most common conditions were *sprains and strains of joints and adjacent muscles* (22.5%); *open wound of upper limb* (9.2%); and *open wound of head, neck, and trunk* (8.6%). *Diseases of the Respiratory System* accounted for 12.6% of outpatient discharges. Within this category, the most common conditions were *acute respiratory infections* (73.5%), *chronic obstructive pulmonary disease and allied conditions* (11.5%), and *pneumonia and influenza* (10.2%).

Key Indicators and Health Disparities

The SLMC community key indicators and health disparities were established by comparing the 2012 BRFSS data for Harris County with the 2012 BRFSS data for Texas (Appendices 2, 5-8). Data reviewed indicate that sufficient health information is already available from local public health sources to allow for the identification of the most important health needs of the SLMC community. The below indicators reflect analyses from the 2012 BRFSS data for both the SLMC community and Texas.

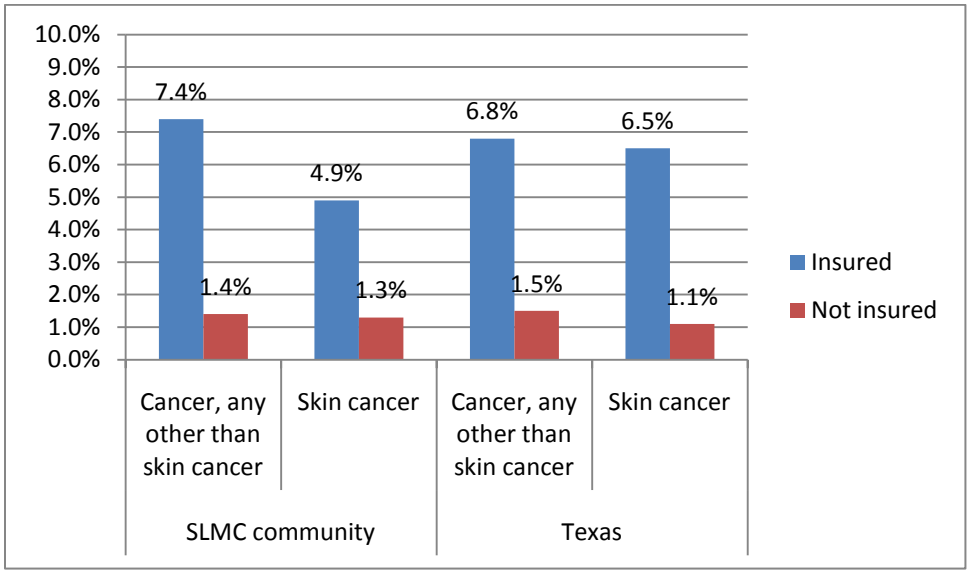
- ***Health insurance and access to care:*** Based on the 2012 BRFSS overall results, the SLMC community has slightly more uninsured residents compared to Texas (30.9% SLMC community vs. 29.9% Texas). In SLMC and Texas, the rates of uninsured are highest for those in poverty and near poverty. The SLMC community in poverty and near poverty reported a higher rate of no personal doctor or healthcare provider (64.2% in poverty and 42.9% near poverty) as compared with Texas (51.0% in poverty and 40.2% near poverty) (Appendix 6, Table 2). Overall, more people in the SLMC community than in Texas reported not being able to see a doctor in the past 12 months because of costs (Appendix 6, Tables 1 and 2).

Figure 3. Percentage of uninsured and in poverty for the SLMC community and Texas



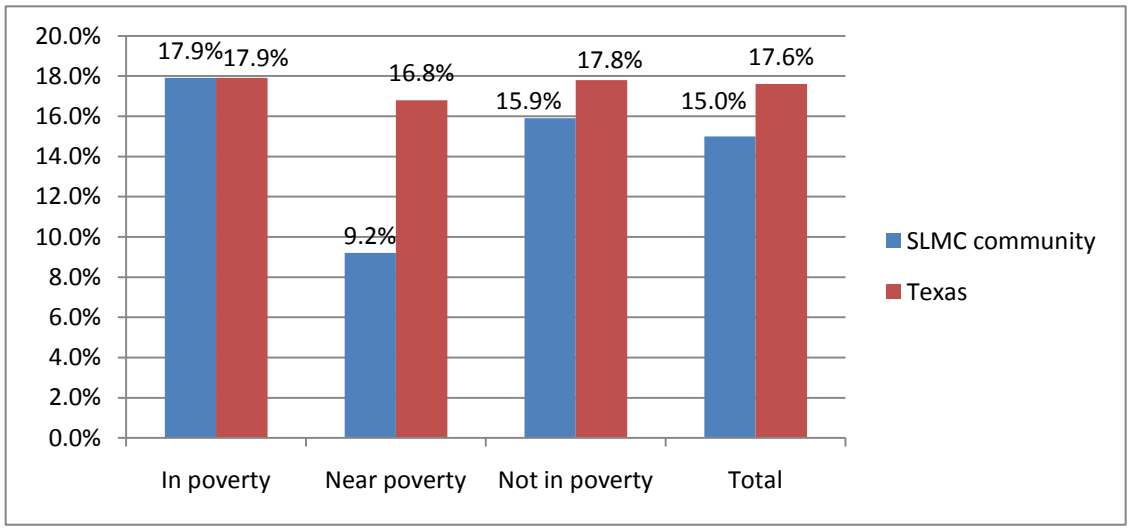
- ***Cancer:*** More insured people in the SLMC community (7.4%) reported ever being diagnosed with any type of cancer other than skin cancer than in Texas (6.8%). Those insured in the SLMC community reported lower rates of skin cancer (4.9%) than in Texas (6.5%). In both the SLMC community and Texas, the skin cancer rate reported by those insured was slightly higher than that reported by those uninsured (1.3% SLMC community; 1.1% Texas) (Figure 4; Appendix 5, Table 1).

Figure 4. Cancer diagnosis by insurance status for the SLMC community and Texas



- ***Diabetes:*** Those insured in the SLMC community reported slightly higher rates of diabetes than those insured in Texas (13.3% SLMC community; 12.2% Texas) (Appendix 5, Table 1). Those in poverty and near poverty in the SLMC community reported higher rates of diabetes (15.0% in poverty; 19.4% near poverty), compared with those in poverty and near poverty in Texas (13.5% in poverty, 13.3% near poverty) (Appendix 5, Table 2).
- ***Mental health:*** In the SLMC community, 32.9% reported one or more days of poor mental health compared to Texas where 35.3% reported one or more days of poor mental health (Appendix 5, Table 1). In general, the fewer people in the SLMC community report fewer poor mental health days than those in Texas (Appendix 5, Table 2).

Figure 5. Percentage of reports for "1-5" days of poor mental health in the last 30 days for SLMC community and Texas



- ***Cardiovascular disease:*** Compared with Texas, the SLMC community has slightly lower rates of coronary heart disease (3.4% SLMC community vs. 3.8% Texas), lower rates of heart attack (2.7% SLMC community vs. 3.7% Texas), and similar rates of stroke (2.6% SLMC community vs. 2.7% Texas) (Appendix 5, Table 1). Compared with Texas near-poverty population, the SLMC near-poverty population reported higher rates of stroke (6.0% SLMC community vs. 3.6% Texas) and higher rate of heart attack (5.3% SLMC community vs. 4.9% Texas) (Table 3) (Appendix 5, Table 2).

Table 2. Cardiovascular disease diagnosis by poverty in the SLMC community and Texas

	SLMC community				Texas			
	In Poverty (%)	Near Poverty (%)	Not in Poverty (%)	Total (%)	In Poverty (%)	Near Poverty (%)	Not in Poverty (%)	Total (%)
Ever diagnosed with angina or coronary heart disease	4.9	4.0	3.7	4.0	4.2	3.9	4.3	4.2
Ever diagnosed with heart attack	3.0	5.3	2.0	2.9	4.0	4.9	3.2	3.8
Ever diagnosed with stroke	3.3	6.0	1.2	2.6	3.1	3.6	1.9	2.6

- ***Asthma:*** Compared with Texas, the SLMC community reported lower rates of asthma (9.2% SLMC community vs. 10.9% Texas) (Appendix 5, Table 1). Of those not insured in the SLMC community, 6.3% had been diagnosed with asthma compared to 9.0% in Texas (Appendix 5, Table 1). Those not in poverty in the SLMC community reported higher rates of asthma (11.5%) compared to Texas (9.7%) (Appendix 5, Table 2).
- ***Use of preventive services:*** Those uninsured in the SLMC community reported lower rates of lifetime mammography, Pap test, blood stool, and sigmoidoscopy/ colonoscopy than in Texas (Appendix 7, Table 1). In the SLMC community, there were higher reported rates of HIV testing among those in poverty and those uninsured than in Texas (Appendix 7, Table 1 and 2).
- ***Smoking:*** Lifetime smoking in the SLMC community was 36.8%, compared with 39.5% in Texas. Those insured in the SLMC community had lower rates of lifetime smoking than those insured in Texas (36.5% SLMC community and 39.0% Texas). Among those not in poverty and those insured in both communities, larger numbers of previous smokers reported no longer smoking (Appendix 8, Table 1 and 2).
- ***Exercise or physical activity:*** Rates of physical activity were similar in both the SLMC community and the State of Texas (72.7% SLMC community vs. 72.9% Texas). However, of those uninsured, 60.2% in the SLMC community reported having engaged in exercise or physical activity in the last 30 days, compared with 65.4% in Texas (Appendix 8, Table 1). Of

those in poverty in the SLMC community, 51.6% engaged in exercise or physical activity compared to 84.3% of those not in poverty. In Texas, 58.7% in poverty engaged in exercise or physical activity compared to 81.1% of those not in poverty (Appendix 8, Table 2).

Description of Community Input

A broad representation of the community was engaged through multiple meetings, focus groups, interviews and written correspondence. Stakeholders were identified based on those with special knowledge of or expertise in public health; state, regional, or local health departments, with current data or other information relevant to the health needs of the community served by SLMC; and leaders, representatives, or members of medically underserved, low income, and minority populations, as well as populations with chronic disease needs, in the community served by SLMC. Community input was obtained from the SLMC hospital advisory team, SLMC community stakeholders, and public health experts. Appendix 3 lists the participants involved in the CHNA including names, titles, and roles.

SLMC Hospital Advisory Team Input

A CHNA kickoff meeting was held on April 24, 2013, to inform leadership of St. Luke's Health System hospitals of the new Internal Revenue Service requirement to conduct a CHNA. The hospital leadership discussed their community's health needs, as well as identified existing resources, programs, and community stakeholders. Individual hospital meeting notes were developed and distributed approximately one week after the meeting. Hospital advisory teams were identified, and meetings were held from June to October 2013 to discuss the CHNA requirements and the process of conducting a CHNA. The hospital advisory team received updates of the progress being made on the CHNA, information regarding the community meeting specific to their community, and deadlines for submitting the Implementation Strategy.

On June 20, 2013, the SLMC hospital advisory team met to provide input on the most significant health needs of their community, existing gaps in available healthcare, and strategies to address the community needs, while keeping in mind the underserved, minority, uninsured,

and elderly communities. There was also a discussion on key stakeholders and resources that currently exist within the community. The SLMC hospital advisory team summary report can be found in Appendix 9. The SLMC hospital advisory team identified the following areas of need:

- ***Elder care:*** Elderly and aging populations lack education on advanced directives, pain management services, and navigating the healthcare system
- ***Heart disease:*** Heart disease awareness, prevention, and education are a need in this area—patients with high blood pressure, diabetes, and stroke present late to the hospital
- ***Mental health:*** There is a mental health need and perhaps an opportunity to partner with a mental health facility for referrals; there are only two psychiatrists on staff
- ***Sickle cell disease:*** Patients do not have an established system for long-term care and they frequently use the emergency department
- ***Violence:*** This is a health concern, particularly for the area immediately surrounding the hospital. The hospital could be more reactive than preventive on this issue

SLMC Community Stakeholder Input

Through active outreach to key community stakeholders, a broad representation from the communities served by SLMC was identified to participate in the community input portion of the CHNA. A focus group was held on Friday, August 23, 2013, from 9:00 am to 10:30 am at the DePelchin Children's Center in Houston, TX. The event brought people from different roles and organizations together to discuss matters that are important to the health needs of the community served by the hospital. There were twenty stakeholders and organizations, which represented a range of community-based organizations, health clinics, and business organizations. The SLMC community stakeholder summary report can be found in Appendix 10. Stakeholders identified the following areas of need:

- ***Access to care:*** Many stakeholders focused on access to care as a major health problem in the Greater Houston community. Several factors affect access to care, including lack of adequate health insurance, limited health literacy, and limited knowledge around

how to navigate the healthcare system and available resources. The two factors which were talked about in greatest detail were geographical barriers (related to a transient community and lack of transportation) and language barriers.

- ***Coordinated care:*** Some stakeholders expressed that one of the most important health problems in the Greater Houston community is lack of coordinated care opportunities, which results in mismanagement or over-management of care. Stakeholders suggested that negative effects of mismanagement or over-management of care can include a patient being provided with an abundance of prescriptions but limited cohesive support, causing inefficiencies in time and cost and strain and stress for the patient. The current healthcare system is complex and difficult to navigate for patients, physicians, and insurers. Increased coordination in which each arm of the healthcare service system works more cohesively in the care of each patient could result in better care and experience for all parties.

- ***Coordination of community resources:*** Stakeholders emphasized that an unmet healthcare need is for robust coordination of community resources. Stakeholders noted that the public often is not aware of many available centers and facilities and has a difficult time finding information about available resources and services. Stakeholders expressed a need to get more information out to the community about available services, how to find them, where to go, and what to do in times of crisis or for routine care. Stakeholders noted that while there may have been some previous efforts to increase access to information, currently there is not one centralized place for information about all health access points in the community that is kept current.

- ***Education and prevention:*** Stakeholders identified the interrelated issues of education and prevention as healthcare needs in the community. Education around how to access services and better manage one's health is an important aspect of preventive care. Although this requires additional funding and resources, investing in prevention can

limit catastrophic or chronic health problems. Prevention efforts and basic health information services may include health education classes, print materials such as brochures or pamphlets, and increased collaboration among the healthcare, education, and safety sectors. Stakeholders also noted the importance of considering uninsured patients with regard to education and prevention, as currently the uninsured often do not have basic/preventive services or access to a primary care physician.

- ***Policies and procedures:*** Several stakeholders expressed that there is a need around increasing the level of awareness and effectiveness of various healthcare policies and procedures such as screening guidelines and the discharge/transition process.
    - Screening guidelines – Stakeholders suggested that inconsistent or unstated screening guidelines often create confusion for physicians.
    - Discharge/transition process – A few stakeholders stated that there is a big weakness in the discharge process that can include transitioning to care at home or outside of the hospital. Once a patient is discharged, there is little time spent with a discharge nurse to learn about all the necessary prescriptions and instructions for proper care.

- ***Types of care:*** Stakeholders noted that there are particular types of care that are lacking in the community. The types of care that were mentioned include behavioral/mental health, childhood obesity, dental health, and palliative care.
    - Behavioral/mental health – Behavioral health, including mental health; substance abuse; learning disabilities; and special needs are all unmet needs in this community.
    - Childhood obesity – There are very few nutrition programs aimed at helping to prevent childhood obesity. The programs that do exist do not always incorporate families, and participants believe that these types of programs are most successful when they involve the whole family.

- Dental health – Stakeholders noted that there is a portion of the population, especially senior citizens, who do not receive adequate dental care. Lack of dental care can cause serious health problems over time. One factor contributing to this need is lack of dental insurance.
- Palliative care – There is very little palliative care and resources to assist the elderly toward "aging in place" through home assistance or other support.

Public Health Experts Input

Another focus group was held for Public Health Experts on Thursday, August 8, 2013, from 2:30 pm to 4:00 pm at the Episcopal Health Charities in Houston, TX. This discussion included twelve representatives from local, county, regional, and state governmental public health organizations. In general, participants noted the correlation between a healthy community and fewer admissions to the hospital, and suggested that elevating the idea of a healthy community is a health need in the community. Participants also noted specific unmet healthcare needs in the community, which include access to care, communication, chronic disease, maternal and child health, behavioral health, environmental health, and health disparities. The Public Health Experts summary report can be found in Appendix 11. The Public Health Experts identified the following areas of need:

- ***Access to care:*** Public Health Experts expressed that access to care was the most important health problem in the community. They acknowledged that there is a sufficient number of health clinics in the area but that access to care remains an issue for a significant portion of the population. Several factors that contribute to the access to care issue include transportation, knowledge, and insurance and finances.

- ***Chronic disease:*** Public Health Experts expressed that the rate of chronic disease, such as diabetes, obesity, high cholesterol, hypertension, heart disease, and asthma (especially in children), is an important health problem in the community. They noted that the rate of adults with diabetes or pre-diabetes is 60%, which illustrates the significance and alarming

nature of the chronic disease problem. They felt that more individuals need to be screened for chronic diseases, and that more information about how to access help for chronic diseases needs to be disseminated.

- ***Communication:*** Public Health Experts indicated that more effective communication around healthcare is an unmet health need. Specifically, they expressed that better communication is needed from healthcare providers to inform the community about services and resources that are available. In addition, better communication is needed between healthcare providers and health departments/public health agencies.

- ***Environmental health:*** Public Health Experts suggested that poor environmental health causes both acute and chronic health issues in the community. The importance of the relationship between environmental health and chronic disease was highlighted, and it was suggested that the community should be offered more educational initiatives around this relationship. Specifically, the experts noted that environmental problems such as air quality or road construction can be obstacles to healthy communities in that they discourage individuals from going outside to exercise, and can also lead to chronic health problems such as respiratory problems, heart attack, stroke, and asthma.

- ***Health disparities:*** Public Health Experts suggested that health disparities are a major healthcare concern in the community. It was noted that there are correlations between race/ethnicity and individuals who do not get regular or necessary healthcare screenings.

- ***Maternal and child health:*** Public Health Experts focused on maternal, infant, and prenatal care as being an important health issue in the community. They cited high rates of maternal and infant mortality and high rates of preterm birth and fetal mortality as evidence of this problem. It was further noted that high rates of poor birth outcomes lead to higher numbers of children with special needs. Overall, the experts suggested that women are aware of the importance of maternal, infant, and prenatal care, but they encounter many

barriers to obtaining these services such as transportation, funding, access, finding a doctor, and making an appointment.

- ***Mental health services:*** Public Health Experts suggested that mental health and chronic mental illness are important health issues. While it was specifically noted that individuals with schizophrenia, bipolar disorder, and depression rarely get the care that they need, there has also been progress in addressing this need, such as the police department helping to place individuals with mental health issues in treatment centers instead of placing them in the law enforcement system.

Description of Identifying and Prioritizing Community Health Needs

Community health needs were identified through an analysis of four major data sources: SLMC Hospital Advisory Team Input, SLMC Community Stakeholders Input, Public Health Experts Input, and 2012 BRFSS data for the SLMC community. This process involved a detailed review of the priorities identified in each separate data source and the determination of the most important health priorities.

Identifying Community Health Needs

Key criteria for identifying community health needs were: 1) importance of the problem for the community, 2) impact of the problem on vulnerable populations and 3) lack of existing resources to address the problem. Health status and social determinants of health were incorporated into the analysis of areas of need, challenges, and barriers. The community health needs were designated by source, and the data were compared and cross-validated with the analysis of secondary data. Table 3 displays the areas of need, challenges, and barriers from the various data sources.

Table 3. Identified areas of need, challenges, and barriers

Data Source	Areas of Need	Challenges and Barriers
SLMC Hospital Advisory Team Input	Elder care Heart disease prevention, education Mental health Sickle cell disease services Violence	Over-utilized emergency department Lack of treatment acceptance/adherence Lack of health service navigation knowledge
SLMC Community Stakeholders Input	Access to care Coordinated care Coordination and centralization of community resources Education and prevention Specific health services Policies and procedures	Limited education and health literacy Lack of funding to support strategic and sustainable healthcare programs Fractured healthcare network
Public Health Experts Input	Access to care Chronic disease Communication Environmental health Health disparities Maternal and child health Mental health services	Lack of public transportation Lack of health service navigation knowledge Lack of health and orientation services for immigrants Lack of health insurance, financial resources Environmental issues (pollution, crime, recreation facilities, food deserts) Lack of funding for programs
BRFSS Survey Data for the SLMC community	Access to care Cancer screenings Chronic disease Preventive services Smoking cessation programs for uninsured	Lack of insurance Limited income

Prioritizing Community Health Needs

The identified community health needs were then prioritized through a triangulation process that looked at the priorities identified in each of the three sources of data separately, compared and contrasted across sources, and identified specific commonalities (Figure 6).

Figure 6. Community health needs triangulation process

Priority Community Health Needs Identified for SLMC

The highest priority health needs for the community served by SLMC are:

1. **Access to care**: Lack of insurance, transportation, and access to primary care physicians and mental health services were identified as limiting access to healthcare, especially for vulnerable populations such as the elderly, Hispanics, and the poor.

2. **Chronic disease management**: There is a lack of access to chronic disease management for asthma, diabetes, cardiovascular disease, sickle cell disease, and pain control.

3. **Coordination of care and referrals**: The lack of an effective healthcare network was identified as an important local problem. There are limited channels to connect patients without medical homes to primary care. Transition services and other services that promote continuity of care are limited, especially for mental health.

4. **Patient education**: There is a need to increase culturally relevant health literacy and healthcare system navigation among vulnerable populations, particularly Hispanics. More information is needed about accessing services using Medicaid, when to access emergency care, and how to access primary care. There is also a lack of health education and screening for cancer and chronic diseases among vulnerable populations.

Description of Community Resources

Within the community engagement meetings and focus groups, existing resources and programs that address health in the community were discussed. Identifying these resources began to build bridges, foster understanding, and increase awareness of existing services. The available resources identified in the SLMC community are list below:

- ***Active Church and Faith-based Community***: The active church and faith-based communities throughout Houston are often involved in all aspects of life, including health and wellness.
- ***Area Agency on Aging***: The Area Agency on Aging implements preventive programs for seniors that promote health for this important sector of the population.
- ***Asthma-related Support Services***: Although funding is no longer available for this initiative, participants noted a program that provided healthy alternatives for the home for families with children that suffer from asthma. The program was a relatively small resource to address a large problem, but it made a difference for children and families who struggle with asthma.
- ***Breast Health Portal***: This iPhone app was built for the female community as it provides all related resources in the area by using a smart phone's GPS system.

- ***Civic Clubs and Social Clubs:*** Civic and social clubs are an important part of communities in Houston and could be a great avenue to reach communities to address health priorities.
- ***Community Health Workers***: Community health workers are certified to help bridge the gap between members of a community and healthcare and social service providers. Community health workers are already here, speak the language, live in the area, and know the community. They have a strong curriculum that is standardized and certified by the state.
- ***Houston Independent School District***: Community Outreach Workers help families in their communities.
- ***Project Safety Net:*** Episcopal Health Charities has an online resource guide to identify safety net providers.
- ***United Way***: The United Way is a great resource in Houston that addresses a myriad of health-related issues in the community. Participants specifically noted programs of the United Way related to cancer screenings and transportation to health-related services.

Community Health Needs Assessment Summary

The Community Health Needs Assessment (CHNA) for St. Luke's Medical Center (SLMC) spanned from April through October, 2013. A CHNA kickoff meeting was held on April 24 to inform hospital leadership of the new Internal Revenue Service requirement to conduct a CHNA and develop a 3-year Implementation Strategy for each hospital. Hospital advisory teams were identified and met with the Charities team from June to October to discuss the CHNA requirement. An overview of the CHNA process was provided, and the hospitals were given an opportunity to discuss their community's health needs, as well as identify any existing resources, programs, and community stakeholders. Individual hospital meeting notes were developed and distributed to the hospital advisory teams approximately one week after each meeting.

For the community input portion of the CHNA, the Charities team solidified meeting locations, scheduled community meetings for each hospital, and invited community

organizations and stakeholders. Through active outreach to key community stakeholders, the Charities team obtained a broad representation from the communities served by the hospitals to participate in the community input portion of the CHNA. Focus groups were held to identify and prioritize community health needs with three stakeholder groups: hospital advisory team, community stakeholders, and public health experts. These events brought key stakeholders together to discuss community health needs, challenges, and priorities for the communities served by SLMC.

The Charities team analyzed secondary data and gathered background information on community health needs. The data include national, state, local, and hospital-specific sources. Additional public health data include community demographics, health indicators, health risk factors, access to healthcare, and social determinants of health. The identified community health needs were then prioritized through a triangulation process that looked at the priorities identified in each of the sources of data, compared and contrasted across sources, and identified specific commonalities. The highest priority health needs for the community served by SLMC are:

1. **Access to care**: Lack of insurance, transportation, and access to primary care physicians and mental health services were identified as limiting access to healthcare, especially for vulnerable populations such as the elderly, Hispanics, and the poor.
2. **Chronic disease management**: There is a lack of access to chronic disease management for asthma, diabetes, cardiovascular disease, sickle cell disease, and pain control.
3. **Coordination of care and referrals**: The lack of an effective healthcare network was identified as an important local problem. There are limited channels to connect patients without medical homes to primary care. Transition services and other services that promote continuity of care are limited, especially for mental health.
4. **Patient education**: There is a need to increase culturally relevant health literacy and healthcare system navigation among vulnerable populations, particularly Hispanics. More information is needed about accessing services using Medicaid, when to access emergency care, and how to access primary care. There is also a lack of health education and screening for cancer and chronic diseases among vulnerable populations.

From October 4 to October 18, 2013, the hospital advisory team reviewed the CHNA and developed the SLMC Implementation Strategy. The timeframe included in the Implementation Strategy is 2013-2015 (Years 1-3). The CHNA and Implementation Strategy was submitted for approval by the SLMC Board of Directors at the November 6, 2013 board meeting and approved on November 17, 2013. The CHNA and Implementation Strategy will be made widely available to the public on the St. Luke's Health System and St. Luke's Medical Center websites.

Implementation Strategy

Introduction

As an integral part of St. Luke's Health System, St. Luke's Medical Center (SLMC) mission is to contribute to enhancing community health by delivering superior value in high-quality, cost-effective acute care since 1954. SLMC, a 719-bed facility located in Houston, Texas, offers clinical and diagnostic services, including cancer services; cardiovascular and heart services; diabetes and endocrinology; ear, nose, and throat; gastroenterology; geriatrics; nephrology; neurology and neurosurgical services; orthopedics; palliative care; pulmonology; surgical services; urology; and women's services. In collaboration with the medical staff, we are dedicated to excellence and compassion in caring for the whole person—body, mind and spirit. We also are committed to the growth and development of our care providers and employees, and to securing the health of future generations by creating, applying and disseminating health knowledge through education and research.

Through our commitment to deliver faith-based, compassionate, quality and cost-effective care, SLMC shall be the provider of choice in the greater Houston and surrounding communities. SLMC adopts the five core values of the St. Luke's Health System, which are central to everything we do:

- *Integrity*—being honest is the basis for our actions
- *Valuing People*—taking care of people, including patients, employees and medical staff—is the reason we exist
- *Goal Orientation*—focusing on what we want to achieve helps us design the best way to realize our vision
- *Excellence*—striving to enhance high quality is our constant pursuit
- *Stewardship*—enhancing our stewardship through transparency, fiscal discipline, accountability, efficient management and maximization of resources throughout our Health System to best meet the needs of the community.

In fulfillment of the requirements described in section 501(r)(3) of the Internal Revenue Code, a Community Health Needs Assessment (CHNA) was conducted collaboratively with the

SLMC hospital advisory team, Episcopal Health Charities, and other partners between April 22 and October 4, 2013; the Implementation Strategy was developed by the SLMC hospital advisory team from October 4 to October 18, 2013. The CHNA and Implementation Strategy were approval by the SLMC Board on November 17, 2013. The timeframe included in the Implementation Strategy are 2013-2015 (Years 1-3).

SLMC is a hospital facility that conducted a CHNA and adopted an Implementation Strategy in 2013 (Year 1). From 2014-2015 (Years 2-3), SLMC will implement at strategies to meet the health needs identified through that CHNA. SLMC will address each of the priority health needs by the last day of 2015 (Year 3). The CHNA and Implementation Strategy will be made widely available to the public on the St. Luke's Health System and St. Luke's Medical Center websites.

Overview of the Community Served by SLMC

The community served by SLMC is described by the geographic area of SLMC and the contiguous zip codes determined by 2012 SLMC hospital discharge data. Located in Houston, Texas, the SLMC hospital service area includes a large metropolitan area, as well as many smaller suburban and rural communities. The SLMC hospital service area includes Harris County, and nine other Texas counties. The Primary Service Area (PSA) is based on 75% of discharges and the Secondary Service Area (SSA) reflects an additional 5%; therefore, the overall service area used for this report is defined by the residential location for 80% of the hospital discharges in 2012. The remaining 20% are outside of the areas considered for this report. SLMC service area zip codes and service area map are included in Appendix 1.

SLMC serves an area that is home to a population of over two million residents that represent diverse ethnicities, backgrounds, and needs. Key descriptors of the community served by SLMC include:

- ***Age*** - One-fifth (21.4%) of those living in the SLMC community are between 45-54 years old; the second-largest age category in the SLMC community is 35-44 years old (19.8%). Older adults comprise the fourth- and fifth-largest age categories in the SLMC community, with 14.6% aged between 55-64 years and 14.2% aged 65 years and older.

- ***Race/Ethnicity*** – The SLMC community reported more variability in racial/ethnic categories with Hispanic (36.4%), White non-Hispanic (36.6%), Black non-Hispanic (15.9%), Asian non-Hispanic (6.0%), and Multiracial (2.0%).
- ***Education***- Most residents have more than or equal to a high school education/GED; less people reported having obtained some college education (27.7%) in the SLMC community.

Development of the Implementation Strategy

The CHNA was conducted collaboratively with the SLMC hospital advisory team, Episcopal Health Charities, and other partners between April 22 and October 4, 2013; the Implementation Strategy was developed by the SLMC hospital advisory team from October 4 to October 18, 2013. The SLMC hospital team consisted of executive leadership staff including the Vice President and Chief Financial Officer, the Vice President and Chief Nursing Officer, the Associate Section Chief of the Emergency Department, and the Director of Business Development. Appendix 3 lists the names, titles, and roles of all involved in the CHNA and Implementation Strategy.

Overview of the Identification and Prioritization of Community Health Needs

As a component of the CHNA, community health needs were identified through an analysis of four major data sources: SLMC Hospital Advisory Team, SLMC Community Focus Group Discussion, Public Health Experts Focus Group Discussion and public health data for the SLMC community. This process involved a detailed review of the key priorities identified in each separate data source and the determination of the most important health priorities. Key criteria for identifying priorities were: 1) importance of the problem for the community, 2) impact of the problem on vulnerable populations and 3) lack of existing resources to address the problem. Health status and social determinants of health were incorporated into the analysis of the areas of needs, challenges, and barriers. The community health needs were designated by source and the data was compared and cross-validated with the analysis of secondary data (See Table 3). The identified community health needs were then prioritized through a triangulation process that looked at the priorities identified in each of the three

sources of data separately, compared and contrasted across sources, and identified specific commonalities (See Figure 6).

The highest priority health needs for the community served by SLMC are:

1. **Access to care**: Lack of insurance, transportation, and access to primary care physicians and mental health services were identified as limiting access to healthcare, especially for vulnerable populations such as the elderly, Hispanics, and the poor.
2. **Chronic disease management**: There is a lack of access to chronic disease management for asthma, diabetes, cardiovascular disease, sickle cell disease, and pain control.
3. **Coordination of care and referrals**: The lack of an effective healthcare network was identified as an important local problem. There are limited channels to connect patients without medical homes to primary care. Transition services and other services that promote continuity of care are limited, especially for mental health.
4. **Patient education**: There is a need to increase culturally relevant health literacy and healthcare system navigation among vulnerable populations, particularly Hispanics. More information is needed about accessing services using Medicaid, when to access emergency care, and how to access primary care. There is also a lack of health education and screening for cancer and chronic diseases among vulnerable populations.

Action Plan to Address Priority Community Health Needs

From October 4 to October 18, the SLMC hospital advisory team discussed the health needs as prioritized by the community in the CHNA and identified strategies to address those needs. The hospital advisory team carefully reviewed the CHNA and made recommendations based on data from the SLMC hospital advisory team notes, SLMC community stakeholder summary report, public health experts summary report, and the local public health data. The hospital advisory team also discussed the activities and the programs that SLMC is already doing to address the priority community health needs.

As a result of extensive analysis and discussion of both quantitative and qualitative data, the priority health needs identified in St. Luke's Medical Center Community Health Needs Assessment will be addressed through the following strategies for FY 2013-2015:

Access to care. SLMC will implement the following strategies to address access to care:

1. SLMC will continue to collaborate with MAT Psych Services. MAT Psych Services is a team of mental health professionals that respond to calls from the emergency room when patients present with symptoms of mental illness, depression, psychosis, or chemical dependency. MAT assists in stabilizing, evaluating, arranging referrals, and following up to maintain patient compliance.
2. SLMC will outreach and foster new relationships with primary care providers and healthcare service providers to assist linking hospital patients to medical homes, including safety net clinics in the Harris and surrounding counties.
3. SLMC will enhance linkages to care by improving the care transition for congestive heart failure patients. SLMC proposes to assess and establish linkages with community clinics in an effort to create a support network and medical home post-discharge.
4. SLMC will improve the identification and treatment of chronic diseases such as Hepatitis C (HCV) by collaborating with partners to educate providers on high-level medical skills using telemedicine. Through this project, SLMC will increase patient and provider awareness of HCV, improve care for patients with HCV, and train a larger workforce of providers that offer care to medically underserved communities.
5. SLMC will continue to be committed to telehealth opportunities that increase access to clinical education such as the Emerge Telemedicine Training. SLMC will also provide webinars for primary care and specialty providers on topics such as elder care, cardiovascular disease, and other chronic diseases.
6. At no extra cost to inpatients, the Center for Integrative Medicine at SLMC will continue to offer massage therapy, yoga therapy, personal pet visitation and acupuncture. The primary objective of the program is to integrate, increase access, and provide preventive and therapeutic modalities into a coordinated delivery system.

Coordination of care. SLMC will implement the following strategies to address coordination of care:

1. SLMC will continue to coordinate patient care through the Patient Navigation Process. Nurse navigators will coordinate additional patient care and follow-up, provide education on existing resources, and assist patients in determining next steps after hospital discharge.
2. SLMC will connect patients to information regarding medical homes, safety net clinics and primary care resources by distributing information on community resources in Harris County.
3. SLMC will continue to coordinate education programs for physicians and other clinicians including programs focused on pain management, diagnosis and treatment of cancer, emergency department provider education, and the importance of transitional care.
4. SLMC will communicate and promote resources on the hospital's website and on various SLMC social media outlets. SLMC will also highlight community collaborations and special events through engagement of local media resources.

Chronic disease management. SLMC will implement the following strategies to address chronic disease management:

1. SLMC will host chronic disease management educational programs throughout the year at the hospital. Educational programs will be held by physicians or nurse educators and topics may include asthma, diabetes, cardiovascular disease, sickle cell disease, and pain control.
2. SLMC will collaborate with other community organizations to promote and educate on healthy lifestyles focusing on nutrition, physical activity and weight management. The goal of these educational programs will be on the prevention of chronic diseases that are most common in the SLMC community.
3. SLMC will offer annual Pain Management educational programs on topics including the prevention and treatment of back pain; hip, knee, and shoulder pain; and/or pain associated with sickle cell disease.
4. SLMC will strengthen relationships with providers and community organizations to coordinate and promote existing chronic disease management resources such as local educational programs, support groups, and specialized care programs and facilities.

Patient education. SLMC will implement the following strategies to address patient education:

1. SLMC physicians will provide free educational programs on topics including early detection and treatment of cancer (skin, prostate, pancreatic, breast, and lung cancer), neuroscience and degenerative brain disorders, sleep disorders, digestive health, and cardiovascular disease. SLMC will be committed to “Make A Stand”, a system-wide initiative to provide breast cancer awareness and education to the community.
2. SLMC nurse educators and dietitians will provide free educational programs for low- income and/or underserved women that focus on maintaining a healthy diet with limited resources, nutrition, risk factors for diabetes, and risk factors for stroke among women.
3. SLMC will collaborate with community organizations, churches, civic groups, and support groups to present educational seminars on priority community health needs and other needs requested by the community. Seminar topics may include: accessing local safety net resources and providers, when to go to the emergency department, and navigating care after a hospital discharge.
4. SLMC will collaborate with organizations that focus on minority and vulnerable populations to present and distribute culturally relevant health information. SLMC will continue to offer targeted patient education programs such as the "Body, Mind and Spirit" presentation at an educational forum for Spanish speaking women.
5. SLMC will offer annual Pain Management educational programs on topics that may include preventing and treating back pain; hip, knee and shoulder pain; and/or pain associated with sickle cell disease.
6. SLMC will continue to host a stroke education support group. This program is open to all community members and stroke education literature is provided at no cost.

Community Health Needs Not Being Addressed

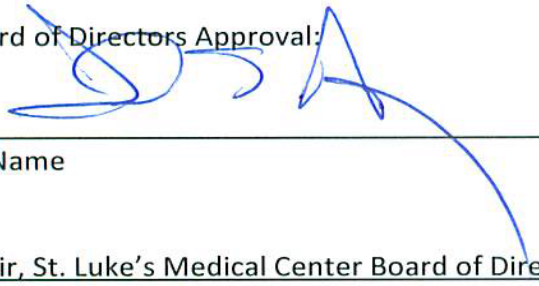
All four of the priority health needs identified in the CHNA are being addressed. There is no limit to the number of issues to which a healthcare institution could devote resources. Time, people, and money often are limiting factors for why we cannot do more. However, prevailing

wisdom suggests an organization like SLMC must focus on a high priority projects as identified in the CHNA. SLMC will also make every effort to avoid duplication and encourage collaboration and coordination with other organizations and community groups. As SLMC assessed unmet health needs and determined its priorities, we also evaluated those issues that are being addressed by others.

Approval

The St. Luke's Medical Center Board of Directors approves the Implementation Strategy for the priorities identified in the Community Health Needs Assessment. This report was prepared for the November 6, 2013 Board of Directors meeting.

Board of Directors Approval:



By Name

Chair, St. Luke's Medical Center Board of Directors
Title

11/17/13

Date

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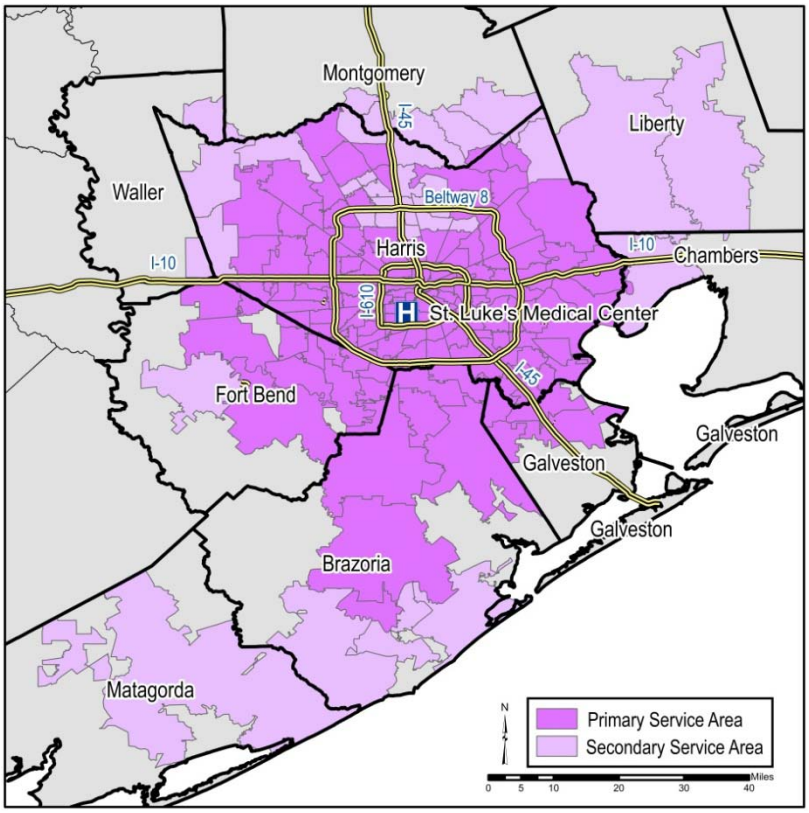
U.S. Department of Health & Human Services (HHS). *2011 HHS Poverty Guidelines; One version of the [U.S.] federal poverty measure*. Washington, DC: 2011.

U.S. Department of Health & Human Services (HHS). *2012 HHS Poverty Guidelines; One version of the [U.S.] federal poverty measure*. Washington, DC: 2012.

Appendix 1. Primary and Secondary Service Area Map and Zip Codes

The community served by SLMC consists of adjacent zip codes determined by 2012 hospital discharge data provided by the St. Luke's Health System. The PSA is based on 75% of discharges and the Secondary Service Area (SSA) reflects an additional 5% of discharges. The PSA for SLMC includes the following zip codes: 77584, 77033, 77021, 77096, 77025, 77051, 77045, 77047, 77057, 77004, 77048, 77053, 77024, 77489, 77016, 77005, 77581, 77035, 77009, 77056, 77087, 77015, 77020, 77063, 77459, 77536, 77027, 77379, 77511, 77089, 77023, 77573, 77401, 77054, 77546, 77008, 77019, 77571, 77026, 77521, 77007, 77429, 77578, 77084, 77088, 77030, 77074, 77029, 77006, 77095, 77077, 77071, 77028, 77018, 77479, 77532,77339, 77092, 77017, 77396, 77346, 77036, 77449, 77450, 77061, 77022, 77042, 77049, 77011, 77044, 77083, 77098, 77040, 77583, 77502, 77082, 77093, 77085, 77338, 77494, 77545, 77013, 77099, 77530, 77055, 77070, 77520, 77345, 77075, 77090, 77388, 77079, 77072, 77076, 77505, 77539, 77078, 77478, 77433, 77081, 77064, 77586, 77080, 77012, 77477, 77062, 77506, 77065, 77034, 77515, 77375, 77003, 77504, 77091, 77547, 77058, 77566, 77066, 77498, 77406, 77598, 77562, 77010, 77041, 77587, 77002, 77043, 77094, 77507, 77503, 77059, 77031, 77469, and 77046. The SSA for SLMC includes the following zip codes: 77535, 77365, 77575, 77073, 77373, 77050, 77037, 77032, 77069, 77523, 77039, 77067, 77014, 77060, 77471, 77386, 77541, 77357, 77086, 77038, 77531, 77336, 77068, 77377, 77493, 77381, 77380, 77389, 77414, 77422, and 77447. Because all of the zip codes within the PSA and the majority of zip codes within the SSA are found within Harris, Brazoria, Galveston, and Fort Bend counties, this report has relied upon recent data available for these counties to draw inferences about the SLMC community. The map below displays the SLMC community.



Appendix 2. Demographics of Community Served by SLMC

Table 1. Demographics of Adults[1] in the SLMC Community and Texas[2] by Poverty Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)							Texas						
	In Poverty		Near Poverty		Not in Poverty		Total	In Poverty		Near Poverty		Not in Poverty		Total
	n	%	n	%	n	%	%	n	%	n	%	n	%	%
Gender														
Male	263,512	38.6%	298,266	49.3%	828,464	50.4%	47.4%	1,697,895	43.4%	2,097,839	52.2%	4,474,612	51.9%	50.0%
Female	418,739	61.4%	306,153	50.7%	815,946	49.6%	52.6%	2,211,927	56.6%	1,917,246	47.8%	4,141,701	48.1%	50.0%
Race/Ethnicity														
White	95,689	14.0%	198,595	32.9%	825,076	50.2%	38.2%	802,463	20.5%	1,565,375	39.0%	546,574	63.4%	47.4%
Black	121,722	17.8%	101,757	16.8%	247,447	15.0%	16.1%	449,841	11.5%	495,799	12.3%	85,704	9.9%	10.9%
Hispanic	419,071	61.4%	254,390	42.1%	358,023	21.8%	35.2%	2,459,333	62.9%	1,680,662	41.9%	152,737	17.7%	34.3%
Asian	3,822	0.6%	27,059	4.5%	115,787	7.0%	5.0%	64,105	1.6%	109,380	2.7%	40,469	4.7%	3.5%
Native Hawaiian or other Pacific Islander	0	0.0%	11,237	1.9%	8,346	0.5%	0.7%	0	0.0%	11,237	0.3%	2,777	0.3%	0.2%
American Indian or Alaskan Native	13,613	2.0%	0	0.0%	9,883	0.6%	0.8%	45,006	1.2%	23,036	0.6%	5,588	0.6%	0.7%
Multiracial	21,655	3.2%	4,671	0.8%	39,622	2.4%	2.2%	55,687	1.4%	60,742	1.5%	13,906	1.6%	1.5%
Don't Know/Not Sure/Refused	6,680	1.0%	6,710	1.1%	40,227	2.4%	1.8%	33,387	0.9%	63,680	1.6%	13,507	1.6%	1.4%
Age (Years)														
18-24	74,336	10.9%	67,092	11.1%	139,106	8.5%	9.6%	627,309	16.0%	604,889	15.1%	706,164	8.2%	11.7%
25-34	206,174	30.2%	86,154	14.3%	204,266	12.4%	16.9%	997,971	25.5%	853,789	21.3%	1,363,255	15.8%	19.4%
35-44	179,379	26.3%	109,804	18.2%	326,923	19.9%	21.0%	894,003	22.9%	644,948	16.1%	1,669,854	19.4%	19.4%
45-54	115,810	17.0%	145,974	24.2%	417,523	25.4%	23.2%	615,816	15.8%	654,789	16.3%	1,957,694	22.7%	19.5%
55-64	60,156	8.8%	90,298	14.9%	297,212	18.1%	15.3%	419,804	10.7	572,592	14.3%	1,536,404	17.8%	15.3%
65 or older	46,396	6.8%	105,096	17.4%	259,381	15.8%	14.0%	354,919	9.1%	684,078	17.0%	1,382,942	16.1%	14.6%
Own or Rent														
Own	300,611	44.1%	325,851	53.9%	1,488,930	90.5%	72.2%	1,768,452	45.3%	2,355,738	58.8%	7,242,022	84.3%	68.9%
Rent	341,018	50.0%	243,630	40.3%	139,614	8.5%	24.7%	1,746,418	44.7%	1,424,644	35.6%	1,105,086	12.9%	25.9%
Other arrangements	40,622	6.0%	27,825	4.6%	14,825	0.9%	2.8%	356,560	9.1%	207,366	5.2%	196,658	2.3%	4.6%
Refused	0	0.0%	7,113	1.2%	1,041	0.1%	0.3%	10,987	0.3%	13,722	0.3%	41,289	0.5%	0.4%

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)							State of Texas						
	In Poverty		Near Poverty		Not in Poverty		Total	In Poverty		Near Poverty		Not in Poverty		Total
	n	%	n	%	n	%	%	n	%	n	%	n	%	%
Marital Status														
Married	252,013	36.9%	268,830	44.5%	1,055,909	64.2%	53.8%	1,406,670	36.0%	1,697,401	42.3%	5,554,742	64.5%	52.3%
A Member of an Unmarried Couple	85,175	12.5%	46,362	7.7%	55,910	3.4%	6.4%	425,938	10.9%	237,824	5.9%	254,178	2.9%	5.5%
Divorced	78,067	11.4%	90,238	14.9%	162,221	9.9%	11.3%	519,381	13.3%	606,744	15.1%	814,757	9.5%	11.7%
Widowed	18,399	2.7%	35,234	5.8%	62,564	3.8%	4.0%	168,575	4.3%	287,072	7.1%	372,051	4.3%	5.0%
Separated	35,910	5.3%	45,873	7.6%	20,060	1.2%	3.5%	277,839	7.1%	178,311	4.4%	117,217	1.4%	3.5%
Never Married	212,688	31.2%	117,883	19.5%	287,746	17.5%	21.1%	1,092,633	27.9%	998,878	24.9%	1,497,817	17.4%	21.7%
Refused	0	0.0%	0	0.0%	0	0.0%	0.0%	18,785	0.5%	8,855	0.2%	5,553	0.1%	0.2%
Education														
Never Attended School or Only Kindergarten	4,361	0.6%	0	0.0%	0	0.0%	0.1%	30,678	0.8%	22,874	0.6%	0	0.0%	0.3%
Grades 1-8 (Elementary)	139,479	20.4%	68,125	11.3%	17,950	1.1%	7.7%	723,812	18.5%	360,234	9.0%	74,301	0.9%	7.0%
Grades 9-11 (Some High School)	217,853	31.9%	93,728	15.5%	50,770	3.1%	12.4%	1,007,953	25.8%	582,220	14.5%	353,091	4.1%	11.7%
Grade 12 or GED (High School Graduate)	173,344	25.4%	183,092	30.3%	285,918	17.4%	21.9%	1,117,743	28.6%	1,297,791	32.3%	1,817,884	21.1%	25.6%
College 1-3 Years (Some College or Technical School)	119,812	17.6%	175,163	29.0%	557,724	33.9%	29.1%	840,458	21.5%	1,251,939	31.2%	2,982,144	34.6%	30.7%
College 4 Years or More (College Graduate)	27,403	4.0%	84,311	13.9%	732,048	44.5%	28.8%	182,973	4.7%	498,212	12.4%	3,382,429	39.3%	24.6%
Refused	0	0.0%	0	0.0%	0	0.0%	0.0%	6,203	0.2%	1,815	< 0.1%	6,464	0.1%	0.1%

[1] Adults aged 18 and over. [2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).

[3] Poverty Status was computed from items in the 2012 BRFSS measuring household income and family size. Family size and household income were then compared to the 2012 Poverty Guidelines published by the U.S. Department of Health and Human Services. Respondents below the poverty line for their reported household income and family size were classified as "In Poverty." Those not in poverty but within 200% of the poverty line were classified as "Near Poverty." Those above 200% of the poverty line were classified as "Not in Poverty."

[4] The percentages in this table are column percentages. For example, to find the percentage of those "In Poverty" who are Male in the SLMC service area, first look at the column "In Poverty" under SLMC and then go down to the row "Male" under Gender. Here, the percentage of those in poverty who are male is shown (38.6%).

Table 2. Demographics of Adults[1] in the SLMC Community and Texas[2] by Insurance Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)					Texas				
	Insured		Not Insured		Total	Insured		Not Insured		Total
	n	%	n	%	%	n	%	n	%	%
Gender										
Male	1,012,620	44.6%	546,684	50.8%	46.6%	6,273,983	47.8%	2,994,461	51.6%	48.9%
Female	1,257,138	55.4%	529,493	49.2%	53.4%	6,855,135	52.2%	2,811,874	48.4%	51.1%
Race/Ethnicity										
White	1,093,675	48.2%	136,995	12.7%	36.8%	7,543,313	57.5%	1,290,431	22.2%	46.7%
Black	354,777	15.6%	176,105	16.4%	15.9%	1,438,189	11.0%	577,827	10.0%	10.6%
Hispanic	554,361	24.4%	659,043	61.2%	36.3%	2,996,809	22.8%	3,613,987	62.2%	34.9%
Asian	152,551	6.7%	47,120	4.4%	6.0%	540,380	4.1%	140,324	2.4%	3.6%
Native Hawaiian or other Pacific Islander	14,137	0.6%	5,446	0.5%	0.6%	28,537	0.2%	11,324	0.2%	0.2%
American Indian or Alaskan Native	12,520	0.6%	10,975	1.0%	0.7%	107,264	0.8%	41,029	0.7%	0.8%
Multiracial	38,210	1.7%	30,356	2.8%	2.0%	217,619	1.7%	74,834	1.3%	1.5%
Don't Know/Not Sure/Refused	49,528	2.2%	10,137	0.9%	1.8%	249,952	1.9%	51,404	0.9%	1.6%
Age (Years)										
18-24	217,152	9.6%	192,394	17.9%	12.2%	1,479,395	11.3%	1,150,559	19.8%	13.9%
25-34	261,280	11.5%	327,238	30.4%	17.6%	1,928,659	14.7%	1,716,247	29.6%	19.2%
35-44	407,777	18.0%	256,232	23.8%	19.8%	2,203,464	16.8%	1,276,802	22.0%	18.4%
45-54	501,428	22.1%	219,669	20.4%	21.6%	2,498,095	19.0%	979,235	16.9%	18.4%
55-64	410,095	18.1%	75,379	7.0%	14.5%	2,184,945	16.6%	606,055	10.4%	14.7%
65 or older	472,026	20.8%	5,265	0.5%	14.3%	2,834,560	21.6%	77,436	1.3%	15.4%
Own or Rent Home										
Own	1,856,873	81.8%	486,116	45.2%	70.0%	9,919,446	75.7%	2,840,714	49.1%	67.5%
Rent	373,819	16.5%	469,733	43.6%	25.2%	2,565,519	19.6%	2,362,977	40.8%	26.1%
Other Arrangements	25,286	1.1%	77,580	7.2%	3.1%	495,107	3.8%	492,423	8.5%	5.2%
Don't Know/Not Sure	7,013	0.3%	22,012	2.0%	0.9%	44,409	0.3%	47,962	0.8%	0.5%
Refused	6,766	0.3%	20,736	1.9%	0.8%	80,690	0.6%	45,592	0.8%	0.7%

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)					State of Texas				
	Insured		Not Insured		Total	Insured		Not Insured		Total
	N	%	N	%	%	N	%	N	%	%
Marital Status										
Married	1,337,306	58.9%	401,070	37.3%	52.0%	7,475,299	56.9%	2,091,000	36.0%	50.5%
A Member of an Unmarried Couple	106,910	4.7%	111,628	6.5%	6.5%	438,956	3.3%	634,439	10.9%	5.7%
Divorced	244,542	10.8%	111,676	10.4%	10.6%	1,408,609	10.7%	683,748	11.8%	11.0%
Widowed	136,419	6.0%	0	0.0%	4.1%	886,891	6.8%	115,656	2.0%	5.3%
Separated	55,397	2.4%	51,564	4.8%	3.2%	341,005	2.6%	299,840	5.2%	3.4%
Never Married	389,185	17.1%	400,599	37.2%	23.6%	2,546,933	19.4%	1,945,401	33.5%	23.7%
Refused	0	0.0%	0	0.0%	0.0%	31,424	0.2%	36,252	0.6%	0.4%
Education										
Never Attended School or Only Kindergarten	0	0.0%	7,114	0.7%	0.2%	17,778	0.1%	47,316	0.8%	0.3%
Grades- 1-8 (Elementary)	89,752	4.0%	186,180	17.3%	8.2%	542,974	4.1%	837,069	14.4%	7.3%
Grades 9-11 (Some High School)	111,529	4.9%	281,984	26.2%	11.8%	852,364	6.5%	1,391,149	23.9%	11.8%
Grades 12 or GED (High School Graduate)	524,078	23.1%	300,175	27.9%	24.6%	3,344,119	25.5%	1,647,769	28.3%	26.3%
College 1-3 years (Some College or Technical School)	709,647	31.3%	219,338	20.4%	27.8%	4,340,211	33.0%	1,468,993	25.2%	30.7%
College 4 Years or More (College Graduate)	834,752	36.8%	81,387	7.6%	27.4%	4,027,517	30.6%	415,179	7.1%	23.3%
Refused	0	0.0%	0	0.0%	0.0%	23,654	0.2%	11,684	0.2%	0.2%

[1] Adults aged 18 and over.

[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).

[3] Insurance Status was taken from the 2012 BRFSS. Respondents were asked if they had a source of healthcare coverage such as an HMO or Medicare.

[4] The percentages in this table are column percentages. For example, to find the percentage of those "Insured" who are Male in the SLMC service area, first look at the column "Insured" under SLMC and then go down to the row "Male" under Gender. Here, the percentage of those insured who are male in Harris County is shown (44.6%).

Appendix 3 Participants involved in the CHNA

SLMC Hospital Advisory Team			
William Brosius, CPA	Vice President, Chief Financial Officer	St. Luke's Medical Center	Hospital Advisory Team
Karen Myers, MSN, RN, CNAA	Vice President, Chief Nursing Officer	St. Luke's Medical Center	Hospital Advisory Team
John Stroh, MD	Associate Section Chief-Emergency Department	St. Luke's Medical Center	Hospital Advisory Team
Aamrapali Patel, MHA	Director of Business Development	St. Luke's Medical Center	Hospital Advisory Team
St. Luke's Health System Team			
Melinda Grady	Tax Director	St. Luke's Health System	General Oversight
David Gruener	Senior Vice President and Chief Finance Officer	St. Luke's Health System	General Oversight
Kenneth Zieren	Administrative Director of Compliance	St. Luke's Health System	General Oversight
Episcopal Health Charities Team			
Tamara Brickham Bourda, MPH	Manager, Special Programs	Episcopal Health Charities	Overall CHNA Project Management
Patricia Gail Bray, PhD	Executive Director	Episcopal Health Charities	Technical Assistance
Jeanne Hanks, DrPh	Assistant Director of Operations	Episcopal Health Charities	Technical Assistance
Maria Fernandez-Esquer, PhD	Associate Professor	The University of Texas School of Public Health	CHNA Project Management
Pamela M. Diamond, PhD	Associate Professor	The University of Texas School of Public Health	CHNA Project Management
John Atkinson, DrPH	Faculty Associate	The University of Texas School of Public Health	Quantitative Data Analysis
Andria Rusk, MScGH	Graduate Assistant	The University of Texas School of Public Health	Qualitative Data Analysis
Erica Cantu, MPH	Graduate Assistant	The University of Texas School of Public Health	Quantitative Data Analysis
Mariana Arevalo, MSPH	Graduate Assistant	The University of Texas School of Public Health	Quantitative Data Analysis
Lynn Elgin	Community Engagement Manager	Clarus Consulting Group	Community Engagement Coordination
Taylor Cooper	Community Engagement Associate	Clarus Consulting Group	Community Engagement Coordination
Community Stakeholders and Public Health Experts			
Diaa Alqusairi	Program Manager	Harris County Healthcare Alliance	Community Stakeholder
Robert W. Anders	Operations Supervisor	Harris County Transit - RIDES	Community Stakeholder

Todd A. Curry	Interim Division Manager	Houston Mayor's Office for People with Disabilities	Community Stakeholder
Dr. Faith Foreman	Assistant Director	City of Houston Department of Health and Human Services	Community Stakeholder
Frances Isbell	Chief Executive Officer	Healthcare for the Homeless - Houston	Community Stakeholder
Jill Ann Jarrell	M.D./M.P.H.	Doctors for Change	Community Stakeholder
Gwen Johnson	Manager, Health and Medical Services	Houston Independent School District	Community Stakeholder
Susan Lackey	Community and Stakeholder Engagement	Healthy Living Matters	Community Stakeholder
June Liu	Quality Manager, Special Projects	Community Health Choice, Inc.	Community Stakeholder
Curtis McMinn	Senior Program Manager	United Way of Greater Houston	Community Stakeholder
Robyn Patschke	Grant Manager	Interfaith Ministries for Greater Houston	Community Stakeholder
Giselle Patterson	Director of Member Connection	YMCA of Greater Houston	Community Stakeholder
Jometra Pinesette	Health Equity Specialist	American Heart Association	Community Stakeholder
Rocaille Roberts	Director, Office of Policy and Planning	Harris County Public Health and Environmental Services	Community Stakeholder
Josh Reynolds	Director of Programs	Care for Elders	Community Stakeholder
Kimberly Tang	Program Manager (Workforce Development)	Chinese Community Center	Community Stakeholder
Denise Truong	Director of Programs	Chinese Community Center	Community Stakeholder
Anne Whitlock	Program Manager, Community Clinic Funders' Collaborative	Harris County Healthcare Alliance	Community Stakeholder
Lyn Widlaski	Executive Director	Breast health Collaborative of Texas	Community Stakeholder
Lindsey Wiginton	Epidemiologist	Houston HDDS	Community Stakeholder
Latrice Babin, PhD	Environmental Toxicologist	Harris County Pollution Control Services Department	Public Health Expert
June Hanke	Strategic Analyst/Planner	Harris Health System	Public Health Expert
Dr. Nicole Hare-Everline, CHES	City of Houston Wellness/EAP Director	City of Houston	Public Health Expert
Robert Hines	Epidemiologist	Houston Department of Health and Human Services	Public Health Expert
Haley Jackson	Team Lead	Texas Department of State Health Services	Public Health Expert
Lisa Mayes	Executive Director	Harris County Healthcare Alliance	Public Health Expert
Bakeyah Nelson	Public Health Analyst	Harris County Public Health and	Public Health Expert

		Environmental Services	
Beverly Nichols, PsyD, MS, RN	Senior Staff Analyst	Houston Department of Health and Human Services	Public Health Expert
Kimberly Nicholson	Program Specialist II	Texas Department of State Health Services	Public Health Expert
Ebun Odeneye	Senior Health Educator	City of Houston	Public Health Expert
Yan Shi	Management Analyst III	Houston Department of Health and Human Services	Public Health Expert
Lindsey Wiginton	Epidemiologist	Houston Department of Health and Human Services	Public Health Expert

Appendix 4. 2012 SLMC Discharges by ICD-9 Code

Data on all hospital discharges for 2012 were provided by the St. Luke's Health System. Data were available for SLMC and was aggregated by the 5 digit ICD-9 diagnosis code and divided into inpatient and outpatient discharges. No demographic or personally identifiable information was provided; therefore, the information below represents the types of health problems experienced by people who made use of SLMC during 2012. In order to summarize the data more effectively, the ICD-9 codes were further aggregated into more relevant and less clinically specific categories.

Table 1 St. Luke's Medical Center, 2012 Hospital Discharges by ICD-9 Code[1]

Diagnostic Group (ICD-9)	Inpatient		Outpatient		Total	
	n	%	n	%	n	%
1. Infectious and Parasitic Diseases (001–139)	**915**	**5.9%**	**1686**	**2.4%**	**2601**	**3.0%**
2. Neoplasms (140–239)	**420**	**2.7%**	**67**	**0.1%**	**487**	**0.6%**
3. Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders (240–279)	**843**	**5.4%**	**885**	**1.2%**	**1728**	**2.0%**
4. Diseases of the Blood and Blood-Forming Organs (280–289)	**504**	**3.3%**	**436**	**0.6%**	**940**	**1.1%**
5. Mental Disorders (290–319)	**150**	**1.0%**	**581**	**0.8%**	**731**	**0.8%**
• ***290-294 organic psychotic conditions***	62	41.3%	44	7.6%	106	14.5%
• ***295-299 other psychoses***	31	20.7%	61	10.5%	92	12.6%
• ***300-316 neurotic disorders, personality disorders, and other nonpsychotic***	56	37.3%	476	81.9%	532	72.8%
• ***317-319 intellectual disabilities***	1	0.7%	0%	0.0%	1	0.1%
6. Diseases of the Nervous System and Sense Organs (320–389)	**471**	**3.0%**	**3615**	**5.0%**	**4086**	**4.7%**
7. Diseases of the Circulatory System (390–459)	**3911**	**25.3%**	**2113**	**3.0%**	**6024**	**6.9%**
• ***390-392 acute rheumatic fever***	1	<0.1%	0	0.0%	1	< 0.1%
• ***393-398 chronic rheumatic heart disease***	7	0.2%	0	0.0%	7	0.1%
• ***401-405 hypertensive disease***	393	10.0%	964	45.6%	1357	22.5%
• ***410-414 ischemic heart disease***	625	16.0%	104	4.9%	729	12.1%
• ***415-417 diseases of pulmonary circulation***	139	3.6%	13	0.6%	152	2.5%
• ***420-429 other forms of heart disease***	1622	41.5%	503	23.8%	2125	35.3%
• ***430-438 cerebrovascular disease***	731	18.7%	185	8.8%	916	15.2%
• ***440-449 diseases of arteries, arterioles, and capillaries***	97	2.5%	23	1.1%	120	2.0%

Diagnostic Group (ICD-9)	Inpatient		Outpatient		Total	
	n	%	n	%	n	%
• *451-459 diseases of veins and lymphatics, and other diseases of circulatory*	296	7.6%	321	15.2%	617	10.2%
8. Diseases of the Respiratory System (460-519)	**1490**	**9.6%**	**9051**	**12.6%**	**10541**	**12.1%**
• *460-466 acute respiratory infections*	75	5.0%	6653	73.5%	6728	63.8%
• *470-478 other diseases of upper respiratory tract*	18	1.2%	238	2.6%	256	2.4%
• *480-488 pneumonia and influenza*	483	32.4%	922	10.2%	1405	13.3%
• *490-496 chronic obstructive pulmonary disease and allied conditions*	485	32.6%	1045	11.5%	1530	14.5%
• *500-508 pneumoconioses and other lung diseases due to external agents*	94	6.3%	15	0.2%	109	1.0%
• *510-519 other diseases of respiratory system*	335	22.5%	178	2.0%	513	4.9%
9. Diseases of the Digestive System (520-579)	**2612**	**16.9%**	**2863**	**4.0%**	**5475**	**6.3%**
• *520-529 diseases of oral cavity, salivary glands, and jaws*	35	1.3%	539	18.8%	574	10.5%
• *530-539 diseases of esophagus, stomach, and duodenum*	398	15.2%	422	14.7%	820	15.0%
• *540-543 appendicitis*	143	5.5%	100	3.5%	243	4.4%
• *550-553 hernia of abdominal cavity*	76	2.9%	95	3.3%	171	3.1%
• *555-558 noninfective enteritis and colitis*	270	10.3%	586	20.5%	856	15.6%
• *560-569 other diseases of intestines and peritoneum*	650	24.9%	771	26.9%	1421	26.0%
• *570-579 other diseases of digestive system*	1040	39.8%	350	12.2%	1390	25.4%
10. Diseases of the Genitourinary System (580-629)	**1084**	**7.0%**	**4702**	**6.6%**	**5786**	**6.6%**
• *not specified*	0	0.0%	581	12.4%	581	10.0%
• *580-589 nephritis, nephrotic syndrome, and nephrosis*	405	37.4%	33	0.7%	438	7.6%
• *590-599 other diseases of urinary system*	588	54.2%	2705	57.5%	3293	56.9%
• *600-608 diseases of male genital organs*	38	3.5%	242	5.1%	280	4.8%
• *610-612 disorders of breast*	11	1.0%	85	1.8%	96	1.7%
• *614-616 inflammatory disease of female pelvic organs*	24	2.2%	447	9.5%	471	8.1%
• *617-629 other disorders of female genital tract*	18	1.7%	609	13.0%	627	10.8%
11. Complications of Pregnancy, Childbirth, and the Puerperium (630–677)	**60**	**0.4%**	**1082**	**1.5%**	**1142**	**1.3%**
12. Diseases of the Skin and Subcutaneous Tissue (680–709)	**456**	**2.9%**	**3704**	**5.2%**	**4160**	**4.8%**
13. Diseases of the Musculoskeletal System and Connective Tissue (710-739)	**328**	**2.1%**	**5845**	**8.2%**	**6173**	**7.1%**

Diagnostic Group (ICD-9)	Inpatient		Outpatient		Total	
	n	%	n	%	n	%
• *710-719 arthopathies and related disorders*	63	19.2%	1528	26.1%	1591	25.8%
• *720-724 dorsopathies*	112	34.1%	2813	48.1%	2925	47.4%
• *725-729 rheumatism, excluding the back*	88	26.8%	1420	24.3%	1508	24.4%
• *730-739 osteopahies, chondropathies, and acquired musculoskeletal*	65	19.8%	84	1.4%	149	2.4%
14. Congenital Anomalies (740-759)	**11**	**0.1%**	**9**	**< .01%**	**20**	**< .01%**
15. Certain Conditions Originating in the Perinatal Period (760–779)	**1**	**< 0.1%**	**12**	**< 0.1%**	**13**	**< .01%**
16. Symptoms, Signs, and Ill-Defined Conditions (780-799)	**920**	**5.9%**	**19746**	**27.6%**	**20666**	**23.7%**
• *780-789 symptoms*	865	94.0%	19643	99.5%	20508	99.2%
• *790-796 nonspecific abnormal findings*	52	5.7%	94	0.5%	146	0.7%
• *797-799 ill-defined and unknown causes of morbidity and mortality*	3	0.3%	9	< 0.1%	12	0.1%
17. Injury and Poisoning (800-899)	**1283**	**8.3%**	**13925**	**19.4%**	**15208**	**17.5%**
• *800-804 fracture of skull*	7	0.5%	147	1.1%	154	1.0%
• *805-809 fracture of spine and trunk*	67	5.2%	191	1.4%	258	1.7%
• *810-819 fracture of upper limb*	32	2.5%	1027	7.4%	1059	7.0%
• *820-829 fracture of lower limb*	150	11.7%	660	4.7%	810	5.3%
• *830-839 dislocation*	2	0.2%	245	1.8%	247	1.6%
• *840-848 sprains and strains of joints and adjacent muscles*	8	0.6%	3139	22.5%	3147	20.7%
• *850-854 intracranial injury, excluding those with skull fracture*	73	5.7%	405	2.9%	478	3.1%
• *860-869 internal injury of chest, abdomen, and pelvis*	12	0.9%	6	< .01%	18	0.1%
• *870-879 open wound of head, neck, and trunk*	5	0.4%	1194	8.6%	1199	7.95
• *880-887 open wound of upper limb*	2	0.2%	1279	9.2%	1281	8.4%
• *890-897 open wound of lower limb*	0	0.0%	495	3.6%	495	3.35
• *900-904 injury to blood vessels*	0	0.0%	0	0.0%	0	0.0%
• *905-909 late effects of injuries, poisonings, toxic effects, and other external*	1	0.1%	0	0.0%	1	< 0.1%
• *910-919 superficial injury*	1	0.1%	907	6.5%	908	6.0%
• *920-924 contusion with intact skin surface*	9	0.7%	1697	12.2%	1706	11.2%
• *925-929 crushing injury*	0	0.0%	61	0.4%	61	0.4%
• *930-939 effects of foreign body entering through orifice*	11	0.9%	250	1.8%	261	1.7%
• *940-949 burns*	2	0.2%	192	1.4%	194	1.3%
• *950-957 injury to nerves and spinal cord*	1	0.1%	4	< 0.1%	5	< 0.1%

Diagnostic Group (ICD-9)	Inpatient		Outpatient		Total	
	n	%	n	%	n	%
• ***958-959 certain traumatic complications and unspecified injuries***	6	0.5%	1260	9.0%	1266	8.3%
• ***960-979 poisoning by drugs, medicinals and biological substances***	62	4.8%	102	0.7%	164	1.1%
• ***980-989 toxic effects of substances chiefly nonmedical as to source***	4	0.3%	87	0.6%	91	0.6%
• ***990-995 other and unspecified effects of external causes***	28	2.2%	184	1.3%	212	1.4%
• ***996-999 complications of surgical and medical care, not elsewhere classified***	800	62.4%	393	2.8%	1193	7.8%
18. Sickle-cell Disease (282.60-282.69)	**209**	**1.4%**	**134**	**0.2%**	**343**	**0.4%**
• ***282.60 sickle-cell disease unspecified***	0	0.0%	0	0.0%	0	0.0%
• ***282.61 Hb-SS disease without crisis***	0	0.0%	0	0.0%	0	0.0%
• ***282.62 Hb-SS disease with crisis***	191	91.4%	129	96.3%	320	93.3%
• ***282.63 Sickle-cell/Hb-C disease without crisis***	0	0.0%	0	0.0%	0	0.0%
• ***282.64 Sickle-cell/Hb-C disease with crisis***	0	0.0%	0	0.0%	0	0.0%
• ***282.68 other sickle-cell disease without crisis***	0	0.0%	1	0.7%	1	0.3%
• ***282.69 other sickle-cell disease with crisis***	18	8.6%	4	3.0%	22	6.4%
V Codes Supplementary Classification of Factors Influencing Health Status and Contact	**16**	**0.1%**	**1011**	**1.4%**	**1027**	**1.2%**
E Codes Supplementary Classification of External Causes of Injury and Poisoning	**1**	**< .01%**	**1**	**0.1%**	**1**	**< 0.1%**

Data are presented for inpatient, outpatient, and total discharged patients. For some categories such as #1, Infectious and Parasitic Diseases, the bolded numbers indicate the number of discharges for that diagnosis. For example, there were 915 inpatient discharges in this category which accounted for 5.9% of all inpatient discharges. Similarly, there were 1,686 outpatient discharges which accounted for2.4% of all outpatient discharges. In total, there were 2,601 discharges for this category, which accounted for 3.0% of total discharges. For categories such as #7, Diseases of the Circulatory System, the bolded numbers are to be interpreted similarly. For example, 3,911inpatients were diagnosed with a circulatory disease, and these represented 25.3% of all inpatient discharges. The additional rows under this heading represent sub-diagnostic categories. For example, 393 of the 3,911 inpatient discharges were for "hypertensive disease." As indicated, these cases accounted for 10.0% of all inpatient discharges for a circulatory disease.

Appendix 5. Health Status Indicators

Table 1. Health Status of Adults[1] in the SLMC Community and Texas[2] by Insurance Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)					Texas				
	Insured		Not Insured		Total	Insured		Not Insured		Total
	n	%	n	%	%	n	%	n	%	%
Reported health status										
Excellent	513,561	22.6%	100,147	9.3%	18.3%	2,562,630	19.5%	780,827	13.4%	17.7%
Very Good	731,852	32.2%	219,127	20.4%	28.4%	4,230,867	32.2%	1,092,511	18.8%	28.1%
Good	615,545	27.1%	493,844	45.9%	33.2%	3,900,026	29.7%	2,567,339	44.2%	34.2%
Fair	260,320	11.5%	209,022	19.4%	14.0%	1,601,844	12.2%	973,183	16.8%	13.6%
Poor	136,748	6.0%	48,717	4.5%	5.5%	724,907	5.5%	302,421	5.2%	5.4%
Refused	11,732	0.5%	5,320	0.5%	0.5%	93,940	0.7%	54,625	0.9%	0.8%
Ever told have diabetes										
Yes	301,529	13.3%	76,008	7.1%	11.3%	1,602,772	12.2%	418,585	7.2%	10.7%
Yes, during pregnancy	15,103	0.7%	11,301	1.1%	0.8%	91,223	0.7%	70,968	1.2%	0.9%
No, pre-diabetes or borderline diabetes	20,071	0.9%	11,099	1.0%	0.9%	132,007	1.0%	99,205	1.7%	1.2%
Ever told had skin cancer [5]	111,353	4.9%	13,829	1.3%	3.7%	856,421	6.5%	61,456	1.1%	4.8%
Ever told had any other type of cancer	167,929	7.4%	15,553	1.4%	5.5%	893,680	6.8%	88,719	1.5%	5.2%
Ever diagnosed with angina or coronary heart disease	96,415	4.2%	17,242	1.6%	3.4%	669,556	5.1%	58,786	1.0%	3.8%
Ever told had a heart attack	79,787	3.5%	11,286	1.0%	2.7%	602,863	4.6%	91,974	1.6%	3.7%
Ever diagnosed with a stroke	56,540	2.5%	30,647	2.8%	2.6%	431,829	3.3%	80,241	1.4%	2.7%
Ever told have asthma	238,619	10.5%	67,724	6.3%	9.2%	1,547,130	11.8%	524,276	9.0%	10.9%
Number of days in last 30 days mental health not good										
None	1,539,381	67.8%	705,717	65.6%	67.1%	8,666,319	66.0%	3,588,525	61.8%	64.7%
1- 5 days	351,141	15.5%	148,900	13.8%	14.9%	2,341,089	17.8%	966,544	16.6%	17.5%
6 -10 days	92,800	4.1%	64,163	6.0%	4.7%	574,285	4.4%	365,364	6.3%	5.0%
11-30 days	258,301	11.4%	154,473	14.4%	12.3%	1,366,312	10.4%	762,391	13.1%	11.2%
Don't Know / Not Sure	17,248	0.8%	0	0.0%	0.5%	108,100	0.8%	73,608	1.3%	1.0%
Refused	10,887	0.5%	2,924	0.3%	0.4%	73,013	0.6%	49,903	0.9%	0.6%

[1] Adults aged 18 and over.

[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).

[3] Insurance Status was taken from the 2012 BRFSS. Respondents were asked if they had a source of healthcare coverage such as an HMO or Medicare.

[4] The percentages in this table are column percentages. For example, to find the percentage of those "Insured" in the SLMC service area who reported their health as "Excellent," first look at the column "Insured" under SLMC and then go down to the row "Excellent" under Reported Health Status. Here, the percentage of those "Insured" in the SLMC service area who reported having excellent health is shown (22.6%).

[5] BRFSS participants were first asked about skin cancer specifically, then any other type of cancer.

Table 2. Health Status of Adults[1] in the SLMC Community and Texas[2] by Poverty Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)							Texas						
	In Poverty		Near Poverty		Not in Poverty		Total	In Poverty		Near Poverty		Not in Poverty		Total
	n	%	n	%	n	%	%	n	%	n	%	n	%	%
Reported health status														
Excellent	44,383	6.5%	65,733	10.9%	427,586	26.0%	18.3%	377,645	9.7%	580,351	14.5%	1,963,206	22.8%	17.7%
Very Good	71,747	10.5%	109,655	18.1%	611,944	37.2%	27.1%	520,606	13.3%	906,224	22.6%	3,262,738	37.9%	28.4%
Good	279,301	40.9%	213,345	35.3%	454,384	27.6%	32.3%	1,653,247	42.3%	1,459,550	36.4%	2,427,944	28.2%	33.5%
Fair	202,270	29.6%	134,902	22.3%	114,845	7.0%	15.4%	860,942	22.0%	733,965	18.3%	727,119	8.4%	14.0%
Poor	79,229	11.6%	72,922	12.1%	31,781	1.9%	6.3%	446,873	11.4%	299,133	7.5%	174,242	2.0%	5.6%
Refused	5,320	0.8%	7,862	1.3%	3,870	0.2%	0.6%	41,759	1.1%	28,292	0.7%	49,795	0.6%	0.7%
Ever told have diabetes														
Yes	102,533	15.0%	117,195	19.4%	148,032	9.0%	12.5%	528,885	13.5%	535,141	13.3%	769,231	8.9%	11.1%
Yes, during pregnancy	5,726	0.8%	0	0.0%	6,827	0.4%	0.4%	58,020	1.5%	20,284	0.5%	54,227	0.6%	0.8%
No, pre-diabetes or	19,577	2.9%	10,052	1.7%	1,541	0.1%	1.1%	87,998	2.3%	59,677	1.5%	71,357	0.8%	1.3%
Ever told had skin cancer[5]	13,161	1.9%	15,080	2.5%	84,713	5.2%	3.9%	61,279	1.6%	190,451	4.7%	591,848	6.9%	5.1%
Ever told had any other type of cancer	22,898	3.4%	39,729	6.6%	99,180	6.0%	5.5%	141,233	3.6%	239,049	6.0%	487,821	5.7%	5.2%
Ever diagnosed with angina or coronary heart disease	33,348	4.9%	24,425	4.0%	60,247	3.7%	4.0%	163,983	4.2%	156,839	3.9%	367,221	4.3%	4.2%
Ever told had a heart attack	20,416	3.0%	32,227	5.3%	33,431	2.0%	2.9%	156319	4.0%	197,357	4.9%	277,649	3.2%	3.8%
Ever diagnosed with a stroke	22,461	3.3%	35,987	6.0%	19,171	1.2%	2.6%	119,993	3.1%	143,892	3.6%	164,849	1.9%	2.6%
Ever told have asthma	63,695	9.3%	39,838	6.6%	189,824	11.5%	10.0%	514,163	13.2%	466,374	11.6%	838,648	9.7%	11.0%
Number of days in last 30 days mental health not good														
None	364,607	53.4%	427,292	70.7%	1,154,993	70.2%	66.4%	2,085,905	53.4%	2,515,599	62.7%	6,063,437	70.4%	64.5%
1- 5 days	122,352	17.9%	55,460	9.2%	261,069	15.9%	15.0%	701,353	17.9%	673,581	16.8%	1,537,885	17.8%	17.6%
6- 10 days	64,016	9.4%	21,383	3.5%	61,451	3.7%	5.0%	261,831	6.7%	270,180	6.7%	288,769	3.4%	5.0%
11- 30 days	125,015	18.3%	84,437	14.0%	158,621	9.6%	12.6%	761,768	19.5%	500,028	12.5%	656,406	7.6%	11.6%
Don't Know / Not Sure	0	0.0%	9,780	1.6%	2,407	0.1%	0.4%	43,332	1.1%	38,064	0.9%	47,921	0.6%	0.8%
Refused	6,261	0.9%	6,067	1.0%	5,869	0.4%	0.6%	55,632	1.4%	17,633	0.4%	21,895	0.3%	0.6%

[1] Adults aged 18 and over.

[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).

[3] Poverty Status was computed from items in the 2012 BRFSS measuring household income and family size. Family size and household income were then compared to the 2012 Poverty Guidelines published by the U.S. Department of Health and Human Services. Respondents below the poverty line for their reported household income and family size were classified as "In Poverty." Those not in poverty but within 200% of the poverty line were classified as "Near Poverty." Those above 200% of the poverty line were classified as "Not in Poverty."

[4] The percentages in this table are column percentages. For example, to find the percentage of those "Insured" in the SLMC service area who reported their health as "Excellent," we first look at the column "In Poverty" under Harris County and then go down to the row "Excellent" under Reported Health Status. Here, the percentage of those in the SLMC service area living in poverty who reported having excellent health is shown (6.5%).

[5] BRFSS participants were first asked about skin cancer specifically, then any other type of cancer.

Appendix 6. Health Access Indicators

Table 1. Health Access of Adults[1] in the SLMC Community and Texas[2] by Insurance Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)					Texas				
	Insured		Not Insured		Total	Insured		Not Insured		Total
	n	%	n	%	%	n	%	n	%	%
Poverty Status[5]										
In Poverty	197,187	9.8%	477,193	52.8%	23.1%	1,492,143	12.9%	2,386,690	48.4%	23.5%
Near Poverty	362,012	17.9%	242,407	26.8%	20.7%	2,376,583	20.6%	1,619,402	32.8%	24.2%
Not in Poverty	1,459,375	72.3%	183,987	20.4%	56.2%	7,679,628	66.5%	925,422	18.8%	52.2%
Personal Doctor or Healthcare Provider										
Yes, only one	1,723,176	75.9%	195,063	18.1%	57.3%	9,782,816	74.5%	1,745,972	30.1%	60.9%
More than one	131,647	5.8%	13,793	1.3%	4.3%	988,682	7.5%	105,248	1.8%	5.8%
No	402,690	17.7%	852,876	79.3%	37.5%	2,305,965	17.6%	3,898,115	67.1%	32.8%
Don't Know/Not Sure	5,383	0.2%	9,267	0.9%	0.4%	15,513	0.1%	30,705	0.5%	0.2%
Refused	6,862	0.3%	5,177	0.5%	0.4%	36,141	0.3%	26,295	0.5%	0.3%
Could not see doctor in past 12 months because of cost	266,275	11.7%	501,780	46.6%	23.0%	1,516,261	11.5%	2,428,396	41.8%	20.8%

[1] Adults aged 18 and over.
[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).
[3] Insurance status was taken from the BRFSS. Respondents were asked if they had a source of healthcare coverage such as an HMO or Medicare.
[4] The percentages in this table are column percentages. For example, to find the percentage of those "Insured" in the SLMC service area who were "In Poverty," we first look at the column "Insured" under SLMC and then go down to the row "In Poverty" under Poverty Status. Here the percentage of those insured living in the SLMC service area who report being in poverty is shown (9.8%)
[5] Poverty Status was computed from items in the 2012 BRFSS measuring household income and family size. Family size and household income were then compared to the 2012 Poverty Guidelines published by the Department of Health and Human Services. Respondents below the poverty line for their reported household income and family size were classified as "In Poverty." Those not in poverty but within 200% of the poverty line were classified as "Near Poverty." Those above 200% of the poverty line were classified as "Not in Poverty."

Table 2. Health Access of Adults[1] in the SLMC Community and Texas[2] by Poverty Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)							Texas						
	In Poverty		Near Poverty		Not in Poverty		Total	In Poverty		Near Poverty		Not in Poverty		Total
	n	%	n	%	n	%	%	n	%	n	%	n	%	%
Health Insurance[5]	197,187	29.2%	362,012	59.9%	1,459,375	88.8%	69.1%	1,492,143	38.5%	2,376,583	59.5%	7,679,628	89.2%	70.1%
Personal Doctor or Healthcare Provider														
Yes, only one	205,736	30.2%	317,744	52.6%	1,206,571	73.4%	59.0%	1,695,597	43.4%	2,166,203	54.0%	6,347,693	73.7%	61.7%
More than one	20,930	3.1%	20,259	3.4%	84,267	5.1%	4.3%	184,747	4.7%	205,902	5.1%	549,209	6.4%	5.7%
No	438,162	64.2%	259,519	42.9%	353,573	21.5%	35.9%	1,992,882	51.0%	1,616,020	40.2%	1,711,659	19.9%	32.2%
Don't Know/Not Sure	5,383	0.8%	6,897	1.1%	0	0.0%	0.4%	9,759	0.2%	9,574	0.2%	2,969	0.0%	0.1%
Refused	12,039	1.8%	0	0.0%	0	0.0%	0.4%	26,837	0.7%	17,386	0.4%	4,784	0.1%	0.3%
Could not see doctor in past 12 months because of cost	330,791	48.5%	150,891	25.0%	198,170	12.1%	23.2%	1,607,614	41.1%	1,112,681	27.7%	858,285	10.0%	21.6%

[1] Adults aged 18 and over.

[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).

[3] Poverty Status was computed from items in the 2012 BRFSS measuring household income and family size. Family size and household income were then compared to the 2012 Poverty Guidelines published by the U.S. Department of Health and Human Services. Respondents below the poverty line for their reported household income and size were classified as "In Poverty." Those not in poverty but within 200% of the poverty line were classified as "Near Poverty." Those above 200% of the poverty line were classified as "Not in Poverty."

[4] The percentages in this table are column percentages. For example, to find the percentage of those "In Poverty" in the SLMC service area who had health insurance, we first look at the column "In Poverty" under SLMC and then go down to the row "Health Insurance." Here, the percentage of those in living in poverty in the SLMC service area who are insured is shown (29.2%).

[5] Insurance Status was taken from the 2012 BRFSS. Respondents were asked if they had a source of healthcare coverage such as an HMO or Medicare.

Appendix 7. Preventive Services Indicators

Table 1. Preventive Services obtained by Adults[1] in the SLMC Community and Texas[2] by Insurance Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)					Texas				
	Insured		Not Insured		Total	Insured		Not Insured		Total
	n	%	n	%	%	n	%	n	%	%
Ever had a mammogram[5]	834,252	70.5%	193,450	36.5%	60.0%	4,662,088	70.2%	1,121,147	41.4%	61.8%
Ever had a Pap test[5]	1,085,651	91.9%	435,731	82.3%	89.0%	6,050,182	91.3%	2,263,388	83.8%	89.1%
Ever had blood stool test using a home kit	367,745	35.4%	22,978	13.6%	32.3%	2,158,611	35.5%	158,533	14.1%	32.1%
Ever had a sigmoidoscopy/colonoscopy[6]	747,387	71.9%	27,052	16.0%	64.1%	4,216,936	69.3%	265,147	23.8%	62.3%
Ever tested for HIV	905,416	42.4%	550,549	52.1%	45.6%	4,526,619	36.0%	2,365,681	43.1%	38.2%

[1] Adults aged 18 and over.
[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).
[3] Insurance Status was taken from the 2012 BRFSS. Respondents were asked if they had a source of healthcare coverage such as an HMO or Medicare.
[4] The percentages in this table are column percentages. For example, to find the percentage of women "Insured" in the SLMC service area who had ever had a mammogram, we first look at the column "Insured" under SLMC and then go down to the row "Ever had a mammogram. Here, the percentage of insured women in the SLMC service area who had ever had a mammogram is shown (70.5%).
[5] Asked of women only.
[6] Asked of respondents 50 years of age or older.

Table 2. Preventive Services obtained by Adults[1] in the SLMC Community and Texas[2] by Poverty Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)							Texas						
	In Poverty		Near Poverty		Not in Poverty		Total	In Poverty		Near Poverty		Not in Poverty		Total
	n	%	n	%	n	%	%	n	%	n	%	n	%	%
Ever had a mammogram[5]	155,571	37.5%	209,349	71.7%	531,166	69.2%	60.8%	1,012630	47.5%	1,147789	62.3%	2,874,744	71.1%	62.8%
Ever had a Pap test[5]	357,889	86.2%	276,069	94.6%	722,301	94.4%	92.1%	1,854,699	87.2%	1,619,471	88.1%	3,790,864	94.1%	90.9%
Ever had blood stool test using a home kit	42,193	27.3%	86,787	36.5%	211,237	30.2%	31.1%	203,730	19.8%	492,896	31.9%	1,322,220	34.7%	31.6%
Ever had a sigmoidoscopy/colonoscopy[6]	55,704	36.1%	126,748	53.3%	514,181	73.4%	63.8%	422,103	41.2%	845,513	54.9%	2,699,228	70.8%	62.2%
Ever tested for HIV	381,819	57.0%	259,476	44.5%	671,479	43.0%	46.6%	1,630,418	43.9%	1,475,510	38.8%	3,114,639	37.4%	39.3%

[1] Adults aged 18 and over.
[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).
[3] Poverty Status was computed from items in the 2012 BRFSS measuring household income and family size. Family size and household income were then compared to the 2012 Poverty Guidelines published by the Department of Health and Human Services. Respondents below the poverty line for their reported household income and family size were classified as "In Poverty." Those not in poverty but within 200% of the poverty line were classified as "Near Poverty." Those above 200% of the poverty line were classified as "Not in Poverty."
[4] The percentages in this table are column percentages. For example, to find the percentage of women "In Poverty" in the SLMC service area who had ever had a mammogram, we first look at the column "In Poverty" under SLMC and then go down to the row "Evert had a Mammogram." Here, the percentage of women in the SLMC service area living in poverty who had ever had a mammogram is shown (37.5%).
[5] Asked of women only.
[6] Asked of respondents 50 years of age or older.

Appendix 8. Risk Factors

Table 1. Risk Factors of Adults[1] in the SLMC Community and Texas[2] by Insurance Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)					Texas				
	Insured		Not Insured		Total	Insured		Not Insured		Total
	n	%	n	%	%	n	%	n	%	%
Smoked at least 100 Cigarettes in Lifetime	805,987	36.5%	399,604	37.5%	36.8%	5,045,585	39.0%	2,309,603	40.6%	39.5%
Frequency of Days Now Smoking[5]										
Every day	183,379	22.8%	96,621	24.2%	23.2%	1,294,791	25.7%	853,567	37.0%	29.2%
Some days	87,501	10.8%	166,485	41.7%	21.0%	632,869	12.5%	583,475	25.3%	16.5%
Not at all	533,291	66.2%	126,534	31.7%	54.7%	3,105,691	61.6%	856,345	37.1%	53.9%
Refused	2,266	0.3%	9,964	2.5%	1.0%	9,330	0.2%	16,217	0.7%	0.3%
Exercise or Physical Activity (non-work) in Past 30 Days	1,785,475	78.7%	647,771	60.2%	72.7%	10,002,864	76.2%	3,799,462	65.4%	72.9%

[1] Adults aged 18 and over.
[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).
[3] Insurance Status was taken from the 2012 BRFSS. Respondents were asked if they had a source of healthcare coverage such as an HMO or Medicare.
[4] The percentages in this table are column percentages. For example, to find the percentage of those "Insured" in the SLMC service area who had smoked at least 100 cigarettes in their lifetime, first look at the column "Insured" under SLMC and then go down to the row "Smoked 100 Cigarettes in Lifetime." Here, the percentage of those insured in the SLMC service area who had smoked at least 100 cigarettes in their lifetime is shown (36.5%).
[5] Of those who had smoked at least 100 cigarettes in lifetime.

Table 2. Risk Factors of Adults[1] in the SLMC Community and Texas[2] by Poverty Status[3,4]

	SLMC (Harris, Brazoria, Galveston, Ft. Bend Counties)							Texas						
	In Poverty		Near Poverty		Not in Poverty		Total	In Poverty		Near Poverty		Not in Poverty		Total
	n	%	n	%	n	%	%	n	%	n	%	n	%	%
Smoked at least 100 Cigarettes in Lifetime	262,770	38.8%	284,902	47.5%	555,562	34.7%	38.3%	1,465,639	38.1%	1,853,253	47.0%	3,263,260	38.3%	40.4%
Frequency of Days Now Smoking[5]														
Every day	86,022	32.7%	80,658	28.3%	99,600	17.9%	24.1%	516,237	35.2%	631,598	34.1%	796,480	24.4%	29.5%
Some days	91,612	34.9%	58,550	20.6%	67,755	12.2%	19.8%	340,732	23.2%	312,931	16.9%	401,531	12.3%	16.0%
Not at all	85,135	32.4%	135,730	47.6%	385,942	69.5%	55.0%	608,669	41.5%	895,856	48.3%	2,059,735	63.1%	54.2%
Refused	0	0.0%	9,964	3.5%	2,266	0.4%	1.1%	0	0.0%	9,964	0.5%	5,514	0.2%	0.2%
Exercise or Physical Activity (non-work) in Past 30 Days	351,899	51.6%	418,970	69.3%	1,386,351	84.3%	73.6%	2,293,416	58.7%	2,782,120	69.3%	6,991,134	81.1%	72.9%

[1] Adults aged 18 and over.

[2] Harris, Brazoria, Galveston and Ft. Bend county and Texas data were obtained from analyses of the 2012 Behavioral Risk Factor Surveillance System (BRFSS) survey conducted by the Centers for Disease Control and Prevention (CDC).

[3] Poverty Status was computed from items in the 2012 BRFSS measuring household income and family size. Family size and household income were then compared to the 2012 Poverty Guidelines published by the U.S. Department of Health and Human Services. Respondents below the poverty line for their reported household income and family size were classified as "In Poverty." Those not in poverty but within 200% of the poverty line were classified as "Near Poverty." Those above 200% of the poverty line were classified as "Not in Poverty."

[4] The percentages in this table are column percentages. For example, to find the percentage of those "In Poverty" in the SLMC service area who had smoked at least 100 cigarettes in their lifetime, first look at the column "In Poverty" under SLMC and then go down to the row "Smoked at least 100 cigarettes in Lifetime." Here, the percentage of those in the SLMC service area living in poverty who had smoked at least 100 cigarettes in their lifetime is shown (38.8%).

[5] Of those who had smoked at least 100 cigarettes in lifetime.

Appendix 9. SLMC Hospital Advisory Team Summary Report

Attendees: William Brosius (SLMC), Karen Myers (SLMC), John Stroh (SLMC), Tamara Bourda (EHC), Pamela Diamond (UT), Maria Fernandez-Esquer (UT), Andria Rusk (UT)

Introduction and review of CHNA kickoff meeting

The assessment and hospital teams were introduced and an overview of the needs assessment process was provided. The CHNA process includes reaching out to the community to identify needs, leveraging existing data sets, assessing health needs by county, holding focus group discussions, and possibly conducting a community survey.

Hospital's perspective on community needs

There was a discussion of the hospital's view on the needs of the community, the focus of the assessment and what may not show up in the reports, and ways to discover new data rather than repeat old efforts.

- Define the community
    - To an extent, SLMC serves an international community ; the System has provided the assessment team with the primary and secondary service areas
    - The community definition should be based on the data, and the community and community stakeholders will prioritized the identified needs

- Community unmet needs
    - Violence
        - Catholic Health Initiatives encourages anti-violence initiatives; the hospital can be more reactive than preventive on this issue
        - Staff currently are committed to treating those patients, reporting abuse, and working with the social work team
        - There's a good case management department and an aggressive response system
    - Mental Health
        - There is a mental health need and perhaps an opportunity to partner with a mental health facility for referrals; there are 2 psychiatrists on staff
    - Sickle Cell Disease
        - Patients don't have an established system for long term care and they frequently use the ER; hospital staff work very well with assisting these patients in follow up
    - Heart Disease
        - Hospital has participated in news reports and interviews to bring awareness to important topics
        - Patients with high blood pressure, diabetes, and stroke present late to the hospital
    - Elder Care
        - Elderly and aging populations lack education on advanced directives, pain management services and navigating the healthcare system

- Existing services and relationships
    - Hospital has many staff that participate in community health education and outreach
        - Outreach team provides education to paramedics and fire department, and sponsor boy scouts, swim teams, and other community groups
        - Stroke and heart attack support groups are hosted several times a year
    - Additional community stakeholders include:
        - Governmental officials- Political leaders, staffers
        - Community organizations- United Way, Legacy Community Health
        - Asian outreach organizations that work with Hepatitis C
        - Local churches

- New ideas and strategies to address needs
    - Train nurses to better recognize victims of violence; this includes interviewing skills, regular training, and knowledge on referring to hotline
    - Identify strategies to connect hospital discharges back to their community; this does not necessarily include case management , rather follow up to ensure connection to resources
    - Connect sickle cell patients to resources including pain clinics, transportation, and ongoing support systems
    - Need to offer resources to special populations that present to the ED with drug abuse and/ or mental health issues, and assist with provide referrals
    - Educate patients on navigating the healthcare system, specifically those patients with chronic diseases that frequently visit the emergency room
    - Enhance education specifically about stroke, the risks of high blood pressure, and identifying early signs of heart failure
    - There may be an opportunity with Memorial Hermann's pain management clinic to discuss difficult patients with chronic disease

Review of IRS requirements

The assessment and implementation plan must be submitted together at the end of the tax year, Dec 2013. The implementation plan should demonstrate how the hospital is addressing the needs for the next 3 years.

Next Steps and Proposed timeline

- Assessment team will give Hospital a preliminary report for review
- Final assessment and implementation plan will submitted to be included in board packet 2 weeks before the November 6 board meeting
- Board approved report will submitted to the System for filing with taxes

Action Items

- Obtain media and other documented strategies of community engagement from Corporate Communications
- Follow up with Troy Sheldon, Manager of Community Emergency Center, to discuss the outreach done in Pearland

For additional information regarding the community health needs assessment, contact Tamara Bourda at tbourda@sleh.com, 832-355-4983.

Appendix 10. Community Stakeholder Summary Report

Introduction

In accordance with Federal law, a Community Health Needs Assessment (CHNA) must take into account "input from persons who represent the broad interests of the community serviced by the hospital facility, including those with special knowledge of or expertise in public health." Gathering this community input for St. Luke's Medical Center (SLMC) took place through a carefully designed process of community engagement that included a Group Conversation. The sections that follow describe how this community engagement met and exceeded Federal requirements to engage:

- Persons with special knowledge of or expertise in public health;
- Federal, tribal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility; and
- Leaders, representatives, or members of medically underserved, low-income, and minority populations, as well as populations with chronic disease needs, in the community served by the hospital facility.

Overview of Group Conversation

A Group Conversation was held in support of the SLMC Community Health Needs Assessment on Friday, August 23, 2013, from 9:00 am -10:30 am at the DePelchin Children's Center in Houston, TX. It included twenty participants from a range of community organizations and health-related groups. The Group Conversation was an organized event that brought people from different roles and organizations together to discuss matters that are important to the health needs of the community served by SLMC. It was a dynamic process intended to allow all participants to share their thoughts and views, listen to other perspectives, and build on one another's ideas. The Group Conversation did not seek specific answers or responses – all input was welcomed. The exchange that occurred in the Group Conversation allowed participants to share ideas and thoughts with one another in a structured way.

Format of Group Conversation

In the Group Conversation, participants were seated at small round tables so that participants could see one another when speaking and listening. The Group Conversation was led by a facilitator that guided the discussion by introducing the topic of discussion and posing four questions to the group. Before the Group Conversation began, the facilitator informed participants of several guidelines and protocols for the discussion, including:

- Comments made in the meeting will not be associated with a participant's name or organization. Feedback will be analyzed and reported in a summary format so that participants' comments remain anonymous.
- Because speaking and listening are key components of the Group Conversations, participants should not engage in side conversations and participants should speak one at a time.
- The questions asked in the Group Conversation are designed to be non-directive and open-ended in order to allow for dynamic and open conversation.

Participants spent approximately 15 minutes discussing each question. At the end of discussion for the fourth question, the facilitator shared a brief report of what she heard from the group and offered an opportunity to ask questions and contribute additional comments. The following four questions were asked during the Group Conversation:

1. What are the most important health problems or unmet healthcare needs in the community?
2. What are the challenges and/or barriers to addressing unmet healthcare needs in the community?
3. What healthcare needs do you see as priorities that should be addressed first? Second? Third?
4. What resources may be already available in the community that can help address the unmet health priorities?

Community Stakeholder Recruitment

More than twenty-two individuals and organizations were identified as key stakeholders in the community and invited via email and follow-up telephone calls to attend the Group Conversation for SLMC. Collectively, these stakeholders not only represent the broad interests of the community, but also represent significant knowledge and expertise in public health. Below is a list of the types of organizations that were invited to attend the Group Conversation, and the unique perspective that each group has on health needs of the community.

- *Health Clinics and Federally Qualified Health Centers (FQHC)* – Health clinics and FQHCs serve a medically underserved area or population and have firsthand knowledge of the health needs of these communities, as well as general knowledge of public health.
- *Regional and Local Health Departments* – Regional, county, and local public health departments are responsible for the general health of citizens in a certain area. Health departments often provide health-related services and maintain current statistics and data on the health of a given population.
- *Health-related Support Groups* – National associations that support research and prevention of diseases, illnesses, and health risk factors often sponsor local support groups. These health-related support groups address health needs of local communities.
- *School Districts* – School Districts have health services departments and staff in each school within a district. These professionals support general student health, access to health services, and appropriate intervention for students with high-risk or chronic medical needs.
- *Community Organizations* – Community organizations range in scope and mission from serving minority and low-income populations, to promoting healthy communities, to advocating for a range of community needs. Community organizations effectively serve as representatives of the individuals and communities they serve.
- *Business Organizations* – Business organizations, such as chambers of commerce, often work to promote economic development and quality of life in communities. They have unique perspectives on quality of life issues including education and health.
- *Services for the Disabled* – Agencies and organizations that provide services for the disabled have a unique perspective on community health needs and priorities. Individuals with mental and/or physical disabilities are often underrepresented in communities.

- *Services for Seniors* – Agencies and organizations that provide services for seniors have a unique perspective on community health needs. Elderly and aging populations often have chronic health needs but encounter significant obstacles to obtaining access to services to meet those needs.

Community Stakeholder Attendance

Below is a list of participants who contributed to the Group Conversation held in support of the SLMC Group Conversation on August 23, 2013. As described above, the group included persons with special knowledge of or expertise in public health; state and local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility; and leaders, representatives, or members of medically underserved, low-income, and minority populations, as well as populations with chronic disease needs, in the community served by the hospital facility.

	Name	**Title**	**Organization**
1	Diaa Al Qusairi	Program Manager	Harris County Healthcare Alliance
2	Robert W. Anders	Operations Supervisor	Harris County Transit - RIDES
3	Todd A. Curry	Interim Division Manager	Houston Mayor's Office for People with Disabilities
4	Dr. Faith Foreman	Assistant Director	City of Houston Department of Health and Human Services
5	Frances Isbell	Chief Executive Office	Healthcare for the Homeless - Houston
6	Jill Ann Jarrell	M.D./M.P.H.	Doctors for Change
7	Gwen Johnson	Manager, Health and Medical Services	Houston Independent School District
8	Susan Lackey	Community and Stakeholder Engagement	Healthy Living Matters
9	June Liu	Quality Manager, Special Projects	Community Health Choice, Inc.
10	Curtis McMinn	Senior Program Manager	United Way of Greater Houston
11	Robyn Patschke	Grant Manager	Interfaith Ministries for Greater Houston
12	Giselle Patterson	Director of Member Connection	YMCA of Greater Houston
13	Jometra Pinesette	Health Equity Specialist	American Heart Association
14	Rocaille Roberts	Director, Office of Policy and Planning	Harris County Public Health and Environmental Services

15	Josh Reynolds	Director of Programs	Care for Elders
16	Kimberly Tang	Program Manager (Workforce Development)	Chinese Community Center
17	Denise Truong	Director of Programs	Chinese Community Center
18	Anne Whitlock	Program Manager, Community Clinic Funders' Collaborative	Harris County Healthcare Alliance
19	Lyn Widlaski	Executive Director	Breast health Collaborative of Texas
20	Lindsey Wiginton	Epidemiologist	Houston HDDS

Community Stakeholder Feedback

Below is a description of participant feedback from the Group Conversation held in the SLMC community, encompassing the greater Houston area. Data is organized according to the four questions posed to participants.

1. What are the most important health problems or unmet healthcare needs in the community?

- **Access to Care.** Many participants focused on access to care as a major health problem in the greater Houston community. Several factors affect access to care including, lack of adequate health insurance, limited health literacy, and limited knowledge around how to navigate the healthcare system and available resources. The two factors which were talked about in greatest detail included geographical barriers and language barriers.

    - Geographic Barriers – Participants noted that there is a certain population in the community that is transient and therefore often makes changes to their primary care providers or insurance carriers. Additionally, some people have a difficult time finding affordable transportation to visit with a health professional especially when great distances separate care centers from housing.
    - Language Barriers – It was also noted that an unmet need is for more multilingual healthcare providers. For example, there are very few bilingual home health aides, psychiatrists, and mental health service providers. The few providers that currently are bilingual are typically not taking any new patients or only accept Medicare and Medicaid – which limits the amount of patients that benefit from this service.

- **Coordinated Care**. Some participants expressed that one of the most important health problems in the greater Houston community is lack of coordinated care opportunities which result in mismanagement or over-management of care. For example, participants explained that many seniors see several physicians and specialists and that these providers do not communicate with one another to compare treatment plans or prescriptions for an individual. This creates

confusion and sometimes even new problems for the patient. Over-management of care can also occur when providers do not communicate or provide coordinated care. Participants suggested that negative effects of over-management of care can include a patient being provided with an abundance of prescriptions but limited cohesive support, causing inefficiencies in time and cost and strain and stress for the patient. The current healthcare system is complex and difficult to navigate for patients, physicians, and insurers. Increased coordination in which each arm of the health service system works more cohesively in the care of each patient could result in better care and experience for all parties.

- **Coordination of Community Resources.** Similarly, participants emphasized that an unmet healthcare need is for robust coordination of community resources. Participants noted that the public often is not aware of many available centers and facilities and that they have a difficult time finding information about available resources and services. This seems to be especially true in the northern part of the city as there is a big gap between downtown Houston and the Beltway. Participants expressed a need to get more information out to the community about available services, how to find them, where to go, and what to do in times of crisis or for routine care. Participants noted that while there may have been some previous efforts to increase access to information, currently there is not one centralized place for information about all health access points in the community that is kept current. Participants noted many benefits to having one centralized place for listings, sorted by area or service or provider, where anyone can find information about access to different types of care. Participants also acknowledged potential barriers to developing a central system including a complex health system and sensitivity of data around privacy and proprietary issues.

- **Types of Care.** Various participants noted that there are particular types of care that are lacking in the community. The types of care which were mentioned include behavioral/mental health, childhood obesity, dental health and palliative care.

    - Behavioral/Mental Health - Behavioral health, including mental health, substance abuse, learning disabilities, and special needs, are all unmet needs in this community. There are very few resources to meet these needs and some providers do not feel like they are able to offer quality or sufficient care to all those who need it.
    - Childhood Obesity - There are very few nutrition programs aimed at helping childhood obesity. The programs that do exist do not always incorporate families, and participants believe that these types of programs are most successful when they involve the whole family. When external resources and programs are offered, physicians could be doing more to refer children and families to these types of programs.
    - Dental Health – Participants noted that there is a portion of the population, especially senior citizens, who do not receive adequate dental care. Lack of dental care can cause serious health problems over time. One factor contributing to this need is lack of dental insurance. Additionally, those who do have insurance may struggle to find convenient providers who accept their insurance plans.

- Palliative Care - There is very little palliative care and resources to assist the elderly toward "aging in place" through home assistance or other support.

- **Education and Prevention**. Participants identified the interrelated issues of education and prevention as healthcare needs in the community. Education around how to access services and better manage one's health is an important aspect of preventive care. Although this requires additional funding and resources, investing in prevention can limit catastrophic or chronic health problems. Furthermore, many believe that it will be more cost effective to invest in preventive measures on the front end as opposed to investing in long term care for chronic illness over a patient's lifetime. Universal prevention efforts and basic health information services may include health education classes, print materials such as brochures or pamphlets, and increased collaboration among the healthcare, education and safety sectors. Participants also noted the importance of considering uninsured patients with regard to education and prevention, as currently the uninsured often do not have basic/preventive services or access to a PCP.

- **Policies and Procedures.** Several participants expressed that there is a need around increasing the level of awareness and effectiveness of various healthcare policies and procedures such as screening guidelines and the discharge/transition process.

  - Screening Guidelines – Participants suggested that inconsistent or unstated screening guidelines often create confusion for physicians. One example given involved lack of clarity around breast cancer screenings that was resolved after new breast cancer screening guidelines were released recently. Physicians quickly began learning and implementing these new standards, which also clarified guidelines for patients around self-examinations and health literacy and awareness.
  - Discharge/Transition Process – A few participants stated that there is a big weakness in the discharge process that can include transitioning to care at home or outside of the hospital. Once a patient is discharged, there is little time spent with a discharge nurse to learn about all of the necessary prescriptions and instructions for proper care. Additionally, there is not a process for transition or continual follow-up with the patient, and for a lot of people this is a challenge (i.e. mentally ill, elderly, minorities, others with language barriers). Participants mentioned that transition planning models have been used well in other countries and in other industries, and when effectively instituted, may allow for increased support with various patient populations.

2. What are the challenges and/or barriers to addressing unmet healthcare needs in the community?

- **Education and Health Literacy.** Participants identified a lack of health education programs and limited health literacy as one of the main barriers to meeting healthcare needs in the greater Houston community. Patients do not always understand their diagnosis and therefore they are apprehensive when advocating for their own health. Educating patients will enable them to

manage their own health, help them to ask questions, become more confident, and get the answers they need. Increasing support around health literacy can help patients to accurately understand a particular diagnosis, a physician's instructions, and their personal medical records.

- **Funding.** Participants noted scarcity of financial resources to support healthcare services and programs as barriers to addressing healthcare needs in the greater Houston community. Even when there are great programs and ideas to be implemented, investments are made on a limited basis without much strategic or sustainable planning and funding.

- **Fractured Network**. Several participants identified a lack of collaboration and a fractured healthcare network in the greater Houston area as a challenge to meeting healthcare needs in the community. Participants specifically noted that there are many sectors which affect the health of a community, making partnerships and collaborations essential to creating a seamless system of care. Increased awareness and understanding about what services are being offered as well as the funding models for those services can facilitate more effective connections and a stronger system of care.

3. What healthcare needs do you see as priorities that should be addressed first? Second? Third?

Participants named numerous priorities for addressing healthcare needs in their community.

- First, participants discussed increasing the coordination of care. For example, hiring patient advocates at hospitals and partnering with community health workers can help patients navigate the the health system, give them tools to manage their health, and find available resources.
- Second, participants emphasized promoting greater access to care and increased coordination of community resources. Having a more robust and central information system for patients will help inform the community around what services are available and increase access to care.
- Third, participants remarked that strengthening partnerships is going to be an important priority, as meeting health needs in a community is most effective when collaborations are strong among all sectors. Examples given were forming partnerships with schools, grocery stores, the government sector, non-profits, and the police force.
- Fourth, increasing financial resources is a priority that some participants noted. Specifically, helping to secure insurance for a greater portion of the community by either offering some kind of financial support or promoting provider built insurance programs.

4. What resources may be already available in the community that can help address the unmet health priorities?

Throughout the Group Conversation, participants shared a few of the existing and previous resources and programs that address health in the community. Identifying these resources began to build bridges,

foster understanding, and increase awareness of services for the involved participants. The available resources discussed in the Group Conversation are listed below.

- Community Health Workers – Community health workers are certified to help bridge the gap between members of a community and healthcare and social service providers. Community health workers are already here, speak the language, live in the area, and know the community. They have a strong curriculum that is standardized and certified by the state.
- Houston Independent School District – Community Outreach Workers help families in their communities.
- Project Safety Net (St. Luke's 2007) – This program helped families who were uninsured.
- Breast Health Portal –This iPhone app was built for the female community as it provides all related resources in the area by using a smart phone's GPS system.

Throughout the Group Conversation, participants placed heavy emphasis on finding ways to coordinate all of the existing community resources.

Group Conversation Evaluation

All participants were asked to evaluate their knowledge and expertise of public health; knowledge of or involvement with medically underserved, low-income, and minority populations, and populations with chronic disease needs; and knowledge of the SLMC community. The participants identified their primary area of knowledge/expertise and the community they serve as including the following areas in general: public health, community health, health policy, and health education; healthy living and disease prevention; access to primary care and ED diversion; integrated care and care coordination; internal medicine, palliative medicine, pediatrics, and healthcare delivery and services to children; charity health clinics and nonprofit organizations, including FQHCs in Harris County; heart disease and stroke; women's health; breast health knowledge for low income and medically underserved population; epidemiology; aging community and their caregivers; people with all spectrums and categories of disabilities in the city of Houston; para-transit for seniors and people with disabilities; mental health and substance abuse treatment; refugees; workforce and immigration; public benefits, Medicaid, CHIP; uninsured, low-income, and homeless healthcare; Asian Americans; and the Harris County Community. More specifically, participants answered the following questions about their knowledge/expertise.

Question	Yes	No
In your opinion, do you feel that you or your organization represent the broad interests of the community served by the St. Luke's Medical Center?	20	0
Are you a person with knowledge or expertise in public health?	17	2
Are you a representative of a federal, tribal, regional, state, or local health department or agency?	3	17
Does the organization you represent have current data or other information relevant to the health needs of the community served by the St. Luke's Medical Center?	19	0
Are you a leader, representative, or member of a population served by the St. Luke's Medical Center that could be characterized as medically underserved, low income, minority, or having chronic disease needs?	14	6

Recommendations Made by Community Stakeholders

Several specific ideas for how St. Luke's Medical Center could engage with the community to meet overall health needs of the community emerged from the Group Conversation. Although health problems and needs in the community like access to health care and prevention are complex and multi-layered, there were a number of ideas and recommendations put forward by the community for the hospital's consideration, including the following:

1. Coordination of community resources through the provision of a comprehensive and central health resources database that is updated on a regular basis. This central portal or controlling house can provide information on services and organizations that are current and sorted by geographic area or service or provider.
2. Hiring more patient advocates at hospitals to work with community health workers can bridge the gap between members of a community and healthcare and social service providers. Additionally offering more supports around health literacy, such as pairing patients with health/life coaches, can help patients navigate the complex health system.
3. Increasing education programs around preventive care can also help people manage their own health. This can begin at a young age, so that youth have a better framework and awareness of tools and resources to help inform living a healthier life.

Appendix 11. Public Health Experts Summary Report

Introduction

In accordance with Federal law, a Community Health Needs Assessment (CHNA) must take into account "input from persons who represent the broad interests of the community serviced by the hospital facility, including those with special knowledge of or expertise in public health." In collaboration with Episcopal Health Charities, Clarus Consulting Group identified and invited Public Health Experts, facilitated focus groups, and developed the Public Health Experts summary report. Gathering the community input for the hospitals in the St. Luke's Health System took place through a carefully designed process of community engagement that included a "Group Conversation," or targeted focus group. The sections that follow describe how this community engagement met and exceeded Federal requirements to engage federal, tribal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility.

Overview of Group Conversation

A Group Conversation was held in support of the CHNAs for all six hospitals in the St. Luke's Health System (St. Luke's Medical Center, St. Luke's Lakeside Hospital, St. Luke's Sugar Land Hospital, St. Luke's The Woodlands Hospital, St. Luke's Patient's Medical Center, St. Luke's Hospital at The Vintage) on Thursday, August 8, 2013, from 2:30 pm to 4:00 pm at the Episcopal Health Charities in Houston, TX. It included twelve participants from city, county, regional, and state public health organizations. The Group Conversation was an organized event that brought public health experts together to discuss matters that are important to the health needs of the community served by the hospital system. It involved a dynamic process that allowed all participants to share their thoughts and views, listen to other perspectives, and build on one another's ideas. The Group Conversation did not seek specific answers or responses—all input was welcomed. The exchange that occurred in the Group Conversation allowed participants to share ideas and thoughts with one another in a structured way.

Format of Group Conversation

In the Group Conversation, participants and a facilitator were seated around a conference table, so that participants could see one another when speaking and listening. The Group Conversation was led by a facilitator that guided the discussion by introducing the topic of discussion and posing four questions to the group. Before the Group Conversation began, the facilitator informed participants of several guidelines and protocols for the discussion, including:

- Comments made in the meeting will not be associated with a participant's name or organization. Feedback will be analyzed and reported in a summary format so that participants' comments remain anonymous.
- Because speaking and listening are key components of the Group Conversations, participants should not engage in side conversations, and participants should speak one at a time.
- The questions asked in the Group Conversation are designed to be non-directive and open-ended in order to allow for dynamic and open conversation.

Participants spent approximately 15 minutes discussing each question. At the end of discussion for the fourth question, the facilitator shared a brief report of what she heard from the group and offered an opportunity to ask questions and contribute additional comments. The following four questions were asked during the Group Conversation:

1. What are the most important health problems or unmet healthcare needs in the community?

2. What are the challenges and/or barriers to addressing unmet healthcare needs in the community?
3. What healthcare needs do you see as priorities that should be addressed first? Second? Third?
4. What resources may be already available in the community that can help address the unmet health priorities?

Public Health Experts Recruitment

Twenty-four public health organizations and individuals were identified as key stakeholders in the field of public health and invited via email to attend the Group Conversation for St. Luke's Health System. Collectively, these groups represent significant knowledge and expertise in public health. Regional, county, and local public health departments are responsible for the general health of citizens in a certain area. Health departments often provide health-related services and maintain current statistics and data on the health of a given population.

Public Health Experts Attendance

Below is a list of participants who contributed to the Group Conversation held in support of the St. Luke's Health System Group Conversation on August 8, 2013. As described above, the group included persons with special knowledge of or expertise in public health as it relates to the communities served by the St. Luke's Health System.

	Name	**Title**	**Organization**
1	Latrice Babin, PhD	Environmental Toxicologist	Harris County Pollution Control Services Department
2	June Hanke	Strategic Analyst/Planner	Harris Health System
3	Dr. Nicole Hare-Everline, CHES	City of Houston Wellness/EAP Director	City of Houston
4	Robert Hines	Epidemiologist	Houston Department of Health and Human Services
5	Haley Jackson	Team Lead	Texas Department of State Health Services
6	Lisa Mayes	Executive Director	Harris County Healthcare Alliance
7	Bakeyah Nelson	Public Health Analyst	Harris County Public Health and Environmental Services
8	Beverly Nichols PsyD, MS, RN	Senior Staff Analyst	Houston Department of Health and Human Services
9	Kimberly Nicholson	Program Specialist II	Texas Department of State Health Services
10	Ebun Odeneye	Senior Health Educator	City of Houston
11	Yan Shi	Management Analyst III	Houston Department of Health and Human Services
12	Lindsey Wiginton	Epidemiologist	Houston Department of Health and Human Services

Public Health Experts Feedback

Below is a description of participant feedback from the Group Conversation held for Public Health Experts. Data are organized according to the four questions posed to participants.

1. What are the most important health problems or unmet healthcare needs in the community?

In general, participants noted the correlation between a healthy community and fewer admissions to the hospital, and suggested that elevating the idea of a healthy community is a healthcare need in the Greater Houston community. Participants also noted specific unmet healthcare needs in the community, including access, communication, chronic disease, mother/infant/prenatal care, behavioral health, environmental health, and health disparity issues:

- **Access.** Collectively, participants felt that access to care was the most important health problem in the community. Participants acknowledged that there is sufficient number of health clinics in the area but that access to care remains an issue for a significant portion of the population. Several factors contribute to the access to care issue.
- **Transportation.** Houston is a very spread out city, and transportation to and from healthcare settings is a problem for many people in Houston.
- **Knowledge.** Some participants felt that many people simply do not understand how to obtain healthcare resources and services. This problem is especially evident as it relates to prenatal and behavioral healthcare needs.
- **Insurance and Finances**. Many people do not have access to care because they do not have the financial resources to pay for care. Many people do not have insurance and do not know how to pay for care. This often leads to a deferral of care and higher admittance to the emergency department.
- **Communication.** Participants indicated that more effective communication around healthcare in the Greater Houston community is an unmet healthcare need. Specifically, participants felt that better communication is needed from healthcare providers to inform the community about services and resources that are available. In addition, better communication is needed between healthcare providers and health departments/public health agencies.
- **Chronic Disease.** Participants suggested that the rate of chronic diseases, such as diabetes, obesity, high cholesterol, hypertension, heart disease, and asthma (especially in children), is an important health problem in the community. One participant noted that the rate of adults with diabetes or pre-diabetes is 60%, which illustrates the significance and alarming nature of the chronic disease problem in the Greater Houston community. Participants felt that more individuals need to be screened for chronic diseases, and that more information about how to access help for chronic diseases needs to be disseminated.
- **Mother/Infant/Prenatal Care.** Several participants focused on maternal, infant, and prenatal care as being an important health problem in the Greater Houston community. Participants cited high rates of maternal and infant mortality and high rates of preterm birth and fetal mortality as evidence of this problem. Participants further noted that high rates of poor birth outcomes lead to higher numbers of children with special needs. Participants suggested that, overall, women are aware of the importance of maternal, infant, and prenatal care, but they encounter many barriers to obtaining these services such as transportation, funding, access, finding a doctor, and making an appointment.
- **Behavioral Health.** Several participants suggested that mental health and chronic mental illness are important healthcare issues in the Greater Houston community. While participants specifically noted that individuals with schizophrenia, bipolar disorder, and depression rarely get care they need, they also cited some progress in addressing this need, such as the police department helping

to place individuals with mental health issues in treatment centers instead of placing them in the law enforcement system.

- **Environmental Health.** Participants suggested that poor environmental health causes both acute and chronic health issues in the community. Participants noted the importance of the relationship between environmental health and chronic disease, and suggested that the Greater Houston community needs more educational initiatives around this relationship. Participants noted that environmental problems such as air quality or road construction can be obstacles to healthy communities in that they discourage individuals from going outside to exercise, but they can also lead to chronic health problems such as respiratory problems, heart attack, stroke, and asthma.
- **Health Disparities.** Participants suggested that disparity issues are a major healthcare concern in the Greater Houston community. One participant provided the example that there are correlations between ethnicity and individuals that do not get regular or necessary healthcare screenings.

2. What are the challenges and/or barriers to addressing unmet healthcare needs in the community?

Participants discussed the challenges and barriers to addressing unmet healthcare needs in the community at the individual, organizational, and the community levels.

- **Barriers for Individuals.** Barriers to addressing unmet healthcare needs for individuals in the Greater Houston community relate to access to care issues. Transportation, insurance and financial resources, and scarcity of time are all barriers to addressing unmet healthcare needs for individuals in the Greater Houston community.
    - Transportation – Transportation to and from healthcare settings is a significant barrier to obtaining healthcare services for many individuals in the Greater Houston community.
    - Insurance and Financial Resources – Many individuals in Houston lack insurance and/or do not know how to access Medicaid funds. Participants indicated that while most individuals are educated about the benefits of healthcare, they do not have the financial resources to access healthcare services.
    - Time – Participants acknowledged that time is a precious resource for individuals in Houston and that scarcity of time is often a barrier to accessing healthcare services. In particular, participants noted a need for individuals to understand the difference between after-hours and emergency care facilities in terms of accessing care.
- **Barriers for Organizations.**
    - Political Climate and Acceptance of Available Funds – Participants voiced that the political climate is a barrier for some health-related organizations in the Greater Houston community. Specifically, participants noted that governing bodies that serve as a funding source for health-related organizations often do not want to accept funds that may be politically controversial, such as funds associated with Medicaid expansion. Participants noted that some organizations are seeking assistance with this challenge at the state level but have not seen much progress made in terms of this unique funding barrier.
- **Barriers for Communities.** At the community level, participants observed that poverty, resources for individuals, and access to healthy foods are barriers to addressing unmet healthcare needs.
    - Poverty – Several participants stated that from a community perspective, the high rate of poverty is a barrier to addressing unmet healthcare needs. Poverty is a growing issue in Houston, and communities with high rates of poverty often are not able to place exercise and accessing healthcare as priorities.

- Empowering the Individual – Participants suggested that communities do a good job of educating the public, but that education needs to be followed up on the community level by empowering individuals to act on the information they receive related to healthcare.
- Access to Healthy Foods – Participants noted that many communities in Houston are considered "Food Deserts" because they lack access to fresh, healthy foods. Access to healthy foods is a basic principle in creating healthy communities and many communities in Houston lack such access.

3. What healthcare needs do you see as priorities that should be addressed first? Second? Third?

- **Infant and Maternal Health.** Participants identified maternal, infant, and prenatal health as an important unmet healthcare need in the community. Participants agreed that this is a priority healthcare need in the community.
- **Access and Awareness.** Participants suggested that a range of issues related to access and awareness should be a priority in the community. Access to transportation, healthy foods, information about chronic diseases such as diabetes and asthma, cancer screenings, and preventive care were access/awareness issues named specifically by participants. Participants also emphasized that a focus on outreach to communities dealing with high rates of poverty should be a priority for providing access to healthcare.
- **Referrals between Hospitals and Federally Qualified Health Centers (FQHCs).** Participants identified developing a working relationship between hospitals and FQHCs to efficiently and effectively refer patients to the appropriate healthcare provider as a priority for the community. Participants acknowledged that it is not only best for the patient to be seen in the right healthcare setting, but it also helps relieve overuse of emergency care facilities for primary care purposes. Participants also noted that part of this referral system should be the provision of transportation and appropriate follow up to ensure that patients received care through the appropriate healthcare setting.
- **Health Services (and Orientation to Services) for Immigrants.** Participants noted that Houston is a "city of immigrants" and that working to establish a holistic approach to providing social services and healthcare for immigrants should be a priority for the Greater Houston community. A partnership with the Office of Immigration to provide education around navigating the health system and introducing health as a way of life could be a part of this priority.
- **Promoting Availability of Services.** Participants suggested that promoting awareness about availability of services should be a priority in the Greater Houston community. Promoting availability of services should occur through broad communication efforts.
- **Promote Healthy Communities.** Participants felt that promoting healthy communities overall should be a priority. From a policy standpoint, communities should look at policies that form the behavior of hospitals and the incentive to participate in community level work.

4. What resources may be already available in the community that can help address the unmet health priorities?

In answer to this specific question, as well as throughout the Group Conversation, participants noted several existing resources and programs that address health in the community.

- Active and Engaged Civic Clubs and Social Clubs – Civic and social clubs are an important part of communities in Houston and could be a great avenue to reach communities to address health priorities.
- Active Church and Faith-based Community – The active church and faith-based communities throughout Houston are often involved in all aspects of life, including health and wellness.
- United Way – The United Way is a great resource in Houston that addresses a myriad of health-related issues in the community. Participants specifically noted programs of the United Way related to cancer screenings and transportation to health-related services.
- Area Agency on Aging – The Area Agency on Aging implements preventive programs for seniors that promote health for this important sector of the population.
- Asthma-related Support Services – Although funding is no longer available for this initiative, participants noted a program that provided healthy alternatives for the home for families with children that suffer from asthma. The program was a relatively small resource to address a large problem, but it made a difference for children and families who struggle with asthma.

Group Conversation Evaluation

All participants were asked to evaluate whether his or her organization represents the broad interests of the communities served by the St. Luke's Health System, and whether the organization he or she represents has current data or other information relevant to the health needs of the communities served by the St. Luke's Health System. Participants were also asked which of the six hospital communities in the St. Luke's Health System he or she is most closely familiar with. Participants answered these questions according to the chart below.

Question	Yes	No
In your opinion, do you feel that you or your organization represent the broad interests of the communities served by the St. Luke's Health System hospitals?	10	0
Does the organization you represent have current data or other information relevant to the health needs of the communities served by the St. Luke's Health System hospitals?	10	0
Which of the following hospital service area health needs do you feel that you are most closely familiar with? (Mark all that apply.)		
St. Luke's Medical Center	6	-----
St. Luke's Hospital at The Vintage	3	-----
St. Luke's The Woodlands Hospital	4	-----
St. Luke's Sugar Land Hospital	1	-----
St. Luke's Patient's Medical Center	3	-----
St. Luke's Lakeside Hospital	1	-----

Recommendations made by Public Health Experts

Several specific ideas for how St. Luke's Health System could engage with the community to meet overall health needs of the community emerged from the Group Conversation. Although health problems and needs in the community like access to health care and prevention are complex and multi-layered, there were a number of ideas and recommendations put forward by public health experts for the hospitals' consideration, including the following:

- Development of a resource center for chronic diseases, similar to a diabetes resource center
- Promotion of available resources in the community – and healthy communities in general – by engaging with the local community to become aware of and promote available resources instead of waiting for community members and organizations to come to hospital
- Development of partnerships and collaboration between hospitals and public health departments and agencies based on similarities in accreditation processes and health needs assessments for both entities
- Support policies that promote health in rural communities, such as complete streets policies
- Develop a partnership with METRO to help publish transportation system maps that include hospital and clinic locations
- Partner with external facilities that can help with services that the hospital would like to address, such as emergency facilities