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### Introduction

LCMC Health is a Louisiana-based, not-for-profit healthcare system serving the needs of the people of Louisiana, the Gulf South and beyond. LCMC Health currently manages award-winning hospitals including Children's Hospital New Orleans, Touro Infirmary, New Orleans East Hospital, University Medical Center New Orleans, and West Jefferson Medical Center.

Children's Hospital is a 224-bed, not-for-profit pediatric medical center offering a complete range of healthcare services for children from birth to 21 years. With over 40 pediatric specialties and more than 400 physicians, it is the only full-service hospital exclusively for children in Louisiana and the Gulf South. Children's Hospital had 191,544 patient encounters (visits) in 2014 with children coming from 64 parishes in Louisiana, 43 states and 4 foreign countries. In all 79,147 children received care from Children's Hospital last year. In 2009 Children's Hospital formed Louisiana Children's Medical Center when it aligned with Touro Infirmary.

The Patient Protection and Affordable Care Act (PPACA), which went into effect on March 23, 2010, requires tax-exempt hospitals to conduct community health needs assessments (CHNA) and implementation strategies to improve the health and well-being of residents within the communities served by the hospital(s). These strategies created by hospitals and institutions consist of programs, activities, and plans that are specifically targeted toward populations within the community. The execution of the implementation strategy plan is designed to increase and track the impact of each hospital's efforts.

Tripp Umbach was contracted by Metropolitan Hospital Council of New Orleans (MHCNO) to conduct a CHNA for East Jefferson General Hospital, LCMC Health, Ochsner Health System, HCA Healthcare (Tulane Medical Center), Slidell Memorial Hospital, and St. Tammany Parish Hospital. The overall CHNA involved multiple steps that are depicted in Chart 1. Additional information regarding each component of the project, and the results, can be found in the Appendices section of this report.

The CHNA process undertaken by LCMC Health, along with East Jefferson General Hospital, HCA Healthcare (Tulane Medical Center), Ochsner Health System, Slidell Memorial Hospital, and St. Tammany Parish Hospital, with project management and consultation by Tripp Umbach, included input from representatives of the community served by the hospital facilities, including those with special knowledge of public health issues and data related to underserved, hard-to-reach, vulnerable populations; and representatives of vulnerable populations served by each hospital. Tripp Umbach worked closely with Working Group members to oversee and accomplish the assessment and its goals. This report fulfills the requirements of the Internal Revenue Code 501(r)(3), established within the PPACA, requiring that nonprofit hospitals conduct CHNAs every three years.

Data from government and social agencies provide a strong framework and a comprehensive view to the overall CHNA. The information collected, which includes socioeconomic information, health

<sup>&</sup>lt;sup>1</sup> Tripp Umbach worked closely with Working Group members composed of hospital administration leaders from participating hospitals and health systems. A complete Working Group member listing can be found in Appendix F.

statistics, demographics, and mental health issues, is a snapshot of the health of residents in Southern Louisiana. The CHNA report is a summary of primary and secondary data collected for Children's Hospital.

The requirements imposed by the IRS for tax-exempt hospitals and health systems include the following:

- Conduct a CHNA every three years.
- Adopt an implementation strategy to meet the community health needs identified through the assessment.
- Report how it is addressing the needs identified in the CHNA and describe needs that are not being addressed, with the reasons why.

The Department of the Treasury and the IRS require a CHNA to include:

- 1. A description of the community served by the hospital facilities and how the description was determined.
- 2. A description of the process and methods used to conduct the assessment.
  - A description of the sources and dates of the data and other information used in the assessment, and the analytical methods applied to identify community health needs.
  - A description of information gaps that affect the hospital organization's ability to assess the health needs of the community served by the hospital facility.
  - Identification of organizations that collaborated with the hospital and an explanation of their qualifications.
- 3. A description of how the hospital organizations considered input from persons who represent the broad interests of the community served by the hospitals. In addition, the report must identify any individual providing input that has special knowledge of or expertise in public health. The report must also identify any individual providing input who is a "leader" or "representative" of populations.
- 4. A prioritized description of all of the community health needs identified through the CHNA, as well as a description of the process and criteria used in prioritizing such health needs.
- 5. A description of the existing health care facilities and other resources within the community available to meet the community health needs identified through the CHNA.
- 6. A description of the identified needs that the hospital intends to address, the reasons those needs were selected, and the means by which the hospital will undertake addressing the selected needs.<sup>2</sup>

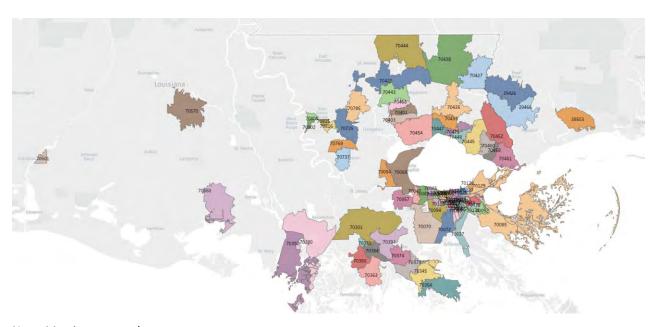
<sup>&</sup>lt;sup>2</sup> The outcomes from the CHNA will be addressed through an implementation planning phase.

## Children's Hospital New Orleans Primary Service Area

A comprehensive CHNA was completed for Children's Hospital New Orleans (CHNOLA) which began in early 2018.

The primary service area for CHNOLA was defined by ZIP codes that contain a majority (80 percent) of inpatient discharges from the health facility. In 2018, a total of 89 ZIP codes were identified for CHNOLA's service area as containing a majority of inpatient discharges. The CNI information is represented in map and table below. (See Map 1 and Table 1)

Data from Truven Health Analytics was supplied to gain a deeper understanding of community health care needs.<sup>3</sup> The Community Needs Index (CNI), jointly developed by Dignity Health and Truven Health, assists in the process of gathering vital socioeconomic factors in the community. CNI is a strong indicator of a community's demand for various health care services. The CNI data will be used to quantify the implementation strategy efforts and plans for CHNOLA.



Map 1: Children's Hospital New Orleans - Study Area

Note: Map is not to scale.

Source: Truven Health Analytics

<sup>3</sup> Truven Health Analytics, formerly known as Thomson Reuters, is a multinational health care company that

delivers information, analytic tools, benchmarks, research and services to a variety of organizations and companies. Truven Health Analytics uses: Demographic data, poverty data (from The Nielsen Company) and insurance coverage estimates (from Truven Health Analytics) to provide Community Needs Index (CNI) scores at the ZIP code level. Additional information on Truven Health Analytics can be found in the Appendices.

Table 1: CHNOLA – Study Area ZIP codes

1.39426CarrierePearl River County, MS2.39466PicayunePearl River County, MS3.39503GulfportHarrison County, MS4.70001MetairieJefferson Parish, LA5.70002MetairieJefferson Parish, LA6.70003MetairieJefferson Parish, LA	
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7. 70005 Metairie Jefferson Parish, LA	
8. 70006 Metairie Jefferson Parish, LA	
9. 70032 Arabi St. Bernard Parish, LA	
10. 70037 Belle Chasse Plaquemines Parish, LA	
11. 70043 Chalmette St. Bernard Parish, LA	
12. 70047 Destrehan St. Charles Parish, LA	
13. 70053 Gretna Jefferson Parish, LA	
14. 70056 Gretna Jefferson Parish, LA	
15. 70057 Hahnville St. Charles Parish, LA	
16. 70058 Harvey Jefferson Parish, LA	
17. 70062 Kenner Jefferson Parish, LA	
18. 70065 Kenner Jefferson Parish, LA	
19. 70068 LA Place St. John the Baptist Parish, LA	
20. 70070 Luling St. Charles Parish, LA	
21. 70072 Marrero Jefferson Parish, LA	
22. 70075 Meraux St. Bernard Parish, LA	
23. 70084 Reserve St. John the Baptist Parish, LA	
24. 70085 Saint Bernard St. Bernard Parish, LA	
25. 70087 Saint Rose St. Charles Parish, LA	
26. 70092 Violet St. Bernard Parish, LA	
27. 70094 Westwego Jefferson Parish, LA	
28. 70112 New Orleans Orleans Parish, LA	
29. 70113 New Orleans Orleans Parish, LA	
30. 70114 New Orleans Orleans Parish, LA	
31. 70115 New Orleans Orleans Parish, LA	
32. 70116 New Orleans Orleans Parish, LA	
33. 70117 New Orleans Orleans Parish, LA	
34. 70118 New Orleans Orleans Parish, LA	
35. 70119 New Orleans Orleans Parish, LA	
36. 70121 New Orleans Jefferson Parish, LA	
37. 70122 New Orleans Orleans Parish, LA	
38. 70123 New Orleans Jefferson Parish, LA	
39. 70124 New Orleans Orleans Parish, LA	

	ZIP Code	City	Parish
40.	70125	New Orleans	Orleans Parish, LA
41.	70126	New Orleans	Orleans Parish, LA
42.	70127	New Orleans	Orleans Parish, LA
43.	70128	New Orleans	Orleans Parish, LA
44.	70129	New Orleans	Orleans Parish, LA
45.	70130	New Orleans	Orleans Parish, LA
46.	70131	New Orleans	Orleans Parish, LA
47.	70301	Thibodaux	Lafourche Parish, LA
48.	70345	Cut Off	Lafourche Parish, LA
49.	70354	Galliano	Lafourche Parish, LA
50.	70359	Gray	Terrebonne Parish, LA
51.	70360	Houma	Terrebonne Parish, LA
52.	70363	Houma	Terrebonne Parish, LA
53.	70364	Houma	Terrebonne Parish, LA
54.	70373	Larose	Lafourche Parish, LA
55.	70374	Lockport	Lafourche Parish, LA
56.	70380	Morgan City	St. Mary Parish, LA
57.	70392	Patterson	St. Mary Parish, LA
58.	70394	Raceland	Lafourche Parish, LA
59.	70401	Hammond	Tangipahoa Parish, LA
60.	70403	Hammond	Tangipahoa Parish, LA
61.	70422	Amite	Tangipahoa Parish, LA
62.	70427	Bogalusa	Washington Parish, LA
63.	70433	Covington	St. Tammany Parish, LA
64.	70435	Covington	St. Tammany Parish, LA
65.	70438	Franklinton	Washington Parish, LA
66.	70443	Independence	Tangipahoa Parish, LA
67.	70444	Kentwood	Tangipahoa Parish, LA
68.	70445	Lacombe	St. Tammany Parish, LA
69.	70447	Madisonville	St. Tammany Parish, LA
70.	70448	Mandeville	St. Tammany Parish, LA
71.	70452	Pearl River	St. Tammany Parish, LA
72.	70454	Ponchatoula	Tangipahoa Parish, LA
73.	70458	Slidell	St. Tammany Parish, LA
74.	70460	Slidell	St. Tammany Parish, LA
75.	70461	Slidell	St. Tammany Parish, LA
76.	70466	Tickfaw	Tangipahoa Parish, LA
77.	70471	Mandeville	St. Tammany Parish, LA
78.	70560	New Iberia	Iberia Parish, LA
79.	70570	Opelousas	St. Landry Parish, LA
80.	70601	Lake Charles	Calcasieu Parish, LA

	ZIP Code	City	Parish
81.	70726	Denham Springs	Livingston Parish, LA
82.	70737	Gonzales	Ascension Parish, LA
83.	70769	Prairieville	Ascension Parish, LA
84.	70785	Walker	Livingston Parish, LA
85.	70802	Baton Rouge	East Baton Rouge Parish, LA
86.	70805	Baton Rouge	East Baton Rouge Parish, LA
87.	70815	Baton Rouge	East Baton Rouge Parish, LA
88.	70816	Baton Rouge	East Baton Rouge Parish, LA
89.	71291	West Monroe	Ouachita Parish, LA

The CNI score is an average of five different barrier scores that measures various socioeconomic indicators of each community using the source data. The five barriers are income, culture, education, insurance, and housing. A score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need.

Reviewing information related to CHNOLA's primary service area, ZIP codes 70112 (New Orleans), 70113 (New Orleans), 70114 (New Orleans), 70117 (New Orleans), and 70805 (Baton Rouge) had a 2017 CNI score of 5.0 (more socioeconomic needs); while, on the polar end, ZIP codes 70447 (Madisonville) and 70448 (Mandeville) both had a CNI score of 1.6.

Map 2: CHNOLA - 2017 CNI Map

Note: Map is not to scale.

Source: Truven Health Analytics

#### 2017 CNI Score

↑ 5.00 to 4.00 (High-socioeconomic barriers)

3.99 to 3.00

▼ 1.99 to 1.00 (Low-socioeconomic barriers)

Table 2: CHNOLA – 2017 CNI Score

ZIP Code	City	Parish	2017 CNI Score
39426	Carriere	Pearl River County, MS	3.4
39466	Picayune	Pearl River County, MS	4.4
39503	Gulfport	Harrison County, MS	3.8
70001	Metairie	Jefferson Parish, LA	3.4
70002	Metairie	Jefferson Parish, LA	4.0
70003	Metairie	Jefferson Parish, LA	3.0
70005	Metairie	Jefferson Parish, LA	2.8
70006	Metairie	Jefferson Parish, LA	3.2
70032	Arabi	St. Bernard Parish, LA	3.8
70037	Belle Chasse	Plaquemines Parish, LA	3.0
70043	Chalmette	St. Bernard Parish, LA	4.2
70047	Destrehan	St. Charles Parish, LA	2.4
70053	Gretna	Jefferson Parish, LA	4.6
70056	Gretna	Jefferson Parish, LA	4.0
70057	Hahnville	St. Charles Parish, LA	4.0
70058	Harvey	Jefferson Parish, LA	4.0
70062	Kenner	Jefferson Parish, LA	4.6
70065	Kenner	Jefferson Parish, LA	3.6
70068	LA Place	St. John the Baptist Parish, LA	3.0
70070	Luling	St. Charles Parish, LA	2.6
70072	Marrero	Jefferson Parish, LA	4.0
70075	Meraux	St. Bernard Parish, LA	3.0
70084	Reserve	St. John the Baptist Parish, LA	4.0
70085	Saint Bernard	St. Bernard Parish, LA	3.4
70087	Saint Rose	St. Charles Parish, LA	3.6
70092	Violet	St. Bernard Parish, LA	4.4
70094	Westwego	Jefferson Parish, LA	4.4
70112	New Orleans	Orleans Parish, LA	5.0
70113	New Orleans	Orleans Parish, LA	5.0
70114	New Orleans	Orleans Parish, LA	5.0
70115	New Orleans	Orleans Parish, LA	3.6
70116	New Orleans	Orleans Parish, LA	4.6
70117	New Orleans	Orleans Parish, LA	5.0
70118	New Orleans	Orleans Parish, LA	4.2
70119	New Orleans	Orleans Parish, LA	4.8
70121	New Orleans	Jefferson Parish, LA	3.6
70122	New Orleans	Orleans Parish, LA	4.2

ZIP Code	City	Parish	2017 CNI Score
70123	New Orleans	Jefferson Parish, LA	2.8
70124	New Orleans	Orleans Parish, LA	2.0
70125	New Orleans	Orleans Parish, LA	4.6
70126	New Orleans	Orleans Parish, LA	4.8
70127	New Orleans	Orleans Parish, LA	4.8
70128	New Orleans	Orleans Parish, LA	4.2
70129	New Orleans	Orleans Parish, LA	4.6
70130	New Orleans	Orleans Parish, LA	3.6
70131	New Orleans	Orleans Parish, LA	3.8
70301	Thibodaux	Lafourche Parish, LA	4.0
70345	Cut Off	Lafourche Parish, LA	3.6
70354	Galliano	Lafourche Parish, LA	4.0
70359	Gray	Terrebonne Parish, LA	3.8
70360	Houma	Terrebonne Parish, LA	3.0
70363	Houma	Terrebonne Parish, LA	4.2
70364	Houma	Terrebonne Parish, LA	3.6
70373	Larose	Lafourche Parish, LA	3.6
70374	Lockport	Lafourche Parish, LA	3.4
70380	Morgan City	St. Mary Parish, LA	4.4
70392	Patterson	St. Mary Parish, LA	4.2
70394	Raceland	Lafourche Parish, LA	3.8
70401	Hammond	Tangipahoa Parish, LA	4.4
70403	Hammond	Tangipahoa Parish, LA	4.2
70422	Amite	Tangipahoa Parish, LA	4.4
70427	Bogalusa	Washington Parish, LA	4.6
70433	Covington	St. Tammany Parish, LA	2.8
70435	Covington	St. Tammany Parish, LA	2.6
70438	Franklinton	Washington Parish, LA	3.8
70443	Independence	Tangipahoa Parish, LA	4.2
70444	Kentwood	Tangipahoa Parish, LA	4.0
70445	Lacombe	St. Tammany Parish, LA	2.8
70447	Madisonville	St. Tammany Parish, LA	1.6
70448	Mandeville	St. Tammany Parish, LA	1.6
70452	Pearl River	St. Tammany Parish, LA	3.6
70454	Ponchatoula	Tangipahoa Parish, LA	3.4
70458	Slidell	St. Tammany Parish, LA	3.4
70460	Slidell	St. Tammany Parish, LA	3.8
70461	Slidell	St. Tammany Parish, LA	2.8
70466	Tickfaw	Tangipahoa Parish, LA	4.2

ZIP Code	City	Parish	2017 CNI Score
70471	Mandeville	St. Tammany Parish, LA	2.0
70560	New Iberia	Iberia Parish, LA	4.6
70570	Opelousas	St. Landry Parish, LA	4.6
70601	Lake Charles	Calcasieu Parish, LA	4.8
70726	Denham Springs	Livingston Parish, LA	2.8
70737	Gonzales	Ascension Parish, LA	3.0
70769	Prairieville	Ascension Parish, LA	2.2
70785	Walker	Livingston Parish, LA	3.0
70802	Baton Rouge	East Baton Rouge Parish, LA	4.8
70805	Baton Rouge	East Baton Rouge Parish, LA	5.0
70815	Baton Rouge	East Baton Rouge Parish, LA	3.6
70816	Baton Rouge	East Baton Rouge Parish, LA	3.4
71291	West Monroe	Ouachita Parish, LA	3.6

In reviewing scores from 2016 and 2017, the map provides a geographic trending visual of the service area between the years. The lighter green to dark green color represents ZIP codes that have improved their overall CNI score. As the color changes certain ZIP codes face higher (worse) socioeconomic barriers (Map 3).

ZIP code 70373 reported the largest move between 2016 and 2017 with a 0.80 difference, followed by ZIP codes 70002, 70301, 70345, 70354, 70363, 71291,70359, and 70394 with a 0.60 difference, indicating factors have contributed to residents facing more socioeconomic barriers to health care. ZIP codes 70122 and 70124, both in New Orleans did not change their CNI scores between the years.

Change in CNI Score

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Map 3: Children's Hospital New Orleans - Trending Score

Note: Map is not to scale.

Source: Truven Health Analytics

#### 2017 CNI Score

5.00 to 4.00 (High-socioeconomic barriers)

3.99 to 3.00

▼ 1.99 to 1.00 (Low-socioeconomic barriers)

A total of 75 of the 89 ZIP code areas (84.2 percent) for the Children's Hospital New Orleans study area were at or above the median score for the scale (3.0). Being above the median for the scale indicates that these ZIP code areas have more than the average number of barriers to health care access.

Table 3: CHNOLA – Trending Data

Zip	City	Parish	2017 CNI	2016 CNI	Difference
39426	Carriere	Pearl River County, MS	Score 3.4	Score 3.6	(0.20)
39466	Picayune	Pearl River County, MS	4.4	4.4	0.0
39503	Gulfport	Harrison County, MS	3.8	3.8	0.0
70001	Metairie	Jefferson Parish, LA	3.4	3.2	0.20
70002	Metairie	Jefferson Parish, LA	4.0	3.4	0.60
70003	Metairie	Jefferson Parish, LA	3.0	2.8	0.20
70005	Metairie	Jefferson Parish, LA	2.8	2.6	0.20
70006	Metairie	Jefferson Parish, LA	3.2	3.0	0.20
70032	Arabi	St. Bernard Parish, LA	3.8	3.4	0.40
70037	Belle Chasse	Plaquemines Parish, LA	3.0	2.8	0.20
70043	Chalmette	St. Bernard Parish, LA	4.2	3.8	0.40
70047	Destrehan	St. Charles Parish, LA	2.4	2.2	0.20
70053	Gretna	Jefferson Parish, LA	4.6	4.4	0.20
70056	Gretna	Jefferson Parish, LA	4.0	3.6	0.40
70057	Hahnville	St. Charles Parish, LA	4.0	4.0	0.0
70058	Harvey	Jefferson Parish, LA	4.0	3.6	0.40
70062	Kenner	Jefferson Parish, LA	4.6	4.6	0.0
70065	Kenner	Jefferson Parish, LA	3.6	3.4	0.20
70068	LA Place	St. John the Baptist Parish, LA	3.0	2.8	0.20
70070	Luling	St. Charles Parish, LA	2.6	2.4	0.20
70072	Marrero	Jefferson Parish, LA	4.0	3.8	0.20
70075	Meraux	St. Bernard Parish, LA	3.0	3.0	0.0
70084	Reserve	St. John the Baptist Parish, LA	4.0	3.8	0.20
70085	Saint Bernard	St. Bernard Parish, LA	3.4	3.4	0.0
70087	Saint Rose	St. Charles Parish, LA	3.6	3.6	0.0
70092	Violet	St. Bernard Parish, LA	4.4	4.0	0.40
70094	Westwego	Jefferson Parish, LA	4.4	4.2	0.20
70112	New Orleans	Orleans Parish, LA	5.0	4.6	0.40
70113	New Orleans	Orleans Parish, LA	5.0	4.8	0.20
70114	New Orleans	Orleans Parish, LA	5.0	4.6	0.40
70115	New Orleans	Orleans Parish, LA	3.6	3.4	0.20
70116	New Orleans	Orleans Parish, LA	4.6	4.2	0.40
70117	New Orleans	Orleans Parish, LA	5.0	4.6	0.40

70118         New Orleans         Orleans Parish, LA         4.2         3.8           70119         New Orleans         Orleans Parish, LA         4.8         4.4           70121         New Orleans         Jefferson Parish, LA         3.6         3.6           70122         New Orleans         Orleans Parish, LA         4.2         4.2           70123         New Orleans         Jefferson Parish, LA         2.8         3.0           70124         New Orleans         Orleans Parish, LA         2.0         2.0           70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.2         4.0           70128         New Orleans         Orleans Parish, LA         4.6         4.2           70129         New Orleans         Orleans Parish, LA         4.6         4.2           70130         New Orleans         Orleans Parish, LA         3.6         3.2	0.40 0.40 0.0 0.0 (0.20) 0.40 0.40 0.40 0.40 0.40 0.40
70119         New Orleans         Orleans Parish, LA         4.8         4.4           70121         New Orleans         Jefferson Parish, LA         3.6         3.6           70122         New Orleans         Orleans Parish, LA         4.2         4.2           70123         New Orleans         Jefferson Parish, LA         2.8         3.0           70124         New Orleans         Orleans Parish, LA         2.0         2.0           70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.2         4.0           70128         New Orleans         Orleans Parish, LA         4.6         4.2           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.40 0.0 0.0 (0.20) 0.40 0.40 0.40 0.20 0.40
70121         New Orleans         Jefferson Parish, LA         3.6         3.6           70122         New Orleans         Orleans Parish, LA         4.2         4.2           70123         New Orleans         Jefferson Parish, LA         2.8         3.0           70124         New Orleans         Orleans Parish, LA         2.0         2.0           70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.2         4.0           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.0 0.0 (0.20) 0.40 0.40 0.40 0.20 0.40
70122         New Orleans         Orleans Parish, LA         4.2         4.2           70123         New Orleans         Jefferson Parish, LA         2.8         3.0           70124         New Orleans         Orleans Parish, LA         2.0         2.0           70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.2         4.0           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.0 (0.20) 0.0 0.40 0.40 0.40 0.20 0.40
70123         New Orleans         Jefferson Parish, LA         2.8         3.0           70124         New Orleans         Orleans Parish, LA         2.0         2.0           70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.8         4.4           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.20) 0.40 0.40 0.40 0.20 0.40
70124         New Orleans         Orleans Parish, LA         2.0         2.0           70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.8         4.4           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.0 0.40 0.40 0.40 0.20 0.40
70125         New Orleans         Orleans Parish, LA         4.6         4.2           70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.8         4.4           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.40 0.40 0.40 0.20 0.40
70126         New Orleans         Orleans Parish, LA         4.8         4.4           70127         New Orleans         Orleans Parish, LA         4.8         4.4           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.40 0.40 0.20 0.40
70127         New Orleans         Orleans Parish, LA         4.8         4.4           70128         New Orleans         Orleans Parish, LA         4.2         4.0           70129         New Orleans         Orleans Parish, LA         4.6         4.2	0.40 0.20 0.40
70128New OrleansOrleans Parish, LA4.24.070129New OrleansOrleans Parish, LA4.64.2	0.20
70129 New Orleans Orleans Parish, LA 4.6 4.2	0.40
70130 New Orleans Orleans Parish, LA 3.6 3.2	0.40
70131 New Orleans Orleans Parish, LA 3.8 3.6	0.20
70301 Thibodaux Lafourche Parish, LA 4.0 3.4	0.60
70345 Cut Off Lafourche Parish, LA 3.6 3.0	0.60
70354 Galliano Lafourche Parish, LA 4.0 3.4	0.60
70359 Gray Terrebonne Parish, LA 3.8 3.2	0.60
70360 Houma Terrebonne Parish, LA 3.0 3.0	0.0
70363 Houma Terrebonne Parish, LA 4.2 3.6	0.60
70364 Houma Terrebonne Parish, LA 3.6 3.4	0.20
70373 Larose Lafourche Parish, LA 3.6 2.8	0.80
70374 Lockport Lafourche Parish, LA 3.4 3.2	0.20
70380 Morgan City St. Mary Parish, LA 4.4 4.0	0.40
70392 Patterson St. Mary Parish, LA 4.2 3.8	0.40
70394 Raceland Lafourche Parish, LA 3.8 3.2	0.60
70401 Hammond Tangipahoa Parish, LA 4.4 4.2	0.20
70403 Hammond Tangipahoa Parish, LA 4.2 4.2	0.0
70422 Amite Tangipahoa Parish, LA 4.4 4.2	0.20
70427 Bogalusa Washington Parish, LA 4.6 4.2	0.40
70433 Covington St. Tammany Parish, LA 2.8 2.4	0.40
70435 Covington St. Tammany Parish, LA 2.6 2.2	0.40
70438 Franklinton Washington Parish, LA 3.8 3.6	0.20
70443 Independence Tangipahoa Parish, LA 4.2 4.0	0.20
70444 Kentwood Tangipahoa Parish, LA 4.0 3.8	0.20
70445 Lacombe St. Tammany Parish, LA 2.8 2.8	0.0
70447 Madisonville St. Tammany Parish, LA 1.6 1.4	0.20
	(0.20)
70452 Pearl River St. Tammany Parish, LA 3.6 3.4	

Zip	City	Parish	2017 CNI Score	2016 CNI Score	Difference
70454	Ponchatoula	Tangipahoa Parish, LA	3.4	3.2	0.20
70458	Slidell	St. Tammany Parish, LA	3.4	3.4	0.0
70460	Slidell	St. Tammany Parish, LA	3.8	3.6	0.20
70461	Slidell	St. Tammany Parish, LA	2.8	2.8	0.0
70466	Tickfaw	Tangipahoa Parish, LA	4.2	4.0	0.20
70471	Mandeville	St. Tammany Parish, LA	2.0	2.2	(0.20)
70560	New Iberia	Iberia Parish, LA	4.6	4.2	0.40
70570	Opelousas	St. Landry Parish, LA	4.6	4.2	0.40
70601	Lake Charles	Calcasieu Parish, LA	4.8	4.4	0.40
70726	Denham Springs	Denham Springs Livingston Parish, LA		2.8	0.0
70737	Gonzales	Gonzales Ascension Parish, LA		2.8	0.20
70769	Prairieville	Prairieville Ascension Parish, LA		2.0	0.20
70785	Walker	Livingston Parish, LA	3.0	3.0	0.0
70802	Baton Rouge	East Baton Rouge Parish, LA	4.8	4.6	0.20
70805	Baton Rouge	East Baton Rouge Parish, LA	5.0	4.6	0.40
70815	Baton Rouge	East Baton Rouge Parish, LA	3.6	3.6	0.0
70816	Baton Rouge	East Baton Rouge Parish, LA	3.4	3.2	0.20
71291	West Monroe	Ouachita Parish, LA	3.6	3.0	0.60

Table 4: CHNOLA – 2017 CNI Score

Zip	City	Poverty	Poverty	Poverty	Limit	Minority	No HS	Un-	Un-	Rent
		65+	Children	Single w/kids	English		Diploma	employed	insured	
39426	Carriere	14.90%	28.12%	63.34%	0.06%	9.53%	14.98%	10.87%	11.68%	14.49%
39466	Picayune	14.33%	30.47%	60.69%	0.13%	24.14%	19.07%	11.95%	16.57%	27.01%
39503	Gulfport	10.05%	22.42%	42.02%	0.48%	39.04%	13.18%	8.67%	13.69%	29.23%
70001	Metairie	13.12%	19.18%	41.15%	5.46%	33.30%	11.67%	5.05%	5.64%	50.43%
70002	Metairie	11.68%	18.60%	49.80%	7.89%	42.08%	12.24%	6.77%	5.78%	46.68%
70003	Metairie	10.64%	16.72%	36.46%	3.97%	30.77%	12.34%	6.80%	4.64%	24.37%
70005	Metairie	8.57%	7.21%	24.68%	3.88%	17.53%	7.43%	5.00%	4.69%	37.11%
70006	Metairie	7.67%	13.62%	35.28%	5.92%	36.56%	10.30%	6.93%	4.39%	34.06%
70032	Arabi	9.95%	28.29%	38.66%	1.91%	36.71%	15.67%	9.76%	7.26%	32.44%
70037	Belle Chasse	13.61%	10.39%	23.90%	1.30%	26.64%	14.54%	3.80%	3.45%	32.94%
70043	Chalmette	9.79%	25.91%	54.46%	3.12%	38.19%	15.55%	10.49%	7.27%	42.13%
70047	Destrehan	22.45%	8.62%	22.00%	1.58%	32.67%	8.76%	9.69%	3.52%	18.66%
70053	Gretna	14.41%	35.04%	51.14%	6.59%	56.06%	24.37%	9.00%	8.45%	52.51%
70056	Gretna	9.32%	22.68%	45.59%	5.82%	63.48%	13.91%	5.95%	5.08%	40.17%
70057	Hahnville	23.95%	30.38%	50.70%	0.67%	54.19%	23.91%	12.90%	7.25%	18.24%
70058	Harvey	18.54%	24.38%	41.83%	5.47%	75.52%	19.97%	5.32%	6.98%	30.69%
70062	Kenner	26.27%	28.45%	48.83%	8.67%	63.36%	24.87%	12.35%	7.79%	48.96%
70065	Kenner	6.28%	13.98%	39.42%	6.92%	51.54%	12.03%	5.85%	4.29%	36.66%
70068	LA Place	13.60%	14.40%	22.33%	1.27%	60.43%	18.59%	8.40%	4.61%	19.26%
70070	Luling	4.94%	13.05%	34.77%	0.60%	24.26%	10.83%	6.45%	4.23%	17.01%
70072	Marrero	20.31%	25.43%	51.58%	2.53%	55.34%	21.84%	5.70%	6.78%	24.34%
70075	Meraux	8.41%	10.95%	37.56%	0.77%	28.33%	17.32%	7.77%	4.52%	17.12%
70084	Reserve	11.82%	29.46%	50.28%	0.93%	58.74%	23.69%	13.44%	4.98%	24.16%
70085	Saint Bernard	11.34%	21.41%	33.33%	0.08%	25.50%	25.32%	17.06%	7.23%	13.26%
70087	Saint Rose	21.81%	13.46%	25.54%	3.07%	56.00%	16.75%	9.34%	5.68%	33.75%
70092	Violet	10.63%	29.87%	60.08%	0.25%	59.90%	22.61%	15.16%	6.90%	21.31%
70094	Westwego	14.81%	30.69%	47.97%	2.48%	58.35%	22.51%	11.64%	7.26%	30.95%
70112	New Orleans	32.03%	60.81%	72.00%	2.36%	68.25%	19.93%	16.56%	14.28%	88.48%
70113	New Orleans	42.79%	51.97%	71.27%	3.91%	83.12%	29.66%	17.16%	17.68%	77.80%
70114	New Orleans	28.57%	42.40%	64.06%	1.46%	81.22%	20.36%	13.33%	12.30%	56.53%
70115	New Orleans	15.94%	22.43%	49.27%	1.73%	35.91%	8.32%	7.04%	7.19%	56.67%
70116	New Orleans	21.96%	55.98%	69.23%	2.08%	55.36%	14.20%	12.17%	10.32%	67.32%
70117	New Orleans	28.71%	43.03%	54.89%	0.82%	78.11%	21.73%	11.48%	12.88%	50.26%
70118	New Orleans	20.14%	28.24%	46.58%	1.30%	44.72%	11.21%	8.99%	9.94%	54.59%
70119	New Orleans	30.52%	45.70%	65.56%	3.28%	69.78%	17.00%	12.21%	12.15%	67.01%
70121	New Orleans	13.19%	19.80%	39.37%	4.10%	38.24%	14.04%	7.40%	5.14%	45.95%
70122	New Orleans	20.43%	30.54%	48.50%	0.78%	86.55%	13.35%	11.03%	10.84%	38.16%
70123	New Orleans	11.01%	10.90%	27.96%	1.07%	21.30%	7.69%	3.21%	3.98%	39.96%
70124	New Orleans	9.65%	4.19%	13.87%	1.16%	16.77%	3.10%	3.56%	4.00%	32.08%
70125	New Orleans	26.96%	39.76%	56.41%	1.98%	66.85%	15.52%	11.11%	11.62%	54.94%
70126	New Orleans	14.17%	49.95%	58.10%	1.23%	95.31%	17.31%	16.75%	14.36%	45.48%
70127	New Orleans	28.20%	45.51%	63.25%	1.56%	97.41%	15.18%	12.43%	13.61%	48.87%

Zip	City	Poverty	Poverty	Poverty	Limit	Minority	No HS	Un-	Un-	Rent
	,	65+	Children	Single w/kids	English	,	Diploma	employed	insured	
70128	New Orleans	21.85%	33.29%	50.00%	2.22%	97.79%	14.20%	8.94%	10.20%	31.19%
70129	New Orleans	28.71%	39.05%	71.03%	18.19%	89.14%	29.40%	11.04%	10.41%	33.28%
70130	New Orleans	20.73%	19.70%	50.00%	1.29%	37.59%	8.12%	7.19%	6.97%	68.26%
70131	New Orleans	10.37%	19.09%	40.51%	2.68%	74.44%	10.37%	8.64%	6.63%	42.45%
70301	Thibodaux	11.93%	20.21%	49.80%	0.99%	28.43%	21.71%	7.24%	5.97%	29.81%
70345	Cut Off	14.64%	18.30%	46.63%	3.48%	21.53%	28.26%	9.28%	5.57%	19.63%
70354	Galliano	24.99%	27.46%	46.12%	6.10%	21.43%	36.26%	8.80%	7.57%	21.90%
70359	Gray	8.95%	24.23%	53.13%	2.14%	37.46%	26.38%	7.94%	6.02%	20.15%
70360	Houma	7.45%	15.07%	45.85%	0.93%	25.79%	12.88%	3.63%	3.79%	29.15%
70363	Houma	8.71%	32.94%	43.75%	1.18%	48.44%	31.69%	8.51%	6.73%	28.62%
70364	Houma	10.72%	24.61%	54.48%	1.97%	28.81%	19.16%	5.17%	5.33%	32.62%
70373	Larose	19.12%	21.22%	50.00%	3.78%	22.96%	28.64%	8.01%	6.48%	18.04%
70374	Lockport	17.82%	20.88%	50.93%	5.17%	14.61%	22.97%	4.14%	5.48%	24.64%
70380	Morgan City	15.70%	31.96%	58.23%	3.21%	34.09%	27.77%	10.88%	6.70%	32.00%
70392	Patterson	21.05%	17.86%	46.51%	0.58%	43.24%	25.40%	8.39%	6.17%	30.31%
70394	Raceland	14.27%	25.92%	48.13%	1.26%	28.04%	23.85%	7.13%	5.45%	20.30%
70401	Hammond	14.74%	30.00%	54.99%	1.49%	47.16%	15.87%	11.26%	9.03%	47.67%
70403	Hammond	14.67%	31.20%	55.08%	0.50%	40.66%	18.16%	9.57%	8.99%	34.59%
70422	Amite	20.09%	32.89%	56.78%	0.80%	49.02%	23.72%	15.85%	8.87%	24.60%
70427	Bogalusa	16.85%	34.35%	64.14%	1.68%	39.02%	21.72%	17.00%	10.55%	31.68%
70433	Covington	8.52%	14.55%	44.35%	1.53%	18.21%	10.01%	6.86%	4.08%	22.21%
70435	Covington	10.47%	17.69%	50.32%	0.58%	14.67%	12.40%	6.38%	4.34%	12.40%
70438	Franklinton	23.46%	18.88%	40.71%	0.84%	28.39%	24.02%	12.15%	8.26%	20.76%
70443	Independence	25.25%	32.84%	62.50%	1.56%	35.43%	22.98%	13.09%	9.34%	22.02%
70444	Kentwood	19.23%	31.85%	58.83%	0.17%	40.56%	22.83%	13.51%	10.85%	19.88%
70445	Lacombe	15.46%	14.89%	44.19%	0.87%	31.72%	18.66%	8.66%	4.46%	14.10%
70447	Madisonville	11.13%	5.40%	25.91%	0.22%	10.99%	4.24%	4.83%	2.05%	10.52%
70448	Mandeville	8.69%	3.28%	9.05%	0.67%	13.69%	5.20%	5.80%	2.64%	19.03%
70452	Pearl River	11.23%	28.11%	49.68%	0.51%	13.10%	20.50%	8.69%	6.30%	19.97%
70454	Ponchatoula	17.15%	15.85%	32.80%	0.23%	20.99%	13.52%	8.38%	6.43%	22.06%
70458	Slidell	12.83%	18.00%	50.09%	0.92%	26.74%	13.26%	7.78%	3.55%	26.36%
70460	Slidell	10.66%	22.56%	49.64%	1.06%	40.85%	17.06%	9.69%	5.01%	21.51%
70461	Slidell	11.38%	10.89%	26.85%	2.18%	33.45%	10.60%	8.55%	3.66%	24.05%
70466	Tickfaw	24.28%	25.99%	52.05%	3.85%	38.76%	21.34%	9.51%	7.32%	31.31%
70471	Mandeville	14.80%	3.89%	10.36%	0.74%	11.67%	5.94%	4.42%	3.63%	26.07%
70560	New Iberia	20.63%	24.70%	43.64%	2.69%	46.77%	25.90%	10.55%	6.99%	34.74%
70570	Opelousas	24.57%	41.20%	73.17%	0.53%	60.89%	24.66%	7.20%	11.66%	31.53%
70601	Lake Charles	26.45%	36.90%	52.25%	0.56%	73.34%	21.51%	13.34%	9.74%	48.14%
70726	Denham	9.18%	11.39%	28.93%	1.01%	17.08%	15 250/	7.18%	2 5 20/	24.39%
70726	Springs Gonzales	9.18%	17.22%	40.87%	1.01%	36.44%	15.35% 12.20%	6.07%	3.52% 4.95%	23.50%
70769	Prairieville			36.59%	0.32%		7.86%			
70769	Walker	10.34% 11.39%	8.37% 17.93%	36.59%	0.32%	22.13% 9.80%	17.45%	4.70% 7.55%	3.43% 4.50%	11.72% 19.96%
70802	Baton Rouge	25.32%	40.92%	47.68%	1.14%	80.95%	20.45%	11.64%	12.76%	63.34%

Zip	City	Poverty 65+	Poverty Children	Poverty Single	Limit English	Minority	No HS Diploma	Un- employed	Un- insured	Rent
				w/kids	,		·	,		
70805	Baton Rouge	26.28%	41.23%	50.31%	0.71%	96.07%	23.64%	13.66%	11.87%	55.25%
70815	Baton Rouge	8.43%	22.19%	44.81%	3.81%	67.05%	11.03%	7.68%	7.18%	34.00%
70816	Baton Rouge	8.50%	20.76%	41.43%	2.06%	56.86%	8.72%	5.36%	5.47%	49.71%
71291	West Monroe	14.71%	21.88%	55.41%	0.34%	18.38%	10.07%	4.92%	6.93%	34.93%

For the study area, there are five ZIP code areas with CNI scores of 5.0, indicating significant barriers to health care access. These ZIP code areas are 70112 (New Orleans), 70113 (New Orleans), 70114 (New Orleans), 70117 (New Orleans), and 70805 (Baton Rouge). (See Table 4.)

- ZIP code 70112 New Orleans reported the highest rates for children living in poverty and for residents (60.81 percent) who rent their homes (88.48 percent).
- ZIP code 70113 New Orleans reported the highest rates for seniors age 65 and older living in poverty (42.79 percent), high rates for residents who are unemployed (17.16 percent) and uninsured (17.68 percent).
- ZIP code 70129 New Orleans reported the highest rates for residents who have limited English proficiency (18.19 percent).
- ZIP code 70570 Opelousas reported the highest rates for impoverished single residents with children (73.17 percent).
- ZIP code 70128 New Orleans reported the highest rates of residents who identify as being a minority (97.79 percent).
- ZIP code 70354 Galliano reported the highest rates of residents who did not have a high school diploma (36.26 percent).

On the other end of the spectrum, the lowest CNI score for the study area was 1.6 in 70447 (Madisonville) and 70448 (Mandeville).

- ZIP code 70447 Madisonville reported the lowest rates in the study area for residents who were uninsured (2.05 percent) and who rent their homes (10.52 percent).
- ZIP code 70070 Luling reported the lowest rates in the study area for impoverished seniors 65 and older (4.94 percent).
- ZIP code 70448 Mandeville reported the lowest rates in the study area for children living in poverty (3.28 percent) and impoverished single residents with children (9.05 percent).
- ZIP code 39426 Carriere reported the lowest rates in the study area for residents with limited English proficiency (0.06 percent) and who identify as being a minority (9.53 percent).
- ZIP code 70124 New Orleans reported the lowest rates in the study area for residents who did not have a high school diploma (3.10 percent).

# Methodology

A comprehensive CHNA process performed by Children's Hospital New Orleans included the collection of primary and secondary data. Community organizations and leaders within the six-parish region were engaged to distinguish the needs of the community. Civic and social organizations, government agencies, educational systems, and health and human services entities were engaged throughout the CHNA. The comprehensive primary data collection phase resulted in the contribution of over 100 community stakeholders/leaders, organizations, and community groups.

The primary data collection consisted of several project component pieces. Community stakeholder interviews were conducted with individuals who represented a) broad interests of the community, b) populations of need or c) persons with specialized knowledge in public health. Health provider surveys were collected to capture thoughts and opinions regarding health providers' community regarding the care and services they provide. Community representatives and stakeholders attended a community forum facilitated by Tripp Umbach to prioritize health needs, which will assist in the implementation and planning phase. A resource inventory was generated to highlight available programs and services within the service area. The resource inventory identifies available organizations and agencies that serve the region within each of the priority needs.

A robust regional profile (secondary data profile) was analyzed. The regional profile contained local, state, and federal data/statistics providing invaluable information on a wide-array of health and social topics.<sup>4</sup> Different socioeconomic characteristics, health outcomes, and health factors that affect residents' behaviors; specifically, the influential factors that impact the health of residents were reviewed and discussed with members of the Working Group and Tripp Umbach.

East Jefferson General Hospital, LCMC Health, Ochsner Health System, HCA Healthcare (Tulane Medical Center), Slidell Memorial Hospital, and St. Tammany Parish Hospital completed a community health needs assessment project through a collaborative partnership under the Metropolitan Hospital Council of New Orleans to identify the health needs of the communities they serve, while developing a deeper understanding of community needs and identifying community health priorities. The mission of the Metropolitan Hospital Council of New Orleans CHNA is to understand and plan for the current and future health needs of residents in its community. The community needs assessment process is a meaningful engagement and input was collected from a broad cross-section of community-based organizations, establishments, and institutions.

The health care environment is characterized by change and uncertainty. As change and uncertainty deepen, hospitals and health systems must continually enhance their ability to ensure value to their members and to assist diverse members with strategies and tools for improving the health of the

<sup>&</sup>lt;sup>4</sup> For the regional profiles, Tripp Umbach cited the data years reflective of the year the CHNA was conducted. The data years from Community Commons vary for each data point. Some data points may be reflective of years prior to 2017. Tripp Umbach compiled and collected data that was currently available on the data sources' sites. Tripp Umbach provided data on specific outcome factors and measures that had "fresh" information.

population. Tripp Umbach facilitated the development of a comprehensive regional community health needs assessment approach for MHCNO and their partner hospitals to advance community health, promote wellness and prevention, and mobilize community partners to participate in addressing health and well-being of the population. Tripp Umbach has found that community and regional CHNAs often bring about a greater understanding of the shared health issues across a community as well as opportunities for health systems and community organizations to share data and work collaboratively to address the health needs of the community.

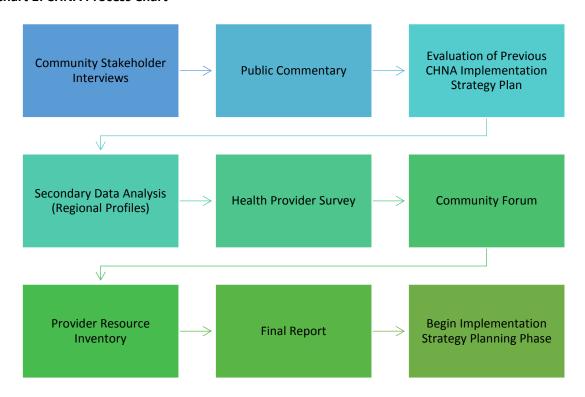
As such, the CHNA was developed through a regional approach. In total, six geographic profiles emerged based on the location and primary service areas of each participating hospital. The regional profiles were: Baton Rouge, Jefferson, New Orleans, North Shore, West Bank, and St. Anne (Raceland)/Lafourche region. Five community forums were conducted within the respective regional areas.<sup>5</sup>

LCMC Health is located in the West Bank and New Orleans study regions; therefore, the results from the community forums were also reflective of the hospital/health institution within those respective regions. For reporting purposes, Tripp Umbach reported data based on a regional approach which encompassed ZIP codes and parishes which may not necessarily be reflective of LCMC Children's Hospital specifically; however, the data and information is reflective of the health care institutions within those respective regions. A listing of facilities included in each region can be found in Appendix H.

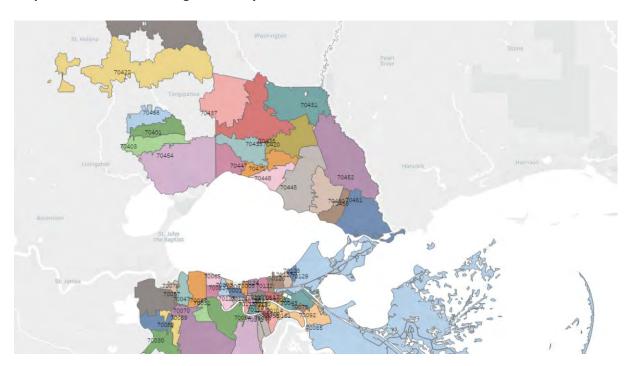
Tripp Umbach provided benchmarking or trending data to track and observe movements in the primary and secondary data (where applicable). The overall CHNA involved multiple steps, which are depicted in the below flow chart.

<sup>&</sup>lt;sup>5</sup> A Baton Rouge community forum was not conducted by Tripp Umbach as the city of Baton Rouge is currently conducting an independent CHNA. Ochsner Medical Center – Baton Rouge is in a collaborative partnership with over 90 hospitals, non-profit organizations, local businesses, schools, and governmental institutions to significantly impact the city's health priorities under the Healthy BR Initiative. Healthy BR is working towards common goals to make Baton Rouge a healthier city as well as being an example of population health management. The final identified needs from the Healthy BR Initiative was reflective for Ochsner Medical Center – Baton Rouge.

**Chart 1: CHNA Process Chart** 



The CNI information compiled for analysis represented the New Orleans Study Area which consisted of 63 ZIP codes located across Jefferson, Orleans, St. Bernard, St. Charles, St. Tammany, and Tangipahoa parishes. The information collected from these specific ZIP codes will assist in future health care planning services, community benefit contributions, and programming efforts. (See Map 1.)



Map 4: The New Orleans Region – Study Area

Note: Map is not to scale.

The study area shows that the six parishes are projected to have a population growth from 2017 to 2022. The New Orleans study region is expected to have a population increase of 62,066.

Jefferson Parish contains 437,303 residents and is the largest parish in the study area; Orleans Parish is the second-largest with 399,567. (See Table 5.)

St. Bernard Parish is expected to have the largest population change at 9.30 percent, or an increase of 4,390 residents.

Table 5: The New Orleans Region - Area Population Snapshot

	Jefferson	Orleans	St. Bernard	St. Charles	St. Tammany	Tangipahoa	Louisiana	USA
2017 Total Population	437,303	399,567	47,213	51,155	254,916	139,216	4,706,135	325,139,271
2022 Projected Population	444,708	427,656	51,603	51,713	269,474	146,282	4,839,118	337,393,057
# Change	7,405	28,089	4,390	558	14,558	7,066	132,983	12,253,786
% Change	1.69%	7.03%	9.30%	1.09%	5.71%	5.08%	2.83%	3.77%

The representation of males and females in the overall study area and the state are similar. (See Chart 2.)

Chart 2: The New Orleans Region - Gender

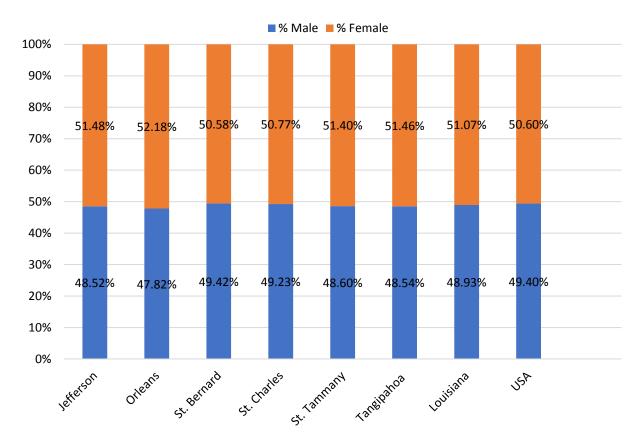


Chart 3 illustrates the distribution of educational attainment among residents in the study area.

St. Tammany Parish reports the lowest rate of residents with a "less than high school" diploma (3.55 percent) for the study area.

St. Bernard Parish has the highest number of residents with a high school diploma (42.72 percent), higher than the state (33.90 percent) and nation (27.83 percent).

Orleans Parish reports the highest rate of residents with a bachelor's degree or higher (35.06 percent) for the study area; while residents in St. Bernard have the lowest (12.06 percent).

**Chart 3: The New Orleans Regional - Education Level** 

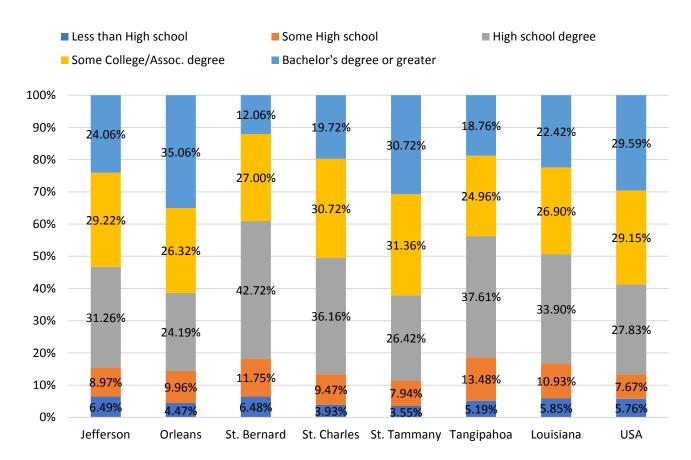
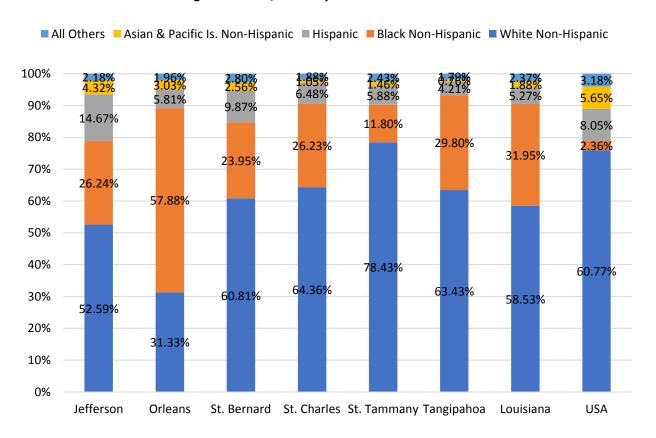


Chart 4 shows the diverse mixture of race/ethnicity represented in the study area. Orleans Parish reports the largest black, Non-Hispanic population percentage for the study area (57.88 percent); while Tangipahoa Parish reports the next highest percent of black, Non-Hispanics (29.80 percent).

St. Tammany Parish reports the highest white, Non-Hispanic population across the study area at 78.43 percent; higher than the state (58.53 percent) and nation (60.77 percent).

Chart 4: The New Orleans Regional - Race/Ethnicity



Tangipahoa Parish reports the lowest average household income of the entire study area at \$58,371; this is also lower than state (\$68,011) and national (\$80,853) averages. St. Tammany Parish reports the highest average household income at \$88,573. (See Chart 5.)

Note: The red line provides a visual of where the state income average lies.

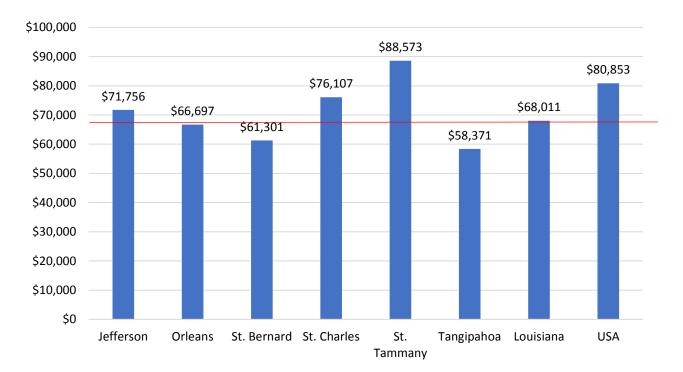


Chart 5: The New Orleans Regional - Average Household Income

Source: Truven Health Analytics

CNI scores obtained by Truven Health Analytics were analyzed for the ZIP codes that make up the service area. This analysis is an important part of the study. The CNI ZIP code summary provides valuable background information to begin addressing and planning for the community's current and future needs. The CNI provides greater ability to diagnose community needs as it explores ZIP code areas with significant barriers to health care access.

A CNI score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with greatest need. It is important to note that a low score (e.g., 1.0) does not imply that attention should not be given to that neighborhood; rather, hospital leadership should explore and identify the specific strategies employed to ensure a low neighborhood score.

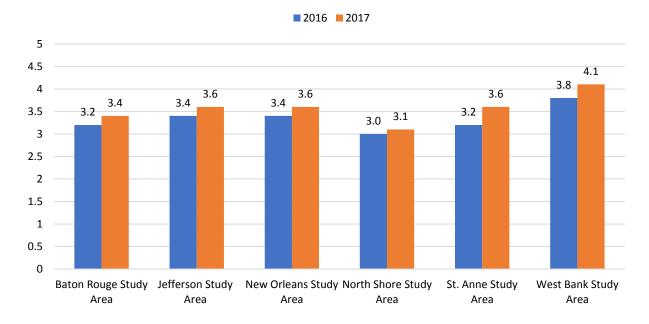
Examining the CNI scores of 2017, Chart 6 shows the average CNI score for each of the six study regions under the overall MHCNO scope. The Jefferson Study Area averaged 3.6; indicating that residents faced significant socioeconomic barriers to care. St. Anne had a CNI score in 2017 of 3.6; Baton Rouge had a 2017 CNI of 3.4.

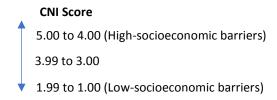
The New Orleans Study Area (which includes LCMC Health System Facilities; University Medical Center New Orleans (UMCNO), New Orleans East Hospital (NOEH), Touro Infirmary, and Children's Hospital New Orleans (CHNOLA)) reported an average CNI score of 3.6. The West Bank Study Area (which includes West Jefferson Medical Center (WJMC)) reported the highest average CNI score at 4.1; indicating that residents face the highest socioeconomic barriers to care when compared to the remaining study areas.

On the polar end, residents in the North Shore Study Area reported a lower score (3.1), indicating fewer socioeconomic barriers to care for residents.

Overall, all of the study regions increased their CNI scores from 2016 to 2017 and continue to report scores above the median for the CNI scale, with North Shore Study Area reporting the lowest score (3.1) and the West Bank Study Area reporting the highest (4.1).

Chart 6: Average CNI Scores of MHCNO Regional Profiles





### **Key Community Needs**

According to the Office of Disease Prevention and Health Promotion, a healthy community is "a community that is continuously creating and improving those physical and social environments and expanding those community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential." This idyllic description is for a healthy community that also has access to health services; ample employment opportunities; high-quality education; affordable, clean housing options; and a safe physical environment. The reduction of poor health outcomes and poor health behaviors are essential in order to build a healthy community. Collaboration and teamwork from community groups, health care institutions, government leaders, and social and civic organizations can also improve the health status of a community. Healthy partnerships can lead to building a strong community infrastructure that addresses and provides services to impede preventable diseases.

With the implementation of the PPACA, the pathway to affordable and obtainable health insurance services has been made accessible to once-uninsured residents in Southern Louisiana. Coordinating health services and reducing health care costs are components in the execution of the PPACA. Accessibility and better care coordination to health services can be delivered through health care institutions and regional partners. CHNOLA and their commitment to delivering high-quality health care services in collaboration with regional agencies and organizations can capitalize on existing resources to further expand community assets.

CHNOLA continues to contribute towards regional programming efforts, educational initiatives, and high-quality patient care to improve the health and security of the community. CHNOLA continues their obligation and devotion to their region not only with the completion of their CHNA but also with the implementation strategies and planning efforts involving strong partnerships with community organizations, health institutions, and regional partners through a comprehensive implementation strategy plan. CHNOLA is a robust economic driver in the region with a strong focus on improving the health of the residents in their community and surrounding regions.

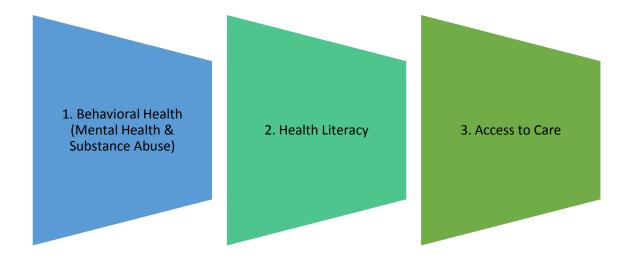
In the summer of 2018, key need areas were identified during the CHNA process through the gathering of primary and secondary data. The identified needs were:

- A. Behavioral health (mental health and substance abuse)
- B. Health literacy
- C. Access to care

The identified community needs are depicted in order of priority in the chart below. (See Chart 7.)

<sup>&</sup>lt;sup>6</sup> Office of Disease Prevention and Health Promotion: https://health.gov/news/blog-bayw/2010/10/healthy-communities-means-healthy-opportunities/

Chart 7: Children's Hospital New Orleans Community Health Needs 2018



## Priority 1: Behavioral Health (Mental Health and Substance Abuse)

Mental disorders and substance use disorders affect people of all racial groups and socioeconomic backgrounds. Mental health is defined as a state of well-being in which every individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to their community. Mental health affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Good mental health is freedom from depression, anxiety, and other psychological issues.

Having good mental health also includes the way you feel about yourself, the quality of relationships, and the manner in how those relationships are managed. Good mental health is freedom from depression, anxiety, and other psychological issues. It also refers to the overall coping mechanisms of an individual.

Having a behavioral health condition is not the result of one event. Research suggests multiple, linking causes. Genetics, environment, and lifestyle influence whether someone develops a mental health condition. A stressful job or home life makes some people more susceptible, as do traumatic life events like being the victim of a crime. Biochemical processes and circuits and basic brain structure may play a role, too.<sup>8</sup>

Mental health is important at every stage of life, from childhood and adolescence through adulthood. Families and individuals throughout the United States, and Southern Louisiana in particular, is susceptible to the rise of mental illness and substance abuse. In 2014, according to SAMHSA's National Survey on Drug Use and Health, an estimated 43.6 million (18.1 percent) Americans ages 18 and up experienced some form of mental illness. In the past year, 20.2 million adults (8.4 percent) had a substance use disorder. Of these, 7.9 million people had both a mental disorder and substance use disorder, also known as co-occurring mental and substance use disorders.

People with serious mental and/or substance use disorders often face higher rates of cardiovascular disease, diabetes, respiratory disease, and infectious disease; elevated risk factors due to high rates of smoking, substance misuse, obesity, and unsafe sexual practices; increased vulnerability due to poverty, social isolation, trauma and violence, and incarceration; lack of coordination between mental and primary health care providers; prejudice and discrimination; side effects from psychotropic medications; and an overall lack of access to health care, particularly preventive care.<sup>11</sup>

More and more providers are approaching patient health with an integrated care model because they realize the importance of treating the whole individual. Behavioral health affects physical health and vice versa. With proper monitoring and treatment, individuals suffering from behavioral health issues

<sup>&</sup>lt;sup>7</sup> World Health Organization: www.who.int/features/factfiles/mental health/en/

<sup>&</sup>lt;sup>8</sup> National Alliance on Mental Illness: www.nami.org/Learn-More/Mental-Health-Conditions

<sup>&</sup>lt;sup>9</sup> U.S. Department of Health and Human Services: www.mentalhealth.gov/basics/what-is-mental-health

<sup>&</sup>lt;sup>10</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/disorders

<sup>&</sup>lt;sup>11</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/wellness-initiative

can lead healthy, productive lives and be contributing members of the community. The difficulty lies in identifying these issues and linking these individuals with behavioral health services.

Data obtained from the Louisiana Department of Health (LDH) showed that in May 2018, 57,289 adults obtained outpatient mental health services in the state. The number of adults obtaining care has increased significantly over the years. From 2016 to 2017, there was a roughly 50 percent increase in the number of adults obtaining outpatient mental health services (from 15,650 to 23,522); while from 2017 to 2018, there was a 140 percent increase in the number of adults seen for outpatient services (from 23,522 to 57,289). (See Chart 8.)

Upon reviewing additional data, the number of adults receiving inpatient mental health services at a psychiatric facility as of May 2018 also rose steadily through the years. The number of adults obtaining mental health care services tripled in 2018 (12,360) from 2017. (See Chart 8.)

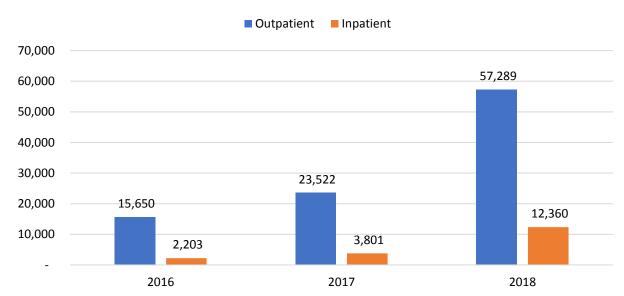


Chart 8: Mental Health: Adults receiving Mental Health Services as of May 2018

Source: Louisiana Department of Health

SAMHSA's 2016 National Survey on Drug Use and Health revealed the reasons not receiving mental health services for adults 18 and older included, the care they needed was due to cost (43.6 percent)(this was their main reason), followed by "can handle problem without treatment" (30.6 percent), and "did not know where to go for services" (26.9 percent). 12 (See Chart 9.)

<sup>&</sup>lt;sup>12</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/data/sites/default/files/NSDUH-ServiceUseAdult-2015/NSDUH-ServiceUseAdult-2015.htm

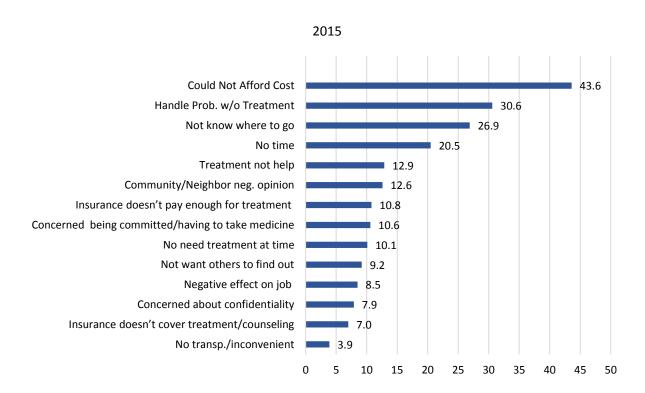


Chart 9: Reasons Not Receiving Mental Health Services (Adults Aged 18 or Older)

Source: Substance Abuse and Mental Health Services Administration

In addition to the growing behavioral health problem in the study region, there is an increased use of drugs. Drug use and its consequences touch every sector of our society. Drug use affects our health and has a significant effect on the criminal justice system. Drug use also endangers the future of our youth. Addiction is a chronic disease, difficult to control as well as difficult to break. Individuals who take drugs do so for many reasons, including environmental influences, genetics, to escape reality, etc. An essential role the community can implement to stem its use is to provide programs to encourage prevention and reinforcement of keeping drugs and alcohol out of neighborhoods and schools; therefore, providing a safe and secure environment for all community residents. Prevention is a cost-effective approach to promoting safe and healthy communities.

SAMHSA reported in its 2016 National Drug Use and Health Survey that 28.6 million residents 12 years or older were current illicit drug users. Marijuana is the most commonly used drug in the U.S. with 24 million users in 2013, followed by 3.3 million people misusing prescription pain relievers. In addition, 20.1 million Americans aged 12 or older had a substance abuse disorder, with 15.1 million abusing

alcohol specifically. In 2016, 1.4 percent aged 12 or older (3,755) received substance use treatment in the past year. Only 1.4 percent aged 26 or older (2,950) received treatment.<sup>13</sup>

Louisiana's percentage of illicit drug dependence or abuse among individuals aged 12 or older was similar to the national percentage in 2013–2014. In Louisiana, about 112,000 individuals aged 12 or older (2.9% of all individuals in this age group) per year in 2013–2014 were dependent on or abused illicit drugs within the year prior to being surveyed. The percentage did not change significantly from 2010–2011 to 2013–2014. (See Chart 10.)

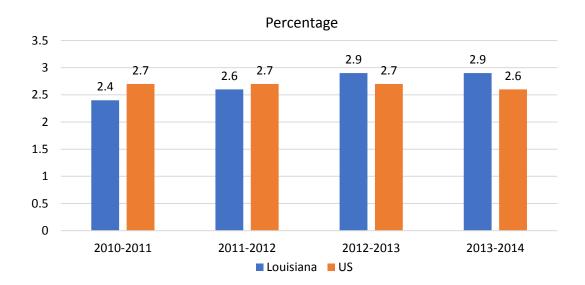


Chart 10: Substance Use - Illicit Drug Dependence or Abuse

Source: Substance Abuse and Mental Health Services Administration

Data reveal that Louisiana is experiencing a high number of drug overdose deaths. The CDC reported the age-adjusted rate of drug overdose deaths in Louisiana in 2014 was 16.9 per 100,000, higher than the national rate of 14.7 per 100,000. Unlike the 6.5 percent national increase in drug overdose—related deaths between 2013 and 2014, the rate in Louisiana decreased 5.1 percent over that same period.<sup>15</sup>

Substance abuse has reached epidemic levels in communities across the nation; especially within vulnerable populations. Drug abuse can alter a person's thinking and judgment, leading to health risks including addiction, drugged driving, infectious disease, and potential harm of unborn babies. <sup>16</sup> Drug abuse often co-occurs with mental health issues, with one exacerbating the other. Due to the complex

<sup>&</sup>lt;sup>13</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/data/sites/default/files/2016\_ffr\_1\_slideshow\_v5.pdf

<sup>&</sup>lt;sup>14</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/data/sites/default/files/2015\_Louisiana\_BHBarometer.pdf

<sup>&</sup>lt;sup>15</sup> Henry J. Kaiser Family Foundation: www.kff.org/health-reform/fact-sheet/the-louisiana-health-care-landscape/

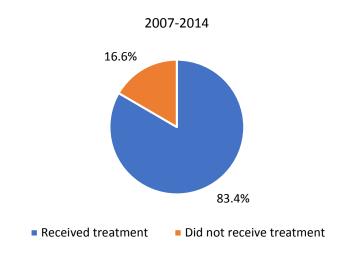
<sup>&</sup>lt;sup>16</sup> National Institute on Drug Abuse: www.drugabuse.gov/drugs-abuse/commonly-abused-drugs-charts

nature of co-occurring disorders, providers have difficulty diagnosing and treating both disorders effectively. Further compounding the issue, patients often also present with physical health issues.

Successful treatment of drug abuse is, most often, a lifelong process. Treatment is intensive and expensive and requires a significant investment of time and effort on behalf of health professionals, social services, community-based organizations, and the patient's support network, not to mention the patients themselves. Oftentimes, people around the individual require mental health and social services as well. Additionally, substance abuse treatment often requires multiple attempts to be deemed successful.

In Louisiana, in the past year treatment for illicit drug use among individuals Aged 12 or older with illicit drug dependence or abuse, about 17,000 individuals (16.6 percent) per year from 2007 to 2014 did not received treatment for their illicit drug use. (See Chart 11.)<sup>17</sup>

Chart 11: Past Year Treatment for Illicit Drug Use Among Individuals Aged 12 or Older with Illicit Drug Dependence or Abuse in Louisiana (Annual Average, 2007–2014)



Source: National Institute on Drug Abuse

Among individuals needing substance use treatment who unsuccessfully sought it, the lack of adequate health insurance or an inability to afford the cost of treatment was the most often cited reason for not getting it. Many agencies struggle with funding sources to meet the needs of the ever-increasing population requiring assistance with substance abuse. This problem requires a concerted effort on behalf of the entire community of service providers to support individuals with substance abuse issues by coordinating resources and increasing community outreach.

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/newsroom/press-announcements/201509170900

Drug addiction is treatable and can be successfully managed. Parents, teachers, community leaders, social and civic organizations, and health care institutions all play a vital role in educating residents and preventing drug use and addiction.

Substance abuse tends to have a ripple effect stemming from the person abusing to everyone surrounding the individual. The communities plagued by this issue also experience higher rates of crime and violence. As a result of this, many children in the community are suffering from childhood trauma and possessing early signs of behavioral health problems.

There is a lack of resources in the community to help to address these issues. Mental health and substance abuse are often found together in individuals as one issue tends to embolden the other. Community stakeholders believe that there is a need for more quality behavioral health services to help break this cycle while also encouraging substance abuse prevention by educating the younger generation. Access to mental health care, especially for children, is limited. More providers are needed to take patients for early intervention assessments and continued therapy. Many children do not qualify for mental health care, but the need is there for early intervention services.

Tobacco use and smoking were identified by stakeholders as a substance abuse concern within the community. Early education to prevent usage could be achieved by involving the school system in promoting the benefits of not using tobacco and making sure residents are informed on where they can access services to help them quit.

## **Access to Services and Provider Shortages**

There is unmet need for health care providers in Louisiana. As of April 2014, Louisiana had 118 primary care Health Professional Shortage Areas (HPSA), 102 dental HPSAs, and 109 mental health HPSAs. Louisiana has less than half (42 percent) of the number of mental health care providers needed to properly serve the population, compared to just over half (51 percent) for the nation as a whole.<sup>19</sup>

Table 3 depicts the ratio of available mental health providers to residents within the area. Jefferson, Orleans, St. Bernard, St. Charles, St. Tammany, and Tangipahoa parishes reported improved mental health provider rates from 2015 to 2018. In 2018, all of the parishes (except New Orleans and St. Bernard) report lower mental health provider figures when compared to the state. Orleans (240:1) and St. Bernard (280:1) parishes are top U.S. performers, having mental health provider rates lower than 330:1. The shortage of mental health providers highlights what residents currently face and will continue to face without intervention. The ability to secure treatment and services is affected by the shortfall of mental health providers in the New Orleans service area.<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Henry J. Kaiser Family Foundation: www.kff.org/health-reform/fact-sheet/the-louisiana-health-care-landscape/

<sup>&</sup>lt;sup>20</sup> County Health Rankings and Roadmaps: www.countyhealthrankings.org

There were improvements in Jefferson, Orleans, St. Charles, St. Tammany, and Tangipahoa parishes related to preventable hospital stays. While the parishes are not U.S. top performers the measures have improved signifying metrics that are aiding residents in the reductions in the number of stays.

Preventable hospital stays measure the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. The measure looks at people who were discharged from the hospital for conditions that, with appropriate care, can normally be treated without the need for a hospital stay. Examples of these conditions include convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. <sup>21</sup> Proper diagnosis, along with primary care treatment from a health professional, and addressing the needs of the patient population who are at risk of readmissions have played a role in the reduction of hospital stays. (See Table 6.)

**Table 6: Mental Health Providers at Parish Level** 

	Jefferson	Orleans	St. Bernard	St. Charles	St. Tammany	Tangipahoa	Louisiana	Top U.S. Performers
2015	790:1	492:1	334:1	1,879:1	816:1	1,140:1	977:1	412:1
2018	470:1	240:1	280:1	880:1	520:1	570:1	420:1	330:1
2015	65	47	87	75	78	94	80	41
2018	49	43	88	57	61	77	66	35

Source: County Health Rankings and Roadmaps

Community residents has been exposed to traumatic events —from natural disasters to increased rates of violent crime—making the investment in and maintenance of a comprehensive behavioral health system necessary for a healthy population. Shortly after Katrina, the Substance Abuse and Mental Health Services Administration (SAMHSA) predicted that "up to 30 percent of residents would experience clinically significant mental health problems and that more than 30 percent would experience mild to moderate depression, post-traumatic stress disorder (PTSD), or both"22; in the years since, New Orleanais have exhibited higher than average levels of stress, depression and suicide.<sup>23</sup>

Although there is an increased need, the behavioral health system is limited in its capacity to provide services to the area, leaving many at a higher risk of developing a mental illness or a substance use

<sup>&</sup>lt;sup>21</sup> County Health Rankings and Roadmaps: www.countyhealthrankings.org/learn/explore-health-rankings/whatand-why-we-rank/health-factors/clinical-care/quality-of-care/preventable-hospital-stays

<sup>&</sup>lt;sup>22</sup> Rudowitz et al. (2006).

<sup>&</sup>lt;sup>23</sup> New Orleans Health Department (NOHD). (2012). Behavioral health in New Orleans 2012: Recommendations for systems change. New Orleans, LA: Author. Retrieved from http://nola.gov/health-department/behavioralhealth/behavioral-health-strategic-plan/

disorder, being victimized by crime, increased contact with the criminal justice system, and poor health outcomes.<sup>24</sup> Orleans Parish reports the second highest ratio of mental providers at 243.5 per 100,000 compared to the lowest ratio in St. Charles Parish at 64.4 per 100,000 and the state ratio of 124.3 per 100,000. (See Chart 12.)

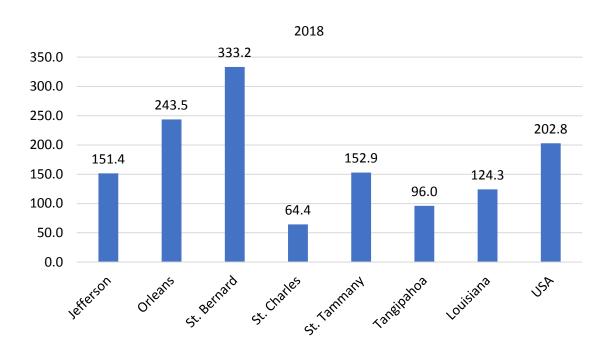


Chart 12: Mental Health Provider Rate (per 100,000)

Source: Community Commons

After the storm, many inpatient mental health facilities in the Greater New Orleans (GNO) area closed, reducing the availability of inpatient psychiatric beds for the severely mentally ill. Since Katrina, there have been severe decreases in adult psychiatric beds (39.0 percent), child/adolescent beds (25.0 percent), and detox beds (31.0 percent), making access for the uninsured extremely difficult. <sup>25</sup> The consequences of these closures and cutbacks have led to mentally ill individuals in crisis being treated in the emergency department, police acting as frontline mental health workers, and a high prevalence of mental illness in jails and prisons and among homeless individuals.<sup>26</sup>

<sup>25</sup> New Orleans Health Department (NOHD). (2016a). *New Orleans inpatient psychiatric bed capacity*. Available at www.nola.gov/health

<sup>&</sup>lt;sup>24</sup> NOHD, 2016

<sup>&</sup>lt;sup>26</sup> Fuller, T., Fuller, D., Geller, J., Jacobs, C., & Ragosta, K. (2012, July 19). *No room at the inn: Trends and consequences of closing public psychiatric hospitals.* Arlington, VA: Treatment Advocacy Center. Retrieved from http://www.treatmentadvocacycenter.org/storage/documents/no\_room\_at\_the\_inn-2012.pdf

It is important to note that although the city has fewer inpatient beds than before Katrina, the gap between the number of inpatient beds and the population of New Orleans has been reduced over time. In addition to an improving inpatient bed to population ratio, there has also been an increase in outpatient programs which are critical in stabilizing those with mental illness, substance use disorders, and co-occurring disorders when inpatient beds are difficult to access.<sup>27</sup>

### **Severe Mental Health**

Mental illness and mental health promotion are important components of the national public health conversation. Oftentimes, severe mental illness is so debilitating that sufferers are unable care for or support themselves. These individuals are dependent on their families and friends and lacking a support network, county and state agencies. An estimated 46 percent of homeless adults staying in shelters live with severe mental illness and/or substance use disorders. Severe mental illness includes disorders that produce psychotic symptoms and severe forms of other disorders, such as major depression and bipolar disorder. It is often defined by its length of duration and the disability it produces. According to the National Institute of Mental Health major depression can result in severe impairments that interfere or limit one's ability to carry out major life activities. An estimated 4.3 percent of adults in the US, or 10.3 million, had at least one major depressive episode with severe impairment in 2016.

Untreated severe mental illness is a major contributing factor to increasing premature death rates; and, not just suicide related deaths which are the primary focus of most mental health campaigns. Individuals with severe mental illness are more likely to have accompanying physical health issues, such as chronic disease (e.g., diabetes, hypertension, or heart disease). A 2006 study of morality statistics showed that individuals with severe mental illness average 20 years of lost life versus the general population and causes of death were similar to the general population, only happening 20 years earlier.<sup>31</sup>

While it is true that suicide and accidental deaths are more common in individuals with severe mental illness, death rates related to physical health conditions like chronic disease are on the rise in this population. Undiagnosed, untreated, and mismanaged severe mental illness causes a wide range of health disparities. Oftentimes, this population is unable or unwilling to seek appropriate health care services as a result of their illness; cannot navigate the current, complex health care delivery system; has no pathway to education or a self-sustainable wage; or, their current health care team is ill equipped to recognize or diagnose mental health issues. Also, some medications used to treat severe mental illness have physical side effects, such as weight gain and increased cholesterol levels; which are risk factors for associated chronic health conditions. For this reason, many health care delivery systems are moving

<sup>&</sup>lt;sup>27</sup> NOHD, 2016

<sup>&</sup>lt;sup>28</sup> National Alliance on Mental Illness: www.nami.org/Learn-More/Mental-Health-By-the-Numbers

<sup>&</sup>lt;sup>29</sup> Behavioral Health Evolution: www.bhevolution.org/public/severe\_mental\_illness.page

<sup>&</sup>lt;sup>30</sup> National Institute of Mental Health: www.nimh.nih.gov/health/statistics/major-depression.shtml

<sup>&</sup>lt;sup>31</sup> Psychology Today: www.psychologytoday.com/us/blog/dsm5-in-distress/201412/having-severe-mental-illness-means-dying-young

toward integrated care models that work to treat both mental and physical health conditions simultaneously.

This population presents greater difficulty in that many are not capable to seek help due to their mental illness. More than most, mental health care consumers need an established support network and professional coordination of care is imperative to assist individuals with severe mental illness in making and keeping appointments with all health professionals on their health care team; medication compliance; participating in routine preventive screenings and regular primary health care; and, taking personal control of their health status through engaging in healthy behaviors like not smoking and maintaining a healthy body weight with proper diet and exercise. An established relationship with a primary care physician is just as important for individuals with severe mental illness as is the same relationship with therapists and psychiatrists.

Data collection efforts sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) measure a set of substance use and mental health indicators to provide a snapshot of behavioral health in the United States. This data facilitates tracking changes and trends over time and brings support to SAMHSA's mission of reducing the impact of substance abuse and mental illness on America's communities.<sup>32</sup> Louisiana residents, much like the rest of the nation suffer from severe mental illness and access to mental health services. 8 percent of all youth aged 12-17 reported having a major depressive episode (MDE) in the past year in 2011-2012; of which, 57.9 percent did not receive treatment.

Data from the provider health surveys revealed mental health and substance abuse services were the top two responses when health professionals of the MHCNO service area were asked what resources/services are missing that would improve the health of residents in the community where you practice (14.4 percent and 11.2 percent respectively). More than one-third (37.7 percent) disagreed and 29.1 percent strongly disagreed that residents had access to mental/behavioral health providers.

## Suicide

Suicide is a major issue across the country and it is continuing to grow. Much of the increase is driven by suicides occurring in mid-life and are mostly committed by men. Typically, having a mental health condition contributes to suicide; however, suicide is rarely caused by a single factor. Additional environmental factors can contribute to suicide such as unemployment, relationships, money issues, substance abuse, housing problems, etc.

According to SAMHSA, in 2013, the highest number of suicides among both men and women occurred among those aged 45 to 54. The highest rates of suicide (suicides per 100,000) occurred among men

<sup>&</sup>lt;sup>32</sup> Substance Abuse and Mental Health Services Administration: https://www.samhsa.gov/data/sites/default/files/Louisiana\_BHBarometer.pdf

aged 75 and up and among women aged 45 to 54. Suicide was the second leading cause of death for young people ages 15 to 24 and for those aged 25 to 34.<sup>33</sup>

Having suicidal thoughts is a significant concern; however, having severe suicidal thoughts increases the risk of an individual attempting suicide. In 2014, an estimated 9.4 million adults in the U.S. (3.9 percent) aged 18 or older had serious thoughts of suicide in the past year. People aged 18 to 25 reported the highest percentage, followed by people aged 26 to 49, then by people aged 50 or older. Among high school students, more than 17 percent (approximately 2.5 million ninth through 12th graders) have seriously considered suicide, more than 13 percent have made a suicide plan, and more than 8 percent have attempted suicide.<sup>34</sup>

According to the Centers for Disease Control and Prevention (CDC), suicide is a leading cause of death as rates have steadily increased in nearly every state from 1999 through 2016. Louisiana saw an increase of 29.3 percent from 1999 to 2016.<sup>35</sup> (See Map 5.)

Suicide rates rose across the US from 1999 to 2016.

Increase 38 - 58%
Increase 31 - 37%
Increase 19 - 30%
Increase 19 - 30%
Increase 6 - 18%
Decrease 1%

SOURCE: CDC's National Vital Statistics System;
CDC Vital Signs, June 2018.

Map 5: Suicide in the U.S.

Source: Centers for Disease Control and Prevention

Community Commons data demonstrates the impact unmet mental health and substance abuse needs has had on residents of the New Orleans service area by reporting high rates for several key health outcome measures: drug overdose deaths, homicide deaths, premature deaths, suicides, and lack of emotional support. Data from Orleans (38.2) parish reveal the homicide rates are roughly three times higher when compared to the state (6.0) and nation (5.5). (See Table 3.)

Jefferson (27.4), Orleans (27.3), St. Bernard (34.2), St. Charles (22.2), St. Tammany, (25.4), and Tangipahoa (19.7) parishes report high drug overdose rates when compared to the state (17.6) and nation (15.6). (See Table 3.)

<sup>&</sup>lt;sup>33</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/suicide-prevention <sup>34</sup> Ihid.

<sup>&</sup>lt;sup>35</sup> Centers for Disease Control and Prevention: www.cdc.gov/vitalsigns/suicide/infographic.html#graphic1

Data also reveal high suicide rates in Jefferson (12.4), Orleans (9.9), St. Bernard (15.4), St. Charles (13.2), St. Tammany (15.7), and Tangipahoa (15.7) parishes when compared to the state (5.8) and nation (13). (See Table 3.) The Healthy People 2020 goal is to be under or equal to 10.2 per 100,000 population.

St. Charles (19.3 percent), and St. Tammany (18.1 percent) parishes report lower percentages of residents who lack social or emotional support when compared to the state (21.7 percent) and the nation (20.7 percent). Close to one-third of residents in St. Bernard Parish (29.5 percent) lack social or emotional support.

This indicator reports adults 18 and older who self-report that they receive insufficient social and emotional support all or most of the time. This indicator is relevant because social and emotional support is critical for navigating the challenges of daily life as well as for good mental health. Social and emotional support is also linked to educational achievement and economic stability. (See Table 7.)

Table 7: Health Outcomes & Social and Economic Support<sup>36</sup>

2018	Jefferson	Orleans	St. Bernard	St. Charles	St. Tammany	Tangipahoa	Louisiana	USA
Drug Overdose Death Rate (per 100,000 pop.)	27.4	27.3	34.2	22.2	25.4	19.7	17.6	15.6
Homicide Death Rate (per 100,000 pop.)	13.5	38.2	8.6	8.5	4.3	10.4	6.0	5.5
Premature Death Rate (per 100,000 pop.)	8,410	10,297	9,938	8,152	7,240	10,131	9,587	7,222
Suicide Rate (per 100,000 pop.)	12.4	9.9	15.4	13.2	15.7	15.7	5.8	13.0
Lack of Social or Emotional Support	23.6%	24.5%	29.5%	19.3%	18.1%	22.6%	21.7%	20.7%

**Source: Community Commons** 

The LDH metrics related to substance abuse show the number of adults receiving substance abuse services, both inpatient and outpatient, has increased exponentially since 2016. In May 2018, 10,290 adults obtained outpatient substance abuse services in the state. The number of adults obtaining care has increased significantly over the years. Between 2016 and 2017, there was an increase in the number

<sup>&</sup>lt;sup>36</sup> Community Commons: www.communitycommons.org

of adults obtaining outpatient substance abuse services (from 2,267 to 3,647); while in 2017 to 2018, there was a 2.8 percent increase in the number of adults seen for outpatient services (from 3,647 to 10,290). (See Chart 13.)

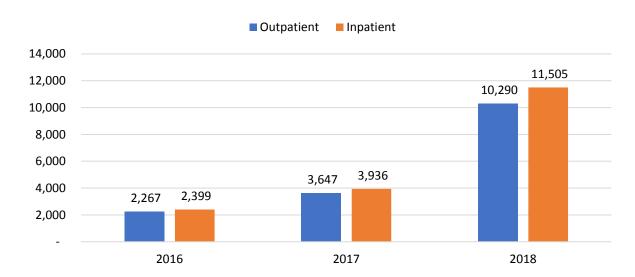


Chart 13: Substance Abuse: Adults Using Service as of May 2018

Source: The Louisiana Department of Health

The consequences of undiagnosed, untreated, or undertreated co-occurring disorders can lead to a higher likelihood of experiencing homelessness, incarceration, medical illnesses, suicide, or even early death.<sup>37</sup> Individuals with unmet behavioral health needs are not always capable of recognizing they have a problem or seeking care. Oftentimes, this responsibility falls on the patient's support network or points of contact within the health care system or other community-based organizations. Better coordination of services and collaborative efforts among all members of the medical community and county and community service organizations would improve the disconnect occurring in identifying mental health and substance abuse needs and linking residents with services.

Residents who try to seek assistance for their conditions often face barriers related to finding a health professional, long waiting periods to be seen by a professional, traveling long distances for care, financial burden, overall health system navigation, and stigma related to having a mental health issue. Education and awareness can impact and remove some stereotypes in order to limit these barriers to care.

In 2015, former LDH Secretary Kathy H. Kliebert stated that "being there and showing care and concern for someone who is vulnerable to suicide is invaluable. We should all reserve judgment and understand that suicide is often caused by a disease we can't see, but we can look for the warning signs. Louisiana Department of Health is aware of the significant problem related to suicide. As such, the department

LCMC Health - Children's Hospital New Orleans (CHNOLA)

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<sup>&</sup>lt;sup>37</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/disorders/co-occurring

implemented a proactive approach in preventing suicide by urging residents to look for warning signs so that they may connect those individuals with prevention resources."<sup>38</sup>

Mental disorders are risk factors for suicide. Additional experiences with violence, abuse, bereavement, isolation, etc., are also associated with suicidal behavior. A proactive approach by offering a sympathetic, non-judgmental ear can be effective. Active listening and positive engagement are important parts of reaching out, as well as linking the individual to receiving professional services for appropriate intervention and follow-up care.

There is strong evidence that a comprehensive public health approach is effective in reducing suicide rates. Released by the U.S. Surgeon General in 2012, the National Strategy for Suicide Prevention is intended to guide suicide prevention actions in the United States. The strategy provides guidance for schools, businesses, health systems, clinicians, and others, and emphasizes the role every American can play in protecting their friends, family members, and colleagues from suicide.<sup>39</sup>

Community partnerships with government, public health, health care, employers, education, and community organizations can assist in the prevention of suicide with continued measures, efforts, and initiatives.

Suicide does not discriminate, as it effects people from all ethnic, race, and socioeconomic groups. Identifying those who are at risk, reducing their environmental problems, promoting factors that improve their coping skills, and providing professional help are measures that can reduce suicide rates in the region.

# Priority 2: Health Literacy

Education is essential to successfully managing all aspects of life, including health care needs, nutrition and food preparation, financial health needs, and basic life skills. Education provides the necessary tools to make informed decisions — where to look for information, determine its validity, and how to interpret and best apply it to the decision at hand. Typically, this knowledge is attained through a combination of trusted sources (e.g., home, school, and community) and continues to evolve as we live through experiences and increased exposure to the world. Today, copious amounts of information are just a click away. Sifting through and deciphering what is true is a daunting task, especially when experiencing a crisis.

Education plays a critical role in overall public health. Individuals without basic education and life skills are more likely to experience lifelong disadvantages such as lack of job opportunities, poor health outcomes, increased likelihood to engage in risky health behaviors, and a general inability to be self-supporting/productive and/or a contributing member of society.

<sup>&</sup>lt;sup>38</sup> Louisiana Department of Health: http://ldh.la.gov/index.cfm/newsroom/detail/3515

<sup>&</sup>lt;sup>39</sup> Substance Abuse and Mental Health Services Administration: www.samhsa.gov/suicide-prevention

Education about health in schools is instrumental to laying a foundation of basic health knowledge and life skills to improve overall public health. Hungry or sick children do not perform well in classrooms compared to their healthy counterparts. Public health policies like the free/reduced-price lunch and free/low-cost health programs help to close these gaps. Physical education as part of a school's curriculum provides valuable knowledge regarding the importance of physical activity and other healthy behaviors to stay healthy.<sup>40</sup>

Nationally, 84 percent of students graduated from high school on time in 2016, and this percentage varies by race/ethnicity. (See Chart 14.) At the state level, 79 percent of students in Louisiana graduated from high school on time in 2016.<sup>41</sup>

100% 91.00% 88.00% 84.00% 90% 79.00% 76.00% 80% 72.00% 70% 60% 50% 40% 30% 20% 10% 0% White Black Hispanic Asian/Pacific American Total Islander Indian/Alaskan Native

Chart 14: Adjusted Cohort Graduation Rate (ACGR) for Public High School Students, by Race/Ethnicity: 2015–16.

Source: U.S. Department of Education, Office of Elementary and Secondary Education, Consolidated State Performance Report, 2015–16.

Reading and comprehension skills are important for helping us understand and interact with the world around us. The Nation's Report Card is the largest continuing and nationally representative assessment of what our nation's students know and can do in subjects such as mathematics, reading, science, and writing. Standard administration practices are implemented to provide a common measure of student achievement. The National Assessment of Educational Progress (NAEP) is a congressionally mandated project administered by the National Center for Education Statistics (NCES), within the U.S. Department of Education and the Institute of Education Sciences (IES).<sup>42</sup> The NAEP reading scale ranges from zero to 500.

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<sup>&</sup>lt;sup>40</sup> National Center for Biotechnology Information: www.ncbi.nlm.nih.gov/pmc/articles/PMC4691207/#R9

<sup>&</sup>lt;sup>41</sup> National Center for Education Statistics: https://nces.ed.gov/programs/coe/indicator\_coi.asp

<sup>&</sup>lt;sup>42</sup> US Department of Education: www.nationsreportcard.gov/about.aspx

The 2017 Reading State Snapshot Report revealed that the average reading score of eighth grade students in Louisiana was 257; lower than the national average score of 265. When compared to the rest of the United States, Louisiana's average reading score was lower than 41 other states/jurisdictions, not significantly different from nine, and only higher than the District of Columbia. The 2017 report also indicated score gaps among different student groups as well. Black students had an average score that was 27 points lower than white students' scores. Hispanic students had an average score that was 16 points lower than white students. Students who were eligible for free/reduced-price school lunch, an indicator of low family income, had an average score that was 24 points lower than students who were not eligible. This performance gap was not significantly different from that in 1998 (20 points). 43

In recognition of the serious lack of educational performance among students in Louisiana school districts, the Louisiana Department of Education created and implemented the Louisiana Believes initiative. Louisiana Believes is a cohesive academic plan that raises expectations and educational outcomes for students through five priority areas: access to quality early childhood education, academic alignment in every school and classroom, teacher and leader preparation, pathways to college or a career, and supporting struggling schools. As a result of this focus, over the past five years, Louisiana has seen an increase in student performance in every measure, both locally and nationally.<sup>44</sup>

Focusing on the New Orleans study area, secondary data related to education from Truven Health Analytics show that statistics vary widely from parish to parish and neighborhood to neighborhood.

For example, Orleans Parish reports both the highest percentage of residents without a high school diploma (in ZIP code 70113 – New Orleans) at 29.66 percent, and the lowest percentage (3.10 percent) in ZIP code 70124 – New Orleans. CNI rankings in the study area for education range from 1 (best ranking) to 5 (worst ranking). However, a majority of the ZIP codes scored at the higher end of the scale. Of the 63 ZIP codes that make up the New Orleans study area, 38 ZIP codes had a CNI score of 4 and higher for education; indicating that education is a socioeconomic barrier in the region. CNI data illustrate a significant number of residents in the New Orleans service area that do not have or have not followed a path to education.

Chart 19 also illustrates marked differences in resident education among the six parishes included in the study area. For instance, more than one-third (35.06 percent) of residents in Orleans Parish have a bachelor's degree or greater verses only 12.06 percent of residents in St. Bernard Parish. Overall, 16.78 percent of Louisiana residents do not have a high school diploma.

St. Bernard (18.23 percent), and Tangipahoa (18.67 percent) fare worse than the overall state of Louisiana (16.78 percent), with respect to residents without a high school diploma.

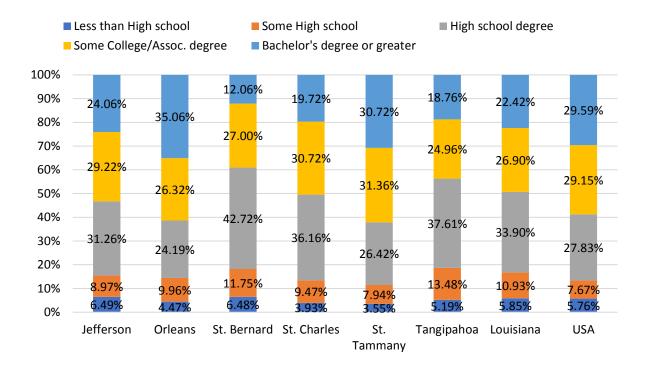
Of the six parishes in the study area, two parishes, St. Charles (13.40 percent) and St. Tammany (11.49 percent), have fewer residents without a high school diploma than both Louisiana (16.78 percent).

https://nces.ed.gov/nationsreportcard/subject/publications/stt2017/pdf/2018039LA8.pdf

<sup>&</sup>lt;sup>43</sup> The Nation's Report Card:

<sup>&</sup>lt;sup>44</sup> Louisiana Department of Education: www.louisianabelieves.com/resources/about-us

**Chart 15: Education** 



Source: Truven Health Analytics

Education is a crucial component in overcoming social determinants of health. Continuing to increase pathways to higher education and opportunities to develop skills valued by business and industry is important to mitigate the effects that social determinants of health have on residents of the New Orleans service area.

## **Chronic Diseases**

According to the Centers for Disease Control and Prevention, half of all Americans live with at least one chronic disease, like heart disease, cancer, stroke, or diabetes. Along with other chronic diseases they are the leading causes of death and disability in America, as well as the leading driver of health care costs. <sup>45</sup> A chronic disease is broadly defined as lasting more than one year, generally incurable yet manageable with a proper treatment plan and medication. Tobacco use (secondhand smoke exposure), poor nutrition, lack of physical activity, and excessive alcohol use are some risk behaviors that

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<sup>&</sup>lt;sup>45</sup> Centers for Diseases Control and Prevention: www.cdc.gov/chronicdisease/index.htm

contribute to developing a chronic disease. Nationally, chronic diseases cost \$2.7 trillion in annual health care costs.<sup>46</sup>

The Partnership to Fight Chronic Disease projected the total cost of chronic disease from 2016-2030 in Louisiana as \$612 billion. In 2015, 2.9 million people in Louisiana had at least 1 chronic disease, 1.2 million had 2 or more chronic diseases. Chronic diseases could cost Louisiana \$28.8 billion in medical costs and an extra \$12 billion annually in lost employee productivity (average per year 2016-2030). It was also revealed that in Louisiana, 16,500 lives could be saved annually through better prevention and treatment of chronic disease.<sup>47</sup>

It was reported that 19.9 percent of health providers surveyed identified that, overall, chronic disease is a top health concern affecting residents in the community. However, following a healthy diet, engaging in physical activity, and avoiding risky behaviors can significantly improve and influence one's overall health, mentally and physically. Health management can be achieved permanently with knowledge and practice; thereby, reducing the likelihood that an individual develops a chronic disease. Prevention related to exercising, eating well, avoiding tobacco and excessive alcohol use, as well as obtaining regular health screenings from a health care provider can prevent chronic diseases and improve the quality of life for an individual.

The CHNA has identified that poor health behaviors such as smoking, physical inactivity, and factors which contribute to being obese are problems that plague residents in the New Orleans study area.

County Health Rankings and Roadmaps provides reliable local data and evidence to communities to assist them in identifying opportunities to improve the health of their community. Data from County Health Rankings and Roadmaps reported that health behaviors in Jefferson, Orleans, St. Bernard, and Tangipahoa parishes rose when comparing ranking data from 2015 to 2018. The ranking snapshot allows communities to compare where they are positioned within Louisiana as each parish is ranked. Parishes that have a high rank, e.g. 1 or 2, are considered to be the "healthiest." Louisiana has 64 parishes overall; therefore, Tangipahoa Parish (48) ranks poorly in its current standing compared to St. Tammany Parish (1). (See Chart 17).

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> Partnership to Fight Chronic Disease: www.fightchronicdisease.org/states/louisiana

<sup>&</sup>lt;sup>48</sup> The County Health Rankings & Roadmaps program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

**Health Behaviors** 100 **2015 2018** 80 60 48 36 40 21 19 17 20 12 10 7 1 1 Jefferson Orleans St. Bernard St. Charles St. Tammany Tangipahoa

**Chart 16: County Health Rankings and Roadmaps Health Behaviors** 

Source: County Health Rankings and Roadmaps

## **Prevention (Education)**

Receiving age appropriate routine preventive health care such as health screenings and vaccinations is important to staying healthy. Chronic diseases (e.g., heart disease, cancer, and diabetes) are responsible for seven of every 10 deaths among Americans each year and account for 75 percent of the nation's health spending. Most Americans underuse preventive services and vulnerable populations with social, economic, or environmental disadvantages are even less likely to use these services. Routine preventive health care is essential to good health; providers are able to detect and treat health issues early, when treatment works best; preventing onset and/or progression of chronic conditions. Nationally, Americans use preventive services at about half the recommended rate. Individuals without insurance or the financial means to pay out of pocket are less likely to take advantage of routine preventive and primary care. These individuals consume more public health dollars and strain the resources of already overburdened facilities dedicated to free and low-cost care.<sup>49</sup>

Successful management of chronic diseases in an outpatient setting is essential to managing overall health care costs. According to the American Diabetes Association, in 2017, care for people diagnosed with diabetes accounts for one in four health care dollars in the US. The total estimated cost of diagnosed diabetes was \$327 billion in direct medical costs; a 26 percent increase from figures released in 2012. Hospital in-patient care and prescription medications to treat complications of diabetes accounted for 60 percent of the total medical cost (30 percent in each category). Diabetics without

<sup>&</sup>lt;sup>49</sup> Centers for Disease Control and Prevention: www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/PreventiveHealth.html

insurance have 60 percent fewer physician office visits and are prescribed 52 percent fewer medications contributing to 168 percent more emergency department visits than their insured counterparts.<sup>50</sup>

It will take time for the benefits of recent efforts related to preventive health education and increased availability of services to be fully realized by residents in the New Orleans service area. Current data from Truven Health Analytics, Community Commons, County Health Rankings, American's Health Rankings, and the Louisiana Department of Health all suggest that residents of the New Orleans service area experience high levels of health issues related to lack of routine preventive health care.

The entire study area (except for Orleans Parish) reports higher rates of preventable hospital events per 1,000 Medicare enrollees when compared to the nation in 2018 (49.9). (See Chart 17). In 2017, Louisiana ranked 47<sup>th</sup> out of 50 states in preventable hospitalizations in America's Health Rankings.

The preventable hospital events indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges can demonstrate a possible "return on investment" from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

140.0 2015 **2018** 120.0 92.2 86.5 93.9 100.0 83.9 80.3 78.3 74.9 80.0 67.5 65.9 64.6 61.6 59.2 60.0 49.9 50.0 46.644.8 40.0 20.0 0.0 Jefferson USA Orleans St. Bernard St. Charles St. Tangipahoa Louisiana **Tammany** 

Chart 17: Preventable Hospital Events, Age-Adjusted Discharge Rate (Per 1,000 Medicare Enrollees)

Source: Community Commons

<sup>&</sup>lt;sup>50</sup> American Diabetes Association: www.diabetes.org/advocacy/news-events/cost-of-diabetes.html

Across the study area, Table 4 shows some preventive care utilization rates that are lower than the nation. Secondary data collected during the CHNA process shows that St. Tammany residents fare consistently better in most health measures when compared to the rest of the study area.

St. Bernard Parish (36.0 percent) residents report low numbers of colon cancer screening while Tangipahoa Parish residents (58.20 percent) who received mammograms in the past two years when compared to the remaining parishes/counties. There is a large reporting percentage of residents who have never been screened for HIV/AIDS. (See Table 4.)

For 2018, the years of potential life lost per 100,000 population in Louisiana was 9,587; higher than the nation by 2,365 years (7,222 per 100,000 population). Orleans, St. Bernard, and Tangipahoa parishes reported rates higher than the overall state rate. Six of the eight parishes in the study area reported a decrease from the 2015 rate. However, these parishes continue to report rates well above the nation. St. Tammany, while slight, saw a reduction in years of potential life lost from 7,253 in 2015 to 7,240 in 2018. (See Chart 18.)

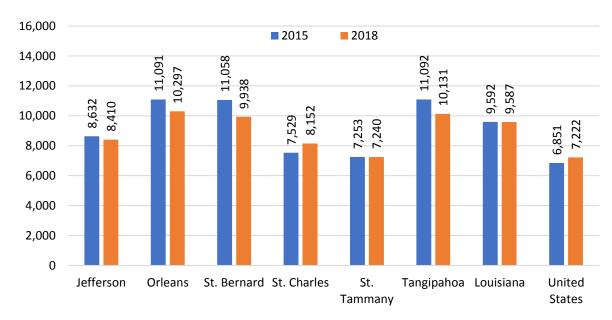


Chart 18: Years of Potential Life Lost (per 100,000 population)

**Source: Community Commons** 

The financial consequence of non-adherence is estimated to be in the hundreds of billions of U.S. dollars. In addition to the financial burden, non-adherence is also a risk factor for very serious and often fatal complications; as many as 125,000 deaths each year. Factors influencing patient adherence are many and varied — patients misunderstand instructions or execute them incorrectly, patients forget, or they just outright ignore health advice. The relationship between provider and patient can be a determining factor in patient compliance. It is important that providers realistically assess a patient's

level of knowledge and understanding of the treatment plan and, based on that assessment, clearly and effectively communicate information.<sup>51</sup>

Not many adults have a long, established relationship with their health provider, making it difficult to know a patient well enough to determine the best strategy to ensure patient adherence. Providers have access to research and studies compiling many, varied ways to approach a non-compliant patient, and not all strategies work for all patients. It is important that practitioners take the time to have open discussions with non-compliant patients to encourage a partnership approach to strategizing ways to encourage adherence.

Table 8: 2018 Preventive Care Utilization in the New Orleans Service Area

	Medicare Enrollees with Mammogram in Past 2 Years – Percent Females	% Adults Screened for Cervical Cancer	% Adults Screened for Colon Cancer	% Medicare Enrollees with Diabetes per Hemoglobin A1c Test	% Adults Never Screened for HIV / AIDS
Jefferson	63.40%	78.40%	57.90%	81.26%	57.87%
Orleans	62.10%	80.90%	55.90%	76.80%	38.24%
St. Bernard	60.10%	67.30%	36.00%	78.40%	68.44%
St. Charles	62.90%	82.80%	61.90%	85.83%	58.27%
St. Tammany	67.80%	77.70%	64.60%	83.76%	58.76%
Tangipahoa	58.20%	75.60%	51.90%	81.45%	48.16%
Louisiana	61.50%	78.10%	54.50%	52.70%	56.23%
USA	63.10%	78.50%	61.30%	N/A	62.79%

Source: Community Commons

County Health Rankings and Roadmaps reveals the vast differences between St. Tammany Parish when compared to the remaining parishes on several measures in the study area. (See Table 9.)

The overall rankings in health outcomes represent how healthy counties are within the state. The healthiest county in the state is ranked one. The ranks are based on two types of measures: how long people live and how healthy people feel while alive.

The overall rankings in health factors represent what influences the health of a county. They are an estimate of the future health of counties as compared to other counties within a state. The ranks are

<sup>&</sup>lt;sup>51</sup> National Center for Biotechnology Information: www.ncbi.nlm.nih.gov/pmc/articles/PMC1661624/

based on four types of measures: health behaviors, clinical care, social and economic, and physical environment factors.

Social and economic factors vary depending on where we live and by our racial/ethnic background. The following four data graphics illustrate differences among counties and by racial/ethnic groups in social and economic opportunities for health in Louisiana. These graphics show that it is important to explore differences by place and race/ethnicity in order to tell a more holistic story about the health of a community.

**Table 9: 2018 County Health Rankings** 

	Jefferson	Orleans	St. Bernard	St. Charles	St. Tammany	Tangipahoa
Health Outcomes	9	39	31	8	2	28
Health Factors	9	16	31	4	1	42
Mortality (Length of life)	11	39	30	7	4	33
Morbidity (Quality of life)	9	38	36	10	2	27
Health Behaviors	7	19	36	6	1	48
Clinical Care	14	7	40	9	3	33
Social and Economic Factors	20	33	23	5	3	43
Physical Environment	9	16	42	24	8	35

Source: County Health Rankings and Roadmaps

## **Financial Health Literacy**

Skills related to financial management are just as important in a household living at or below the federal poverty level as one living above; perhaps more so. Health care is expensive, and many individuals postpone or avoid health care because of the costs involved; whether it be due to high co-pays and deductibles or having to pay the full cost out of pocket. Many lack the skills or education to find employment that offers health insurance or a sustainable wage.

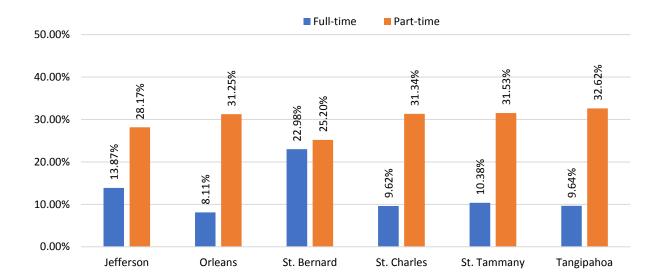
How to educate heads of households on developing sound financial plans should be part of the overall health conversation. Financial stability is an important component of overall health. Being in financial crisis can be just as devastating to a family as a physical or mental health crisis. Financial crisis can sometimes be a cause of a physical or mental health crisis due to increased stress or not being able to purchase lifesaving medications.

The United Way studied the growing number of households that do not earn enough to afford basic necessities. This population is referred to as ALICE (Asset Limited, Income Constrained, Employed). The ALICE Project spans 15 states, including Louisiana, representing nearly 40 percent of the U.S. population. For each state, the ALICE report calculates the number of households that cannot afford a Household Survival Budget, a basic budget that includes the cost of housing, child care, food, transportation, and health care. The state reports have identified millions of Americans that, despite living above the Federal Poverty Level, still cannot afford these five basic needs.

The ALICE Threshold is the average income a household needs to afford basic necessities as defined by the Household Survival Budget for each county in each state. The ALICE threshold includes both the ALICE population and poverty-level households. In 2014, 41 percent of the 152,788 households in New Orleans were below the ALICE Threshold. Approximately 38 percent of Louisiana families with heads of household aged 25 to 64 earn below the ALICE Threshold. This is interesting because ages 25 to 64 are considered to be prime working years, when an individual should be able to meet monthly expenses and fund financial plans for future living expenses. Reduced wages, unemployment, underemployment, and lack of cost of living increases in wages are all factors causing significant increases in the number of families meeting ALICE criteria.

Data gathered for the Greater New Orleans Community Data Center Report showed, by parish, the percentages of working-age residents in the study area that struggle with poverty. (See Chart 19.)<sup>52</sup>

<sup>&</sup>lt;sup>52</sup> Source: Greater New Orleans Community Data Center's Report – Poverty in Southeast Louisiana Post-Katrina: https://www.datacenterresearch.org/reports\_analysis/poverty-in-southeast-louisiana/



**Chart 19: Working-Age Population in Poverty** 

Source: Greater New Orleans Community Data Center's Report

Supporting CNI data related to poverty, unemployment, and education in the New Orleans study area reports that ZIP codes 70113 and 20112 in New Orleans have high percentages of seniors living in poverty (42.79 percent and 32.03 percent). Single parents with children in ZIP codes 70112 (72 percent), 70013 (71.27 percent), and 70129 in New Orleans also reported high percentages living in poverty. ZIP code 70113 represents the highest percentage of unemployed residents at 26.50 percent (70051); on the polar end ZIP code 70123 in New Orleans (Jefferson Parish) reported low unemployment rates (3.21 percent).

Further examination of data from Truven Health Analytics reveals the average household income in Orleans, St. Bernard, and Tangipahoa parishes fall under the state income average of \$68,011. (See Chart 20.) The low average household income aligns with the poverty rates in Orleans Parish.

\$100,000 \$88,573 \$90,000 \$80,853 \$76,107 \$80,000 \$71,756 \$68,011 \$66,697 \$70,000 \$61,301 \$58,371 \$60,000 \$50,000 \$40,000 \$30,000 \$20,000 \$10,000 \$0 Jefferson St. Bernard St. Charles St. Tangipahoa Louisiana USA **Tammany** 

**Chart 20: Average Household Income** 

Source: Truven Health Analytics

According to the United Way, a family consisting of two adults with two children in child care living in Louisiana needs an operating budget of \$46,020 to cover the basic necessities of housing, child care, food, health care, and transportation — plus taxes and miscellaneous costs. Most ALICE households do not qualify for Medicaid and cannot afford even Bronze Marketplace premiums and deductibles. Many of these households opt to pay the penalty for not having health insurance because it is the cheapest option. However, choosing this option does not improve health care in any way for these families and is an example of the difficult choice these households are forced to make.<sup>53</sup>

Two adults working 40 hours per week at \$10 per hour gross \$41,600 annually; this is almost \$4,500 less than the ALICE threshold for a Louisiana family of two adults and two children. Minimum wage in Louisiana is \$7.25 per hour. Legislation to raise the minimum wage continues to be defeated in the Louisiana government. This, coupled with limited job opportunities and low educational attainment in the region, inhibits community members from financial stability and self-sustainability.

Residents of Louisiana must have financial management skills if they are to stretch limited income to include health care costs and build assets to increase financial stability. Educational institutions can further this goal by offering classes and coursework that includes financial management specifically related to household budgeting, analyzing income versus expenses, food purchasing, and discerning trusted sources of financial advice and information.

 $www.dropbox.com/s/8rs2iurjqwyioic/16UW\%20ALICE\%20Report\_MultiStatesSummery\_12.23.16\_Lowres.pdf?dl=0$ 

<sup>&</sup>lt;sup>53</sup> The United Way:

<sup>54</sup> NOLA.com: www.nola.com/politics/index.ssf/2018/03/minimum\_wage\_equal\_pay\_john\_be.html

## **Health Education/Information**

Health education information related to chronic diseases can help reduce mortality and morbidity rates if lifestyles changes were also applied. Providing information to residents could motivate and encourage citizens to improve and maintain their health, prevent disease, and reduce risky behaviors. Information related to diet, exercise, and disease prevention can help individuals make positive, healthy, long-term decisions.

County Health Rankings and Roadmaps reports in 2018 a ranking of nine for Jefferson Parish, 39 for Orleans Parish, 31 for St. Bernard Parish, eight for St. Charles Parish, two for St. Tammany Parish, and 28 for Tangipahoa Parish for health outcomes. (See Chart 21.)<sup>55</sup>

The overall rankings in health outcomes represent how healthy counties (parishes) are within the state. The ranks are based on two types of measures: how long people live and how healthy people feel while alive. If rankings are to improve, health education, specifically concerning diet, exercise, and disease management, is vital to managing health conditions and practicing healthy behaviors. Changing health behaviors requires community residents to be committed and armed with adequate information in order to modify their current living habits.

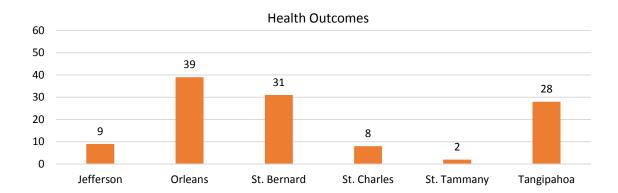


Chart 21: 2018 County Health Rankings and Roadmaps Health Outcomes

Source: County Health Rankings and Roadmaps

<sup>&</sup>lt;sup>55</sup> County Health Rankings are out of 65 parishes in Louisiana. By ranking the health of nearly-every county in the nation, the County Health Rankings and Roadmaps help communities understand what influences how healthy residents are and how long they will live. The comparisons provide context and demonstrate that where you live, and many other factors including race/ethnicity, can deeply impact one's ability to live a healthy life. The Rankings provide a snapshot of the parishes' health. A low-ranking score signifies a parish that does well in specific measures when compared to the remaining parishes in the state.

Easy-to-understand programs designed around nutrition and healthy living could assist residents in understanding the long-term benefits of healthy living, as the goal of health programs is to modify and establish healthy behaviors. Overall, education plays a significantly large role in how residents can improve health outcomes in that by attaining even a basic education (i.e., a high school diploma) residents are better able to grasp the concepts of health education and the benefits of incorporating healthy behaviors into daily life.

# Priority 3: Access to Care

Access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans.<sup>56</sup>

Access to health services means "the timely use of personal health services to achieve the best health outcomes." It requires three distinct steps:

- Entering the health care system (usually through insurance coverage)
- Accessing a location where needed health care services are provided (geographic availability)
- Finding a health care provider whom the patient trusts and can communicate with (personal relationship)<sup>58</sup>

One of the strongest predictors of meeting these three components is an individual's health insurance status. Those who are uninsured have more difficulty entering the health care system, are less likely to receive medical care, more likely to have poor health status, and more likely to die early. In addition to lack of insurance coverage, other common barriers to care include the lack of availability of services and high cost of services; all of which may lead to diminished quality of care, delays in receiving appropriate care, the inability to get preventive services, and hospitalizations that could have been prevented. Access to care has been shown to have a significant impact on health including improved overall physical, social and mental health status, prevention of disease and disability, and better quality of life.<sup>59</sup>

The ease in which a population accesses health care has a direct correlation to the health of the overall community. A population with adequate access to quality health care services that are both readily available and culturally competent is more likely to experience better health outcomes when presented with sickness and disease.

<sup>&</sup>lt;sup>56</sup> Healthy People 2020: www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

<sup>&</sup>lt;sup>57</sup> Institute of Medicine, Committee on Monitoring Access to Personal Health Care Services. Access to Health Care in America. Millman M, editor. Washington, DC: National Academies Press; 1993. www.ncbi.nlm.nih.gov/books/NBK235890/#ddd00008

<sup>&</sup>lt;sup>58</sup> National Healthcare Quality Report, 2013. Chapter 10: Access to Healthcare. Rockville (MD): AHRQ; May 2014: www.ahrq.gov/research/findings/nhqrdr/nhqdr15/access.html

<sup>&</sup>lt;sup>59</sup> United States Department of Health and Human Services (HHS), Office of Disease Prevention and Health Promotion (ODPHP). (2016a). Healthy people 2020. Access to health services. Available at www.healthypeople.gov

Access to health care is a culmination of many factors including, geographic, economic, cultural, and social.<sup>60</sup> Economic, cultural, and social factors can reduce and, in some cases, eliminate access to needed medical services, despite an existing adequate ratio of providers and transportation to those providers.

For patients to get timely, appropriate, affordable and quality care, they must be able to navigate the health care system. When the system is too burdensome, patients may delay or neglect to schedule needed care or will seek care in inappropriate but more easily accessible settings, such as emergency departments. Certain populations may experience greater challenges when navigating the health care system which leads to increased health disparities and decreased access to necessary healthcare services.

Health care systems have become laden with complexity. While patients are dealing with unexpected medical diagnoses requiring the expertise of various healthcare professionals, procedures and doctor visits, patients are also expected to address barriers such as transportation, financial and insurance issues, cultural beliefs, and language barriers. Trying to address all of these factors may present barriers to accessing the appropriate services, at the right place, at the right time.

Obtaining transportation to and from health service appointments was reported by stakeholders as effecting residents' ability to receive care as well as other basic necessities. Seniors and young adults are among the top reported residents in the community experiencing transportation barriers for health visits; however, high school-aged residents are less affected due to available onsite health centers. In rural areas there is a lack of resources available paired with a lack of transportation to get to where programs are located.

Education on available resources and how to appropriately use them is another barrier to accessing services. This is especially true in regard to preventive care. Often, preventive care is considered not accessible because residents do not know of its availability or how to access it.

Stakeholders also identified access to family planning services as an unmet need in the community. . The lack of awareness of the existence of these services is leading providers to see more cases of sexually transmitted diseases and unwanted pregnancies. Education and the dissemination of information on what is available is crucial to improving the overall health of the community.

Community stakeholders reported that the inability to pay for services due to the lack of health insurance not being accepted or residents unable to acquire health insurance coverage was reported as an accessibility barrier. Providing information and education to residents about how to obtain health insurance would help close this gap.

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<sup>60</sup> Rand Corporation: www.rand.org/topics/health-care-access.html

## **Transportation**

Health and well-being are inextricably linked to the social and economic conditions in which people live. Research has shown that only 20 percent of health can be attributed to medical care, while social and economic factors—like access to healthy food, housing status, educational attainment and access to transportation—account for 40 percent.<sup>61</sup>

Individuals struggling with food insecurity, housing instability, limited access to transportation or other barriers may experience poor health outcomes, increased health care utilization and increased health care costs. Addressing these determinants of health will have an impact on people's health, which includes longer life expectancy, positive healthier behaviors, and better overall health.

Barriers to transportation greatly affect the quality of people's lives. These statistics highlight the scope of the problem:

- 3.6 million people in the U.S. do not obtain medical care due to transportation barriers. 62
- Regardless of insurance status, 4 percent of children (approximately 3 million) in the U.S. miss a
  healthcare appointment each year due to unavailable transportation; this includes 9 percent of
  children in families with incomes of less than \$50000.<sup>63</sup>
- Transportation is the third most commonly cited barrier to accessing health services for older adults.

Transportation issues can include lack of vehicle access, long distances and lengthy times to reach needed health care services, transportation costs and adverse policies. Transportation challenges affect populations in both rural and urban communities. Because transportation touches many aspects of a person's life, adequate and reliable transportation services are fundamental to accessing health care services and creating healthy communities. Inadequate transportation may result in missed or delayed health care appointments, increased health expenditures and overall poorer health outcomes.

A provider health survey was created to collect thoughts and opinions of healthcare providers in the MHCNO service area regarding the care and services they provide, or patients receive. More than one-third of respondents disagreed (26.4 percent) and strongly disagreed (14.4 percent) that residents have available transportation options for medical appointments and other services.

Transportation challenges affect urban and rural communities. Overall, individuals who are older, less educated, female, minority, or low income—or have a combination of these characteristics—are affected more by transportation barriers. Children, older adults and veterans are especially vulnerable to transportation barriers due to social isolation, comorbidities, and greater need for frequent clinician

 <sup>&</sup>lt;sup>61</sup> American Hospital Association. Determinants of Health Series: Transportation and the Role of Hospitals.
 www.aha.org/ahahret-guides/2017-11-15-social-determinants-health-series-transportation-and-role-hospitals
 <sup>62</sup> Wallace, R., Hughes-Cromwick, P., Mull, H.,& Khasnabis, S. (2005). Access to health care and nonemergency medical transportation: Two missing links. Transportation *Research Record: Journal of the Transportation Research Board*, (1924): 76-84. Retrieved from http:// trrjournalonline.trb.org/doi/abs/10.3141/1924-10
 <sup>63</sup> Grant, R., Gracy, D., Goldsmith, G., Sobelson, M. & Johnson, D. (2014). Transportation barriers to child health care access remain after health reform. *JAMA Pediatrics*, 168(4): 385- 386. Retrieved from http://jamanetwork.com/journals/jamapediatrics/fullarticle/1819645

visits.<sup>64</sup> Perceived distance and time burdens are frequently cited by patients as a barrier to health care utilization.<sup>65</sup>

Rural environments have different transit options, costs and availability (than urban environments), but residents still may experience transportation challenges.<sup>66</sup> Residents may be widely spread out in rural regions therefore, trips can take a long time. Rural roads that are curvy or hilly can be challenging to develop and maintain, which could complicate transportation logistics.<sup>67</sup> Studies show an association between poorer health outcomes and how far a patient lives from health care facilities they need to access. This association is evident at all levels of geography—local, urban, and rural.<sup>68</sup>

## **Health Insurance**

Over the first half of this decade, as a result of the Patient Protection and Affordable Care Act of 2010, 20 million adults have gained health insurance coverage. <sup>69</sup> Yet even as the number of uninsured has been significantly reduced, millions of Americans still lack coverage. Disparities exist by geography, as millions of Americans living in rural areas lack access to primary care services due to workforce shortages. Health insurance provides an affordable opportunity to take advantage of well visits and other preventive services like health screenings, which are typically provided at low or no cost to the patient. This enables health care providers to identify risk factors for chronic disease like high blood pressure or high cholesterol before they pose a serious health risk. Health insurance helps individuals and families access needed primary care, specialists, and emergency care. Those without insurance are often diagnosed at later, less treatable disease stages and at higher costs than those with insurance.

According to the Louisiana Department of Health report "Medicaid Expansion 2016/2017<sup>70</sup>," as of June 26, 2017, more than 433,000 Louisiana residents who lacked coverage for essential health care services in 2016, have coverage because of Medicaid expansion. More important than having coverage is using the coverage to visit a primary care doctor for an annual check-up, having prescription coverage and being covered for wellness visits and screenings.

The report also stated that from 2016-2017:

<sup>&</sup>lt;sup>64</sup> Syed, S.T., Gerber, B.S., & Sharp, L. K. (2013). Traveling towards disease: Transportation barriers to health care access. Journal of Community Health, 38(5): 976-993. https://link.springer.com/article/10.1007/s10900-013-9681-1

<sup>65</sup> Ibid.

<sup>&</sup>lt;sup>66</sup> Hansen, A.Y., Meyer, M.R.U., Lenardson, J.D., & Hartley, D. (2015). Built environments and active living in rural and remote areas: A review of the literature. Current Obesity Reports, 4(4): 484-493. https://link.springer.com/article/10.1007/s13679-015-0180-9.

<sup>&</sup>lt;sup>67</sup> Hansesn, et al (2015)

<sup>&</sup>lt;sup>68</sup> Kelly, C., Hulme, C., Farragher, T. & Clarke, G. (2016). Are differences in travel time or distance to healthcare for adults in global north countries associated with an impact on health outcomes? A systematic review. BMJ Open, 6(11): e013059. Retrieved from http://bmjopen. bmj.com/content/6/11/e013059.long

<sup>&</sup>lt;sup>69</sup> Healthy People 2020. www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services <sup>70</sup> Medicaid Expansion 2016/2017.

http://ldh.la.gov/assets/HealthyLa/Resources/MdcdExpnAnnlRprt\_2017\_WEB.pdf

- More than 100,000 patients have received preventive care
- More than 15,000 patients have received breast cancer screenings
- 154 have been diagnosed with breast cancer
- More than 2,600 people have been diagnosed with diabetes
- Nearly 10,500 have been screened for colon cancer
- Patients are also getting mental health care services and treatment for addictions.

As an option for the development of a community- based provider network, healthcare leaders have looked to Health Resources and Service Administration (HRSA) to gain Federally Qualified Health Center (FQHC) status as a method for securing additional funding to support the healthcare delivery model and to better meet the needs of underserved communities. There is a strong body of evidence showing that FQHCs reduce health disparities experienced by underserved populations through increased access to primary care, coordination of primary and preventive care, high performance on quality measures, and ultimately, facilitate improved health outcomes for their patients.<sup>71</sup>In a city with historically high rates of uninsured and substantial health disparities, FQHCs may play a vital role in ensuring access to care and equitable health outcomes.

## **Language Barriers**

Each consumer approaches the health care system with a unique perspective influenced by personal experience, literacy levels, language, and beliefs about health. Finding a provider who fits these preferences can be challenging, particularly within a limited network. Newly insured individuals, the notion of "finding a provider who was right for them" was empowering. Barriers to quality care are significant for all uninsured and underinsured residents. Individuals with limited English proficiency (LEP) face added difficulty of poor communication. Communication is a critical element of patient safety and quality care. Communication barriers between provider and patient lead to decreased use of preventive services, misuse of services, and higher rates of hospitalization and drug complications.<sup>72</sup>

Jefferson Parish ranks the highest for having the largest population over age 5 at 407,618. Jefferson Parish also has a high population of:

- Residents over age 5 with limited English proficiency at 34,079
- Percent population over age 5 with limited English proficiency with 8.36 percent (vs. Louisiana at 2.86 percent).

<sup>&</sup>lt;sup>71</sup> New Orleans Community Health Improvement Plan, 2017. Robert Wood Johnson Foundation (RWJF), County Health Rankings and Roadmaps. (2013, April 7). Federally Qualified Health Centers. Retrieved from www.countyhealthrankings.org/policies/federally-qualified-health-centers-fqhcs

<sup>&</sup>lt;sup>72</sup> The Joint Commission. What did the Doctor Say? Improving Health Literacy to Protect Patient Safety." 2007.

**Table 10: English Speaking Population** 

2018	Population Age 5+	Population Age 5+ with Limited English Proficiency	Percent Population Age 5+ with Limited English Proficiency
Jefferson	407,618	34,079	8.36%
Orleans	359,616	12,322	3.43%
St. Bernard	40,612	1,793	4.41%
St. Charles	49,419	1,011	2.05%
St. Tammany	231,647	5,710	2.46%
Tangipahoa	118,033	1,690	1.43%
Louisiana	4,336,413	124,144	2.86%
USA	298,691,202	25,440,956	8.52%

Source: Community Commons

## Maternal/Child Health

In the area of women and children's health, access to quality healthcare is of concern. Increased access to family planning services is a priority. The lack of awareness and existence of services is leading providers to see more cases of sexually transmitted diseases and unplanned pregnancies. Education and the dissemination of information on what is available is crucial to improve the overall health of the community.

In 2014, 321,480 Louisiana women aged 13–44 needed publicly funded family planning services. Publicly supported family planning centers in Louisiana served 49,570 female contraceptive clients in 2014. They met 15% of Louisiana women's need for contraceptive services and supplies. Across the United States, such centers met 26% of need. Publicly funded family planning centers in Louisiana helped avert 12,000 unintended pregnancies in 2014, which would have resulted in 5,800 unplanned births and 4,300 abortions.<sup>73</sup>

Regardless of one's plans for building a family in the future, working to improve preconception health is an important practice for men and women of reproductive age, considering that approximately half of all pregnancies in the U.S. are unplanned.<sup>74</sup>

Sexually transmitted diseases continue to pose a significant impact to the health of the population of Louisiana. Louisiana consistently ranks in the five states with the highest rates of sexually transmitted diseases (STDs). The reported rates of these STDS for the state were all significantly higher than the US average, with primary and secondary syphilis rates doubling the US rate. STD rates in Louisiana are much higher than rates in other southern states as well. The reported rates and increasing trends of these

<sup>&</sup>lt;sup>73</sup> Frost JJ, Frohwirth L and Zolna MR, Contraceptive Needs and Services, 2014 Update, New York: Guttmacher Institute, 2016, www.guttmacher.org/report/contraceptive-needs-and-services-2014-update

<sup>&</sup>lt;sup>74</sup> Finer, L. B. & Zolna, M. R. (2011). Unintended pregnancy in the United States: incidence and disparities, 2006. *Contraception*, 84(4), 78-85

three conditions highlight a growing problem for the health of many Louisianans that increases the risk for contracting other infections, such as HIV. <sup>75</sup>

In September 2016, the United Health Foundation published a report, "Health of Women and Children," and based on sixty measures of health noted the following:

- Mississippi is ranked as the state with the greatest health challenges, followed by Arkansas (49) and Louisiana (48).
- For women, Massachusetts, Minnesota and Vermont fare best; Mississippi, Louisiana and Texas have the greatest opportunity for improvement.

The federal and state governments have worked for decades to expand access to family planning services for young and low-income women and men, channeling public funds through multiple programs. The contraceptive services provided by these programs help clients avoid pregnancies they do not want and avoid the unplanned births that may otherwise follow. Publicly supported family planning visits also include screenings for STIs such as chlamydia, gonorrhea and HIV; cervical cancer prevention services, including Pap tests and testing and vaccination for human papillomavirus (HPV); and other key preventive care services, all of which have their own health benefits. <sup>76</sup>

Access to mental health care, especially for children, is limited. More providers are needed to take patients for early intervention assessments and continued therapy. Many children do not qualify for mental health care, but the need is there for early intervention services.

Community leaders reported that transportation is a major barrier to residents accessing care. Stakeholders have stated that although primary care and preventive care have become more accessible, it is still not vastly and widely open to meet the growing needs of the community. Insurance was mentioned as a barrier to care as well as the cost associated with copays and out-of-pocket payments. Many residents utilize the FQHC clinics as a source of primary care due to their accessibility and convenience. Residents are experiencing excessively long waiting periods to obtain an appointment and often their insurance plan is not accepted. Access to health care services in rural areas is very difficult due to transportation issues as well as lack of available services. Many residents must travel to New Orleans to be seen by a provider.

Seniors felt they are last on the list for care and help. Stakeholders feel that seniors are not a priority or concern and face significant problems related to accessing services due to transportation as well as lack of knowledge on how to navigate the system. Specialty and mental health care are lacking in the community. Mental or behavioral health is believed to be the least accessible service in the area and insurance coverage issues were cited as one of the main reasons.

<sup>&</sup>lt;sup>75</sup> Louisiana Department of Health. 2017 Louisiana Report Card.http://ldh.la.gov/assets/oph/Center-PHI/BRFSS/2017\_Health\_Report\_Card.pdf

<sup>&</sup>lt;sup>76</sup> Frost JJ et al., Return on investment: a fuller assessment of the benefits and cost savings of the US publicly funded family planning program, *Milbank Quarterly*, 2014, 92(4):696–749, http://onlinelibrary.wiley.com/enhanced/doi/10.1111/1468-0009.12080/.

# Conclusion

Children's Hospital New Orleans will continue to work to close the gaps in health disparities and continue to improve health services for residents by leveraging the region's resources and assets, while existing and newly developed strategies can be successfully developed. Results from the CHNA, in conjunction with the final Implementation Strategy Plan, will build upon an existing infrastructure of previous community health improvement efforts, as these plans will enhance new developments.

The collection and analysis of primary and secondary data armed the Working Group with sufficient data and resources to identify key health needs. Local, regional, and statewide partners understand the CHNA is an important factor toward the future strategy that will improve the health and well-being of residents in their region. CHNOLA will work closely with community organizations and regional partners to effectively address and resolve the identified needs. As the completion of the 2018 CHNA is finalized, an internal planning team from CHNOLA will begin the framework for the implementation strategy phase and its ongoing evaluation.

Community stakeholders and health providers are specific groups who have knowledge of, relationships with, and treat the underserved, disenfranchised, and hard-to-reach populations. Data from these specific groups have helped and will continue to assist LCMC Children's Hospital 's leadership in reducing the challenges residents often face when seeking services.

CHNOLA took into consideration the ability to address the region's identified needs and viewed the overall short- and long-term effects of undertaking the task. CHNOLA will address the identified needs and view them as positive and encouraging changes. CHNOLA will complete the necessary action and implementation steps of newly formed activities or revise strategies to assist the community's underserved and disenfranchised residents. Future community partnerships and collaboration with other health institutions and organizations, and involvement from government leaders, civic organizations, and stakeholders are imperative to the success of addressing the region's needs. The available resources and the ability to track progress related to the implementation strategies will be managed by the health system along with other hospital departments at CHNOLA to meet the region's need. Tackling the region's needs is a central focus hospital leadership will continue to measure throughout the years. CHNOLA will continue to work closely with community partners, as the CHNA report is the first step in an ongoing process to reduce the gaps of health disparities.



# **APPENDICES**



# Appendix A: General Description of LCMC Health & Children's Hospital New Orleans (CHNOLA)



# **About LCMC Health**

LCMC Health is a Louisiana-based, non-profit healthcare system serving the needs of the people of Louisiana, the Gulf South and beyond. Our mission is to enhance the health of the communities we serve by delivering high quality healthcare services to all patients through a commitment to clinical excellence, education, technology and research.

LCMC Health was founded by Louisiana's only freestanding children's hospital, and currently consists of Children's Hospital, Touro, University Medical Center New Orleans, New Orleans East Hospital and West Jefferson Medical Center. In addition to its five hospitals, LCMC Health significantly expanded its footprint and scope in the past several years through a joint ownership agreement with Crescent City Surgical Centre,

**OUR UNIQUE HISTORY & GROWTH** 

(ILH), preserving

New Orleans and

teaching programs

services and access in

averting a significant

disruption in university

■ ■ LCMC



**GREGORY C. FEIRN** LCMC Health, Chief Executive Officer

LCMC Health after

agreement is reached

with Jefferson Parish.

an urgent care partnership with Premier Health, and a joint ownership agreement with Fairway Medical Center. In 2017, LCMC Health joined the Health Leaders Alliance clinically integrated statewide network, and in 2018 introduced its own clinically integrated network, LCMC Healthcare Partners, LLC.

As a large health system in Louisiana, LCMC Health is uniquely positioned to adapt to the rapidly changing healthcare environment through its size, scale and leadership, and is committed to providing the best care possible for its community.

#### 2009 2012-13 2013 2014 2015-17 2018 Health Leaders LCMC Health is formed LCMC Health introduces out of Children's Hospital LCMC Healthcare to partner with Touro Partners, LLC, a LCMC Health expands reach Infirmary, preserving clinically integrated with partnerships throughout the hospital's legacy of network focused on LCMC Health partners Greater New Orleans and at LCMC Health partners providing healthcare to LCMC Health improving care in the with the State of state level through joining with the City of New West Jefferson New Orleans for more finalizes partnership Greater New Orleans Louisiana to operate the Healthcare Leaders Alliance. Medical Center joins than 160 years. with the State of community. Interim LSU Hospital

management of New

Orleans East Hospital,

returning a full-service

hospital to the area

for the first time since

Hurricane Katrina

Louisiana to operate

ILH and the future

University Medical

Center New Orleans.



# BY THE NUMBERS



















# **LCMC Health Hospitals**



Children's Hospital is a 224-bed, non-profit academic pediatric medical center offering a comprehensive range of healthcare services for children from birth to 21 years. With 43 pediatric specialties, it is the only full-service hospital exclusively for children in Louisiana and the Gulf South. Children's Hospital cares for children from all 64 parishes in Louisiana, 43 states and 4 countries.



Founded in 1852, Touro Infirmary is New Orleans' only community based, non-profit, faith-based hospital. For more than 165 years, Touro has had a special place in the heart of the community, providing high quality, compassionate healthcare to the New Orleans community. As a full-service hospital, Touro offers medical, surgical, intensive care, obstetric, skilled nursing inpatient services, inpatient and outpatient rehabilitation services and a 24-hour Emergency Department.



University Medical Center New Orleans, home of the Rev. Avery C. Alexander Academic Research Hospital, fulfills a 275-year legacy of serving the people of New Orleans and Gulf South. With our academic partners, UMC is training the next generation of healthcare professionals and leading research to find tomorrow's cures and treatments. As the region's only Level 1 Trauma Center, UMC plays a vital role in treating south Louisiana's most critically injured patients.



As a hospital service district of the City of New Orleans, New Orleans East Hospital opened in summer 2014, bringing a full-service hospital to the area for the first time since Hurricane Katrina. The 80-bed (60 inpatient; 20 leased to community organization) facility provides complete surgical services, diagnostic imaging, laboratory and emergency services in both inpatient and outpatient settings.



Founded April 11, 1956, through the citizens of Jefferson Parish, West Jefferson Medical Center is a 435-bed, full-service community hospital. Frequently recognized with national Patient Safety and Stroke Care accolades, West Jefferson Medical Center provides quality and compassionate healthcare to the people of West Bank, Gretna, Harvey, New Orleans and surrounding areas.

# **Our Academic Partners**

LCMC Health plays a vital role in training the next generation of healthcare professionals and education is a key component of our mission. Through our successful partnerships with local universities, thousands of medical, dentistry, nursing and allied health students train in our hospitals every year.















Source: information annualized based on June 30, 2018 data available

# Children's Hospital



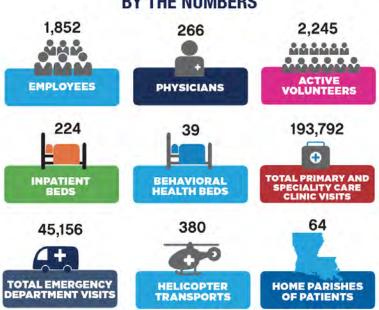
CARING FOR EVERY CHILD AS OUR OWN.

Children's Hospital is a 224-bed, not-for-profit academic pediatric medical center offering a comprehensive range of healthcare services, including preventive care, routine childhood treatments and lifesaving care from our specialists. With 43 pediatric specialties and more than 100 subspecialists, it is the only free-standing, full-service hospital exclusively for children in Louisiana and the Gulf South.

Critical care is provided in the hospital's 36-bed Neonatal Intensive Care Unit (NICU), 18-bed Pediatric Intensive Care Unit (PICU), and 20-bed Cardiac Intensive Care Unit (CICU), the only one dedicated entirely to the care of cardiac patients from birth to adulthood in Louisiana.

With the largest number of specialists dedicated to treating children in the state, Children's Hospital offers services so specialized, no other facility can claim them. Last year, Children's Hospital cared for children from all 64 parishes in Louisiana, 43 states and 9 countries.

# BY THE NUMBERS



# **EXECUTIVE LEADERSHIP**





# CHILDREN'S HOSPITAL SPECIALTY PROGRAMS

# 43 Pediatric Specialties

Center for Cancer & Blood Disorders

Critical Care

Dialysis & Renal Care

Heart Center

Neurosciences

Orthopedics

Rehabilitation

Surgical Services





# LOCATIONS

MAIN CAMPUS: Uptown New Orleans SATELLITE LOCATIONS: Baton Rouge, Covington,

Lafayette and Metairie

Outpatient appointments with pediatric specialists are offered at the Ambulatory Care Center on the hospital's main campus as well as at the hospital's satellite locations throughout Louisiana: The Metairie Center, Children's Hospital Outpatient Center of Baton Rouge, Children's Hospital Burdin-Riehl Clinic in Lafayette and Children's Northshore Outpatient Center. In addition to these

satellite locations, our specialists see patients in Alexandria, Houma, Lake Charles, Monroe, Slidell, Thibodaux, and Gulfport, Mississippi.





# **ACCREDITATIONS & AFFILIATIONS**

- · The Joint Commission (TJC)
- Children's Hospital Association (CHA)
- Commission on Accreditation of Rehabilitation Facilities (CARF)
- · Children's Hospitals' Solutions For Patient Safety
- Children's Oncology Group (COG)
- College of American Pathologists (CAP)
- Foundation for Cellular Therapy (FACT)
- American College of Surgeons/Commission on Cancer (ACOS/COC)
- United Network of Organ Sharing (UNOS)





# **SUBSIDIARY**

## CHILDREN'S PEDIATRICS

A non-profit wholly owned subsidiary corporation of Children's Hospital, Children's Pediatrics was created to provide pediatric primary care to the children in and around New Orleans including medically underserved areas. With 13 locations, Children's Pediatrics treats more than 150,000 children every year.



2017

PAYER MIX

## **KEY MILESTONES**

1955 2009



Crippled Children's
Hospital founded in
New Orleans as a 53-bed
rehabilitation facility for
children during the polio
epidemic.

LCMC Health is formed from Children's Hospital, making it one of the only health systems in the country founded by a free-standing children's hospital. LCMC Health partners with Touro Infirmary.



Children's Hospital announces \$300 million dollar expansion project





200 HENRY CLAY AVENUE NEW ORLEANS, LA 70118 (504) 899-9511

CHNOLA.ORG











Source: information annualized based on June 30, 2018 data available.

# Appendix B: Overall New Orleans Region Community Definition

In 2018, the region of New Orleans which is served by LCMC Children's, LCMC New Orleans East (NOEH), Touro Infirmary, Ochsner Baptist Medical Center, and Tulane Medical Center along with Ochsner Medical Center - Baptist, and Tulane Medical Center represented a total of 63 ZIP codes. The final CHNA needs were defined through a regional approach focusing on six parishes. The parishes were: Jefferson, Orleans, St. Bernard, St. Charles, St. Tammany, and Tangipahoa parishes. (See Table 11).

Table 11: The New Orleans Region – ZIP codes

ZIP codes	Town	Parish
70001	Metairie	Jefferson
70003	Metairie	Jefferson
70005	Metairie	Jefferson
70006	Metairie	Jefferson
70030	Des Allemands	St. Charles
70031	Ama	St. Charles
70032	Arabi	St. Bernard
70039	Boutte	St. Charles
70043	Chalmette	St. Bernard
70047	Destrehan	St. Charles
70053	Gretna	Jefferson
70056	Gretna	Jefferson
70057	Hahnville	St. Charles
70058	Harvey	Jefferson
70062	Kenner	Jefferson
70065	Kenner	Jefferson
70070	Luling	St. Charles
70072	Marrero	Jefferson
70075	Meraux	St. Bernard
70079	Norco	St. Charles
70080	Paradis	St. Charles
70085	Saint Bernard	St. Bernard
70087	Saint Rose	St. Charles
70092	Violet	St. Bernard
70094	Westwego	Jefferson
70112	New Orleans	Orleans
70113	New Orleans	Orleans
70114	New Orleans	Orleans
70115	New Orleans	Orleans
70116	New Orleans	Orleans
70117	New Orleans	Orleans
70118	New Orleans	Orleans

ZIP codes	Town	Parish
70119	New Orleans	Orleans
70121	New Orleans	Jefferson
70122	New Orleans	Orleans
70123	New Orleans	Jefferson
70124	New Orleans	Orleans
70125	New Orleans	Orleans
70126	New Orleans	Orleans
70127	New Orleans	Orleans
70128	New Orleans	Orleans
70129	New Orleans	Orleans
70130	New Orleans	Orleans
70131	New Orleans	Orleans
70401	Hammond	Tangipahoa
70403	Hammond	Tangipahoa
70420	Abita Springs	St. Tammany
70422	Amite	Tangipahoa
70431	Bush	St. Tammany
70433	Covington	St. Tammany
70435	Covington	St. Tammany
70437	Folsom	St. Tammany
70444	Kentwood	Tangipahoa
70445	Lacombe	St. Tammany
70447	Madisonville	St. Tammany
70448	Mandeville	St. Tammany
70452	Pearl River	St. Tammany
70454	Ponchatoula	Tangipahoa
70458	Slidell	St. Tammany
70460	Slidell	St. Tammany
70461	Slidell	St. Tammany
70466	Tickfaw	Tangipahoa
70471	Mandeville	St. Tammany

#### Overall New Orleans Region Population and Demographics Snapshot

- The New Orleans Regional Study Area ZIP codes encompass 1,329,370 residents. Jefferson Parish encompasses 437,303 residents and is the largest parish in the study area.
- From 2017 to 2022 the New Orleans Study Area is projected to experience a 4.67% increase in population (62,066 people).
- St. Bernard Parish projects the largest population increase of 9.30 percent; while St. Charles Parish is projected to have the smallest population increase of 1.1 percent.
- The gender breakdown for the study area is consistent across the study area parishes and similar to state and national norms.
- Orleans Parish reports a larger percentage of 25-34-year old (18.04 percent) when compared to the state (14.16 percent) and nation (13.43 percent).
- St. Tammany Parish reports the highest white, Non-Hispanic population percentage at 78.43 percent. Orleans Parish reports the highest black, Non-Hispanic population across the study area at 57.88 percent.
- Jefferson and St. Bernard parishes report the highest rate of residents with 'Less than a high school' degree (6.49 percent and 6.48 percent respectively). Orleans Parish reports the highest rate of residents with a bachelor's degree or higher at 35.06 percent.
- Tangipahoa Parish reports the lowest average annual household income for the study area at \$58,371. Orleans Parish reports high rates of households that earn less than \$15,000 per year (23.44 percent). St. Tammany Parish reports the highest rates of households earning over \$100k (30.28 percent).

# Appendix C: Primary and Secondary Data Overview

#### **Process Overview**

Children's Hospital New Orleans (CHNOLA) completed a wide-scale, comprehensive, community-focused CHNA to better serve the residents of Southern Louisiana. CHNOLA, with other health care systems and hospitals within the Metropolitan Hospital Council of New Orleans, participated in the assessment process.

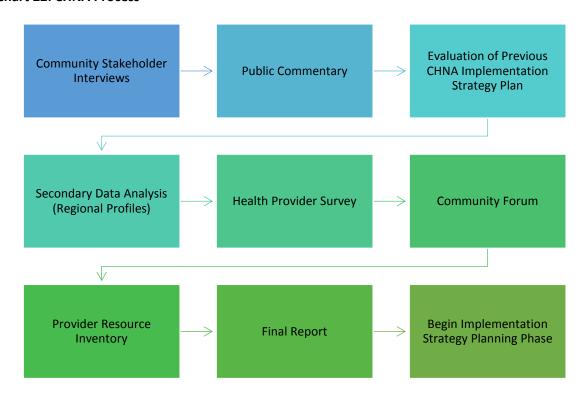
Civic and social organizations, government officials, educational institutions, and community-based organizations participated in the assessment to assist LCMC Children's Hospital with evaluating the needs of the community. The 2018 assessment included primary and secondary data collection that incorporated public comments, community stakeholder interviews, a health provider survey, and a community forum.

Tripp Umbach collected primary and secondary data through the identification of key community health needs in the region. CHNOLA will develop an Implementation Strategy Plan that will highlight and identify ways the hospital will meet the needs of the community it serves.

CHNOLA and Tripp Umbach worked diligently to collect, analyze, review, and discuss the results of the CHNA, concluding with the identification and prioritization of the community's needs for CHNOLA.

The overall process and the project components in the CHNA are depicted in the flow chart below.

**Chart 22: CHNA Process** 



#### **Community Stakeholder Interviews**

As part of the CHNA phase, telephone interviews were completed with community stakeholders in the service area to better understand the changing community health environment. The interviews offered community leaders an opportunity to provide feedback on the needs of the community, suggestions on secondary data resources to review and examine, and other information relevant to the study.

As part of the CHNA project, telephone interviews were completed with community stakeholders to better understand the changing community health environment. Community stakeholder interviews were conducted in February 2018 and continued through April 2018. Community stakeholders targeted for interviews encompassed a wide variety of professional backgrounds including: 1) public health experts, 2) professionals with access to community health—related data, 3) representatives of underserved populations, 4) government leaders, and 5) religious leaders.

In total, 91 interviews were conducted with community leaders and stakeholders within the MHCNO project; five key stakeholders were identified and represented CHNOLA. The interviews offered community stakeholders an opportunity to provide feedback on the needs of the community, secondary data resources and other information relevant to the study.

The qualitative data collected from community stakeholders are the opinions, perceptions, and insights of those who were interviewed as part of the CHNA process. The information provided insight and added great depth to the qualitative data.

Within the interview and discussion process, overall health needs, themes, and concerns were presented. Within each of the overarching themes, additional topics fell under each category. Below are key themes community stakeholders communicated from the most discussed to the least discussed (in descending order).

- 1. Substance Abuse and Mental Health
- 2. Chronic Diseases
- 3. Access to Care
- 4. Unhealthy Lifestyles

# **Public Commentary Collection**

As part of the CHNA, Tripp Umbach solicited comments related to the 2015 CHNA and Implementation Strategy Plan (ISP) on behalf of Children's Hospital New Orleans . The solicitation of feedback was obtained from community stakeholders identified by the Working Group. Observations offered community representatives the opportunity to react to the methods, findings, and subsequent actions taken as a result of the previous 2015 CHNA and implementation planning process. Stakeholders were posed questions developed by Tripp Umbach and reviewed by the Working Group. Feedback was collected from five community stakeholders related to the public commentary survey. The comments below are a summary of stakeholders' feedback regarding the former documents.

The collection period for the survey began in late February 2018 and continued through April 2018.

When asked if the assessment "included input from community members or organizations," three survey respondents reported that it did include input from community members or organization, one stakeholder was unsure, and one did not respond.

No survey respondents reported that the assessment reviewed did exclude community members or organizations that should have been involved in the assessment; three reported that it did not exclude any organizations, one did not know, and one did not respond.

In response to the question, "Are there needs in the community related to health (e.g., physical health, mental health, medical services, dental services, etc.) that were not represented in the CHNA," four of the five respondents agreed the needs identified in the 2015 CHNA represented the needs of the community; one did not respond.

Four of the survey respondents indicated that the ISP was directly related to the needs identified in the CHNA; one did not respond.

#### **Evaluation of Previous Planning Efforts**

LCMC Children's Hospital submitted an evaluation matrix to highlight and measure specific strategies that were developed. The Implementation Strategy Plan is a roadmap for how hospitals and communities are addressing the community health needs identified in the CHNA.

The purpose of the implementation strategy evaluation is for hospitals and community leaders to review and assess progress on the strategies and goals identified in the Implementation Strategy Plan to address community health needs.

#### A. Increase Access to Health Care

# Outcomes/Results

- Expanded access to medical and preventive care to patients within the community through expanded primary care and expanded specialty care.
- Children's Hospital hired new executive leadership for Ambulatory Services to address primary and specialty services.
- Northshore Clinic opened in 2016, which provided specialty access to patients on the Northshore of New Orleans.
- Provided preventative services contributing to overall health improvement of pediatric community including immunizations.
- Continued to have the immunization program service the community through the Shots for Tots Bus as well as the school-based immunization nurses.
- Embedded the Healthy Lifestyle patient population to Endocrine clinic to better manage their medical and psychosocial support needs.

- Provided a health insurance coverage option for those families not able to obtain a sufficient insurance plan.
- Provided information on website and during admitting/registration process to communicate to patients/families.
- Made financial counselor available to help family apply to CHAP. Placed Medicaid enroller onsite.

# B. Need for Care Coordination

# Outcomes/Results

- Provided educational information about what services are available in the community.
  - Maintained a relationship with office of public health via CSHS to provide a resource center located onsite.
  - Maintained relationship with State Board of Education with our VACP to educate school health professionals
- The VACP program partnered with schools to educate health professionals in the school systems regarding Ventilator-dependent children.
- Provided educational information about health management and healthy behaviors.
- Embedded population to Endocrine clinic to better manage their medical and psychosocial support needs.
- Implemented organization-wide EHR system.
- Provided communication between primary and specialty services by implementing Electronic Medical Record (EMR) using Epic as the vendor. This project kicked off in 2016 and will be implemented in 2018.
- Provided education via VACP program to patient/family to ensure a safe and healthy environment for the pediatric ventilated patient in the home.
- Centralized resources to provide streamlined and coordinated care to patients through the call center and transfer center.
- Moved subspecialty clinic access to a centralized call center. Continual integration of this call center into the specialty practices for better care coordination.
- Transfer center created in 2016 to support care coordination of patients needing specialized pediatric services. Coordinated all inbound transfers from community Emergency Departments and hospitals as well as primary care direct admits.

#### C. Need to Improve Cultural Competence

# Outcomes/Results

- Screened patients during admission for their language of preference and provided appropriate translation services for patients that prefer a language other than English.
  - o Offered a language line for translation
  - o Based on resources and availability, offered bilingual staff to assist with translation.
  - o Offered education and outreach in a variety of languages

- Ensured comprehension of medical documents for patients with limited Englishspeaking skills.
- Moved to new language line service vendor (Cyracom) endorsed by American Hospital Association.
  - Designed program for bi-lingual staff members to become certified medical interpreters.
  - Established language access committee charged to improve accommodations for Limited English Proficiency (LEP) population.
  - Offered culturally sensitive care to patients.
- Offered chaplain services to provide oversight and coordination for religious preferences and practices for a variety of affiliations.
- Hired additional chaplain staff to support patients and families.

# D. Need to Improve Early Intervention and Prevention

# Outcomes/Results

- Ensured providers are aware of the most up to date preventive practices and detection methods by providing outreach and education to local providers.
- Provided ongoing CEU accredited educational lecture series for local primary care providers.
- Offered general and special pediatric care which includes services to facilitate early
  intervention with any health issues outside of typical child development including referrals
  through: Child abuse care center, dialysis and transplant center, developmental delay clinics
  and healthy lifestyles clinic.
- Embedded social services into both Care Center and Dialysis /Transplant center.
- Provided parents with the education and support to facilitate early intervention and preventive care.
  - The Parenting Center at Children's Hospital
  - Cancer community outreach education
- Hosted family fair for cancer patient families to provide resources in the community.
- Provided patients with information about and access to healthy options.
- Outpatient support provided by clinical dietitians as identified by medical providers.

#### E. Need to Improve Behavioral Health Sciences

#### Outcomes/Results

Provided inpatient and outpatient behavioral health services such as: Rapid Treatment
 Program, The Child and Adolescent Behavioral Health Center, Audrey Hepburn CARE Center,

and the Autism Center.

 Planned and broke ground on a new behavioral health facility to expand inpatient capacity and potential to expand service line offerings.

# **Secondary Data Collection**

Tripp Umbach collected and analyzed secondary data from multiple sources, including Community Need Index (CNI), Community Commons Data, County Health Rankings and Roadmaps, Greater New Orleans Community Data Center's Report, and the Louisiana Department of Health. The regional data profile includes information from multiple health, social, and demographics sources. ZIP code analysis was also completed to illustrate community health needs at the local level. Tripp Umbach used secondary data sources to compile information related to disease prevalence, socioeconomic factors, and behavioral habits. Data were benchmarked against state and national trends, where applicable.

The information provided in the secondary data profile does not replace existing local, regional, and national sites but provides a comprehensive (but not all-inclusive) overview that complements and highlights existing and changing health and social behaviors of community residents for the health system, social, and community health organizations involved in the CHNA. A robust secondary data report was compiled for CHNOLA; select information collected from the report has been presented throughout the CHNA. Data specifically related to the identified needs were used to support the key health needs.

Tripp Umbach obtained data through Truven Health Analytics to quantify the severity of health disparities for ZIP codes in the CHNOLA service area. Truven Health Analytics provides data and analytics to hospitals, health systems, and health-supported agencies.

The Community Need Index (CNI) data source was also used in the health assessment. CNI considers multiple factors that are known to limit health care access; the tool is useful in identifying and addressing the disproportionate and unmet health-related needs of neighborhoods. The five prominent socioeconomic barriers to community health quantified in the CNI are income barriers, cultural/language barriers, educational barriers, insurance barriers, and housing barriers. Additional information related to CNI can be found in Appendix G.

Map 6 is the regional primary service area (study area) for the New Orleans study region.

2017 CNI Score

1.6 5.0

Store

Total

Map 6: The New Orleans Region – CNI Scores

Note: Map is not to scale.

Source: Truven Health Analytics

# 2017 CNI Score

↑ 5.00 to 4.00 (High-socioeconomic barriers)

3.99 to 3.00

▼ 1.99 to 1.00 (Low-socioeconomic barriers)

In 2017, ZIP codes 70112 (New Orleans), 70113 (New Orleans), 70114 (New Orleans), and 70117 (New Orleans) located in Orleans Parish reported the highest CNI score of 5.0 out of the 63 ZIP codes in the study area.

On the polar end, ZIP codes 70447 (Madisonville) and 70448 (Mandeville) in St. Tammany Parish report low CNI scores of 1.6, which indicates that residents within these ZIP codes face low socioeconomic barriers to care.

CNI data also revealed 24 ZIP codes that had a score between 4.0 and 4.8, and 17 ZIP codes that had a range between 3.0 and 3.8.

Table 12: The New Orleans Region (CNI Score Breakouts)

Zip	County	City	Poverty 65+	Poverty Children	Poverty Single w/kids	Limited English	Minority	No High School Diploma	Un- employed	Un- insured	Renting
70001	Jefferson	Metairie	13.12%	19.18%	41.15%	5.46%	33.30%	11.67%	5.05%	5.64%	50.43%
70003	Jefferson	Metairie	10.64%	16.72%	36.46%	3.97%	30.77%	12.34%	6.80%	4.64%	24.37%
70005	Jefferson	Metairie	8.57%	7.21%	24.68%	3.88%	17.53%	7.43%	5.00%	4.69%	37.11%
70006	Jefferson	Metairie	7.67%	13.62%	35.28%	5.92%	36.56%	10.30%	6.93%	4.39%	34.06%
70030	St. Charles	Des Allemands	5.73%	14.19%	38.92%	0.44%	14.35%	15.94%	5.23%	5.91%	13.89%
70031	St. Charles	Ama	0.78%	6.88%	23.26%	0.45%	44.62%	8.99%	3.54%	4.91%	14.18%
70032	St. Bernard	Arabi	9.95%	28.29%	38.66%	1.91%	36.71%	15.67%	9.76%	7.26%	32.44%
70039	St. Charles	Boutte	4.79%	20.00%	53.64%	0.91%	62.90%	15.97%	11.86%	5.23%	31.21%
70043	St. Bernard	Chalmette	9.79%	25.91%	54.46%	3.12%	38.19%	15.55%	10.49%	7.27%	42.13%
70047	St. Charles	Destrehan	22.45%	8.62%	22.00%	1.58%	32.67%	8.76%	9.69%	3.52%	18.66%
70053	Jefferson	Gretna	14.41%	35.04%	51.14%	6.59%	56.06%	24.37%	9.00%	8.45%	52.51%
70056	Jefferson A	Gretna	9.32%	22.68%	45.59%	5.82%	63.48%	13.91%	5.95%	5.08%	40.17%
70057	St. Charles	Hahnville	23.95%	30.38%	50.70%	0.67%	54.19%	23.91%	12.90%	7.25%	18.24%
70058	Jefferson	Harvey	18.54%	24.38%	41.83%	5.47%	75.52%	19.97%	5.32%	6.98%	30.69%
70062	Jefferson	Kenner	26.27%	28.45%	48.83%	8.67%	63.36%	24.87%	12.35%	7.79%	48.96%
70065	Jefferson	Kenner	6.28%	13.98%	39.42%	6.92%	51.54%	12.03%	5.85%	4.29%	36.66%
70070	St. Charles	Luling	4.94%	13.05%	34.77%	0.60%	24.26%	10.83%	6.45%	4.23%	17.01%
70072	Jefferson	Marrero	20.31%	25.43%	51.58%	2.53%	55.34%	21.84%	5.70%	6.78%	24.34%
70075	St. Bernard	Meraux	8.41%	10.95%	37.56%	0.77%	28.33%	17.32%	7.77%	4.52%	17.12%
70079	St. Charles	Norco	11.35%	22.27%	54.90%	0.56%	14.97%	12.08%	4.73%	4.24%	19.54%
70080	St. Charles	Paradis	8.24%	11.98%	39.22%	0.46%	21.41%	17.44%	5.30%	6.13%	27.65%
70085	St. Bernard	Saint Bernard	11.34%	21.41%	33.33%	0.08%	25.50%	25.32%	17.06%	7.23%	13.26%
70087	St. Charles	Saint Rose	21.81%	13.46%	25.54%	3.07%	56.00%	16.75%	9.34%	5.68%	33.75%
70092	St. Bernard	Violet	10.63%	29.87%	60.08%	0.25%	59.90%	22.61%	15.16%	6.90%	21.31%
70094	Jefferson	Westwego	14.81%	30.69%	47.97%	2.48%	58.35%	22.51%	11.64%	7.26%	30.95%
70112	Orleans	New Orleans	32.03%	60.81%	72.00%	2.36%	68.25%	19.93%	16.56%	14.28%	88.48%

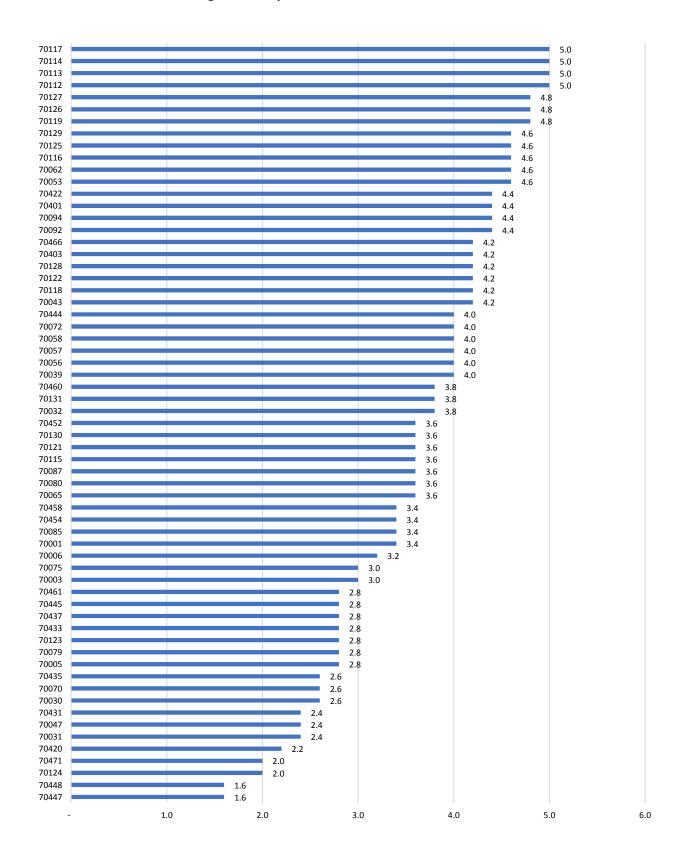
Zip	County	City	Poverty 65+	Poverty Children	Poverty Single w/kids	Limited English	Minority	No High School Diploma	Un- employed	Un- insured	Renting
70113	Orleans	New Orleans	42.79%	51.97%	71.27%	3.91%	83.12%	29.66%	17.16%	17.68%	77.80%
70114	Orleans	New Orleans	28.57%	42.40%	64.06%	1.46%	81.22%	20.36%	13.33%	12.30%	56.53%
70115	Orleans	New Orleans	15.94%	22.43%	49.27%	1.73%	35.91%	8.32%	7.04%	7.19%	56.67%
70116	Orleans	New Orleans	21.96%	55.98%	69.23%	2.08%	55.36%	14.20%	12.17%	10.32%	67.32%
70117	Orleans	New Orleans	28.71%	43.03%	54.89%	0.82%	78.11%	21.73%	11.48%	12.88%	50.26%
70118	Orleans	New Orleans	20.14%	28.24%	46.58%	1.30%	44.72%	11.21%	8.99%	9.94%	54.59%
70119	Orleans	New Orleans	30.52%	45.70%	65.56%	3.28%	69.78%	17.00%	12.21%	12.15%	67.01%
70121	Jefferson	New Orleans	13.19%	19.80%	39.37%	4.10%	38.24%	14.04%	7.40%	5.14%	45.95%
70122	Orleans	New Orleans	20.43%	30.54%	48.50%	0.78%	86.55%	13.35%	11.03%	10.84%	38.16%
70123	Jefferson	New Orleans	11.01%	10.90%	27.96%	1.07%	21.30%	7.69%	3.21%	3.98%	39.96%
70124	Orleans	New Orleans	9.65%	4.19%	13.87%	1.16%	16.77%	3.10%	3.56%	4.00%	32.08%
70125	Orleans	New Orleans	26.96%	39.76%	56.41%	1.98%	66.85%	15.52%	11.11%	11.62%	54.94%
70126	Orleans	New Orleans	14.17%	49.95%	58.10%	1.23%	95.31%	17.31%	16.75%	14.36%	45.48%
70127	Orleans	New Orleans	28.20%	45.51%	63.25%	1.56%	97.41%	15.18%	12.43%	13.61%	48.87%
70128	Orleans	New Orleans	21.85%	33.29%	50.00%	2.22%	97.79%	14.20%	8.94%	10.20%	31.19%
70129	Orleans	New Orleans	28.71%	39.05%	71.03%	18.19%	89.14%	29.40%	11.04%	10.41%	33.28%
70130	Orleans	New Orleans	20.73%	19.70%	50.00%	1.29%	37.59%	8.12%	7.19%	6.97%	68.26%
70131	Orleans	New Orleans	10.37%	19.09%	40.51%	2.68%	74.44%	10.37%	8.64%	6.63%	42.45%
70401	Tangipahoa	Hammond	14.74%	30.00%	54.99%	1.49%	47.16%	15.87%	11.26%	9.03%	47.67%
70403	Tangipahoa	Hammond	14.67%	31.20%	55.08%	0.50%	40.66%	18.16%	9.57%	8.99%	34.59%
70420	St. Tammany	Abita Springs	7.28%	12.74%	33.15%	1.06%	15.30%	12.67%	8.42%	4.54%	15.65%
70422	Tangipahoa	Amite	20.09%	32.89%	56.78%	0.80%	49.02%	23.72%	15.85%	8.87%	24.60%
70431	St. Tammany	Bush	2.15%	16.11%	59.29%	0.81%	8.07%	11.23%	7.82%	4.24%	12.92%
70433	St. Tammany	Covington	8.52%	14.55%	44.35%	1.53%	18.21%	10.01%	6.86%	4.08%	22.21%
70435	St. Tammany	Covington	10.47%	17.69%	50.32%	0.58%	14.67%	12.40%	6.38%	4.34%	12.40%
70437	St. Tammany	Folsom	9.68%	18.21%	51.27%	1.13%	16.50%	13.59%	6.96%	4.36%	12.98%
70444	Tangipahoa	Kentwood	19.23%	31.85%	58.83%	0.17%	40.56%	22.83%	13.51%	10.85%	19.88%
70445	St. Tammany	Lacombe	15.46%	14.89%	44.19%	0.87%	31.72%	18.66%	8.66%	4.46%	14.10%
70447	St. Tammany	Madisonville	11.13%	5.40%	25.91%	0.22%	10.99%	4.24%	4.83%	2.05%	10.52%
70448	St. Tammany	Mandeville	8.69%	3.28%	9.05%	0.67%	13.69%	5.20%	5.80%	2.64%	19.03%
70452	St. Tammany	Pearl River	11.23%	28.11%	49.68%	0.51%	13.10%	20.50%	8.69%	6.30%	19.97%
70454	Tangipahoa	Ponchatoula	17.15%	15.85%	32.80%	0.23%	20.99%	13.52%	8.38%	6.43%	22.06%
70458	St. Tammany	Slidell	12.83%	18.00%	50.09%	0.92%	26.74%	13.26%	7.78%	3.55%	26.36%
70460	St. Tammany	Slidell	10.66%	22.56%	49.64%	1.06%	40.85%	17.06%	9.69%	5.01%	21.51%
70461	St. Tammany	Slidell	11.38%	10.89%	26.85%	2.18%	33.45%	10.60%	8.55%	3.66%	24.05%
70466	Tangipahoa	Tickfaw	24.28%	25.99%	52.05%	3.85%	38.76%	21.34%	9.51%	7.32%	31.31%
70471	St. Tammany	Mandeville	14.80%	3.89%	10.36%	0.74%	11.67%	5.94%	4.42%	3.63%	26.07%

Table 13: The New Orleans Region (CNI Score Breakouts)

Zip	Income Quintile	Culture Quintile	Education Quintile	Insurance Rank	Housing Quintile	2017 CNI Score
70001	3	4	3	2	5	3.4
70003	3	4	3	2	3	3.0
70005	2	3	2	2	5	2.8
70006	3	4	3	2	4	3.2
70030	3	3	4	2	1	2.6
70031	2	5	2	2	1	2.4
70032	3	4	4	4	4	3.8
70039	4	5	4	3	4	4.0
70043	4	4	4	4	5	4.2
70047	2	4	2	2	2	2.4
70053	4	5	5	4	5	4.6
70056	4	5	4	2	5	4.0
70057	4	5	5	4	2	4.0
70058	3	5	5	3	4	4.0
70062	4	5	5	4	5	4.6
70065	3	5	3	2	5	3.6
70070	2	4	3	2	2	2.6
70072	4	5	5	3	3	4.0
70075	3	4	4	2	2	3.0
70079	4	3	3	2	2	2.8
70080	3	4	4	3	4	3.6
70085	3	4	5	4	1	3.4
70087	2	5	4	3	4	3.6
70092	5	5	5	4	3	4.4
70094	4	5	5	4	4	4.4
70112	5	5	5	5	5	5.0
70113	5	5	5	5	5	5.0
70114	5	5	5	5	5	5.0
70115	4	4	2	3	5	3.6
70116	5	5	4	4	5	4.6
70117	5	5	5	5	5	5.0
70118	4	5	3	4	5	4.2
70119	5	5	4	5	5	4.8
70121	3	4	4	2	5	3.6
70122	4	5	3	4	5	4.2

Zip	Income	Culture	Education	Insurance	Housing	2017 CNI
<b>,</b>	Quintile	Quintile	Quintile	Rank	Quintile	Score
70123	2	4	2	1	5	2.8
70124	1	3	1	1	4	2.0
70125	5	5	4	4	5	4.6
70126	5	5	4	5	5	4.8
70127	5	5	4	5	5	4.8
70128	4	5	4	4	4	4.2
70129	5	5	5	4	4	4.6
70130	4	4	2	3	5	3.6
70131	3	5	3	3	5	3.8
70401	4	5	4	4	5	4.4
70403	4	4	4	4	5	4.2
70420	2	3	3	2	1	2.2
70422	5	5	5	4	3	4.4
70431	4	2	3	2	1	2.4
70433	3	3	3	2	3	2.8
70435	4	3	3	2	1	2.6
70437	4	3	4	2	1	2.8
70444	5	4	5	4	2	4.0
70445	3	4	4	2	1	2.8
70447	2	3	1	1	1	1.6
70448	1	3	1	1	2	1.6
70452	4	3	5	3	3	3.6
70454	3	4	4	3	3	3.4
70458	4	4	3	2	4	3.4
70460	4	5	4	3	3	3.8
70461	2	4	3	2	3	2.8
70466	4	4	5	4	4	4.2
70471	1	3	1	1	4	2.0

Chart 23: The New Orleans Region – Study Area Overview



Change in CNI Score

-0.2 0.4

7044

Viradingson

Front Bitter

Language

Language

Accertaion

St. Miles

10: Miles

10:

Map 7: The New Orleans Region – Study Area (Trending Scores)

Note: Map is not to scale.

Source: Truven Health Analytics

# 2017 CNI Score

▲ 5.00 to 4.00 (High-socioeconomic barriers)

3.99 to 3.00

▼ 1.99 to 1.00 (Low-socioeconomic barriers)

In reviewing scores from 2016 and 2017, the map provides a geographic trending visual of the service area between the years. The dark green to lighter green color represents ZIP codes that have improved their overall CNI score. As the color changes from lighter red to dark red, certain ZIP codes face higher (worse) socioeconomic barriers (Map 7).

ZIP code 70043, 70092, 70112, 70114, 70117, 70118, 70032, 70056, 70058, 70079, 70130, 70433, 70435, 70437, 70116, 70119, 70125, 70126, 70127, and 70129 reported the largest moved between 2016 and 2017 with a 0.40 difference, indicating factors that contributed to residents facing more socioeconomic barriers to health care.

ZIP codes 70123 (Orleans), 70148 (Orleans), 70471 (Mandeville), and 70448 (Mandeville) improved their ZIP code scores by 0.20. The move signifies factors between the years that have helped residents improve their accessibility to health care services. The move implies that small community changes are implemented and applied.

Table 14: The New Orleans Region – Study Area (Trending Scores)

Zip	City	Parish	2016 CNI	2017 CNI	Difference
			Score	Score	
70043	Chalmette	St. Bernard	3.8	4.2	(0.40)
70092	Violet	St. Bernard	4.0	4.4	(0.40)
70112	New Orleans	Orleans	4.6	5.0	(0.40)
70114	New Orleans	Orleans	4.6	5.0	(0.40)
70117	New Orleans	Orleans	4.6	5.0	(0.40)
70118	New Orleans	Orleans	3.8	4.2	(0.40)
70032	Arabi	St. Bernard	3.4	3.8	(0.40)
70056	Gretna	Jefferson	3.6	4.0	(0.40)
70058	Harvey	Jefferson	3.6	4.0	(0.40)
70079	Norco	St. Charles	2.4	2.8	(0.40)
70130	New Orleans	Orleans	3.2	3.6	(0.40)
70433	Covington	St. Tammany	2.4	2.8	(0.40)
70435	Covington	St. Tammany	2.2	2.6	(0.40)
70437	Folsom	St. Tammany	2.4	2.8	(0.40)
70116	New Orleans	Orleans	4.2	4.6	(0.40)
70119	New Orleans	Orleans	4.4	4.8	(0.40)
70125	New Orleans	Orleans	4.2	4.6	(0.40)
70126	New Orleans	Orleans	4.4	4.8	(0.40)
70127	New Orleans	Orleans	4.4	4.8	(0.40)
70129	New Orleans	Orleans	4.2	4.6	(0.40)
70003	Metairie	Jefferson	2.8	3.0	(0.20)
70006	Metairie	Jefferson	3.0	3.2	(0.20)
70030	Des Allemands	St. Charles	2.4	2.6	(0.20)
70039	Boutte	St. Charles	3.8	4.0	(0.20)
70065	Kenner	Jefferson	3.4	3.6	(0.20)
70070	Luling	St. Charles	2.4	2.6	(0.20)
70072	Marrero	Jefferson	3.8	4.0	(0.20)
70080	Paradis	St. Charles	3.4	3.6	(0.20)
70094	Westwego	Jefferson	4.2	4.4	(0.20)
70113	New Orleans	Orleans	4.8	5.0	(0.20)

Zip	City	Parish	2016 CNI	2017 CNI	Difference
			Score	Score	
70115	New Orleans	Orleans	3.4	3.6	(0.20)
70128	New Orleans	Orleans	4.0	4.2	(0.20)
70401	Hammond	Tangipahoa	4.2	4.4	(0.20)
70422	Amite	Tangipahoa	4.2	4.4	(0.20)
70444	Kentwood	Tangipahoa	3.8	4.0	(0.20)
70447	Madisonville	St. Tammany	1.4	1.6	(0.20)
70452	Pearl River	St. Tammany	3.4	3.6	(0.20)
70466	Tickfaw	Tangipahoa	4.0	4.2	(0.20)
70001	Metairie	Jefferson	3.2	3.4	(0.20)
70005	Metairie	Jefferson	2.6	2.8	(0.20)
70047	Destrehan	St. Charles	2.2	2.4	(0.20)
70131	New Orleans	Orleans	3.6	3.8	(0.20)
70454	Ponchatoula	Tangipahoa	3.2	3.4	(0.20)
70460	Slidell	St. Tammany	3.6	3.8	(0.20)
70053	Gretna	Jefferson	4.4	4.6	(0.20)
70031	Ama	St. Charles	2.4	2.4	-
70057	Hahnville	St. Charles	4.0	4.0	-
70062	Kenner	Jefferson	4.6	4.6	-
70075	Meraux	St. Bernard	3.0	3.0	-
70085	Saint Bernard	St. Bernard	3.4	3.4	-
70087	Saint Rose	St. Charles	3.6	3.6	-
70121	New Orleans	Jefferson	3.6	3.6	-
70122	New Orleans	Orleans	4.2	4.2	-
70124	New Orleans	Orleans	2.0	2.0	-
70403	Hammond	Tangipahoa	4.2	4.2	-
70420	Abita Springs	St. Tammany	2.2	2.2	-
70431	Bush	St. Tammany	2.4	2.4	-
70445	Lacombe	St. Tammany	2.8	2.8	-
70458	Slidell	St. Tammany	3.4	3.4	-
70461	Slidell	St. Tammany	2.8	2.8	-
70448	Mandeville	St. Tammany	1.8	1.6	0.20
70123	New Orleans	Jefferson	3.0	2.8	0.20
70471	Mandeville	St. Tammany	2.2	2.0	0.20

# **Health Provider Survey**

Tripp Umbach employed a health provider survey methodology to survey providers within the region. A provider health survey was created to collect thoughts and opinions regarding health providers' community regarding the care and services they provide. Each hospital organization within the MHCNO collaboration sent emails to their health providers requesting survey participation. A survey link was also posted in an internal company newsletter to increase response rates. The survey data collection period ran on Survey Monkey from March through May 2018. In total, a sample size of 176 surveys were collected.

#### **Key Points:**

- Jefferson (13.5 percent), Orleans (13.4 percent), St. Tammany (11.5 percent), St. Charles (6.2 percent), and St. Bernard (5.6 percent) parishes were the top five parishes where survey respondents reported they serve.
- A majority of survey respondents identified themselves as being a physician specialist (30.6 percent), 26.6 percent were primary care physicians, 19.1 percent were nurses.
- Hospital facility (39.3 percent) or doctor's office (26.6 percent) were the top two types of facilities where survey respondents provided care.
- The top three specific population's survey respondents that have focused care are: all populations (14.9 percent), seniors/elderly (9.5 percent), and low income/poor (8.4 percent).
- Overall, close to one-half of survey respondents reported the community in which they provide care or services as being unhealthy (37.8 percent)/very unhealthy (11 percent).
- More than half of survey respondents strongly agreed (30.3 percent) and agreed (37.7 percent) that residents have access to high-quality primary care providers.
- More than half of survey respondents strongly agreed (26.3 percent) and agreed (37.7 percent) that residents have access to specialists.
- More than half of survey respondents disagreed (37.7 percent) and strongly disagreed (29.1 percent) that residents have access to mental/behavioral health providers.
- Close to one-third of survey respondents disagree (21.4 percent) and strongly disagree (9.2 percent) that residents have access to dental care.
- More than half of survey respondents strongly agree (17.1 percent) and agree (36.6 percent) that residents have access to vision care.
- More than one-third of respondents disagreed (26.4 percent) and strongly disagreed (14.4 percent) that residents have available transportation options for medical appointments and other services.
- There was strong agreement (22.9 percent) and agreement (38.3 percent) that residents have access to health facilities where interpreter services/bilingual providers are available (61.3 percent).
- More than half of survey respondents strongly agree (12 percent) and agree (39.4 percent) that there are ample employment opportunities in the community where they practice.
- More than half of survey respondents strongly agreed (17.1 percent) and agreed (35.4 percent) the community where they practice is a safe place to live.
- 50.9 percent of survey respondents reported that there are safe, clean, and affordable housing
  options in the community.

- Close to one quarter of respondents (24.9 percent) disagreed that quality public education is available in the community.
- The top five health concerns affecting residents in the community according to health providers are: chronic diseases (19.9 percent), access to health care (17.7 percent), obesity/poor diet/lack of exercise (14.1 percent), mental health (12.2 percent) and substance abuse (6.4 percent).
- The top five reported health factors that contribute to the health concerns are: Health
  literacy/overall education (16.2 percent), obesity/poor diet/lack of exercise (11 percent), access
  to health care (14.1 percent), unemployment/poverty (10.8 percent), and mental health/lack of
  mental health services (5.6 percent).
- Mental health services (14.4 percent) and substance abuse services (11.2 percent) were the top
  two resources/services that are missing from the community that would improve the health of
  residents.
- Conversely, vision care (1.7 percent) and emergency care (0.7 percent) were not seen as important resources/services that are missing from that community that would improve the health of residents.
- More than half of survey respondents (55.7 percent) were female, while 41.4 percent were male.
- Close to one-third of survey respondents (29.1 percent) are 55 and older.
- More than one-third of survey respondents plan to retire in 15 or more years (44 percent).
- A majority of survey respondents are white/Caucasian (83.1 percent).
- More than half of survey respondents have a medical degree (55.7 percent) followed by a college or master's degree (16.7 percent).

# **Community Forum**

On July 31, 2018, Tripp Umbach facilitated a public input session (community forum) with leaders from community, government, civic, and social organizations, and other key community leaders at the Corpus Christi Church-Epiphany Resource Center. The purpose of the community forum was to present the CHNA findings, which included existing data, in-depth community stakeholder interviews results, and results from the health provider survey, and to obtain input regarding the needs and concerns of the community overall. Community leaders discussed the data, shared their visions and plans for health improvement in their communities, and identified and prioritized the top community health needs in their region. With input received from forum participants, community stakeholders prioritized and identified top priority areas.

- A. Behavioral Health (Mental Health and Substance Abuse)
  - a. Access to Services/Provider shortages
  - b. Severe mental health

#### B. Health Literacy

- a. Chronic Diseases
- b. Prevention (Education)
- c. Financial health literacy
- d. Health education/information

#### C. Access to Care

- a. Health system navigation
- b. Child/Maternal health

### **Provider Resource Inventory**

An inventory of programs and services specifically related to the key prioritized needs was cataloged by Tripp Umbach. The inventory highlights programs and services within the focus area. The inventory identifies the range of organizations and agencies in the community that are serving the various target populations within each of the prioritized needs. It provides program descriptions, contact information, and the potential for coordinating community activities by creating linkages among agencies. The provider inventory was provided as a separate document due to its interactive nature, and is available on the Children's Hospital New Orleans website.

# **Final Report**

A final report was developed that summarized key findings from the assessment process, including the final prioritized community needs. Top community health needs were identified by analyzing secondary data, primary data collected from key stakeholder interviews, a health provider survey, and a community forum. Tripp Umbach provided support to the prioritized needs with secondary data (where available), consensus with community stakeholders results, and survey results.

# **Implementation Planning**

With the completion of the community health needs assessment, an implementation phase will begin with the onset of work sessions facilitated by Tripp Umbach. The work sessions will maximize system cohesion and synergies, during which leaders from LCMC Health will be guided through a series of identified processes. The planning process will result in the development of an implementation plan that will meet system and IRS standards.

# Appendix D: Community Stakeholder Interviewees

Tripp Umbach completed 27 interviews with community stakeholders representing LCMC Health to gain a deeper understanding of community health needs from organizations, agencies, and government officials that have day-to-day interactions with populations in greatest need. Interviews provide information about the community's health status, risk factors, service utilizations and community resource needs, as well as gaps and service suggestions.

Listed below in alphabetic order by last name are the community stakeholders interviewed for the community needs assessment.

Table 15: Community Stakeholders for Children's Hospital New Orleans (Listed Alphabetically by Last Name)

Name	Organizations
Paulette Carter	Children's Bureau New Orleans
Sandy Denapolis	Jefferson Parish Public School System
Coretta LaGarde	American Heart Association/American Stroke Association
Amy Williams	American Cancer Society
Amy Zapata	Bureau of Family Health

Listed below in alphabetic order by last name are the community stakeholders who were interviewed overall for LCMC Health.

Table 16: Overall Community Stakeholders for LCMC Health (Listed Alphabetically by Last Name)

Name	Organizations Representing LCMC Health
Kate Andrus, MPH, RDN, LDN	Louisiana Department of Health
	Bureau of Chronic Disease Prevention and Health Promotion
Mike Andry	Excelth Health Center
Jennifer Avegno, MD	UMCNO Forensics
Jennifer Steel-Bourgeois	Community Stakeholder
Matthew Broussard	The Louisiana Campaign for Tobacco-Free Living
Dr. Clara Byes	Martin Luther King Task Force & West Bank African American
	Churches
Paulette Carter	Children's Bureau New Orleans
Sandy Denapolis	Jefferson Parish Public School System
Jeff Elder, MD	EMS New Orleans
Martha Kegel	Unity of Greater New Orleans
Joseph D. Kimbrell, MA, MSW	Louisiana Public Health Institute
Althea LaCour	West Jefferson Medical Center; Auxiliary

Name	Organizations Representing LCMC Health
Coretta LaGarde	American Heart Association/American Stroke Association
Lang Le	VIET
Lisa Plunkett	Susan G. Komen
Oscar Pipkins	Civic Coalition West Bank
Chioma Ogbuefi, MD	Excelth Health Center
Howard Rodgers	New Orleans Council on Aging
Melanie Thompson	United Healthcare
Susan Todd	504 HealthNet
Susan Trantham	WJMC Foundation Director
Jeanne Tripoli	Jefferson Parish Council on Aging
Charlotte Weil, M.A., CWWS	HUB International Gulf South
Amy Williams	American Cancer Society
Rosalind Woodfox	The Blood Center
Stephanie Young	Louisiana Organ Procurement Agency
Amy Zapata	Bureau of Family Health

# Appendix E: Community Organizations and Partners

Metropolitan Hospital Council of New Orleans along with its hospital partners, East Jefferson General Hospital, HCA Healthcare (Tulane Medical Center), LCMC Health, Ochsner Health System, Slidell Memorial Hospital, and St. Tammany Parish Hospital came together to gain a better understanding of the health needs of the community they serve.

LCMC Health is a leading health care provider dedicated to understanding community needs, offering high-quality programs to address the region's needs, and promoting population wellness. The primary data collected in the CHNA provided valuable input and ongoing dedication to assisting LCMC Health and its health care partners in identifying community health priorities; building on a foundation to develop strategies that will address the needs of residents in Southern Louisiana.

The table below lists community organizations that assisted LCMC Health and its hospital partners with the primary data collection through community stakeholder interviews, completing a health provider survey, and or attending a regional forum.

**Table 17: Community Organizations and Partners** 

	Organization Name
1.	504HealthNet
2.	Acadian Ambulance Service
3.	Access Health Louisiana
4.	Agenda for Children
5.	American Cancer Society
6.	American Heart Association/American Stroke Association
7.	Andrea's Restaurant
8.	Backyard Gardeners Network
9.	Baton Rouge Health District
10.	Belle Chasse YMCA
11.	Boys & Girls Clubs West Bank
12.	Broad Community Connections
13.	Bryan Bell Metropolitan Leadership Forum
14.	Bureau of Chronic Disease Prevention and Health Promotion
15.	Bureau of Family Health
16.	Café Hope
17.	Caffin Avenue SDA Church
18.	Capital Area Human Services
19.	CCOSJ

	Organization Name
20.	Central Chamber of Commerce
21.	Central Lafayette High School
22.	Children's Bureau New Orleans
23.	City of Baton Rouge
24.	City of Covington
25.	City of Kenner
26.	City of Mandeville
27.	City of New Orleans Emergency Medical Services
28.	City of Slidell
29.	Civic Coalition West Bank
30.	Council on Aging of St. Tammany
31.	Covenant House New Orleans
32.	Covington Food Bank
33.	Crescent Dental
34.	Daughters of Charity
35.	East Jefferson General Hospital
36.	East St. Tammany Chamber of Commerce
37.	EXCELth Family Health Center
38.	Fifth District Savings Bank
39.	Friends of Lafitte Greenway
40.	Gheens Needy Family
41.	Gin Wealth Management Partners
42.	Good Samaritan Food Bank
43.	Gulf Coast Bank & Trust Company
44.	Health Guardians of Catholic Charities Archdiocese of New Orleans
45.	Hospital Service District
46.	HUB International Gulf South
47.	Humana
48.	Humana Bold Goal
49.	JEFFCAP
50.	Jefferson Chamber of Commerce
51.	Jefferson Parish Council on Aging
52.	Jefferson Parish Public School System
53.	Jewish Family Services

	Organization Name	
54.	John J. Hainkel, Jr. Home & Rehabilitation Center	
55.	Junior League of New Orleans	
56.	Kenner Discovery Health Sciences Academy	
57.	Kingsley House	
58.	Lafourche Behavioral Health Center	
59.	Lafourche Fire Department District #1	
60.	Lafourche Hospital Service District #2	
61.	Lafourche Parish Government	
62.	Lafourche Parish School Board	
63.	Lafourche Parish Sheriff's Office	
64.	Lakeview Regional Medical Center	
65.	LCMC Health	
66.	LCMC Health – Children's Hospital	
67.	LCMC Health – New Orleans East Hospital	
68.	LCMC Health – Touro Infirmary	
69.	LCMC Health – University Medical Center	
70.	LCMC Health – West Jefferson Medical Center	
71.	Limb Up	
72.	Lockport City Council	
73.	Louisiana Children's Research Center for Development and Learning	
74.	Louisiana Department of Health	
75.	Louisiana Organ Procurement Agency	
76.	Louisiana Policy Institute for Children	
77.	Louisiana Public Health Institute	
78.	Louisiana Public Health Institute	
79.	Louisiana State University Agricultural Center	
80.	Louisiana State University Health Sciences Center	
81.	Louisiana State University/University Medical Center	
82.	Market Umbrella	
83.	Martin Luther King, Jr. Task Force & West Bank African American Churches	
84.	Methodist Health System Foundation, Inc.	
85.	Metropolitan Human Services District	
86.	New Orleans Chamber of Commerce	
87.	New Orleans Council on Aging	

88. New Orleans Emergency Medicine 89. New Orleans Health Department 90. New Orleans Mission/Giving Hope Retreat 91. New Pathways New Orleans 92. Newman, Mathis, Brady & Spedale 93. NOLA Business Alliance 94. Northshore Community Foundation 95. Northshore Healthcare Alliance 96. Nurse Family Partnership 97. Ochsner Baptist Medical Center 98. Ochsner Health System 99. Ochsner Health System Board of Trustees 100. Ochsner Medical Center – Baton Rouge 101. Ochsner Medical Center – Kenner 102. Ochsner Medical Center – Kenner 103. Ochsner Medical Center – North Shore 104. Ochsner Medical Center – West Bank 105. Ochsner Medical Center – West Bank 106. Ochsner St. Anne Hospital 107. One Haven Inc. 108. People's Health 109. Rainbow Child Care Center, Inc. 110. Ready Responders 111. Regina Coeli Child Development Center 112. River Parish Behavioral Center 113. River Place Behavioral Health a service of Ochsner Health System 114. SAIRP 115. Salvation Christian Fellowship 116. Second Baptist Church 117. Second Harvest Food Bank 118. Slidell Memorial Hospital		Organization Name	
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<ul> <li>105. Ochsner Rehabilitation Hospital in partnership with Select Medical</li> <li>106. Ochsner St. Anne Hospital</li> <li>107. One Haven Inc.</li> <li>108. People's Health</li> <li>109. Rainbow Child Care Center, Inc.</li> <li>110. Ready Responders</li> <li>111. Regina Coeli Child Development Center</li> <li>112. River Parish Behavioral Center</li> <li>113. River Place Behavioral Health a service of Ochsner Health System</li> <li>114. SAIRP</li> <li>115. Salvation Christian Fellowship</li> <li>116. Second Baptist Church</li> <li>117. Second Harvest Food Bank</li> </ul>	103.	Ochsner Medical Center – North Shore	
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110. Ready Responders  111. Regina Coeli Child Development Center  112. River Parish Behavioral Center  113. River Place Behavioral Health a service of Ochsner Health System  114. SAIRP  115. Salvation Christian Fellowship  116. Second Baptist Church  117. Second Harvest Food Bank	108.	People's Health	
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<ul> <li>113. River Place Behavioral Health a service of Ochsner Health System</li> <li>114. SAIRP</li> <li>115. Salvation Christian Fellowship</li> <li>116. Second Baptist Church</li> <li>117. Second Harvest Food Bank</li> </ul>	111.	Regina Coeli Child Development Center	
114. SAIRP  115. Salvation Christian Fellowship  116. Second Baptist Church  117. Second Harvest Food Bank	112.	River Parish Behavioral Center	
<ul> <li>115. Salvation Christian Fellowship</li> <li>116. Second Baptist Church</li> <li>117. Second Harvest Food Bank</li> </ul>	113.	River Place Behavioral Health a service of Ochsner Health System	
116. Second Baptist Church 117. Second Harvest Food Bank	114.	SAIRP	
117. Second Harvest Food Bank	115.	Salvation Christian Fellowship	
	116.	Second Baptist Church	
118. Slidell Memorial Hospital	117.	Second Harvest Food Bank	
	118.	Slidell Memorial Hospital	
119. South Central Planning & Development Commission (SCPDC)	119.	South Central Planning & Development Commission (SCPDC)	
120. St. John Council	120.	St. John Council	
121. St. John Volunteer Citizen	121.	St. John Volunteer Citizen	

	Organization Name
122.	St. Tammany Coroner's Office
123.	St. Tammany Department of Health & Human Services
124.	St. Tammany Parish Clerk of Court; 22nd Judicial District Court
125.	St. Tammany Parish Government Health & Human Services
126.	St. Tammany Parish Hospital
127.	St. Thomas Health Center
128.	Susan G. Komen
129.	The Blood Center
130.	The Haven
131.	The Louisiana Campaign for Tobacco-Free Living
132.	The Metropolitan Hospital Council of New Orleans
133.	The National Alliance on Mental Illness
134.	TPRC
135.	Tulane Lakeside Hospital for Women and Children
136.	Tulane Medical Center
137.	U.S. House of Representatives
138.	UMCNO Forensics
139.	United Healthcare
140.	United Way
141.	United Way for Greater New Orleans
142.	United Way of Southeast Louisiana
143.	UNITY of Greater New Orleans
144.	Vacherie-Gheens Community Center
145.	VIET
146.	Volunteers of America
147.	Well-Ahead Louisiana Region 9
148.	West Jefferson Medical Center
149.	West Jefferson Medical Center Foundation Director
150.	West Jefferson Medical Center; Auxiliary

# Appendix F: Working Group Members

The CHNA was overseen by a committee of representatives from the sponsoring organizations. Members of the Working Group and the organizations they represent are listed in alphabetical order by last name.

Table 18: Working Group Members (Listed aphabetically by last name)

Name	Organization
Jennifer Berger, MBA	Manager, Marketing & Communications
	Business Development
	Slidell Memorial Hospital
Avery Corenswet, MHA, BSN, RN	Vice President of Community Outreach
	Ochsner Health System
Melissa Hodgson, ABC, APR	Director of Communication
	St. Tammany Parish Hospital
Jennifer E. McMahon	Executive Director
	The Metropolitan Hospital Council of New Orleans
Charlotte Parent, RN, MHCM	Assistant Vice President Community Affairs
	Network Navigation
	LCMC Health
Tom Patrias, FACHE	Chief Operating Officer
	Tulane Health System
Megan Perry	Marketing & Communications Coordinator
	Business Development
	Slidell Memorial Hospital
John Sartori	Director of Marketing Communications
	East Jefferson General Hospital
Ha T. Pham	Principal
Na I. Piidiii  -	Tripp Umbach
Parhara Tarry	Senior Advisor
Barbara Terry	Tripp Umbach

# Appendix G: Truven Health Analytics

# **Community Needs Index (CNI) Overview**

Not-for-profit and community-based health systems have long considered a community's needs to be a core component of their mission of service to local communities. While specific initiatives designed to address health disparities vary across local communities (outreach to migrant farm workers, asthma programs for inner city children, etc.), the need to prioritize and effectively distribute hospital resources is a common thread among all providers.

Given the increased transparency of hospital operations (quality report cards, financial disclosures, etc.), community benefit efforts need to become increasingly strategic and targeted in order to illustrate to a variety of audiences how specific programs have been designed and developed. While local community needs assessments will always play a central role in this process, they are often voluminous, difficult to communicate, and may lack necessary qualitative and statistical justification for choosing specific communities as having the "greatest need."

Because of such challenges, Dignity Health and Truven Health Analytics jointly developed a Community Need Index (CNI) in 2004 to assist in the process of gathering vital socioeconomic factors in the community. The CNI is strongly linked to variations in community health care needs and is a strong indicator of a community's demand for various health care services.

Based on a wide-array of demographic and economic statistics, the CNI provides a score for every populated ZIP code in the United States on a scale of 1.0 to 5.0. A score of 1.0 indicates a ZIP code with the least need, while a score of 5.0 represents a ZIP code with the most need. The CNI should be used as part of a larger community need assessment and can help pinpoint specific areas that have greater need than others. The CNI should be shared with community partners and used to justify grants or resource allocations for community initiatives.

#### Methodology

The CNI score is an average of five different barrier scores that measure various socioeconomic indicators of each community using the source data. The five barriers are listed below, along with the individual statistics that are analyzed for each barrier. The following barriers, and the statistics that comprise them, were carefully chosen and tested individually by both Dignity Health and Truven Health:

#### 1. Income Barrier

- Percentage of households below poverty line, with head of household age 65 or older
- Percentage of families, with children under age 18, below poverty line
- Percentage of single female-headed families, with children under age 18, below poverty line

#### 2. Cultural Barrier

- Percentage of population that is a minority (including Hispanic ethnicity)
- Percentage of population, over age 5, that speaks English poorly or not at all

#### 3. Education Barrier

• Percentage of population, over age 25, without a high school diploma

# 4. Insurance Barrier

- Percentage of population in the labor force, age 16 or older, without employment
- Percentage of population without health insurance

# 5. Housing Barrier

• Percentage of households renting their home

Every populated ZIP code in the United States is assigned a barrier score of 1, 2, 3, 4, or 5 depending upon the ZIP national rank (quintile). A score of 1 represents the lowest rank nationally for the statistics listed, while a score of 5 indicates the highest rank nationally. For example, ZIP codes that score a 1 for the Education Barrier contain highly educated populations; ZIP codes with a score of 5 have a very small percentage of high school graduates.

For the two barriers with only one statistic each (Education and Housing), Truven Health used only the single statistic listed to calculate the barrier score. For the three barriers with more than one component statistic (Income, Cultural, and Insurance), Truven Health analyzed the variation and contribution of each statistic for its barrier; Truven Health then weighted each component statistic appropriately when calculating the barrier score.

Once each ZIP code is assigned its barrier scores from 1 to 5, all five barrier scores for each ZIP code are averaged together to yield the CNI score. Each of the five barrier scores receives equal weight (20 percent each) in the CNI score. An overall score of 1 indicates a ZIP code with the least need, while a score of 5 represents a ZIP code with the most need.

#### **Data Sources**

- Demographic data, The Nielsen Company
- Poverty data, The Nielsen Company
- Insurance coverage estimates, Truven Health Analytics

#### **Applications and Caveats**

- CNI scores are not calculated for non-populated ZIP codes. These include such areas as national parks, public spaces, post office boxes, and large unoccupied buildings.
- CNI scores for ZIP codes with small populations (especially less than 100 people) may be less
  accurate. This is due to the fact that the sample of respondents to the 2010 census is too small
  to provide accurate statistics for such ZIP codes.

# Appendix H: Regional Groupings

The table below represents the areas that were representative of each hospital within the MHCNO project.

**Table 19: Regional Groupings** 

Region	Hospital/Health Care Institution
West Bank	LCMC West Jefferson Medical Center
	Ochsner Medical Center - West Bank
North Shore	Ochsner Medical Center – North Shore
	Slidell Memorial Hospital
	St. Tammany Parish Hospital
	Tulane Lakeview Regional Medical Center
New Orleans	LCMC Children's Hospital
	LCMC New Orleans East Hospital (NOEH)
	Touro Infirmary
	LCMC University Medical Center (UMC)
	Ochsner Medical Center - Baptist
Jefferson	East Jefferson General Hospital
	Ochsner Medical Center - Kenner
	Ochsner Medical Center – Main
	Ochsner Rehabilitation Hospital
	River Place Behavioral Health - Ochsner Medical Center
	Tulane Lakeside Hospital
St. Anne (Raceland/Lafourche)	Ochsner Medical Center – St. Anne
Baton Rouge	Ochsner Medical Center – Baton Rouge

# Appendix I: Tripp Umbach

#### **Consultants**

The Metropolitan Hospital Council of New Orleans (MHCNO) along with its partners, East Jefferson General Hospital, LCMC Health, Ochsner Health System, HCA Healthcare (Tulane Medical Center), Slidell Memorial Hospital, and St. Tammany Parish Hospital, contracted with Tripp Umbach, a private health care consulting firm with offices throughout the United States, to complete a community health needs assessment (CHNA) and implementation strategy planning phase. Tripp Umbach has worked with more than 300 communities in all 50 states. In fact, more than one in five Americans lives in a community where our firm has worked.

From community needs assessment protocols to fulfilling the new Patient Protection and Affordable Care Act (PPACA) IRS 990 requirements, Tripp Umbach has turned needs assessments into practical action plans with sound implementation strategies, evaluation processes, and funding recommendations for hundreds of communities. Tripp Umbach has conducted more than 400 community health needs assessments and has worked with over 800 hospitals.

Changes introduced as a result of the PPACA have placed an increased level of importance on population health and well-being and on collaborative efforts between providers, public health agencies, and community organizations to improve the overall health of communities.

