

1. Collaboration Name: The Trauma Informed Network for Community Resilience

2. Name of Lead Entity: Primo Center

3. List All Collaboration Members:

Acclivus; Health Care Council of Chicago; Illinois Childhood Trauma Coalition; Sinai Chicago, and; Meridian Health Plan.

4. Proposed Coverage Area: Service Areas/Zip Codes would include the west, south and southwest Chicago Neighborhoods (Cook County) encompassing the following Zip Codes: 60651, 60622, 60644, 60624, 60612, 60623, 60608, 60616, 60632, 60609, 60653, 60638, 60629, 60636, 60621, 60637, 60652, 60620, 60619, 60649, 60655, 60628, 60617, 60643, 60827, 60633

5. Area of Focus:

We propose the establishment of a first-of-its-kind trauma informed network that is singularly focused on supporting individuals who have experienced a traumatic life experience with qualified, community-based resources that support healing and recovery.

6. Total Budget Requested: \$4,850,000

Project Description

- Does your collaboration include multiple, external, entities? *Response* - Yes
- Can any of the entities in your collaboration bill Medicaid? *Response* - Yes

Participating Entities

- 1) What is the name of the lead entity of your collaborative? *Response* Primo Center
- 2) Please provide primary contact information, secondary contact information, and the Tax ID # of each entity in your collaborative. Please list the lead entity in the top row.

Primo Center

Tax ID #	36-2966006	
Primary Contact	Christine Achre	
Position	CEO	
Email	Cachre@primocentre.org	
Office Phone		
Mobile Phone		
Secondary Contact	Erik Harmon	
Secondary Contact Position	Chief Administrative Officer	
Contact Email	Ehamon@prmocenter.org	

Acclivus

Tax ID #	27-3108215		
Primary Contact	LeVon Stone		
Position	CEO		
Email	Levon.Stone.Sr@acclivusInc.org		
Office Phone			
Mobile Phone			
Secondary Contact	Sheila Regan		
Secondary Contact Position	СОО		
Contact Email	Sheila.regan@acclivusinc.org		

Meridian

Terr ID #	25 1202026		
Tax ID #	35-1302836		
Primary Contact	James Kiamos		
Position	CEO		
Email	James.kiamos@mhplan.com		
Office Phone			
Mobile Phone			
Secondary Contact	Felicia Spivack		
Secondary Contact Position	VP compliance		
Contact Email	Felicia.Spivack@mhplan.com		

Sinai Chicago

Tax ID #	36-3166895		
Primary Contact	Karen Teitelbaum		
Position	President and CEO		
Email	Karen.teitelbaum@sinai.org		
Office Phone			
Mobile Phone			
Secondary Contact	Donnica Austin		
Secondary Contact Position	President Holy Cross Hospital		
Contact Email	Donnica.austin@sinai.org		

Health Care Council of Chicago

Tax ID #	84-3983128
Primary Contact	Meghan Philip
Position	Executive Director
Email	Meghan@HC3.Health
Office Phone	
Mobile Phone	
Secondary Contact	David Smith
Secondary Contact Position	Co-Founder
Contact Email	David.smith@thirdhorizonstrategies.com

 Please upload the most recent IRS Form 990 (including Schedule H, if applicable) for all participants in the collaboration. (Note: These 990s will all have to be compiled into a single PDF file.)

Response - Uploaded

- 2) Please enter the names of entities that provide primary or preventative care in your collaborative. *Response* Holy Cross Hospital provides preventative and primary care services
- Are there any specialty care providers in your collaborative? *Response* - No
- 4) Please enter the names of entities that provide specialty care in your collaborative. *Response* N/A
- 5) Are there any hospital services providers in your collaborative? *Response* Yes
- 6) Please enter the name of the first entity that provides hospital services in your collaborative. *Response* -Sinai Chicago
- 7) Which MCO networks does this hospital participate in? *Response* - YouthCare Blue Cross Blue Shield Community Health Plan CountyCare Health Plan (Cook County only) IlliniCare Health Meridian Health Plan (Former Youth in Care Only) Molina Healthcare
- 8) Are there any other hospital providers in your collaborative? *Response* No

- Please enter the name of the second entity that provides hospital services in your collaborative. *Response* - No
- 10) Which MCO networks does this hospital participate in? *Response* N/A
- 11) Are there any mental health providers in your collaborative?*Response* Yes
- 12) Please enter the names of entities that provide mental health services in your collaborative. *Response* Holy Cross Hospital
- 13) Are there any substance use disorder services providers in your collaborative?*Response* No
- 14) Please enter the names of entities that provide substance abuse disorder services in your collaborative. Response - N/A
- 15) Are there any social determinants of health services providers in your collaborative?
 Response Yes
- 16) Please enter the names of entities that provide social determinants of health services in your collaborative.*Response* Acclivus
- 17) Are there any safety net or critical access hospitals in your collaborative?*Response* Yes
- Please list the names of the safety net and/or critical access hospitals in your collaborative.
 Response -Sinai Chicago
- 19) Are there any entities in your collaborative that are either certified by the Illinois Business Enterprise Program (BEP) or not-for-profit entities that are majorly controlled and managed by minorities? *Response* -N/A
- 20) Please list the names of the entities in your collaborative that are either certified by the Illinois Business Enterprise Program (BEP) or not-for-profit entities that are majorly controlled and managed by minorities.
 Response -N/A
- 21) Please list the Medicaid-eligible billers (firms that can bill Medicaid for services) in your collaborative, and the Medicaid ID for each.*Response* Primo Center & Sinai Chicago
- 22) Below are high-level descriptions of project types that appeared in the Transformation funding statute. Check any that apply to your project; if none apply, please provide a brief description of what kind of entities comprise your collaboration. (This question is informational only and will not affect your eligibility).

Response - Cross-Provider Care Partnerships

23) If you checked, "Other," provide additional explanation here. *Response* -N/A

 24) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - Please see Appendix A - Partner Letters of Support

Project Description

Brief Project Description

1) Provide an official name for your collaboration. NOTE: Please ensure that this name matches the name given in the "Application Name" field in the Project Information form at the beginning of the application.

Response - "Trauma Informed Network for Community Resilience".

Tagline: "Gateways to Hope No wrong door"

- Provide a one to two sentence summary of your collaboration's overall goals.
 Response Create a public utility to support Chicagoans who have experienced a traumainducing event through an on-demand digital application. This digital front door will serve as a gateway to service providers who provide trauma-informed care services tailored to the needs of the individual or family.
- Provide a narrative description of your overall project, explaining what makes it transformational.
 Response Please see Appendix B Concept Paper

Governance Structure

Structure and Processes

1) Please describe in detail the governance structure of your collaboration and explain how authority and responsibility will be distributed and shared. How will policies be formulated and priorities set?

Response - The collaboration will be led and governed by Primo Center. Separately, the collaboration will form a Steering Committee constituted by representatives from collaboration partners and national trauma experts.

 Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)



Accountability

1) How will collaborating entities be made accountable for achieving desired outcomes? How will the collaboration be made accountable for acting prudently, ethically, legally, and with extensive participation from each participating entity? What methods will be used to enforce policy and procedure adherence?

Response - The collaborative parties will forge a binding agreement with HFS following an award with specific accountability measures to ensure fidelity to this proposal. Separately, the collaborative parties will execute binding MOUs committing to execute the respective responsibilities codified under this proposal. The collaborative parties will retain a third party project management firm accountable to the Primo Center board and the Steering Committee to regularly provide information and data requisite to demonstrate the performance of all parties against their respective commitments under the executed MOUs. As it pertains to inter-party performance, the collaborative parties will meet weekly to review project performance and fidelity to milestones. The Primo Center board will have the performance measures as an agenda item in each board meeting. Finally, the Steering Committee will meet each month and report any perceived deviation from project performance or the evidence-base underlying trauma informed care to collaborative party leadership and the Primo Center board.

2) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

New Legal Entity

- Will a new umbrella legal entity be created as a result of your collaboration? *Response* – No
- 2) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response – We do not believe a new legal entity is required to be established to operationalize the tenets of this proposal. We intend to execute the proposed activities and requirements through the Primo Center, leveraging cross-governance, project management, and oversight mechanisms to ensure fidelity to our commitments to the city of Chicago and HFS. Though a new legal entity will not be established, the Steering Committee will be constituted of 50 percent African American leaders. By extension, the Primo Center board is comprised of 38 percent of minorities and holds a firm institutional commitment to diversity, equity, and inclusion principles as it pertains to hiring, professional development, and community engagement.

Payments and Administration of Funds

1) How will you ensure direct payments to providers within your collaboration are utilized for your proposed program's intended purpose? If the plan is to use a fiscal intermediary, please specify.

Response - Primo Center will work with its managed care organization (MCO) partners to remit claims for approved case management and therapeutic services as a means of underwriting the operating costs needed to achieve budget neutrality. Once referrals have been made from Primo Center to collaborative partners for longer-term services and support germane to the clinical disposition of the addressable trauma, the provider partner will remit claims in accordance with their respective relationships and contracts held with MCOs. For any collaborative entities (initially or added in the future) that do not have the capability of billing MCOs for services rendered, Primo Center will function as a fiscal intermediary, facilitating the remittance of claims and reconciling payment for expenditures and resource consumptions by such parties.

 Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)



Racial Equity

High Level Narrative

1) A fundamental focus of healthcare transformation is racial equity. Please provide a high level description of how the design of your proposal incorporates racial equity. (Greater detail will be requested in the questions below.)

Response - Minorities in Chicago experience a disproportionate degree of health and racial inequity. The Trauma Informed Network for Community Resilience is designed to create broader and enhanced access to services capable of supporting the targeting, screening, assessment, triage, and support services for individuals and families who have experienced or are actively experiencing trauma through violence, housing, family, economic, and related mental health challenges.

Racial Equity Impact Assessment Questions

1) Which racial/ethnic groups may be most affected by and concerned with the issues related to this proposal?

Response - Ninety-seven percent of Primo Center's clients and the majority of individuals served by the collaborative parties are African American. Given the service base and the demographic characteristics of the communities targeted by this proposal, our expectation is that the vast majority of individuals served will be minorities, with the majority of individuals being African American.

More specifically, for the zip codes targeted by the collaborative parties under this proposal, nonwhite Black residents constitute 47.28 percent of the population. By extension, Latinx residents constitute 31.74 percent of the population. The total non-white, Latinx and Black residents constitute 79.02 percent of these communities (or 1,076,657 residents).

The attached graphics encompass all zip codes in the collaborative parties' service area and the demographic composition of Black and Latinx community members.

2) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)



Demographics (Non-Hispanic Black), 2015-2019

Created on Metopio | https://metop.io | Data source: American Community Survey (Table B01001) Demographics: Percent of residents within each major demographic group. Use this topic to explore age, gender, and racial/ethnic breakdowns. This topic is expressed as a percent; to see a breakdown of all residents (pie or area chart), use Population (POP).



Demographics (Hispanic or Latino), 2015-2019

Created on Metopio | https://metop.io | Data source: American Community Survey (Table B01001) Demographics: Percent of residents within each major demographic group. Use this topic to explore age, gender, and racial/ethnic breakdowns. This topic is expressed as a percent; to see a breakdown of all residents (pie or area chart), use Population (POP). 3) Have stakeholders from different racial/ethnic groups — especially those most adversely affected or from vulnerable communities — been informed, meaningfully involved and authentically represented in the development of this proposal? Who's missing and how can they be engaged?

Response

Primo Center Community Convening (2019)

The leading agent on the TINCR platform, Primo Center, hosted a community convening with a diverse set of stakeholders, including 150 community members, philanthropists, youth, and other community-based organizations in December of 2019. This community convening focused on addressing and understanding some of the most critical challenges facing local residents including life expectancy gaps, lack of economic opportunities and critical access points to basic health and wellness resources. One of the most universally noted issues raised by those in attendance was trauma, including finding support in the aftermath of traumatic experience, and the lack of being able to connect quickly and easily to the right community resources.

Health Care Council of Chicago (HC3) (2019-2021): Thought leadership convenings and reports

HC3, a supporting partner of the TINCR platform convenes networking and thought leadership discussions focused on health care issues, including healthcare access, health equity and trauma. These events are attended by health care leaders and stakeholders amongst the provider and business communities of Chicago with the purpose of addressing the most critical issues that impact the vitality of the city. Since November of 2019, HC3 has hosted several events covering a variety of topics, but several of which come to terms with the complex issues that the TINCRR application aims to address. See attached overview of topics and additional information with links to the event takeaways, as well as featured leaders and speakers that highlight the critical thinking and cross-sectoral collaboration of thought leaders in support of doing better for our communities.

In March of 2021, HC3 conducted a regional examination of revenue and cost trends compounded that create unfunded liabilities threatening further restrictions to the capacity of, and access to, the city's safety net hospital system. The attached report – The Challenging Future of Chicago's Safety Net – was the culmination of analysis and research outlining the dire outlook for Chicago's critical access hospitals, and how the status quo is no longer a viable option.

4) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response – Please see Appendix C - Safety Net Paper

5) Which racial/ethnic groups are currently most advantaged and most disadvantaged by the issues this proposal seeks to address? How are they affected differently? What quantitative and qualitative evidence of inequality exists? What evidence is missing or needed? *Response* - The Primo Center and TINCR partners are focused on serving the south and west side communities of Chicago. Neighborhoods where the Primo Center serves are primarily African American populations--81% of Austin residents and 95% of Englewood residents. These two communities have suffered decades-long disinvestment and structural racism and today have concentrated poverty, a woeful lack of employment and educational opportunities, and chronic community-based violence. Both Austin and Englewood are categorized by HRSA as medically underserved areas for primary, dental, and mental health care, and as health professional shortage areas. In addition to the lack of health care services, inequity is evinced by life expectancy.

In 2019, 80% of the children served by La Rabida's Trauma Center were Black and 75% had experienced four or more traumas. Sixty-one percent had their first trauma before the age of 6. Children who experience six or more traumatic events have an average lifespan 19 years shorter than children who do not experience this level of trauma. While trauma for these children often occurs within interpersonal relationships, these children will also have been exposed to significant community violence.

On Chicago's Westside, 38% of children live in poverty in Austin, and the rates of child poverty are even more striking in Englewood; over half of children are living in poverty. In both communities 24-25% of adults lack a high school diploma or GED. Both are communities with large numbers of young people; more than 35% of Austin residents are younger than 25 and 29% of Englewood's population is under 19. Thus, making both communities ideal settings for serving TINCR's target population.

TINCR lead partner, Primo Center, currently serves youth and their families where the youth live in two highly underserved communities in Chicago. These children demonstrate risk behaviors that limit their functioning in family, school, or community activities and that may develop into a more serious and persistent illness. They may have PTSD, depression, anxiety, conduct disorders, the early signs of a mood disorder, or are exhibiting antisocial behaviors. In school, these are the students most often excluded, and some are excluded multiple times and mostly have significant histories of trauma.

Children in these communities are exposed to significant community violence on a daily basis. The 2019 Chicago Police Department's Annual Report shows that Austin experienced 5403 violent crimes-an average of 15 per day-including 53 criminal homicides (one/week) and 882 aggravated assault/battery. Englewood experienced 2,056 violent crimes-an average of six per day-including 44 criminal homicides and 1,293 aggravated assault/battery. Furthermore, violence in Chicago during the pandemic has spiraled out of control: in the seven days between April 21st and May 2nd, murders were up 56%, sexual assaults 44%, robbery 37%, aggravated battery 29%, and shootings a whopping 40%. Since the beginning of 2021, ten children have been shot in Chicago and four have died. Much of this violence is concentrated on Chicago's west and south sides. As Gary Sputnik writes about Chicago's west side "violence begets violence." His research shows that those exposed to violence as victims or witnesses become more at risk for developing violent behaviors. Unaddressed community trauma impacts children's self-regulatory skills and can lead to serious mental and physical health problems as they grow into adults. Exposure to multiple traumas, significant adverse life events, and toxic stress has been shown to change brain development and impact attention, learning, and normative stages of growth.

COVID-19's Impact: Unprecedented violence, rising unemployment, and the impact of COVID has compounded mental health issues and the risks for trauma of living in under-resourced neighborhoods. The pandemic has exacerbated an existing environment that can only be described as corrosive to a child's and family's sense of safety and mental health. It has worsened the social determinants of health, including health and health care, education, access to food, housing, and economic stability in Black and Brown communities and exposed significant inequities. Black people are dying from coronavirus at a disproportionately high rate-- while Chicago's Black population is 30%, the percent of Black deaths is nearly 60%. Englewood, the second poorest neighborhood in Chicago, has seen the most coronavirus deaths. As Chicago schools moved to remote learning, children in the west and south side communities have been left behind: 34% of children in Austin and 38% in Englewood lacked internet access, compared to 20% in all of Chicago. Many Black and Brown residents of Chicago have essential jobs, such

as transportation and health care, which increased their and their loved one's risk of exposure to COVID-19. And from June to November 2020, Black Zip codes on Chicago's south and west sides recorded the highest rate of unemployment claims per 1,000 working-age people.

The Primo Center and TINCR partners all have a vested interest in working to overcome such inequities, both on the front lines of care in underserved communities and in activating against the dominant norms that have worked to repress Black and Brown families. Most of the TINCR partners are from these communities or aim to serve these communities

- 6) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- 7) What factors may be producing and perpetuating racial inequities associated with this issue? How did the inequities arise? Are they expanding or narrowing? Does the proposal address root causes? If not, how could it?

Response - There are a myriad of different factors that are both causally related to and perpetuate racial inequities in the communities of focus for this proposal. The most significant factor is found in limitations to accessible services across the biopsychosocial spectrum. Some key indicators of this asymmetry between these communities and the broader city of Chicago can be found in clinician access. For example, for every 100,000 residents of the city's north side, there are 1,710 primary care physicians (PCP), while on the city's south side only 795 PCPs are available. Comparatively there are 59.9 percent fewer OB/GYN and 67.8 percent fewer Cardiologists available between these two regions. Underlying this are the various, definable traumatic circumstances and/or events that research-based evidence indicate requisite support services. Chronic disease prevalence, housing insecurity, insufficient access to food, poverty, isolation, violence, and addiction are all disproportionately prevalent in the targeted service area of the city (as shown in the attached data). Working these variables in reverse order, we believe that underlying socially deterministic gaps have a causal relationship to increased mortality and chronic disease, in turn driving a higher need and demand for critical services, most of which are inadequately provided in the communities of interest. Since the underlying socially deterministic gaps are trauma-related in nature, we believe this proposal serves to organize resources upstream, capable of proactively addressing inequities and working to reduce the worsening of physical and mental health deterioration and preserving health stock that would reduce life expectancy variation and promote economic development.

8) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

	West Side	South Side	Chicago
Current Asthma	10.0%	10.3%	9.1%
Arthritis	19.9%	23.7%	21.9%
Coronary Heart Disease	5.6%	6.5%	5.9%
High Cholesterol	28.3%	30.9%	28.4%
Chronic Kidney Disease	3.5%	3.9%	3.4%
Diagnosed Diabetes	13.0%	14.6%	12.2%
COPD	7.1%	7.7%	6.7%
High Blood Pressure	32.8%	37.9%	32.8%
Obesity	37.2%	38.3%	33.0%
Diagnosed Stroke	3.8%	4.5%	3.6%

North Side		South Side	
1,710		795	Primary Care Physician per 100,000 Residents
229	V	s 92	OB/GYN per 100,000 Residents
112		36	Cardiologists per 100,000 Residents
10		30	Endocrinologists per 100,000 Residents

	West Side	South Side	Chicago
Living in Food Desert	0.3 %	0.9%	2.6%
Food Stamps (SNAP)	29.7%	29.5%	18.9%
Households in Poverty not receiving SNAP	42.4%	39.5%	46.8%
Low food access	17.7%	30.5%	27.6%
Very low food access	0.5%	1.7%	4.4%

		<u> </u>	
	West Side	South Side	Chicago
Eviction Rate	1.2%	1.8%	1.1%
Prevalence of Housing Choice Vouchers	9.5%	16.6%	9.6%
Crowded Housing	5.4%	3.6%	3.7%
Moved to county in past year	13.6%	10.2%	11.5%
Severely rent burdened	27.7%	31.1%	24.6%
Median Gross Rent	\$1,057.00	\$892.00	\$1,047.00





	West Side	South Side	Chicago
Poverty Rate	27.9%	25.0%	19.5%
Hardship Index*	26.5%	26.0%	23.3%
Deep Poverty	13.3%	11.7%	9.0%
Below 150% Poverty Level	41.6%	38.2%	31.8%
Below 200% Poverty Level	51.7%	49.7%	39.6%
Poverty Rate for Wokers	12.3%	10.8%	8.0%
	West Side	South Side	Chicago
Preschool enrollment	60.8%	54.9%	58.4%
9th grade education rate	88.5%	90.9%	92.2%
High school graduation rate	75.7%	81.1%	84.5%
College graduation rate	27.6	21.3	38.4%

9) What does the proposal seek to accomplish? Will it reduce disparities or discrimination? *Response* - This proposal seeks to establish a utility that can be leveraged by any Chicagoan to access information, tools, and professional resources equipped to support recovery from traumatic events. The trauma app itself will be designed to serve as a "digital front door," where a resident can access information and tools without the requirement of providing individual information, promoting utilization from those who are fearful of stigma or interested in preserving autonomy and confidentiality.

For residents who seek to move beyond information and tools, the trauma app and trained case managers will leverage trauma-informed evidence-based practices to screen, assess, and triage various forms of trauma and refer residents to specialized community resources based on clinical disposition.

The proprietary case management system associated with the trauma app will support closedloop referrals (either through integration with partners' native electronic medical records or an instance of the case management system installed at the partner site). The case management system will feed a trauma-informed registry with a highly scrutinized permissions structure, allowing for researchers, policymakers, and officials to access key data on community trauma, allowing for improved community engagement and policy responsiveness to further addressing the underlying factors that drive trauma throughout Chicago's neighborhoods.

- 10) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- 11) What are negative or unforeseen consequences and positive impacts/opportunities for equity as a result of this proposal? Which racial/ethnic groups could be harmed or could benefit? How could adverse impacts be prevented/minimized and equitable opportunities be maximized? *Response* We do not anticipate negative unintended consequences as a result of this proposal. There are however certain critical elements that will require strong controls.

One such area is in external party access to the trauma-related data being gathered and organized through the available proprietary registry and dashboards operated by the collaborative parties. For example, it will be important that civic institutions such as the Chicago Police Department or Chicago Public Schools can access data in ways to improve operations and engagement, while adhering to a data permission structure that does not compromise the privacy of Chicago residents that have used these systems to access supports.

Another key area is ensuring that the core digital platforms and the initial and ongoing provider partners are culturally and structurally competent to address the distinct needs of different neighborhoods and their associated ethnic communities. More specifically, ensuring multi-lingual supports and an understanding of cultural, ecclesiastical, to social norms and customs will be critical to most appropriately address individual residents based on their unique needs.

The final area of interest will be to ensure that the algorithms driving the AI-interface engine are not built in ways that incorporate racially intolerant or insufficiently competent systems that could exacerbate racial inequities or insensitivities.

The Steering Committee, constituted by national and local trauma leaders is uniquely positioned to mitigate these risks and identify any other unanticipated risk factors that could lead to unintended consequences.

- 12) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- 13) Are there better ways to reduce racial disparities and advance racial equity? What provisions could be changed or added to ensure positive impacts on racial equity and inclusion?

Response - Our view of this question is more broadly applicable to the other changes that could be made by the community-based organizations along the biopsychosocial spectrum and/or city, county, and state leadership. Chicago does not currently have a system capable of observing and organizing information that can provide clear and material intelligence needed to hyper-focus on the underlying, structural causes of trauma. The deficit of such intelligence leaves policy makers, philanthropists, and stakeholders bereft of the insights to be highly focused and tactical in addressing such gaps. The underlying registry will be made accessible to such leaders (with associated strict permission structures designed to protect the privacy of residents) to leverage in addressing such gaps, which we believe could have a material impact on racial disparities over time.

- 14) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- 15) Is the proposal realistic, adequately funded, with mechanisms to ensure successful implementation and enforcement? Are there provisions to ensure ongoing data collection, public reporting, stakeholder participation and public accountability?

Response - We believe that the underlying elements driving this proposal are realistic given the substantive advancements in industry technology over the last three years. Said differently, we do not believe the proposed model and conjoining digital infrastructure could have been adequately executed in 2018 or before. The key element to ongoing data collection and providing regular and ongoing intelligence to stakeholders and policymakers is found in the custom registry that will be designed to amalgamate trauma-related data and insights (adhering to strict permission sources designed to protect resident privacy). Provisions encompassed in the collaborative parties' agreement with HFS and the governance and oversight edicts inculcated in the structures of the Primo Board and Steering Committee will support transparency amongst and between provider partners and to the community more broadly.

- 16) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
- 17) What are the success indicators and progress benchmarks? How will impacts be documented and evaluated? How will the level, diversity and quality of ongoing stakeholder engagement be assessed?

Response - The most critical indicators of this proposal's success will be based on data showing the utilization of the various technology platforms. The primary objective is to drive community awareness (through marketing, partnerships, and word of mouth) that would drive residents to download and leverage the resources of the trauma app. Given our expectation of an elevated and persistent level of demand for such resources, we anticipate a utilization growth curve that demonstrates an ever-growing number of Chicagoans turning to this tool as a means of investigating or directly addressing experienced traumas. The underlying demand for and utilization of the trauma app will serve as a predicate for related volumes of residents accessing direct services through the case management system. The utilization of the case management system will provide clear data on the type and disposition of such traumas, the success of care transitions, and the efficacy of such transitions (particularly when conjoined with claims data from participating MCO partners). Finally, the registry itself will continue to grow in direct correlation to the utilization of these two digital platforms, providing an ever growing body of statistically significant evidence through which to make stakeholder and/or policymaker-based decisions. Further, the registry system will be capable of tracking the external parties mining the data to curate critical insights relevant. These data will be important to identifying the entities benefitting from the data infrastructure tracking trauma throughout the city and relatedly isolating entities not making use of the resources (but whose actions could be positively influenced by such utilization).

18) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - N/A

Community Input

Service Area of the Proposed Intervention

- Identify your service area in general terms (e.g., "West Chicago", "East St. Louis Metro Area", "Southeastern Illinois").
 Response - West, South, and Southwest Chicago
- Please select all Illinois counties that are in your service area. (NOTE: Selecting a county does not mean that your intervention must service the entire county.)
 Response Cook
- 3) Please list all zip codes in your service area, separated by commas.
 Response 60651, 60622, 60644, 60624, 60612, 60623, 60608, 60616, 60632, 60609, 60653, 60638, 60629, 60636, 60621, 60637, 60652, 60620, 60619, 60649, 60655, 60628, 60617, 60643, 60827, 60633

Community Input

1) Describe the process you have followed to seek input from your community and what community needs it highlighted.

Response - Primo Center Community Convening (2019)

The leading agent on the TINCR platform, Primo Center, hosted a community convening with a diverse set of stakeholders, including 150 community members, philanthropists, youth, and other community-based organizations in December of 2019. This community convening focused on addressing and understanding some of the most critical challenges facing local residents including life expectancy gaps, lack of economic opportunities and critical access points to basic health and wellness resources. One of the most universally noted issues raised by those in attendance was trauma, including finding support in the aftermath of traumatic experience, and the lack of being able to connect quickly and easily to the right community resources.

Health Care Council of Chicago (HC3) (2019-2021): Thought leadership convenings and reports

HC3, a supporting partner of the TINCR platform convenes networking and thought leadership discussions focused on health care issues, including healthcare access, health equity and trauma. These events are attended by health care leaders and stakeholders amongst the provider and business communities of Chicago with the purpose of addressing the most critical issues that impact the vitality of the city. Since November of 2019, HC3 has hosted several events covering a variety of topics, but several of which come to terms with the complex issues that the TINCRR application aims to address. See attached overview of topics and additional information with links to the event takeaways, as well as featured leaders and speakers that highlight the critical thinking and cross-sectoral collaboration of thought leaders in support of doing better for our communities.

In March of 2021, HC3 conducted a regional examination of revenue and cost trends compounded that create unfunded liabilities threatening further restrictions to the capacity of, and

access to, the city's safety net hospital system. The attached report – The Challenging Future of Chicago's Safety Net - was the culmination of analysis and research outlining the dire outlook for Chicago's critical access hospitals, and how the status quo is no longer a viable option.

2) Optional - Please upload any documentation of your community input process or findings here. (Note: if you wish to include multiple files, you must combine them into a single document.) **Response** – Please see Appendix C - Safety Net Paper and Appendix D - Community Input

Input From Elected Officials

- 1) Did your collaborative consult elected officials as you developed your proposal? **Response** – Yes
- 2) If you consulted Illinois Federal or State legislators, please select all the legislators you consulted. Davis D. - US Representative -7th Congressional District, Ford, L – IL State Representative -8th Representative District
- 3) If you consulted local officials, please list their names and titles here. Mayor Lori Lightfoot – Office of Public Health
- 4) If you consulted local officials, please list their names and titles here. **Response** - See Above
- 5) [Input from Elected Officials Optional] Please upload any documentation of support from or consultation with elected officials. (Note: if you wish to include multiple files, you must combine them into a single document.) **Response** – Please see Appendix E - Elected Officials Letters of support

Data Support

- 1) Describe the data used to design your proposal and the methodology of collection. Response -We used data from the population analytics platform Metop.io to identify the target service area for this proposal and the underlying socio-economic and demographic insights to validate the demand-related needs for these services. For the model itself, we used evidence-based research to support the principles behind the digital front door, case management, and referral management systems.
- 2) Attach the results of the data analyses used to design the project and any other relevant documentation. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response - All data outputs, tables, and maps are uploaded through the various components of this application.

Health Equity

1) Name the specific healthcare disparities you are targeting in your service area, including by race and ethnicity. Describe the causes of these disparities that your project specifically seeks to address and explain why you have chosen to address these causes.

Response - Chicagoans in the city's south and west sides have disproportionately lower access to mental health professionals trained to support trauma-informed care. In most cases, individuals and families that have experienced trauma have limited knowledge of the entities that can support trauma-related needs. Mental health disorders sit at the heart of the trauma orientation of this proposal.

Separately, two of this proposal's initial collaborating entities uniquely focus on traumas related to violence and housing. A separate entity focuses on youth and adolescents, with a unique focus on family stability and education.

Our intention is to launch the Trauma Informed Network for Community Resilience with these initial partners and expand to incorporate other community based organization collaborators that either overlap or extend the topic areas of focus for technology infrastructure and the broader model.

- Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.) *Response* - N/A
- 3) What activities will your collaborative undertake to address the disparities mentioned above? What immediate, measurable, impacts will follow from these activities that will show progress against the obstacles or barriers you are targeting?

Response - This collaborative's goal is to create a universally accessible digital platform to any individual with a connected device to seek out resources and support in recovering from a trauma-related event.

The success of this approach can be gauged by observing utilization of the app itself, the number of successful transitions of care to affiliated trauma-informed providers of care, and comparing the baseline utilization of partnering providers with numbers reconciled from digital app referrals.

- 4) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - N/A
- 5) Why will the activities you propose lead to the impact you intend to have? *Response* - Chicago residents who have experienced trauma face social stigma and barriers to access that frequently preclude or increase the difficulty of accessing services capable of directly supporting the specific needs related to traumatic events. This proposal mitigates those barriers by creating a private, on-demand, and highly-coordinated system of care designed to meet residents where they are.
- 6) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - N/A

Access to Care

1) Name the specific obstacles or barriers to healthcare access you are targeting in your service area. Describe the causes of these obstacles that your project specifically seeks to address and explain why you have chosen to address these causes.

Response - While Chicago is often heralded as the City of Broad Shoulders, it also has a legacy of residential segregation as a result of discriminatory 20th century housing and segregation policies. Limited economic investment in communities with larger African-American and Latinx populations has led to structurally vulnerable neighborhoods with crowded housing, food insecurity, economic divestiture and employment instability, higher rates of uninsured residents, and increased reliance on crowded public transit. Access to healthcare on the south and west sides of Chicago look starkly different from that of other parts of the city. The 2012 closures of the city's community mental health centers exacerbated a structural void in services and access to behavioral health services, particularly in Chicago's South and West sides. Historically, people who have experienced trauma are less likely to seek routine or preventive health care.

The COVID-19 pandemic significantly underscored these disparities as COVID-19 mortality in neighborhoods on the South and West areas of the city have been found to continue to reflect the legacy of residential segregation and persistence of inequality in education, income, and access to healthcare. It is our belief that a coordinated multi-stakeholder approach is necessary to address the deep rooted and long-term resource divestiture that has occurred in these communities.

To make significant and lasting change, we believe we must also address the intersection of trauma and social determinants of health. The Trauma Informed Network for Community Resilience collaborative will monitor the management of at-risk individuals, allowing our project partners to better serve not only their basic needs, including safe and affordable housing and access to nutritious foods, in addition to the more complex and challenging parts of the overall health and well-being of these communities. We will therefore improve access to quality healthcare through a trauma-informed network that will empower individuals by providing them with the information and resources necessary to navigate our health care system efficiently and without the traditional barriers to service.

Finally, an a priori approach to trauma in Chicago's vulnerable communities will never address the causal drivers of access-based inequities as the demand for higher acuity biopsychosocial services will only grow. The safety net's capacity to sustain this increased demand is highly limited as manifested by key hospital closures over the last three years.

- 2) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response Please see Appendix C Safety Net Paper
- 3) What activities will your collaborative undertake to address the disparities mentioned above? What immediate, measurable, impacts will follow from these activities that will show progress against the obstacles or barriers you are targeting?

Response - Through the trauma app, individuals will be able to immediately access supportive tools in real time. The application will be enabled by an artificial intelligence (AI) machine learning algorithm to augment human interaction, screening, and assessment by providing real-time access to data for every person and key decisions that would not require the interaction of a clinical professional. In all cases, community members may elect to engage directly with a case manager for direct support, regardless of any interaction with the AI-enabled communication features of the app. This will provide an opportunity for individuals to be assessed and triaged to the right supportive services to alleviate traumarelated symptoms. Low-income communities will benefit the greatest because of the highly accessible nature of the tool. Community members can utilize the tool without providing any direct, identifying information. If a community member seeks to activate a case with the system or a professional, data structures and permissions will be enabled to maximize the confidentiality and autonomy of the individual.

The architecture of the trauma app will follow user-based design principles, engaging community members as the end-users of the utility to actively influence and shape features, algorithms, and accessibility features.

The use of AI will remove the complexities, barriers, and stigma for community members seeking support for trauma-related care and support services. Additionally, the use of an AI provider will alleviate individuals' time to perform tasks, provide immediate support to community members 24 hours a day and seven days a week, and empower individuals with ownership of their experience and information. The app will be designed to meet the needs of the community in the right way, at the right place, and at the right time.

Data collection will inform best practices for coordinated care, mapping opportunities to meet the individual needs of patients and help us improve upon the services offered. Overall, reduction in health disparities, increased socioeconomic status and better health outcomes will ultimately ease the negative impact of trauma in our most vulnerable communities.

- 4) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- 5) Why will the activities you propose lead to the impact you intend to have? *Response* - The evidence and data show a high prevalence of trauma-related disorders and ailments throughout the targeted service area. Chicago does not suffer from a deficit of trauma-informed evidence regarding supportive practices to remediate or aid in recovery from traumatic episodes, but lacks a sufficiently coordinated infrastructure and a "no wrong door" approach to individuals or families needing or seeking support. We believe that the availability of this utility provides for a no-risk pathway to any Chicagoan seeking to better understand and address an underlying or active trauma. As a result, this utility will provide readily available access to the evidence-based resources currently present in the city at higher volumes and get more Chicagoans the support needed to optimize well-being, health, and economic opportunity.
- Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.) *Response* N/A

Social Determinants of Health

1) Name the specific social determinants of health you are targeting in your service area. Describe the causes of these social determinants that your project specifically seeks to address and explain why you have chosen to address these causes.

Response - The TINCR will address three Social Determinants of Health:

- Social and Community Support
- Health Care Access and Quality
- Neighborhood and Built Environment

As Thomas Frieden's five-tier Health Impact Pyramid suggests, interventions targeting socioeconomic factors that drive health disparities across multiple conditions will have the greatest health impact on individuals ¹. Thus, our project will focus on the aforementioned factors, while addressing one of the most significant barriers to wellness – trauma. Research suggests that trauma arising between the ages of 18 and 30 years, as well as ages 31 to 64 years, has the strongest relationship with current health². Experiencing a traumatic event has been linked to poor physical outcomes³ and can be more challenging when one's environment is not properly set up to address the fragility of someone healing from trauma⁴. Trauma impacts 62–90% of the adult population in the United States^{5,6}, with members of racial/ethnicity minority and socioeconomically disadvantaged groups bearing a disproportionate burden⁷.

By utilizing the TINCR App, individuals experiencing trauma will be empowered to engage in numerous activities that will build resiliency and help the individual re-gain control at their own pace. The TINCR App is an access point for care AND an even more important tool that can be used to identify the resources needed in a timely manner. Resources provided by TINCR providers and partners will identify individual and community social determinants of health. Finally, the innovation that the TINCR App brings to the field of mental health assessment and support is the use of AI to remove the complexities, barriers, and stigma of seeking and receiving appropriate and effective care.

¹ Frieden, T. R. (2010). A framework for public health action: the health impact pyramid. *American journal of public health, 100*(4), 590-595.

² Krause, N., Shaw, B. A., & Cairney, J. (2004). A descriptive epidemiology of lifetime trauma and the physical health status of older adults. *Psychology and aging*, *19*(4), 637–648. <u>https://doi.org/10.1037/0882-7974.19.4.637</u>

³ Pietrzak, R. H., Goldstein, R. B., Southwick, S. M., & Grant, B. F. (2012). Physical health conditions associated with posttraumatic stress disorder in U.S. older adults: results from wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of the American Geriatrics Society*, *60*(2), 296–303. <u>https://doi.org/10.1111/j.1532-5415.2011.03788.x</u>

⁴ Schroeder, K., Noll, J. G., Henry, K. A., Suglia, S. F., & Sarwer, D. B. (2021). Trauma-informed neighborhoods: Making the built environment trauma-informed. *Preventive medicine reports*, *23*, 101501. <u>https://doi.org/10.1016/j.pmedr.2021.101501</u>

⁵ Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of traumatic stress*, *26*(5), 537–547. <u>https://doi.org/10.1002/jts.21848</u>

⁶ Merritt, J., & Benningfield, M. (2019). Lessons From the Street Through a Homeless Youth with Depression. *Psychiatric services* (*Washington, D.C.*), *70*(6), 526–527. <u>https://doi.org/10.1176/appi.ps.70601</u>

⁷ Merritt, J., & Benningfield, M. (2019). Lessons From the Street Through a Homeless Youth with Depression. *Psychiatric services* (*Washington, D.C.*), *70*(6), 526–527. <u>https://doi.org/10.1176/appi.ps.70601</u>

Individuals accessing the TINCR App will utilize an interface that links the information received by an individual to a case management system that registers the traumatic event and also supports care transitions. It is within the context of care transitions where our project will impact the aforementioned social determinants of health through a variety of interventions, including but not limited to:

• Social and Community Support

• Violence Interruption and Prevention

Through our partnership with Acclivus, we will provide resources and support to assist at-risk Chicago residents with personal and professional growth. Acclivus' goal is for each person to thrive as they overcome social challenges that may include but are not limited to chronic exposure to violence and trauma, poverty, a criminal background, disproportionately high rates of serious health conditions, and limited formal education. In partnership with the Jane Addams Center for Social Policy and Research, Acclivus provides programs and services to address trauma, decrease health disparities, reduce incarceration, enhance educational opportunities, and increase employment options for individuals and their communities. Acclivus supports community health and well-being for Chicago area populations at risk for violence and other negative health outcomes.

• Health Care Access and Quality

• Food Access and Nutrition Support:

The Primo Center currently collaborates with several partners including the Greater Chicago Food Depository and Kennedy King to provide food access to clients. In addition, the Primo Center also operates Englewood Community Kitchens⁸, which is open to the greater community to address food insecurities and nutritional education.

• Neighborhood and Built Environment

• Housing Access and Security

against the obstacles or barriers you are targeting?

The Primo Center is Chicago's largest provider of services and shelter for families and children experiencing homelessness. The Primo Center is focused on ensuring the stability of women, children, and families through their housing services. The organization has considerable experience as a provider of services to families affected by extreme poverty and homelessness.

 Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - N/A

 What activities will your collaborative undertake to address the disparities mentioned above? What immediate, measurable, impacts will follow from these activities that will show progress

Response - The TINCR App will have a particularly strong effect on low-income communities because it will provide access to care and self-care with little effort and cost. This will lead to less severe symptoms and effects of trauma and soften the blow of the negative impact of trauma to underserved communities. Through the collaborative service areas of our collective partners,

⁸ Primo Center. (n. d.). *Englewood Community Kitchens*. <u>https://www.primocenter.org/eck/</u>

we will be able to address the complex needs of patients through a coordinated care model. The technology of the collaborative's system will enable provider and community partners to better track, manage and address the needs of patients as they navigate any challenges economically or socially. Through a closed loop referral platform, we believe we will better be equipped to anticipate and monitor any gaps or pitfalls for patients as they access supportive services as they are needed. Patients will be empowered by a digital application that offers them the ability to also be proactive in their care plan and offers them the tools and resources that they need at their convenience. Thus, we believe the Trauma-Informed Network will have an immediate, measurable impact on all the SDOHs measures noted above.

4) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response – N/A

5) Why will the activities you propose lead to the impact you intend to have? *Response* – The TINCR App will be in the vanguard of using Artificial Intelligence (AI) to augment human decision-making by providing real-time access to data for every person, process, and decision. Its use of AI will provide a fast, effective, easy-to-use, low-barrier way for the general public to assess themselves and find help to alleviate their trauma-related symptoms. The TINCR App will have a particularly strong effect on low-income communities because it will provide access to care and self-care with little effort and cost. This will lead to less severe symptoms and effects of trauma and soften the blow of the negative impact of trauma to underserved communities.

The primary advantages of using AI as the technology base for the Trauma App are:

- drives down the time taken to perform a task;
- operates 24/7 without interruption and has zero downtime;
- augments the capabilities of differently abled individuals, and;
- facilitates decision-making by making the process faster and smarter.

The data collection and aggregate information collected on each patient will be leveraged by tools and resources for us to map and address at-risk individuals needs accordingly. Our ability to better understand how patients are being supported will allow us to better serve them and future patients.

Finally, we will utilize Rapid Cycle Evaluation⁹ to quickly evaluate program or process changes necessary to continual quality improvement to ensure the features of the TINCR App are achieving the results expected.

6) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - N/A

⁹ Keith, R.E., Crosson, J.C., O'Malley, A.S. *et al.* Using the Consolidated Framework for Implementation Research (CFIR) to produce actionable findings: a rapid-cycle evaluation approach to improving implementation. *Implementation Sci* **12**, 15 (2017). <u>https://doi.org/10.1186/s13012-017-0550-7</u>

Care Integration and Coordination

1) Describe how your proposal improves the integration, efficiency, and coordination of care across provider types and levels of care.

Response - The nature of trauma is in itself multifaceted, transcending a range of different causal factors and correlated (evidence-based) support services that tend to be highly fragmented and often unknown to community leaders and residents. The Trauma Informed Network for Community Resilience concept is designed to create the level of integration and coordination that removes barriers from residents by providing a single front door with technology and case management supports that connect residents to a broader range of specialized, trauma-informed mental health and social professionals. The collaborating parties will organize a network of tiered trauma-informed service providers that allow for patient referrals when a resident has engaged with the digital platform and the triage process has identified specific needs that are reconciled with the specific services available in the community.

- 2) Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- Do you plan to hire community health workers or care coordinators as part of your intervention? *Response* – Yes
- Please submit care coordination caseload numbers and cost per caseload (stratified by risk, if applicable). Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response - The model design calls for the capacity to move high volumes of community members through the assessment, screening, triage, and referral process. Though the trauma app will contain resources to support trauma recovery, higher acuity instances will be referred to network partners and have fidelity to the case load limitations and protocols established by clinical acuity. As such, we anticipate the caseload capacity for each centrally managed case manager to be 50 individuals, though we anticipate the timeframe for these support services to be no greater than 96 hours.

- 5) Are there any managed care organizations in your collaborative? *Response* Yes
- Please list the names of the managed care organizations in your collaborative.
 Response Meridian (a subsidiary of Centene Corporation) is a participating organization under this proposal.
- If no, do you plan to integrate and work with managed care organizations *Response* - N/A
- Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.) *Response* - N/A

Minority Participation

1) Please provide a list of entities that will be a part of your collaboration/partnership that are certified by the Illinois Business Enterprise Program (BEP) and/or not-for-profit entities majorly controlled and managed by minorities that will be used on the project as subcontractors or equity partners.

Response - Primo Center and Acclivus are minority and women led and managed. Sinai Chicago's management team is 27 percent constituted by minority leaders. It's Board of Directors is majority minority governed, with Board leadership under a Black professional. The Steering Committee and Primo Board will hold itself accountable to a measure that prioritizes contractors and hired professionals representative of minority communities as key to the function of the Trauma Informed Network for Community Resilience.

2) Please describe the respective role of each of the entities listed above, and specify whether they will have a role only during the implementation of your proposal or if they will have a role in the ongoing operation of your transformed delivery system.

Response - Every collaborating partner in this proposal will have a role during implementation and on an ongoing basis post-operationalization.

Each collaborative partner will hold a seat on the Steering Committee, providing direct line of sight and transparency to the project's implementation and operation. This mechanism will also afford highly specific input and contributions from all parties in the design and implementation process.

Primo Center will be the primary operator of the technology resources following implementation.

All participating provider entities will be equipped to receive referrals through the Trauma Informed Network for Community Resilience's case management system, either through direct EMR integration (using HL7 FHIR transmission protocols) or through an installed instance of the case management platform at the partnering provider's site. Clinically appropriate services will be provided to the community member in accordance with their certifications, accreditation, and competencies. Payment for services will follow mechanisms between the provider partner and contracted MCOs.

Meridian's role as one of the primary MCOs in the state of Illinois will be to streamline the reimbursement process for provider partners and to engage in alternative payment model ideation for specific trauma applications.

Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - Please see Appendix F - Minority Organization Letters of Support

Jobs

1) For Collaborating providers, please provide data on the number of existing employees delineated by job category, including the zip codes of the employees' residence and benchmarks for the continued maintenance and improvement of these job levels.

Response - Primo Center, Acclivus and Sinai Chicago are all leaders in ensuring that its workforce reflects the communities where our participants reside. Each organization prioritizes recruiting staff from the community served, as well as persons with lived experiences. For example, the Primo Center's employee profile reflects 91% African American staff who support 97% of our participant base. In all aspects of the organization, the agency prioritizes persons with lived experiences and are represented in its governance, professional as well as paraprofessional staff. Through targeted recruitment, professional training for peer led positions, leave for college classes and paid for certifications for our staff, the agency consistently maintains a high standard of professional development opportunities.

 Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response - Please see Appendix G - Employee Data File

New Employment Opportunities

- Please estimate the number of new employees that will be hired over the duration of your proposal.
 Response 25
- Describe any new employment opportunities in the future alignment of your proposal and how those opportunities reflect the community you serve.
 Response We anticipate that between Primo Center and its collaborating partners an initial 20 FTW staff positions will be created and filled. As volumes increase over the course of time and the economics of the model can substantiate, additional staff will be added in accordance with demand and need.
- Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response N/A
- 4) Please describe any planned activities for workforce development in the project. *Response* - Each of the partnering provider entities focus on professional development and educational opportunities for individuals who have experienced trauma and have a commensurate economic opportunity gap. Additional community-based organizations will work with each provider collaborator to assist in academic enrollment, resumes, interview skills, and job placement opportunities.

We see poverty and economic immobility as a commonly co-occurring dynamic with individuals experiencing trauma. Hence, the focus of collaborative partners on economic opportunity is endemic to a trauma-focused recovery ecosystem.

 Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.) *Response* – N/A

Quality Metrics

Alignment with HFS quality Pillars

- Tell us how your proposal aligns with the pillars and the overall vision for improvement in the Department's Quality Strategy.
 Response - The Trauma Informed Network for Community Resilience aligns with each of the five HFS pillars. The underlying nature of trauma overlaps with maternal and child health, adult behavioral health, equity, community placement and pediatric behavioral health. We highlight the specific points of impact and the associated metrics for measuring performance in the questions below
- Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)
 Response - N/A
- 3) Does your proposal align with any of the following Pillars of Improvement?

a. *Maternal and Child Health? Response* - Yes

Maternal and Child Health: Propose measurable quality metrics you propose to be accountable for improving. You should choose at least one metric from the quality strategy. *Response* – Through our partnership with Lurie's Center for Childhood Resilience and Primo Center, the evidence-based approaches to childhood trauma and care are best-in-class. At this point there is not a partner who will be uniquely focused on maternal care, though Sinai Chicago has extensive resources capable of supporting women through the perinatal process, particularly in instances where a traumatic event may be interfering or disrupting pregnancy.

b. *Adult Behavioral Health? Response* - Yes

Adult Behavioral Health: Propose measurable quality metrics you propose to be accountable for improving. You should choose at least one metric from the quality strategy.

Response - The Trauma Informed Network for Community Resilience is designed to meet many of the objectives outlined by HFS' Quality Framework. Specifically, this project will focus on improving access to care (measured by volume), increasing the effectiveness of coordinating care (measured through referrals and closed-loops post-referral as a means of gauging care transitions), screening (measured by the volume of AI enabled interactions facilitated through the trauma app), creating a consumer-centric delivery system (accomplished through the unique case management system and measured by variation of data captured through the network's registry), eliminating disparities through evidence-based care approaches (measured by demographic information captured upon referral and the long-term effects on disparities as measured by public health data), advancing value-based models (measured by the collaborative entities various arrangements with Meridian and/or other participating MCOs), and the deployment of technology (measured by improvements in access to care vis-a-vis the publicly available trauma app as a digital front door). Each of these areas are germane to adult behavioral health.

[Adult Behavioral Health - Optional] Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.) *Response* - N/A

c. Child Behavioral Health? *Response* - Yes

Child Behavioral Health: Propose measurable quality metrics you propose to be accountable for improving. You should choose at least one metric from the quality strategy. *Response* - The Trauma Informed Network for Community Resilience is designed to meet many of the objectives outlined by HFS' Quality Framework. Specifically, this project will focus on improving access to care (measured by volume), increasing the effectiveness of coordinating care (measured through referrals and closed-loops post-referral as a means of gauging care transitions), screening (measured by the volume of AI enabled interactions facilitated through the trauma app), creating a consumer-centric delivery system (accomplished through the unique case management system and measured by variation of data captured through the network's registry), eliminating disparities through evidence-based care approaches (measured by demographic information captured upon referral and the long-term effects on disparities as measured by public health data), advancing value-based models (measured by the collaborative entities various arrangements with Meridian and/or other participating MCOs), and the deployment of technology (measured by improvements in access to care vis-a-vis the publicly available trauma app as a digital front door). Each of these areas are germane to child behavioral health.

Child Behavioral Health – Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document *Response* - N/A

d. Equity?

Response - Yes

Equity: Propose measurable quality metrics you propose to be accountable for improving. You should choose at least one metric from the quality strategy.

Response - We believe that a primary source of inequity in Chicago is the lack of readily available services or an understanding of how to access services constituted through the city's existing safety net infrastructure. The Trauma Informed Network for Community Resilience is designed to break down those access barriers and provide on-demand access to resources that can support community members who have or are actively experiencing trauma. The primary metric for measuring the addressable equity gaps will be through measuring the utilization of the trauma app itself, the number of successful events where an individual has undergone the triage process, and the number of successful closed-loop referrals. We believe that an increase in these utilization numbers is representative of disproportionately higher inequity.

Equity – Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.) *Response* - N/A

29

- e. Community-Based Services and Supports?
- Response Yes

Community-Based Services and Supports: Propose measurable quality metrics you propose to be accountable for improving. You should choose at least one metric from the quality strategy.

Response - Each of the collaborating entities is a community-based organization whose mission and values are aligned with local impact. Each of the collaborating entities is responsible for a range of quality measures endemic to their performance for reimbursement and certification. The primary metric of interest for this collaborative will be the selection and incorporation of entities with an evidence based that is consistent with the unique trauma-related needs of community members who have been referred for services. However, it is our intention to incorporate our partners quality metrics (as reported to regulators and/or MCOs) through the registry-based dashboard for review and tracking amongst and between the community partners.

Community-Based Services and Supports – Optional Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document. *Response* - N/A

4) Will you be using any metrics not found in the quality strategy? *Response* - No

Please propose metrics you'll be accountable for improving and a method for tracking these metrics.Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Note: Once metrics are agreed upon in the negotiated funding agreement, HFS will proceed to establish a baseline for the service community, a tracking process, and negotiated improvement targets.

Response - N/A

Milestones

 For all activities described in your proposal, please provide a calendar of milestones to show progress (e.g., when IT will be purchased, when IT will be operative, when construction projects will begin and end, when people will be hired, etc.) The timeline should be in months from the award.

Response - Following the prospective award and the subsequent executed agreement with HFS the project will advance in its key work of acquiring technology, securing cloud computing services, engaging in design of the trauma app, codified agreements with two technology partners (for case management and registry services), integration of the full suite of technology platforms, beta testing, launching a communications campaign, and releasing a second version of the platform based on feedback from the initial version. Oversight will be conducted by the Primo Center Board of Directors and Steering Committee. The Primo Center Board will meet on a quarterly basis, regularly including a report-out of the progress against key milestones and project indicators. The Steering Committee will meet monthly (with only one meeting during the holiday season), requiring the same readout that will be provided to the Primo Center Board of Directors.

2) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)



Budget

Number of individuals Served

- 1) Please upload here any additional documentation or narrative you would like to provide around your budget. Include any documentation regarding budget items in the Construction category (drawings and estimates, formal bids, etc.) (Note: if you wish to include multiple files, you must combine them into a single document.)
- 2) Please project the number of individuals that will be served in each year of funding.

Year 1 Individuals served	1,000
Year 2 Individuals served	2,500
Year 3 Individuals served	10,000
Year 4 Individuals served	30,000
Year 5 Individuals served	75,000
Year 6 Individuals served	150,000

Alternative Payment Methodologies

Outline any alternative payment methodologies that your proposal might utilize for receiving reimbursement for services from MCOs.

Response - Each of the participating entities intend to work with Meridian (one of the core collaborative partners) to explore alternative payment methodologies. Primo Center intends to explore a flat case management fee with Meridian and/or other MCO partners.

3) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response - N/A

Sustainability

1) Include a narrative that describes how your budget will decrease reliance on Transformation funding over time and how reimbursements for services and other funding sources will increase and establish sustainability over time. (i.e. how will your project continue to operate without HTC funding?)

Response - Following the capital investments made by HFS through the HTC funding, we believe this model will become financially self-sustaining through a combination of FFS reimbursement between the collaborative partners and MCOs and/or alternatively payment models advanced in specific trauma-informed models of care led by the proposal's partners.

All services provided will be facilitated through case management, therapy, and/or clinical fees. Additional supports that collaborating entities determine are accretive to a community member's trauma recovery will be facilitated through community-based organizations that derive funding from corporate, philanthropic, or government resources.

The only key assumption is that volumes will be sufficient to drive case management reimbursements necessary to offset non-HTC-funded costs. However, we believe that the community messaging expenditures leveraged to drive adoption will assist in driving the requisite adoption, translating to case management fees and the revenues needed to offset revenues.

2) Optional - Please upload any documentation or visuals you wish to submit in support of your response. (Note: if you wish to include multiple files, you must combine them into a single document.)

Response - N/A

APPENDIX A: PARTNER LETTERS OF SUPPORT



Acclivus Inc. (312) 766-7145 1640 W. Roosevelt Rd, Suite 608 Chicago, Illinois 60608 acclivusinc.org

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621 RE: **Trauma Informed Network for Community Resilience**

November 17, 2021

Dear Christine:

I am writing at this time to offer both support and commitment to collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. As longtime practitioners in violence prevention and crisis intervention, we are all too familiar with the health disparities and persistent exposure to trauma within Chicago's most vulnerable populations. We have committed our effort to reversing these trends and are thrilled to partner with Primo's network to actualize our shared vision of a healthier city of Chicago and state of Illinois.

Acclivus, Inc. is a grassroots community health organization working to improve community health for Chicago metro. area populations at heightened risk for violence and other negative health outcomes. The organization is governed and directed by high-capacity, grass-roots black and brown leaders in public health solutions to violent epidemics. The mission is to support community health and well-being for Chicago area populations at risk for violence and other negative health outcomes. Acclivus utilizes public health principles and evidence-based strategies across intentional social networks to serve the most vulnerable individuals in the metro area, both through community-based intervention and through partnership with both level-one trauma centers and community hospitals.

Embodying the public health approach, we share common principles and practices with the team at Primo Center and value their role as innovators in healthcare delivery. This community grounded organization provides housing support to those in dire need in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful the work of Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

Sincerely,

LeVon Stone, Sr. Chief Executive Officer, Acclivus LeVon.Stone.Sr@AcclivusInc.Org



HEALTH CARE COUNCIL of Chicago

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

November 17, 2021

Dear Christine:

On behalf of the Health Care Council of Chicago, I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

Sincerely,

Meyhon Shillipp

Meghan Phillipp Executive Director, Health Care Council of Chicago (HC3)


November 18, 2021

Christine Achre, MA, LCPC Chief Executive Officer Primo Center for Women and Children 6212 S. Sangamon Chicago, IL 60621

Dear Ms. Achre,

On behalf of Lurie Children's Center for Childhood Resilience (CCR) and the Illinois Childhood Trauma Coalition (ICTC), I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

Made up of over 160 public and private organizations in Illinois, ICTC supports the prevention and treatment of childhood trauma. In addition, we provide opportunities for policy makers, practitioners and other child serving advocates to learn and share emerging best practices within the state of Illinois. As you know, I serve as the Clinical Director of the Illinois Childhood Trauma Coalition, Executive Director for Center for Childhood Resilience (CCR) and member of the Pritzker Department of Psychiatry and Behavioral Health's Executive Team within the Ann & Robert H. Lurie Children's Hospital and Northwestern Feinberg School of Medicine. We have a multi-year history of collaboration with the Primo Center for Women and Children through multiple grant and city-sponsored initiatives to disseminate evidence-based interventions for children experiencing trauma in Chicago and Illinois. We are grateful for the passionate leadership that your center has advanced to support the needs of homeless families and your willingness to share this expertise with your colleagues through your longstanding membership in the ICTC.

CCR is dedicated to promoting access to high quality mental health services for children and adolescents in Chicago, across Illinois and nationwide. Our team of diverse mental health experts develops, evaluates, and disseminates mental health best practices to promote systems change and to increase access and reduce mental health disparities where kids live, learn and play. Since 2004, we have partnered with schools and youth-serving organizations to deliver innovative, sustainable, culturally attuned, and evidence-based strategies, promote mental health and wellness, and foster resilience in the face of adversity and build trauma-informed schools and communities.

I am confident that my experience in Illinois and my involvement in several national collaborations provide me with an excellent foundation of experience and network of experts to participate in your steering committee and contribute to the work of the Trauma Informed Network for Community Resilience (TINCR) project.

To support the innovative work included of the TINCR proposal we CCR and ICTC can commit to:

- Executive Director of CCR to serve as a participant in your steering committee to assist on the development and implementation of TINCR focused on enhancing strategies and best practices to support achievement of defined deliverables.
- Encouraging ICTC coalition members to expand capacity to serve children and families in their own work by accessing the Trauma Informed Network for Community Resilience (TINCR) platform.

- Promoting and communicating awareness around the accessibility of TINCR to communities and organizations that support communities in need of trauma-supportive services.
- Sharing what is learned through this project with members of ICTC in other parts of the state by presenting learning collaborative opportunities and connective communications via ICTC's quarterly meetings, newsletters, conferences, and communication initiatives.
- Supporting capacity building and offering trauma-informed expertise through ICTC's diverse collective of public, private, clinical, research, advocacy, and educational institutions, as well as through CCR's provider services.
- Tracking emerging trends around trauma and offering support to TINCR providers and stakeholders that work with and for children and families who experience trauma.

The TINCR proposal aligns well with both CCR and the ICTC's priorities and we look forward to being an active part of it. If you are successful in securing this grant, we look forward to exploring a formal collaborative agreement that aligns this innovative program with the resources and expertise of the ICTC.

We are extremely pleased to support this proposal and we look forward to continued collaboration.

Culeuderfu Pit

Colleen Cicchetti, PhD, MEd Clinical Director, Illinois Childhood Trauma Coalition Executive Director, Center for Childhood Resilience Clinical Psychologist, Pritzker Department of Psychiatry and Behavioral Health Ann & Robert H. Lurie Children's Hospital of Chicago Associate Professor, Northwestern University Feinberg School of Medicine



300 S. Riverside Plaza, Ste 500 Chicago, IL 60606 (312) 705-2900 www.mhplan.com

November 17, 2021

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

Dear Christine:

On behalf of Meridian Health, I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

James Kiamos President and Chief Executive Officer Illinois Market - Meridian in Illinois & Youthcare Program at Centene Corporation





November 19, 2021

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

Dear Christine:

On behalf of Sinai Chicago, I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. At Sinai Chicago, we have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which has the potential to transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

Donnica Austin-Cathey, MHA, CHC President, Holy Cross Hospital Vice President of Operations, Acute Care Hospitals







DEPARTMENT OF PUBLIC HEALTH

CITY OF CHICAGO

November 19, 2021

Theresa Eagleson Director, Illinois Department of Healthcare and Family Services 201 South Grand Ave East Springfield, IL 62763-0001

RE: Trauma Informed Network for Community Resilience's application for the Healthcare Transformation Collaborative (HTC)

Dear Theresa Eagleston:

On behalf of the city of Chicago, I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that behavioral health leaders address the underlying mental health needs in high need communities that are impacted by extremely high rates of trauma, through the lens of social and health equity.

I am excited by the innovation this will bring and agree that CDPH will participate in the trauma informed network led by the Primo Center. I understand that this project will represent a collective of traditional and natural community-facing support; offering a gateway for healing the South and West Side communities that have so heavily impacted by inequitable health care options and chronic traumatic stress for decades.

Primo Center has demonstrated a history of serving individuals who are victims of trauma. Primo Center has partnered with Acclivus, Meridian Health, and Sinai Chicago to establish a trauma informed network to support individuals who have experienced a traumatic life experience with qualified, community-based resources that support healing and recovery. This partnership will both fiscally and programmatically manage this important initiative that seeks to ultimately transform the mental health and well-being of the entire community.

I encourage the consideration of this application for HTC funding.

llen Uwady. no

Allison Arwady, MD Commissioner

APPENDIX B: TINCR CONCEPT PAPER



Trauma Informed Network for Community Resilience

Concept Proposal for HFS Transformation Funding

November 2021

Background

Trauma is ubiquitously experienced by most people during their life, but the circumstances of the traumatic event and the residual effects on people vary considerably. The COVID-19 pandemic is an inherently traumatic event of unprecedented scale and scope, with hundreds of millions of people experiencing the death and severe illness of loved ones as well as the fear of contracting the disease themselves. It is very difficult for a person who has experienced trauma to gauge for themselves how to protect their mental health, and then access the appropriate care. This process is very complex for many reasons, including stigma, and is made even more challenging for those living in lower-income communities where resources may be scarce and the stigma of seeking mental-health care is high.

Primo Center, Acclivus, and Sinai Chicago are proposing the establishment of a first-of-its-kind trauma informed network that is singularly focused on supporting individuals who have experienced a traumatic life experience with qualified, community-based resources that support healing and recovery.

The Trauma Informed Network for Community Resilience (TINCR) would be designed to provide a digitally-enabled point of connection for individuals seeking support after a traumatic event and link such individuals to high-quality resources.

A Gateway to Hope through a Digital Front Door

The TINCR app will be designed as the gateway to support services for individuals seeking support for experienced trauma.

The Trauma App will be in the vanguard of using Artificial Intelligence (AI) to augment human decision-making by providing real-time access to data for every person, process, and decision. Its use of AI will provide a fast, effective, easy-to-use, low-barrier way for the general public to assess themselves and find help to alleviate their trauma-related symptoms. The Trauma App will have a particularly strong effect on low-income communities because it will provide access to care and self-care with little effort and cost. This will lead to less severe symptoms and effects of trauma and soften the blow of the negative impact of trauma to underserved communities.

The primary advantages of using AI as the technology base for the Trauma App are:

- Drives down the time taken to perform a task
- Operates 24/7 without interruption and has zero downtime
- Augments the capabilities of differently-abled individuals

• Facilitates decision-making by making the process faster and smarter

The foundation of bringing AI to address Trauma Response will be from the AI Branch of Natural Language Processing (NLP). We have chosen NCP because it enables the App to understand text and spoken words in the same way that human beings can. By focusing on NLP to provide a flexible trauma-based application, resources can be accessed in real-time to address the trauma and provide concierge level, access to trauma-focused care.

The innovation that the Trauma App brings to the field of mental-health assessment and support is the use of AI to remove the complexities, barriers and stigma of seeking and receiving appropriate and effective care. By utilizing AI, the Trauma App will provide an intuitive user interface that is simple, clean and fluid.

The Trauma App will also feature four additional functions:

- Bimodal texting platform that allows for an individual seeking trauma informed support for certain life events. After downloading the app an individual will have the option of connecting to a central Case Manager capable of screening an individual for trauma and engaging in further questions to better understand the nature of the traumatic event and any imminent danger(s) that the individual may be facing (extrinsic or intrinsic). This text communication will take place inside the app environment to obviate the risk of HIPAA violations and to preserve a record of the interaction.
- Content library comprised of evidence-based information that can assist an individual in better understanding the nature of and implications to the specific trauma they are navigating. The content within the application will be specifically tailored to the physical, mental, and social effects of specific traumas and link to self-support resources that assist the individual.
- Cognitive behavioral therapy (CBT) supports tailored to traumatic life events. This module is designed to support patients seeking community level resources for direct support in trauma *and* those who may be reticent to seek such supports.
- An interface that links the information received by an individual to a case management system that registers the traumatic event and supports care transitions.

Centrally Organized Case Management

The entity that houses TINCR will not be a care organization, but will instead assume the role of screening, triage, and referral management to support individuals in Chicago who have experienced a traumatic life event. The entity will employ an initial three professional case managers who have received trauma-informed training and care equipped to assist individuals in taking critical steps in their recovery journey. Case Managers will be responsible for facilitating initial contact with an individual who is prepared to engage in treating their trauma

and supporting the care transition process to a community resource that specializes in the underlying traumatic event.

Case Management System

The second digital resource that underlies TINCR will be a case management system that records information related to the traumatic event being reported by the individual. Personal information, approximate dates of the event, and other reported challenges or co-morbidities will be recorded and logged by the Case Manager's interaction with an individual and/or the asynchronous triage function of the application. Stored information will be shared externally when authorized by an individual consenting to a community-based referral. An API will be established between the Case Management system and the TINCR application to share information.

In addition to support transitions of care for individuals, this case management system will serve as a trauma-informed registry. APIs will be permitted with outside municipal, state, and research entities to access meta data used for epidemiological and public health purposes.

Trauma Informed Network

TINCR will vet and establish a trauma informed network that will serve as the primary platform through which trauma-informed care can be accessed and administered. There are three tiers of network affiliates that will be identified:

Tier 1: Direct TINCR Partners

The primary partners to TINCR will have demonstrated the use of evidence-based resources to support highly specific traumatic life events. Initially these partners will be focused on violence, domestic or family events, housing challenges, and mental health disorders. Tier 1 TINCR partners will operate a partner version of the case management system capable of receiving and acting on referrals generated by Case Managers. Tier 1 partners will also agree to log consent-based patient information with the trauma system to further bolster the trauma-informed registry features of the case management system.

Tier 2: Indirect TINCR Partners

Chicago-based entities that provide trauma-informed care services can be certified or qualified by TINCR as referral partners, but do not operate the case management system. These are entities that demonstrably employ an evidence-base for trauma-informed services.

Tier 3: TINCR-Identified, Non-Qualified Community Resources

The outermost tier of resources will be a compendium of other identified community organizations in Chicago that espouse supporting specific types of individual trauma. These entities will not be vetted by TINCR, but can be pursued by patients at their discretion.

Financial and Economic

The TINCR model will be underwritten by capital resources provided by the state (through HFS transformation funding) and/or venture capital. We anticipate the capital budget needs for application and network development to be approximately \$5 million.

Ongoing operating costs will be underwritten by case management fees charged by the entity to contracted managed care organizations (MCO).

APPENDIX C: SAFETY NET PAPER

THE CHALLENGING FUTURE OF THE CHICAGO SAFETY NET

2021

Prepared by



Supported by





Table of Contents

Section 1: Introduction3
Section 2: Regional Analysis and Forecasting6
Introduction7
South Side Chicago
West Side Chicago
Section 3: Health Inequity 20
Health Access
Chronic Disease
Health Outcomes
Section 4: Reimagining the Safety Net
The Political Price of Reform
Literally No Time Like the Present
Seizing the Moment with Creative Financing Approaches
First Principles of Transformation
The Punchline
Appendix A: Definitions and Methodology
Definitions 41
Methodology



SECTION 1 INTRODUCTION



Chicago's safety net status quo has run out of runway. The most important safety net hospitals on the city's west and south sides are projected to reach a compounded operating loss of \$1.76 billion in the coming years.

Based on historical financial trends and our longitudinal modeling, the seven primary safety net hospitals on Chicago's south side (Advocate Trinity1, Roseland Community, St. Bernard, Holy Cross, Mercy, Jackson Park, and South Shore) are projected to endure a total loss of \$1.34 billion by 2024.

The safety net hospital cohort to the city's west (consisting of Mount Sinai, Loretto, St. Anthony, AMITA Health Saint Mary, Elizabeth Medical Center - Saint Mary Campus2, and Norwegian) will bear \$421 million in compounded operating losses over the same period.

These projections may prove conservative, given that they do not account for the financial duress of the COVID-19 pandemic, the deepening recession, and any other substantial changes to volumes or costs since 2018 (the period through which our modeling is based).

Despite the significant cost the Illinois taxpayers bear to underwrite the state's portion of the Medicaid program and the related subsidies intended to maintain the financial vitality of the safety net, health outcomes have not generally improved, access to important health services have maintained a staggering disparity compared to the rest of the city, and the structural integrity of the institutions that provide thousands of jobs stand at a fracturing point.

Without meaningful and unprecedented action from the market and policy makers, already scarce health services for south and west side residents are at risk of further erosion. This report analyzes retrospective financial data to illustrate the financial situation of Chicago's safety net hospitals, highlights the key health and social outcomes that have remained stuck, and comments on persistent health disparities despite significant investment.

We offer considerations to policy makers and market leaders as they contemplate the highest and best use of the city and state's scarce resources through government funding, corporation giving, philanthropic contributions, and tax payer dollars.

This analysis focuses on the financial state of the city's safety net hospitals. However, we should be clear that addressing the access gaps and inequities in underserved communities will require a multi-stakeholder approach that is capable of demonstrating value and enhancing the resources available to improve health.

¹ Advocate Trinity is not recognized by HFS as a safety net hospital, but is included in this analysis given its location in Chicago's underserved south side.

² AMITA's Saint Mary hospital is not recognized by HFS as a safety net hospital, but is included in this analysis given its location in Chicago's underserved west side.

Legend for South and West Sides

South Side Zip Codes

60609	60633
60615	60636
60616	60637
60617	60643
60619	60649
60620	60652
60621	60653
60628	
60629	
60632	



West Side Zip Codes

60607
60608
60612
60622
60623
60624
60644
60651





SECTION 2 REGIONAL ANALYSIS AND FORECASTING



Introduction

We conducted a regional analysis and forecasting exercise to determine the degree to which revenue and cost trends may compound to create unfunded liabilities that threaten to further restrict the capacity of, and access to, the city's safety net system.

The data underlying this analysis precedes the COVID-19 pandemic. Thus, our modeling does not reflect the corresponding economic contraction and government budget climate impact on hospitals in Chicago and across the state.

We began by projecting operational losses for the south and west sides of the city through 2024, offsetting calculated losses against cash and cash-convertible assets (excluding liabilities in the event of insolvency) that could ostensibly be drawn on in a solvency event.

South Side Chicago

The south side cohort has experienced a sustained decrease in net patient revenue (NPR³) and increase in total operating expenses year-over-year for the retrospective examination period. Based on the underlying rates, revenues and expenses will continue to diverge in the years ahead, resulting in a loss of \$1.34 billion by 2024 (Exhibit 2.1). This gap between revenues and expenses exacerbates the magnitude of total dollars lost for each year in the future, accelerating the cohort's collective amount of loss.



Exhibit 2.1: Projected NPR and Operating Expenses for South Side Cohort (2015-2024)

³ Net patient revenue is the actual amount of monies received (or expected to be received) based on the price a hospital charges for services minus any discounts negotiated with an insurance company or government payer.

South Side Scenario

As a means of stress testing the assumptions made under this model, we conducted two additional analyses for a total of three different scenarios. The only difference between these scenarios are the numbers used to project future revenue and expenses.

The scenarios and their associated revenue and expense assumptions are as follows:

Scenario 1 – We used a single composite revenue and expense rate of change for all hospitals within the cohort. This single composite rate of change was applied to the entire cohort's revenues and expenses and projected for outlying years through 2024.

Scenario 2 – Instead of calculating a single composite rate of change for the entire cohort, we calculated each hospital's historic revenue and expense trends and applied them directly to the respective facility. We summed the total loss or gain for each hospital to determine the aggregate change for the cohort.

Scenario 3 – Finally, we took a highly conservative approach that assumes there are no future changes to revenues and expenses, leaving today's losses fixed. These annual losses are compounded over the same period.

South Side: Scenario 1 - Trended Baseline

Between 2015 and 2018, the NPR for the side side cohort of hospitals declined from \$910.4 million (2015) to \$848.5 million (2018). Two hospitals increased their NPRs while all others experience a contraction ranging from 0.15 percent to 23.97 percent (Exhibit 2.2).

Market share (as measured by each hospitals net patient revenue composition against the entire cohort) remained generally flat between the facilities. Additionally, the facilities' annual NPR erosion of \$61.9 million in (a compounded annual loss of 1.75 percent annually) while expenses increased by 0.55 percent (Exhibit 2.3).

Exhibit 2.2: Historic NPR Market Share, Composition, and Growth/Contraction for South Side Cohort (2015-2018)





It is important to note that the increase in operating expenses was largely driven by two specific facilities - hospital 1 and hospital 4 (Exhibit 2.4). The remaining hospitals in the cohort decreased their operating expenses between 12.45 percent and 0.05% percent to a nearly flat reduction trend.





Forecasting the 2019-2024 period based on the 1.75 percent decrease in NPR and the 0.55 percent increase in operating expenditures creates a compounded total operating loss of \$1.34 billion by 2024.

South Side: Scenario 2 - Hospital Specific Analysis

This scenario omits the application of a single composite growth rate over all hospitals in the cohort, and instead forecasts based on an individual hospital's rate of change for revenues and expenses. Under this scenario, four hospitals decreased their respective NPR, one remained constant, and two increased their respective NPR (Exhibit 2.5, 2.6).

Alternatively, four of the hospitals under this cohort successfully reduced expenditures from 2015-2018 and two increased expenses by 3 percent or more (Exhibit 2.7).



Exhibit 2.7: Historic NPR and Operating Expenditures by Specific Hospital (2015-2018)

Hospital	1	2	3	4	5	6	7
NPR	1.9%	- 2.6 %	-6.6%	- 2.3 %	9.5%	-2.7%	0.0%
Operating Expenses	3.1%	0.0%	-3.3%	-3.4%	-1.1%	-1.0%	-0.9%

NPR Millions

Anticipated margin calculations are projected to follow a downward trend for most of these individual hospitals (Exhibit 2.8) based on their site-specific revenues and losses.

The compounded losses under Scenario 2 highlight a reduction in NPR from \$910.4 million (2015) to \$687 million (projected 2024), and an increase in operating expenditures from \$980.6 million (2015) to \$932.5 million (projected 2024), resulting in a compounded, projected loss of \$1.2 billion between 2019 and 2024.



South Side: Scenario 3 - Best Case

The best case assumption is no change (growth or decline) in NPR or operating expenditures, holding the amounts fixed at 2018 levels. This is tantamount to projecting the future based on a single year's snapshot of the difference between revenue and expenses and its prospective impact on outlying years.

The total operating loss for these eight facilities in 2018 was \$138.9 million. Applying that annualized loss for 2019-2024, the total projected reduction in margin for the south side is \$833.4 million.

We refer to this as a "best case" scenario because we believe the structural dynamics driving NPR declines and the influence of medical cost inflation over expenses are unlikely to see the magnitude of change that would reverse key trends (revenues grow instead of shrink; expenses decrease instead of increasing).

South Side: Scenario Summary

While we believe that the projections under Scenario 1 are conservative, the other two more optimistic scenarios continue to paint a stark picture of the losses. Taken together, Exhibit 2.9 highlights the baseline to best case scenarios, projecting anywhere from \$833.4 million to \$1.34 billion in unfunded operational losses.



Exhibit 2.9: Total Unfunded Operating Losses by Scenario for South Side Cohort (in millions)

Net Income and Cash Balance (Scenario 1 Only)

Hospitals incur operating losses from time to time. Safety net hospitals in particular are regularly exposed to greater risks because they receive relatively lower reimbursements compared to their peers that benefit from commercial insurance rates. As a result, safety net hospitals are highly skilled at procuring and discharging funds through government and philanthropic sources to support the organization's community-focused mission (and/ or religious affiliation). However, decreasing revenues in the region illustrate a structural challenge that could be difficult to overcome by cutting costs or increasing non-operating revenues via grants, contributions, and/or investments.

In 2018, the south side safety net hospitals (excluding Advocate Aurora Trinity Hospital) had \$33.8 million in total cash on hand and \$63.2 million in temporary cash investments. Offsetting the losses under Scenario 1 against these short-term assets leaves a remaining loss of approximately \$1.2 billion.

In consideration of longer-term assets, there were approximately \$1.8 billion in "pledges and grants receivables" on 2018's balance sheets. The tax forms used to capture balance sheet data do not itemize or compartmentalize the nature of these receivables, making it difficult to tell the time period and sources for cash conversion. Since these types of receivables are converted over multi-year periods and their realization can be contingent on uncontrollable factors, it should not be taken as a forgone conclusion that the receivables could be converted to cash during a solvency event. Nevertheless, these assets certainly represent a separate source of capital that could further offset projected operating losses. Exhibit 2.10 breaks down the way these assets offset the operational losses.

Exhibit 2.10: Balance Sheet Offset Against Unfunded Operating Liabilities for the South Side Cohort (in millions)

Unfunded Operational Loss (2019 – 2024)	(\$1,340)
Plus: Cash on Hand (2018)	\$33.8
Plus: Savings & Temporary Cash Investments	\$63.2
Current Asset Surplus/Deficit after Balance Sheet Offsets (sans Pledges and/or Grants Receivable)	(\$1.243)
Plus: Pledges and Grants Receivable	\$1.783
Potential Current Asset Surplus/Deficit after Balance Sheet Offsets	\$540

Note: Balance sheet calculations do not reflect Advocate Aurora Trinity Hospital

We should note that this analysis does not include monies provided by the federal government through the The Coronavirus Aid, Relief, and Economic Security Act (in 2020), nor does it reflect potential transformation funding that could be awarded by the state. Those infusions could provide additional capital to strengthen the economic fundamentals of individual institutions and the cohort as a whole.

Regardless, structural challenges remain and it is not reasonable to believe that revenues will be sufficient to cover costs in the short, medium, or long term.

Employment Considerations

Prior to the onset of COVID-19, the south side hospital cohort (excluding Advocate Aurora Trinity Hospital and MetroSouth) represented 6,405 jobs for the community, ranging across custodial, administrative, mid-level practitioner, and physician positions with varying levels of compensation. Currently, American Community Survey (ACS) data show that there are 362,805 employed residents and 80,842 unemployed residents in the zip codes under this geography (see Methodology), resulting in an unemployment rate of 22.3 percent.

Though it is not conceivable that *all* facilities would ever close, the absence of the 6,405 jobs would increase the unemployment rate by 2 percent to 24 percent. This does not account for the peripheral industries that also contribute to the community's employment rate because of their affiliation and support of hospitals, including food services, laundering, transportation, construction and maintenance, and others.

Any one hospital's closure on the south side would impact other sectors and omit hundreds of employment opportunities for community residents.

West Side Chicago

The historical financial data from 2015-2018 for the city's west side tells a similar story. The west side cohort's operating loss for 2018 was \$18 million. If the NPR and operating expenditure patterns continue into the future, the compounded deficit will grow to \$420 million (Exhibit 2.11, Exhibit 2.12). While the magnitude of the absolute dollar loss for the west side cohort is approximately one-third of the south side's loss, ongoing losses are likewise unsustainable.

The fundamentals driving this compounded loss are somewhat different than the south side – namely, we anticipate the NPR for the west side will increase on a composite basis. However, our trend analysis indicates a faster rate of growth of operating expenditures than for revenues, which continues to widen the gap under our forecast, albeit at a slower rate than observed on the south side.







West Side Scenario Scenario

We applied the same scenario-based assumptions used for the south side health cohort (p. 8) to model the west side's potential financial outcomes.

West Side: Scenario 1 - Trended Baseline

In 2015, the west side cohort hospitals generated a total of \$864.8 million in NPR, increasing to \$870.9 million by 2018. Four hospitals increased their respective NPR from 4.17 percent to 12.96 percent (Exhibit 2.13)). The hospital that held approximately 35 percent of the total cohort NPR increased at a reasonably strong rate of 4.17 percent, which helped to offset a separate facility's 32.5 percent contraction (Exhibit 2.14).

The overall revenue growth for the five facilities sums to a historical compounded growth rate of 0.71 percent. Shifts in the share of NPR were slightly more material than the south side cohort. One hospital lost 33 percent of its NPR while other facilities concurrently had gains.



Exhibit 2.15: Operating Expenditure Growth for West Side Cohort (2015-2018)



Exhibit 2.14: Historic NPR Market Share, Composition, and Growth/Contraction for West Side Cohort (2015-2018)

Hospital	Marke Comp	Growth/ Contraction	
	2015	2018	
1	34.02%	35.19%	4.17%
2	5.86%	6.57%8.	12.96%
3	12.19%	12.31%	1.70%
4	35.19%	37.39%	7.01%
5	12.74%	8.54%	-32.49%

From 2015 through 2018, the aggregate composite operating expense increased by 7.3 percent. Each hospital in the west side cohort saw a patterned increase in operating expenditures ranging from 1.35 percent to 21.75 percent, percent; 21.75 percent was an outlier (Exhibit 2.15).

Scenario 1 represents the trends for NPR (0.71 percent growth) and operating expenditures (7.3 percent growth) for 2019-2024. Forecasting the 2019-2024 period based on the 0.71 percent increase in NPR and the 7.3 percent increase in operating expenditures resulted in a compounded total operating loss of \$420.8 million by 2024. The significant delta between a lower trended revenue outcome and a cost growth rate nearly 10x the size of income is the primary reason for the compounded exacerbation.

West Side: Scenario 2 - Hospital Specific Analysis

This scenario omits the application of composite growth rate assumptions ubiquitously over all hospitals in the cohort, and instead forecasts based on individual hospital's rates (Exhibit 2.16). Under this scenario, four hospitals had historic growth in NPR that perpetuates as we forecast through 2024, while one hospital had significant contraction (32 percent).

HOSPILAI (2015-2018)						
Hospital	1	2	3	4	5	
NPR	1.0%	3.1%	0.4%	1.7%	- 9.4 %	
Operating Expenses	2.0%	5.0%	0.3%	1.9%	0.6%	

Hospital (2015 2019)

Exhibit 2.16: Historic NPR and Operating Expenditures by Specific

To keep the methodology for the south and west sides consistent, we did not make important modifications to the unlikely expenditure growth rate for any individual facility. The range in operating expenditure growth totals (based on the historic trends for each hospital) range from 3 percent to 64 percent for the entire 2015-2024 period (Exhibit 2.17).

In the second scenario, NPR increases from \$864 million in 2015 to \$906 million by 2024, operating expenditures increase from \$828 million in 2015 to \$992.4 million in 2024, and the compounded losses accumulate to \$353 million by the end of the same period.

Projected margins for this period continue a downward trend for the majority of individual hospitals (Exhibit 2.18).

This scenario demonstrates that even if weighting is removed and individual hospital financial performance is assessed, the unfunded operational loss liability remains material.



West Side: Scenarion 3 - Best Case Scenario

As with the south side, the best case assumption holds no change (growth or decline) in NPR or operating expenditures, maintaining 2018 levels. This is tantamount to projecting the future based on a single year's snapshot of the present difference between revenue and expenses and its prospective impact on outlying years.

To calculate this, we froze the NPR and operating expenditures of the aggregate west side cohort, which saw an overall loss of \$18.6 million. Compounded from 2019-2024, the total loss for the west side would be \$111.39 million under this scenario, a much smaller multi-year loss to offset.

West Side: Scenario Summary

Exhibit 2.19 collectively illustrates all three scenarios, projecting anywhere from \$111.4 million to \$420.7 million in unfunded operational losses.



Net Income and Cash Balance (Scenario 1 Only)

The same principles and rationale for leveraging the balance sheets of the hospitals in the south side cohort apply to the west side.

In 2018, the west side cohort had a total of \$53.3 million (excluding AMITA Health St. Mary's and Elizabeth Medical Center) in cash on hand. Shorter term assets totaled \$19.5 million, reducing the total projected unfunded liabilities by \$72.8 million between the two asset categories. The hospitals on the west side show an aggregate of \$885.9 million in pledges and grant receivables, more than offsetting the remaining operating loss. Exhibit 2.20 breaks down the way these assets offset the operational losses.

Exhibit 2.20: Balance Sheet Offset Against Unfunded Operating Liabilities for the West Side Cohort (in millions)

Unfunded Operational Loss (2019 – 2024)	(\$421)
Plus: Cash on Hand (2018)	\$53.3
Plus: Savings & Temporary Cash Investments	\$19.5
Current Asset Surplus/Deficit after Balance Sheet Offsets (sans Pledges and/or Grants Receivable)	(\$348.2)
Plus: Pledges and Grants Receivable	\$885.9
Potential Current Asset Surplus/Deficit after Balance Sheet Offsets	\$537.7

Note: Balance sheet calculations do not reflect AMITA Health Saint Marys and Elizabeth Medical Center

Employment Considerations

Prior to the onset of COVID-19, the west side hospitals (excluding AMITA Health Saints Mary and Elizabeth Medical Center) represented 5,433 jobs for the west side community, ranging from custodial, administrative, mid-level practitioners, and physicians with varying ranges of income. According to ACS data, there are 180,319 employed residents and 60,642 unemployed residents in the west side zip codes, translating to a 34.6 percent unemployment rate. Though it is not conceivable that all facilities would ever close, the absence of the 5,433 jobs would drive up the unemployment rate by 3 percent to 36.6 percent. This does not account for the peripheral industries that also contribute to the community's employment rate because of their affiliation and support of hospitals, including food services, laundering, transportation, construction and maintenance, and others.

As with the south side, any one hospital's closure would impact other sectors and omit hundreds of employment opportunities for community residents.



SECTION 3 HEALTH INEQUITY



Health Inequity

The losses calculated under Section 2 are operational in nature and don't capture the additional investment critical to underwriting under-resourced parts of the safety net infrastructure. This is important because simply underwriting the operating losses of these communities does not directly address the various other factors that are driving sustained health inequity.

We consider health equity as communities having fair access to health services enabling the ability to achieve the highest level of health regardless of age, economic status, geographic location, education, race, gender, ethnicity, etc. Categorically, residents need to have equal access to health care services and the support of a well-coordinated social services infrastructure to achieve improved health.

Health Access

Historically, Chicago's neighborhoods and city boundaries have been defined through segregationist roots. Both the south and west sides have higher concentrations of Black and Latinx residents: the west side's population is 41.0 percent Black and 34.3 percent Latinx, while the south side's population is 56.8 percent Black and 28.2 percent Latinx (Exhibit 3.1).

	West Side	South Side	Chicago	Illinois
Non-Citizens	11.2%	9.6%	11.4%	7.0%
Limted English Proficiency	10.0%	7.4%	8.4%	4.5%
Hispanic or Latinx	34.3%	28.2%	29.0%	17.0%
Non-Hispanic Black	40.9%	56.8%	29.7%	14.0%
Asian or Pacific Islander	4.8%	4.2%	6.4%	5.4%
Non-Hispanic White	18.6%	9.4%	32.8%	61.6%
Female	50.5%	53.3%	51.4%	50.9%
Median Age	31.7	35.9	34.3	37.9
Median Household Income	\$45,082	\$39,217	\$53,657	\$61,801

Exhibit 3.1: Demographics Overview (data over multiple years)

Institutional Inequalities

Compared to the broader city of Chicago, the south and west sides generally have the most scarce access to medical, mental health, and social resources.

The city's south side shows particularly alarming access gaps, with almost every category used for this analysis showing significant disparity with the rest of the city. The south side boasts a fairly dense (comparably) number of Federally Qualified Health Centers (FQHC), representing critical access points to institutions singularly focused on serving the vulnerable. However, access to specialty services across the board are completely imbalanced with the rest of the city. More specifically, there are 1,015 residents for every specialist on the south side versus the 353 residents for every specialist on the city's north side (Exhibit 3.2).

This asymmetry ranges across different clinical disciplines and is actually more dire for critical clinical functions. For example, there are 6 psychiatrists for every 100,00 residents (which we generally use as a proxy for mental health professionals) on the south side versus the 23 for every 100,000 residents throughout the entire city.

North Side		South Side	
1,710		795	Primary Care Physician per 100,000 Residents
229	vs	92	OB/GYN per 100,000 Residents
112	• -	36	Cardiologists per 100,000 Residents
30		10	Endocrinologists per 100,000 Residents

Exhibit 3.2 : Resident to Patient Ratio for South and North Sides

At face value, the west side fares better, with ratios that are more consistent with the north side and the broader city. However, this is likely because the west side includes certain academic and marquee hospital institutions that employ a disproportionate number of specialists and professionals compared to a typical safety net hospital. It is important to note that a specialist's or psychiatrist's proximity to a resident does not automatically mean they are accessible given the network and reimbursement factors that ultimately determine the types of patients a medical professional will see.

Social Infrastructure

Using metop.io's analytics platform, we found that the social infrastructure and the overall economic conditions of the city's vulnerable neighborhoods further exacerbate the health status of these communities. Specific examples of these social disparities abound.

Social Engagement

Statistics⁴ show that loneliness is linked to several demographic variables, including old age; living alone, in rural areas, or in residential care; widowhood; low educational attainment; and low income.

The proprietary Social Engagement Index developed by Metop.io is a composite score that measures elements of civic engagement and social isolation, especially those affected by the built environment, and incorporates information about neighborhood resiliency and barriers to social engagement. The scores for the west side (85.9) and south side (87.0) both fall under Chicago's composite score of 87.9.

Social Isolation

Social isolation similarly varies across the city. Young people neither working nor enrolled in school constitute 8.5 percent of the city's 16-19-year-old population. The prevalence increases to 9.6 percent on the south side and 14.2 percent on the west side (Exhibit 3.3).



Seniors living alone also are at increased risk of adverse physical and mental health events. According to the Centers for Disease Control and Prevention⁵ (CDC) more than one-third of adults aged 45 and older report feeling lonely, and nearly one-fourth of adults aged 65 and older are socially isolated across the country, correlating to an increased risk of premature death, a 29 percent increased risk of heart disease, and a 32 percent increased risk of stroke. Peer-reviewed studies have shown that loneliness leads to increased risk of depression, anxiety, and suicide.

Thirteen percent of seniors living in the city's south side are considered socially isolated compared to the city's overall prevalence of 8.2 percent. As shown earlier, the mental health infrastructure on the south and west sides of the city is starkly under-developed in comparison to more affluent communities.

⁵ https://www.cdc.gov

⁴ https://www.cdc.gov/aging/publications/features/lonely-older-adults.html

Poverty

Individuals experiencing poverty are more likely to have adverse health outcomes and are disproportionately located in the west and south side neighborhoods of Chicago. In aggregate, the west side's poverty rate is 27.9 percent and the south side's is 25.0 percent. Both of these rates are higher than the city's total poverty rate of 19.5 percent (Exhibit 3.4). To the west, East Garfield Park and West Garfield Park have the highest poverty rates at 61 percent (Exhibit 3.5). To the south, Englewood has the highest poverty rate at 43.5 percent (Exhibit 3.6).

	West Side	South Side
Poverty Rate	27.9%	25.0%
Hardship Index*	26.5%	26.0%
Deep Poverty	13.3%	11.7%
Below 150% Poverty Level	41.6%	38.2%
Below 200% Poverty Level	51.7%	49.7%
Poverty Rate for Wokers	12.3%	10.8%

Exhibit 3.4: Poverty Indicators (data over multiple years)



Exhibit 3.5: Poverty Rates by Race/Ethnicity (2014-2018)

* The Hardship Index is a composite score calculated by Metopi.o to reflect the hardship in a given community (higher values indicate greater hardship). The index incorporates unemployment, age dependency, education, per capita income, crowded housing, and poverty into a single score that allows comparison between geographies. The rate of poverty in each ZIP code also vary across race and ethnicity groups.



Exhibit 3.6: Poverty Rates for the South and West Side ZIP Codes (2014-2018)


A regression analysis finds a statistically significant relationship between poverty rate and self-reported mental health conditions among Chicago communities. For instance, North Lawndale has a poverty rate of 40.5 percent and 18 percent of adults with poor mental health. In North Center, the poverty rate is 4.7 percent and 9.7 percent of adults report poor mental health.

To view the regression model live on Metop.io visit: https://metop.io/projects/2dj35lvw/

A CDC⁶ report found that across America, families that earn less than \$35,000 a year are five times as likely to report being sad all or most of the time compared families earning more than \$100,000. Money may not buy happiness, but a lack of income creates a hardship that wears on an individual's psyche.

Further, a 2018 Health Affairs⁷ article found that impoverished adults are five times more likely as those with incomes above 400 percent of the federal poverty level to report being in poor or fair health. The research also indicates that low-income Americans show higher rates of physical limitation, heart disease, stroke, and other chronic conditions. Accompanying physical health challenges, low-income individuals encounter more barriers to accessing health care due to being uninsured, underinsured, and/or lacking access to primary and specialty care in the community.

⁶ https://www.cdc.gov/nchs/data/series/sr 10/sr10 256.pdf

⁷ https://www.healthaffairs.org/do/10.1377/hpb20180817.901935/full/

Homelessness and Housing Stability

Individuals facing chronic homelessness have substantially higher physical and mental health morbidities⁸ and increased mortality. Factors that indicate the likelihood of housing instability are more prevalent in west and south side communities change highlighted text to compared to the the overall city and state.

The eviction rates to the west and south are 1.2 percent and 1.8 percent respectively, both higher than Chicago's 1.1 percent rate (Exhibit 3.7). Eviction rates shift across neighborhoods. For example, the highest regionalized eviction rates are 2.6 percent in Austin and 3.82 percent in South Shore.

	West Side	South Side	
Eviction Rate	1.2%	1.8%	
Prevalence of Housing Choice Vouchers	9.5%	16.6%	
Crowded Housing	5.4%	3.6%	
Moved to county in past year	13.6%	10.2%	Sit
Severely rent burdened	27.7%	31.1%	
Median Gross Rent	\$1,057.00	\$892.00	

Exhibit 3.7: Homelessness and Housing Insecurity Indicators (data over multiple years)

These eviction rates are also indicators of living cost hardships. A regression analysis finds a statistically significant relationship between those "experiencing severe rent burden" and high blood pressure among Chicago communities. To view the model, visit <u>https://metop.io/insights/xMnl/</u>.

For instance, 35.1 percent of individuals in Austin are "severely rent burdened" and 42.1 percent of individuals have high blood pressure. Yet, in Logan Square, 15.4 percent of individuals are "severely rent burdened" with an associated 20 percent rate of high blood pressure.

The stress of unstable housing can impact employment, social networks, education, and access to social service benefits which collectively add to the individual burden and hardship that can adversely shape a person's health. A study published in Health Affairs⁹ found that providing stable housing to residents of Oregon caused caused Medicaid expenditures to the state to decrease by 12 percent, a 20 percent increase in primary care outpatient visits, and an 18 percent decrease in emergency department visits. Similar analyses abound in urban centers across the country.

⁸ https://www.healthaffairs.org/do/10.1377/hpb20180313.396577/full/

⁹ https://www.healthaffairs.org/do/10.1377/hpb20180313.396577/full/

The 2019 Point in Time¹⁰ survey revealed 5,290 individuals experiencing homelessness, a modest decrease from prior years. The survey also found that 76.2 percent of individuals were sheltered while 23.8 percent were unsheltered. The neighborhoods with the greatest number of unsheltered homeless individuals were:

- O'hare: 162 individuals
- Near West Side: 114 individuals
- Loop: 127 individuals
- Near North Side: 95 individuals
- East Garfield Park: 65 individuals
- Roseland: 64 individuals

Additionally, rates of substance use and mental health disorders treatments for individuals and families with shelter were 16 and 26 percent respectively. For those without shelter, treatment rates increased to 28 and 29 percent respectively.

Homelessness is not unique to Chicago and significant research has been conducted linking housing instability to various physical ailments¹¹ including diseases of the extremities, skin disorders, and increases the possibility of traumatic events, such as physical or sexual assault (with expanded health implications). Other ailments exacerbated by homelessness includes malnutrition, parasitic infection, dental disease, degenerative joint disease, and venereal disease.

¹⁰ https://www.chicago.gov/content/dam/city/depts/fss/supp_info/Homeless/2019PITReportFinal110819.pdf

¹¹ https://www.ncbi.nlm.nih.gov/books/NBK218236/

Food Insecurity

Local investigatory efforts¹² reveal that fresh produce and nutritious food are not readily available in Chicago's vulnerable neighborhoods indicating the presence of so-called food deserts. There are greater disparities in the number of individuals on SNAP to the west (29.7 percent) and south (29.5 percent) than greater Chicago (18.9 percent) (Exhibit 3.8).

	West Side	South Side
Living in Food Desert	0.3 %	0.9%
Food Stamps (SNAP)	29.7%	29.5%
Households in Poverty not receiving SNAP	42.4%	39.5%
Low food access	17.7%	30.5%
Very low food access	0.5%	1.7%

Exhibit 3.8: Food Insecurity Indicators (data over multiple years)

The south and west side neighborhoods have a higher proportion of Non-Hispanic Black and Hispanic or Latinx residents receiving SNAP benefits compared to the Non-Hispanic White populations living in these same ZIP Codes (Exhibit 3.9).



Exhibit 3.9: SNAP Rates for the South and West Sides (2014-2018)

¹² https://chicagodefender.com/food-deserts-continue-to-plague-the-southside/

¹³ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4218969/

Fifty-one percent of individuals in East Garfield Park and West Garfield Park receive SNAP, compared to 7.1 percent of individuals in Near West Side. Relatedly, in Englewood, 50.5 percent of the neighborhood residents receive SNAP, compared to 15.1 percent of individuals in Beverly and Morgan Park (Exhibit 3.10).





A regression analysis finds a statistically significant relationship between low food access and diagnosed diabetes among Chicago communities. For instance, in Roseland 17.2 percent of individuals suffer from diabetes and 69 percent of individuals have limited access to food. In Lakeview, 4 percent of individuals have diabetes and 6 percent have low access to food (<u>https://metop.io/insights/pxxB/</u>). A 2014 study¹³ stated that while more research needs to be done to confirm food insecurity as a risk-factor of diabetes, there is a connection between individuals with "limited budgets and the propensity to purchase cheaper, higher-calorie foods, which can contribute to weight gain and an increased susceptibility to one or more chronic illnesses, including type 2 diabetes."

Education

Enrollment in early education is connected to long-term health outcomes. Compared to the preschool enrollment rate in Chicago (58.4 percent), the west side has a rate of 60.8 percent and the south side at 54.9 percent (Exhibit 3.11). Austin and Humboldt have rates of 53.2 percent while West Town has a rate of 73 percent To the south, Oakland has a preschool enrollment rate of 71.7 percent while Woodlawn and Archer Heights run at 36.1 percent (Exhibit 3.12).

	West Side	South Side	Chicago
Preschool enrollment	60.8%	54.9%	58.4%
9th grade education rate	88.5%	90.9%	92.2%
High school graduation rate	75.7%	81.1%	84.5%
College graduation rate	27.6	21.3	38.4%

Exhibit 3.11: Education Rates (2014-2018)

Exhibit 3.12: Preschool Enrollment Rates for the South and West Side ZIP Codes (2014-2018)



Recent studies¹⁴ have identified various ways in which early childhood education may affect health. Higher rates indicate a greater prevalence of access to health screenings, health care, improved nutrition, or other health-promoting activities.

A report¹⁵ exploring the impact of educational attainment on public health and health outcomes found the prevalence of several risk behaviors in adults is higher among those with fewer than nine years of formal education and declines as years of education attainment increases. Education also impacts physical health outcomes as rates of major circulatory diseases, diabetes, liver disease, and psychological symptoms were found to be higher among adults with lower educational attainment.

¹⁴ https://www.healthaffairs.org/do/10.1377/hpb20190325.519221/full/

¹⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4691207/

Chronic Disease

West side and south side communities have higher rates of every chronic condition relative to the city of Chicago. In particular, the south side stands outs as higher in nearly every condition (Exhibit 3.13).

	West Side	South Side
Current Asthma	10.0%	10.3%
Arthritis	19.9%	23.7%
Coronary Heart Disease	5.6%	6.5%
High Cholesterol	28.3%	30.9%
Chronic Kidney Disease	3.5%	3.9%
Diagnosed Diabetes	13.0%	14.6%
COPD	7.1%	7.7%
High Blood Pressure	32.8%	37.9%
Obesity	37.2%	38.3%
Diagnosed Stroke	3.8%	4.5%

Exhibit 3.13: Chronic Condition Rates (2017)

The data shows that there are notable disparities in the prevalence of chronic disease outcomes between the south side and the broader city of Chicago. In fact, for the south side, in every measurable category, there is a higher degree of prevalence of chronic disease than for the city of Chicago and it's west side.

For the west side, all categories except for heart disease and high cholesterol rank at parity or higher. We believe those categories ranked at parity to be worse than the data shows, as the south side numbers (baked into the city's broader statistics) pull up the composite city figures.

In self-reported studies, 15.3 percent of individuals in west side communities and 14.5 percent of individuals in south side communities have higher poor physical health rates than broader Chicago (12.7 percent).

These figures track the aforementioned equity numbers aptly, demonstrating that the lack of infrastructure, particularly on Chicago's south side, creates a significant challenge to addressing the prevalence of chronic disease.

Health Outcomes

There are myriad ways to represent the composite health outcomes that result from the institutional and social inequities referenced in this report. However, we believe that the ultimate indicator for a community's health is life expectancy, which measures the rate at which people pass away as a corollary to the areas this report has showcased.

Since 2001, life expectancy has increased¹⁶ nearly 2.5 years for the top 5.0 percent of earners, but remained stagnant for the bottom 5.0 percent of earners. In Chicago, the life expectancy of individuals who live in the west side and south side of the city varies greatly for individuals who live in the Loop or north side. For instance, residents in West Garfield Park have an average life expectancy of 69.9 years compared to individuals in the Loop (directly east) who have a life expectancy of 81.7. South side neighborhoods have similar disparities. In Englewood, the life expectancy is 68.1 years compared to the neighboring, more affluent area of Hyde Park where life expectancy is 80.6 years (Exhibit 3.14).



Exhibit 3.14: Life Expectancy in South and West ZIP Codes (2010-2015)





SAFETY NET



Reimagining the Safety Net

The projections and the underlying access, chronic disease, and outcomes data paint a stark picture for the city's most vulnerable communities. Currently, the state underwrites physical and mental services through the Departments of Healthcare and Family Services, Human Services, and Public Health at an aggregate rate of \$40 billion.¹⁷ Over the last three years, this government outlay has steadily increased by 8.4 percent. However, most stakeholders would assert that this money is not altogether sufficient to finance the amount of infrastructure required to support the underlying health, mental, and/or social service needs in under-served communities.

Under normal circumstances, despite the state's longer-term budget rehabilitation efforts, there would be a case for a gradual increase in the state's budget to accommodate the unfunded liabilities of safety net hospitals. However, there are three critical factors that are highly likely to preclude and obviate any meaningful budgeting exercise:

- The financial impact of COVID-19 on the Illinois economy has yet to fully materialize. Current projections by The Center on Budget and Policy Priorities anticipate that the Illinois state budgets will see a depression of 7 percent (\$2.7 billion) in 2020 and 12 percent (\$4.6 billion) in 2021.¹⁸ In short, even with federal aid, the state will struggle to find new monies to subsidize hospitals that are consistently operating at a loss.
- 2. This analysis only constitutes a four-year window, with perpetual decreasing inpatient revenues and increasing operating costs, both of which are likely to directionally continue their divergent paths absent some significant budgetary event. The outlying years beyond 2024 are likely to tell a similar, if not more ominous, story. Course-correcting would effectively require structural changes to the budget, forcing higher taxes or trade-offs with other critical state services like transportation, education, or security.
- 3. Successful, well-funded, or capitalized hospitals can portray a sense of safety and sophistication. In the absence of such financing, safety net facilities will continue to face asset and capital deterioration, which will exacerbate additional declines in utilization rates. In short, we do not yet know where the bottom is for these trended revenue declines.

It is difficult to conceive of a pathway where subsidies stand as the core solution to keeping these important community institutions open and viable.

¹⁷ https://www2.illinois.gov/sites/budget/Pages/BudgetBooks.aspx

¹⁸ https://www.cbpp.org/research/state-budget-and-tax/states-grappling-with-hit-to-tax-collections

The Politcal Price of Reform

Policy makers face difficult tradeoffs that must be thoughtfully considered now.

Our playbook heretofore has been to avert the political implications of transformation and consume every last inch of remaining runway until we are forced to reckon with the dispassionate economics that result in systematic hospital closures, leaving important communities bereft of critical health services. Over the last two years, the city has already seen the devastation communities experience as hospitals – West Lake, MetroSouth, and now, Mercy – have either closed or announced they are suspending operations. By delaying action, not only do hospitals fail to get the critical capital needed to bolster their infrastructure, but the opportunity to improve health outcomes and the communities' economies in the short or long term is compromised. These forecasted financial circumstances will soon render this playbook useless. We are running out of time.

We need a new playbook, created through a meaningful collaboration of the community and stakeholders that aims to realign our collective expectations of availability to a range of resources and allows us to focus on difficult political decisions. This is not code for "closing hospitals." Instead, it is a recognition of the irrefutable facts that we have far too few resources to address the range of biopsychosocial demand and needs in our underserved communities with an objectively unsustainable path for underwriting a single part of that system in the face of mounting losses.

If done right, we ardently believe and submit that not only do hospitals not *need* to close in the future, but capital (sourced from a variety of stakeholders) can be better focused to equip institutions with the resources that serve their highest and best needs in the community, preserving identity, presence, and the mission of improving health.

Imagine dedicated centers of excellence who are uniquely focused on highly specific health determinants that are fundamentally absent in the community. Behavioral health, addiction treatment, OBGYN, endocrinology, cardiology, nephrology, etc, buttressed by the use of current technology to link practitioners across the city, better assimilate data for intelligence, and relying on patient coordination partnerships that support improved experience and access. New skills can be developed, new jobs can be created, and new sources of income that lead to financial viability across the city can be established. Regrettably, any one stakeholder acting unilaterally threatens a self-inflicted wound. Such an exercise must be well-timed, well-coordinated, and well-intentioned, with the collective passion and energy of the entire city focused on creating an environment for maximized human potential, and all that comes with it, through improved health.

Literally No Time Like the Present

We have options and dynamics that did not exist a mere five years ago. The convergence of six key environmental factors tells us that we have never had the kind of opportunity at our feet now. Delayed action may threaten to remove those options in a mere five years from now. In short, there is literally no time quite like the present. These factors include:

- 1. Private sector institutions, venture firms, and other strategic groups believe that investing in market-based solutions, applied to delivery system mechanics, are capable of creating efficiency and generating savings.
- 2. Innovative technology platforms are offering communication resources that can share important patient information in real-time, manage scarce infrastructure capacity in new ways, and can leverage data science to more accurately stratify and predict risk.
- 3. An increase in the prevalence of alternative payment models (APMs) that encourage providers to offer a broader range of services and balance the risk and reward equation between payers and providers. Though APMs are far more prevalent in the Medicare and commercial markets (in 2018, 53 percent of ACOs were commercial, 37 percent were Medicare, and 10 percent were Medicaid¹⁹), there are demonstrable examples in other parts of the country (e.g., Oregon Coordinated Care Organizations²⁰ and Colorado's Accountable Care Collaborative²¹) that efficiency gains can be achieved when payment mechanisms are reconfigured to better align the interests of the parties.
- 4. The science of care models and management have become profoundly sophisticated. The combination of people, process, and technology configured to directly address specific disease states and/or populations shows that we have important evidence on *how* to improve community health. However, under our system's current fee-for-service reimbursement structure, these models all too often fail to be financially self-sustaining when the provider bears the operating cost directly or there are efficiency barriers that require onerous processes or extended staff.
- 5. The size of this challenge is not abating, as more Chicagoans find themselves closer to poverty every year and the state's projected Medicaid beneficiaries are anticipated to grow. The COVID-19 pandemic alone has caused the state's Medicaid population to increase by 4 percent from February 2020 to May 2020.
- 6. The events of 2020, from COVID-19 to the ongoing discussion of America's racial history, are shifting the disposition around the health system's role in health and economic development. Further, in the two years preceding 2020, the industry had already begun a wholesale mass shift to prioritize social determinants of health as highly correlated to the life expectancy variations we see within urban and rural communities across the country.

These conditions alone are not sufficient to drive the changes or decisions required to advance the interests of the states or these communities. However, they do establish an environment under which emergent or traditional funding sources could be directed for appropriate capital investment and transformation.

¹⁹ https://www.healthaffairs.org/do/10.1377/hblog20180810.481968/full/

²⁰ https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2016.1298

²¹ https://www.coloradohealthinstitute.org/research/ways-raes

Seizing the Moment with Creative Financing Approaches

There is an active debate about whether this could all be simply addressed through higher reimbursement rates, particularly through the Medicaid program. While that may be true, it should be clear by now that there is a low likelihood that we can "fund our way" out of this. Higher reimbursement rates should remain an objective. But we believe it is more important to address the "efficiency gap" that is created by the fragmented nature of our biopsychosocial systems while concurrently deploying and expanding the resources at our city's disposal in far more strategic ways. If we cannot create new money, we must find ways to be more deliberate about how we spend the money we *do* have.

- 1. The state has diligently worked to create a multi-year funding path through the allocation of dollars intended for transformation. This funding amounts to \$150 million per year and could serve as a significant investment in addressing the gaps and staving off the fiscal cliff this paper identifies. The state's disposition in identifying funding opportunities through established collaborations that address fragmentation and efficiency is the right one. The onus will be on communities to convene, collaborate, and operate with an abundance mentality to maximize the use of these finite resources.
- 2. Private sector institutional capital that is invested to support foundational community assets that create strategic opportunities. Illinois is one of 36 states that allows for Benefits Corporations organizations that pay taxes but enjoy the benefit of a different charter and mandate that have fidelity for the mission of the organization instead of the shareholders or owners.
- 3. Philanthropic funding that can be better concentrated and levered by state funding to optimize the overall impact of donors.
- 4. Organizations are piloting and implementing early stage, integrated delivery systems in Chicago's safety net, providing insights from which to build and learn upon. Integration enables greater interoperability and greater person-centered care coordination, which in turn can yield greater health outcomes and lower costs across the care continuum.
- 5. Corporate investments are simultaneously looking for opportunities to enhance or improve community-level diversity and inclusion efforts. The corporate community is lacking a single coordinating entity capable of optimizing these expenditures.
- 6. Tax-exempt hospitals are required to provide monies for "community benefit." While hospitals certainly check the box of federal and state requirements in allocating this funding, it is often not coordinated with other facilities and minimizes the broader, aggregate impact that could be realized in the safety net. Non-safety-net hospitals have a natural economic incentive to maximize these funds in service of strengthening the safety net as such strengthening mitigates the number of lower-reimbursed patients from crossing town.
- 7. State policy markers could consider a policy that would allow for a re-allocation of risk-based capital for Managed Care Organizations. If granted, it would be possible to shift the capital held in reserve for payer insolvency toward investments in certain for-profit initiatives (strictly defined) that could create \$30-\$160 million in additional capital funding.

 ²² https://benefitcorp.net/policymakers/state-by-state-status?state=0
²³ https://www2.illinois.gov/Pages/news-item.aspx?ReleaseID=21790

What's more, if the second, fourth, or sixth option are linked to a transformation proposal and funds were run through HFS, an additional federal match could be captured, resulting in an even better levering of scarce state resources. In short, there are myriad pathways to establish funding that could represent more than \$1 billion and could be used to transform these facilities.

The price tag to redesign these safety net systems could exceed one billion dollars. The price of inaction is far greater, both in measures of lost economic productivity and loss of life. These dollars largely exist or are on a path to allocation. Sporadic spending threatens to keep the system mired in its current state. Thoughtful and collaborative allocation of these collective resources can literally help communities establish a new intergenerational baseline.

Principles of Transformation

Defining any transformation effort should abide by three important principles.

The first is a general de-prioritization and cultural shift in how we think about the role of hospitals in these communities. While hospitals have been and will continue to be important community assets and pillars for critical care, they are too often used for purposes that could be commensurately addressed in the home through technology, social service platforms, or community health centers. In short, we would be well served in focusing less on the fixed asset costs of brick-and-mortar facilities and more on evidence-based platforms capable of similar health outcomes at a lower cost. This is in no way an assertion that we should circumvent hospitals' critical services; but rather a call to focus on investing in their highest and best community use for the purpose of long-term viability.

The second is energetic investment in the under-funded parts of Chicago's mental health and social services infrastructure should be a paramount priority. There is no reason to have to close any hospitals or misplace any jobs if proactive action is taken. According to our analysis (see Section 3), there is a surplus of acute care capacity in certain communities. Conversely, based on similar infrastructure inventorying and projected patient demand, there are resources gaps throughout vulnerable communities, namely in:

- Mental health settings
- Addiction recovery programs and housing
- Chronic kidney disease services and supports, including dialysis
- Diabetes prevention and recovery
- OBGYN services including perinatal planning, labor and delivery, and intensive care capacity
- COVID-19/Post-COVID-19

Further still, Chicago has highly-accessible, accredited, and capable learning institutions that can be critical partners in equipping the workforce with new skills.

Finally, it is critical to align Managed Care Organizations and providers in a way that changes the financial construct for reimbursement. Insurance companies are highly adept at managing the way in which their members access services through networks, but are disadvantaged due to a lack of sustained and contiguous patient contact. Payers should continue to fulfill the administrative and managerial functions on which their expertise relies while sharing the risk for improved outcomes with the institutions and clinicians that are more directly connected to patients on the ground.

This does not have to be difficult. There are political outcomes that can be tenable and acceptable to all parties so long as the will, a high collaborative IQ, and a strong partnership with communities are brought to bear with a shared vision of improving the access to care. There is a start need to address these issues; and even bigger gains to be realized through true innovation and transformation.

The Punchline

Health is the most fundamental building block of human productivity.Compromised mental or physical health make it difficult to carry out functions of work, education, and caretaking. Improving health is the first and most critical step to improving economic activity, as healthier and more well communities can train, work, and perpetuate new economic opportunities.

We have attempted to show that our current approach of subsidizing individual hospital losses may be reaching a rapid conclusion. Even if we could afford such subsidies in the coming years, these hospitals are done a tremendous disservice by not having the access to capital needed to make critical investments. Jobs will be threatened, communities may lose even more access to key services, and the environment for neighborhoods will get even harder to bear.

Chicago represents a symbiotic ecosystem. What happens in one neighborhood, in some way will indelibly impact all others. These challenges are not simply isolated to certain geographies. No matter our walk of life or our industry, we have a shared interest in improving the environment for the better health that correlates to higher prosperity.

There is a risk of the perfect being the enemy of the good. Additional funding and resources may be desirable, but the magnitude of what's needed is almost surely untenable. Despite that, emergent factors can be leveraged to redefine our systems of care through the grit, determination, and creativity our city has always been known for.

Our future is not cast in stone. We can re-train professionals, redeploy funding, and reimagine transformation to create a holistic system of care and the economic vibrancy that can be achieved through such activities.

The best time to plant a tree was 20 years ago. The next best time is today.

Appendix A: Definitions and Methodology

Definitions

Safety Net

We used the Illinois Department of Healthcare and Family Service's (HFS) definition of a "safety net hospital" to identify the hospitals included in this analysis. To qualify as a safety net hospital, HFS requires an Illinois hospital to:

- Be licensed by the Department of Public Health as a general acute care or pediatric hospital;
- Be a Disproportionate Share Hospital as determined by HFS;
- Have a Medicaid Inpatient Utilization Rate (MIUR) of at least 40 percent with a charity percent of at least 4 percent OR a Medicaid Inpatient Utilization Rate of at least 50 percent; and
- Any hospital that, beginning July 1, 2012 and ending on June 30, 2020, would have qualified for the rate year beginning October 1, 2011."

Geographic Partitioning and Considerations

We looked at the safety net hospital infrastructure of Illinois at comprehensively across Illinois, as well as within two very discrete geographic regions in the city of Chicago on the city's south and west sides. Each geographic region is identified by ZIP codes classified by the data platform Metop.io.

These three regions within Illinois are defined as:

South Side

The geography for Chicago's south cohort included the following 17 ZIP codes:

60609	60632
60615	60633
60616	60636
60617	60637
60619	60643
60620	60649
60621	60652
60628	60653
60629	

West Side The geography for Chicago's west cohort included the following eight ZIP codes:

60607
60608
60612
60622
60623
60624
60644
60651

Broader Illinois

The safety net hospitals not included in the south and west side cohorts constituted the third category for this analysis, representing 22 institutions that HFS recognized as safety net hospitals in 2019.

These zip codes account for 428,967 Illinois residents, or 3.8 percent of the state's population. As of 2019, HFS recognizes five safety net hospitals on the west side.

Methodology

Data Sources

For this analysis, we leveraged data from three primary sources:

- Torch Insight Developed by Leavitt Partners, this analytics platform provides critical underlying data that informs the financial and operational integrity of health ecosystems. The database includes hundreds of variables that can be used for analysis and is able to triangulate on referral patterns and diagnosis or procedural prevalence using ICD and CPT coding features. <u>https://torchinsight.com/</u>
- Metop.io This platform has a proprietary score that creates a composite view of community need, integrating various biopsychosocial factors. The platform is further able to provide mapping at various discrete geographic units of analysis, examining a wide array of variables such as alcohol use disorder prevalence, housing security, mental health access, chronic disease prevalence, etc. Further, the platform has integrated tools that support multi-variable regression of different variables to study unique correlations that could provide strategic insights depending on the underlying questions be posited. https://metop.io/
- **990 Forms** Federal tax instruments used to capture important financial information from tax-exempt entities. We primarily used these forms to extract balance sheet data for free-standing safety net

Data Variables

The primary data variables used in this analysis were pulled from the Torch Insight database and included the following:

Label	Description
Net Patient Revenue	Total net patient revenue
Total Operating Expenses	The total operating expenses for the hospital, calculated by subtracting the total deductions from the operating expenses and total additions

Data Assumptions

Torch Insight did not have 2018 data elements for two hospitals: Advocate Trinity and South Shore. To adjust for the missing data, we calculated compounded trends for each variable using historic data covering the three-year period between 2015 and 2017. We applied the compounded trends to 2017 data to approximate the missing 2018 data, and then used the approximate 2018 data for these two hospitals across cohort calculations, as appropriate.

Calculations and Modeling

We examined two timeframes for these analyses: retrospective (covering the four-year period between 2015 and 2018) and prospective views (covering the six-year period between 2019-2024). We elected to exclude data prior to 2015 so as to not include the financial dynamics that existed prior to the states entrance into managed care or the expansion of the Medicaid program through the Affordable Care Act.

We used a standard growth rate formula to examine facility-by-facility annual trends in NPR and each hospital's annual operating expenditures. We adjusted and weighted the rates to accurately represent a composite view of the corresponding region's overall financial trends.

We conducted prospective forecasting by first calculating the compounded trend of relevant data variables based on historical data from the four-year period between 2015 and 2018. We applied compounded trends to a given year's data (either actual or calculated) to approximate the following year's data and calculated compounded trends for each cohort on an aggregated basis to review how the hospitals performed as a collective.

For the south side cohort, we included data from MetroSouth Medical Center for the retrospective findings, but excluded it from the prospective findings since the facility closed in 2019.

APPENDIX D: COMMUNITY INPUT



HC3 Events 2019-2021: Access, Equity and Trauma

11.26.2019 - Reimagining Chicago's Safety Net <u>https://www.hc3.health/post/eventrecap_reimaginingchicago-ssafetynet2019</u>

12.16.2019 - Community Violence as a Public Health Focus <u>https://www.hc3.health/post/event-recap-community-violence-as-a-public-health-focus-december-16-</u> <u>2020</u>

8.13.2020 - Opportunities for Data to Drive Solutions for COVID-19 and Beyond <u>https://www.hc3.health/post/opportunities-for-data-to-drive-solutions-for-covid-19-and-beyond-august-12-2020</u>

8.21.2020 - Emerging Leaders Series: A conversation with Jahmal Cole on Social Justice <u>https://www.hc3.health/post/event-recap-emerging-leaders-series-a-conversation-with-jahmal-cole-on-social-justice</u>

8.31.2020 - Addressing Complexities of Care during COVID-19 <u>https://www.hc3.health/post/addressing-complexities-of-care-during-covid-19by-august-31-2020</u>

3.26.2021 – The Challenging Future of the Chicago Safety Net <u>https://www.hc3.health/post/event-recap-the-challenging-future-of-the-chicago-safety-net-white-paper-release-03-18-2021</u>

4.16.2021 – Advancing Health Equity Series: Defining Health Equity (in partnership with MATTER) <u>https://www.hc3.health/post/event-recap-advancing-health-equity-series-defining-health-equity-4-14-2021</u>

5.25.2021 – Transformation Series: Enhancing the Behavioral Health Safety Net <u>https://www.hc3.health/post/event-recap-transformation-series-enhancing-the-behavioral-health-safety-net-5-25-2021</u>

9.15.2021 - All In Chicago: Cultivating Resiliency for Individuals and Communities (in partnership with CommunityHealth)

https://www.hc3.health/post/event-recap-all-in-chicago-cultivating-resiliency-for-individuals-andcommunities-6-17-2021

APPENDIX E: ELECTED OFFICIALS LETTERS OF SUPPORT



JASON C. ERVIN City of Chicago

Alderman, 28th Ward 2622 W. Jackson Boulevard, Suite 200A Chicago, Illinois 60612 Telephone: (773) 533-0900 Fax: (773) 522-9842 <u>Jason.Ervin@CityOfChicago.org</u> www.AldermanErvin.com

November 12, 2021

Committee Memberships

Aldermanic Black Caucus, Chairman Budget & Government Operations Contracting Oversight & Equity, Chairman Finance License & Consumer Protection Public Safety

Workforce Development, Vice Chairman

Christine M. Achre, CEO Primo Center 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

Dear Ms. Achre:

I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the Trauma Informed Network for Community Resilience program.

Sincerely.

Jason C. Ervin Alderman, 28th Ward

"Standing Tall for the 28th Ward"

COMMITTEE ON WAYS AND MEANS

CHAIRMAN: WORKER AND FAMILY SUPPORT

> SUBCOMMITTEE: TRADE

COMMITTEE ON OVERSIGHT AND REFORM

SUBCOMMITTEES: CIVIL RIGHTS AND CIVIL LIBERTIES GOVERNMENT OPERATIONS

Conaress of the United States

House of Representatives

CHICAGO OFFICE: 2813–15 W 5TH AVENUE CHICAGO, IL 60612 (773) 533–7520 (773) 533–7530 (fax)

DANNY K. DAVIS

7TH DISTRICT, ILLINOIS WASHINGTON OFFICE:

2159 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515 (202) 225–5006

(202) 225-5641 (fax)

November 18, 2021

Theresa Eagleson, Director Healthcare and Family Services State of Illinois 401 S. Clinton Street Chicago, IL 60607

RE: Healthcare Transformation Collaboratives Funding for Trauma Informed Network for Community Resilience

Dear Director Eagleson:

Please accept this communiqué as a letter of support for the Primo Center's application for Health Care Transformation Collaboratives funding for the *Trauma Informed Network for Community Resilience*. The *Trauma Informed Network for Community Resilience* collaborative promises to increase the quality of care for adult Medicaid beneficiaries in the underserved communities of the South and West Sides of Chicago. Given the extremely high rates of trauma in these communities, it is imperative that we address the underlying mental health needs of these residents, especially with a lens on social equity.

As an early adopter of harm reduction for families, the Primo Center has demonstrated that it is highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. The Primo Center has served as a leader innovation for decades in serving vulnerable adults. It has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude that will help transform the mental health and well-being of the targeted communities. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to healing within the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

The Healthcare Transformation Collaboration funding offers a unique opportunity for this innovative partnership to improve the adult health in communities suffering from trauma. I trust the application will receive all due consideration.

Sincerely,

Darmych. Danies

Danny K. Davis Member of Congress

CAPITOL OFFICE 247-E STRATTON BUILDING SPRINGFIELD, IL 62706 217.782.5962 OFFICE 217.557.4502 FAX Repford@lashawnford.com



La Shawn K. Ford State Representative 8th District

November 15, 2021

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

Dear Christine:

I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

Sincerely,

La Shawn K. Ford State Representative--Eighth District

STEPHANIE D. COLEMAN ALDERMAN, 16TH WARD

5411 SOUTH ASHLAND AVENUE CHICAGO, ILLINOIS 60609 PHONE: 773-306-1981 EMAIL: INFO@16THWARD.ORG



CITY OF CHICAGO CITY COUNCIL

COUNCIL CHAMBERS CITY HALL ROOM 300 121 NORTH LASALLE STREET CHICAGO, ILLINOIS 60602 PHONE: 312-744-6850 COMMITTEE MEMBERSHIPS

COMMITTEES AND RULES EDUCATION AND CHILD DEVELOPMENT HUMAN RELATIONS AND HEALTH LICENSE AND CONSUMER PROTECTION PEDESTRIAN AND TRAFFIC SAFETY

November 15, 2021

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

Dear Christine:

I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

Committed and Dedicated to the 16th Ward,

ALDERMAN - 16th WARD

APPENDIX F: MINORITY ORGANIZATION LETTERS OF SUPPORT



Primo Center

Christine M. Achre, CEO

6212 South Sangamon Street

Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

November 18, 2021

Dear Christine:

I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing theorganization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and wellbeing of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding . We look forward to working with you on the Trauma Informed Network for Community Resilience program.

Sincerely,

Ma

Marshall Hatch Jr.

MAAFA Redemption Project- Executive Director 22 N. Kildare Ave Chicago, IL 60624 Suite 101 mhatch@maafachicago.org



Now Mount Bilgrim M. B. Church 4301 West Washington Boulevard, P.O. Box 24340, Chicago, Illinois 60624 Telephone: (773) 287-5051 Facsimile: (773) 265-0312

E-mails: <u>newmountpilgrim@sbcglobal.net</u> Rev. Dr. Marshall E. Hatch, Senior Pastor

Primo Center Christine M. Achre, CEO 6212 South Sangamon Street Chicago, IL 60621

RE: Trauma Informed Network for Community Resilience

November 15, 2021

Dear Christine:

I am pleased to support and commit to the collaboration on Medicaid transformation for the underserved communities of the South and West Sides of Chicago. It is imperative that we address the underlying mental health needs of the aforementioned communities given the extremely high rates of trauma, especially with a lens on social equity.

I am excited by the innovation this will bring and to participate in the trauma informed network led by the Primo Center. I understand that this project will truly represent a community collective of traditional as well as natural supports that will offer a gateway to hope in healing the South and West Side communities ravaged for decades by inequitable health care options and chronic traumatic stress.

As an early adopter of harm reduction for families, Primo Center has demonstrated that they are highly effective at serving individuals who are victims of trauma. I have had the privilege of witnessing the organization's growth from being one of the smallest providers of family shelter to becoming the largest in the Chicago area. Primo Center has been a leader in guiding innovation for decades. The Primo Center has the insight and expertise to both fiscally and programmatically manage an initiative of this magnitude which will ultimately transform the mental health and well-being of the entire community.

I am grateful for our partnership with Primo Center and feel strongly that this project is deserving of HFS Transformation Funding. We look forward to working with you on the *Trauma Informed Network for Community Resilience* program.

Sincerely,

<u>Rev. Dr. Marshall E. Hatch Sr.</u> Rev. Dr. Marshall E. Hatch Sr. Pastor

> "The joy of worship, the challenge of ministry!"(2021) www.newmptilgrim.org

APPENDIX G: EMPLOYEE DATA FILE

ZIP/Postal Code	Job Title
46307	Clinical Director
46324	Maintenance
46404	Sr. Case Manager
46407	Case Manager II/Therapist
60302	Asst. Shelter Director
60404	Director of Communications/Special Assistant to CEO
60406	House Manager
60406	House Manager
60411	Care Coordinator/Crisis Assessment Team
60411	Sr. Dir. of Community Support Services
60419	Program Director
60419	Sr. Case Manager
60426	Consumer Savings Program Specialist
60429	Case Manager I
60429	Lead Maintenance
60438	Maintenance
60443	Case Manager II/Therapist
60443	Human Resource Manager
60449	Case Manager II/Therapist
60473	Chief Program Officer
60473	Parent Educator
60487	Billing Director
60601	Chief Community Relations Officer
60607	Chief Executive Officer
60609	FUSE Program Director
60609	House Manager
60612	Home Visitor
60612	House Manager
60612	PT Maintenance/House Manager
60615	Care Coordinator
60615	Case Manager I
60615	House Manager
60617	House Manager
60617	House Manager
60619	Case Manager II
60619	Clinical Manager
60619	House Manager
60619	House Manager
60620	Chief Compliance Officer
60620	Early Childhood Worker
60620	Finance and Records Support
60620	House Manager
60620	Maintenance
60620	Property Manager

60620	Site Director
60621	Early Learning Teacher Aide
60621	Maintenance
60622	Chief Administrative Officer
60623	House Manager
60623	House Monitor
60624	House Manager
60624	House Monitor
60624	Security
60624	Therapist
60636	Maintenance
60636	Maintenance
60636	Security
60637	House Manager
60637	House Manager
60640	Director of Grants and Finance
60640	House Manager
60643	Chief Quality/Impact Officer
60643	House Manager
60643	Therapist
60644	House Monitor
60644	Maintenance
60649	Case Manager II
60649	House Manager
60649	Parent Educator
60651	Home Visitor
60653	Site Director
60653	Sr. Director of Early Learning Services
60653	Therapist
60655	Sr. Case Manager
60827	House Manager

Row Labels	Count of Employee Number
60620	10
60619	4
60624	4
60636	3
60643	3
60612	3
60615	3
60649	3
60653	3
60637	2
60644	2
60623	2
60443	2
60406	2
60640	2
60617	2
60621	2
60473	2
60609	2
60429	2
60411	2
60419	2
60601	1
60651	1
60607	1
60487	1
60655	1
60449	1
46407	1
60438	1
46324	1
60622	1
60827	1
46307	1
46404	1
60426	1
60302	1
60404	1
Grand Total	78

Row Labels	Count of Employee Number
House Manager	21
Maintenance	7
House Monitor	3
Case Manager II/Therapist	3
Therapist	3
Sr. Case Manager	3
Case Manager I	2
Parent Educator	2
Case Manager II	2
Site Director	2
Home Visitor	2
Security	2
Chief Executive Officer	2
Care Coordinator/Crisis Assessment Team	1
Chief Quality/Impact Officer	1
Clinical Director	1
Human Resource Manager	1
Clinical Manager	1
Program Director	1
Consumer Savings Program Specialist	1
Chief Community Relations Officer	1
Chief Administrative Officer	1
Chief Compliance Officer	1
Sr. Dir. of Community Support Services	1
Lead Maintenance	1
PT Maintenance/House Manager	1
Chief Program Officer	1
Billing Director	1
Property Manager	1
Finance and Records Support	1
FUSE Program Director	1
Care Coordinator	1
Early Learning Teacher Aide	1
Director of Communications/Special Assistant to CEO	1
Sr. Director of Early Learning Services	1
Director of Grants and Finance	1
Asst. Shelter Director	1
Early Childhood Worker	1
Grand Total	78
	10