[redacted]

For

a West Michigan Healthcare Nonprofit

Evaluation of New Business Models

In Support of Alternative Revenues

Prepared for [redacted]

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Stakeholder Mapping

To begin evaluating the [redacted], it was necessary to gain a holistic understanding of the system in which the [redacted] operates. To do this, a stakeholder map was created in collaboration with [redacted] staff. Each staff member was asked to write down as many people, businesses, organizations, industries, etc., they believe the [redacted] affects (or is affected by) either directly or indirectly. Then, each of these stakeholders were compiled and organized. Using this stakeholder map, we identified which market segments to prioritize for interviewing. The original stakeholder map can be found in Appendix A. The final stakeholder map was digitized and can be found in Figure 1.

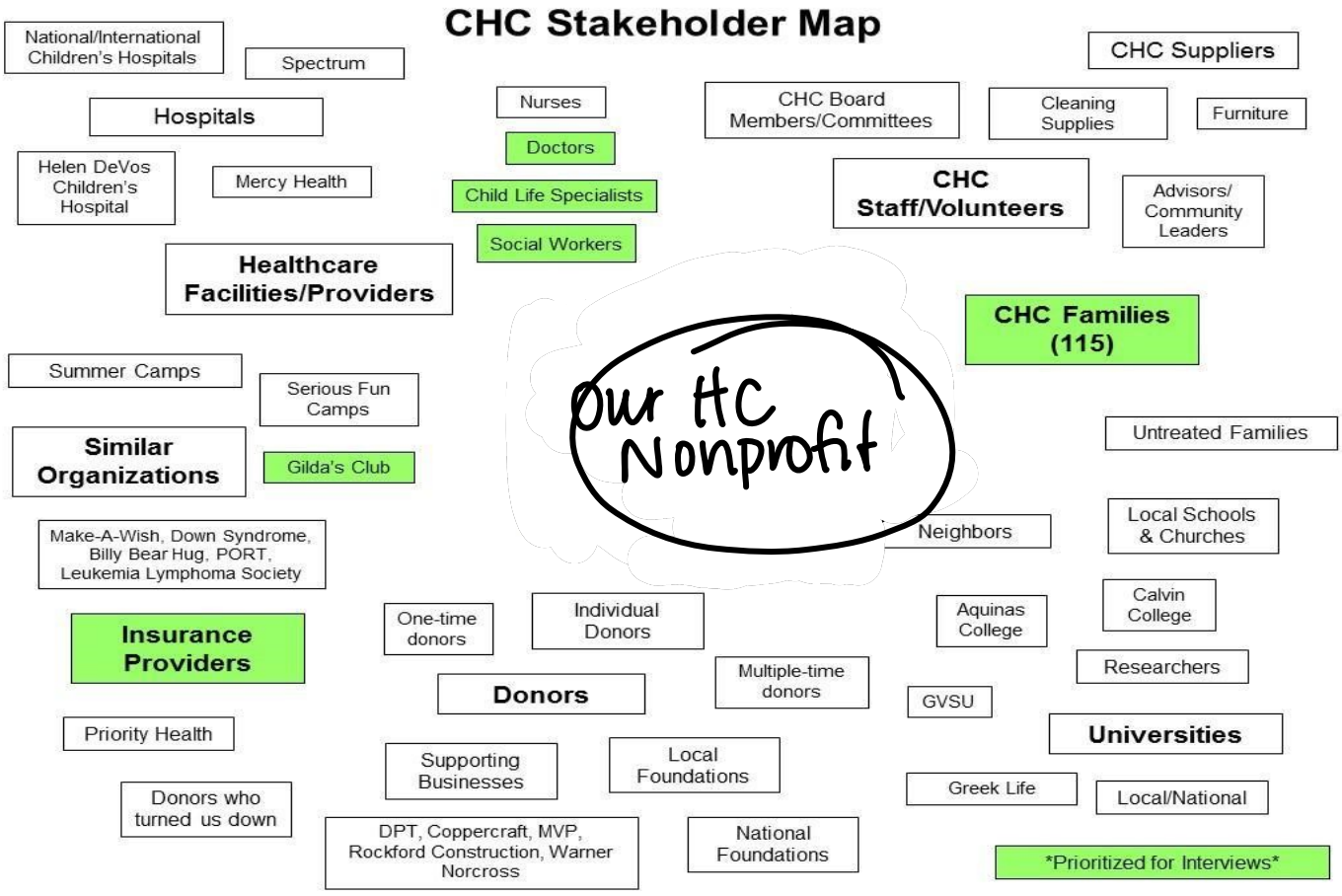

Figure 1. This stakeholder map is a visual display of the stakeholders who are directly and indirectly impacted by the [redacted] Highlighted in green are stakeholders prioritized for interviewing, with the addition of hospital administration.

Stakeholder Interview Strategy

Goal: To identify and validate the value propositions provided by [redacted] for B2B and B2C market segments

Method: Craft questions which identify the needs and opportunities which the CHC currently and could meet for stakeholders

Through review of the stakeholder map with [redacted] management, and alignment with previous strategic assessment research by Dr. Mike Schuler, Ph.D. (*The Epicenter of Play; Creating Sustainability, 2016*) and the Calvin College CSR project running concurrent with this research, we made the decision to focus primary research with three stakeholder groups: **Healthcare Providers**, **Insurance Companies**, and organizations with **similar service delivery models** that were/are part of an expansion or have themselves expanded beyond a single location.

Healthcare providers included subgroups of services along a continuum of care, starting with administration, and moving closer to the qualifying member through physicians and their supporting staff, then child life specialists, then social workers.

Key Findings from Interviews

All stakeholder groups indicated that coordination throughout the continuum of care is challenging, especially at "hand off" points.

Insurance

"Transition from inpatient to outpatient (chronic care) generally has a patient care plan for continuation of care. This supports management of the disease pathway and "recovery." Many "hand-offs" in this process which can cause issues. Decision-making is very fragmented."

- Service must be considered medically/clinically necessary
- Services or supplies must be widely accepted as effective, appropriate, and essential, based upon nationally accepted *evidence-based* standards
- Insurance coverage is tightening to just clinical care
- ACA exclusion for habilitative therapy, with a specific *exclusion* for recreational therapy
- Home-based primary care; must be able to offer to all enrolled in the demographic
- Market size matters; too small isn't financially viable

Healthcare Administrators

"We really can't deal with any service that isn't clinically driven as we operate through reimbursement."

- Interactions need to be clinical to clinical
- Uncertainty in the insurance market means uncertainty in clinical service lines
- 50% of pediatric cases are Medicaid (in GR market)
- No risk on early discharge is assumed with pediatric patients
- Transition from in to outpatient is a "grey area"

Healthcare Providers (Physicians)

"Many things are overlooked …. there really needs to be more complete education and instruction on risks for infection and avoidance."

- Time with patients is a luxury
- Patient diagnosis and management is getting more complex; co-morbidities are not understood
- Patients don't know their own drug regimens/dosage levels
- No time to follow-up or follow-through; self-advocacy is important
- Proper food preparation/nutrition is a real issue for these cases
- Connecting back to inpatient care is difficult for outpatient treatment providers

Child Life

"I definitely think that there's a more of a role Child Life could play outside the hospital."

- Child Life is an inpatient service; however not funded by insurance
- Child Life aims to "normalize the hospital experience" for children and families
- Used to play more of an educational role through transition out of hospital, but budget is a barrier
- Designed to build rapport, educate, and support normal psychosocial development
- Child Life Specialists struggle to maintain relationships with patients over time
- Once the child leaves their specific area or department, they are referred to other Child Life Specialists
- Connections (not official referrals) to outside resources can support family-centered treatment and child development
- Need to start from scratch with each new patient

Social Work

“Social workers who have several clients and families may also have several case workers working with them - it is overwhelming for everyone involved, especially during the transition phase. Information gets lost, files get piled up, and families can be forgotten, especially if the case worker feels overworked. Families then have the sense that they aren't as important, and that tension creates even more problems, and they are unwilling or less likely to take the advice of the social worker."

- Social Workers don’t have enough time or resources to thoroughly treat each case
- Social Work often takes a therapeutic role
- Support normal psychosocial child development through hospital treatments and transition out
- Social Workers are required to refer clients to outside resources
- Resources need to be reputable and easily accessible by ALL clients (geographic/financial barriers)
- Resources need to support “normal social-emotional development”
- Social Workers’ jobs, licenses, and reputations depend on positive referrals (NASW)

Learning from Other Models

“If doctors have to sell your service, they don’t and won’t.”

- Families are interested in services to help them “survive” the challenge of long-term health management, but services need to be free
- Doctors do not sell to patients
- For sustainability, it’s important to build effective regional and national affiliations
- Strong philanthropy is key for sustainability; also builds deep ties to the community
- Consider positioning services as outsource for busy healthcare providers who don’t know how to/don’t want to deal with condition (share reimbursement)
- Targeted marketing matters; know your market access points

Target Market Data – B2B in support of Duplication Model

Logic Model

In order to identify target markets around the country with potential for [redacted] duplication, we characterized the ideal location as one which has a flourishing philanthropic community to support fundraising, a children's hospital with which to partner for access to qualifying members, and a research university that may support clinical and longitudinal research the[redacted] needs. In this, we identified potential cities for [redacted] duplication with the following logic model as shown in Figure 2:

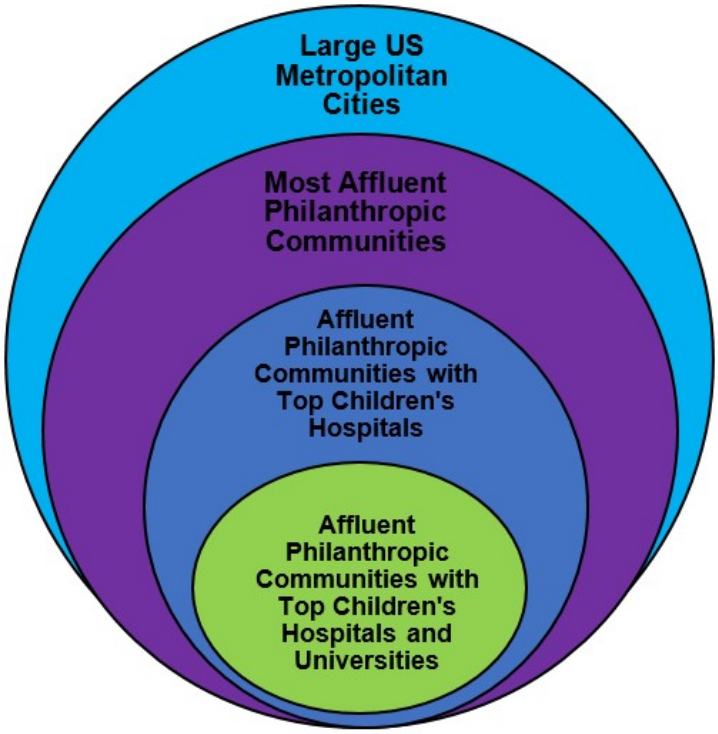

Figure 2. This stacked Venn diagram is a visual representation of the target market logic model.

Most Affluent Philanthropic Communities

The most affluent philanthropic communities were identified using Charity Navigator (https://www.charitynavigator.org/index.cfm?bay=studies.metro.main&categoryid=9), an online database which collects and stores critical information from the U.S. nonprofit sector. We chose to focus on rankings based on total contributions as we believe this is the best indicator of potential funds accessible to [redacted] for expansion into a new region. Table 1 lists the top thirty charitable U.S. cities by total contributions. Notably, Detroit is ranked 11th and Chicago is ranked 22nd.

Total Contributions: Median Grant/Charitable Donations/Year		
RANK	Metro Market	Median
1	Houston	$4,318,811
2	Washington, DC	$4,047,666
3	Los Angeles	$4,003,094
4	Miami	$3,927,908
5	New York City	$3,887,670
6	Dallas	$3,740,065
7	Baltimore	$3,713,401
8	Phoenix	$3,638,636
9	Kansas City	$3,563,003
10	Colorado Springs	$3,472,384
11	Detroit	$3,466,651
12	Atlanta	$3,454,887
13	Indianapolis	$3,429,655
14	Portland	$3,383,150
15	Cincinnati	$3,304,136
16	Seattle	$3,250,397
17	Pittsburgh	$3,188,410
18	San Diego	$3,186,567
19	San Francisco	$3,164,766
20	Orlando	$3,127,369
21	St. Louis	$3,066,680
22	Chicago	$3,044,005
23	Tampa/St. Petersburg	$3,000,087
24	Cleveland	$2,714,512

25	Nashville	$2,691,954
26	Denver	$2,646,327
27	Milwaukee	$2,606,003
28	Minneapolis/ St. Paul	$2,567,429
29	Boston	$2,496,611
30	Philadelphia	$2,297,705

Table 1. The top 30 charitable cities by total contributions in dollars per year.

Top Children's Hospitals

The [redacted] has largely benefitted from its partnership with and proximity to the Helen DeVos Children's Hospital in Grand Rapids. In order to ensure similar success in a duplication model, we characterized partnership with a top-rated children's hospital as a need in identifying potential duplication cities. To identify these hospitals, we used data from the U.S. News & World Report (https://www.usnews.com/info/blogs/press-room/articles/2016-06-21/us-news-announces-the-2016-2017-best-childrens-hospitals) which ranked children's hospitals by specialties based on factors like clinical outcomes, efficiency, best practices, resources, and more. Table 2 compiles a list of viable children's hospitals with which the [redacted] could partner.

Top-Rated Children's Hospitals by Size, City, and State				
Children's Hospital	Patients Treated Annually (in and out patient)	# of Beds	City	State
St. Jude	7,500	78	Memphis	TN
Boston Children's Hospital	15,817	415	Boston	MA
Children's Hospital of Philadelphia	>1,000,000	546	Philadelphia	PA
Texas Children's Hospital	30,002	651	Houston	TX
Cincinnati Children's Hospital	>1,200,000	600	Cincinnati	OH
Johns Hopkins	426,198	259	Baltimore	MD

Children's National Medical Center	218,958	313	Washington, DC	DC
Children's Hospital Colorado	721,040	479	Aurora	CO
Children's Hospital LA	358,353	300	LA	CA
Nationwide Children's Hospital	>1,400,000	468	Columbus	OH
Seattle Children's Hospital	420,996	371	Seattle	WA
Ann and Robert H. Lurie Children's Hospital of Chicago	599,000	288	Chicago	IL
U of M Mott Children's Hospital	23,321	348	Ann Arbor	MI
Children's Hospital of Wisconsin	345,071	370	Milwaukee	WI
Mayo Clinic	50,000	148	Rochester	MN
Shriners Hospitals for Children	10,500	40	Salt Lake City	UT
Children's Hospital of Pittsburgh	12,432	305	Pittsburgh	PA
Akron Children's Hospital	800,000	414	Akron	OH
Comer Children's Hospital	72,000	172	Chicago	IL
Helen DeVos Children's Hospital	50,000	212	Grand Rapids	MI
St. Louis Children's Hospital	275,000	280	St. Louis	MO
Nemours/DuPont Children's Health System	9,330	194	Wilmington	DE
UH Rainbow Babies and Children's Hospital	700,000	244	Cleveland	OH
Children's Hospital of Michigan-DMC	100,000	288	Detroit	MI

Table 2. A list of viable children's hospitals with which the [redacted] could partner by children treated annually, number of beds, city, and state.

Philanthropic Cities with Top Rated Children's Hospitals

Continuing the target market logic model, we cross-referenced top children's hospitals with the most philanthropic cities in the country. In this, we identify hospitals with which the [redacted] could partner while receiving philanthropic financial support. Table 3 lists these cities and hospitals.

Philanthropic Cities with Top-Rated Children's Hospitals		
Case	City	Children's Hospital
1	Boston	Boston Children's Hospital
2	Philadelphia	Children's Hospital of Philadelphia
3	Houston	Texas Children's Hospital
4	Cincinnati	Cincinnati Children's Hospital
5	Baltimore	Johns Hopkins
6	Washington, D.C.	Children's National Medical Center
7	LA	Children's Hospital LA
8	Seattle	Seattle Children's Hospital
9	Chicago	Ann and Robert H. Lurie Children's Hospital of Chicago
10	Milwaukee	Children's Hospital of Wisconsin
11	Pittsburgh	Children's Hospital of Pittsburgh
12	Chicago	Comer Children's Hospital
13	St. Louis	St. Louis Children's Hospital
14	Cleveland	UH Rainbow Babies and Children's Hospital
15	Detroit	Children's Hospital of Michigan - DMC

Table 3. Cross-Referencing Philanthropic Cities and Children's Hospitals

Philanthropic Cities with Top-Rated Children's Hospitals and University Relationships

The final list of potential target markets for duplication is generated by cross-referencing philanthropic cities, top children's hospitals, and ties which these hospitals have with local universities. In this, the[redacted] would not only have potential financial, clinical, referential, and programmatic support from the cities and hospitals, but potential for a future longitudinal study in collaboration with university faculty. Table 4 contains this final list.

Philanthropic Cities with Top-Rated Children’s Hospitals and University Relationship			
Case	City	Children’s Hospital	University
1	Boston	Boston Children's Hospital	Harvard University
2	Philadelphia	Children's Hospital of Philadelphia	University of Pennsylvania
3	Houston	Texas Children's Hospital	Baylor University
4	Cincinnati	Cincinnati Children's Hospital	University of Cincinnati
5	Baltimore	Johns Hopkins	Johns Hopkins University
6	Washington, D.C.	Children's National Medical Center	George Washington University
7	LA	Children's Hospital LA	University of Southern California
8	Seattle	Seattle Children's Hospital	University of Washington
9	Chicago	Ann and Robert H. Lurie Children's Hospital of Chicago	Northwestern University
10	Milwaukee	Children's Hospital of Wisconsin	University of Wisconsin
11	Pittsburgh	Children's Hospital of Pittsburgh	University of Pittsburgh
12	Chicago	Comer Children's Hospital	University of Chicago
13	St. Louis	St. Louis Children's Hospital	Washington University
14	Cleveland	UH Rainbow Babies and Children’s Hospital	Case Western Reserve University

15	Detroit	Children's Hospital of Michigan - DMC	Wayne State and Michigan State Universities
16	Ann Arbor*	U of M Mott Children's Hospital	University of Michigan
*while Ann Arbor would not have technically made this list, it was added because of the existing relationship between the CHC and Mott Children's Hospital			

Table 4. Cross-Referencing Philanthropic Cities and Children's Hospitals with Research Universities

Target Market Data – B2C in support of Duplication Model

Logic Model

It is important to understand the available and captured target market in each [redacted] duplication so predictions can be made about qualifying member capacity and growth

potential. Similarly to the B2B market logic model, the B2C breaks down the [redacted]s market size by Total Available Market (number of children in treatment), Serviceable Available Market (total number of qualifying members in treatment), Target Obtainable Market (10-20% of Serviceable Available Market), and Other Qualifiers (distance from the center, transportation, insurance, etc.). This logic model is found in Figure 3.

Figure 3: This stacked Venn diagram depicts the B2C logic model.

West Michigan Market (HDVCH Market Example)

The B2C market size in West Michigan was estimated using data obtained by the [redacted] from HDVCH. These data are in Appendix C. There are approximately 12,000 children in treatment currently at HDVCH--this is the Total Available Market for the existing [redacted]. Therefore, the Serviceable Available Market is estimated to be about 3,300 children. Ten percent of the Serviceable Available Market is 330 children, or the Target Obtainable Market. Currently, there are 120 qualifying HDVCH member families participating at the [redacted], or 36 percent market capture. This breakdown is in Figure 4. Note that this is a relatively small Target Obtainable Market in support of a sustainable business model. Also note that this analysis should be completed prior to expansion into any region.

Figure 4: This stacked Venn diagram depicts West Michigan's B2C market breakdown.

Interview Questions

Insurance Providers and Healthcare Administrators

1. What is the priority of “conditions” for consideration of new services? (oncology, etc.)

2. How does your organization make referrals for services to patients?

3. How are new service lines evaluated for reimbursement by your organization?

4. How are services specifically designed for children evaluated in your organization? What (if any) is currently reimbursed?

5. How do healthcare providers influence the process?

6. After the service line is added, how is success measured? How often?

7. How much is the priority of conditions influenced by the Affordable Care Act?

8. What other factors need to be considered under the Affordable Care Act?

9. How else is the Affordable Care Act influencing your organizations decision-making processes for new services?

10. What else should we have asked that we didn’t ask?

11. Who else should we talk with at your organization or with other health providers?

12. Can we follow-up with you directly if we have more questions?

Healthcare providers (pediatric)

1. What do you worry about most when treating children?

2. What gaps in services for treating children have you experienced while working at

_____.

3. How do you evaluate a patient service that is outside the hospital or your practice group?

4. How does your hospital or practice group referral process work?

5. How do you track referral quality and impact?

6. What is your influence on decision-making at health insurance companies for addition of new, reimbursable, service lines?

7. How is your hospital and/or practice group evaluated under the Affordable Care Act?

8. What else should we have asked that we didn't ask?

9. Who else should we talk with at your company or with other health insurance companies?

10. Can we follow-up with you directly if we have more questions?

Child Life

1. Exactly what is your role in the pediatric healing process? How is this different from immunocompromised children?

2. What can you do with immunocompromised children to ensure a positive treatment experience? What does their access to the playroom and toys look like?

3. What does the ideal treatment and experience look like? For immunocompromised children?

4. What are some barriers to children receiving this ideal experience? Immunocompromised children?

5. What are your priorities and main concerns when working with sick children as a Child Life Specialist?

6. What are some barriers for you to do your job well? What challenges do you face as a Child Life Specialist?

7. What kinds of things are being done to work to combat these challenges? Is there a specific time there was a challenge and you needed to overcome it?

8. What is your relationship like with the children?

9. When the children are preparing for discharge, what does the transition out of the hospital look like? Do you play a role, then?

10. What do your interactions with social workers look like? Do they guide the child out of the hospital experience?

11. What else should I know about the work that child life accomplishes?

12. Is there any additional contact information I can have for follow up questions or interviews in the future?

Social Work

1. What are your main responsibilities when working with immunocompromised children?

2. What do social workers do to help fill in the gaps of sick children's care?

3. What is your role in the child's healing process?

4. Where does your role begin and end?

5. How do you help children transition out of the hospital?

6. How do you evaluate outpatient care?

7. What gaps in services have you noticed when working with sick children?

8. How do you decide which services to refer to children and families?

9. What is the ideal goal of your contribution to the healing process?

10. What factors make this transition difficult?

11. What are the main barriers to this transition?

12. What have you found is the most influential factor in a positive/successful transition?

13. What does a successful transition look like?