

Proposal Summary

Meeting Date: 3/1/2017

University of Chicago Medicine Request # 115369

Project Title:	South Side Asthma Center
Duration:	36 months
Request Date:	10/25/2016
Request Amount:	\$2,165,422
Recommended Amount:	t/b/d
Program Area:	Health and Rehabilitation\Clinical\ Treatment Services
Population Served:	General Public
Type of Support:	Program Support
Grantee Location:	Chicago, IL
Primary Contact:	Ms. Brenda Battle

Project Abstract

This request is to support the new South Side Asthma Center (SSAC). Four medical partners will collaborate to develop and launch a multidimensional Center to: 1) provide comprehensive asthma care management, education and outreach for children and their families/caregivers and; 2) standardize education and treatment among asthma care providers.

Organizational Background (University of Chicago)

The University of Chicago (revenue and finances above) includes the University of Chicago, University of Chicago Medical Center and other health care facilities.

The University of Chicago Medicine (UCM) – UCM medical campus includes the Center for Care and Discovery, Comer Children’s Hospital, Bernard A. Mitchell Hospital, and the Duchossois Center for Advanced Medicine (which houses the Coleman Supportive Oncology Suite). The UCM also has outpatient locations throughout the Chicago area.

The Department of Pediatrics and Comer Children’s Hospital – Comer Children's sees children with common as well as the most complex medical problems. About 5,000 patients are admitted annually from the Chicago area, the Midwest, and around the world. Each year, outpatient clinics accommodate nearly 37,000 general pediatric and specialty visits. More than 30,000 visits are made to the pediatric emergency room each year. Nearly 60% of all inpatient care and more than 50% of all outpatient care -- including 75% of emergency room care -- are provided to Medicaid children and those with no health insurance.

Urban Health Initiative – The Urban Health Initiative (UHI) is the University of Chicago Medicine’s community health department through which population health and community benefit are administered. This is accomplished through collaboration with community programs and partners, innovative strategies and the utilization of resources. UHI fosters relationships with civic leaders, community

organizations, health care providers and residents to improve health and access to quality care on the South Side of Chicago.

Annual Revenue Sources

Grants	3%	Government	10%	Earned Income	45%
Fees	10%	Private Support	4%	Other**	28%

***Other revenue sources includes: endowment payout, earnings on investments, miscellaneous income, net assets released from restriction.*

Finances (in thousands)

	Budget	Actual	Actual
	2016	06/30/2015	06/30/2014
Revenues	3,833,301	3,716,468	3,518,774
Expenses	3,846,314	3,703,097	3,496,302
Surplus (Deficit)	(13,013)	13,371	22,472
Net Assets	n/a	8,042,051	8,192,922

Program Description

The South Side Asthma Center (SSAC) is a collaborative of four health care institutions serving patients on the South Side of Chicago. These organizations will collaborate for the pilot phase of the SSAC:

- University of Chicago Medicine, which functions as the coordinating and convening institution;
- La Rabida Children’s Hospital, which provides care to children with special needs;
- Friend Family Health Center is a federally qualified health center;
- St. Bernard Hospital in Englewood (Chicago community), which 59% of children are reported to have asthma based on data from St. Bernard Hospital and the UCM 2013 community health needs assessments.

The University of Chicago Medicine Service Area (UCMSA) spans 31 local community areas and currently has a population of approximately 650,000 people. Every three years, UCM conducts a survey to determine the health status and needs of residents across the service area. On the South Side of Chicago, it is estimated that 38,311 children have asthma. The table below highlights key statistics around asthma on Chicago’s South Side compared to Illinois and the United States.

Asthma Statistics	UCM SA	IL	US
Child currently has asthma	20%	10%	12%
ER/Urgent Care for asthma in past year	55%	15%	47%
Child hospitalized for asthma in past year	23%	--	0.6%
Child missed school due to asthma in past year	51%	8%	39%

While these findings demonstrate the severity and prevalence of asthma on Chicago’s South Side, literature points to disparate forms of asthma education and treatment plans among providers, which

indicates a lack of care and treatment standards. Literature also indicates that some clinicians can overlook steps on assessing individual patient needs. One study concluded “unnecessary and frequent visits to the Emergency Department (ED) for asthma care were associated with poor education about asthma and medication use”.

The South Side Asthma Center (SSAC) programs are designed to address disparities in asthma education and lessons learned from other asthma programs in the US and Canada. SSAC programs are intended to improve asthma education, promote better asthma management practices and navigate patients to appropriate asthma services. The SSAC will utilize three levels of programming education, outreach and care coordination (described below):

Education Programs

Education programs will aim to standardize asthma education in accordance with the Global Initiative for Asthma management and prevention guidelines, which provide the latest evidence of effective education and treatment. Asthma education and learning sessions will be held throughout the South Side for faculty, clinicians and staff, school nurses and teachers, patients and families, faith-based health ministries, etc. An annual asthma education workshop will focus on specialized education sessions for diverse stakeholders, i.e., a session for clinicians and asthma educators, one for teachers, one for care givers and patients, etc.

Outreach Program (Community Health Worker Program)

The Community Health Worker (CHW) program will focus on outreach to families and persons living with asthma. Based on existing evidence-based models, the CHW will help to address social determinants of health (conditions in which a person lives that affect health risks and outcomes), and assist families and persons living with asthma to self-manage and adopt improved health behaviors.

CHWs will be deployed at the collaborative partners’ sites to enroll high risk pediatric asthma patients into the program. They will work across Chicago’s South Side communities to assist patients in self-management through consecutive home visits and follow up calls. Each child and family will be in the program for 12 months to achieve adherence to the asthma action plan and manage asthma control. As part of the program, CHWs will engage in community outreach events to provide education to the broader population.

Care Coordination Program

The Asthma Care Coordinator program will consist of a team of Asthma Care Navigators whose primary role is to conduct an initial asthma assessment to determine signs and symptoms of asthma. The care coordinator will determine: where the individual receives primary care, appropriate insurance coverage and link the individual and caregivers to the appropriate services. Asthma Care Coordinators and Community Health Workers will use a database system (NowPow) to link community residents to high-quality community resources to aid in asthma self-management.

The roles and responsibilities of the SSAC staff for this effort are as follows:

- *Project Directors* – Dr. Louise Giles and Brenda Battle from UCM, and Dr. David Soglin from La Rabida will serve as co-faculty directors sharing oversight and advising responsibilities for the asthma center functions at their mutual sites and for the collaborative as a whole. Brenda Battle is also on the steering committee for the Healthy Chicago 2.0 (a city-wide effort to improve health outcomes for children with asthma.)

- *Community Benefit Manager* – Nadia Salibi is a member of the Advisory Committee for the South Side Pediatric Asthma Center and will manage the Community Health Worker program.
- *Community Health Worker* – Will serve as the liaison between families and the patient’s primary care provider. Four CHWs will deliver patient education on asthma; conduct home environmental assessments; and connect community members to resources. The CHWs will be deployed through the UCM Community Health Workers program and shared across the collaborative partners.
- *Asthma Educator* – Will counsel individuals and families on how to manage their asthma. The Asthma Educator will be a nurse (RN) with sole responsibility for working with the caregiver and patient to coordinate asthma care management, including connecting them to the Community Health Worker for ongoing care in the home. Asthma Educators will be housed within each partner site and will be members of the care delivery team. Beginning in year 1, this role will be inserted at La Rabida Children's Hospital; year 2, inserted in Friend Family Health Center and year 3, into St. Bernard Hospital.
- *Asthma Care Coordinator (ACC)* – Will take calls from those seeking assistance with questions about asthma services, programs, etc. The ACC will conduct outreach via phone to complete an assessment of asthma symptoms and management, introduce patients to the Community Health Worker Program and connect them with services in the community. Initially, one person will be hired for this role whose primary responsibility will focus on building the care coordination protocols.
- *Advanced Practice Nurse* – Will provide clinical care, treatment and education to patients in the clinical setting. Two FTE Advanced Practice Nurses will be employed during the three year grant period at La Rabida and UCM.
- *Social Worker* – Will help coordinate access to services for the patient or family to meet their needs for care and wellbeing. Deployed for the SSAC exclusively, the social worker will be particularly needed when the patient’s or family needs are complex and require support for the entire family. One FTE social worker will be employed for year two and year three of the grant.

Expected Outcome

Anticipated South Side Asthma Center Outcomes

- A standardized practice that provides improved and consistent education to providers, community members and asthma patients
- An agreed upon care coordination model

Anticipated Patient Outcomes (these targets are adjusted based on national best practice targets)

- Reduce asthma hospitalization and absenteeism among children with asthma
 - Reduce Emergency Department (ED) visits in 25% of children
 - Reduce hospitalization in 25% of children
 - Reduce missed school days and/or caregiver work days in 25% of children
- Increase education and treatment plans for children

- Increase asthma management education in 25% of children/caregivers that are identified as high risk
- Increase knowledge of asthma management in 25% of children/caregivers that are identified as high risk
- Improve provider understanding and treatment of asthma
 - 80% of providers report improved knowledge of asthma education
 - 80% of clients receive a completed Asthma Action Plan (AAP)
- Increase children/caregivers understanding of asthma triggers and environmental modification
 - Increase medication adherence in 25% children
 - Reduce symptom days in 25% of children
- Reduction in client environmental triggers
 - 100% of children/caregivers that use tobacco are referred to smoking cessation programs
 - 80% of children/caregivers report improved knowledge of asthma environmental triggers
 - 80% of children/caregivers address identified asthma triggers in the home

The long-term impact of the SSAC is to empower children and families with knowledge and to reduce asthma morbidity and mortality. By providing a streamlined experience, from identification of an asthmatic child, to outpatient care by a specialist in asthma management, and coordinated, culturally appropriate asthma education, the goal is to improve the quality of life of children with asthma and their families. With improved asthma control, the Center aims to reduce the burden of missed days of school for the child and missed days of work for the parent, as well as reduce the use of urgent care clinics, hospitalizations, emergency room events, and deaths due to asthma.

Program Budget

The total three year budget for the Asthma Center is \$7,422,148. Expenses include personnel, equipment and supplies, education, training summit and materials, and IT system costs. University of Chicago Medicine's contribution to the budget is \$5,584,014. The gap or what still needs to be raised for the pilot is \$1,838,134 or 25% of the budget. The gap amount shown on the proposal budget (in the Coleman Funds column) represents the full budget for the pilot, and is not the actual requested amount.

Prior Grants

Last Grant Date: 11/17/2016 **Grant Amt:** \$101,000 (Coleman Supportive Oncology Collaborative)
Number of Prior Grants: 8 **Total Amount Granted:** \$1,764,170

Recommendation

Based on previous Board conversations to engage and provide learning opportunity for board members, Dan & Rosa initially approached La Rabida Children's Hospital to gain insight on how they treated and cared for children with asthma. They found that La Rabida was engaged in a collaborative effort, being led by the University of Chicago Medicine, to develop a South Side Asthma Center. Based on the results from the disparate and fragmented system of asthma care delivery on the South Side of Chicago, the Asthma Center collaboration model has been conceptualized to link efforts by service providers to achieve improved outcomes for children with asthma.

The collaboration between UCM, LaRabida, Friend Family and St. Bernard in their involvement in the proposed grant, provides an attractive set of partners with which CFI can confidently participate in this new area of grant making. The parties involved are longstanding providers to the South Side community and have great experience with the population and the challenges faced in trying to bring improvement in the education, treatment and other aspects of Asthma care. The proposal is attractive in its scope and thoughtfulness and is a product of many efforts and years of experience accrued by the providers.

The population the proposal is serving is very much in line with the overall goals of CFI. The proposals goals of improved education, training, and collaboration – with the expected outcome of a reduction in Asthma related hospitalization, greater access to and formal usage of Asthma treatment plans, and better understanding at the caregiver level – are all understandable and familiar outcome expectations for CFI.

The proposal provides an attractive set of confidences that makes it very appealing for CFI to participate and have confidence in being part of making a difference in an important part of the Chicago community. We believe this is a strong program effort that is capable of delivering realistic outcomes, and recommend funding at an acceptable level to the board.

<i>The University of Chicago Medicine</i>			
<i>South Side Pediatric Asthma Center</i>			
<i>20-Jan-17</i>			
<i>Project Budget (Yr. 1): \$2,200,480</i>			
<u>Revenue</u>	<u>Funds Needed:</u>	<u>Funds Requested</u>	<u>Funds Committed</u>
	<u>Year 1</u>	<u>Year 1</u>	<u>Year 1</u>
Coleman Foundation	\$463,182	\$463,182	\$0
Private donations/grants	\$0	\$0	\$0
UCM Organizational Contribution	\$1,737,298	\$0	\$1,737,298
Program Revenue	\$0	\$0	\$0
Revenue Total	\$2,200,480	\$463,182	\$1,737,298
<u>Expense</u>	<u>Project Budget</u>	<u>Coleman Funds</u>	<u>Other Sources</u>
<i>Personnel</i>			
Asthma Educator (1.50 FTE)	\$129,413	\$86,275	\$43,138
Community Health Worker (4.00 FTE)	\$224,159	\$112,080	\$112,080
Administrator Co-Director (0.10 FTE)	\$429,742	\$0	\$429,742
Clinical Co-Director (0.10 FTE)	\$336,948	\$33,695	\$303,253
Clinical Co-Director (0.10 FTE)	\$261,191	\$26,119	\$235,072
Manager Community Benefit (0.40 FTE)	\$131,492	\$0	\$131,492
Asthma Care Coordinator (Yr. 1: 1.00 FTE; Yr. 2: 2.00 FTE; Yr. 3: 2.00 FTE)	\$72,014	\$72,014	\$0
APN (2.00 FTE)	\$190,773	\$0	\$190,773
Social Worker (Yr 2 & 3: 1.00 FTE)	\$0	\$0	\$0
<i>Equipment and Supplies</i>			
Spirometer	\$2,500	\$2,500	\$0
Home assessment kits	\$8,500	\$8,500	\$0
<i>Education and Training</i>			
Annual Asthma Education Summit	\$7,500	\$0	\$7,500
Printed Education Materials	\$5,000	\$0	\$5,000
HLM Health Literacy	\$75,000	\$50,000	\$25,000
<i>IT System</i>			
Hand Held Devices - Ipad for CHWs and Navigators	\$2,250	\$0	\$2,250
Care Coordination System	\$216,000	\$72,000	\$144,000
NowPow Database	\$108,000	\$0	\$108,000
Total	\$2,200,480	\$463,182	\$1,737,298

<i>The University of Chicago Medicine</i>			
<i>South Side Pediatric Asthma Center</i>			
<i>20-Jan-17</i>			
<i>Project Budget (Yr. 2): \$2,509,235</i>			
<u>Revenue</u>	<u>Funds Needed:</u>	<u>Funds Requested</u>	<u>Funds Committed</u>
	<u>Year 2</u>	<u>Year 2</u>	<u>Year 2</u>
Coleman Foundation	\$657,262	\$657,262	\$0
Private donations/grants	\$0	\$0	\$0
UCM Organizational Contribution	\$1,851,973	\$0	\$1,851,973
Program Revenue	\$0	\$0	\$0
<u>Revenue Total</u>	<u>\$2,509,235</u>	<u>\$657,262</u>	<u>\$1,851,973</u>
<u>Expense</u>	<u>Project Budget</u>	<u>Coleman Funds</u>	<u>Other Sources</u>
<i>Personnel</i>			
Asthma Educator (1.50 FTE)	\$133,295	\$88,863	\$44,432
Community Health Worker (4.00 FTE)	\$230,884	\$115,442	\$115,442
Administrator Co-Director (0.10 FTE)	\$442,634	\$0	\$442,634
Clinical Co-Director (0.10 FTE)	\$347,056	\$34,706	\$312,350
Clinical Co-Director (0.10 FTE)	\$269,027	\$26,903	\$242,124
Manager Community Benefit (0.40 FTE)	\$135,436	\$0	\$135,436
Asthma Care Coordinator (Yr. 1: 1.00 FTE; Yr. 2: 2.00 FTE; Yr. 3: 2.00 FTE)	\$148,349	\$148,349	\$0
APN (2.00 FTE)	\$196,496	\$0	\$196,496
Social Worker (Yr 2 & 3: 1.00 FTE)	\$85,108	\$0	\$85,108
<i>Equipment and Supplies</i>			
Spirometer	\$2,500	\$2,500	\$0
Home assessment kits	\$8,500	\$8,500	\$0
<i>Education and Training</i>			
Annual Asthma Education Summit	\$7,500	\$0	\$7,500
Printed Education Materials	\$5,000	\$0	\$5,000
HLM Health Literacy	\$75,000	\$50,000	\$25,000
<i>IT System</i>			
Hand Held Devices - Ipads for CHWs and Navigators	\$450	\$0	\$450
Care Coordination System	\$360,000	\$120,000	\$240,000
NowPow Database	\$62,000	\$62,000	\$0
Total	\$2,509,235	\$657,262	\$1,851,973

The University of Chicago Medicine			
South Side Pediatric Asthma Center			
20-Jan-17			
			Project Budget (Yr. 3): \$2,712,433
Revenue	Funds Needed: Year 3	Funds Requested Year 3	Funds Committed Year 3
Coleman Foundation	\$717,690	\$717,690	\$0
Private donations/grants	\$0	\$0	\$0
UCM Organizational Contribution	\$1,994,743	\$0	\$1,994,743
Program Revenue	\$0	\$0	\$0
Revenue Total	\$2,712,433	\$717,690	\$1,994,743
Expense	Project Budget	Coleman Funds	Other Sources
<i>Personnel</i>			
Asthma Educator (1.50 FTE)	\$137,294	\$91,529	\$45,765
Community Health Worker (4.00 FTE)	\$237,810	\$118,905	\$118,905
Administrator Co-Director (0.10 FTE)	\$455,913	\$0	\$455,913
Clinical Co-Director (0.10 FTE)	\$357,468	\$35,747	\$321,721
Clinical Co-Director (0.10 FTE)	\$277,098	\$27,710	\$249,388
Manager Community Benefit (0.40 FTE)	\$139,499	\$0	\$139,499
Asthma Care Coordinator (Yr. 1: 1.00 FTE; Yr. 2: 2.00 FTE; Yr. 3: 2.00 FTE)	\$152,799	\$152,799	\$0
APN (2.00 FTE)	\$202,391	\$0	\$202,391
Social Worker (Yr 2 & 3: 1.00 FTE)	\$87,661	\$0	\$87,661
<i>Equipment and Supplies</i>			
Spirometer	\$2,500	\$2,500	\$0
Home assessment kits	\$8,500	\$8,500	\$0
<i>Education and Training</i>			
Annual Asthma Education Summit	\$7,500	\$0	\$7,500
Printed Education Materials	\$5,000	\$0	\$5,000
HLM Health Literacy	\$75,000	\$50,000	\$25,000
<i>IT System</i>			
Hand Held Devices - Ipads for CHWs and Navigators	\$0	\$0	\$0
Care Coordination System	\$504,000	\$168,000	\$336,000
NowPow Database	\$62,000	\$62,000	\$0
Total	\$2,712,433	\$717,690	\$1,994,743

Three Year Project Budget			
	Coleman	UCM	Total
Year 1	\$463,182	\$1,737,298	\$2,200,480
Year 2	\$657,262	\$1,851,973	\$2,509,235
Year 3	\$717,690	\$1,994,743	\$2,712,433
Total	\$1,838,134	\$5,584,014	\$7,422,148