COMMUNITY HEALTH NEEDS ASSESSMENT
PROGRAM DESCRIPTION:

Breath for Life
Learn for Life

Parkland
Care. Compassion. Community.

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COMMUNITY HEALTH NEEDS ASSESSMENT
PROGRAM DESCRIPTION

Asthma

A. PROBLEM STATEMENT

High asthma morbidity among pediatric population in the following ZIP Codes: 75210, 75211, 75215, 75216, 75217 and 75241.

B. STRATEGY

Implement Breath For Life & Learn For Life asthma program. This is a data-driven model for cross-sector linkage and coordination between Dallas County schools and its health system. The purpose of this program is to enroll children with an asthma diagnosis in a text notification program and risk-driven clinical intervention that drive patients and/or parents to follow appropriate preventive measures to avoid asthma exacerbation.

Program will deploy outreach into communities in the involved ZIP Codes, screen asthma children, and refer them to PCPs for asthma management. If they do not have a PCP, they will be referred into the Parkland system for asthma medical management and education.

C. METRICS

1. Percentage of patients with asthma from the targeted population who were prescribed an asthma therapy

2. Number of pediatric patients with asthma from the targeted population enrolled in the notification program

3. Percentage of patients with asthma from the targeted population who received a flu shot

D. STAFFING

Additional staffing was not identified for 2020. As program enrollment increases over the next two years staffing patterns will be reassessed as well as the expansion of the community partners' network.

E. BUDGET (as of August 31, 2020)

Parkland has entered in a contract with PCCI to develop and deploy the asthma predictive risk model and text messaging platform components of this program, the budget presented below reflects costs associated to this contract.

CHNA Pediatric Asthma Financial Summary

	Year 1 FY21	Year 2 FY22	Year 3 FY23	Total
Gross Revenue	$0	$0	$0	**$0**
Deductions from Revenue	-	-	-	-
Net Revenue	-	-	-	-
Expenses				
Salaries * :				
Executive Oversight	43,000	43,000	33,970	**119,970**
Senior Clinician	24,570	24,570	18,900	**68,040**
Data Scientist	66,600	166,500	57,720	**290,820**
Data/Business Analyst	-	37,900	-	**37,900**
Project Coordinator	34,570	72,570	34,052	**141,192**
Total Salaries	168,740	344,540	144,642	657,922
Benefits	-	-	-	-
IT Services				
(Text messaging cost and Cloud hosting environment)	30,800	105,000	105,000	**240,800**
Total Expenses	**199,540**	**449,540**	**249,642**	**898,722**
Net Income before Capital Expenditure	**$ (199,540)**	**$ (449,540)**	**$ (249,642)**	**$ (898,722)**
Capital Purchases	-	-	-	-
Net Income including Capital	**$ (199,540)**	**$ (449,540)**	**$ (249,642)**	**$ (898,722)**
FTEs	-	-	-	-
Volumes/Visits	-	-	-	-
Net Revenue Per Patient	$ -	$ -	$ -	**$ -**
Expense Per Patient	$ -	$ -	$ -	**$ -**
Net Income Per Patient	**$ -**	**$ -**	**$ -**	**$ -**

F. INTERVENTION DEPLOYMENT

Goal: Increase the percentage of patients with asthma from the targeted population who were prescribed an asthma therapy from 96% to 97% by 2022

	Intervention	Time of Services	Scope of Service	Staff	Outputs	Internal Capacity Impact
1	Patient Identification	Asthma screening and patient	In-person screening conducted by Parkland staff or Asthma Chasers in community settings including but not limited to schools and PCP visit • Complete Asthma Control Test (ACT) questionnaire • Spirometry test • Referrals • Students referred by DISD Asthma Chasers • Data analytics • Predictive risk model	• Asthma Chasers • Parkland Respiratory Therapist • DISD School Nurse • PCCI	# of ACTs completed # of spirometry tests completed # of patients referred by DISD # high risk patient identified through data analytics	**Patients Identified** 2020: 776 2021: 1,776 2022: 2,650
2	Referral to PCP	Within 1 week from screening	Contact the family to help facilitate an appointment with either a Youth & Family Clinic or COPC health center Patient Financial Services for COPC will reach out to the family pre-visit to perform a financial screening	• Respiratory Therapist • Financial Counselor	# of PCP appointments # of financial consults	**PCP Referrals** 2020: 776 2021: 1,705 2022: 2,570

3	Asthma Treatment	Established Parkland patient 2 – 4 weeks from screening
		DISD student 2 – 4 from referral
			Assess the level of asthma severity by completing the following:
			• Asthma assessment (lung capacity assessment, ACT, etc.)
			• Medication adherence
			• Asthma treatment plan
			• Asthma education including but not limited to:
			  • Asthma self-management
			  • Medication adherence
			  • Environmental risk factors
				• PCP
				• CHW
				• Parkland Respiratory Therapist
					# of asthma assessment plans
					# of asthma treatment plans
					# of asthma education sessions
						Assessments
						2020: 745
						2021: 1,705
						2022: 2,570
						Treatment Plans
						2020: 745
						2021: 1,705
						2022: 2,570
						Education Sessions
						2020: 745
						2021: 1,705
						2022: 2,570

4	On-site or remote asthma monitoring	Every 2 - 3 months post first PCP visit based on level of asthma severity	• Complete ACT
			• Complete spirometry test
			• Health literacy including but not limited to:
			  • Asthma symptoms
			  • Asthma devices
			  • Medication adherence
			  • Environmental risk factors
				• Parkland Respiratory Therapist
				• Asthma Chasers
					# of patients monitored
					# of ACTs completed
					# of spirometry tests
						Patients Monitored
						2020: 745
						2021: 1,705
						2022: 2,570
						Monitoring Sessions
						2020: 6,984
						2021: 15,984
						2022: 23,850

Goal: Increase the percentage of patients with asthma from the targeted population who were prescribed an asthma therapy from 96% to 97% by 2022

	Intervention	Time of Services	Scope of Service	Staff	Outputs	Internal Capacity Impact

5	Home Visits		**Visit 1:**
			• Complete ACT and establish baseline
			• Complete "Asthma home visit questionnaire"
			• Educate household about asthma on the following:
			  • Create asthma self-management skill
			  • Work with household and medical provider to create asthma management plan if family does not have one
			  • Collaborate with clinical partners
			Visit 2:
			• Conduct room-by-room assessment of the home using Environmental Protection Agency (EPA) checklist
			• Identify environmental asthma triggers in the home
			• Educate household on the following:
			  • Share information with household about identified asthma triggers and action steps to reduce these triggers
			  • Conduct basic tobacco cessation counseling and referrals when applicable
			  • Collaborate with community partners
			Visit 3
			• Assist family in accessing available social resources based on social needs assessment
			• Assess using ACT or C-ACT
			  • Assess progress on previously recommended solutions
			  • Make referrals to social services
			Follow-up call 1, 6 months from home visit 1
			• Assess improvement from baseline
			• Follow-up on previous recommendations
			Follow-up call 2, 12 months from home visit 1
			• Assess improvement from baseline
			• Follow-up on previous recommendations
			• Encourage family to participate in asthma treatment plan
				DCHHS and Parkland
				CHWs
					# of home visits 1
					# of home visits 2
					# of home visits 3
					# of follow-up calls 1
					# of follow-up calls 2
						Home Visit 1
						2020: 2,328
						2021: 5,328
						2022: 7.950
						Home Visit 2
						2020: 2,328
						2021: 5,328
						2022: 7.950
						Home Visit 3
						2020: 2,328
						2021: 5,328
						2022: 7.950
						Follow-up Call 1
						2020: 2,328
						2021: 5,328
						2022: 7.950
						Follow-up Call Home 2
						2020: 2,328
						2021: 5,328
						2022: 7.950

Goal: Increase the percentage of patients with asthma from the targeted population who received a flu shot from 50.16% to 80% by 2022

	Intervention	Time of Services	Scope of Service	Staff	Outputs	Internal Capacity Impact
1	Influenza Prevention	PCP visits	• Administer influenza vaccinations	Registered Nurse	# of influenza vaccinations delivered	**Influenza Vaccinations** 2020: 456 2021: 1,243 2022: 2,120

Goal: Number of pediatric patients with asthma from the targeted population enrolled in the notification program

	Intervention	Time of Services	Scope of Service	Staff	Outputs	Internal Capacity Impact

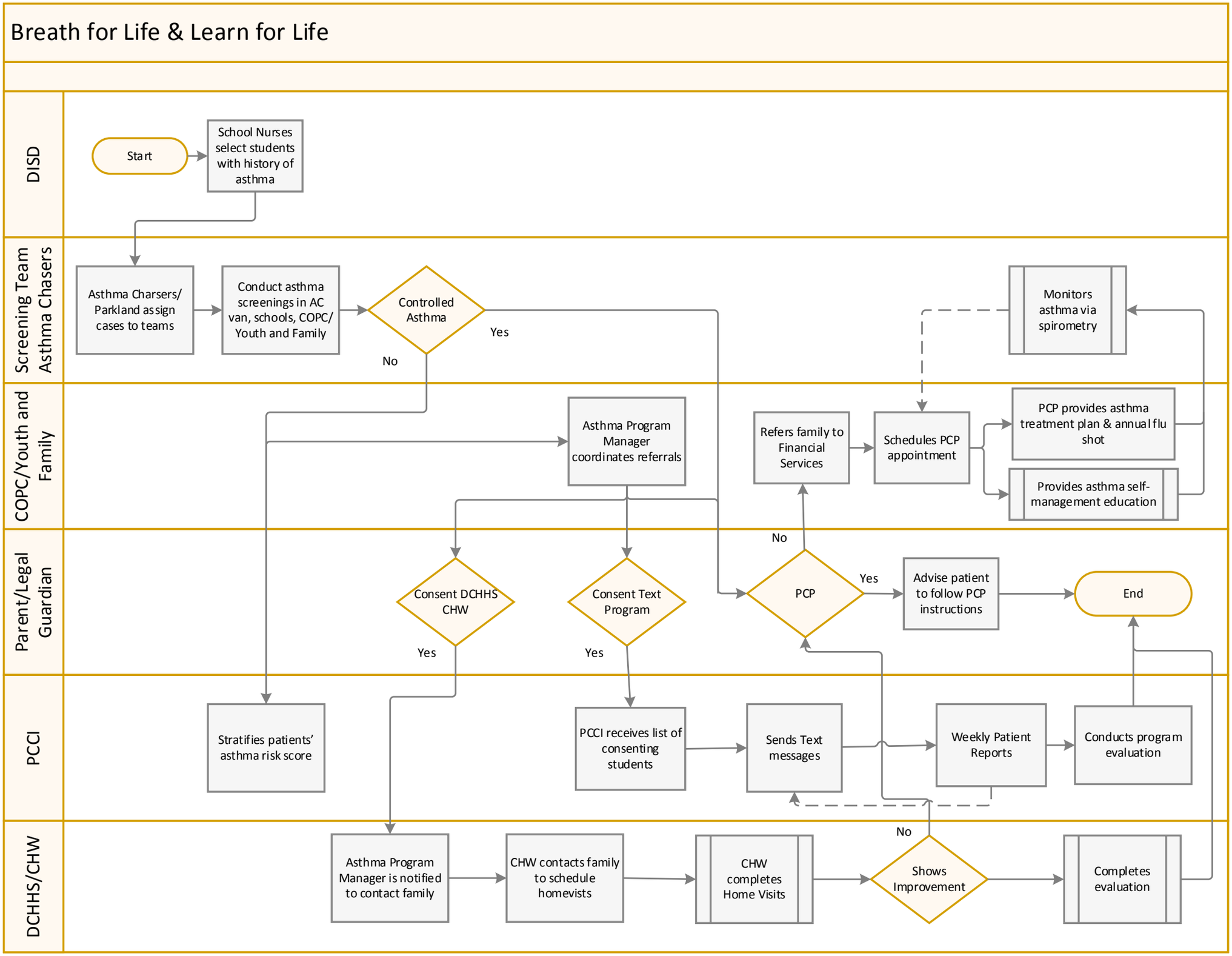
1	Patient Identification	Screening	In-person screening, i.e. community settings including schools and PCP visit
			• Complete Asthma Control Test (ACT) questionnaire
			• Spirometry test
			• Referrals
			  • Students referred by DISD school nurses
			• Data analytics
			  • High-risk predictive model
				Asthma Chasers
				Parkland Respiratory Therapist
				DISD School Nurse
				PCCI
					# of ACTs completed
					# of spirometry tests completed
					# of patients referred by DISD
					# of high-risk patient identified through data analytics
						Patients Identified
						2020: 776
						2021: 1,776
						2022: 2,650

2	Obtain consent for enrollment	In real time for patients screened in community settings
		Within 1 – 2 weeks post referrals from DISD, PCCI and data analytics
			Parent/Legal Guardian are contacted to obtain consent for child's participation
			• Referrals
			  • Students referred by DISD School Nurses
			• Data analytics
			  • predictive risk model
				Asthma Chasers
				Parkland Respiratory Therapist
				DISD School Nurse
				CHW
				Call Center Staff while Social Distancing guidelines are in place
						Consents
						2020: 776
						2021: 1,776
						2022: 2,650

Goal: Number of pediatric patients with asthma from the targeted population enrolled in the notification program						
	Intervention	**Time of Services**	**Scope of Service**	**Staff**	**Outputs**	**Internal Capacity Impact**
3	Welcome Message	Upon enrollment	• Patient is welcomed to the text notification program (Texts are available in English and Spanish and are delivered based on patients' preferred language)	PCCI	# of welcome messages delivered	**Welcome of Messages Delivered** 2020: 612 2021: 1,421 2022: 2,120
4	Asthma Diary Text	Monday & Thursday	Asthma diary and subsequent messages based on patient response including but not limited to: • Medication Adherence Questionnaire • Thank you message • Warning message, if necessary	PCCI	# of Asthma diary messages delivered	**Asthma Diary Texts Messages Delivered**[1] 2020: 32,282 2021: 146,763 2022: 220,480
5	Health Literacy or Medication Reminder Texts	Tuesday & Saturday	Medication education topics include: • Medication reminders • Environmental risk factors	PCCI	# of Health literacy messages delivered	**Asthma Health Literacy Text Messages Delivered**[1] 2020: 32,282 2021: 147,763 2022: 220,480
6	Warning messages	Based on evaluation of Asthma Diary responses; If recipient reports poorly controlled asthma	• Instruct the patient to contact PCP for advice • Instruct the patient to call 911 if patient cannot breathe	PCCI	Inquire about percentages of warning responses per patient	TBD
7	Patient Satisfaction	4 weeks post enrollment and every 3 months, thereafter	Questions include whether the program has taught them how to better care for their child's asthma, whether their asthma is better controlled and whether they would recommend the program	PCCI	# of patient satisfaction text messages delivered	**Patient Satisfaction Text Messages Delivered**[1] 2020: 10,554 2021: 24,154 2022: 36,040

[1] Assuming 80% retention rate for the full year.

G. SERVICE DELIVERY PROCESS FLOW



H. PARTNERSHIPS

	CBO Name	ZIP Codes	Scope of Service	Population	Services for Parkland Patients	MOU Status
1	**Asthma Chasers**	75210 75211 75215 75216 75217 75241	Asthma Chasers provides a broad scope of services including: • Asthma screenings including pulmonary function testing and Asthma Control Testing • Asthma medication assistance • Case management • Childhood asthma education • Community asthma education • Provide asthma devices, such as peak flow meters and spacers	Low income families living in ZIP Codes with high asthma incidence and prevalence rates	• Asthma screenings including pulmonary function testing • Asthma Control Testing • Childhood asthma education • Community asthma education	In progress
2	**DISD**	16 cities in Dallas County	Operates schools across Dallas	154,000 students in pre-kindergarten through 12th grade, in 230 schools	• Refer students with asthma to Parkland • Obtain consent from parents to enroll child/children in asthma text program • Asthma data sharing	In progress
3	**Dallas County Health and Human Services**	Dallas County	Public health services	Dallas County population	• Complete home visits • Obtain consent from parents to enroll child/children in text program	N/A