



ADVANCING INTEGRATED HEALTHCARE

Asthma QI Learning Collaborative Meeting

April 24, 2024

Thank you!



TUFTS
Health Plan

Item	Time
<p>Welcome & Intros</p> <p><i>Susanne Campbell, RN, MS, PCMH CCE, Sr. Program Administrator, CTC-RI</i></p> <p><i>Pat Flanagan, Clinical Director and PCMH Kids Co-Chair, CTC-RI</i></p>	<p>10 min</p>
<p>Lessons Learned at Providence Community Health Center</p> <p><i>Lillian Nieves, PharmD, Clinical Pharmacist Providence Community Health Center</i></p>	<p>25 min</p>
<p>Updates to Asthma Action Plan & SNT Question for providers</p> <p><i>Del Rose Newball, MPH, Asthma Program Coordinator, Rhode Island Asthma Control Program, RI Depart of Health</i></p> <p><i>June Tourangeau, Certified Asthma Educator, Practice Facilitator, CTC-RI</i></p>	<p>20 min</p>
<p>Practice and School Nurse Teacher Sharing</p> <p><i>Sue Dettling, BS, PCMH CCE, Program Manager & Practice Facilitator, CTC-RI &</i></p> <p><i>June Tourangeau, Certified Asthma Educator, Practice Facilitator, CTC-RI</i></p>	<p>25 min</p>
<p>Next Steps</p> <ul style="list-style-type: none"> • Supplies • School Nurse Teacher meeting – May 28th <p><i>Michelle Mooney, MPA, Program Coordinator II, CTC-RI /All</i></p>	<p>5 min</p>



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Asthma Management - Lessons Learned at Providence Community Health Center

Lillian Nieves, PharmD, Director of Clinical Pharmacy
Providence Community Health Center

Objectives

- To review Asthma Continuous Quality Improvement Pedi Project aim
- To discuss project spread and sustainability findings
- To share lessons learned

Asthma Continuous Quality Improvement Pedi Project

AIM

To improve asthma disease state knowledge via a pharmacist-led 1:1 educational interventions in PCHC medically underserved population

- **Caregiver education included: identification and avoidance of asthma triggers, medication management and emergency preparedness**

Asthma Continuous Quality Improvement Pedi Project

- **SPREAD and SUSTAINABILITY**
- **Manager Continuous Quality Improvement Project**
- **Goal #3. Improve quality of life and symptom control for patients with inpatient/ED visits for asthma**
- **Measure 1: Decrease IP/ED visit rate by at least 0.2% for patients enrolled in the pharmacy asthma intervention program**
- **Measure 2: Decrease the inpatient admission rate of patients ≥ 5 y/o with asthma**
 - A power BI report of patients with asthma exacerbations was created to identify patients for pharmacy interventions

Asthma Continuous Quality Improvement Pedi Project

Total of 69 patients were outreached during July 1st 2022- September 30th, 2023

Pharmacy Consultation	MD followed recommendations	# of Asthma Patients	% of Asthma Patients
YES	YES	21	38%
NO	NO	19	28%
NO	-----	29	42%
	Total pts	69	100%

Reasons Why MD did not follow recommendations	# of Asthma Patients	% of Asthma Patients
Pt no show or no appt	9	47%
MD referred to pulmonology	3	16%
MD judgement	7	17%
	19	100%

Asthma Continuous Quality Improvement PEDI Project

Reasons why no pharmacy consult		# of Asthma Patients	% of Patients Asthma
Patient declined		5	17%
Left multiple voice mails		13	45%
Took medication history only		4	14%
Diabetes patients		6	21%
No diagnosis		1	3%
	Total	29	100%

Asthma Continuous Quality Improvement Pedi Project

- A total of 69 patients were outreached during July 1st 2022- September 30th, 2023
- The pediatric cohort consisted of 25 of which 4 were lost to follow up
- A total of 21 patients demonstrated that pharmacists' interventions were effective but not statistically significant in decreasing IP/ED rates at PCHC
- **All patients/caregivers had updated AAP at home and in school completed by pharmacist and signed by PCP**
 - **A written AAP and education alone does NOT improve outcomes** ¹
 - Children using symptom-based WAPs had lower risk of exacerbations which required an acute care visit ²
 - The number needed to treat to prevent one acute care visit was 9 ²
 - Symptom monitoring was preferred over peak flow monitoring by children ²
 - There were no significant group differences in the rate of exacerbation requiring oral steroids or admission, school absenteeism, lung function, symptom score, quality of life, and withdrawals ²
 - **Greater adherence to the monitoring strategy, earlier identification of onset of deteriorations, specific treatment recommendations and education regarding urgent vs emergency presentations or acute care settings need emphasis**

Asthma Continuous Quality Improvement Pedi Project

- **Measure 1 was met to IP/ED visit rate by at least 0.2% for patients enrolled in the pharmacy asthma intervention program**
- **ED rate was decreased by 0.38% after pharmacy interventions in this pilot study**
 - Of the 21 pedi patients 8 went to the ED after at least one pharmacist intervention
 - Only one of the 8 patients went to the ED twice who were not adherent to ICS
- **Measure 2 was met to decrease the inpatient admission rate of patients ≥ 5 y/o with asthma**
- **No patients intervened were admitted to the hospital inpatient setting during the cohort study**

Asthma Continuous Quality Improvement Pedi Project

- **SDoH Screenings**
- 14 of the 21 pediatric patients screened had an SDoH need
- All accepted referrals and were effectively followed through by Community Health Advocate Team and referral network

Type of SDoH Referral	# Patients	% of Patients
Transport	1	7%
Food	2	14%
Utilities	2	14%
Remote Education	5	36%
Home Remediation	4	29%
Total	14	100%

Asthma Continuous Quality Improvement Pedi Project

- **Medication Adherence**
- Maintenance medications are the hallmark of treatment
- 8 patients without ICS +/- LABA returned to the ED
 - Lack of follow up
 - MD wanted to wait to see if albuterol use increased

	YES	NO	Called Pharmacy to Refill	Refilled Med Consistently for 6 Mo
ICS +/- LABA	13	8	13	13

Quick Assessment Tool

Rules of Two

Your Treatment is NOT working if:

- ✓ You have asthma symptoms and require use of a quick-relief bronchodilator two or more times a week.
- ✓ Your asthma wakes you up two or more times a month.
- ✓ You are refilling your quick-relief bronchodilator canister two or more times a year.

Lessons Learned

- Community-led pharmacist interventions improved asthma control, quality of life and medication adherence in ICS +/- LABA
 - 4 immediate Express referrals and 5 internal referrals to asthma and allergy for biologic therapy
- ED rate was decreased by 0.38% after pharmacy interventions but sample was too small to demonstrate statistical significance
- Of the 21 pedi patients 8 went to the ED after at least one pharmacist intervention
- Only one of the 8 patients went to the ED twice who were not adherent to ICS
- No patients intervened were admitted to the hospital inpatient setting during the cohort study
- Follow Rules of Two as a quick assessment tool
- PCHC Workflow improvements needed
 - Additional Nurse and Provider Education
 - Educated spacer and inhaler technique and cleaning
 - More education needed on asthma disease state including AAP especially emergency preparedness
 - Discover provider barriers to clinical inertia
 - Educate patients on the spot and book follow up appointments right away
 - Populate pharmacists schedule for additional education

References

1. Do Written Asthma Action Plans Improve Outcomes? [John M Kelso¹](#).

PMID: 27158550 PMCID: [PMC4851179](#) .DOI: [10.1089/ped.2016.0634](#)

2. Written action plans for asthma in children. [S Bhogal](#), [R Zemek](#), [F M Ducharme](#).

PMID: 16856090. DOI: [10.1002/14651858.CD005306.pub2](#)



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RIDOH Updates & SNT Questions

Questions?



ADVANCING INTEGRATED HEALTHCARE

Asthma QI updates from - Pediatric Practices partnering with Schools & School Nurse Teachers

Baseline Data (9/1/2023 to 1/31/2024)

Practice:

Number of patients with asthma on an asthma medication: **218**

Do you document the name of school attended for your patients? (Y/N): Y
(sometimes)

What has been successful thus far?

Practice:

- Downloading AAP's into KIDSNET
- New office flow current name of child's school is documented under demographics at Patients intake.

Barriers/Opportunities:

Practice:

- Parents denial of child's asthma, using asthma medication, and correct use of inhalers.
- Need for Staff KIDSNET refresher course

Baseline Data (9/1/2023 to 1/31/2024)

Practice:

Number of patients with asthma on an asthma medication: **824**

Do you document the name of school attended for your patients? (Y/N): N

School:

Number of student with asthma: **60**

Tracking absenteeism: **Y**

Tracking reason for absenteeism: **N**

Number of shared patients/students: 4

What has been successful thus far?

Practice:

- Improved communication for shared children with asthma.
- Updated/missing AAP for shared children with asthma was provided to SNT
- Now documenting name of school to provided place in eCW
- Shared new workflows with other providers in practice

School:

- Improved communication with Sunshine re: shared children with asthma
- Tracking absenteeism in skyword system
- Notified Dr Wehbe re: a shared child with chronic absenteeism (34 days as of 3/20).

Barriers:

Practice: Difficulty Aug/Sept. filling out hundreds of AAP for schools; lack of compliance of family bringing AAP to school.

School: AAP missing information for SNT to use legally as a med order, No fax machine in SNT office, Difficulty calling all families when child absent

Baseline Data (9/1/2023 to 1/31/2024)

Practice:

Number of patients with asthma on an asthma medication: **12**

Do you document the name of school attended for your patients? (Y/N): **Yes**

School:

Number of student with asthma: **26 #AAP 12**

Tracking absenteeism: **Yes**

Tracking reason for absenteeism: **No**

Number of shared patients/students: 4 # AAP 1

What has been successful thus far?

Practice:

- Shared communication has worked to increase # of AAP, needed inhalers for SNT
- Confidentiality issues addressed by information obtained from Erika on FERPA

School:

- New communication options have increased # of AAP and needed inhalers
- Data tool useful to notify PCP of shared children with asthma
- Connection to Jen of RISE school who uses same school software ASPEN

Barriers:

Practice: Realize there have been faxed information sent to SNT that was not received/communication has realized this and will address.

School:

- Unknown if child is absent due to asthma; SNT will call family (shared students/patients) to see if asthma was the reason for the absenteeism

Baseline Data (9/1/2023 to 1/31/2024)

Practice:

Number of patients with asthma on an asthma medication: **875**

Do you document the name of school attended for your patients? (Y/N): **Yes**

School:

Number of student with asthma: **28 # AAP 20**

Tracking absenteeism: **Y**

Tracking reason for absenteeism: **N**

Number of shared patients/students: 4 # AAP 4

What has been successful thus far?

Practice:

- AAP was loaded into eCW
- Stephanie developed AAP tracking in eCW – noting AAP was given to family

School:

- Tracey able to track absenteeism in skyword system
- Outreach to other school nurses in district (E. Providence) to gather school nurse questions for providers re: supplies/AAP

Barriers:

Practice:

- Formatting issue with AAP in eCW

School:

- Unknown if child is absent due to asthma; SNT will call family (shared students/patients) to see if asthma was the reason for the absenteeism

Baseline Data (9/1/2023 to 1/31/2024) **NEW NUMBERS ARE COMING**

Practice:

- Number of patients with asthma on an asthma medication: **60 (ages 5-11)**
- Do you document the name of school attended for your patients? (Y/N): **Y**
- Dr. Fox will have other providers in practice do the same.

School:

- Number of student with asthma: **24**
- Tracking absenteeism: **Y**
- Tracking reason for absenteeism: **N**

Number of shared patients/students: 7

What has been successful thus far?

Practice:

- AAP loaded into eCW - working with eCW so it will prepopulate.
- All providers will now sign AAP before giving to family/SNT

School:

- Working with skyword and office person to track why child is absent.
- Communication about issues using AAP (ie. Exercised induced area & self administer)

Barriers:

Practice:

- Not being able to track AAP in eCW (will connect with Barrington Pedi on how to do)

School:

- Requesting all AAP at the beginning of school year.

Questions?

Next Steps



Next Learning Collaborative: **June 26, 2024** -7:30-9:00 am

- **May 28th** Meeting with school nurses – 7:30 – 8:30 am
- Supplies ordered?
- Using educational information in binder?
- Post assessments/PDSA updates due **June 17th**

- School nurse consultants:

Erika Iafrate State School Nurse, RIDOH Erika.Iafrate.CTR@health.ri.gov

Jen Castano/ RISE Prep - jcastano@riseprepri.org

Thank you for your continued work!

Practices



Pediatric Associates
East Providence, RI 02914



Sunshine Pediatrics
Providence, RI 02904



Barrington Pediatric Associates
Barrington, RI 02806



Blackstone Valley Pediatrics

Blackstone Valley Pediatrics
Cumberland, RI 02864

Park Pediatrics Llc, Cranston, RI

Thank you for your continued work!

School Nurses



Tracey Bradley, RN
Kent Heights School

Partnered with Barrington Pediatrics



Alexandra Doty, BSN, RN-BC
Myron J Francis Elementary School

Partnered with Pediatric Associates



Colleen O'Donnell, BSN, RN
George J West Elementary

Partnered with Sunshine Pediatrics



Bethany Goldberg
Cumberland Elementary School

Partnered with Blackstone Valley Pediatrics



Jennifer Castano
RISE Prep Mayoral Academy

School nurse – consultant to Asthma QI project

THANK YOU

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