EQIPP for Residents: Team MDI
(*Managing Daily Inhalers*)

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Children's Health
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- EQIPP - Education in Quality Improvement for Pediatric Practice
  - https://eqipp.aap.org
  - Unique online learning program that weaves improvement principles & concepts w pediatric-specific clinical content to improve children's health outcomes
  - EQIPP courses designed to help you identify & close the gaps in your practice using practical tools:
    - Learn to document improved quality care on a continuous basis,
    - QIDA database w generated run charts that are perfect for PCMH application submission
  - EQIPP courses:
    - Are included w AAP membership
    - Earn you CME credit, &
    - Qualify for 25 ABP MOC Part 4 (Performance in Practice) points

EQIPP

- Currently, 11 courses available

- Besides MOC Part 4 credit, you can get 25 – 65 CME credits

Course Name ▲	Tracks ❓	CME Credits ❓	Expiration Date ❓
EQIPP: ADHD - Diagnose, Treat, and Monitor	N/A	27	10/06/2022
EQIPP: Asthma	Hospitalist Generalist	54	12/31/2020
EQIPP: Bright Futures - Infancy and Early Childhood	9 and 24 Months	29	12/31/2020
EQIPP: Bright Futures - Middle Childhood and Adolescence	12 and 16/17 years	29	04/09/2021
EQIPP: Bronchiolitis	Emergency Department Outpatient Inpatient	65	02/20/2021
EQIPP: GERD	Subspecialist Generalist	46	04/25/2021
EQIPP: Growth - Addressing Concerns and Management	Endocrinologist Generalist	45	07/08/2021
EQIPP: Hypertension	Subspecialist Generalist	45	04/09/2021
EQIPP: Oral Health	Generalist	28.50	12/31/2020
EQIPP: Substance Use - Screening, Brief Intervention, Referral to Treatment	Generalist	25	10/22/2021
EQIPP: Treating Tobacco Product Use and Exposure in Families	Generalist	45	05/29/2022

Coming Soon

Select course(s) and click Notify Me to receive an email when a course is available

☐ EQIPP: Talking About Serious Illness

Notify Me

EQIPP: Asthma

- Tracks:
  - Generalist
  - Hospitalist

Asthma Generalist | Change Track

▼ Key Clinical Activities

Diagnosis

Criteria and Methods

Initial Assessment

Quality Improvement ⊙

Assessment

Summary

Asthma Control and Follow-up

Spirometry

Medications

Vaccinate for Influenza

Asthma Action Plan

Education

Schooled in Asthma

▸ Case Studies

Resources

Tools

View Model for Improvement

Quality Improvement

How can EQIPP help me measure and improve?

Measures are essential for quality improvement. They help determine the changes that will lead to quantitative improvement in quality.

Tools to Measure Quality

View the Asthma **Measures,** including how each measure is calculated, along with suggested aims, associated data collection questions, and targeted goals. Pay particular attention to those for this key activity.

View the **Data Collection Tool** used to collect and enter patient data in order to measure your current level of performance. Pay particular attention to the questions related to this key activity.

Ideas for Change

If measurement reveals gaps in your practice, view the **Suggested Ideas for Change Tool** to help bridge the gaps.

Continue

EQIPP: Asthma Tools & Resources

FIGURE 4–2a. CLASSIFYING AST[HMA] TREATMENT IN CHILDREN 0–4 YE[ARS]

Assessing severity and initiating therapy in children wh[o have no] medication

Components of Severity		Classi[fication]
		Intermittent
Impairment	Symptoms	≤2 days/week
	Nighttime awakenings	0
	Short-acting beta₂-agonist use for symptom control (not prevention of EIB)	≤2 days/week
	Interference with normal activity	None
Risk	Exacerbations requiring oral systemic corticosteroids	0–1/year
		Consider [severity and interval since last] Freq[uency]
		Exacerbations of a[ny]
Recommended Step for Initiating Therapy (See figure 4–1a for treatment steps.)		Step 1
		In 2–6 weeks, depen[ding on severity, evaluate level of asthma control that is] achieved. If no clear [benefit is observed in 4-6 weeks, consider adjusting] therapy or alternativ[e diagnoses.]

Key: EIB, exercise-induced bronchospasm

Notes

- The stepwise approach is meant to assist, not replace, th[e clinical decisionmaking required to meet individual] patient needs.
- Level of severity is determined by both impairment and ri[sk. Assess impairment domain by patient's or caregiver's] recall of previous 2–4 weeks. Symptom assessment for l[onger periods should reflect a global assessment, such as] inquiring whether the patient's asthma is better or worse [since the last visit.] category in which any feature occurs.
- At present, there are inadequate data to correspond freq[uencies of exacerbations with different levels of asthma] severity. For treatment purposes, patients who had ≥2 e[xacerbations requiring oral systemic corticosteroids in the] past 6 months, or ≥4 wheezing episodes in the past year [, and who have risk factors for persistent asthma may be] considered the same as patients who have persistent ast[hma, even in the absence of impairment levels consistent] with persistent asthma.

EQIPP: Asthma - Generalist

Potential Barriers and Suggested Ideas for Change

Key Activity: Diagnose all children with asthma.

Rationale: A clear diagnosis of asthma is necessary to ensure proper treatment. Clinicians should use key indicators when considering a diagnosis of asthma as noted in Box 3-1 of the National Heart, Lung, and Blood Institute (NHLBI) guidelines and support the diagnosis with physical examination, appropriate history, and spirometry (if 5 years or older) for 90% of all patients with asthma. Exclude all other diagnoses.

Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
Gap: A clear diagnosis of asthma is not consistently established in accordance with NHLBI guidelines and/or documented in patients' charts.		
The NHLBI recommendations for establishing a diagnosis of asthma are not consistently followed in your practice.	1. Use key indicators for considering a diagnosis of asthma as noted in Box 3-1 of the NHLBI guidelines. The presence of multiple key indicators increases the probability of a diagnosis of asthma. 2. Use physical examination and detailed medical history to help establish the diagnosis. A structured medical history questionnaire such as in Figure 3-2 of the NHLBI guidelines can aid this effort. 3. **For children 5 years or older,** use spirometry if any key indicator is present to demonstrate obstruction and assess airflow reversibility. Determine reversibility by an increase in FEV₁ of >200 mL and 12% from the baseline measure after inhalation of SABA. **For children younger than 5 years with wheeze,** use the API, which outlines the major and minor criteria to identify children at future risk for developing persistent asthma. A trial of therapy may be necessary when the diagnosis cannot be confirmed by pulmonary function testing.	Discuss the importance of following all recommended procedures for diagnosing asthma in your staff meeting. Review passage of the NHLBI guidelines, eg, Box 3-2, about the importance of spirometry in asthma. Talk about potential barriers, and brainstorm ways to overcome them. Review documentation of bronchodilator responsive wheezing episodes to facilitate recognition of patients who may have an asthma diagnosis. Obtain and use tools such as the asthma key indicator list, history questionnaire, API, differential diagnostic possibilities, and asthma severity tables. Make these resources accessible in exam rooms. Obtain spirometry equipment that meets ATS standards or form a liaison with another resource that conducts spirometry.
Staff may be reluctant to label a patient's condition as asthma. However, diagnoses such as reactive airway disease, EIB, or viral pneumonia could result with under-treating the disease.	1. Exclude alternative diagnoses. Consult Box 3-3 of the NHLBI guidelines—Differential Diagnostic Possibilities for Asthma—for other possible causes of airway obstruction leading to wheezing. 2. Classify asthma severity at the time of diagnosis to initiate treatment, using Figure 3-4a, Figure 3-4b, and Figure 3-4c of the NHLBI guidelines based on the patient's age. The selection of type, amount, and scheduling of therapy should correspond to the level of asthma severity based on the child's age.	

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[ASTH]MA CONTROL AND ADJUSTING [THERAPY IN CHILDREN 0-4 YEA]RS OF AGE

[Classific]ation of Asthma Control (0–4 years of age)

	Not Well Controlled	Very Poorly Controlled
[/week]	>2 days/week	Throughout the day
[month]	>1x/month	>1x/week
	Some limitation	Extremely limited
[week]	>2 days/week	Several times per day
	2–3/year	>3/year

[Side] effects can vary in intensity from none to very troublesome and [th]e level of intensity does not correlate to specific levels of control [but are] considered in the overall assessment of risk.

[Recommended Action for Treatment]	Step up (1 step) and	Consider short course of oral systemic corticosteroids,
	• Reevaluate in 2–6 weeks.	• Step up (1–2 steps), and
	• If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy.	• Reevaluate in 2 weeks.
	• For side effects, consider alternative treatment options.	• If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy.
		• For side effects, consider alternative treatment options.

[Notes: the clinical decisionmaking required to meet individual]
[patient needs. Level of severity is deter]mined or risk category. Assess impairment domain by [patient's or caregiver's recall of previous 2-4 weeks. Asses]sment for longer periods should reflect a global [assessment, such as inquiring whether the patient's ast]hma is better or worse since the last visit.

[At present, there are inadequate data to correspond fre]quencies of exacerbations with different levels of asthma [control. In general, more frequent and intense exacerb]ations (e.g., requiring urgent, unscheduled care, [hospitalization, or ICU admission) indicate poorer di]sease control. For treatment purposes, patients who had [≥2 exacerbations requiring oral systemic corticosteroid]s in the past year may be considered the same as patients [who have not-well-controlled asthma, even in the abse]nce of impairment levels consistent with not-well-controlled [asthma.]

[Before step up in therapy: Review adherence to medi]cation, inhaler technique, and environmental control. [If an alternative treatment option was used in a step, d]iscontinue it and use preferred treatment for that step.

EQIPP for Residents

- Almost identical to EQIPP, but w less courses/topics
- Residents can be grouped into different teams that project champions can track & manage
- Each track/topic is managed separately, & have the following completion requirements:
  - Complete QI Basics
  - Enter Baseline data (min 5 charts)
  - Complete Improvement Plan w min 1 Aim Statement
  - Enter Follow Up data (min 5 charts)
  - Repeat steps 2-4 (2nd follow up data cycle)
  - Complete course evaluation
- Residents can earn MOC Part 4 credit during residency that they can bank to apply in the future
  - Project champions (senior residents & faculty) earn MOC Part 4 too
  - Each course can only be have MOC Part 4 credit applied one time

Asthma Generalist >

Bright Futures 9 and 24 Months

Immunizations 19-23 Month

Upper Respiratory Infection

Oral Health

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Changing What's Possible

EQIPP Home | QI Basics | EQIPP for Residents | My EQIPP Groups

EQIPP: For Residents

Home | My Improvement Project | Clinical Guide | Resources

Course Evaluation | Claim Credit | Help | My Bookmarks

Course Introduction

Asthma Generalist

Bright Futures 9 and 24 Months

Immunizations 19-23 Month

Upper Respiratory Infection

Oral Health

My Improvement Project | Asthma Generalist

Baseline Data *   In Progress
Cycle 1 *
Cycle 2 *

* Completion Required to claim credit

CONTINUE: Enter Data | Baseline

Clinical Guide: Key Clinical Activities

Diagnosis	In Progress
Asthma Control and Follow up	In Progress
Spirometry	In Progress
Medications	In Progress
Vaccinate for Influenza	In Progress
Asthma Action Plan	In Progress
Education	In Progress
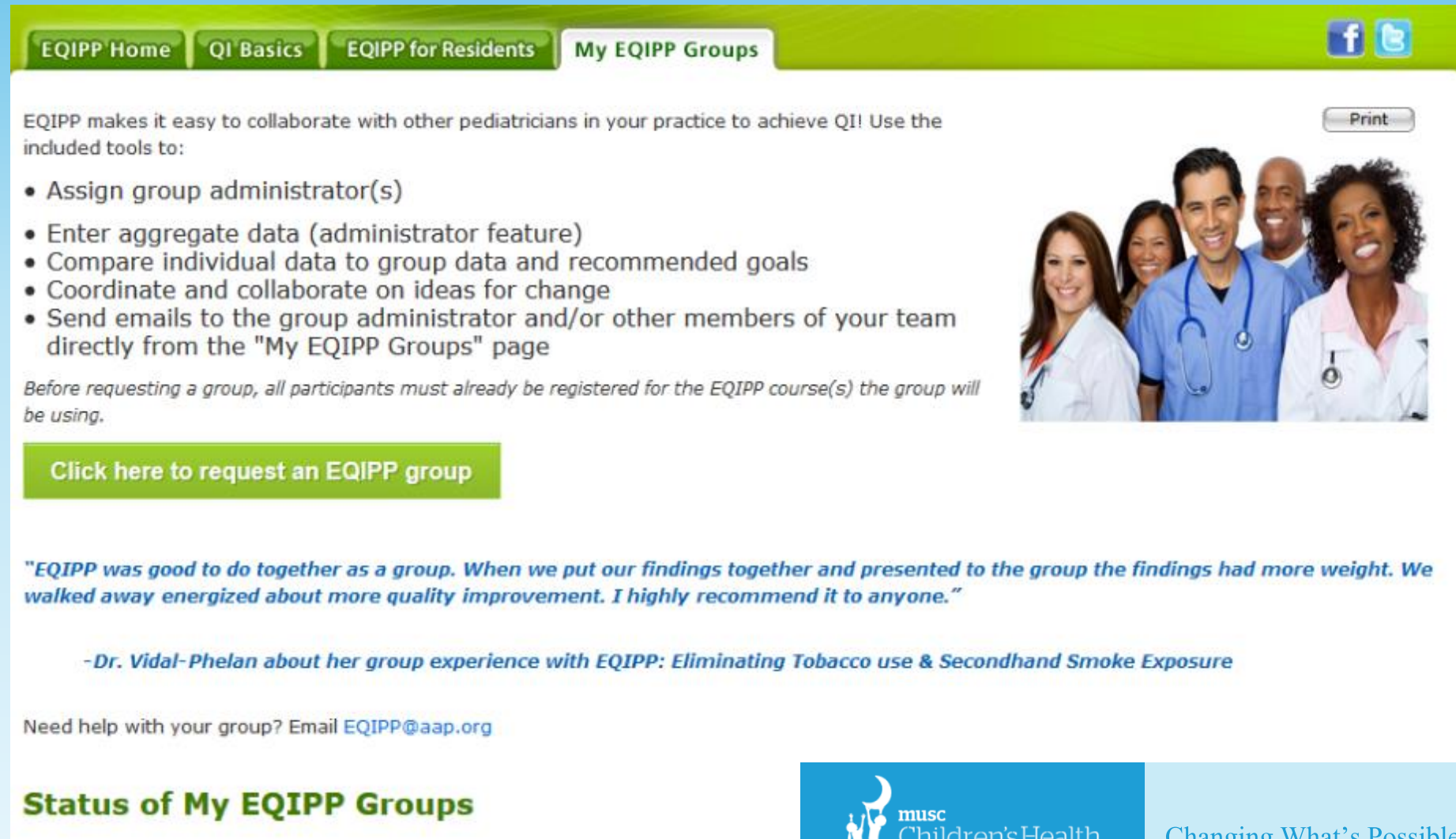
Manage/Track Team MDI

- In EQIPP, you can create groups to allow you to collaborate w other pediatricians in your practice to achieve QI!

EQIPP Chart Audit Tool

EQIPP: Asthma (Generalist)

Patient name: _____ Age of patient: ___ years ___ months

Purpose of visit: ⦿ Well visit   ⦿ Asthma visit   ⦿ Other sick visit

6	Was the age-appropriate NHLBI EPR-3 stepwise table used to identify treatment options or to adjust therapy based on asthma control?	Yes	No		
7	Has a flu shot been administered or a recommendation made within the past 12 months?	Yes	No	NA, Patient younger than 6 mos, other contraindications, or vaccine unavailable	
8	Does the patient have a written asthma action plan?	Yes	No		
	8a. Was the plan updated as needed and reviewed with the patient and/or family at this visit?	Yes	No		
9	Were asthma self-management education and materials (other than or in addition to the asthma action plan) provided and explained to the patient and family at any visit? (Examples include correct medication techniques, avoiding environmental triggers, and getting help to quit smoking. See Figure 3–13, Delivery of Asthma Education by Clinicians During Patient Care Visits for more information.)	Yes	No		
10	Was a follow-up appointment recommended to monitor asthma control?	Yes	No		
	exposure to allergens, tobacco smoke, indoor or outdoor pollutants and irritants, nonadherence to medication regimen)				
5	Is spirometry currently scheduled to be tested, or have results been obtained within the last 1 or 2 years?	Yes	No	NA, Age Inappropriate, younger than 5 years	

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Helping You Improve Care for Children

EQIPP Chart Audit Tool

Appendix

Asthma key indicators:

† History of recurrent wheezing episodes that respond to treatment
† History of any of the following:
   - cough, worse particularly at night
   - recurrent difficulty in breathing
   - recurrent chest tightness
† Direct observation in the clinic of acute wheezing that responds to bronchodilators
† Recurrent respiratory symptoms in a child at high risk for development of asthma (eg, positive asthma predictive index)

Example validated instruments used to determine the level of asthma control:

† Asthma Therapy Assessment Questionnaire (ATAQ)
† Asthma Control Questionnaire (ACQ)
† Asthma Control Test (ACT)
† Childhood Asthma Control Test (Childhood ACT)

Assessing Asthma Control
- Figure 3-5a, Assessing Asthma Control in Children 0–4 Years of Age
- Figure 3-5b, Assessing Asthma Control in Children 5–11 Years of Age
- Figure 3-5c, Assessing Asthma Control in Youths ≥12 Years of Age and Adults

Classifying Asthma Severity to Initiate Treatment
- Figure 4-2a, Classifying Asthma Severity and Initiating Therapy in Children 0–4 Years of Age
- Figure 4-2b, Classifying Asthma Severity and Initiating Therapy in Children 5–11 Years of Age
- Figure 4-6, Classifying Asthma Severity and Initiating Therapy for Youths ≥12 Years of Age and Adults

**Assessing Asthma Control to Maintain or Adjust Therapy**
- Figure 4-3a, Assessing Asthma Control and Adjusting Therapy in Children 0–4 Years of Age
- Figure 4-3b, Assessing Asthma Control and Adjusting Therapy in Children 5–11 Years of Age
- Figure 4-7, Assessing Asthma Control and Adjusting Therapy for Youths ≥12 Years of Age and Adults

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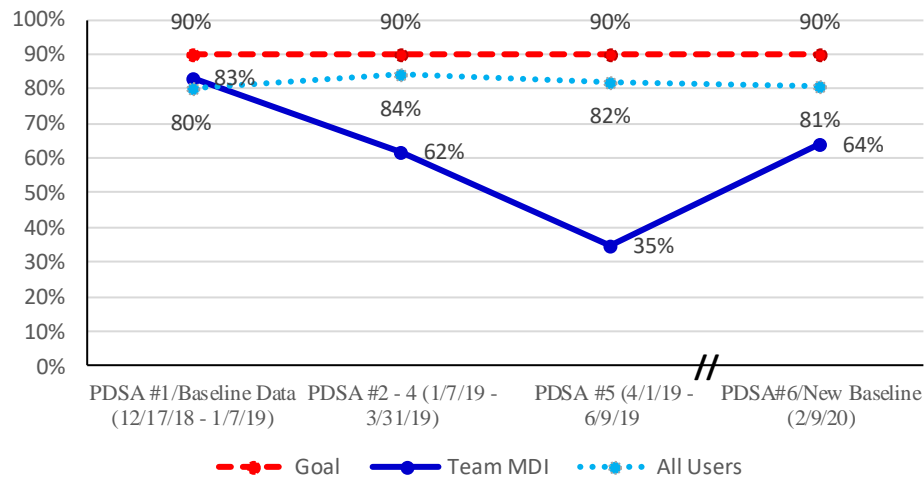Medical University of South Carolina

Changing What's Possible

MUSC's Asthma QTIP Project
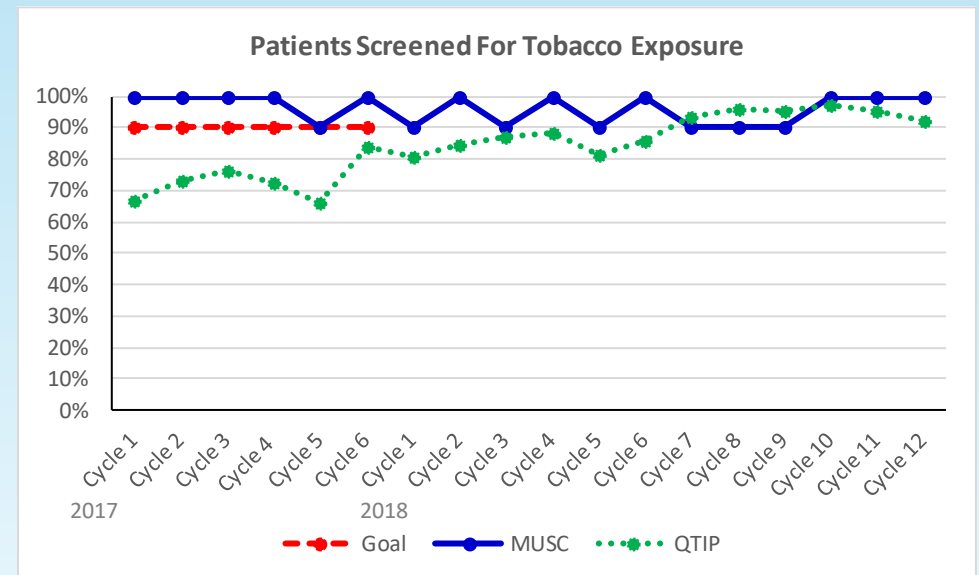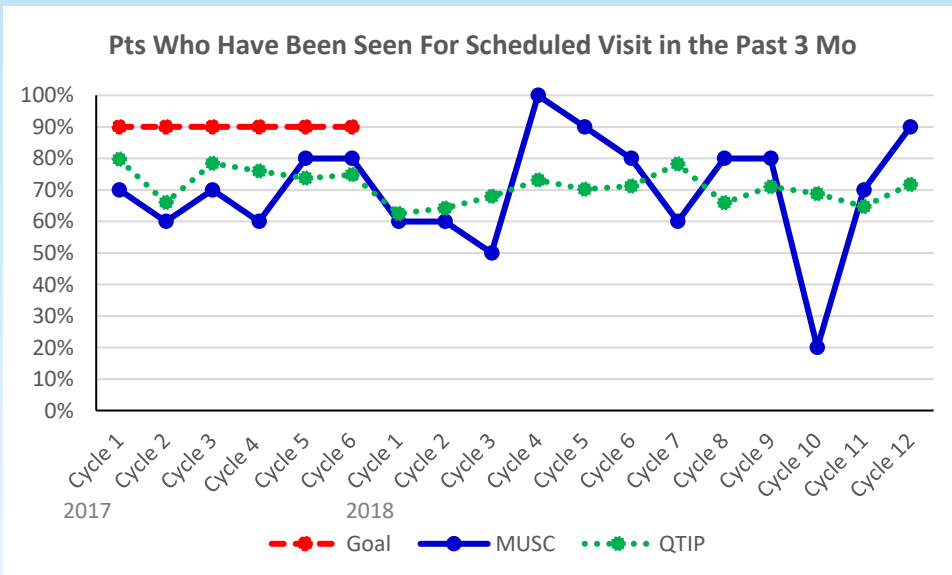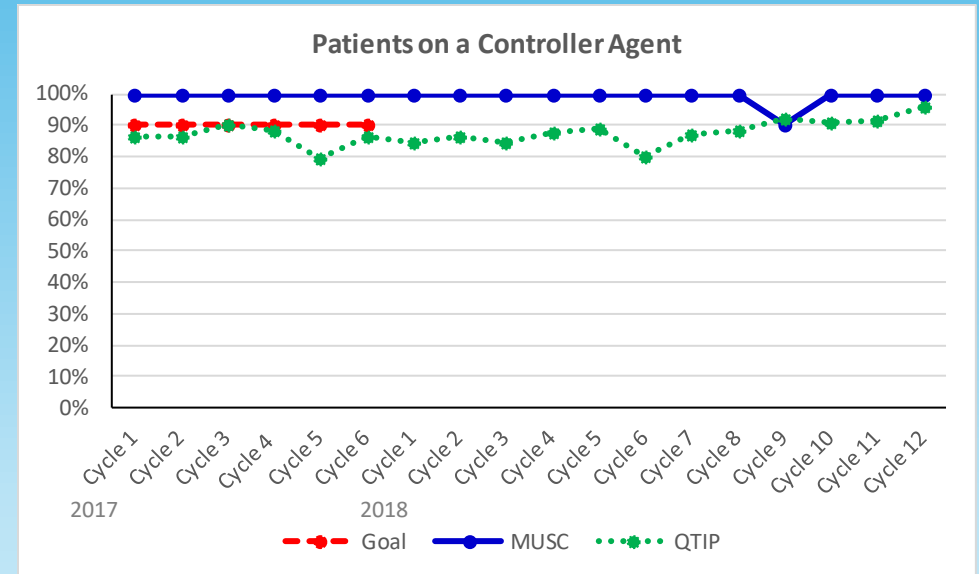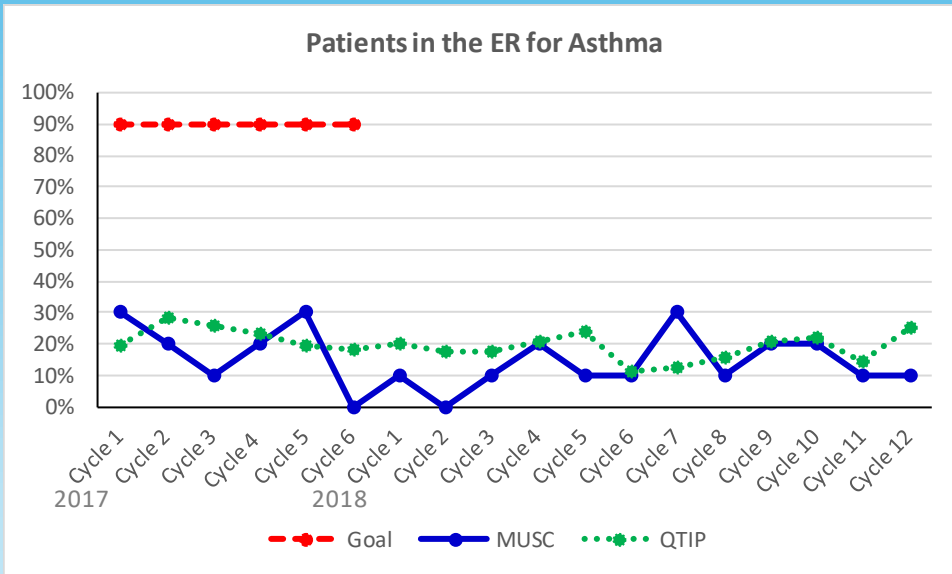
MUSC EQIPP for Residents: Team MDI
(Extension of QTIP Areas of Focus)
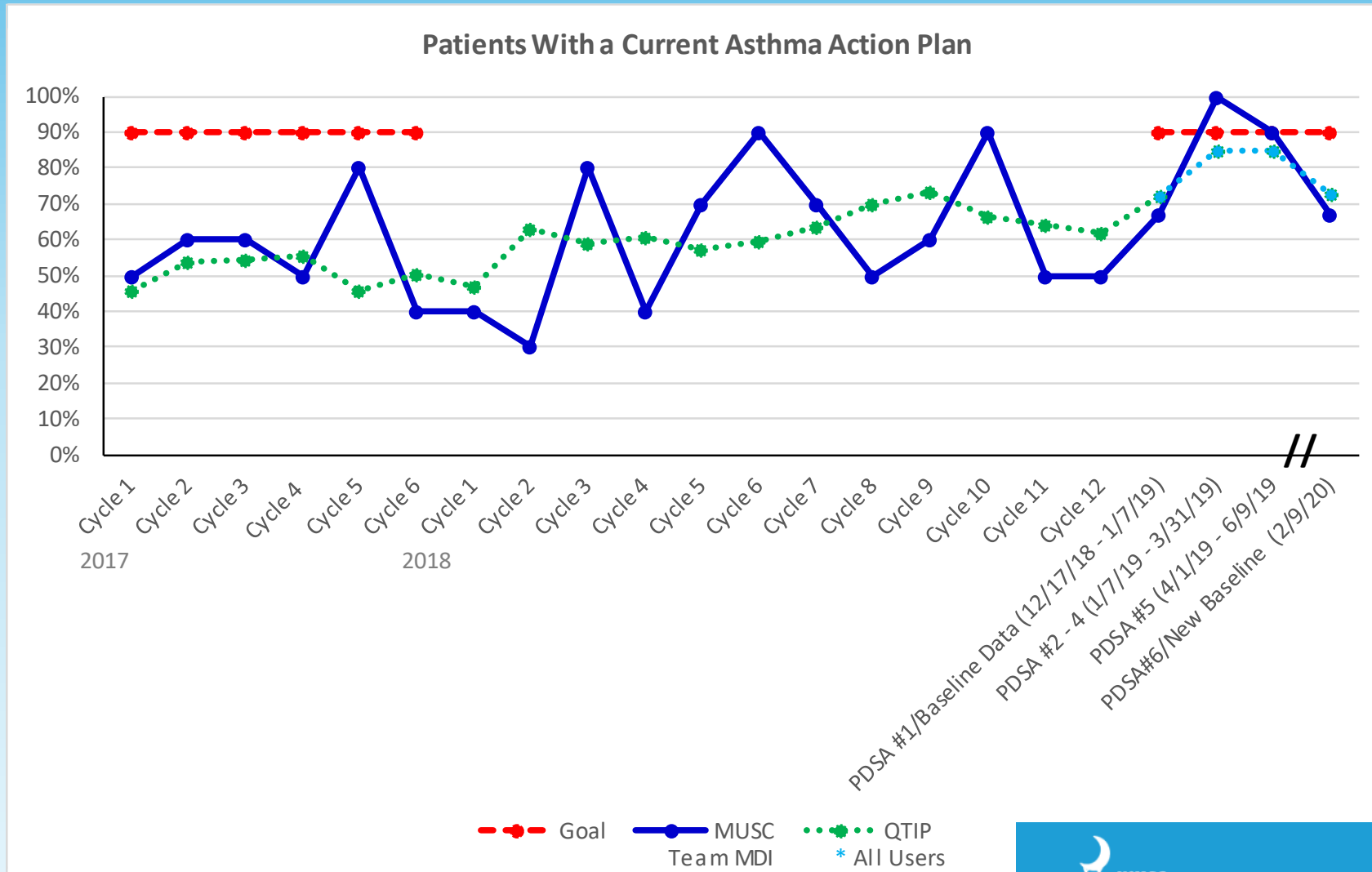
Patients With a Current Asthma Action Plan
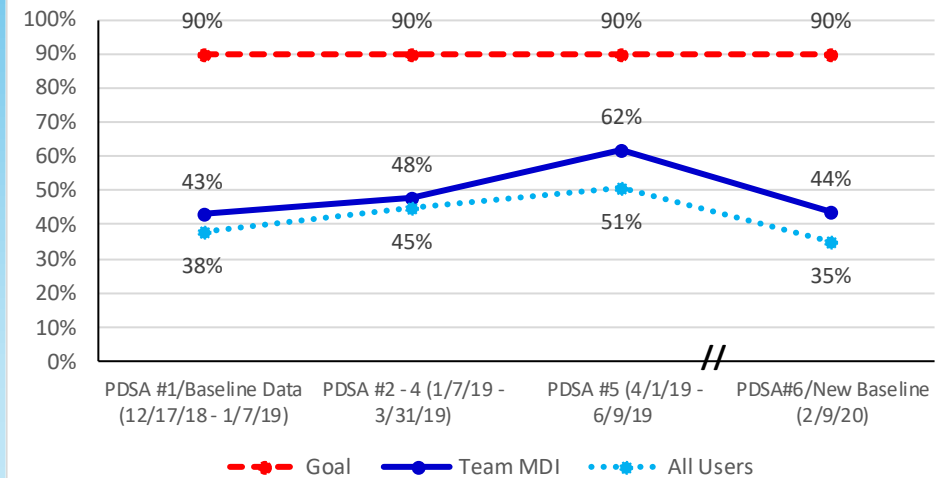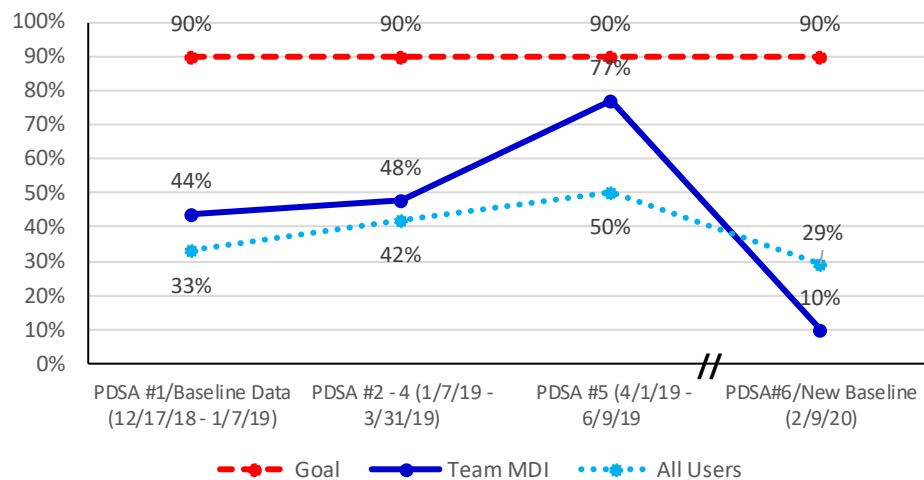
MUSC EQIPP for Residents: Team MDI
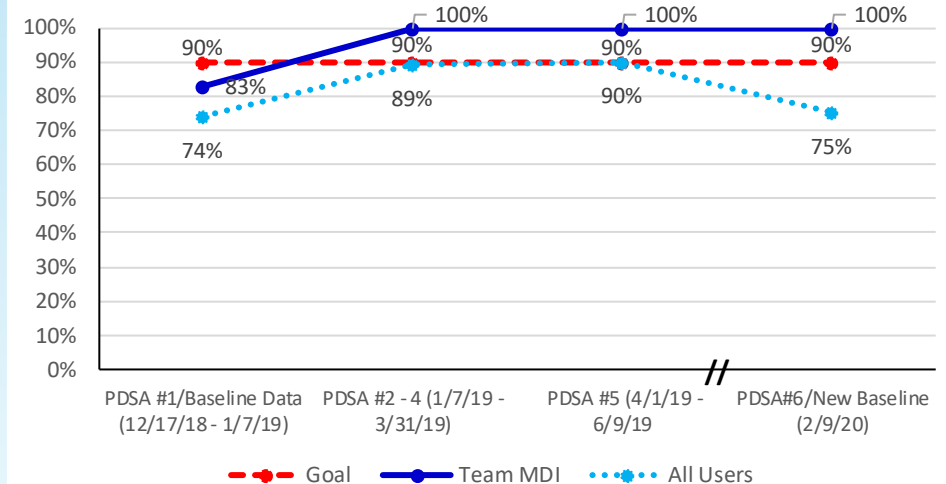
MUSC EQIPP for Residents Team MDI

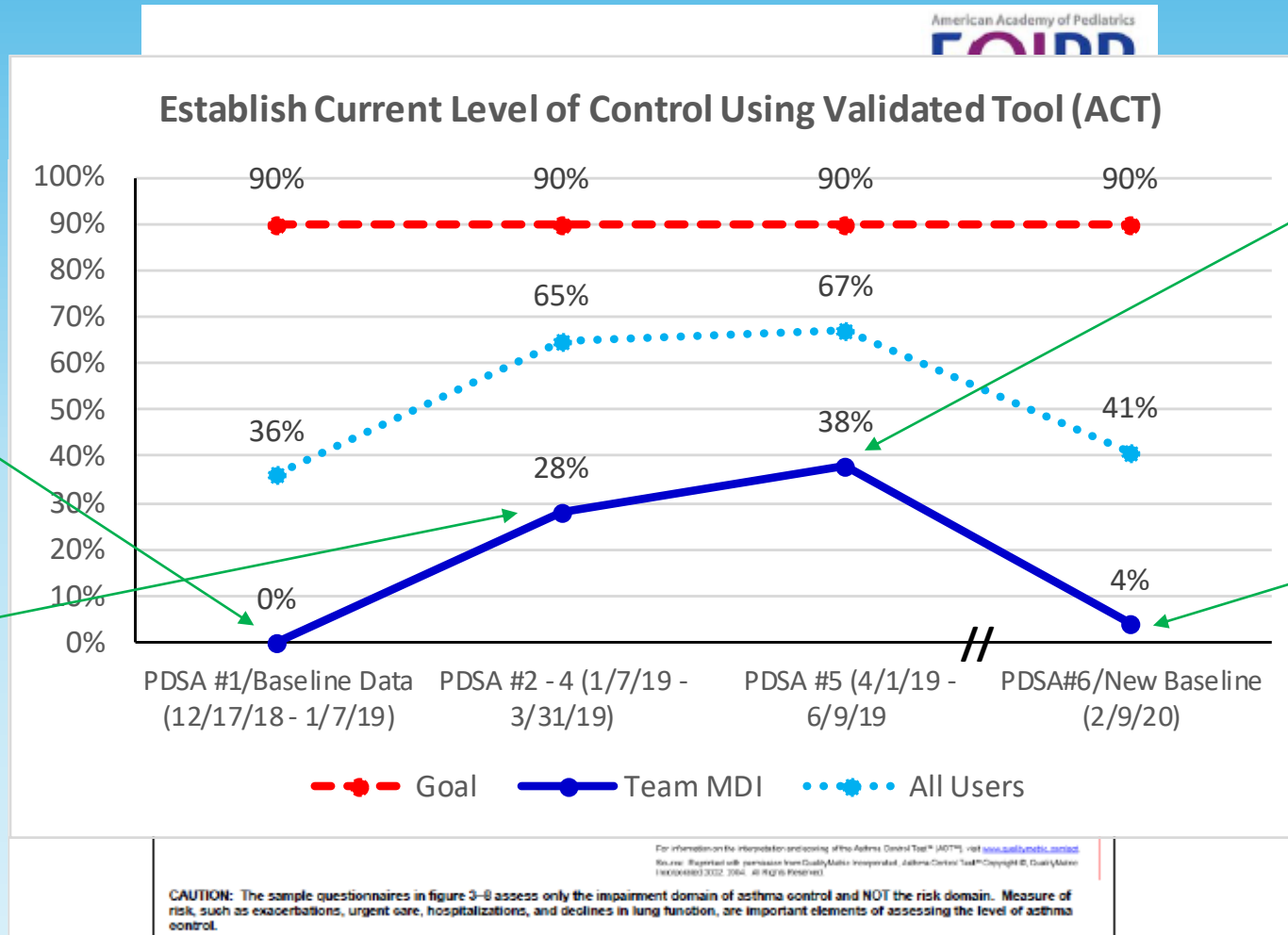- PDSA#1 – Use the Epic PCMH Registry to identify pts w asthma on which to conduct chart audits
- PDSA#2: Review chart audit results to determine on what area to focus
- PDSA#3: Create ".ppcasthmafu" note template w ACT documentation imbedded
- PDSA#4: Email reminders to residents & attendings about ACT & ".ppcasthmafu" note template. Also provided ACT & educated nurses to distribute ACT during triage
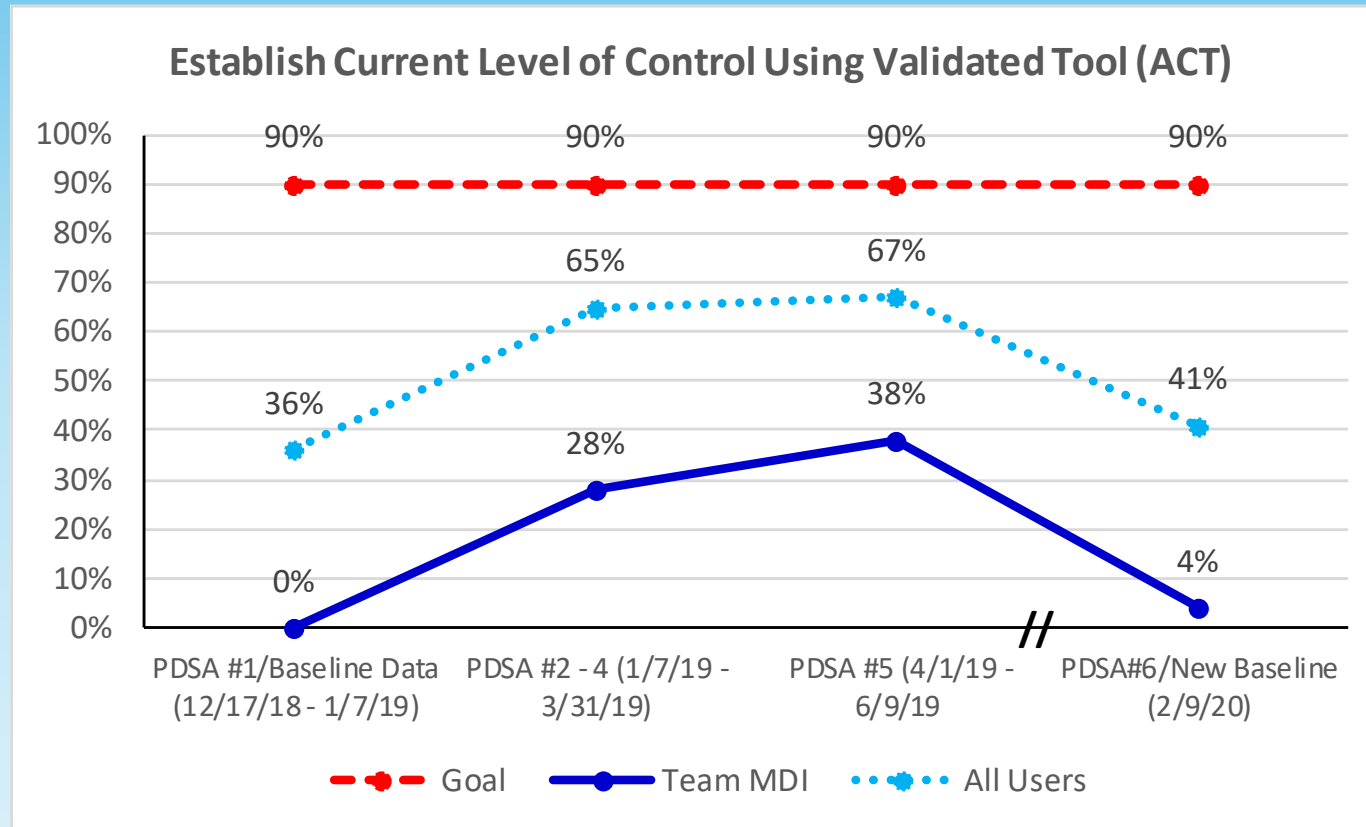
- PDSA#5: Re-emphasized importance of distributing the ACT in triage w nursing staff
- F/u chart audit #2 completed w PDSA#6 planned; however, EQIPP stop w a > 6-month hiatus at residency program request to allow QI education of new intern class
- PDSA#6: Use Epic PCMH Registry to identify pts w asthma on which to conduct chart audits & obtain new baseline to determine on what area to focus

Establish Current Level of Control Using Validated Tool (ACT)

Goal: 90%, 90%, 90%, 90%

All Users: 36%, 65%, 67%, 41%

Team MDI: 0%, 28%, 38%, 4%

X-axis: PDSA #1/Baseline Data (12/17/18 - 1/7/19); PDSA #2 - 4 (1/7/19 - 3/31/19); PDSA #5 (4/1/19 - 6/9/19); PDSA#6/New Baseline (2/9/20)

Legend: Goal, Team MDI, All Users

AIM: By March 31, 2019, our goal is to increase documentation of asthma control from 0% to 25% in asthma f/u visits by giving pts the ACT & documenting the results using note template ".ppcasthmafu"
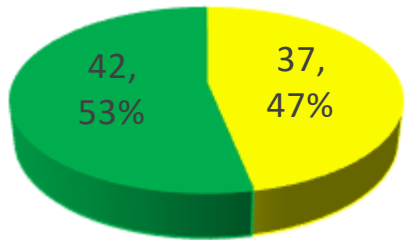
AIM: Based on results from follow-up chart audit #1, by June 10, 2019, our goal is to increase documentation of asthma control from 28% to 60% in asthma f/u visits by giving pts the ACT & documenting ACT results using ".ppcasthmafu" note template
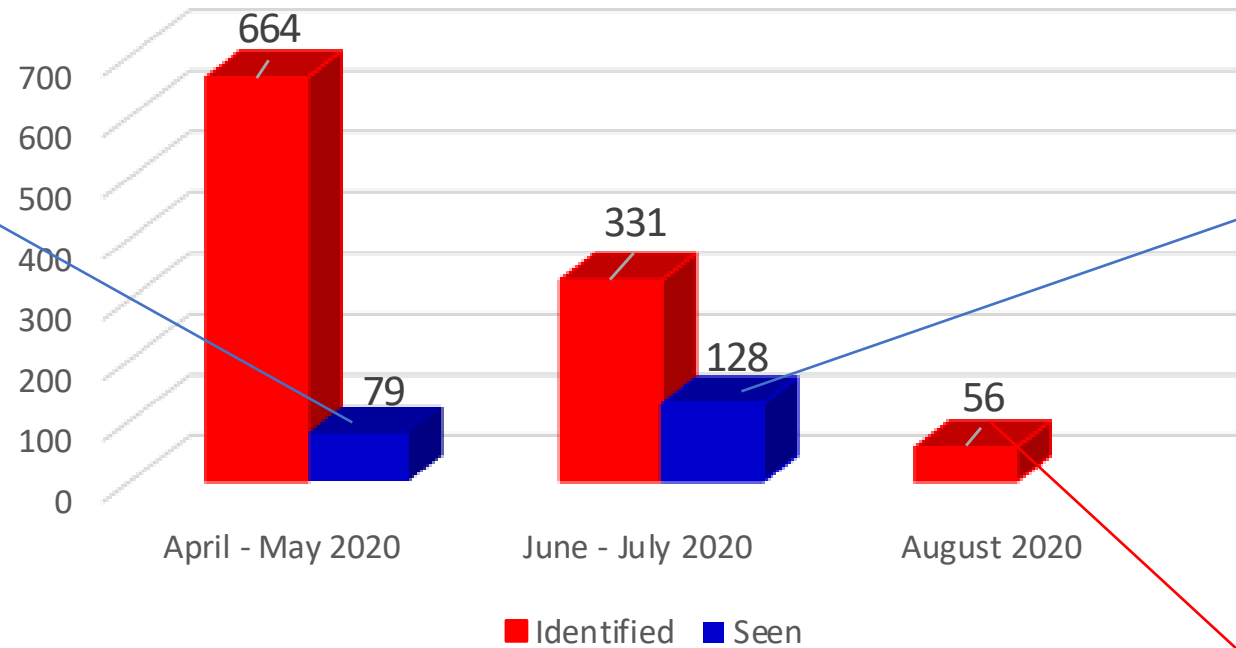
COVID Hit

Establish Current Level of Control Using Validated Tool (ACT)

Legend: Goal (red dashed), Team MDI (blue solid), All Users (light blue dotted)

	PDSA #1/Baseline Data (12/17/18 - 1/7/19)	PDSA #2 - 4 (1/7/19 - 3/31/19)	PDSA #5 (4/1/19 - 6/9/19)	PDSA#6/New Baseline (2/9/20)
Goal	90%	90%	90%	90%
All Users	36%	65%	67%	41%
Team MDI	0%	28%	38%	4%

The New Normal – A New Initiative

April - May 2020

42, 53% | 37, 47%

In-person | Video

COVID19 Asthma Recall Initiative

664 | 79
331 | 128
56

April - May 2020 | June - July 2020 | August 2020

Identified | Seen

June - July 2020

50, 39% | 78, 61%
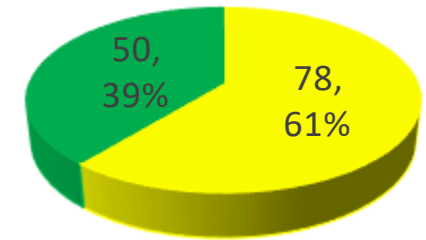
In-person | Video

August 2020

19, 32% | 40, 68%
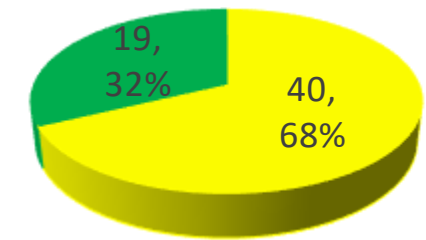
In-person | Video

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