American Academy of Pediatrics
AAP Chapter Quality Network Asthma Project

Introduction/Background/History: Please include any relevant information that may be helpful for others to understand this initiative.

Chapter Quality Network (CQN)
The American Academy of Pediatrics designed the Chapter Quality Network to build the capacity of AAP state chapters to lead quality improvement efforts with member practices that result in improved care and outcomes for children at a population level.

Chapter Quality Network Asthma Project
Despite excellent intentions and pockets of superb care, a major opportunity exists to improve care for children with asthma and their families, as much care is still delivered in ways inconsistent with evidence-based guidelines. Affecting 6.7 million children, childhood asthma is the most common serious pediatric chronic disease (1). African-American and Puerto Rican children have a higher prevalence of asthma compared with non-Hispanic white children (2). Furthermore, the incidence of pediatric asthma continues to grow and accounts for 12.8 million missed school days a year. Nearly half (44%) of all asthma hospitalizations are for children (3).

The CQN Asthma Project was developed for the purpose of working with AAP state chapters to implement an asthma quality improvement methodology and curriculum to help pediatric practices integrate the National Health Lung and Blood Institute (NHLBI) asthma guidelines for all pediatric patients in their practices.

Initiative Goal: Please describe the overall goal of this initiative, including the patient population or disease area that this initiative will address.

The global aim of the CQN Asthma Project is to increase the reliable implementation of the National Heart Lung and Blood Institute (NHLBI) Guidelines for the Management and Treatment of Asthma. To close the gaps in guideline implementation, participating pediatricians will:

- Embed the CQN encounter form into their practice flow in a reliable manner and use the EPR-3 control and severity tables to initiate and adjust treatment.
- Provide a current asthma action plan at each asthma care visit.
- Prescribe controller medications as appropriate for their pediatric patients with persistent asthma.
- Initiate use of the National Asthma Registry to manage their full population of pediatric asthma patients.

Target Learners: Please describe the intended participants of this educational initiative, as well as the estimated number of learners.

Chapter Leadership teams from each participating AAP chapter
- Physician Leaders (4)
- Physician Asthma Experts (4)
- Project Managers (4)

Practice Teams
- Physicians (200)
- Nurses/PA (100)
- Practice Managers (44)

References
3. Asthma and Allergy foundation of America. www.aafa.org/display.cfm?id=9&sub=42
Collaborators: Please include a brief description of the role of each collaborator in the initiative.

Upon selection of participating chapters, the CQN Asthma educational plan will be guided by an AAP national team who will be responsible for overall development and modification of the QI curriculum and education of the leadership teams for each chapter. The national team (listed below) will provide a face to face training for chapter leaders, monthly cross learning conference calls for chapter teams, educational materials and templates, data analysis and registry technical support. In turn, chapter teams consisting of Physician Leader, Physician Asthma Expert, and Project Manager, hold 4 learning sessions (2 face to face, 2 webinars) for participating practice teams (Physician Leader, Nurse/PI, Office Manager) as well as monthly conference calls to implement the various QI activities introduced in the CQN curriculum.

National AAP Staff
Principal Investigator – will have primary responsibility for the design, execution, and management of the project.
Quality Improvement Advisor – will assist in the design and analysis of the improvement methodologies used throughout the project.
Quality Improvement Coach – will assist chapters and practices to implement and perpetuate practice transformation by coaching and the use of tools and resources, as well as ongoing coaching and peer support.
Project Director – will have responsibility for overall direction of project staff and budget.
Chapter Data Analyst – provide training and support to chapters and practices for National Asthma Registry and maintain documentation for Maintenance of Certification.
Project Manager – responsible for management of day to day project activities and documentation for Continuing Medical Education.

Educational Design: Please describe the overall design of this initiative, as well as the approximate time span of this initiative.

The collaborative will engage four AAP state chapters to implement an asthma quality improvement curriculum to help pediatric practices implement the NHLBI asthma guidelines, while closing gaps in pediatric asthma care. Using quality improvement methods, practices will make key practice changes with tools, assistance from a QI coach and data to guide their progress. Data will be collected at the point of care using an encounter form that will also provide decision support to clinicians. Participating practices will utilize the AAP National Asthma Registry to upload their current asthma populations and to collect and analyze data over the course of the project. Real time data reports highlighting practice performance on multiple measures will be available to practices via the registry. After measuring baseline compliance, data collection will measure improvements from encounters that reach optimal asthma care and other key measures. Optimal asthma care is a bundled measure that includes use of a standardized method to measure asthma control, a stepwise approach to treatment, provision of an asthma action plan, and a controller medication prescription for children with persistent asthma.

The CQN Asthma Project improvement efforts rest on three tightly linked and highly successful frameworks.

1. First, the Model for Improvement developed by Associates in Process Improvement is a simple yet powerful tool for accelerating improvement. Building on sequentially gained knowledge, small planned tests of change (Plan-Do-Study-Act cycles) allow learning to be captured during the pilot or testing phase, thereby reducing the risk of lost time and effort due to extensive planning.

2. Secondly, we employ the collaborative learning model which is based on the Institute for Healthcare Improvement’s Breakthrough Series change process. Multi-disciplinary practice teams will work together and learn from each other over 12 months to improve asthma care. Teams attend four sequential learning sessions (two in person and two via webinar), learn best practices and how to overcome barriers with qualified improvement faculty on monthly conference calls, and review the feedback from practice performance data on a monthly basis. A leadership team from each of the four selected chapters will lead the learning collaborative for the recruited practices. The chapter leadership team will consist of a pediatrician leader, asthma expert and a program manager.

3. Lastly, the Chronic Care Model promotes more productive interaction between patients and their care teams by focusing on self-management support, delivery system design, decision support and clinical information systems further promoting improvements in care.
The National Asthma Registry will be used for data collection and analysis. The 16 measures entered into the National Asthma Registry include:

**Parent Section**
- Has the child missed any days of school/daycare due to asthma in the past 6 months?
- Have you or your spouse missed any work days due to your child’s asthma in the past 6 months?
- Has your child visited an Emergency Room or Urgent Care Center due to asthma in the past 12 months?
- Has your child been admitted to the hospital due to asthma in the past 12 months?
- How often does asthma limit your child’s activities?
- How would you rate your child’s asthma control during the past month?
- How comfortable are you in your ability to manage your child’s asthma?

**Physician Section**
- Indicate the patient’s asthma severity level.
- What is the patient’s current level of control during the past month?
- Have you used the age appropriate NHLBI EPR3 stepwise table to identify treatment options or adjust therapy based on asthma control?
- Is the patient on a controller medication?
- Does the patient have a written asthma action plan?
- If yes, was the plan updated as needed and reviewed with the patient and/or family at this visit?
- For patients age 5 years and older, has the patient had spirometry in the past 1-2 years?
- Were asthma patient/family education materials (other than the asthma action plan) provided and explained at this visit?
- Was a flu shot received (active flu season)?

**Publication Strategy:** Please describe how educational outcomes results from this initiative will be disseminated.

The CQN will publish an article on the project outcomes in the AAP peer-reviewed journal *Pediatrics* which has a circulation of 69,000. In addition, CQN project status and results will be featured throughout the 12 months in other AAP publications including *AAP News*, *AAP Chapter Connections* and *AAP Quality Connections*.
| Quality improvement not embedded into everyday practice of medicine (NHLBI guidelines) | Embed the CQN encounter form into practice flow in a reliable manner and use the EPR-3 control and severity tables to initiate and adjust treatment Practices systematically provide data feedback to all clinicians/staff in the practice Practice teams participate in monthly practice calls Practices rate CQN initiative as valuable to improvement efforts | Practice-based Learning and Improvement—Able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence and improve their practice of medicine. Moore Level: Performance % of practices that use the CQN encounter form at point of care (Goal = 100%) % of practices that enter CQN encounter forms into National Asthma Registry (Goal = 100%) % of practices that systematically provide data feedback to all clinicians/staff in the practice (Goal = 80%) % of practices that participate in monthly practice calls (Goal = 90%) # of pediatric patient encounters with asthma are collected and used to improve care (Goal = ≥5000) % of practices that rate CQN initiative as valuable to improvements efforts (Goal = 90%) | National Asthma Registry Data, Plan/Do/Study/Act (PDSA) cycles, practice conference calls, online survey tools |

| Asthma care delivered in ways inconsistent with evidence-based guidelines | Provide a current asthma action plan at each asthma care visit | Practice-based Learning and Improvement Moore Level: Performance % of recorded encounters that indicate asthma action plan received and/or updated | National Asthma Registry Data |

<p>| Asthma care delivered in ways inconsistent with evidence-based guidelines | Prescribe controller medications as appropriate for pediatric patients with persistent asthma | Practice-based Learning and Improvement Moore Level: Performance % of recorded encounters that indicate patients with persistent asthma have been prescribed controller medication | National Asthma Registry Data |</p>
<table>
<thead>
<tr>
<th>Asthma care delivered in ways inconsistent with evidence-based guidelines</th>
<th>Peer review data, National Asthma Registry Data</th>
<th>Embed the CQN encounter form into practice flow in a reliable manner and use the EPR-3 control and severity tables to initiate and adjust treatment. Provide a current asthma action plan at each asthma care visit. Prescribe controller medications as appropriate for pediatric patients with persistent asthma.</th>
<th>Practice-based Learning and Improvement</th>
<th>Moore Level: Performance % of patients that receive optimal asthma care (bundled measure including: assessment of asthma control, NHLBI stepwise approach used to adjust treatment, children with persistent asthma on a controller medication, and written asthma action plan updated and reviewed) (Goal = 85%)</th>
<th>National Asthma Registry Data</th>
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<tr>
<td>Patient encounter form not used at point of care, and specific data not entered into National Asthma Registry</td>
<td>National Asthma Registry Data</td>
<td>Initiate use of a registry to manage full population of pediatric asthma patients</td>
<td>Practice-based Learning and Improvement</td>
<td>Moore Level: Performance % of practices successfully uploaded full asthma population 5000 or more pediatric patient encounters with asthma data collected and used to improve care</td>
<td>National Asthma Registry Data</td>
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Please contact the educational provider for additional information regarding the initiative.