



COMMUNITY
CARE OF
NORTH
CAROLINA

PEDIATRIC ELECTRONIC HEALTH RECORD



CHIPRA Category-D | quality demonstration grant

CHIPRA Category-D

Define

pediatric EHR Standards

A pilot program of the Centers for Medicare & Medicaid Services (CMS) enlists the states of Pennsylvania and North Carolina to assist in evaluating a model Electronic Health Record (EHR) format - specialized for the pediatric patient population. The AHRQ-CMS Model Children's EHR Format is a set of over 560 requirements, organized by topic area, and developed by AHRQ contractor, Westat. It is based on a 2010 Environmental Scan and Gaps Analysis by subcontractor Intermountain Healthcare, outlining areas of deficiency in EHR systems used for child health care delivery. Additional subcontractors included: American Academy of Pediatrics, American Academy of Family Physicians, Duke Medicine, University of Maryland, and Fox Systems (now Cognosante). It is anticipated that Meaningful Use certification standards in Child Health will be based on the Model.

Deploy

solutions that meet model requirements

The North Carolina grantee, Community Care of North Carolina (CCNC), is evaluating the effectiveness of the Model Children's EHR Format to accomplish the following goals:

- Industry-wide increase in understanding and knowledge of information technology's role in child health care.
- Improve the pediatric content and functionality of current and future EHR products.
- Improve child health care quality and reduce cost.

Document

details at the point of care

Pediatricians and Family Physicians in North Carolina have the opportunity to work with their EHR vendors to influence the Model's interpretation and implementation in EHR systems. While no grant funds will go directly to practices or EHR vendors, benefits to practices include better EHR support for clinical processes and quality improvement activities, such as Patient Centered Medical Home (PCMH). Vendors benefit from early access to future product certification criteria.

The CCNC team working on this project has surveyed and discussed EHRs with many pediatricians in the state and discovered that the major gaps existing across a majority of current EHR products are:

- Developmental Screening Scoring
- MCHAT – Autism Screening
- Blood pressure percentiles based on age and height
- Preventive care reminders/prompts
- Premature Growth Charts
- Weight-based dosing
- Anticipatory Guidance Prompts

Decide

where to follow up based on clinical reports

The CHIPRA Category-D grant project in North Carolina will attempt to use the Model Children's EHR Format to fill these gaps and subsequently measure care quality outcomes. This will be accomplished by: working with vendors and practices to interpret and implement the Model in five quality improvement target areas; rating the ease of interpretation and usefulness of the implementation; and by capturing, compiling, and analyzing data from the EHR. The five target quality improvement areas for this project are:

- Obesity
- Oral Health
- Developmental and Behavioral Health
- Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)
- Asthma.

Demonstrate

how the EHR supported and improved care quality & efficiency

<u>Quality Improvement Measure Category</u>	<u>CCNC QMAF Claims</u>	<u>CCNC QMAF Chart Audit</u>	<u>CHIPRA C - Chart Extraction Data</u>	<u>CHIPRA D - PEHR Reporting</u>
Obesity Prevention	BMI V-codes		BMI percentiles. Evidence of Counseling.	BMI percentiles. Evidence of Counseling. Blood pressure percentiles.
Oral Health	Dental visit (annual) & dental varnishing rates		Documentation of dental home. Oral Health Risk Screen and counseling.	Documentation of dental home. Oral Health Risk Screen and counseling.
Developmental and Behavioral Health	Screening rates		Maternal Depression Screen. Referral/follow-up done for positive screens.	Maternal Depression Screen. Referral/follow-up done for positive screens.
Early Periodic Screening Diagnosis and Treatment (EPSDT)	Well-child visits and components		Adolescent Immunizations.	Well-child visits and components. Adolescent Immunizations.
Asthma	Asthma ED visits and hospitalizations	Asthma Action Plan recorded		Asthma Action Plan recorded

North Carolina's areas of quality improvement focus are consistent with the priority areas described by CMS for the entire CHIPRA grant, as shown below:

- **Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Service:** CMS seeks to ensure that eligible children have access to all the screening and follow-up services that are medically needed to correct or ameliorate health conditions and that sustain or support functioning. State reporting of these encounters should accurately reflect the extent to which children receive these services.
- **Obesity:** CMS seeks to ensure that children are properly assessed for overweight and obesity as part of their EPSDT screens and that they are directed to appropriate nutritional counseling and other medically necessary services that may be indicated. Reporting of relevant indicators, such as measurement of body mass index, is necessary to ascertain whether these assessments are being performed.
- **Oral Health:** Oral health, including regular dental examinations, necessary treatment, and preventive services such as fluoride applications and sealants, is critical to overall physical health. Poor oral health can lead to other preventable, medical complications. Efforts to recruit and retain dentists and involve primary care providers in oral health can significantly improve access. CMS is launching an initiative in 2011 that has an oral health goal of increasing the rate of low income children and adolescents who are enrolled in Medicaid or CHIP who received any preventive dental services by 10 percentage points over a 5-year period. A second goal, to be phased in within 2 to 3 years, will seek to increase, by 10 percentage points over 5 years, the rate of low income children and adolescents ages 6 – 9 enrolled in Medicaid or CHIP who receive a dental sealant on a permanent molar tooth.
- **Behavioral Health:** CMS seeks to provide coordinated, comprehensive services necessary to address the mental health and substance abuse challenges faced by eligible children while obtaining the highest possible functional status and quality of life in the least restrictive setting. The use of HIT and EHRs for these children, particularly those in foster care, is helpful in identifying special needs, tracking the receipt of services, and avoiding duplication of efforts by multiple providers. (2010, CMS)

Asthma (ED Visits, Asthma Action Plans) – The fifth QI category of Asthma has been a key QI activity in North Carolina for over 12 years. Asthma ED visit rates have been measurably declining in NC due to these coordinated disease management efforts. ED utilization for asthma is a CHIPRA Category-A measure.

Detailed Topic Summaries from the Pediatric EHR Model

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Pediatric EHR Model Samples - Normative Statements

Topic Area	Requirement ID	Description
Children with Special Healthcare Needs, Well Child/Preventive Care	Req-1066	The system SHALL provide the ability to capture the names and contact information for primary provider, case managers, and subspecialists that follow the Child with Special Healthcare Needs, including their contact info.
Children with Special Healthcare Needs	Req-1060	The system SHOULD support the ability to prompt for the provider (appropriate to local processes and workflow) to discuss code status with the parent/guardian of a medically complex child with special health care needs upon an initial health & physical evaluation.
Children with Special Healthcare Needs	Req-730	The system SHALL support the flagging of individuals with special healthcare needs or complex conditions, to facilitate care management, decision support, and reporting.
Children with Special Healthcare Needs, Growth Data	Req-850	The system MAY display head circumference data on other selected growth charts specific to certain populations (e.g., children with Down syndrome or a particular ethnicity).
Growth Data	Req-849	The system SHALL be able to display all recorded head circumference data on the sex-specific CDC growth chart.
Growth Data	Req-959	The system SHOULD be able to display head circumference adjusted for the degree of prematurity by subtracting the number of weeks premature the individual was born from each plot point during the first two years of life. The growth chart should reflect that this plot was corrected for prematurity.
Specialized Scales/Scoring	Req-1039	The system SHALL support the Tanner stages of adolescent development
Specialized Scales/Scoring	Req-1041	The system SHALL support the PEDS screen.
Specialized Scales/Scoring	Req-1032	The system SHALL support Asthma Severity Scoring.
Well Child/Preventive Care	Req-429	The system SHALL capture the administration, completion, and evaluation of screening tools.
Well Child/Preventive Care	Req-1073	The system SHOULD support age-specific screening forms
Well Child/Preventive Care	Req-1072	The system SHOULD capture information from the screening tool in a structured form
Well Child/Preventive Care	Req-1077	The system SHALL provide access to age specific order sets relevant to proposed preventive care
Well Child/Preventive Care	Req-972	The system SHALL support age-specific preventive well- child encounters with content based on age-appropriate recommendations such as Bright Futures Guidelines
Well Child/Preventive Care	Req-983	The system SHOULD provide specific recommendations regarding the follow-up and re-screening of age appropriate Preventive Procedures
Well Child/Preventive Care	Req-1090	Data for decision support SHALL be interpreted in an age and gender-specific fashion, using age and gender-specific norms, using age-appropriate data
Quality Measures	Req-967	The system SHALL be able to display the quality measures graphically, with multiple time points as selected by the user within the healthcare setting (e.g., run charts).