Overview of AAP EHDI Program and EHDI Quality Improvement Project

Robert Cicco, MD, FAAP
Chairperson, EHDI Quality Improvement Expert Group
The Quality Improvement (QI) project aims to improve the role of the medical home in EHDI and enhance pediatrician knowledge and practice related to:

- Documentation of screening results
- Referrals for audiological diagnostic exams
- Identification of risk factors for late-onset and progressive hearing loss
- Communication of these results with parents and families
Project Overview

- HRSA funded
- Practice-based
- Learning Collaborative model
- Multidisciplinary Expert Group
- Practice diversity
- Plan, Do, Study, Act (PDSA) Cycles of Change
- Development of best practices
Why QI?

- Opportunity to create lasting practice change through:
  - Measurement of practices essential to improving care
  - Identification of barriers to implementation of quality care practices
  - Creating changes that results in measurable change in practice
  - Altering the culture of care surrounding EHDI in the practice setting
  - Sharing successes and learning from other providers
Project Process

- Formation of expert group
- Development of aims and measures
- Institutional Review Board (IRB) and Maintenance of Certification (MOC) applications
- Recruitment of practices
- Baseline data collection
- Face-to-face learning session
- Monthly Calls
What is a Learning Collaborative?

- An improvement method that relies on spread and adaptation of existing knowledge to multiple settings to accomplish a common aim
- A quality improvement approach designed to enable teams to share, test, and implement ideas
- Using the Institute for HealthCare Improvement (IHI) Breakthrough Series Collaborative Model
Core Elements of a Collaborative

- Expert Group
- Learning Sessions(s)
- All teach/all learn philosophy
- Common measures across sites
- Data transparency
- “Share Seamlessly… Steal Shamelessly”
Project Teams
Our Approach to Improvement

Model for Improvement

3 Key Questions for Improvement

What are we trying to accomplish? **AIM**

How will we know that a change is an improvement? **MEASURES**

What changes can we make that will result in an improvement? **IDEAS**

Test Ideas & Changes in Cycles for Learning & Improvement

Act

Plan

Study

Do
Project Aim

By June 2015, at least 5 pediatric offices will make practice-based improvements that lead to enhanced care across the delivery system and strengthen the role of the medical home within the EHDI system.

• 97% or more of all newborns have documentation of the results of their newborn hearing screening in their medical records by 6 weeks of age
• 97% of newborns will have documentation in their medical record that the results were discussed with the family no later than 6 weeks of age
• 97% or more of all newborns identified to have risk factors associate with hearing loss will have documentation of those risk factors in their medical record by 6 weeks of age and will have an individualized care plan by the 4 months of age
• 100% of children who do not pass their newborn hearing screening have completed an audiological evaluation by 3 months of age and documentation will be in their medical record by 4 months of age
Project Measures – Passed Screen

- % Infants with screening results by 6 weeks
- % infants with documented screening results conversation
- % Infants with risk factor assessment by 6 weeks
- % infants with documented risk factor conversation
- % infants with risk factors who have an individualized plan by 4 months
Project Measures – Screen not Passed

- % infants referred for an outpatient rescreen
- % infants referred for a diagnostic appointment
- % infants with diagnostic appointment by 3 months
- % infants with diagnostic results received by 4 months
- % infants with diagnostic results reviewed by 4 months
Outcomes to Date
% Infants with Screening Results – 6 Weeks
% Infants with Screening Results Discussed – 6 Weeks

Results Conversation

Percent


- Goal
- All Practices

Cycle

0.0  10.0  20.0  30.0  40.0  50.0  60.0  70.0  80.0  90.0  100.0

50.0  74.0  85.1  84.0  79.6  89.7  89.2

100.0  100.0  100.0  100.0  100.0  100.0  100.0
% Infants with Risk Factors Assess.– 6 Weeks
% Infants with Risk Factors Discussed – 6 Weeks

Risk factors conversation

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- **Goal**
- **All Practices**
% Infants w/ Risk Factors Care Plan – 4 Month

Risk Factors Care Plan

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Goals vs All Practices

- Goal
- All Practices
What Have We Learned So Far?

• Quick improvement is possible
• Do not pass infants have been few – perhaps too few
• EHR changes yields immediate improvement
• Many were not having a discussion about family risk factors
• Conversations don’t take as long as you might expect
• Spread takes time and patience
A Practice Perspective....

Leslie Lestz, MD, FAAP
Demographics

- TLC Pediatrics of Frisco, located in Frisco, Texas
- 3 pediatricians on staff (1 provider part time)
- Approximately 15 newborns/month
- National Committee on Quality Assurance, Level 3 PCMH Recognized
- Accept most HMO/PPO insurance
- PCC EHR- Physician’s Computer Company
Change is Good.

- Documentation of initial hearing screen by 2 weeks of age
- Documentation NBHS results discussed with family by 2 weeks
- Script/checklist to highlight conversation re: NBHS results
- Diagnosis code assigned to infants that refer on NBHS
- Outpatient hearing screen results documented by 2 mo WCC
- Diagnosis code assigned to infants that refer on outpatient rescreen
- Risk assessment for late onset HL by 2 weeks (with documentation)
- Diagnosis code assigned to “at risk” patients
- Care plan established for “at risk” patients
Lessons Learned . . .

• NBHS-results often documented, rarely discussed
• Outpatient hearing screens-results never communicated to pediatrician
• Quality of conversations with families important
• Details of conversations often not recalled by families
• Risk Factor Assessment for late onset HL
• Biggest impact!
• Identify, track, establish care plans
Challenges

- Communication
- Obtaining NBHS results
- Action=Documentation
- JCIH recommendations for “at risk” population vague
- R&D- created our guidelines for 9-12 mo
Another Practice Perspective....

Julia Richerson, MD, FAAP
Family Health Centers:
urban FQHC with 7 locations
42,000 patients annually
OB, adult care and pediatrics
integrated behavioral health

**Iroquois location:**
1.5 FTE pediatricians
42 employees
6,000 pediatric visits annually
60% language other than English
Almost 100% Medicaid

Core EHDI QI Team:
Julia Richerson, MD, FAAP
Sabrina Dumas, Office Manager
Becky Logsdon, MA

AIMS:
- By 6-30-2016 90% of babies will have risk factors assessed and discussed with parents.
- By 6-30-16 100% of babies who did not pass the hospital screen will have a diagnostic evaluation by 3 months of age.
- By 6-30-16 spread to 1 more provider at Iroquois and 1 other location
Initial Assumptions- True or False

• NBHS is documented in EHR by 6 weeks TRUE
• Not for NICU babies TRUE
• Audio referral by 6 weeks done- maybe referred but not seen for several months TRUE
• Risk factors assessed- always get and review newborn records, but maybe not discuss with family TRUE
Low Hanging Fruit and Changes Made (so far)

- EHR checkboxes to document discussion of results with family and to document assessment of and discussion of risk factors with family
- Dedicated 1 staff person to track all “not passed” screens and diagnostics for risk factors
- Increased awareness in practice of importance of 1-3-6 and risk factor assessment
Challenges We Have Seen

- Too many priorities- need closer case management of “do not pass”- to call immediately after appointment for results, make sure they have insurance
- Unclear guidelines for babies with risk factors so our practice standards aren’t consistent
- Decreased documentation by newborn nurseries of hearing screen results in last 12 months, leading to our having to retrieve results
Discussion, Questions?