Developmental Screening Project at Group Health Cooperative

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Current American Academy of Pediatrics Recommendations

- **Surveillance** at every well child visit
- **Screening** using a validated screening tool at 9 months, 18 months and 24 or 30 months of age.
- Currently 7 out of 10 U.S. pediatricians surveyed use surveillance alone (Glascoe, 2000)
Evidence Based Research

- The detection rate for developmental delays (Glascoe, 2000):
  - Observation/checklist: 30%
  - Validated screening tool: 70-80%

- The majority of developmental screening takes place in the health care providers office (Sand, 2005).
Evidence Based Research

Research supports the benefits of improved functional outcomes with early identification of children with developmental delays.
Why start a screening project at GHC?

- We currently use checklists
- Evidence base suggests we could do better at identifying delays
- Improve the quality of care
- Meet current national AAP recommendations
### MODEL FOR IMPROVEMENT

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Objective for this PDSA Cycle

**PLAN:**

**QUESTIONS:**

**PREDICTIONS:**

**PLAN FOR CHANGE OR TEST:** WHO, WHAT, WHEN, WHERE

**PLAN FOR COLLECTION OF DATA:** WHO, WHAT, WHEN, WHERE

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**DO:** CARRY OUT THE CHANGE OR TEST; COLLECT DATA AND BEGIN ANALYSIS.

**STUDY:** COMPLETE ANALYSIS OF DATA; SUMMARIZE WHAT WAS LEARNED.

**ACT:** ARE WE READY TO MAKE A CHANGE? PLAN FOR THE NEXT CYCLE.
Funding and Technical Support

- The developmental screening project at GHC has been funded by a mini-Medical Home grant from the Department of Health and Family Services and the Regional Center for Children with Special Health Care Needs.

- Funding and technical support has also been provided by the NMHAI project sponsored by the federal Maternal and Child Health Bureau.
Pilot Project January-July 2007

- Developmental screening team initial meeting January 2007
- Drs. Craig and Mathur and their nurses implemented process for 9, 18 and 24 month well child checks
- Drafted letter to be sent to parents with the ASQ Survey and a questionnaire for parents for formal feedback about the survey
- Informal feedback throughout the process from reception, nursing, quality department
- Developmental screening team wrap up meeting
GHC Developmental Screening Flowchart

Mail out ASQ

Parents do ASQ at home

Family in office for WCC Reception inquires about ASQ

Parents bring in completed ASQ to exam room

LPN/CMA scores survey

MD evaluates survey and discusses with parents

MD considers formal developmental evaluation

REASSURE

CONCERN

MD discusses any further developmental concerns with parents

Parents unable to complete

ASQ mailed in

Reception gives ASQ

Family forgot ASQ at home

ASQ mailed in

Parents do ASQ at home
Results

- 211 well child appointments for 9, 18 and 24 month visits
- 119 ASQ screened completed (response rate 56%)
  - 9 month olds: 50 (42%)
  - 18 month olds: 32 (27%)
  - 24 month old: 37 (31%)

This amounts to 4.2 eligible children per week per 1.0 FTE in a pediatric practice at GHC
24 (20%) children had concerning ASQ.
13 were referred to Birth to Three
The remaining 11 were “borderline” and not referred but had close follow-up plans in the office for re-screening
ASQ versus Checklist

- Of the 24 who did not pass the ASQ, 8 (30%) children did pass the checklist.
- This disparity reflects the national data and supports the need to use validated screening tools at well child visits.
90% of parents who responded stated that it took <20 minutes to complete the ASQ.

95% of parents who responded stated that the ASQ was somewhat or very helpful in understanding their child’s development.

A few parents scored it themselves.
Benefits of ASQ

- Improved quality of screening based on national guidelines
- Increased parental awareness of developmental milestones and involvement in screening process
- Time saver during the well child check
Barriers

- Change in workflow
- Language barriers
- Educational barriers
Incorporating ASQ into EMR

- Worked with IT staff at GHC
- Streamlined approach using DOC Flowsheets.
- ASQ answers entered into EPIC by LPN, computer generates score, M.D. can see summary of the results for 9, 18 and 24 months on one page
Organizational Support

- GHC Provider meeting August 2007
  - Over 20 providers at GHC attended
  - Public Health Partners (Waisman Center) gave presentation on developmental screening
  - Discussed results of GHC Pilot project
  - Gave information about community resources
  - Surveys for providers pre and post presentation
Results of Provider Survey

Percentage of Providers who are aware of the AAP Guidelines for Developmental Screening

- **PRE**: 30% Agree or Strongly Agree
- **POST**: 100% Agree or Strongly Agree
Currently used methods of assessing development at GHC

- **Validated Screen - all**
- **Validated Screen - selected**
- **Non-validated Screen**
- **Informal Checklist**
- **Clinical Assessment**
- **Observation only**

The chart shows the percentage of methods used, with Informal Checklist being most used, followed by Observation only.
GHC Survey - Barriers

Barriers to Developmental Screening

- Lack of training: 80%
- Language Barriers: 40%
- Lack of referral options: 40%
- Lack of office staff: 70%
- Lack of time: 80%
- Lack of consensus: 40%

0% 20% 40% 60% 80% 100%
GHC Survey

- 94% of providers surveyed support the using the ASQ at the 9, 18 and 24 month WCC at GHC after the presentation
- 50% of providers would more likely offer a validated screen if knew where to refer
Next Steps

- Organizational Support
- Nursing training and Physician training
- Create systemic workflow for mailing ASQ out to families before appointment
- Plan for documenting ASQ Score sheets into EPIC
Lessons Learned

- Connect with Public Health Partners and other providers within your organization
- Plan/Do/Study/Act
- Start small with 1 or 2 providers/physician champions
- Enlist support of administration (Quality Director)
- Be Patient- change can be slow
References