Learning Collaborative Approach to Improve Hospital Referral to the NYC Early Intervention Program

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NICHQ Collaborative

- Montefiore Medical Center
- New York City Early Intervention Program
- NYC Parents
- New York State NBHS Program
Collaborative Goals

- Improve the Newborn Hearing Screening process at Montefiore Medical Center

- Increase referrals of children “lost to follow up” to NYC Early Intervention Program’s Child Find

- Ensure that children with a hearing loss are aided in a timely manner
Collaborative Aim

- Decrease the percentage of infants who “do not pass” the newborn hearing screening test who are lost to follow up, one year from the date of birth, from 74% to less than 30% at Montefiore Medical Center
New York State Structure

- NYS Department of Health
- Bureau of Early Intervention
- Newborn Hearing Screening Program
  - Public Health Law, Section 2500-g, enacted in 1999
  - Regulations adopted in 2001
Hospital Steps and Procedures

Newborn Hearing Screening

- Conduct inpatient hearing screening prior to discharge

- Conduct follow up hearing screening or referral for infants who do not pass or who do not receive the screening prior to discharge
Hospital Steps and Procedures
Referral to the EI Program

- After an infant fails two hearing screenings, refer for a confirmatory (diagnostic) hearing test.

- If an infant who has failed their initial hearing screening does not receive a follow-up screening within 75 days post-charge or has missed their initial screening.
Montefiore
NICHQ PDSA Cycles

- Multiple Contact Information
- Verify Primary Care Provider Information
- Direct referral to EI after confirmation of hearing loss
- Revised Parent Letter
  - NYS Regulations and Early Intervention Program
Multiple Contact Information

New York Hearing Screening
Hearing 04-R Multiple Contact Information

Goal = 100.00
Verify Primary Care Provider Information

New York Hearing Screening
Hearing 03-R Verified Primary Care Provider

Goal = 100.00

Month

3 - 2006
4 - 2006
5 - 2006
6 - 2006
7 - 2006
8 - 2006
9 - 2006
10 - 2006
11 - 2006
12 - 2006
1 - 2009
2 - 2009
3 - 2009

%
Dear Parents,

CONGRATULATIONS ON THE BIRTH OF YOUR BABY!

We have been trying to reach you to schedule a hearing test for your baby.

We have not been able to get in touch with you.

You have missed your appointment for an out-patient hearing screening.

All babies born at the Jack D. Weiler Hospital of the Albert Einstein College of Medicine have a hearing screening before discharge.

Your baby needs a follow-up screening for one of the below reasons:

1. The baby was discharged before the test could be done.
2. The baby was too awake for the test to be done.
3. The baby was tested but did not pass, and needs to be retested.

Hearing is important for your baby to develop language and speaking skills. Most babies can hear well at birth, but a few do not.

Please call us at 718-920-2333 to schedule an appointment.

If you go elsewhere to have your baby's hearing tested, please have the results forwarded to us.

According to New York State Law, if we have not seen your baby for a hearing screening, if do not receive follow-up test results, and/or if we are unable to reach you to schedule an appointment within 75 days after birth, we are required to refer your baby to Early Intervention for follow-up, unless you object.

Laura Tocci, Au.D.
Director of Audiology
Follow-up Letter

Montefiore Medical Center
Department of ORL/HNS

DIVISION OF AUDIOLOGY…NEWBORN HEARING SCREENING PROGRAM

JUST A REMINDER TO GIVE US A CALL

As you have been told by one of hearing screening technicians or nurses, your baby needs a repeat hearing test.

Many infants need retesting. Wax or fluid normally present in the ear after birth, a noisy nursery, or a crying baby can prevent us from getting an accurate hearing screening in the hospital. It is important to obtain an accurate hearing screening before diagnosing a hearing loss.

Please call us at 718-920-2333 to schedule an appointment for your baby's hearing.
NOTE: If you have your baby's hearing retested at another facility, please forward the results to our office so they can be added to our records.

If you have questions regarding your baby's test results, please feel free to call us at 718-920-2333 and our secretary will arrange for one of us to call you back.

We look forward to meeting you and your baby.

Our office is located at: Montefiore Medical Center
Medical Arts Pavilion
3400 Bainbridge Ave, 3rd floor
Reception Area A
Bronx, NY 10467
718-920-2333
Lessons Learned

- Selected data doesn’t always tell the whole story
- NBHS procedures have changed for the positive
- Changing the wording in the parent letters has contributed to more parents following up with the second screening
- Direct referral to EI for children with a diagnosed hearing loss
NYS Early Intervention Referral Process

- Infants and toddlers suspected of having a disability developmental delay and/or diagnosed condition that has a high probability of delay
- Child Find—identification, tracking and screening of infants and toddlers at risk of having a disability
El Referral Process

- Letter to Hospital Provider
  - Poor loss to follow up rates
- Guide
  - detailing EI referral criteria and process benefits
- Follow-up outreach to hospitals
- Referral Form Revised
- Training of EI Intake Staff
June 6, 2008

Dear Hospital Provider:

I am writing to you to highlight the important partnership between the Newborn Hearing Screening Program at your hospital and New York City’s Early Intervention Program (EIP) in the early identification of and intervention for infants with hearing loss.

As you are aware, the Joint Committee on Infant Hearing (JCHI) Year 2007 Position Statement endorses early detection of and intervention for, infants with hearing loss. As part of this goal, all infants who do not pass their birth admission screen should have an evaluation to confirm the presence of a hearing loss before 3 months of age. If a hearing loss is confirmed, these children should receive services before 6 months. Without early detection and intervention, children who are hard of hearing or deaf, will be at significant risk for delays in language, cognition, and social emotional development.

Timely follow-up and referral to the EIP is particularly important for two groups of infants who fail their initial hearing screening: those who haven’t had a follow up screen, and those who have failed the follow up screen. We have enclosed a one page guide for hospitals to follow which details the criteria for making a referral, and the process for referring a child to the EIP program. Please post this guide and make it available to all personnel involved with your Newborn Hearing Screening Program.

We look forward to partnering with you on this very important issue. If you have any further questions, please feel to call the Early Intervention Child Find Unit at (212) 442-4764.

Sincerely,
<table>
<thead>
<tr>
<th>Early Intervention Child Find Unit</th>
<th>Early Intervention for a Multidisciplinary Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Referral to</strong></td>
<td><strong>Referral to</strong></td>
</tr>
<tr>
<td>Early Intervention Child Find Unit</td>
<td>Early Intervention Child Find Unit</td>
</tr>
<tr>
<td>• Infants who have missed an initial newborn hearing screening. or • Infants who have failed their newborn hearing screening and have not been re-screened within 75 days post discharge.</td>
<td>• Infants who have failed two newborn hearing screenings. or • Children who failed an audiological evaluation.</td>
</tr>
<tr>
<td>• Fax the fully completed, clearly written EI Referral Form to the Child Find Unit Fax # (212) 227-3642 or • Call 311 and ask for The Early Intervention Program.</td>
<td>• Fax the fully completed and clearly written EI Referral Form to the appropriate EI Regional Office located in the Child’s place of residence (fax numbers can be found at the top of the EI Referral Form). or • Call 311 and ask for The Early Intervention Program.</td>
</tr>
<tr>
<td>• The EI Child Find Unit assists families with scheduling a re-screen appointment with the referral facility or with accessing a screening elsewhere. or • Once a referral is received by the Child Find Unit, a Developmental Monitoring Specialist is assigned to work with each family, and will inform the referral facility of the subsequent outcome.</td>
<td>• Once a referral is received by the EI Regional Office located in the child’s place of residence, a Service Coordinator is assigned to assist families with choosing an evaluation site. Children referred on the basis of two failed newborn hearing screenings, will receive an audiological evaluation and a multidisciplinary evaluation, if indicated. or • Children with a confirmed diagnosis of hearing loss meet early intervention eligibility requirements and will receive a complete multidisciplinary evaluation for the purpose of service planning.</td>
</tr>
</tbody>
</table>
Referral to EI Child Find

- 4 of 5 targeted hospitals responded to mailing

Referrals to EI
- 1 of 4 hospitals currently make referrals to EI
- 2 of 4 hospitals currently make referrals to provider agencies
- 1 hospital acknowledged that there was no system in place for referrals and no referrals were being made to EI

Usefulness of Guide
- 4 hospitals claimed that the information was not new to them
- 4 hospitals found the guide useful
- 2 of 4 needed clarity regarding the telephone number given for referrals vs. the referral form

Next steps
- 3 hospitals agreed to partner with the team but felt that they did not need any further intervention.
Lessons Learned/Next Steps

➢ Referral guide useful for hospitals

• Sent guide and letter to all NYC birthing hospitals

• Followed up with phone call to clarify referral process
Outcomes

- Guide was sent to 44 hospitals and follow up calls were made to all 44 hospitals

- Contact made with 23/44 hospitals
  - 5 of 23 hospitals did not understand that they were required to refer to EI
  - 9 of 23 hospitals have no tracking system to track infants who are discharged and need to return for a 2\textsuperscript{nd} hearing screen
  - 6 of 23 hospitals referred to EI Regional Offices instead of Child Find for infants who were lost to follow up

- Since guide was sent, 12 hospitals referred to Child Find that had not referred previously, accounting for 108 infants referred
Lessons Learned/Next Steps

- New El referral form created to clarify El referral process

- El intake staff trained to identify referrals for a missed screening that should be sent to Child Find
**Old EI Referral Form**

<table>
<thead>
<tr>
<th>RELATION</th>
<th>□ Father  □ Grandparent  □ Foster Parent  □ Other, Specify:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD'S DOCTOR</td>
<td></td>
</tr>
<tr>
<td>DOCTOR'S TELEPHONE</td>
<td>(_____) _______ - _______</td>
</tr>
<tr>
<td>BIRTH HOSPITAL</td>
<td></td>
</tr>
<tr>
<td>BIRTH WEIGHT</td>
<td>Pounds: __________ Ounces: ______ OR Grams: _______</td>
</tr>
<tr>
<td>GESTATIONAL AGE</td>
<td>weeks:</td>
</tr>
<tr>
<td>DIAGNOSIS</td>
<td>If known:</td>
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**REASON FOR REFERRAL (Check only ONE)**

- □ This child is suspected or known to have a developmental delay or disability.
- OR
- □ This child is developing typically at this time but may be at risk for atypical development.

(Examples of this are: no prenatal care; maternal prenatal alcohol and/or substance abuse; NICU stay of 10 days or more; Elevated venous lead levels; Growth deficiency/nutritional problems; Homelessness; Concern regarding parent-child interaction; Parental developmental disability or mental illness).

**COMMENTS**

<table>
<thead>
<tr>
<th>Request for ISC</th>
<th>FOR OFFICE USE ONLY</th>
<th>ISC Request</th>
<th>Approved</th>
<th>Not Approved</th>
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<tbody>
<tr>
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<td>SC ID No.</td>
<td>Assigned SC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency</td>
<td>ID No.</td>
<td>Agency</td>
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<td></td>
</tr>
<tr>
<td>Tel.</td>
<td>(____)</td>
<td>Tel. (____)</td>
<td></td>
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</tr>
<tr>
<td>Fax</td>
<td>(____)</td>
<td>Fax (____)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reason for Request</td>
<td>Date Entry</td>
<td>Date</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This information does not have to be obtained if the parent objects.*
Revised EI Referral Form

1. REQUIRED INFORMATION
   - **Caregiver or Alternate Contact Name** (Last, First)
   - Telephone
   - Relation to Child: □ Father □ Grandparent □ Foster Parent □ Other Specify:
   - ☐ Home (___)___-____-____
   - ☐ Cell (___)___-____-____
   - ☐ Work (___)___-____-____

2. REASON FOR REFERRAL (check only one)
   - ☐ **EARLY INTERVENTION:** Child with a suspected or known developmental delay or disability.
     Fax to the EI/P Regional Office in the child's borough or residence:
     - Bronx (718) 410-4504
     - Brooklyn (718) 272-2568
     - Manhattan (212) 487-7071
     - Queens (718) 271-6114
     - Staten Island (718) 420-5360

   - ☐ **DEVELOPMENTAL MONITORING:** Child is developing typically but may be “at risk” for typical development, or child missed or failed newborn hearing screening (not re-screened within 75 days).
     Fax to the Child Find office:
     - Citywide (212) 227-3642

3. PERSON PRESENTING REFERRAL TO EARLY INTERVENTION
   - Name
   - Agency or Facility, if any
   - Address (Street, Apt. No.)
   - City, State, Zip
   - Telephone ___-____-____
   - Fax ___-____-____
   - Referral Source Type: □ Community Program or EI Agency □ Parent/Family
     □ Foster Care/Other ACS □ PCF □ Hospital □ Other (Specify):

4. COMMENTS

5. PARENTAL CONSENT
   - RACE □ White □ Asian □ Black □ Native American or Alaskan □ Hispanic □ Native Hawaiian/Other Pacific Islander □ Not Hispanic
   - ETHNICITY
   - MOTHER’S DATE OF BIRTH (MM/DD/YY) ___-____-____
   - LANGUAGE
   - CHILD KNOWN TO ACS □ Yes □ No

6. CHILD’S DOCTOR
   - DOCTOR’S TELEPHONE ___-____-____

7. BIRTH HOSPITAL
   - LOCATION

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Lost to Follow-up
Utilizing Other Resources

- New York City Immunization Registry (CIR)
  - Child Find staff was trained to use the CIR to find new contact information for families they were previously unable to contact
  
  - Goal is to improve the numbers of children that Child Find is able to follow up and schedule a hearing screening
CIR Results

- Child Find used CIR to contact 4 families it was previously unable to contact

- Child Find was able to contact 2/4 families using a new telephone number found in the CIR
Challenges and Next Steps

- Further use of CIR
  - Letter to PCP alerting them of patient’s hearing screen status
  - Integration of hearing screening information with CIR in combined registry
Interim IFSP implemented for children with hearing loss to expedite the time from referral to hearing aid authorization

- 7 interim IFSPs have taken place
- The average age of the babies at referral was 6 months (range was 1 to 11 months)
- The average time between referral and hearing aid authorization was 20 days. Previously, this process took at least 45 days
Next Steps for NYC EI

- Collaborating with other NYC Hospitals
Next Steps for NY NBHS

- Implement NICHQ Initiatives with other NYS Hospitals
- Law and Regulations– Child Specific Information
- New Data System– Development and Integration