Tracking Child Outcomes Statewide: Integrating Data in the EHDI System

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EHDI Conference Feb 2011 Atlanta, GA
Integrated Data System (IDS)

- **Active**
  - Screening results and demographic data populated from the electronic birth certificate
  - Summer 2011 will be integrated with the immunization registry

- **Passive**
  - Rescreen results and missed infants are entered by the hospital or EHDI staff
  - Audiology outcomes are entered by the EHDI staff (Audiologists will be trained Spring 2011)
  - CO–Hear Coordinators enter EI information
<table>
<thead>
<tr>
<th>Hospital Data</th>
<th>Audiology Assessment Forms</th>
<th>CO-Hear Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of birth</td>
<td>Date of evaluation</td>
<td>Date of referral</td>
</tr>
<tr>
<td>Mother’s age</td>
<td>Date of report</td>
<td>Date of first contact</td>
</tr>
<tr>
<td>Race, Ethnicity</td>
<td>Language spoken</td>
<td>Language spoken</td>
</tr>
<tr>
<td>Mother’s education level</td>
<td>High-risk factors</td>
<td>Insurance</td>
</tr>
<tr>
<td>Admission to NICU</td>
<td>Screen results</td>
<td>Date of transition to preschool</td>
</tr>
<tr>
<td>Infant’s Gender</td>
<td>Type of hearing loss (auditory neuropathy, sensourineural, conductive)</td>
<td>Individual Family Service Plan date</td>
</tr>
<tr>
<td>Birth weight</td>
<td>Degree of hearing loss (mild, moderate, severe, profound)</td>
<td>Date of first home visit</td>
</tr>
<tr>
<td>Apgar score at 5 minutes</td>
<td>Date referred to CO-Hear</td>
<td>Names of audiologists, Part C coordinator, early interventionists</td>
</tr>
<tr>
<td>Date of hearing screen</td>
<td>Type of amplification</td>
<td>Type of early intervention provided</td>
</tr>
<tr>
<td>Screen results</td>
<td>Date of amplification fit</td>
<td></td>
</tr>
<tr>
<td>Reason not screened (e.g., deceased, parent refused, transferred, missed)</td>
<td>Date of next audiology appointment</td>
<td>Insurance</td>
</tr>
</tbody>
</table>
Collecting Early Intervention Data

- The Colorado Hearing Resource Coordinator is responsible for inputting and maintaining data in all EI fields.
- Information is reviewed and updated by Coordinator at regular intervals.
El System Data Collected

- Data related to referral process
  - date of referral
  - date of 1st contact with family
  - date of initial visit
  - IFSP

- Provider data
  - Intervention audiologist
  - Early intervention provider

- Family data
  - Lost to follow up
  - Family declines services
The Colorado Home Intervention Program (CHIP) uses a multi-disciplinary assessment procedure to evaluate a child’s progress.

- Family-centered
- Administered in the home
- Administered at set intervals, 9, 15, 21, 27, 33 months of age
- Evaluates skills in multiple developmental areas
Recently added Child Outcome Field to data tracked in the Early Intervention section of the data system

- Child outcomes on the Minnesota Child Development Inventory and the MacArthur Communicative Development Inventory are tracked in the IDS system
Advantages

- Will give access to outcome data to intervention audiologists
- Ease of tracking child’s progress over time
- Ability to easily report on outcomes of specific target groups
  - children with combined vision and hearing loss
  - children with cochlear implants
  - children from Spanish-speaking homes
Additional Advantages

- Program efficacy data is easily generated when data is in one place
- Seamless statewide system with ability to easily track a particular child, group of children, or whole program from screening to EI outcomes
- Ease of determining relationship of outcomes to other factors
Challenges to Comprehensive Data Collection

- Most accurate data is that which is collected closest to the source
  - Time and resources for professionals to input data
  - Negotiating agreements between multiple state agencies
- Interfacing existing data systems
- Sensitive to data needs of different parties