## **Examining Language Outcomes at the National Level**

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#### **Presenters**

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### **Today's Topics**

- Describe a CDC-supported national outcomes database project
  - Project goals
  - Benefits of participation
  - Eligible participants
  - Description of assessment protocol
- Share experiences of participating states
- Present initial data

### **Project Goals**

- Support states in assessing outcomes
- Assist states in using results to inform intervention
- Examine feasibility of a national outcomes database
- Determine program, child, and family characteristics related to successful outcomes

### **Services Provided by Colorado**

- Assessments scored
- Profile sheet created
- Written report of results
- Comparison of scores to hearing and deaf/hoh norms
- Database creation and maintenance
- Annual accountability report characterizing state's performance (including subgroups)

#### **Benefits for Children and Families**

- Includes parent input in assessment process
- Measures skills across variety of areas
- Identifies potential delays in a timely fashion
- Objectively monitors progress over time
- Compares performance to hearing children
- Compares performance to d/hoh children

#### **Benefits for Children and Families**

- Assists in IFSP/IEP goal development
- Provides data-driven approach to educational programming decisions
- Contributes toward a seamless transition to Part B

### **Benefits for Programs**

- Provides statewide and program-specific accountability data
- Examines outcomes in subgroups of children
- Informs personnel preparation needs and areas for program improvement
- Provides networking opportunities with other states

#### **Benefits to All**

- Contribution to a national database
  - Improve our understanding of language strengths and limitations of children with hearing loss
  - Identify factors that are predictive of more successful language outcomes

### **Eligible Participants**

- Ages 3 months to 4 years
- Unilateral or bilateral loss
- Conductive, senori-neural, or mixed
- Any degree of permanent hearing loss from mild to profound
- Multiple disabilities or hearing loss only
- English or Spanish as language of the home

### **Assessment Components**

- Demographic form
- Release of audiologic information
- Minnesota Child Development Inventory
- MacArthur-Bates Communicative Development Inventories
- Additional assessments on request (e.g., play, listening skills, speech intelligibility, etc.)

# Minnesota Child Development Inventory (1992)

- Multiple areas assessed
  - Language, Motor, Social, Self Help, Pre-Literacy
- Parent-report instrument
- Scales adapted to reflect abilities in both spoken and sign language
- Normed on hearing children
- Colorado norms available for d/hoh children

# MacArthur-Bates Communicative Development Inventories

- Assesses spoken and sign vocabulary
  - Expressive and receptive for younger children
  - Expressive vocabulary for older children
- Parent-report instrument
- Normed on hearing children
- Colorado norms available for d/hoh children

### **Participating States**

- 5 states are currently completing assessments
- 2 states have committed to participating and have developed an action plan
- 8 states have expressed a strong interest in participating

### Flexibility of the Process

- Option to use one or both assessment tools
- Inclusion of state's own instruments
- Inclusion of additional Colorado assessments
- Timing of assessment administration
- Number of times child is assessed

# Implementation Challenges Reported by States

- Some parents need assistance with forms
  - Can be time consuming for providers
  - Particularly time consuming with illiterate families
  - But opportunity to teach about development and improve observation skills
- May be perceived as "extra work"
  - Critical to train providers in the value of assessment and use of assessment as part of the intervention process (not a separate "extra" activity)

# Implementation Challenges Reported by States

- Training on assessments for providers often needed
- Obtaining and coordinating Human Subjects research approval
- Finding funding (\$50 fee per assessment negotiable depending on services provided)

### Wisconsin's Experience

#### Partnership's

- UC Colorado at Boulder
- University Center of Excellence Waisman Center
- Wisconsin Department of Health Services
- Wisconsin Department of Public Instruction

#### **Procedures**

- IRB
- Tool selection
- Evaluation: Child, program and interventionist

#### **Initial Data Collection**

- 5 states have completed assessments
  - Arizona
  - Idaho
  - New Mexico
  - Utah
  - Wyoming

### **Assessments Completed**

- 72 children assessed
- Each assessed 1 to 4 times
- 137 assessments completed
- Excluded children with other significant disabilities in data analysis (6 assessments)

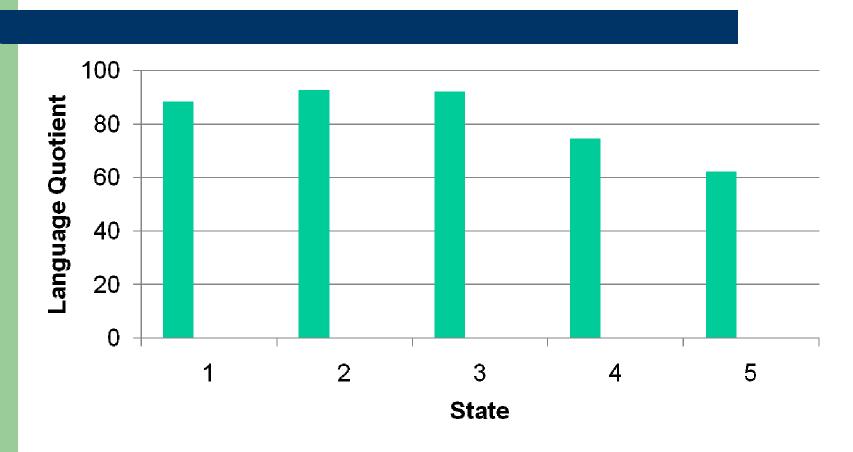
### **Determining Language Quotient**

Language Age/Chronological Age x 100

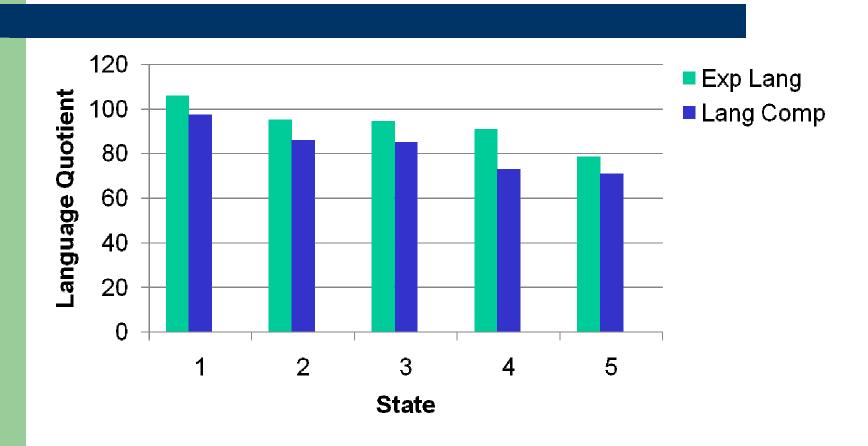
- ➤ If LQ = 100, Language Age = CA
- ➤ If LQ < 100, Language Age < CA
- ➤ If LQ > 100, Language Age > CA

LQs of 80+ are within the normal range compared to hearing children

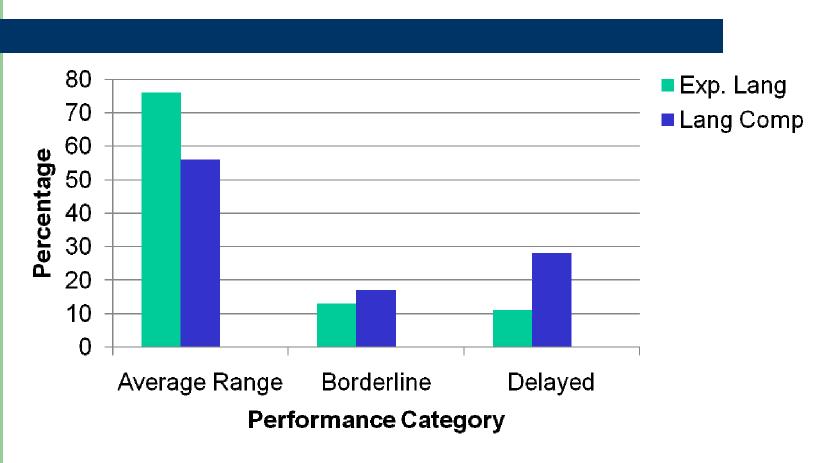
# **Kent Communication Subscale: Median Language Quotients**



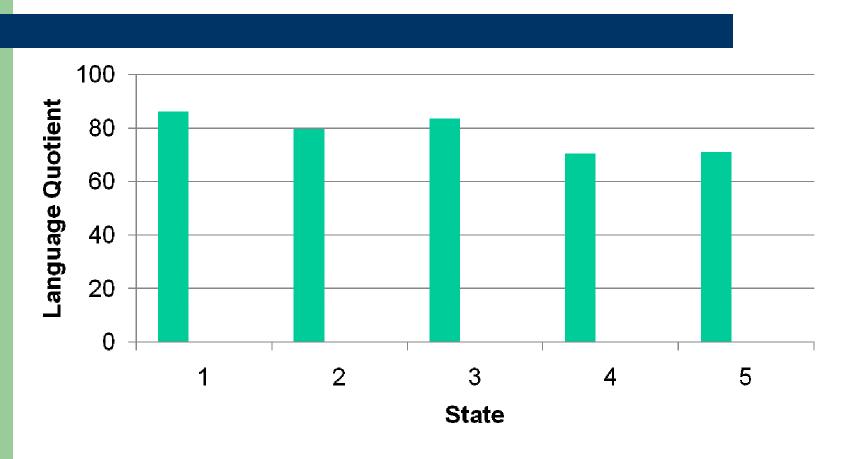
### Minnesota CDI: Median Language Quotients



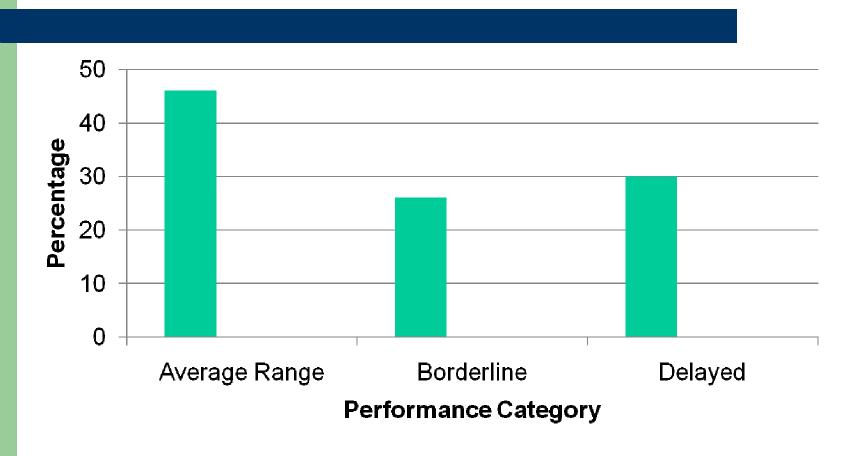
# Minnesota CDI: Percent in Average Range, Borderline and Delayed



# MacArthur Expressive Vocabulary: Median Language Quotients



# MacArthur: Percent in Average Range, Borderline and Delayed



#### For Additional Information

For additional information about the project and/or to inquire about joining this effort contact:

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