

Examining Language Outcomes at the National Level

CDC-EHDI

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Presenters

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Today's Topics

- Describe a CDC-supported national outcomes database project
 - Project goals
 - Eligible participants
 - Description of assessment protocol
 - Benefits of participation
- Summarize current participation
- 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

Eligible Participants

- Ages 3 months to 4 years
- Unilateral or bilateral loss
- Conductive, sensori-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)

- Parent-report instrument
- Multiple areas assessed
 - Language, Motor, Social, Self Help, Pre-Literacy
- 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

- Parent-report instrument
- Areas assessed:
 - Spoken and sign vocabulary
 - Use of gestures (younger children)
 - Early sentence production (older children)
- Normed on hearing children
- Colorado norms available for d/hoh children

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

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)

Participating States

- 6 states are currently completing assessments
- 3 additional states (or large programs) have committed to participating and have developed an action plan
- 8 states have expressed a strong interest in participating

Initial Data Collection

- 5 states included in analysis:
 - 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)

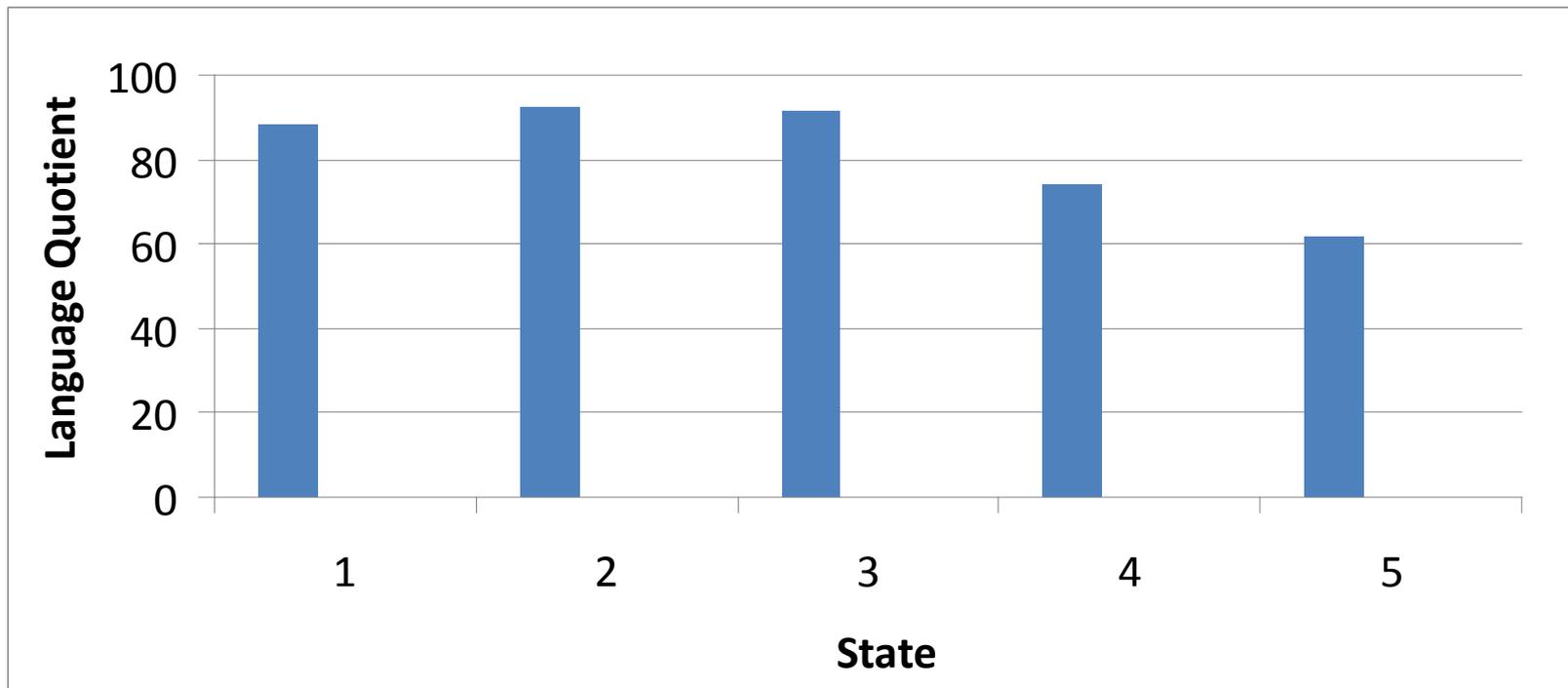
Determining Language Quotient

Language Age/Chronological Age x 100

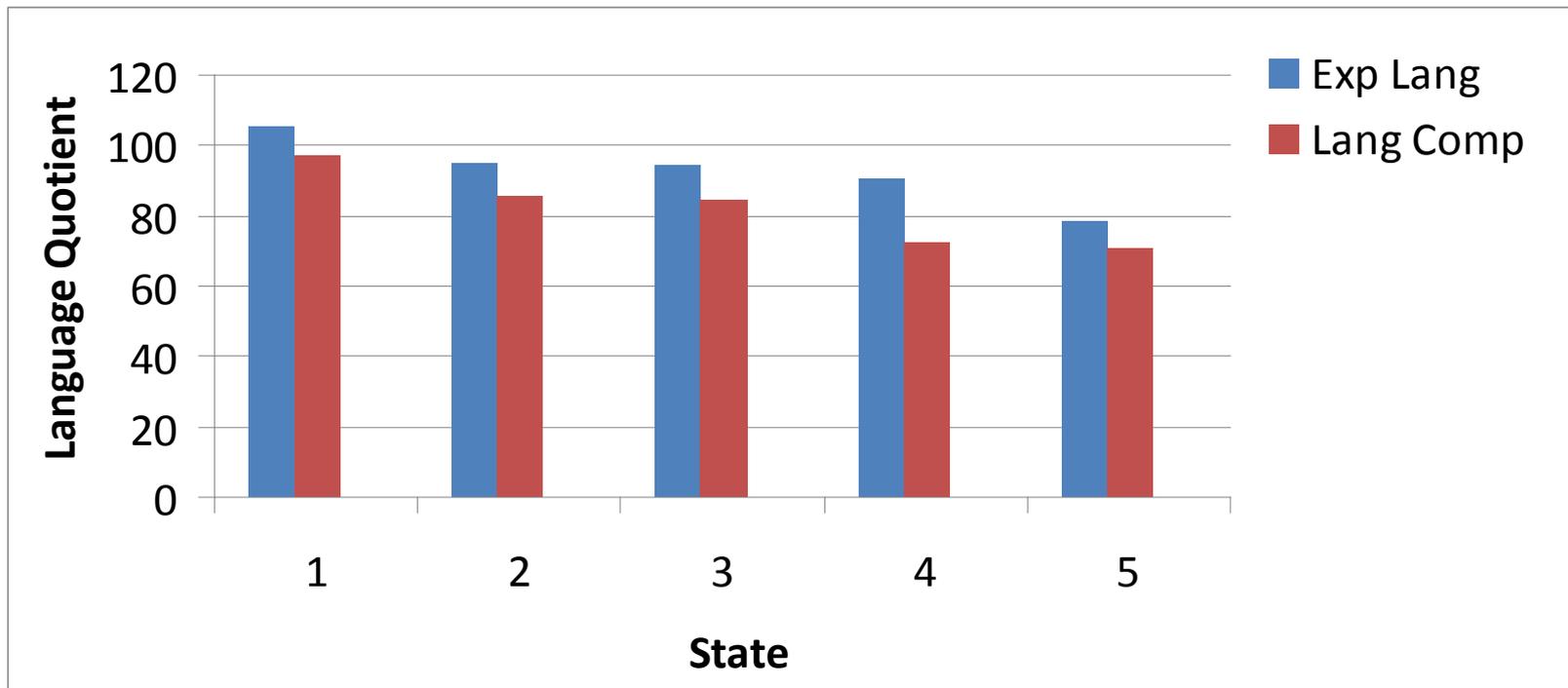
- If $LQ = 100$, Language Age = CA
- If $LQ < 100$, Language Age < CA
- If $LQ > 100$, Language Age > CA

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

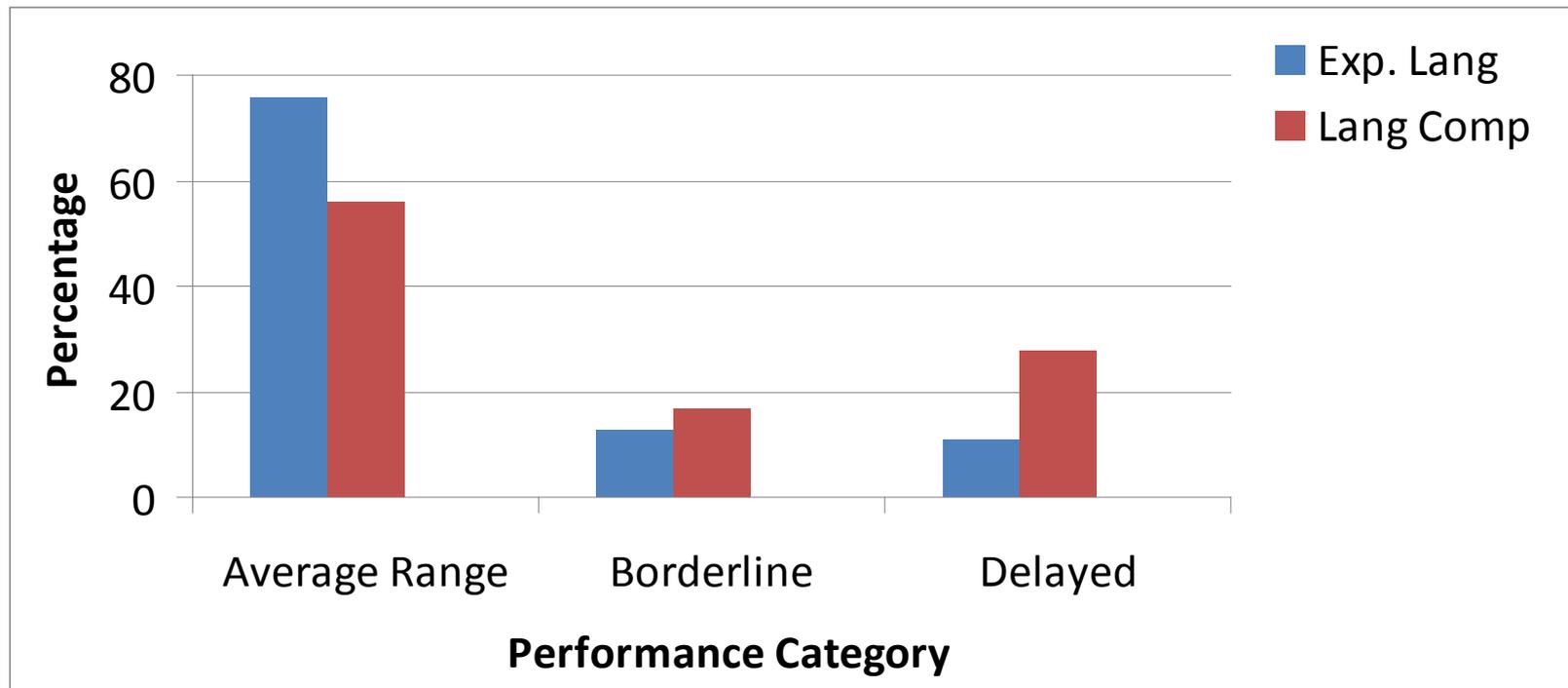
Kent Communication Subscale: Median Language Quotients



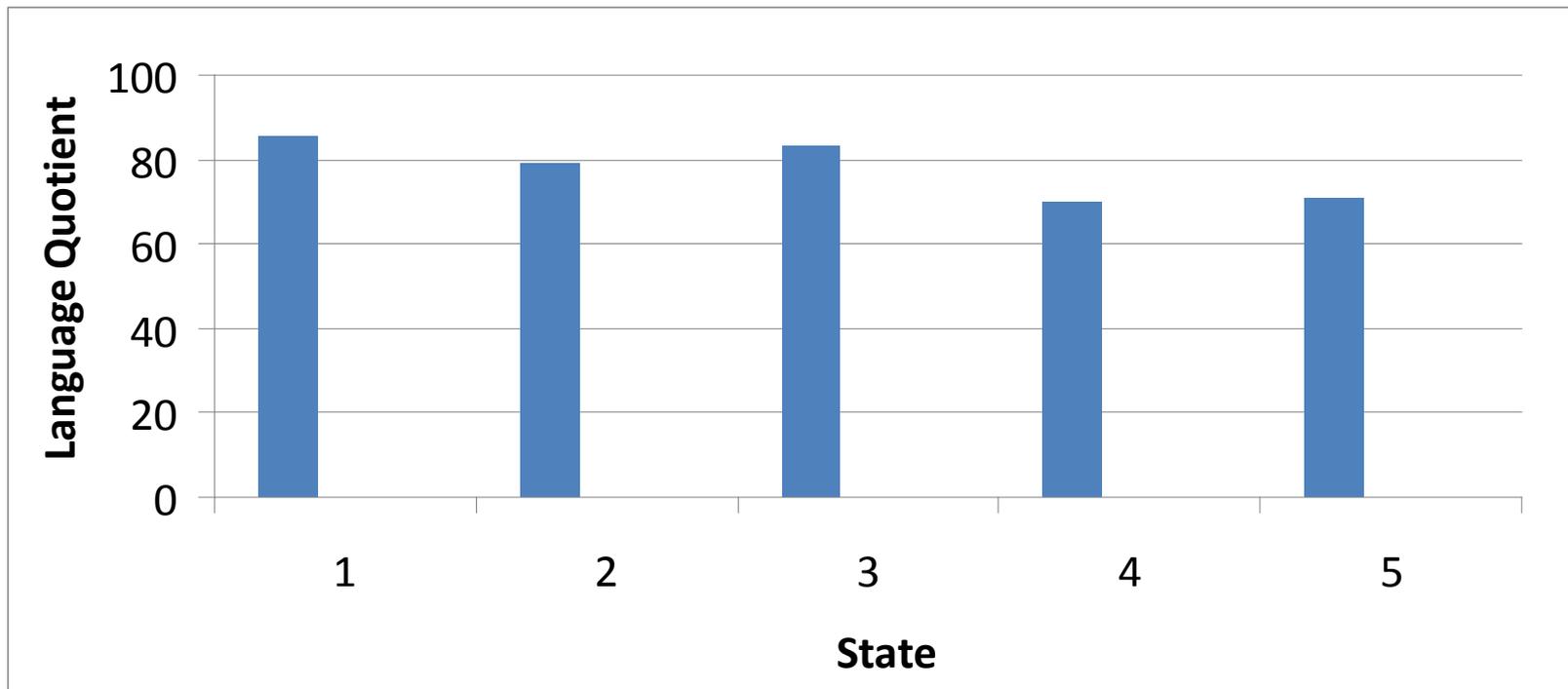
Minnesota CDI: Median Language Quotients



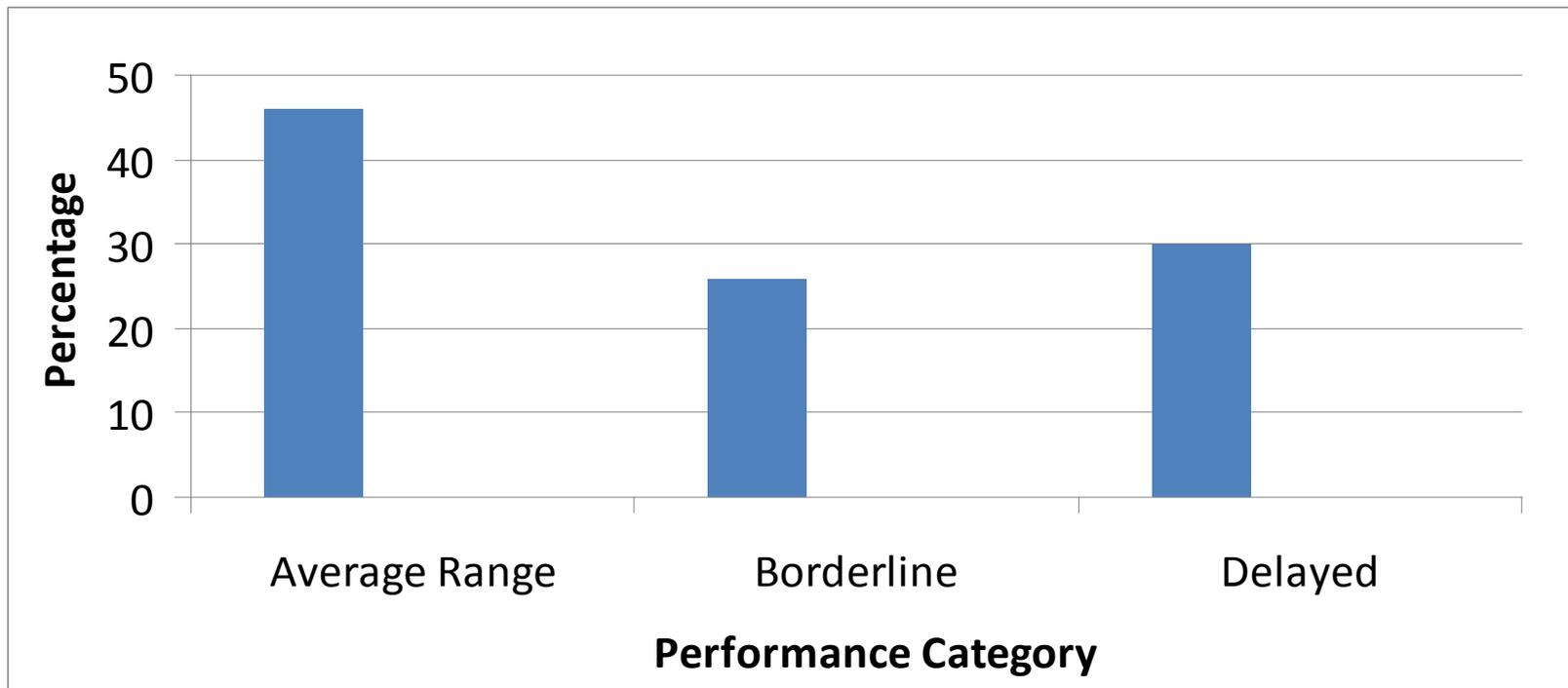
Minnesota CDI: Percent in Average Range, Borderline and Delayed



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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