

What's Your hIQ?

Defining High Quality (hIQ) Intervention Services

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Why is a hIQ Important?

- At the time of diagnosis, parents have many questions
 - their child's hearing ability
 - amplification options
 - communication approaches
 - their child's future
- Answers to these complex questions are multifaceted and require a vast knowledge base
 - About the child
 - About families
 - About parent-child interaction

Benefit of Highly Qualified Providers

Support from the Research



Efficacy of Early Identification & Intervention

(Yoshinaga-Itano et al, 1998)

- Sample of Children
 - All ranges of hearing sensitivity
 - Early- and late-identified children
 - Expedited entry into early intervention



The early identification effect on language by each demographic category for children with normal cognition.

(N=85)

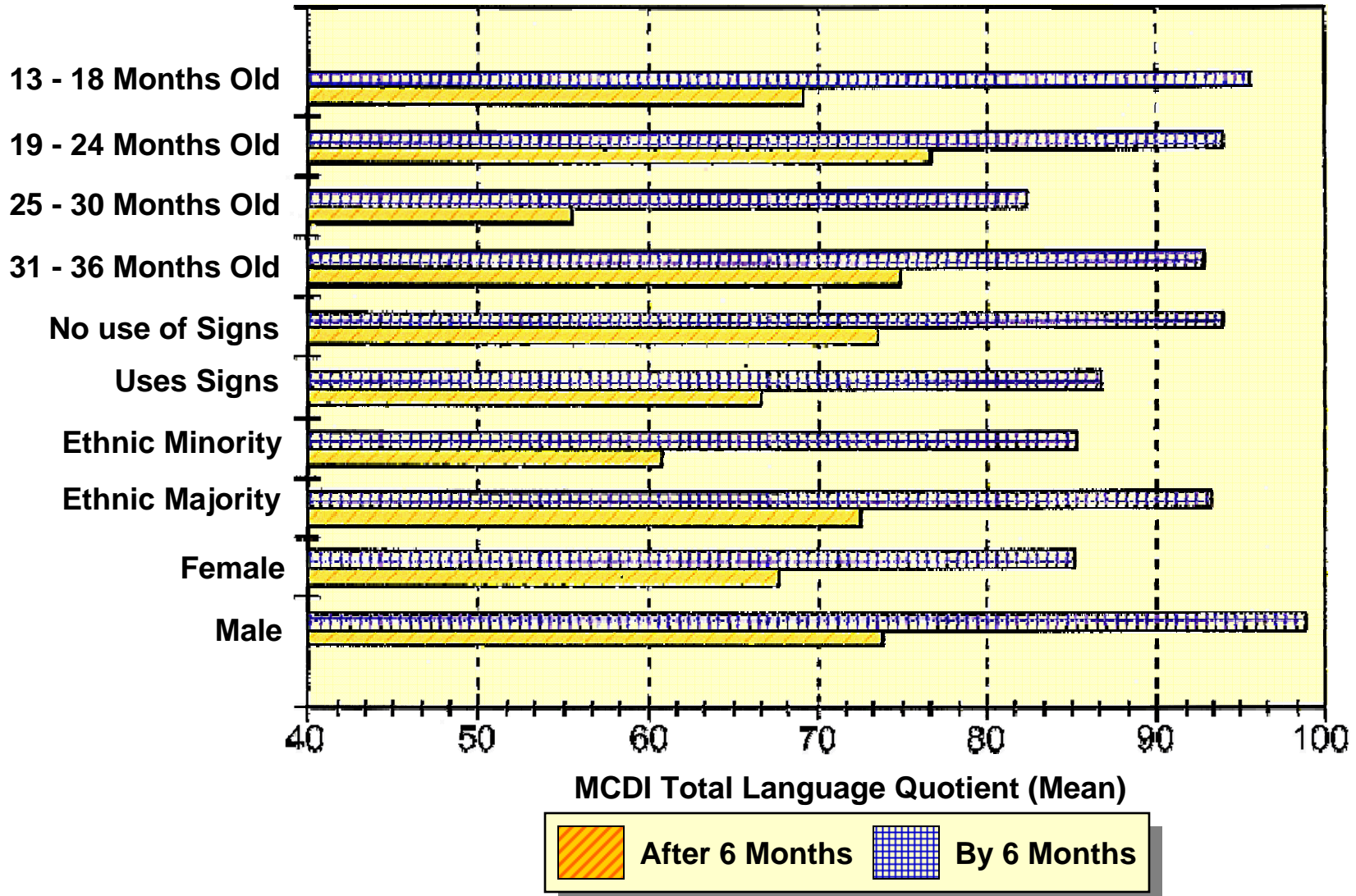


Figure 2a

The early identification effect on language by each demographic category for children with normal cognition.

(N=85)

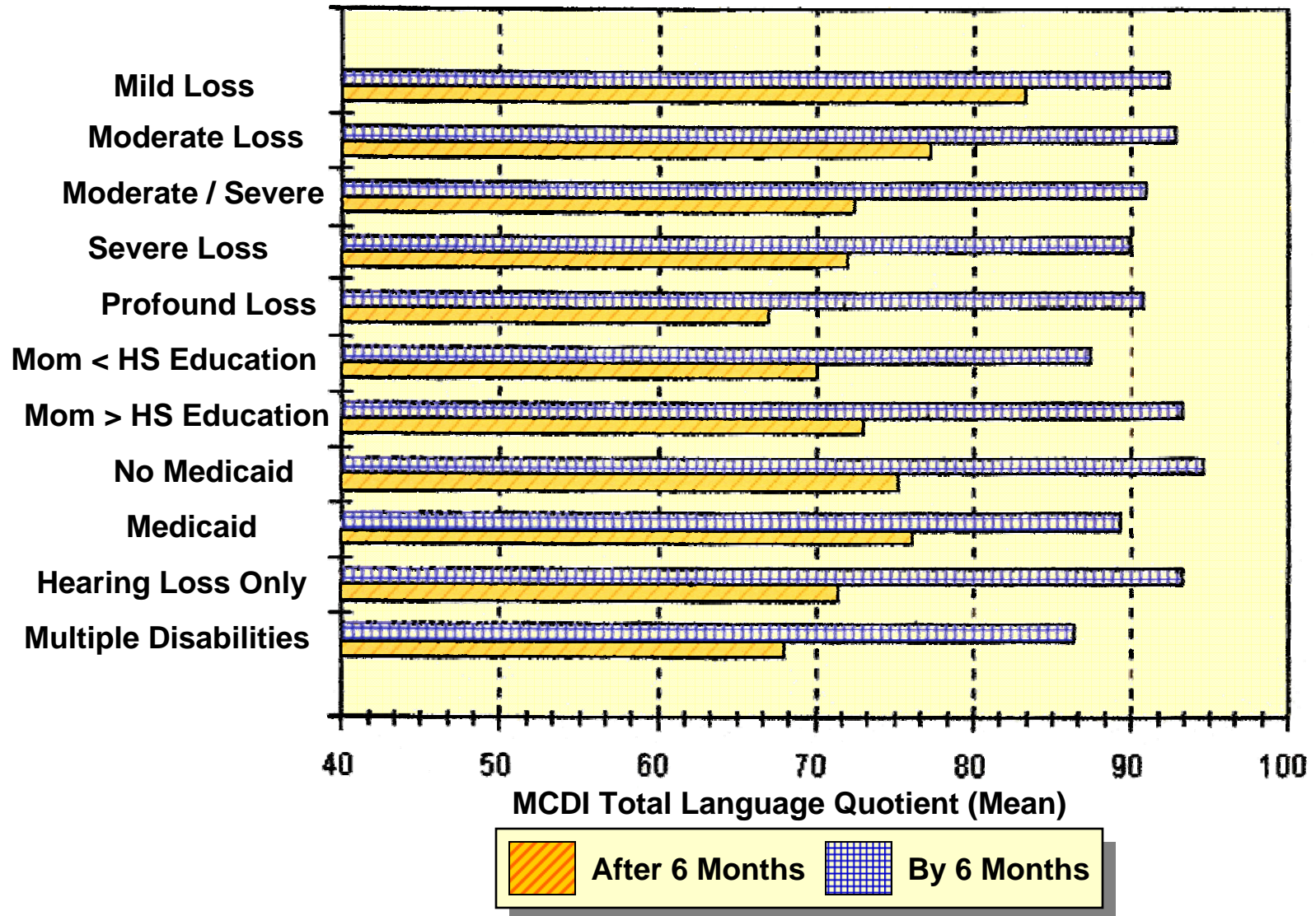


Figure 2b

The hIQ of the Early Interventionists in the Yoshinaga-Itano Study: 1980-1998

- Pre-service training (master's degree)
 - Speech/Language Pathology
 - Teacher of the D/HH
 - Audiology
 - Early Childhood Special Education/Early Childhood
- Strategically selected providers
- Intensive in-service training
 - Statewide & regional meetings for dissemination of information
 - Peer mentor program – putting information into practice

Language Outcomes @ 5 Years of Age (Moeller, 2000)

➤ Sample of children

- 112 children
- Mild to profound hearing loss
- No evidence of major secondary disabilities
- Variety of communication modes

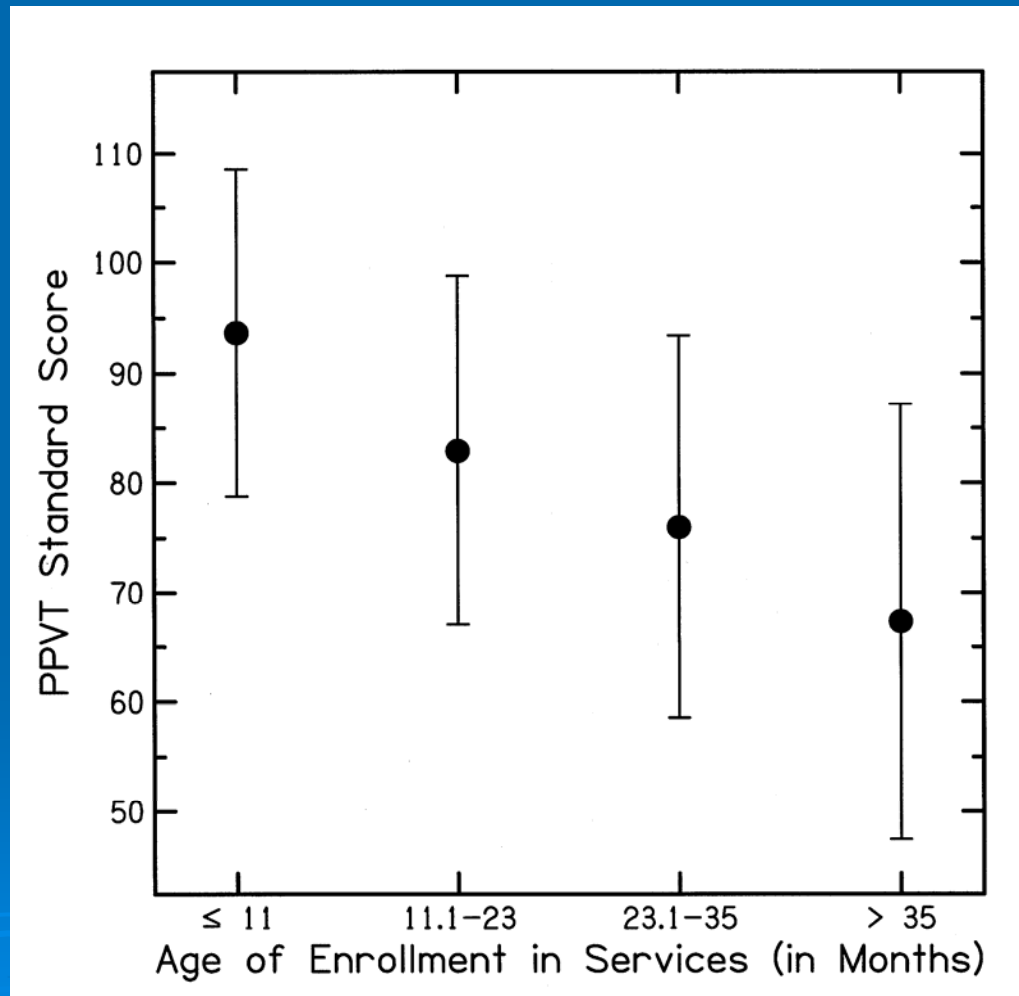
Language Outcomes

➤ Tests used

- PPVT for vocabulary
- Preschool Language Assessment Instrument for verbal reasoning
- Rating scale of family involvement in the intervention program
 - Familial adjustment
 - Session participation
 - Effectiveness of communication with child
 - Advocacy efforts

Language Outcomes

1. Early-enrolled children had significantly better vocabulary when tested at 5 years of age than did later-enrolled children



Language Outcomes

2. Early-enrolled children had significantly better verbal reasoning skills when tested at 5 years of age than did later-enrolled children
3. The most successful children were those with high levels of family involvement

About the Providers:

- All early intervention providers were **highly trained** and considered **specialists** in working with infants and toddlers with hearing loss
 - years of experience working with young children with hearing loss
 - knowledge of child development
 - experience implementing a family-centered approach
 - knowledge of the resources in each family's community

Defining “Highly Qualified”

What does IDEA say?



IDEA Does Specify the Importance of Highly Qualified Educators

Section 602 (10) states that “the teacher has obtained full State certification as a special education teacher (including certification obtained through alternative routes to certification), or passed the State special education teacher licensing examination, and holds a license to teach in the State as a special education teacher”

Unfortunately, this regulation applies only to educators working with children ages 3-21, even though...

- The critical years for language development are birth to three, and therefore the most qualified professionals, should be employed to work with families and children during these critical years
- The earlier a child is amplified consistently, the greater his/her potential for using his/her residual hearing effectively, but consistent amplification is often difficult for families to achieve without assistance from a qualified service provider



And...

- Families are typically in greater crisis in the first year after diagnosis than at any other time in their child's life, and therefore, are in greater need of open, unbiased information from professionals who understand hearing and all of the many complicated issues that families and children will face



Who is Providing Services?

(Stredler-Brown & Arehart, 2000)

Survey (n=188)

- 76%: Speech/Language Pathologists
- 71%: Early Childhood Special Educators
- 48%: Educators of the D/HH
- 38%: Audiologists
- 26%: Other

In-Service Programs

- Most interventionists receive limited training (coursework and/or practicum experience) in their pre-service training programs
- Responsibility for training rests with intervention programs and initiatives within each state to provide in-service training
- Conduct survey and/or needs assessment to identify needs of providers Gallagher, Easterbrooks and Malone (2006)
 - Conducted a series of focus group interviews with 165 service providers in Georgia
 - Results used to develop training materials that were then delivered in workshop formats

Common topics for In-service Training

- Impact of hearing loss
- Hearing aids and other technology
- Cochlear implants
- Auditory activities for babies
- Development of spoken language and signed language

- Development of *early* communication
- Language development
- Visual language learning

- Languages and cultures
- Working with other professionals



Peer Mentors: A way to effectively change a professional's clinical practices

(Rall & Brunner, 2006)

Five-step process

1. The interventionist and the mentor establish a collegial relationship
2. The mentor observes an intervention session
3. The mentor and interventionist identify techniques to fulfill goals for the child and/or family
4. The interventionist practices the new techniques (at first, while engaging in dialogue with the mentor; then, independently)
5. A subsequent meeting with the mentor provides the opportunity to evaluate the effectiveness of the new skill

Do Providers Accept “The One-for-One Rule”?

(Johnson, 2005)

- With newborn hearing screening, we expect children to enter early intervention by 6 months of age
- With early intervention, we expect children to maintain language quotients that are commensurate with their hearing peers (by chronological age or cognitive age) during their early years.
- At a minimum, every child who is D/HH, given no additional learning or language issues, should be making, on average, one year’s growth in a one year period of time.
 - If the child is not making that rate of progress, the services must be questioned, evaluated, and adjusted.


State Standards

- Essential to define **high quality** services
- Provides guide for in-service training
- Maintains focus on **high standards**
- States that are leading the way: North Carolina, Utah, Texas, Colorado, Georgia, New Mexico, others?

CENTe-R Standards

- Conducted a comprehensive search of all currently available standards related to early intervention for children who are D/HH
- Acknowledged that no list of nationally-recognized and validated standards was available
- Convened group of experts in early intervention and hearing loss (n=137)
 - Consumers
 - Family members
 - Professionals from pertinent organizations
 - Faculty from personnel preparation programs
 - Administrators of early intervention programs
- Systematically reviewed the current standards in deafness and early intervention
- Identified 8 areas of graduate level pre-service personnel standards

1. Knowledge of Legislation

- IDEA Part C
 - Family-centered intervention including child & family advocacy
 - Individual Family Service Plans (IFSPs)
 - State EHDI programs
- 

2. Relationship with Families

- Recognize families as experts with long-term influences on the lives of their children
- Recognize the diversity of families, their languages, cultures, and communities
- Understand family dynamics and establishing respectful reciprocal relationships with families
- Identify strategies to promote effective infant-caregiver interactions
- Offer information in a non-biased manner
- Facilitate families' identification of concerns, priorities and resources
- Support family health and emotional well being and identify risks for abuse/neglect situations

3. Infant Development

- The characteristics and stages of typical development
- The effect of prenatal care, prematurity, health and other biological conditions on development
- The importance of play during daily routines
- The effect of bonding/attachment
- The interaction of hearing loss, communication and behavior
- The potential impact of multiple disabilities on development


4. Communication Development

- Pre-linguistic communication
- The role of caregivers in development of pre-linguistic communication skills
- Impact of hearing loss on communication
- The array of communication approaches and resources for observing and demonstrating them.
 - Bilingual-Bicultural approach
 - Simultaneous communication approach
 - Sign supported speech
 - Auditory oral/auditory verbal approaches
 - Cued speech
- Monitoring developmental outcomes, reviewing child progress and revising approaches as needed


5. Service Delivery

- Soliciting technical assistance from colleagues with expertise in hearing loss
- Familiarity with the role of the Deaf community
- Role of the designated Part C Service Coordinator
- Role of the medical home
- Planning seamless transition to Part B services at 3 years of age


6. Assessment

- Evaluation procedures, strategies for gathering information
 - Tools and procedures to assess the development of communication and language
 - Cultural and situational factors that might bias assessments
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7. Technology

- Available technology
 - Factors influencing families' choices of technology
 - How a communication approach might be supported by technology
 - Sources for obtaining assistive technology, information, funding and support
- 

8. Ethics & Professionalism

- Knowledge of adult learning
 - Sensitivity to cultural, religious, ethnic, disability, gender, socioeconomic, linguistic and geographic influences
 - Participation in self evaluation, mentoring, and networking
 - Knowledge of related consumer and professional organizations, including their publications and journals
- 

Programs Showing Positive Results Have the Following (Phone Survey of Five Successful Programs):

- *Highly trained professionals who understand hearing, working directly with families (degrees in Deaf Education, Audiology, Speech-Language Pathology)*
- *An assessment protocol that is used program wide to determine program efficacy in addition to gathering child outcome data*
- *Unbiased representation of ALL communication options*

Programs Showing Positive Results Have the Following:

- *Good audiological support
(children appropriately amplified and
audiological testing conducted regularly)*
- *Provide families with access to a wide
variety of resources and professionals to
meet the varied needs of children and
families*
- *Address the needs of children with all
degrees of hearing loss*

Programs Showing Positive Results Have the Following:

- *High expectations (one month of language gain for every month of life). If the child is not making that rate of progress, the services are questioned, evaluated, and adjusted when necessary.*
- *Deaf/HH adults are represented and consulted at all program levels*
- *Ongoing training of professionals and one-on-one mentoring of new and experienced early interventionists*
- *Excellent collaboration between service providers (No Turf!)*

Programs Showing Positive Results Have the Following:

- *Home-based services, some in combination with center-based programs*
- *Weekly services*
- *Agreed upon, consistently used curriculum that is comprehensive and supports ALL communication approaches*
- *Family-centered, not child-centered services*
- *Strong partnerships with parents with parent representation at all levels*



HIQ Programs Should Include”...

- Assessment (child and program outcomes)
- Developmentally Appropriate Practices
 - Play-based, family-centered, etc.
- Services provided by professionals with appropriate training
- Service providers must have an understanding of hearing loss (both medical & cultural perspectives)
- Deaf/HH adults as service providers and program consultants
- Awareness by service providers of Deaf/HH adults across the lifespan

Effective Early Intervention is NOT JUST...

- Fitting children with appropriate and well functioning amplification
- One time or periodic contact with a pediatrician or ENT
- Speech therapy
- Visits from a developmental specialist that occur one time a month or less
- Sign language classes
- Center-based play groups

Case Studies

➤ Both Children

- Have profound bilateral hearing losses
- Were identified at birth but not diagnosed or enrolled in early intervention services until they were 11 months of age
- First child received hearing aids followed by speech therapy services from three different therapists, none with D/HH specific training or experience
- Second child received hearing aids followed by early intervention services from a teacher of the Deaf/HH who had birth-three specific early intervention training. At 18 months he received a cochlear implant.

What is Your Program's
hIQ?





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