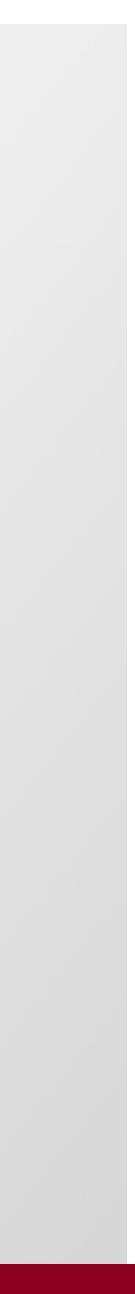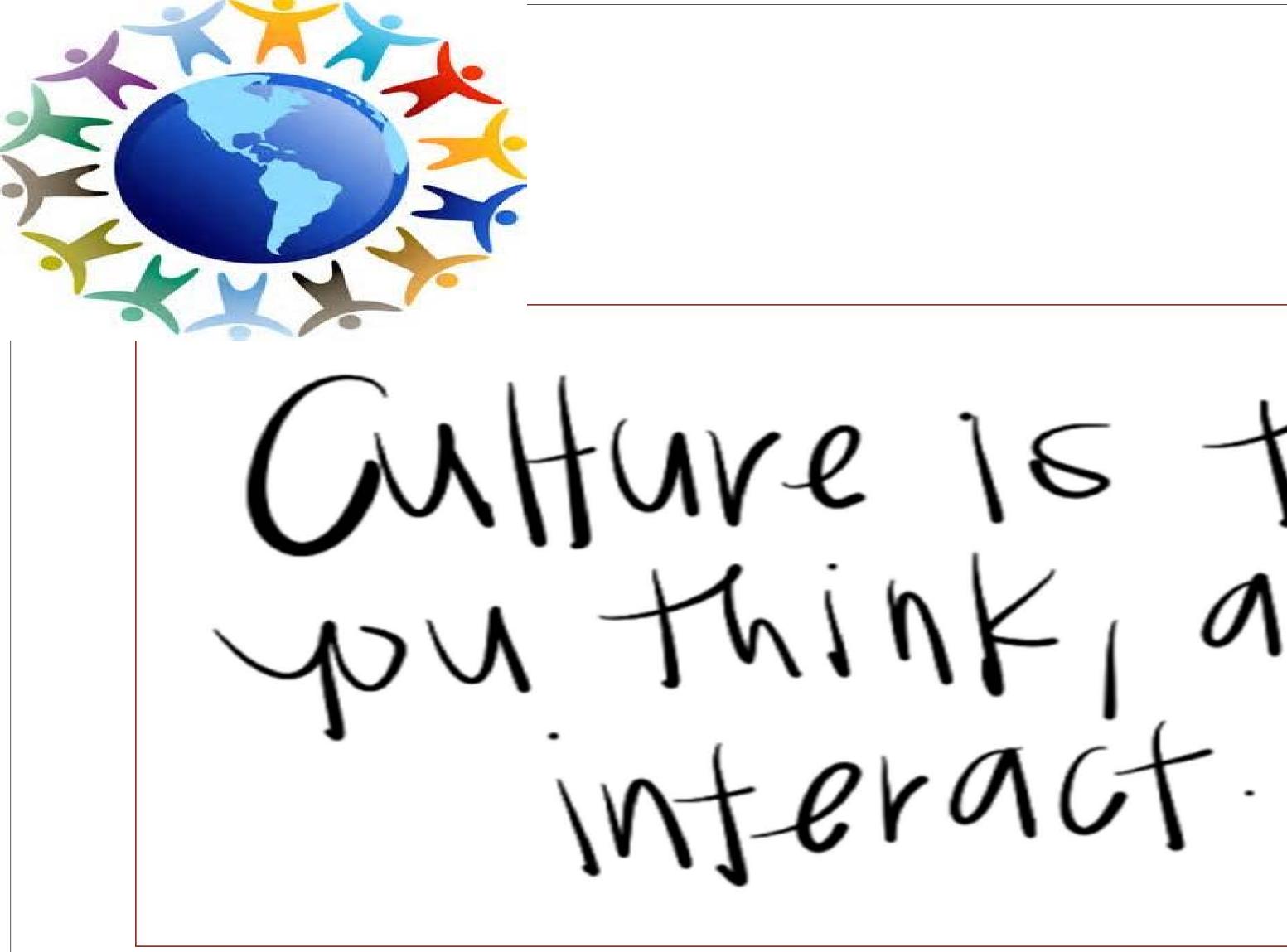# THE UNIVERSITY OF CHICAGO MEDICINE

A Cross Cultural Approach: The path to addressing health and language disparities in pediatric hearing loss
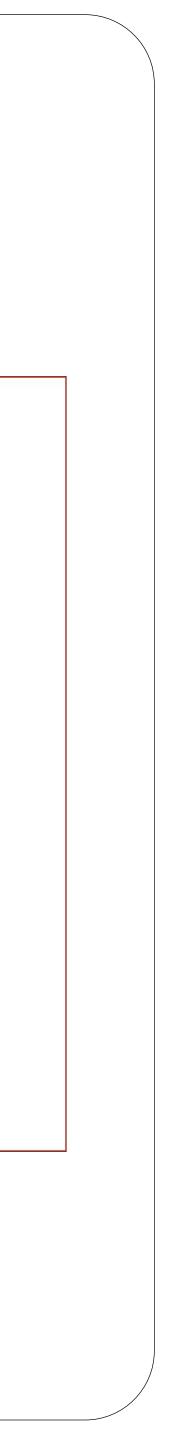
Alejandra Ullauri, Au.D., MPH, CCC-A

Sally Tannenbaum-Katsaggelos, M.Ed., DT/H, LSLS Cert. AVT

Dana Suskind, M.D.

Department of Ear, Nose, Throat, Head and Neck Surgery

Pediatric Hearing Loss and Cochlear Implant Program

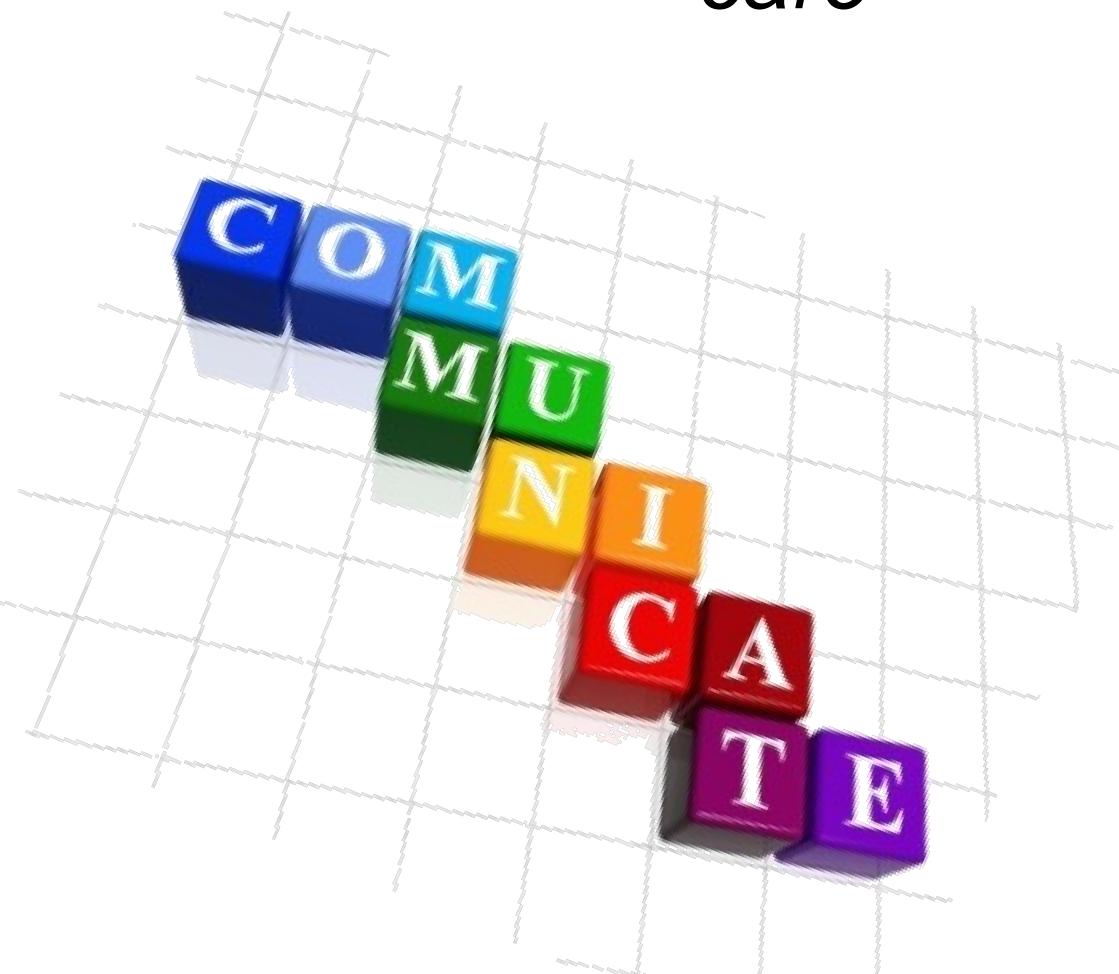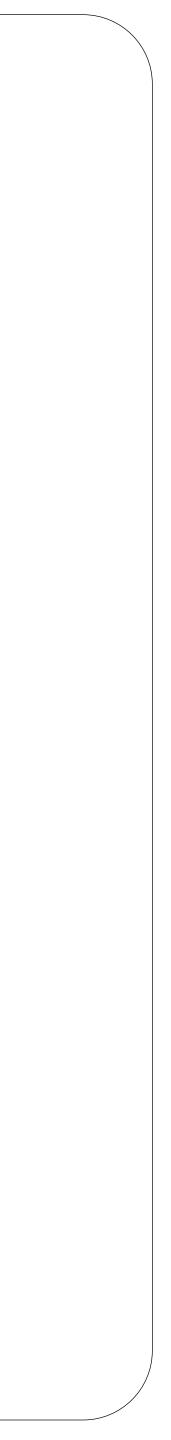Culture is the way you think, act, and interact.

Culture & Ethnic Groups:

- Integrated pattern of learned beliefs and behaviors

- Explains how we view and value the world

- Influenced by *socioeconomic* status, religion, sexual orientation, education, occupation, etc (Nunez, 2006; **Betancourt, 2003**)

Can you share an encounter where cultural differences had an impact on patient's access to care
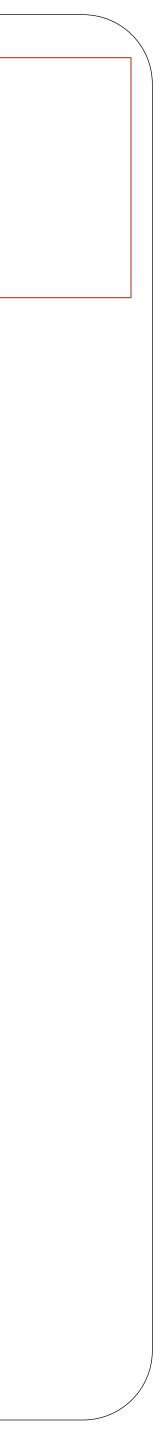
Review of the literature

Main barriers to accessing health care:

- Language
- Low literacy
- Lack of understanding & mutual understanding
- Gender attitudes
- Health beliefs
- Retention of information
- Relationship with provider
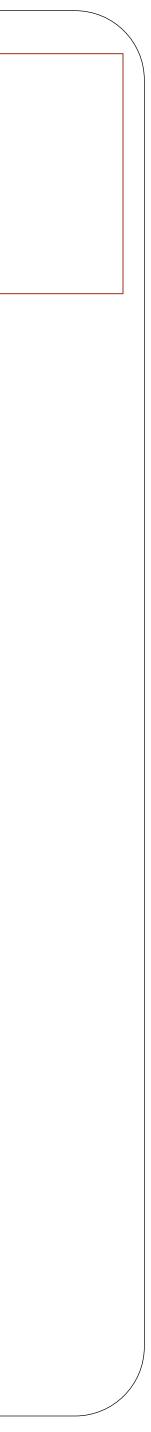
Review of the literature

Relationship with the provider:

- Culture & ethnicity – effect satisfying provider-patient relationship

- Minority patients less verbal, less assertive, & less emotional during medical encounters

- Providers less verbal and affective when interacting with minority patients
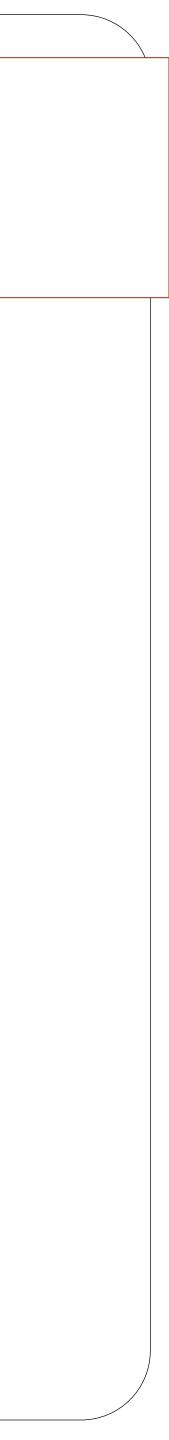
Cultural Competence

- Understanding social and cultural influences in a patient's health beliefs and behaviors

- Ability of health care providers to interact with patients who are different than themselves (Nunez, 2006, Dy, 2011)
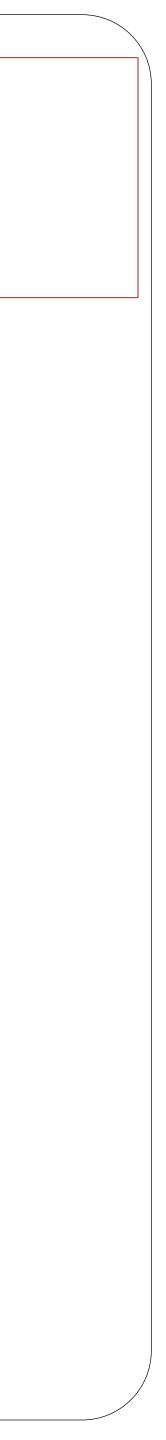
Multicultural Health Care

Categorical approach: might risk falling into *stereotyping* (Masi, 1988).

DIME SI SOY LATINO! (Proyecto Uno)
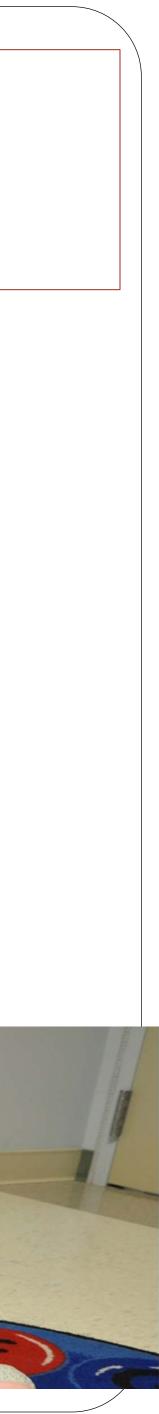
STEREOTYPES DON'T DEFINE US

Cross-Cultural Approach

- patient's culture & local culture = promotes two way communication
- understanding that the system is in place to provide care for them
- understanding the cultures and worldviews of others
- teach our patients how to navigate the system

Cross-Cultural Approach

Main difficulties: System Navigation

- Delays in accessing services
- Delays in accepting services
- Delays in incorporating services

to daily life
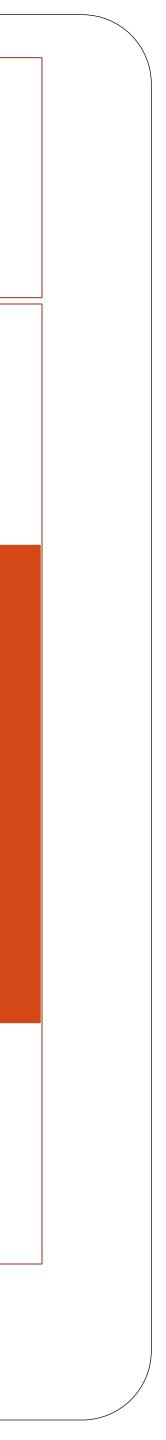
Cross- Cultural : A TWO WAY STREET

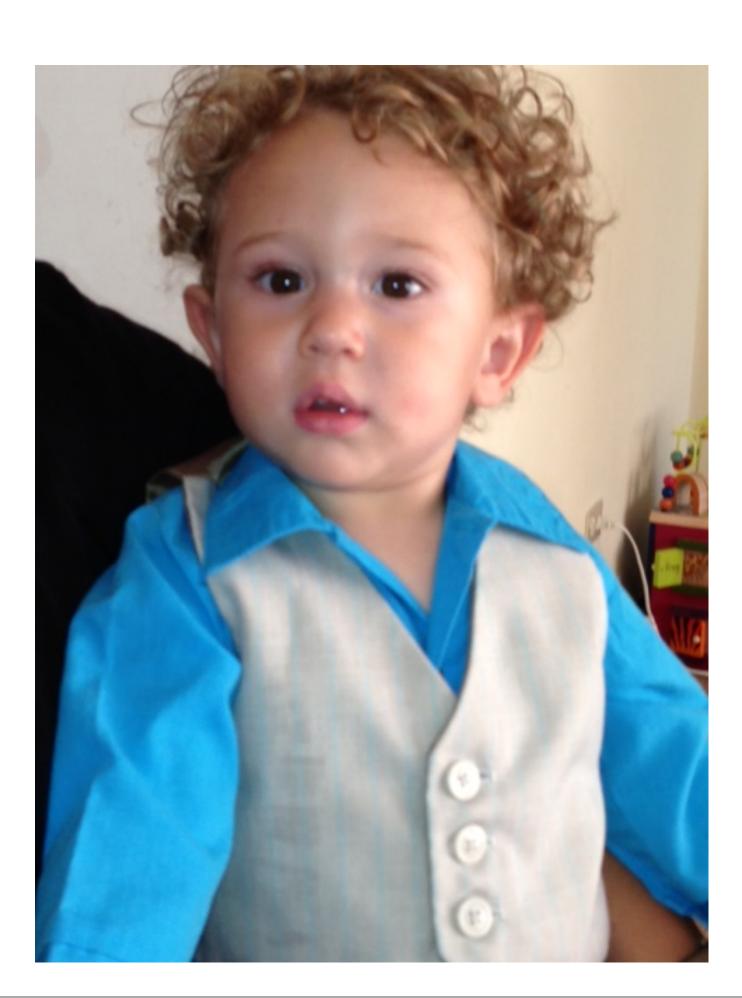Patient's Culture
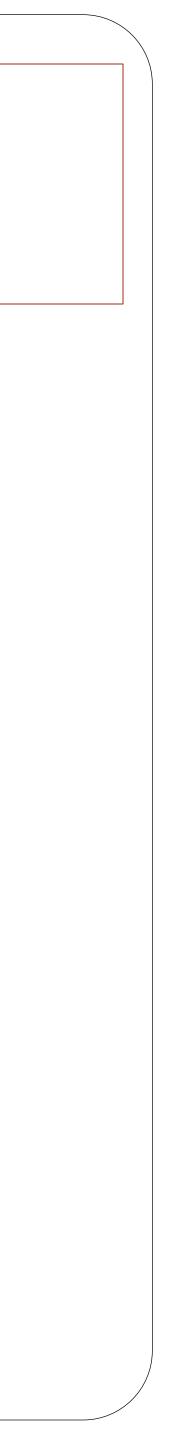
The Local Culture

Cross-Cultural Approach

- Understanding the local culture, the institutions' culture and the provider's culture is vital to access services
- Understanding the local health system is essential for accessing and using it effectively
- Need to understand your institutions' culture, your program's culture and your cultural lens

Cross-Cultural Approach

Institute's Culture:

- Parking
- Registration
- Check in
- Insurance

Our Program's Culture:

- Doctor availability
- Clinic days
- Resources available

ENCOURAGING
CULTURAL
UNDERSTANDING
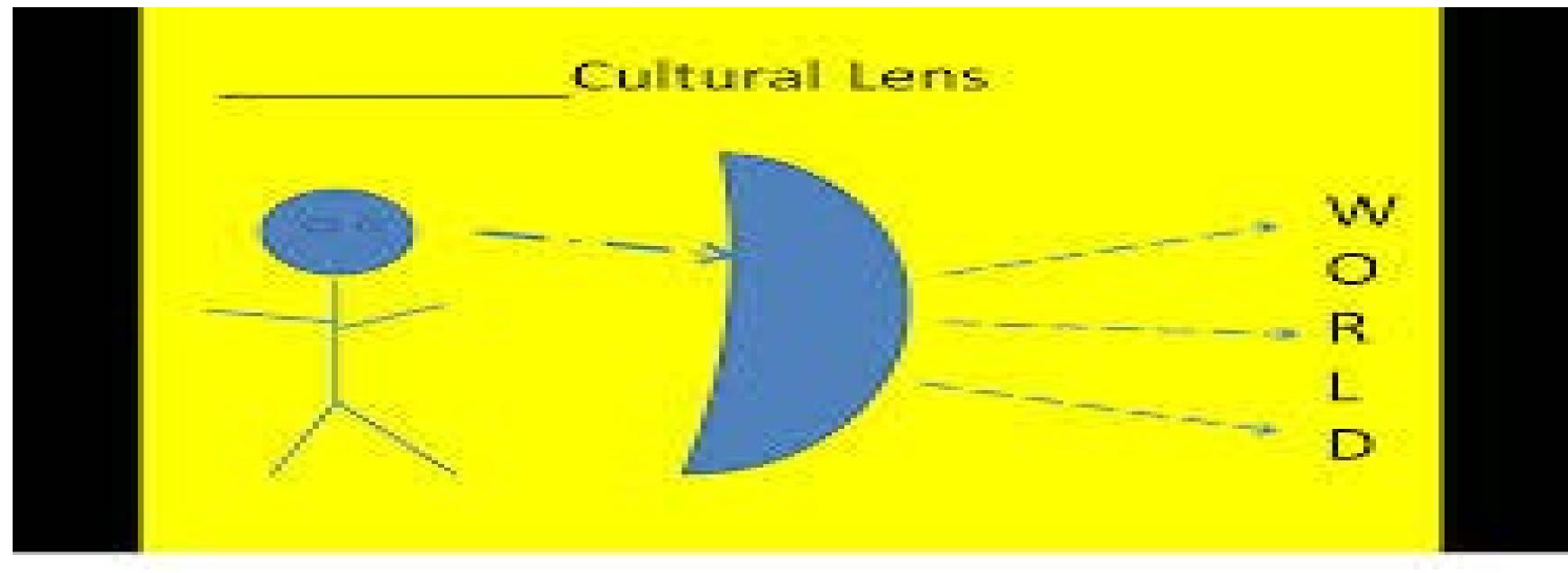
Cultural Lens
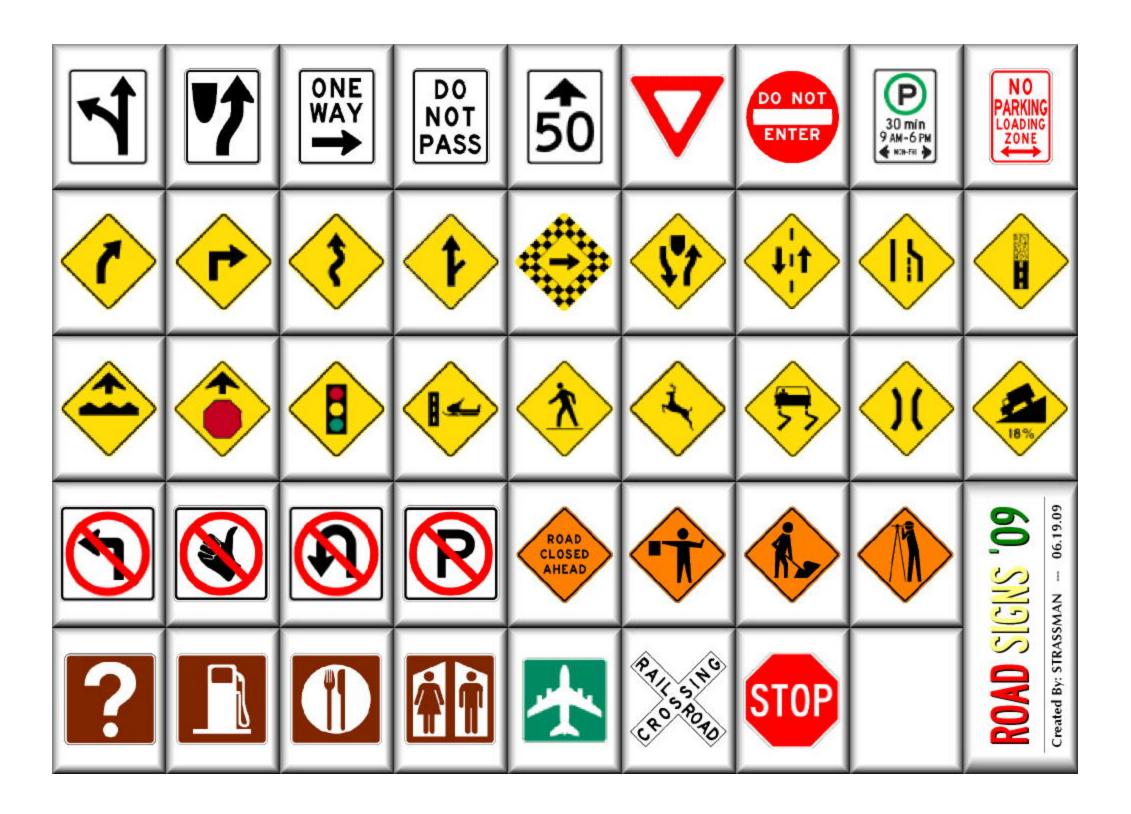
The Road Map to Success
Introductions- Services - Support

Introductions: emphasis on parent education

- Meeting the team
- What do they need immediately
- Evaluation Process
- Questions to ask team members
- Information on communication options
- Emotional impact
- Next appointments & follow up

"We're All In This Together"

Services –single page handouts

- Audiology
- Speech
- Medical
- Educator
- CI packets sent before device selection
- Insurance codes & billing
- Appointment schedule
- Terminology
- Pre & Post Op instructions
- Hearing Birthday Activation- what to expect

Support
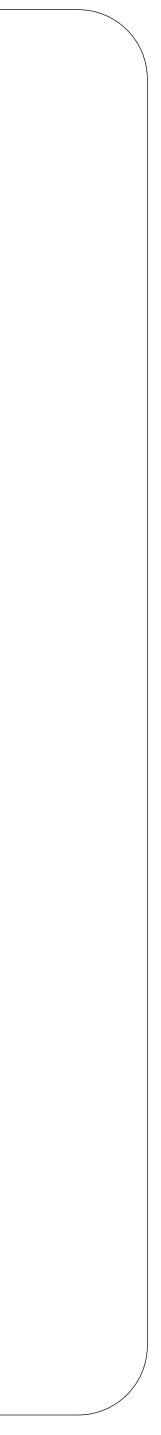
- A commitment for life!
- Family connections
- On going educational support
- Young adult interns
- Walk4hearing
- Choices
- GBYS
- Local agencies & Research

Culture is part of ALL of us and it's influenced by socioeconomic status

Addressing Language Disparities in the Pediatric Population and Enhancing Family Function

90 Nobel Lauretes

Chicago's Southside faces a myriad of social and economic challenges

Profound differences in Children who looked very similar at the outset
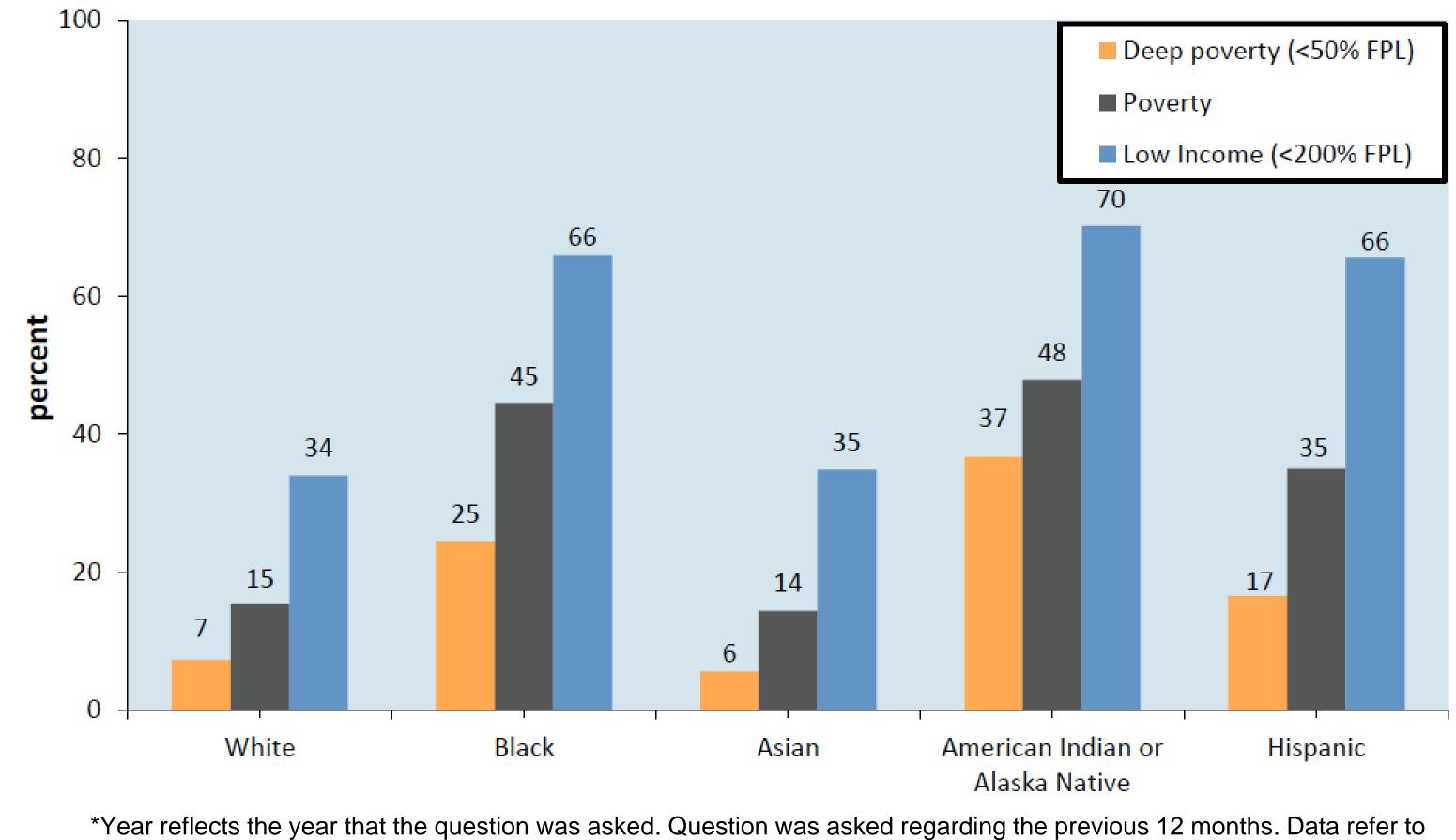
Lagging responses:

- hearing sounds

- responding to name

- comprehension

- saying first words

- interest in reading books

Infants/toddlers living in deep poverty, poverty, and with low income (2012) Significant disparities by race/ethnicity

*Year reflects the year that the question was asked. Question was asked regarding the previous 12 months. Data refer to children residing with and related to the householder.

6

The Youngest Americans / A report by The Robert R. McCormick Foundation and Child Trends

Children Born Into Poverty
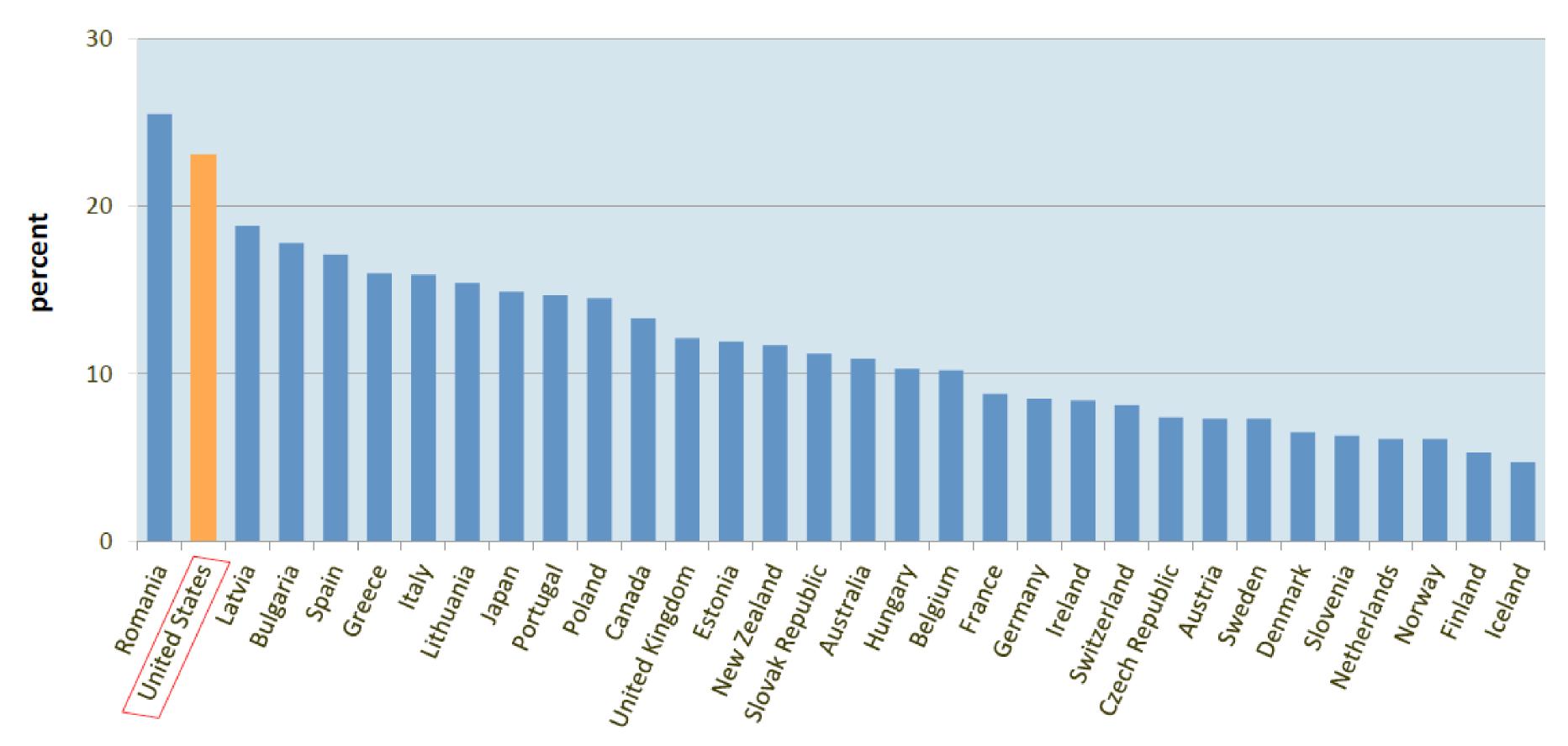
• Income inequality has never been greater in this country

• Children are profoundly impacted

• 16.1 million children in the US live in poverty

• An additional 16.3 million children are living just above the federal poverty live

•Health disparities: that in every disease worse outcomes occur in those born into poverty

Addy, Engelhart & Skinner, 2013

Children (birth – age 17) living in relative poverty* in 32 developed countries (2009**)
U.S. ranks second to last

*Relative poverty is defined as living in a household where disposable income, adjusted for family size and composition, is less than half (50%) of the national median income.. **Data for the United States are from 2007 and data for New Zealand and Japan are from 2011

The Youngest Americans / A report by The Robert R. McCormick Foundation and Child Trends

It's More Than Just Income

What does it really mean for a child?

Poverty impacts every aspect of a child's life.

Limited access to:
- health care
- quality education
- healthy food
- stable and safe housing
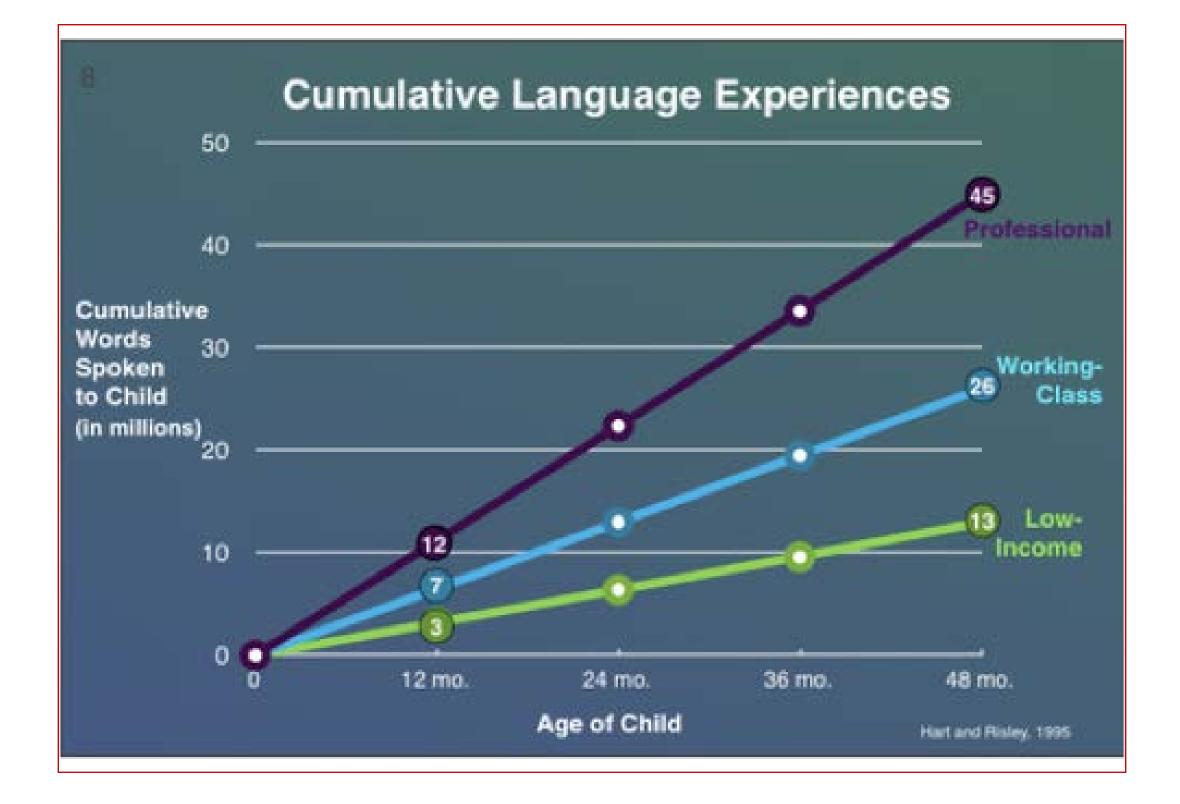
The Achievement Gap

- More than 80% of black and Latino public school students can't read or do math on grade level in the 4th, 8th, and 12th grades

- 52% of low-SES children are *not* school ready by age 5

- Disparities can be seen by 9 months between low and high SES children

- Root Cause: A Child's Early Language Environment

30 Million Word Gap

The Thirty Million Word Gap

- Hart & Risley (1995):

- High-SES children: 45 million words by age 4
- Low-SES children: 13 million words by age 4

DISPARITIES IN EARLY LANGUAGE ENVIRONMENTS

- Both quantitative and qualitative

- Inequities in parents' language input include:

  - significantly less talk and gesture

  - shorter and less complex phrases

  - less use of open-ended questions

  - greater use of directives

  - decreased maternal responsiveness

  - decreased joint attention

(Hammer, Tomblin, Zhang, & Weiss, 2001; Hoff & Tian, 2005; Huttenlocher, Haight, Selzer, & Lyons, 1991; Reilly et al., 2010; Rowe, 2008; Rowe & Goldin-Meadow, 2009; Hoff, 2012)

DISPARITIES IN EARLY LANGUAGE ENVIRONMENTS

- Decreased parental language input leads to significant disparities in children's development of:

  - vocabulary

  - grammar

  - narrative skills

  - early literacy skills

  - cognitive processing/processing speed

- Disparities in language skills are seen from infancy through high school, and the gap widens with age

- 90% of our brain is developed by 4 years of age
- Language is the food for the developing brain
- Parents are the key architects in brain development
- Poor early language environments =not "school ready" but remain poor learners their entire life (_{Anne Fernald})
- Parents have the power to profoundly impact their children's development and ultimate trajectories through their words

ASPIRE + TMW Home Visiting

- 10-12 week multimedia intervention

- Theoretically-driven, culturally sensitive

- **Parent talk: Lens into whole parent-child relationship**

- Standardized, computer-based curriculum designed for future scalability

Project ASPIRE: Addressing the Disparities

- 10 week home visit program
- Empowering and guiding parents to
provide an enriched language environment
- Children under age 4
- In addition to Early Intervention
- Wearing a hearing device
- Lower SES families
- Funded by Dept. of Ed. grant
- 32 families in the Chicagoland Area
- Currently analyzing the data
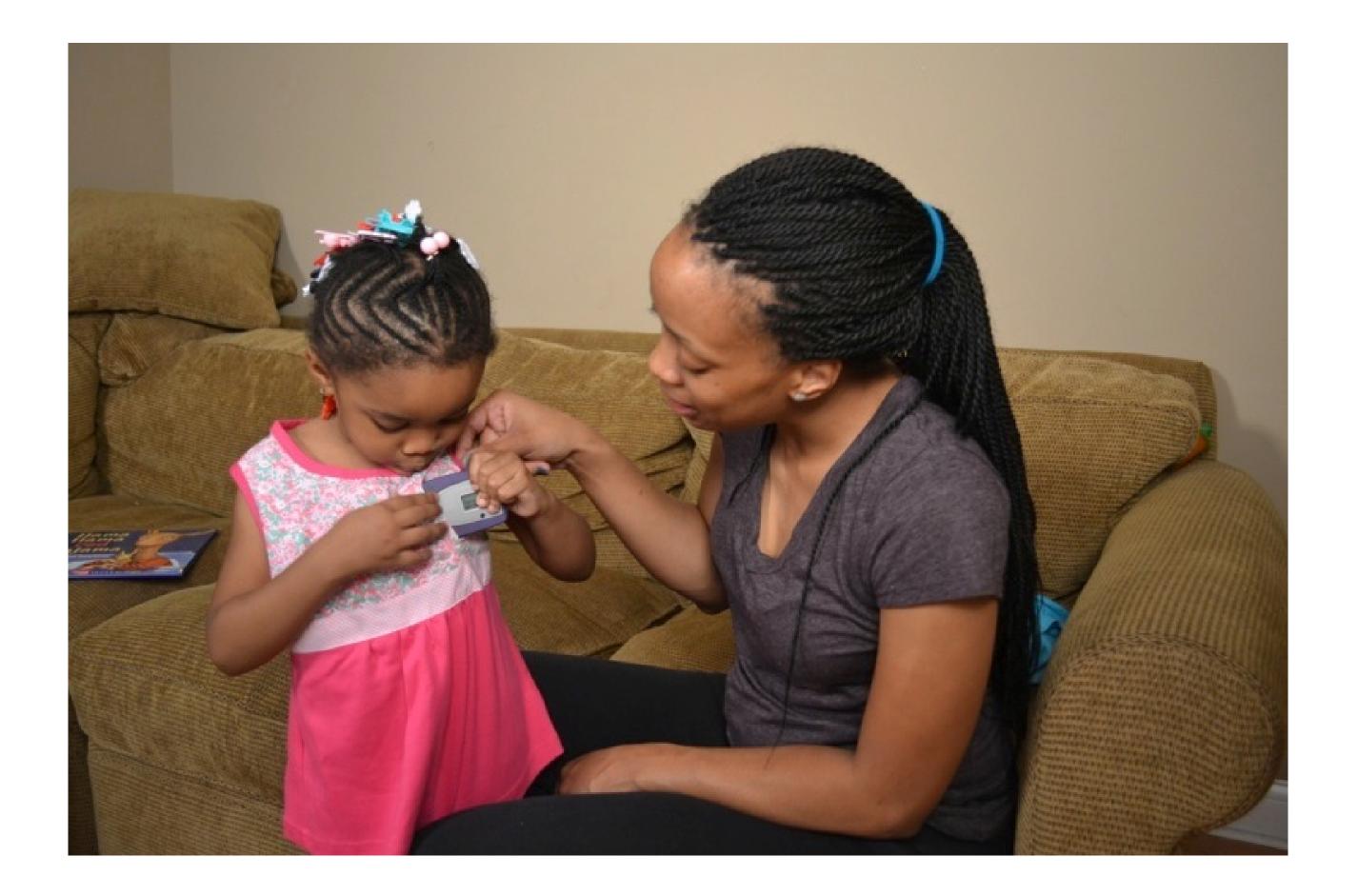
Research Behavioral Intervention

- Theoretically-driven, multimedia program translating cross-disciplinary science into easy-to-understand and easy-to-apply concepts

- Standardized, computer-based curriculum designed for future scalability

- Education component combines animation and real parent video to make strategies easily accessible to parents

- Parent is first and most important teacher

- Limit background noise

- Learning to Listen

- Tune In – joint attention

- Child-directed speech

- Turn taking

- Wait time & Expectant look

- Talk More – description and using detail

- Labeling – take the "IT" out

- Self talk & parallel talk

- Choices & open ended questions

- Book sharing

- Decreasing TV and technology time

Quantitative Linguistic Feedback
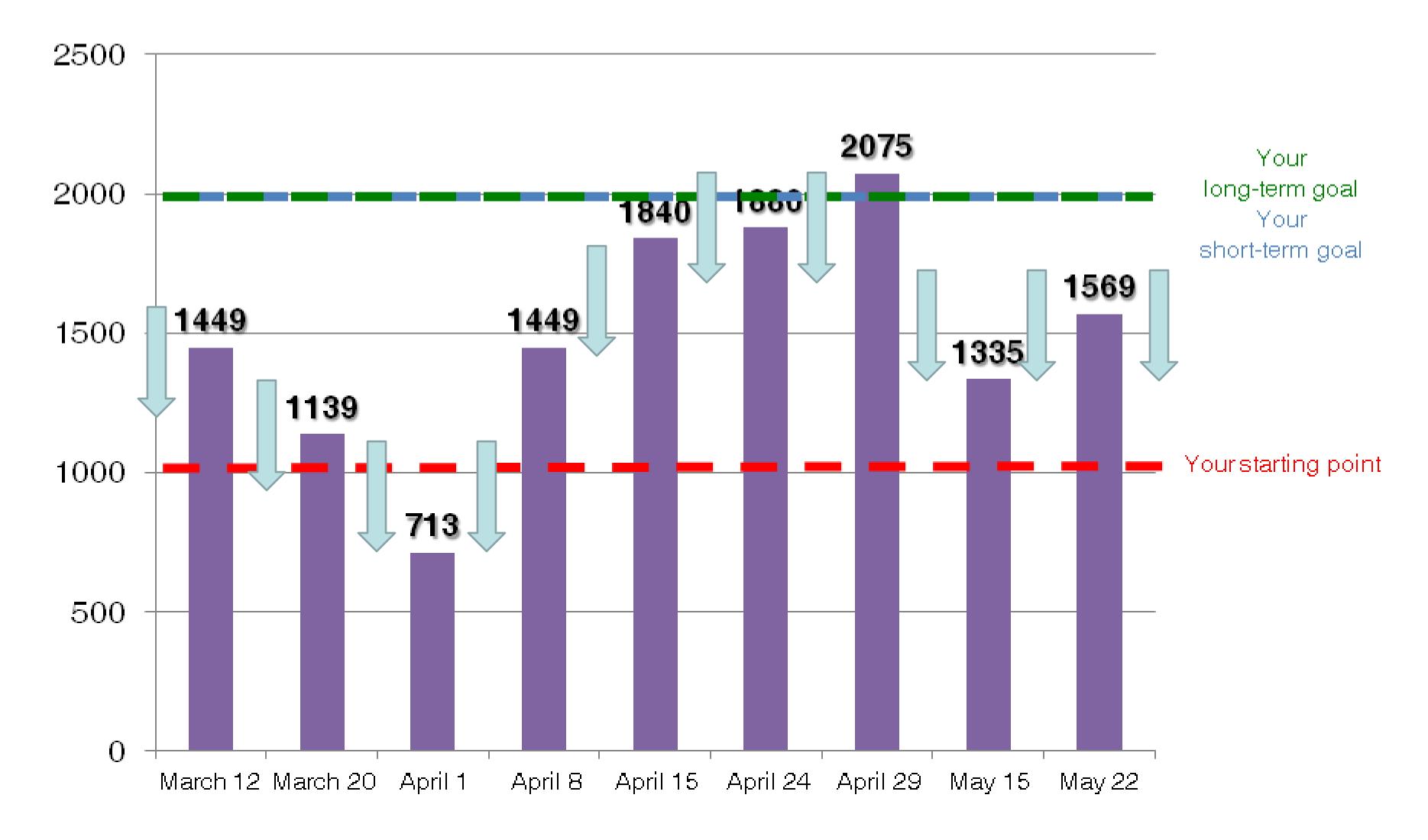
Language ENvironment Analysis System: LENA

- Innovative, automated, technology grants an unprecedented window into a child's natural language environment
- Records 10-16 hours
- Measures
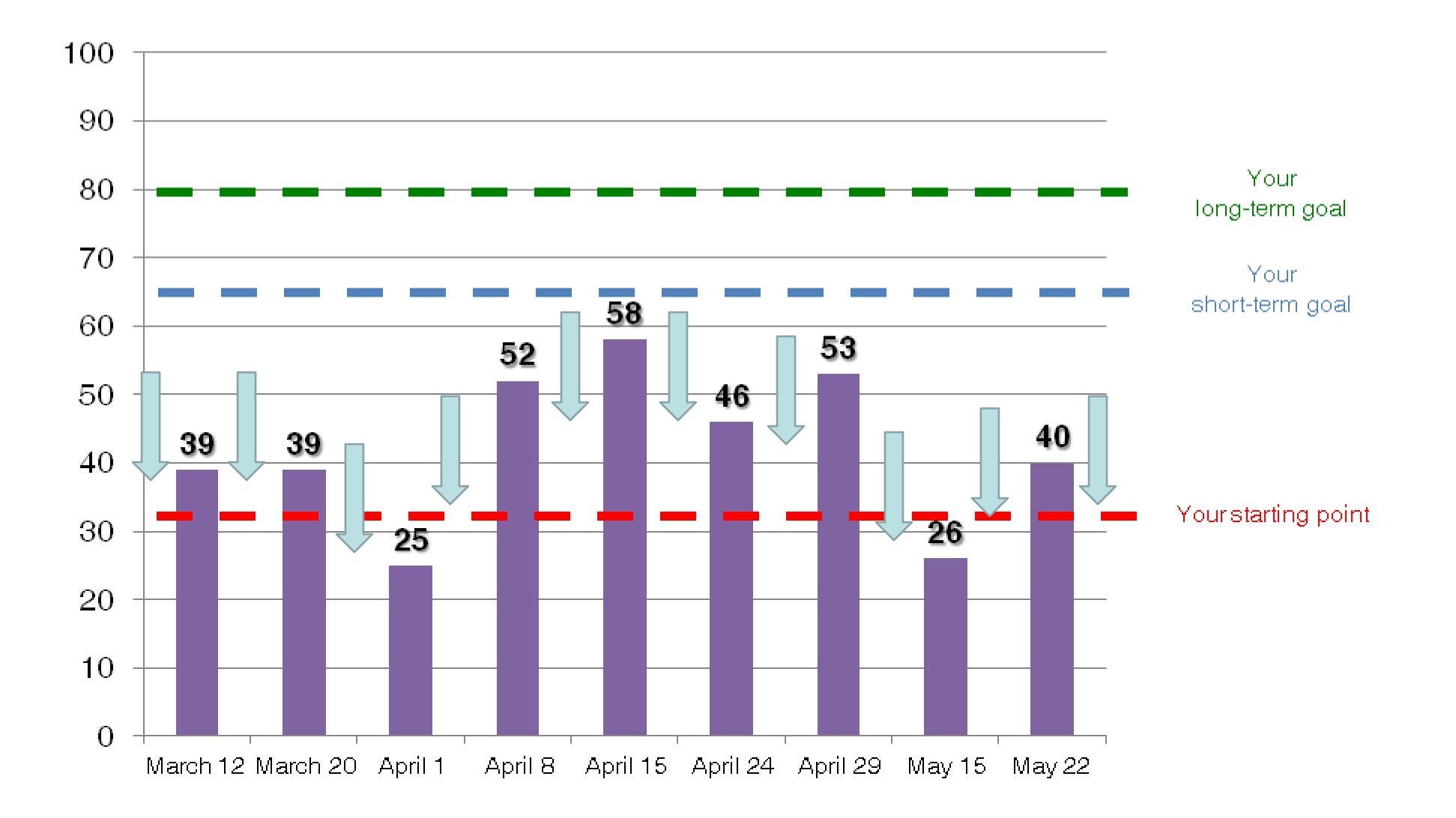 - Adult Words
  - Conversational Turns
  - Child Vocalizations
  - TV time

23
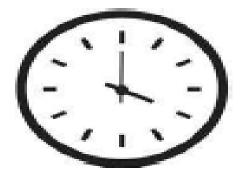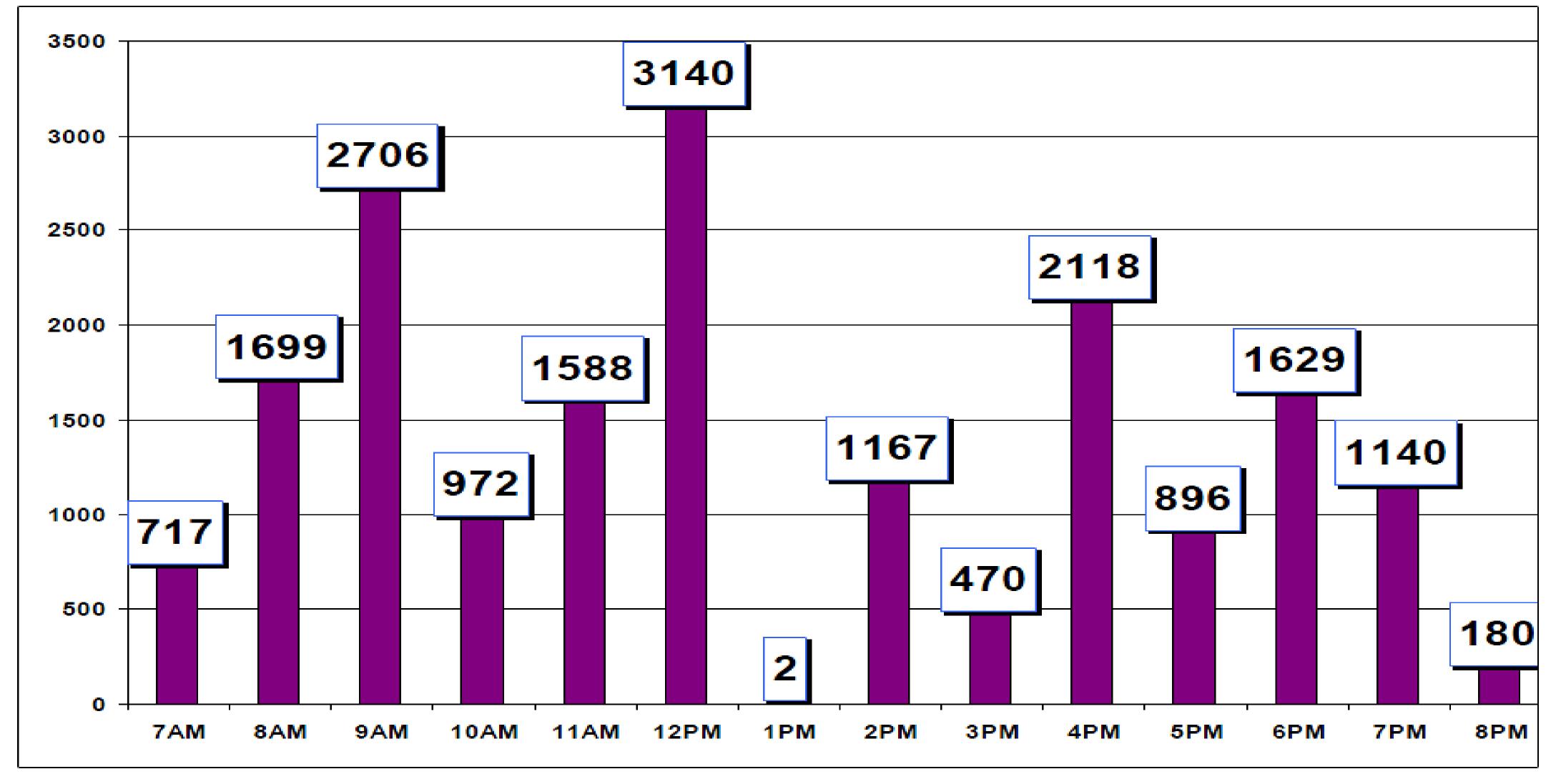
Average words per hour

Words Each Hour - Sep. 10

The Thirty Million Words Initiative
at the University of Chicago

- Vision: impact early language environments of children living in poverty to improve school readiness and school outcomes

Reaching one parent at a time makes a difference in one child's life at a time

But to narrow the gap, the approach must be broadened to the population level
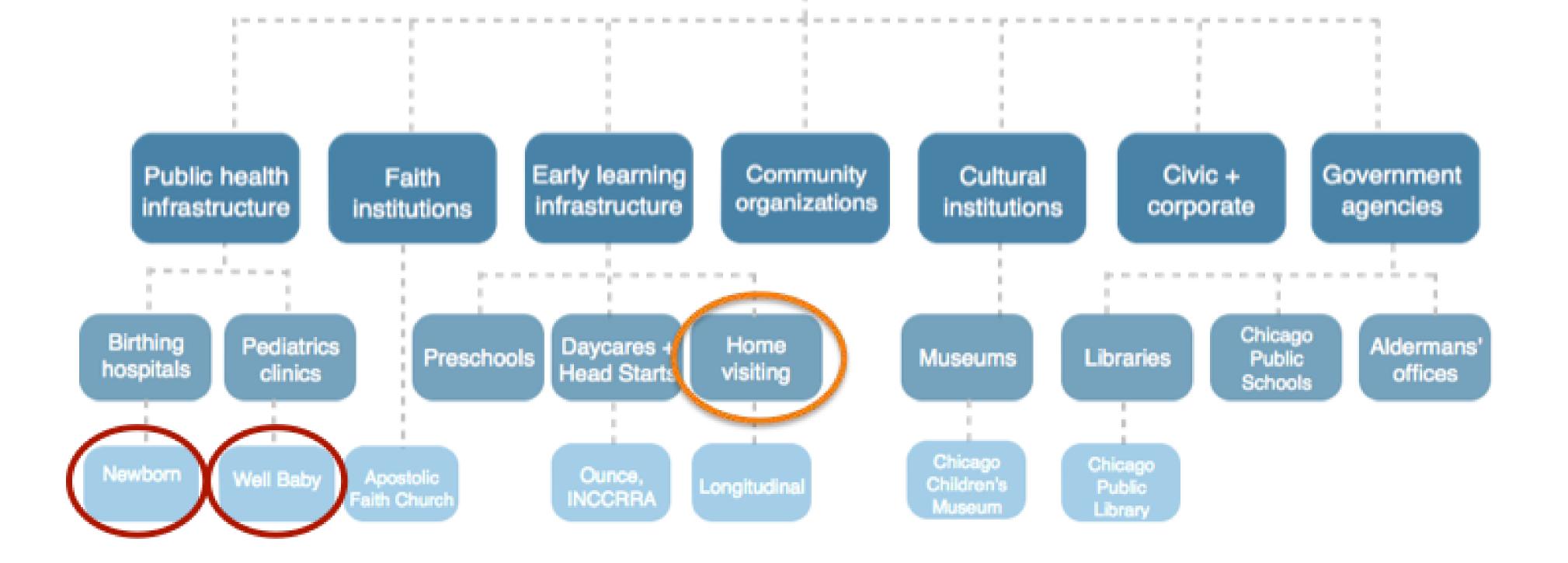
Longitudinal RCT

- PNC Grow-up Great Funding

- 5-year RCT to assess impact on Kindergarten School Readiness

  - 200 families
  - Assess children age 15mo to kindergarten
  - TMW versus Nutrition Intervention
  - Overlay onto Early Head Start infrastructure

Outcomes to be assessed:

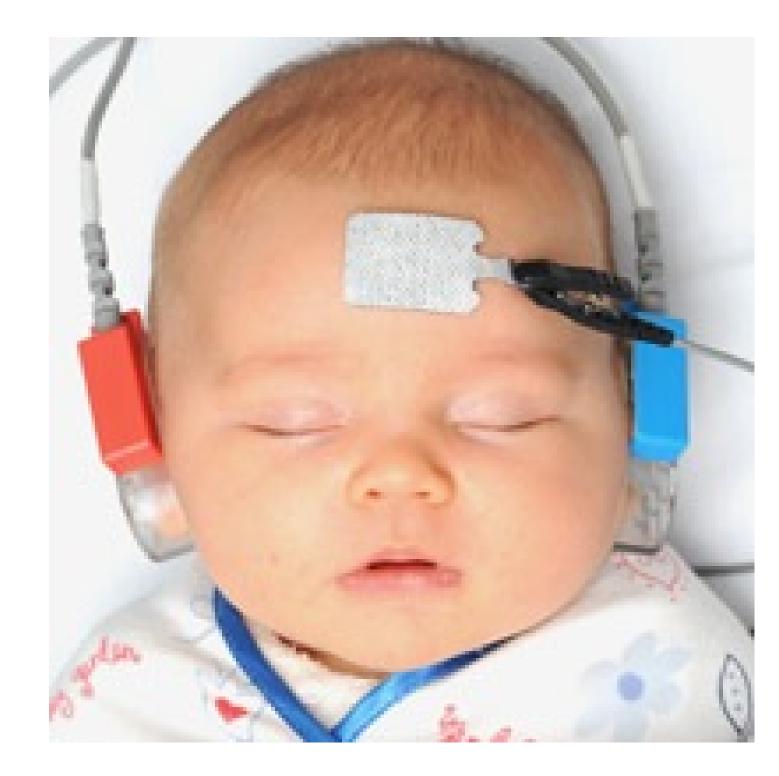| Parent:	Understanding of child language development and parents' role in development
	Language input
	Responsiveness and engagement
Child:	Oral language development
	Social-emotional development
	School readiness (especially linguistic development, self0regulation, early literacy skills)

TMW
Newborn Initiative

Photo courtesy of blogs.rch.org.au

- Bilingual intervention piggybacks on the Universal Newborn Hearing Screening (UNHS)

- 10 minute multi-media presentation designed to reach mothers immediately postpartum

- Impact parents' beliefs about their role in their child's language & cognitive development

- Currently in Formative Development at the University of Chicago and Northwestern
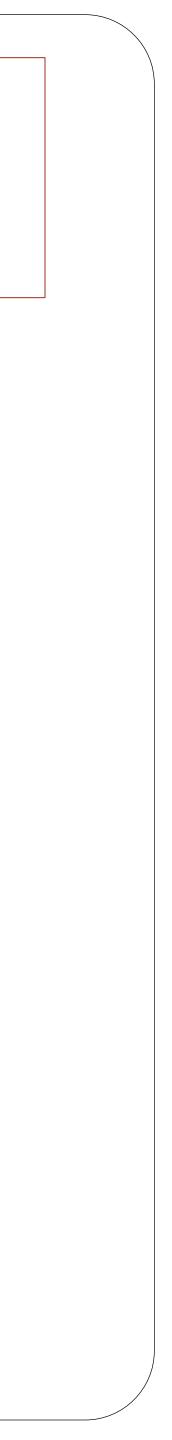
TMW
Well Baby Initiative

- Bilingual, perinatal intervention built into well baby pediatric visits at 1, 2, 4, & 6 months

- 4 multi-media modules designed integrate into existing infrastructures

- Will scale out with Reach Out and Read

- Targets parents to impact language & cognitive development from the start of life

Photo courtesy of: https://www.pinterest.com/capbluecross/well-baby-well-child-visits/
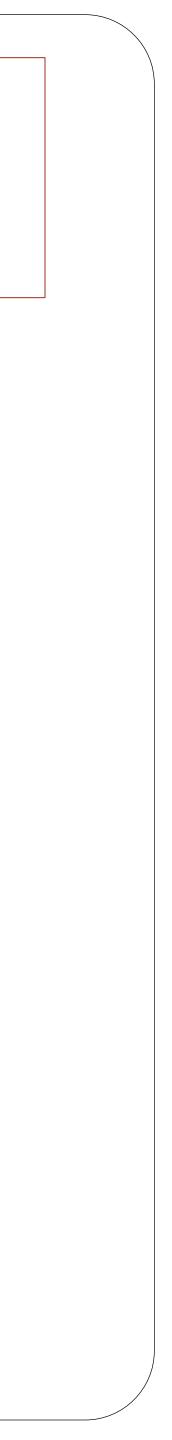
University of Chicago Medicine

- Department of Diversity, Inclusion and Equity began in 2013

- 5 Year Enterprise Wide Diversity and Inclusion Strategy

- Workforce: Recruits, promotes and develops a work force that represent the patient population

- Inclusion: seeks to build and sustain an environment that promotes respect and values differences

- Equity strives to transform us to a culturally and linguistically competent organization
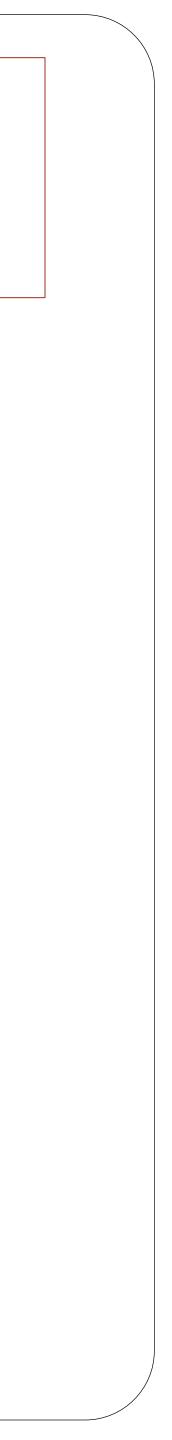
Medical Center / Sub-Committees:

Policy: Aims to advance culturally and linguistically appropriate services and practices through policy and practice changes

Education and Training: informs and supports the successful implementation of cultural competence training strategy

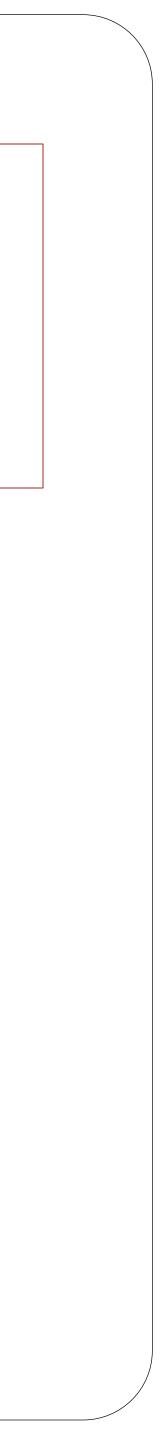**Data:** recommends policy for collection, stratification and reporting of performance measures

Cultural Competence Course

Aims to provide tools to work more effectively in a multicultural setting.

1. Cultural competence & the dimensions of diversity
2. Power and privilege and self- awareness
3. World view and transcultural communication
4. Addressing limited health literacy and communication via interpreters
5. Ethical dimensions of care
6. Health disparities and change agency

Creating a PATH for all our children with hearing loss to become ACTIVE CITIZENS of the world
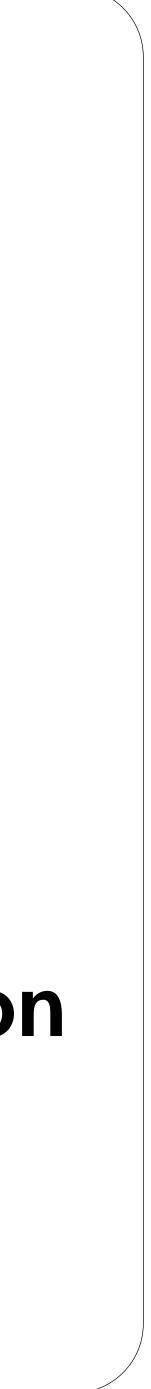
THANK YOU to OUR TEAM

Medical:

- Dr. Dana Suskind
- Dr. Michael Gluth
- Dr. Ernest Mhoon
- Dr. Fuad Baroody
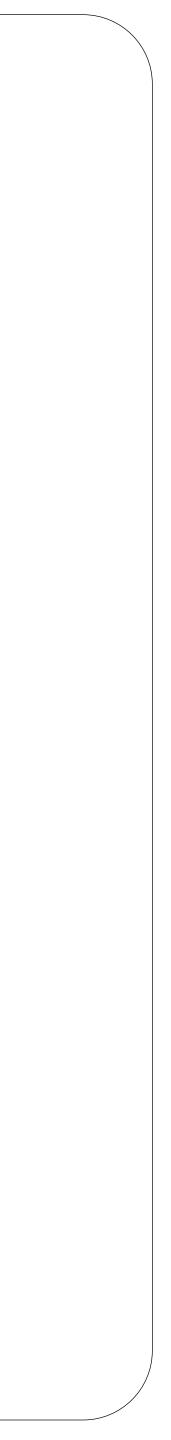- Christina Monteiro, RN, NP-C
- Mary Brady, RN

Audiology:

- Dr. Lia Ferro
- Dr Barbara Corbett
- Dr. Brittney Sprouse
- Dr. Jessica Elliott

Habilitation / Rehabilitation

- Michelle Havlik, MS, SPL

Questions and Thank You!

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