



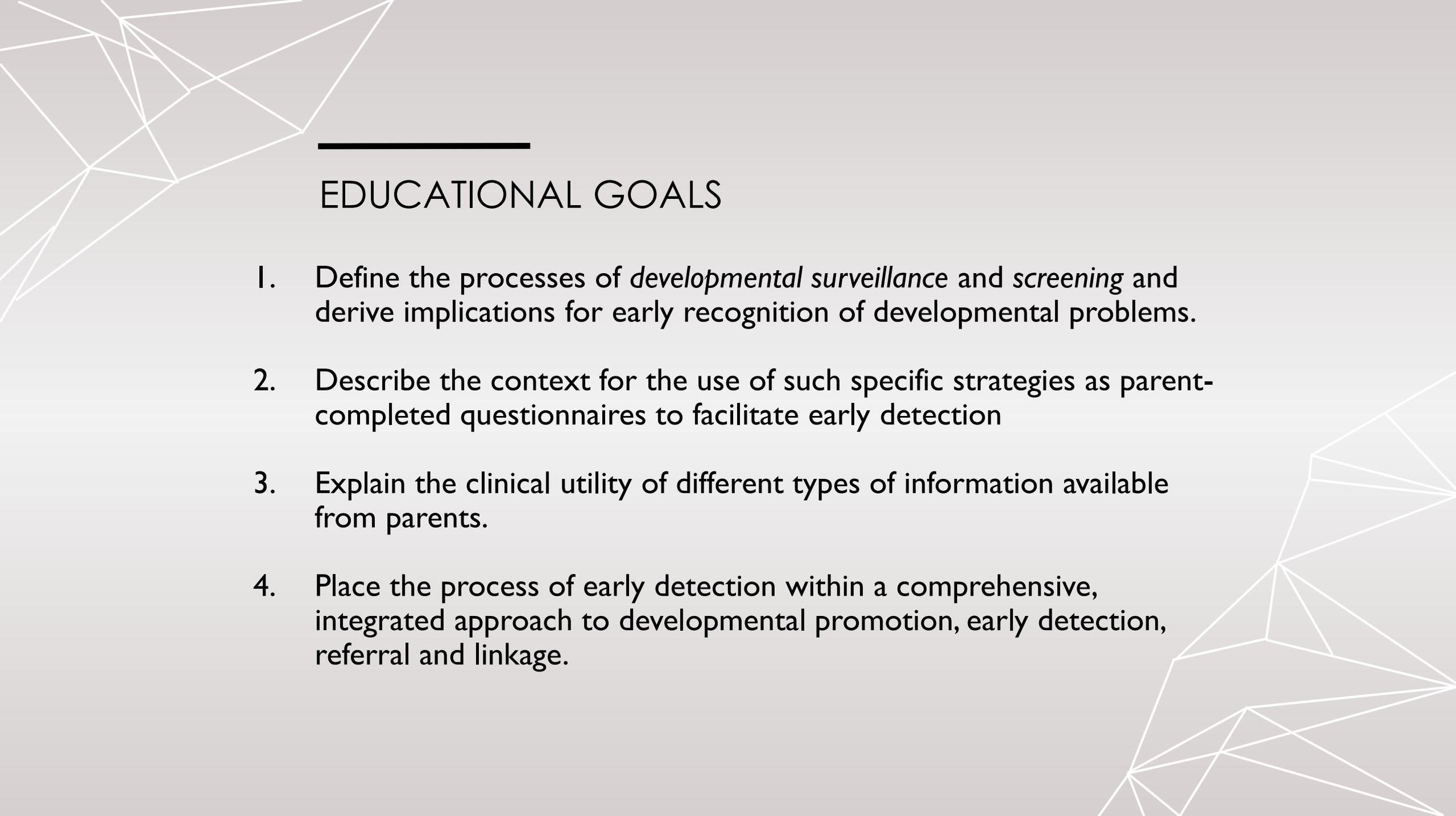
DEVELOPMENTAL SURVEILLANCE AND SCREENING The Help Me Grow National Center Standpoint

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November, 2018



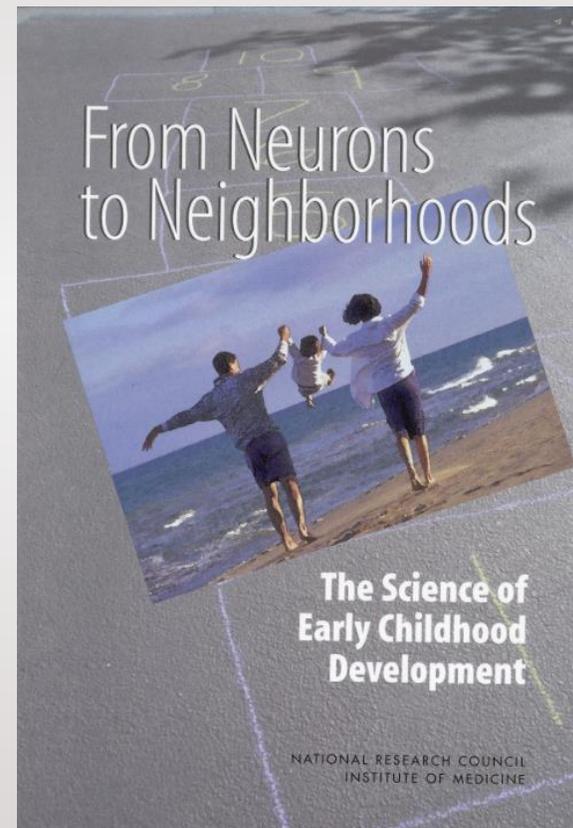
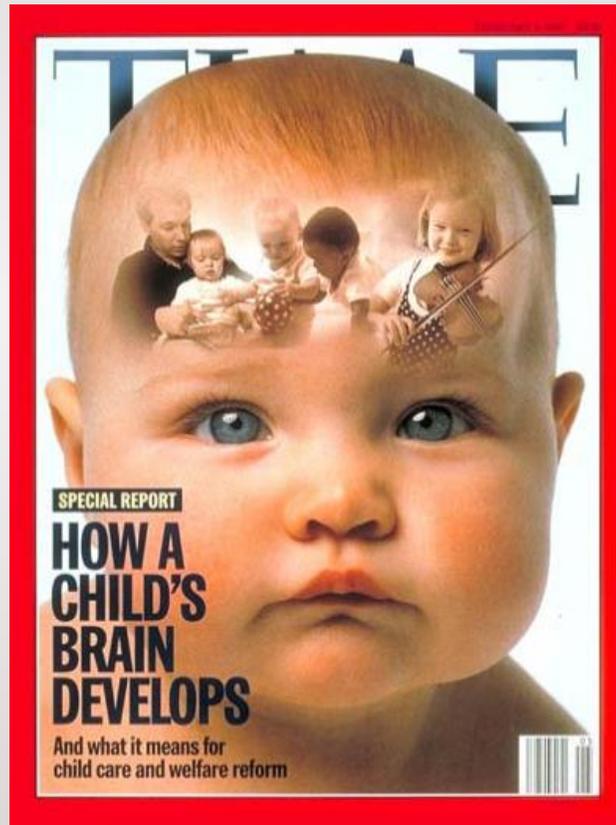


EDUCATIONAL GOALS

1. Define the processes of *developmental surveillance* and *screening* and derive implications for early recognition of developmental problems.
2. Describe the context for the use of such specific strategies as parent-completed questionnaires to facilitate early detection
3. Explain the clinical utility of different types of information available from parents.
4. Place the process of early detection within a comprehensive, integrated approach to developmental promotion, early detection, referral and linkage.

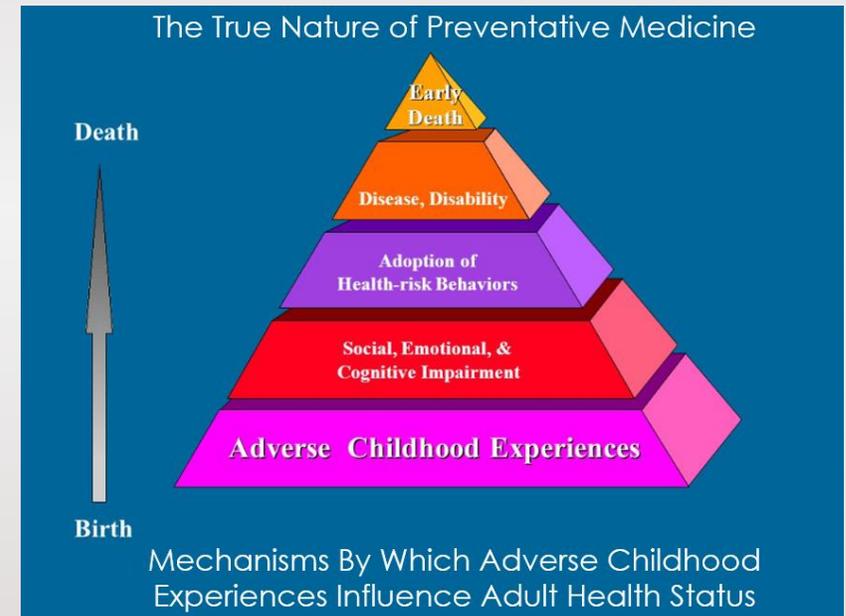
1990s

THE DECADE OF THE BRAIN



DEVELOPMENTAL PROBLEMS RATIONALE FOR EARLY DETECTION

- Critical influence of *early childhood years*
- *Less-differentiated brain* of younger child amenable to intervention
 - Neural plasticity
 - Sensitive periods
 - Sequential development of brain structures
 - Activity-dependent neural differentiation
 - Role of experience in brain development
- Biology of adversity/toxic stress
 - ACE Study
 - “Biological embedding of environmental events”



Criteria for judging *conditions* appropriate for the screening process

- Must have significant morbidity or mortality and be sufficiently prevalent
- Screening program must include entire population
- Diagnostic tests must distinguish affected from non-affected persons
- Condition must be treatable or controllable
- Detection and treatment during asymptomatic stage much improve prognosis
- Adequate resources must be available for definitive diagnosis and treatment
- Cost of screening must be outweighed by savings in suffering and alternative expenditures

Criteria by which specific *tests* are judged appropriate for use in screening programs

- Simple, convenient, acceptable
- Reliable, valid (sensitive and specific)
- Economical
- Lend themselves to easy interpretation



DEVELOPMENTAL SURVEILLANCE ELICIT PARENTS' OPINIONS AND CONCERNS

Information available from parents

Appraisals (opinions of children's development)

- Concerns
- Estimations
- Predictions

Descriptions

- Recall
- Report



DEVELOPMENTAL SURVEILLANCE PARENTS' APPRIASALS

CONCERNS

Accurate indicators of true problems

- Speech and language
- Fine motor
- General functioning (“he’s just slow”)

Self-help skills, behavior less sensitive

“Please tell me any concerns about the way your child is behaving, learning, and developing”

- “Any concerns about how she...”



DEVELOPMENTAL SURVEILLANCE PARENTS' APPRAISALS

ESTIMATIONS

- “Compared with other children, how old would you say your child now acts?”
- Correlate well with developmental quotients
 - Cognitive, motor, self-help, academic skills
 - Less accurate for language abilities

PREDICTIONS

- Likely to overestimate future function
 - If delayed, predict average functioning
 - If average, “presidential syndrome”

DEVELOPMENTAL SURVEILLANCE PARENTS' DESCRIPTIONS

RECALL OF DEVELOPMENTAL MILESTONES

- Notoriously unreliable
- Reflect prior conceptions of children's development
- Accuracy improved by records, diaries
- Even if accurate, age of achievement of limited predictive value



DEVELOPMENTAL SURVEILLANCE PARENTS' DESCRIPTIONS

REPORT

- Accurate contemporaneous descriptions of current skills and achievements
- Importance of format of questions
 - *Recognition*: “Does your child use any of the following words...”
 - *Identification*: “What words does your child say?”
- Produces higher estimates than assessment
 - Child within a familiar environment
 - Skills inconsistently demonstrated



EARLY DETECTION DEVELOPMENTAL SURVEILLANCE AND SCREENING

DEFINITION OF SURVEILLANCE

- Flexible, longitudinal, continuous process
- Knowledgeable practitioners perform skilled observations during child health encounters

COMPONENTS OF SURVEILLANCE:

- Eliciting/attending to parents' concerns
- Obtaining a relevant developmental history
- Making accurate observations of children
- Identifying risk and resiliency factors
- Maintaining record of process and findings
- [Sharing opinions with other professionals]

View child within context of overall well-being



EARLY DETECTION DEVELOPMENTAL SURVEILLANCE AND SCREENING

USE OF *SCREENING TOOLS* AT PERIODIC INTERVALS TO
STRENGTHEN SURVEILLANCE

TYPES

- Parent-completed questionnaires
- Professionally-administered “tests”

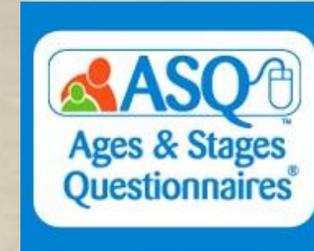
FREQUENCY

- 9, 18, 24-30 months
- When concerns arise
 - (“second-stage”)

DEVELOPMENTAL SCREENING PARENT-COMPLETED QUESTIONNAIRES

ADVANTAGES

- Ease of administration
- Do not require child's cooperation
- Broad sampling of skills
- Flexible administration methods
 - Mailed prior to visit
 - Complete in waiting room
 - Waiting room or telephone
 - Interview by staff
 - Combination



PEDS RESPONSE FORM Acme Pediatrics
Provider

Child's Name Roger J. Parent's Name Malinda J.
Child's Birthday 8/8/05 Child's Age 2 Today's Date 8/10/07

Please list any concerns about your child's learning, development, and behavior.

I'm worried about how my child talks and relates to us. He says things that don't have anything to do with what's going on. He's oblivious to anything but what he is doing. He's not doing as well as other kids in many ways.

Do you have any concerns about how your child talks and makes speech sounds?
Circle one: No Yes A little COMMENTS: He repeats odd things like "Wheel of Fortune"

Do you have any concerns about how your child understands what you say?
Circle one: No Yes A little COMMENTS: I can't tell if he doesn't understand, doesn't hear well or just ignores us

Do you have any concerns about how your child uses his or her hands and fingers to do things?
Circle one: No Yes A little COMMENTS: He's good with manipulatives but does a lot of the same things over and over: spinning wheels on cars, flicking light switches, flipping pages

Do you have any concerns about how your child uses his or her arms and legs?
Circle one: No Yes A little COMMENTS: He's very coordinated and very fast!

Do you have any concerns about how your child behaves?
Circle one: No Yes A little COMMENTS: still lots of tantrums but headbanging is almost gone. Behavior therapy has been helpful and his tantrums are less severe and shorter

Do you have any concerns about how your child gets along with others?
Circle one: No Yes A little COMMENTS: He doesn't seem interested in watching other kids, let alone playing with them

Do you have any concerns about how your child is learning to do things for himself/herself?
Circle one: No Yes A little COMMENTS: He's very independent

Do you have any concerns about how your child is learning preschool or school skills?
Circle one: No Yes A little COMMENTS: He's too young for any of that!

Please list any other concerns.

We spend lots of time playing with Roger and talking to him. This seems to be helping him be more engaged. I still wonder about his hearing.

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Permission is granted to photocopy these forms for training purposes.

DEVELOPMENTAL SURVEILLANCE AND SCREENING CONCLUSIONS

- Expert opinion and research evidence support *developmental surveillance* as “optimal” clinical practice for monitoring children’s development
- Effectiveness is enhanced by incorporating valid measures of parents’ appraisals and descriptions (i.e., parent questionnaires) and/or objective measures of children’s development (i.e., professionally-administered tools)
 - Surveillance **and** screening
 - Screening at 9-, 18-, and 24-30 month visits



DEVELOPMENTAL SURVEILLANCE AND SCREENING CONCLUSIONS

CAVEAT

Detection without referral/intervention is ineffective and may be judged unethical



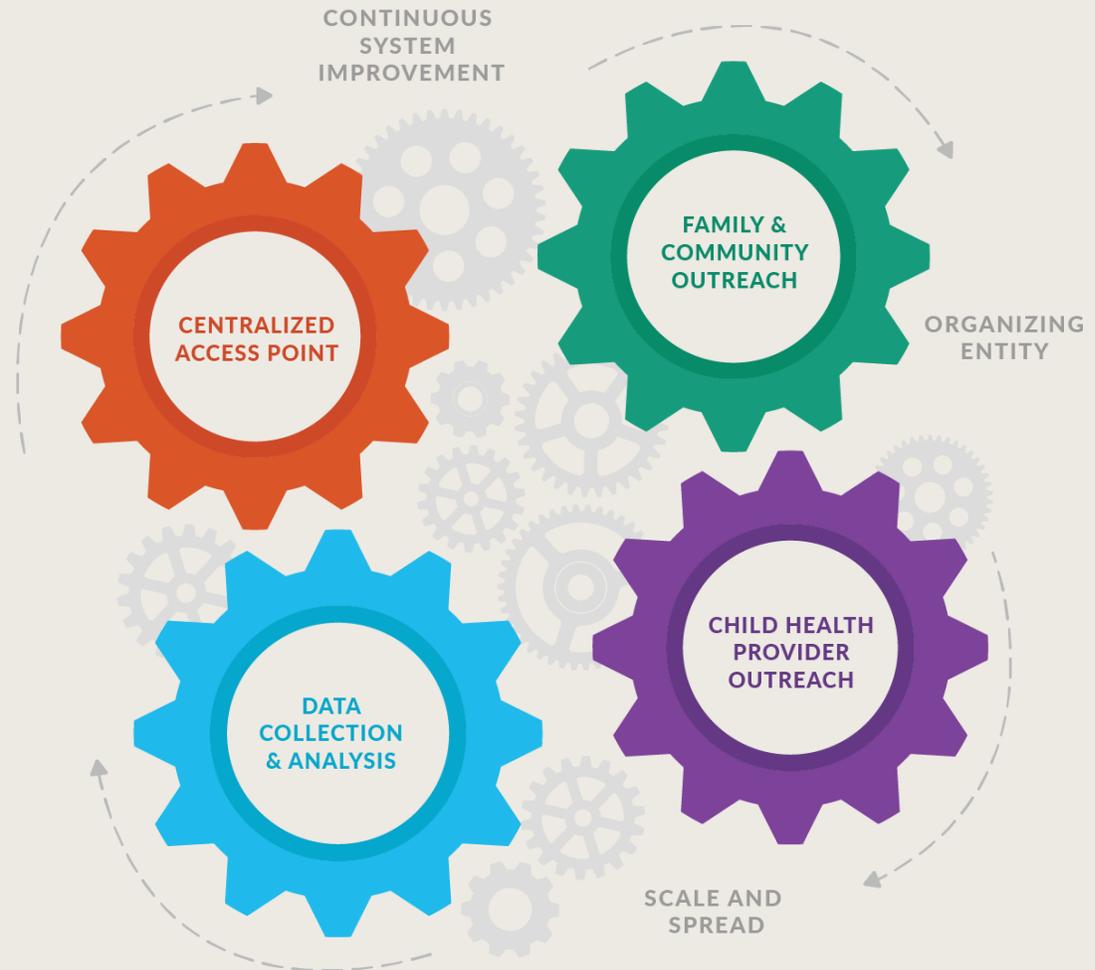
SHARED ASSUMPTIONS

- Children with developmental/behavioral problems are **eluding early detection**
- Many **initiatives exist** to provide services to young children, their families
- **A gap exists** between child health and child development/early childhood education programs
- Children and their families would benefit from a **coordinated, region-wide system** of early detection, intervention for children at developmental risk

HELP ME GROW SYSTEM MODEL CO-OPERATION OF FOUR CORE COMPONENTS

A system model that leverages and enhances existing resources in order to develop and enhance a comprehensive approach to early childhood system building in any given community.

It is the **CO-OPERATION** of the core components that defines the system





Thank You
