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FOR HEALTHIER CHILDREN,
FAMILIES AND COMMUNITIES

Creating the 3.0 Health System to Guarantee Health From the Start

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The First 1000 Days: Getting Right From the Start
Connecticut State Capital
October 19, 2012

Off to a healthy start

- Health trajectory of a child is set in motion years before he or she is born
- Optimizing health from the start--- requires a focus on what influences a child health trajectories
  - When those influences occur
  - How different influences are connect and linked
- Medical problems are often specific and straight forward (bug/drug, boo-boo/band aid, tumor/knife)
- Optimizing Health Development is complex –
  - Lots of different factors, different time scales, differ levels
  - Requires a complex adaptive system to respond

Off to a healthy start

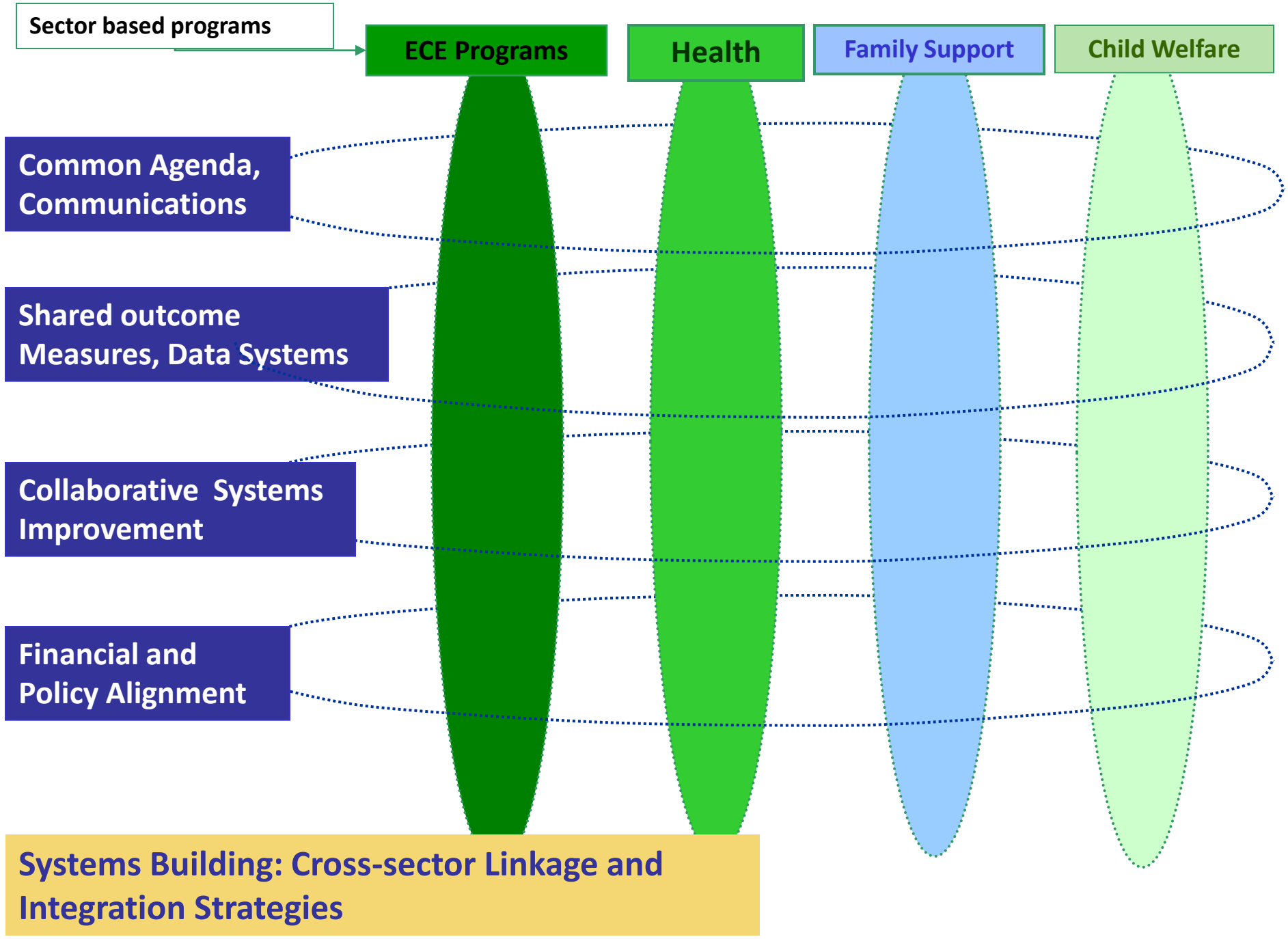
- Healthy development and school readiness are similar if not functionally synonymous
- Healthy development is an integrated process that involves physical, emotional, cognitive, communication, social-relational domains
- Early in childhood these domains are tightly interwoven, interdependent, and co-determinant
- Child health providers are one of the only universal access points to all young children since most are not in center based child care or other organized settings
- Therefore the child health system has an important role to play in assuring that children get off to a healthy start

Priority Areas : multi-sector Health Promotion and Development

- Preconception health and Prenatal Care –optimize birth outcomes
- Mental and Behavioral health for children and their families – optimize family function
- Comprehensive, Adaptive Prevention Systems- Minimize chronic health problems
  - Smoking
  - Drug and Alcohol use
  - Obesity
  - Media exposure, parental engagement

Priority Areas : multi-sector Health Promotion and Development

- Developmental, Early, and Pre-emptive Intervention – optimize development Health
  - Developmental , behavioral, mental health issues
- Oral Health Services
  - Oral Health Home, OH Neighborhood, OH System
- Vulnerable Populations
  - Child Welfare and Foster Care
  - Children of Immigrant Parents
  - Children of Depressed and Substance Abusing Parents


Sector based programs
ECE Programs
Health
Family Support
Child Welfare
Common Agenda, Communications
Shared outcome Measures, Data Systems
Collaborative Systems Improvement
Financial and Policy Alignment
Systems Building: Cross-sector Linkage and Integration Strategies

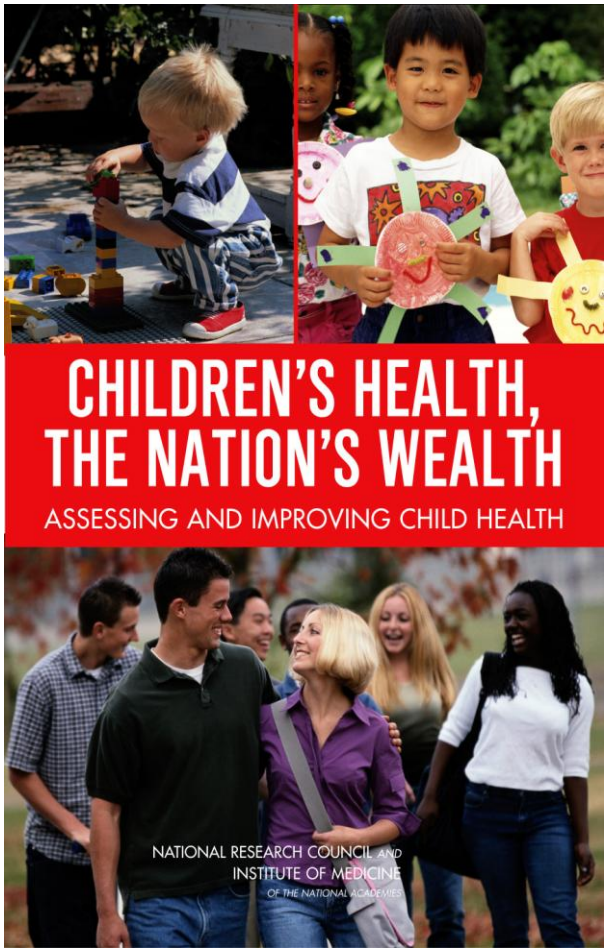
Connecticut Early Childhood Health 3.0

- Establish a Ct ECH&D Innovation Network
  - Public private partnership for Ct future
- Development Formal Collaborative Innovation Networks (CoINS)
  - Across MP like place based efforts in 5-10 sites ala TECCS, BBZs
  - Across child health providers – ala IHI & NICHQ
  - Child Care providers – ala Delaware's CCLC
- Use major health centers and birth hospitals as hubs
- Build the infrastructure for 3.0 Child ACOs

Presentation

- How health develops across the life course
- Health Development is a complex emergent process
- Differences in Health Development start early
- Health of Young Children
- How well is the US Child Health System Performing
- Transforming the Child Health System
- Complex System Approach to improving healthy development

2004 National Research Council and Institute of Medicine Report



IOM/NRC Definition of Children's Health (2004)

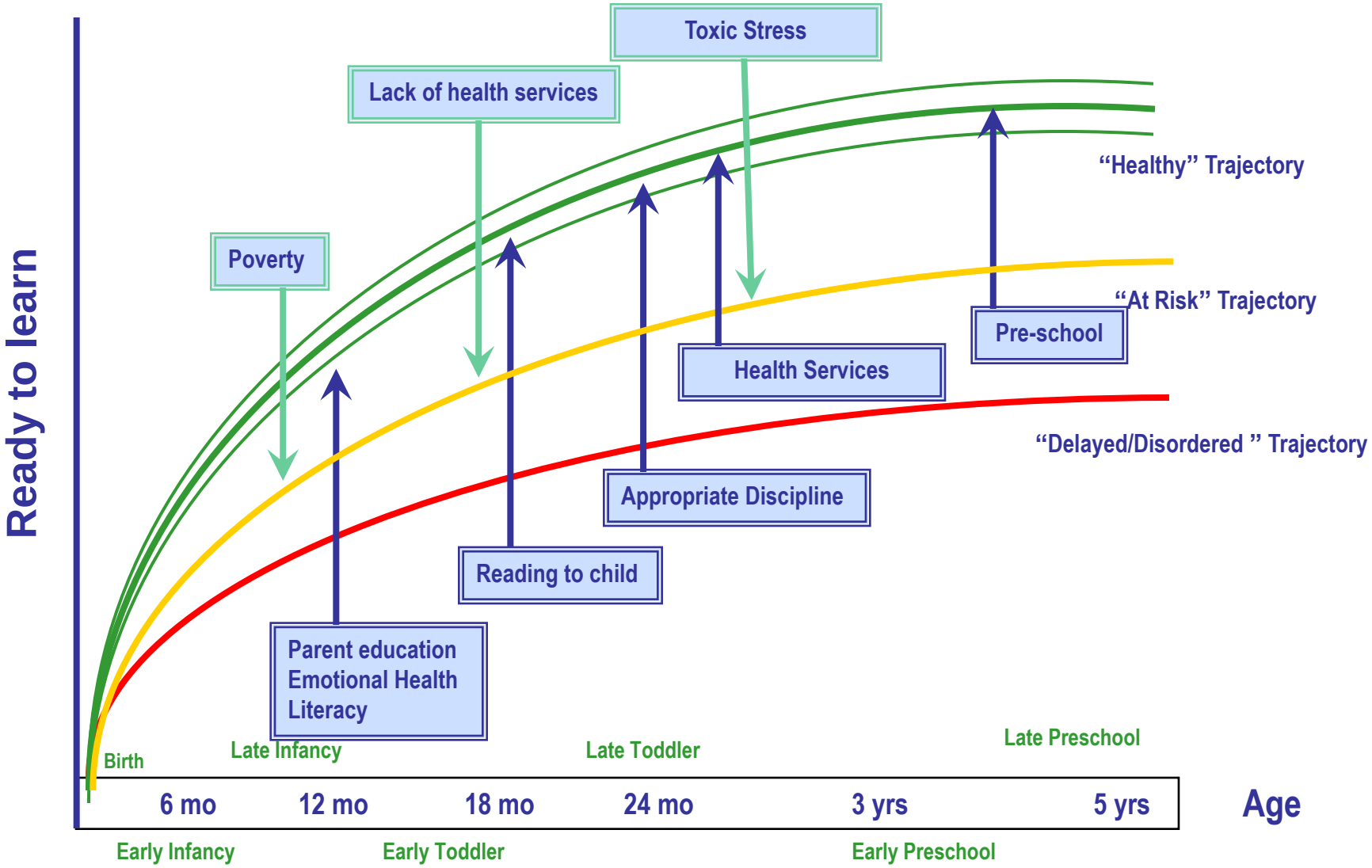
"Children's health is the extent to which individual children or groups of children are able or enabled to (a) develop and realize their potential, (b) satisfy their needs, and (c) develop the capacities that allow them to interact successfully with their biological, physical, and social environments."

From *Children's Health, the Nation's Wealth,*
National Academies Press, 2004.

Health is Developmental

- Health continuously develops across the life course
- Health development can be represented by health trajectories
- Critical/ Sensitive periods where risk and protective factors make a big difference in health trajectories
- Macro and Micro pathways delineate how toxic environments and risky families get under the skin

Health Development: Reducing Risk and Optimizing Promoting and Protective Factors



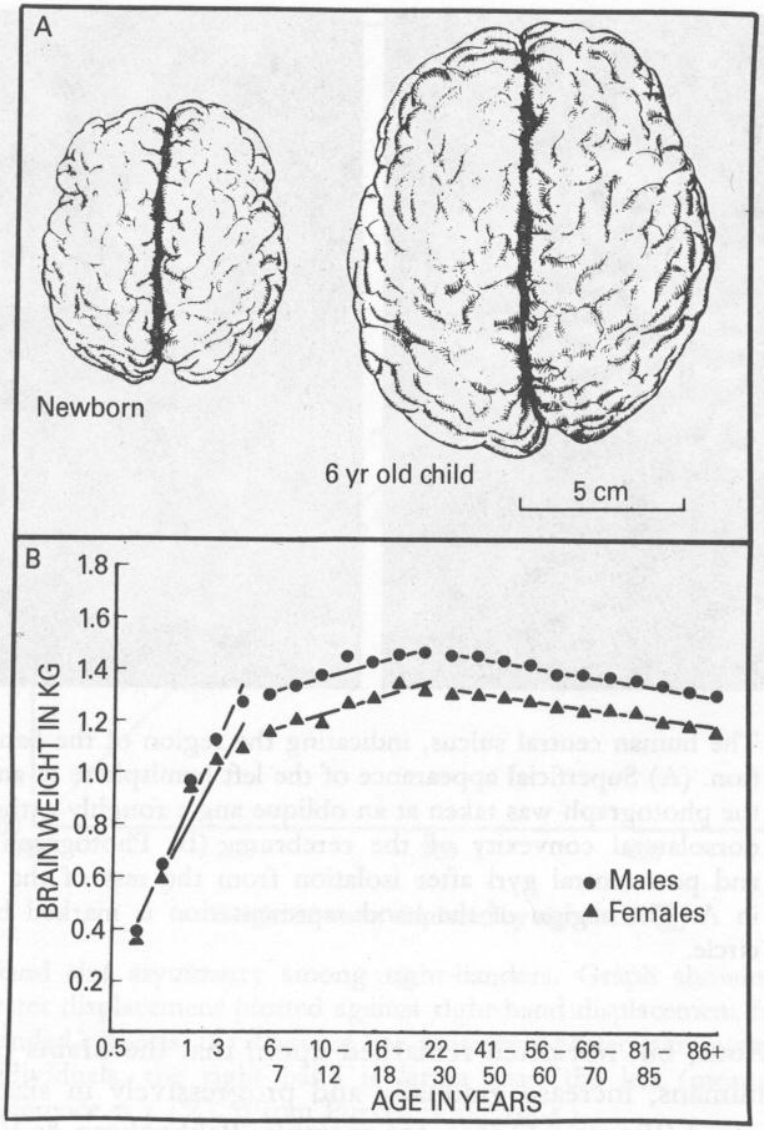
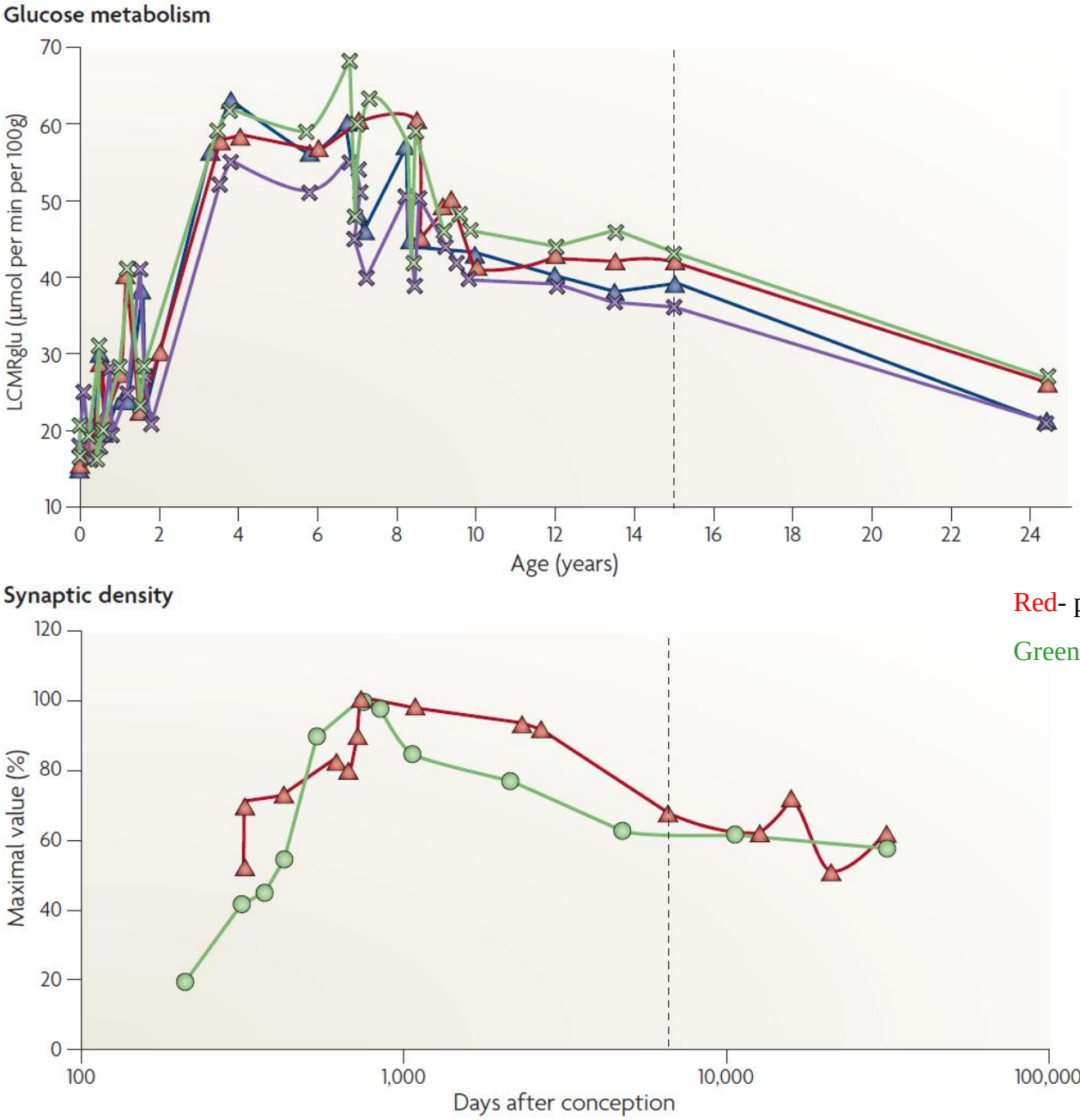


Figure 8.6. Postnatal growth of the human brain. (A) Dorsal view of a normal brain at birth (left) and at age 6 years (right). (B) The duration of human brain growth (according to brain weight). The growth of the brain (here based on 2603 neurologically normal subjects) continues for a decade or more. (From Purves, 1994; (A) after Conel, 1939–67; (B) after Dekaban and Sadowsky, 1978.)

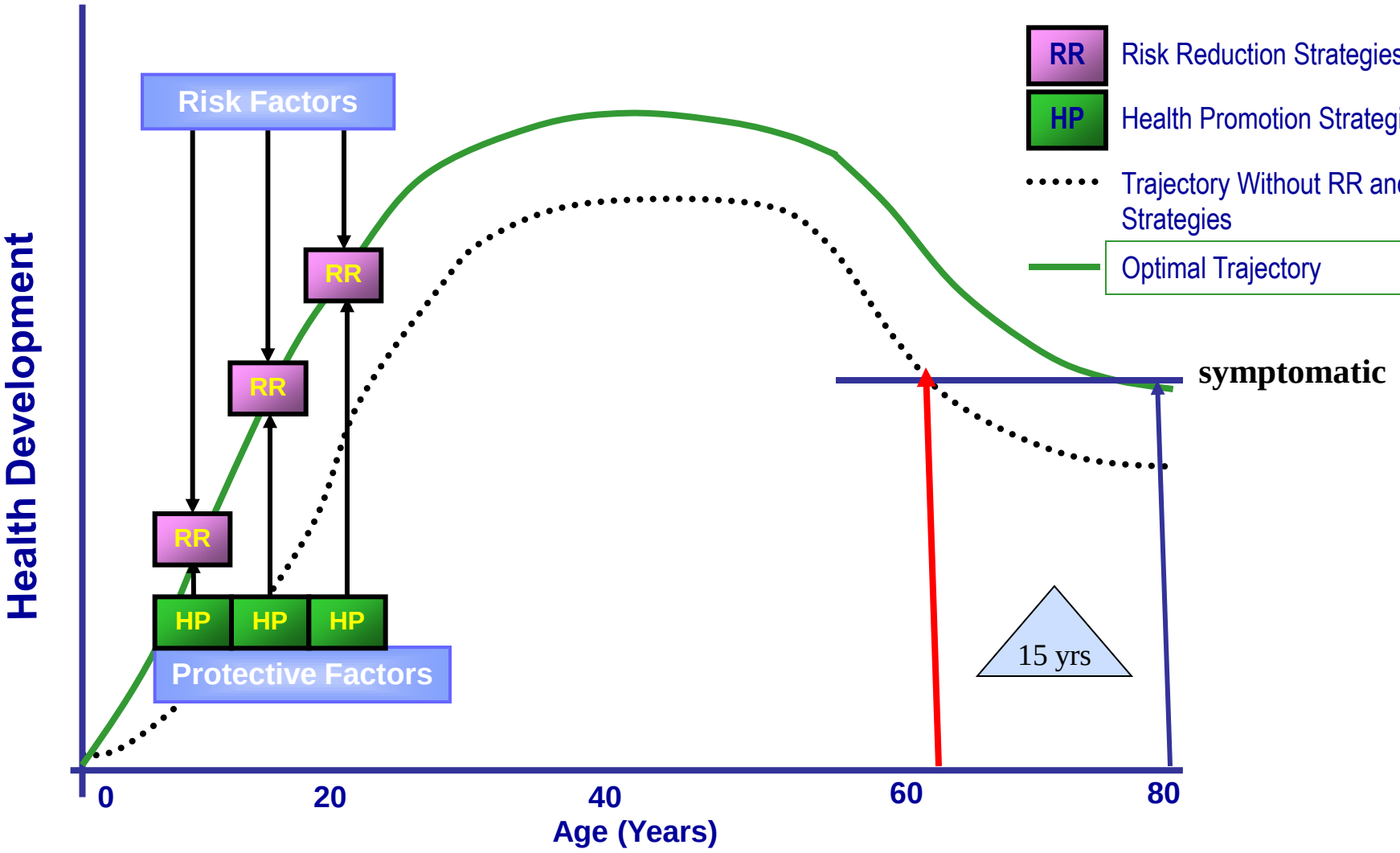


Red- prefrntontal ctx

Green –visual ctx

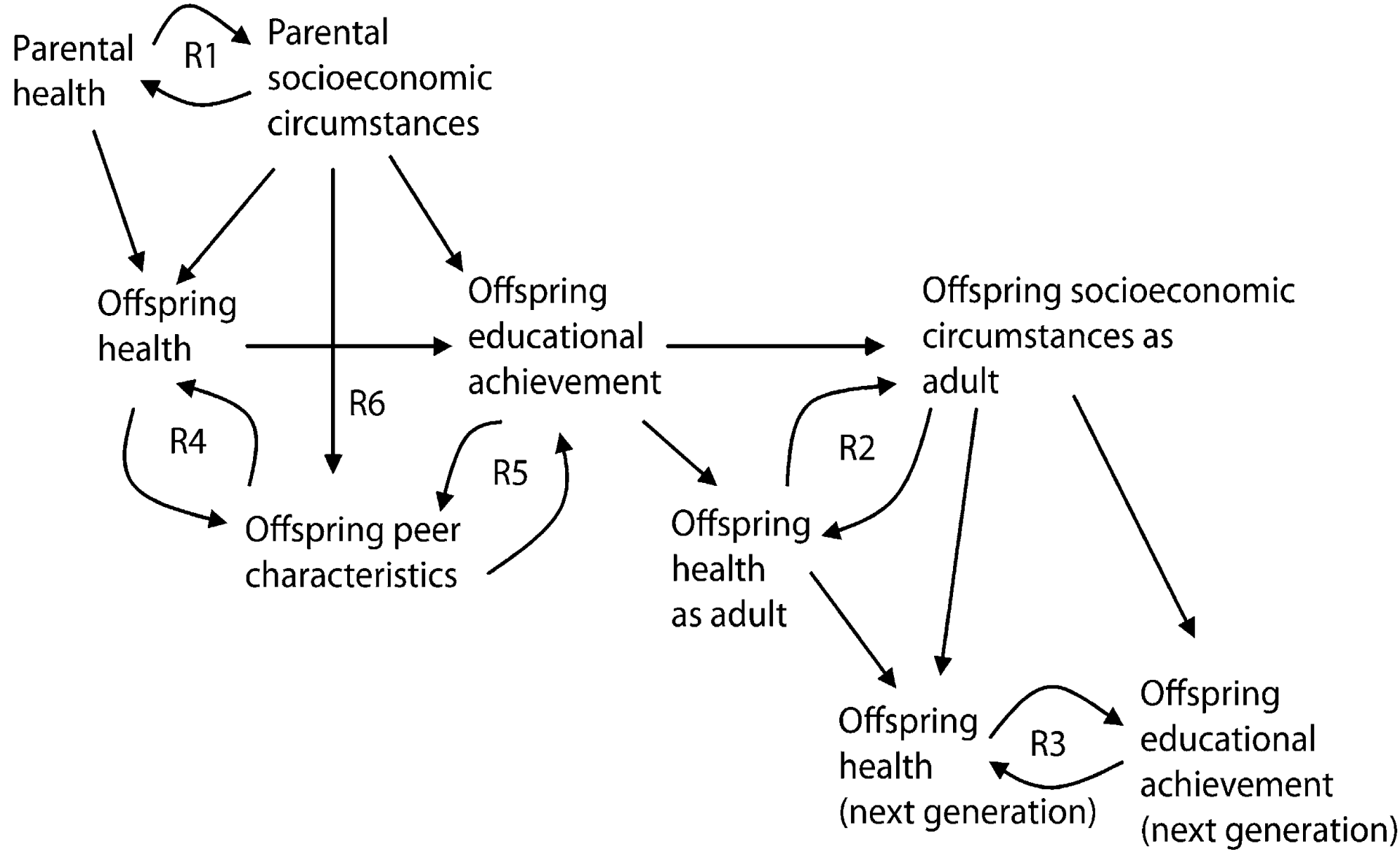
from Paus, *Nature Reviews*, 2008, vol.9

How Risk Reduction and Health Promotion Strategies influence Health Development



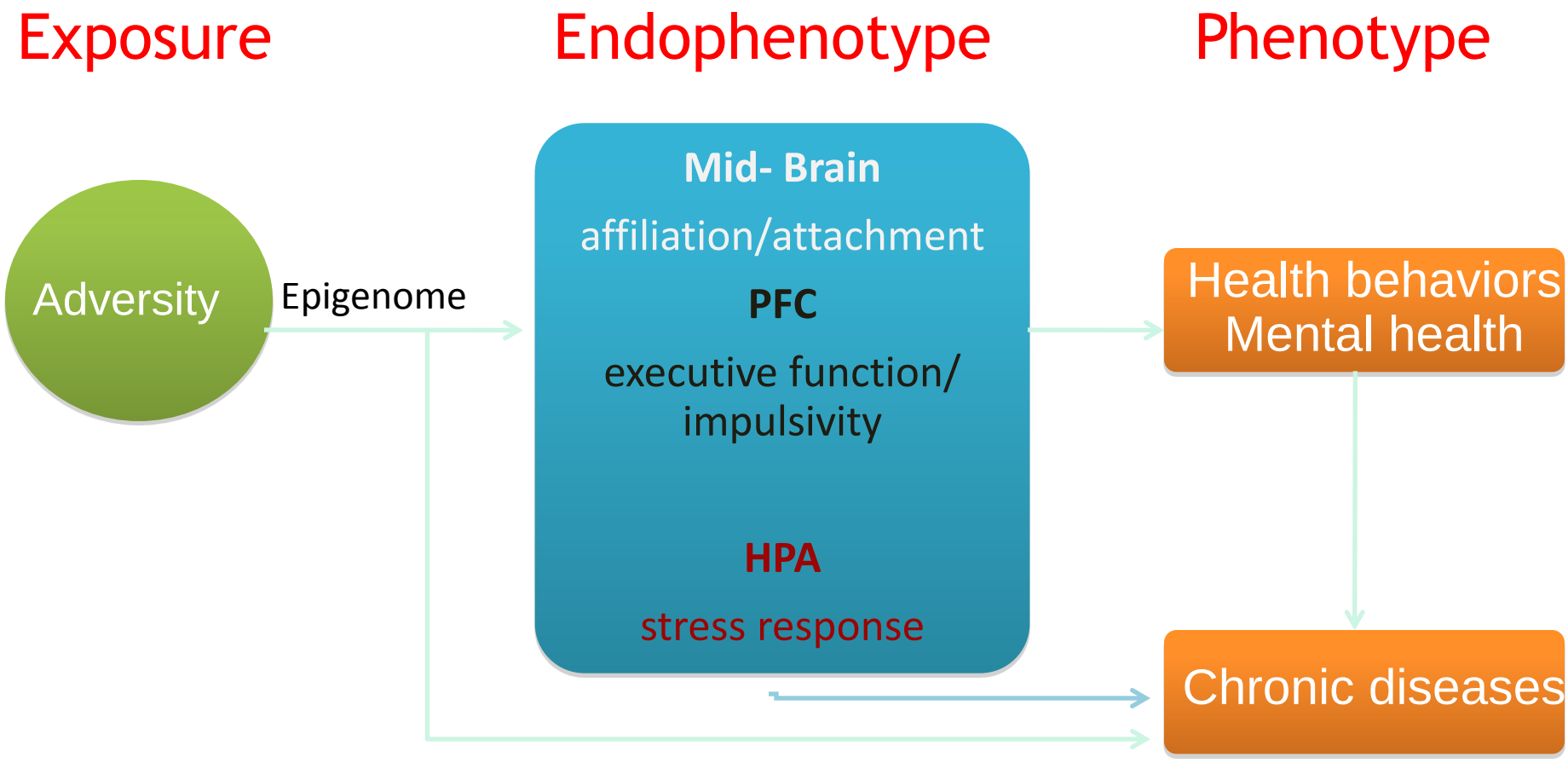
Health Development

Complex Emergent Process



Dynamic relations between health and socioeconomic circumstances over the life course and across generations. From Diez Roux AJPH, 2011

Hypothetical Patterns of Influence

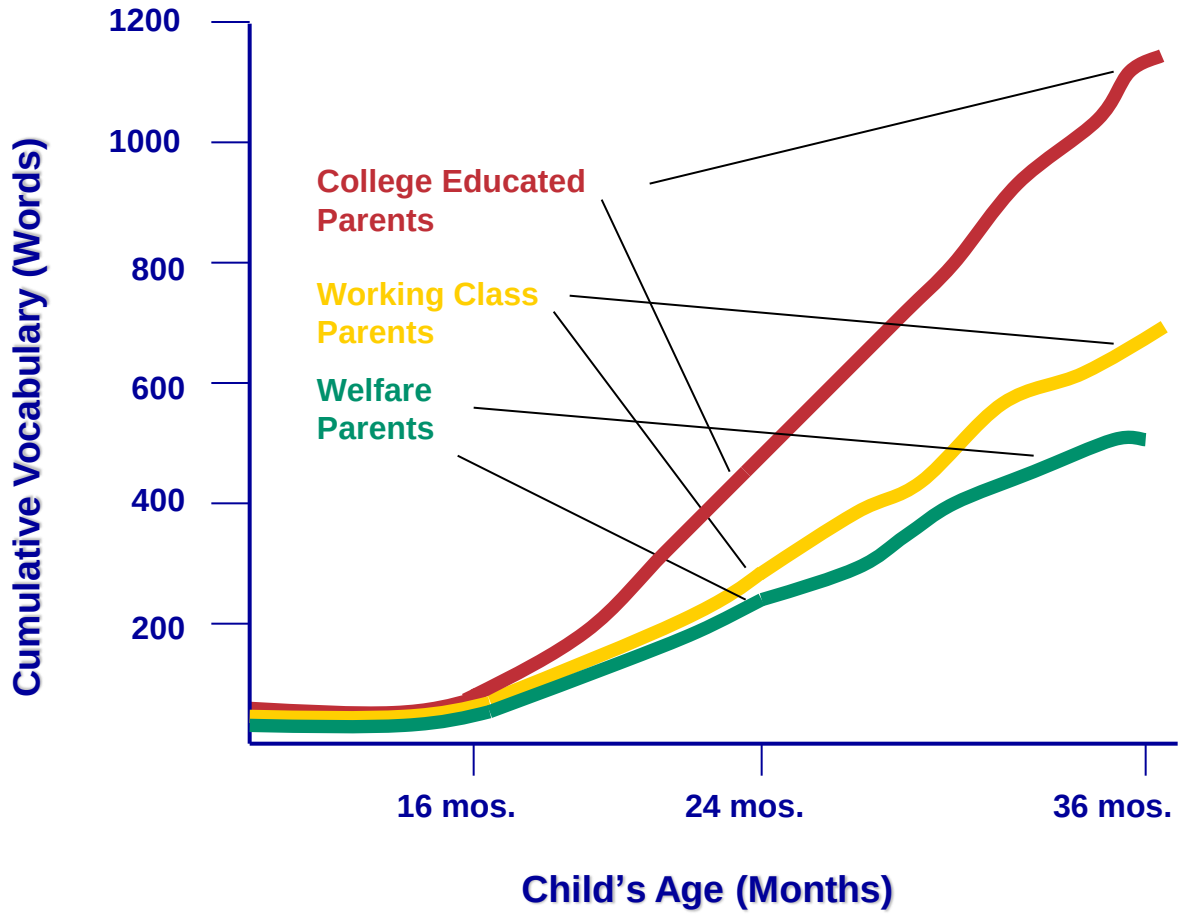


From Hertzman

Differences in Health Development Start Early

Language and Literacy are key markers of Healthy Brain Development across nations

Pathways to Educational Achievement Emerge at a Very Young Age

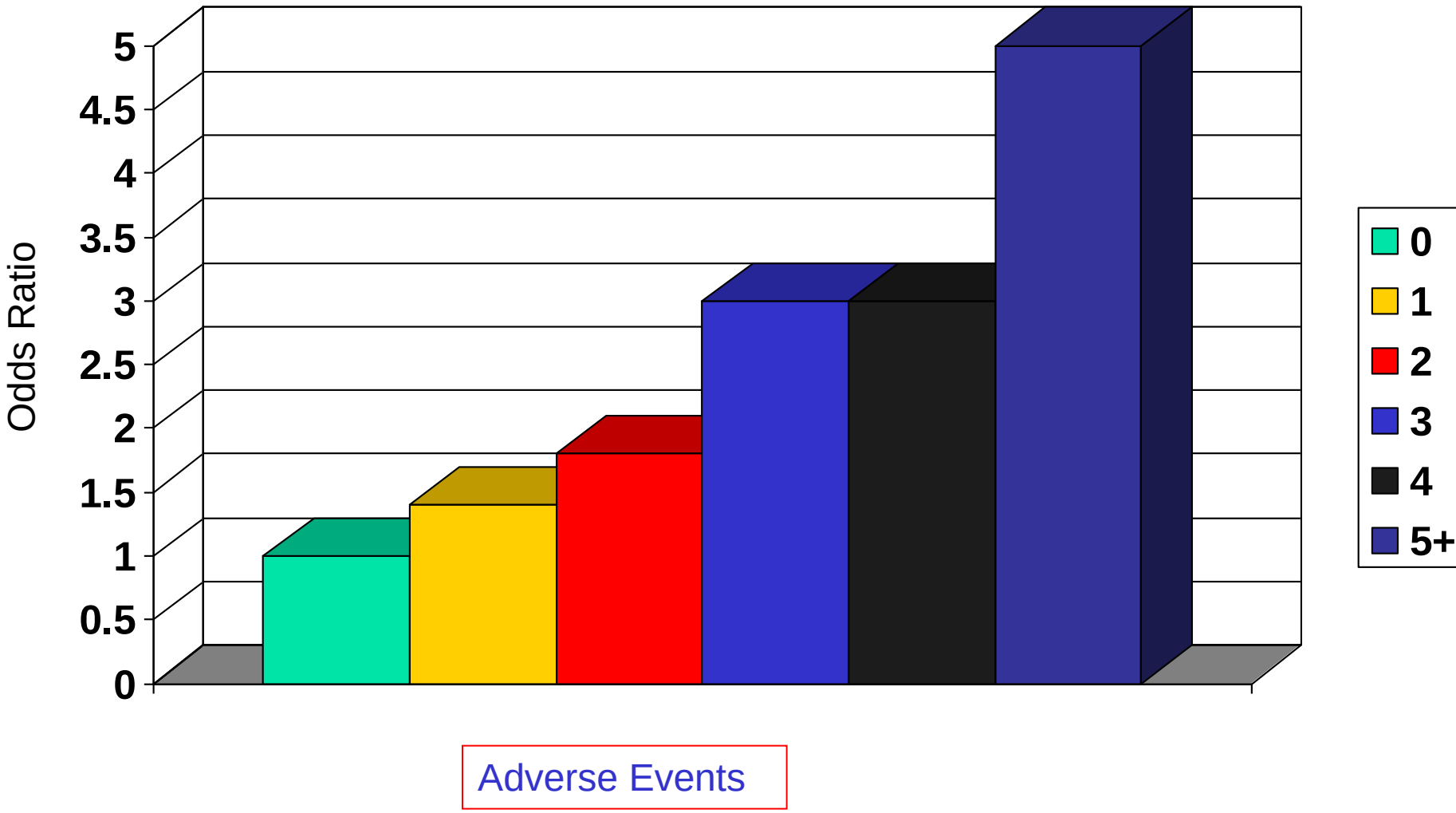


Source: Hart & Risley (1995)

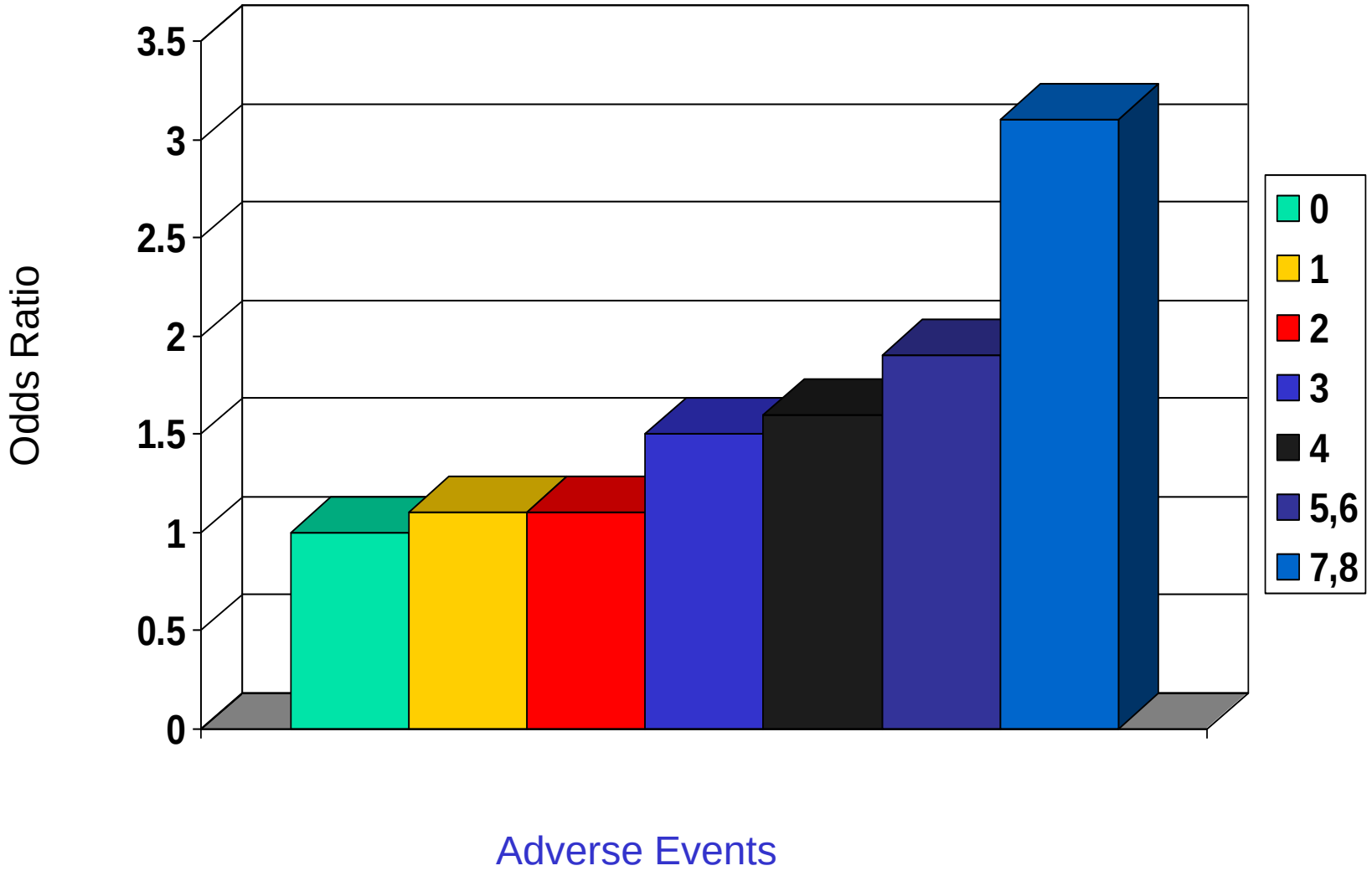
Adversity in Childhood

Long lasting impacts

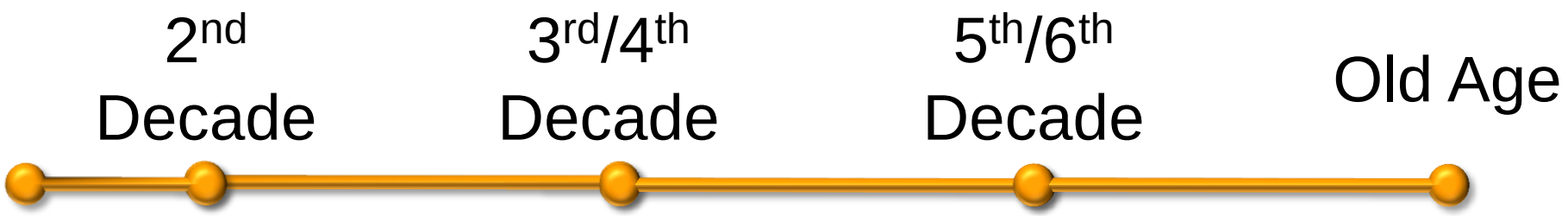
Adverse childhood events and adult depression



Adverse childhood events and adult ischemic heart disease



Life Course Health Development Problems Related to Early Life



- School Failure
- Teen Pregnancy
- Criminality

- **Obesity**
- **Elevated Blood Pressure**
- **Depression**

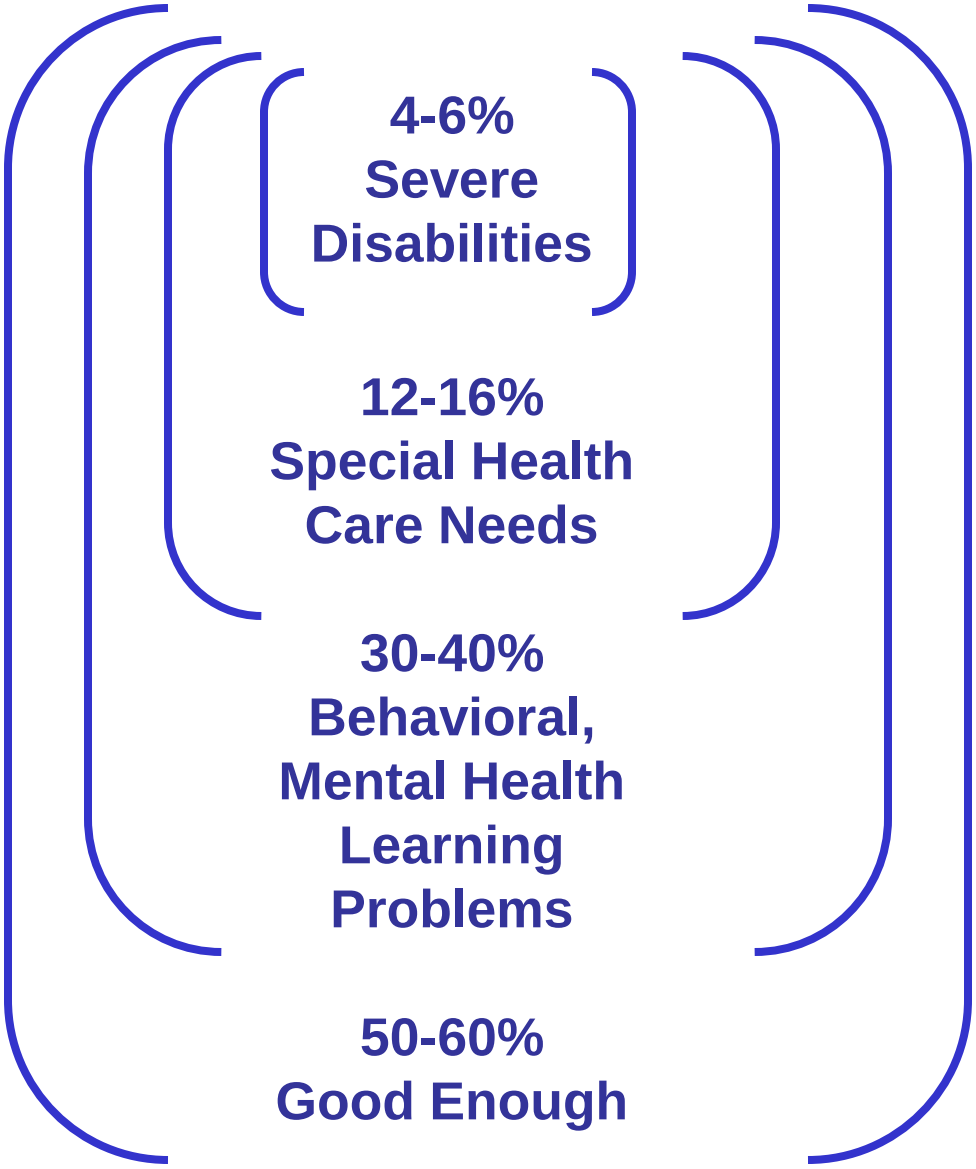
- **Coronary Heart Disease**
- **Diabetes**
- **Renal Disease?**
- **COPD?**
- **Arthritis ?**

- **Premature Aging**
- **Memory Loss**

From Hertzman

How are the Children?

Young Children at Risk



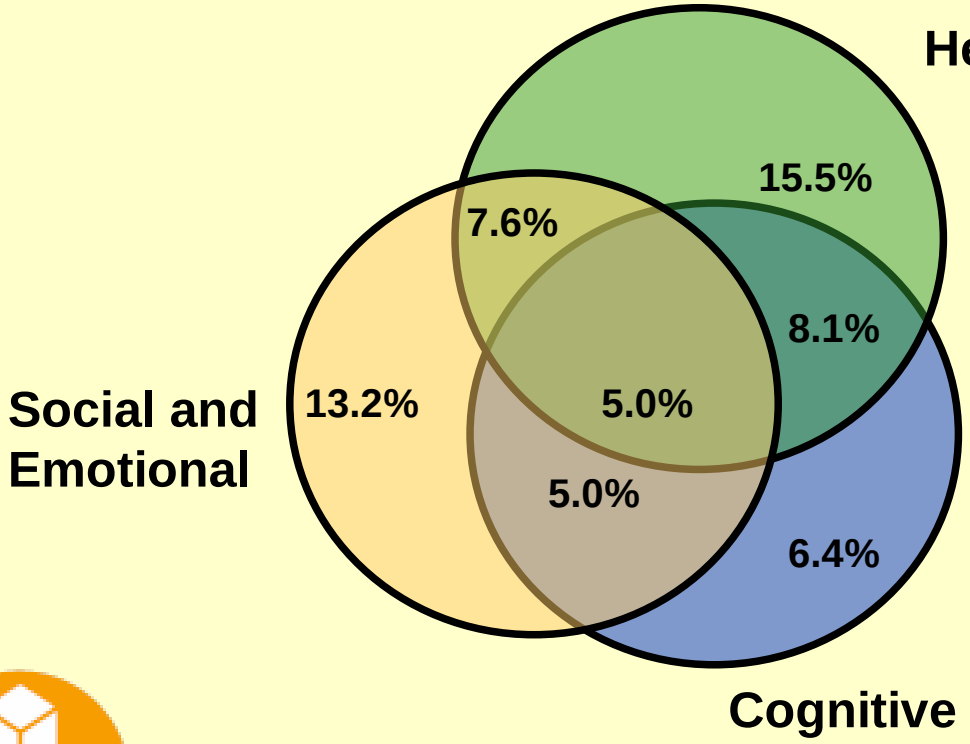
What % are thriving ?

30% ?

40% ?

50% ?

ECLS-K Data and Percent of Children Lagging on One or More Dimensions: Interconnectnessness of Dimensions



While 24.1% of children lag in cognitive development, only 6.4% lag only in cognitive development!

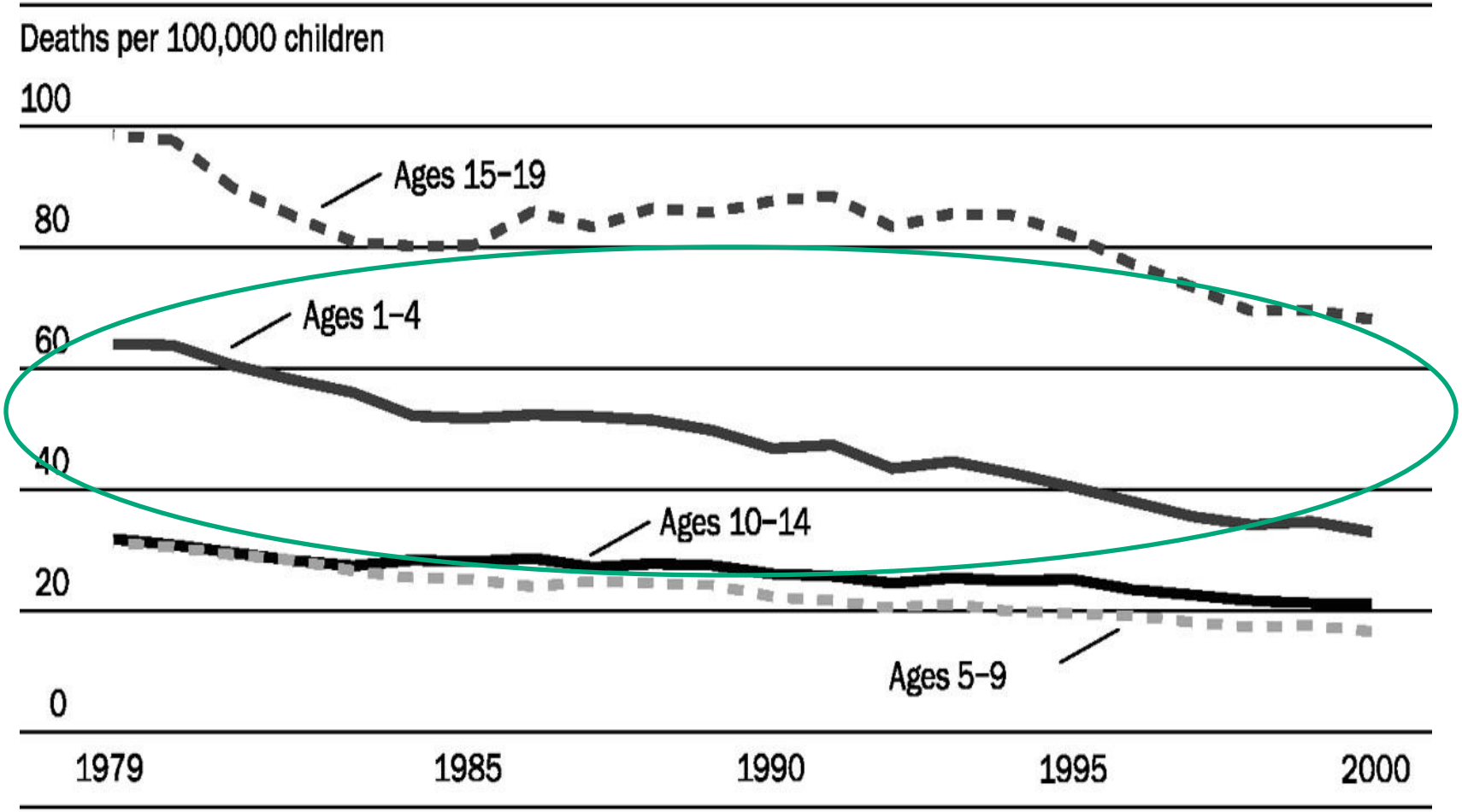
Source: Child Trends analysis of ECLS-K, base year public-use data for 1998-1999

Trends in Child Health & Health Service Delivery

- Mortality Rates Continue to Decrease
- Morbidity has decreased for some Medical Conditions
- Disparities in Health Outcomes have increased
- Emergence of New Morbidities and Concerns
- Patterns of Exposure and Risk have changed

EXHIBIT 7

U.S. Mortality Rates In Children, By Age Group, 1979–2000

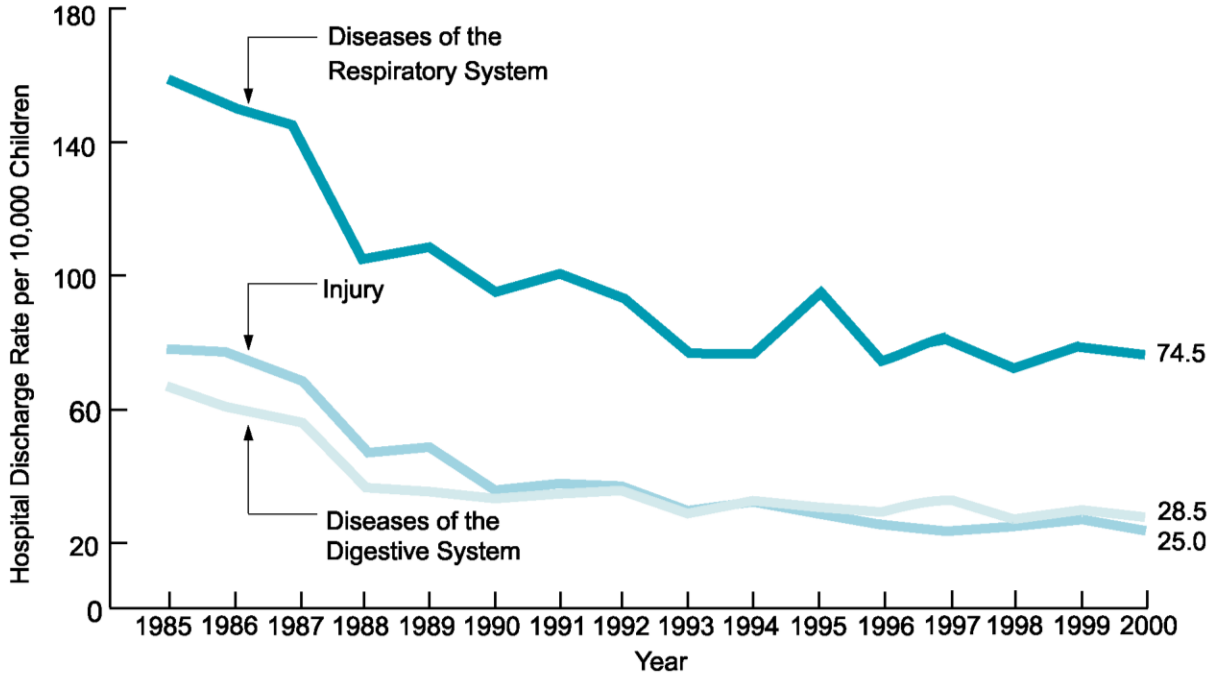


SOURCE: National Center for Health Statistics, National Vital Statistics System, www.cdc.gov/nchs/nvss.htm.

Source: Wise PH. "The transformation of child health in the United States." *Health Affairs.* 23, No. 5 (2004): 9-25.

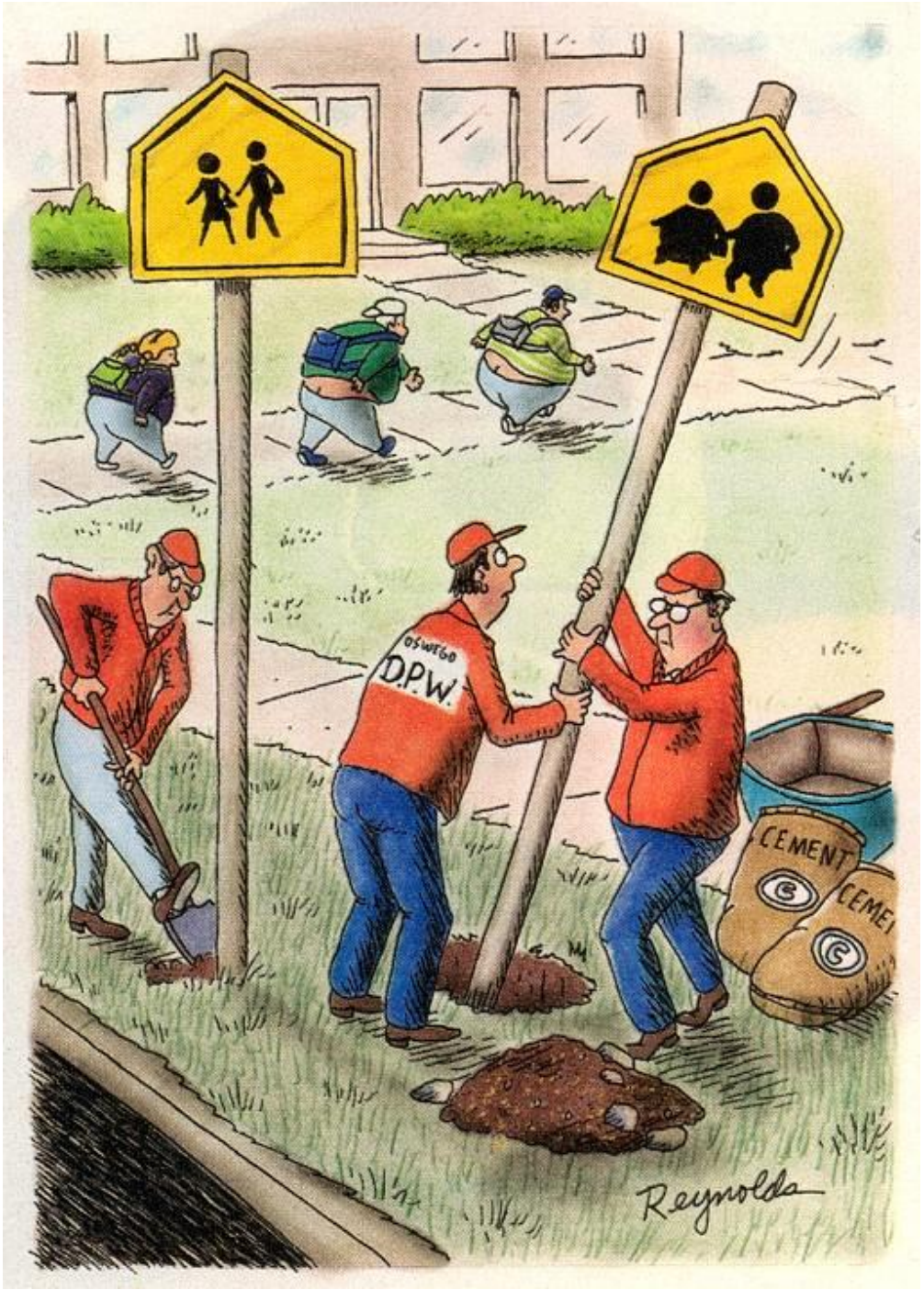
DISCHARGE RATE OF PATIENTS 1-14 YEARS OLD FOR SELECTED DIAGNOSES: 1985-2000

Source (II.9): National Center for Health Statistics



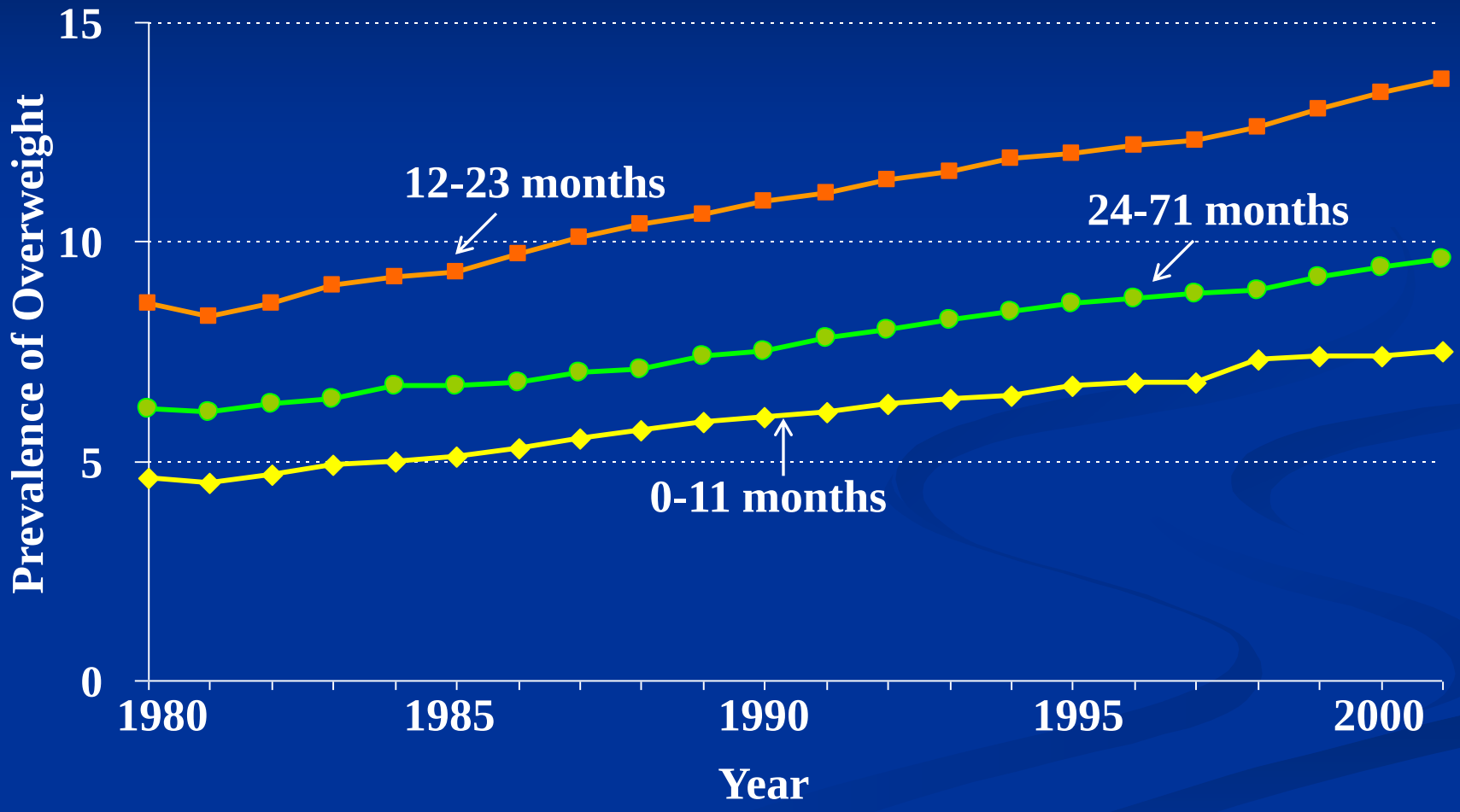
Changing Pattern of Childhood Morbidity

- Increase in chronic health problems (10-14%)
- Greater recognition of mental health problems (15-20%)
- Greater appreciation of role and impact of developmental health problems – learning, language (10-17%)


OSWEGO
D.P.W.
CEMENT
Reynolds

…in Younger Children Too

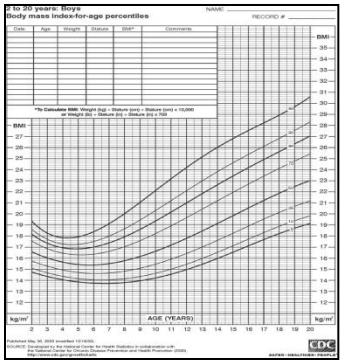
Including Infants



Kim et al., Obesity 2006; ~500,000 well child visits in Mass. HMO

The Embryonic-Fetal Supply Line

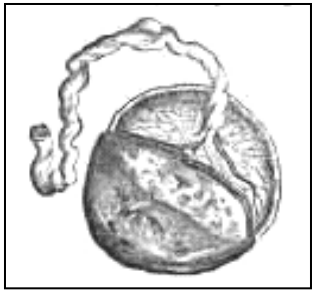
"Fetal nutrition"



Mom's own intrauterine and childhood experiences

Mom's peri-conceptional health

Diet during pregnancy (+ other behaviors)



Utero-placental blood flow, placental function

Fetal metabolism

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The Trans-generational Roots of Obesity & Other Chronic Disease

100 Years of Nutritional Flow

Grandmother	Mother	Placenta	Fetus	Infant/Child
Made grandchild's egg Donated genes	Released egg Provided nutrients Influenced placenta Delivered baby Fed baby Stimulated baby Fed child	Transported nutrients Produced hormones Exported wastes	Made placenta Took nutrients Made organs Grew body	Ate food Grew

Father
Donated Genes

Vulnerability to chronic disease, cancer and infections

1000 Days of Development

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David Barker

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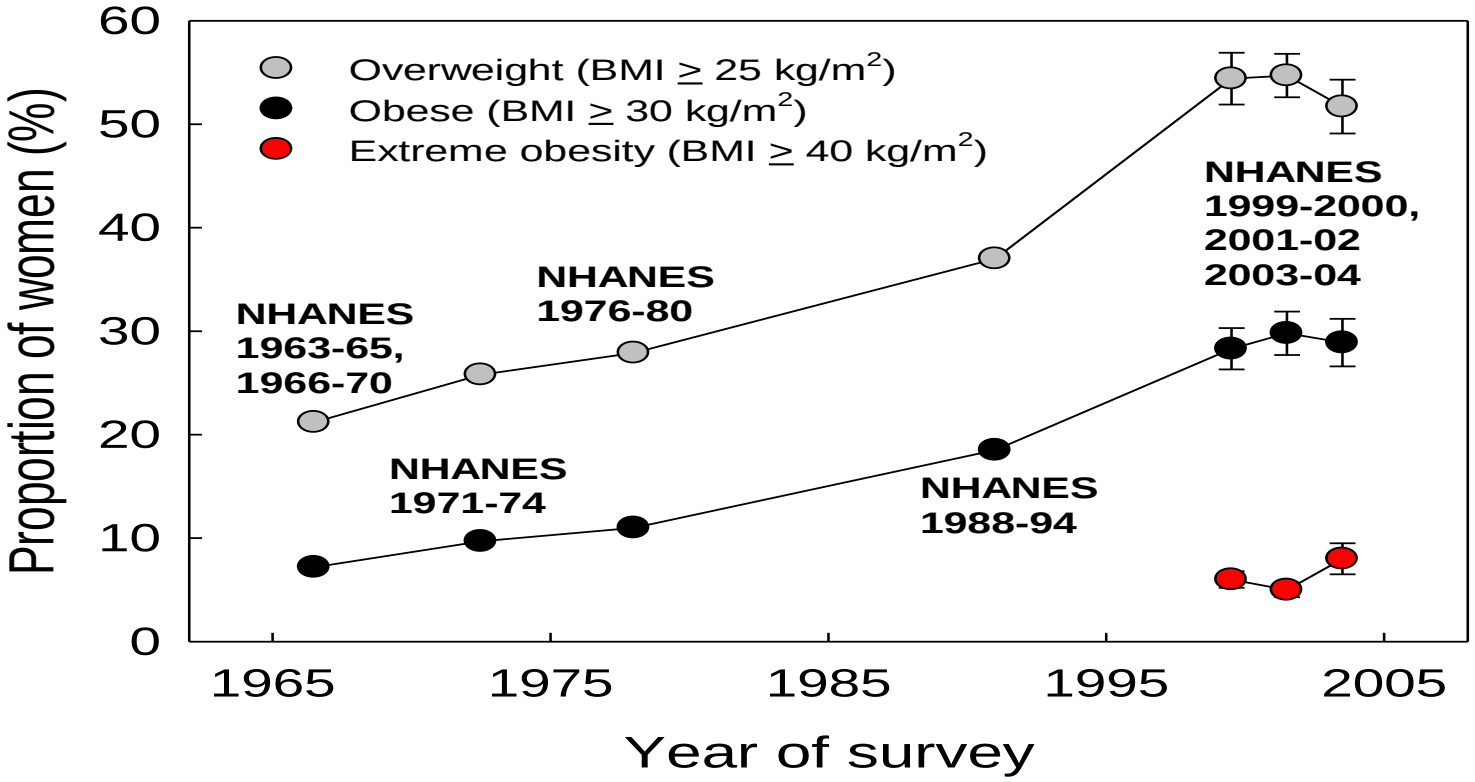
Increasing overweight & obesity among U.S women of childbearing age; 1965-2005

Prevalence of overweight, obesity and extreme obesity among women 20-39* y old: US, 1963-2004



From: *Health, United States, 2005* and Ogden CL, *et al.* *JAMA* 2006;**295**:1549.
*Ages 20-35 through NHANES 1988-94

Maternal Weight Gain

- More U.S. women are entering pregnancy overweight or obese
- Increasing proportion of U.S. women are gaining too much weight during pregnancy
- The more weight women gain during pregnancy, the more weight they retain in the postpartum
- Excess pre-pregnancy and prenatal weight gain is associated with child obesity

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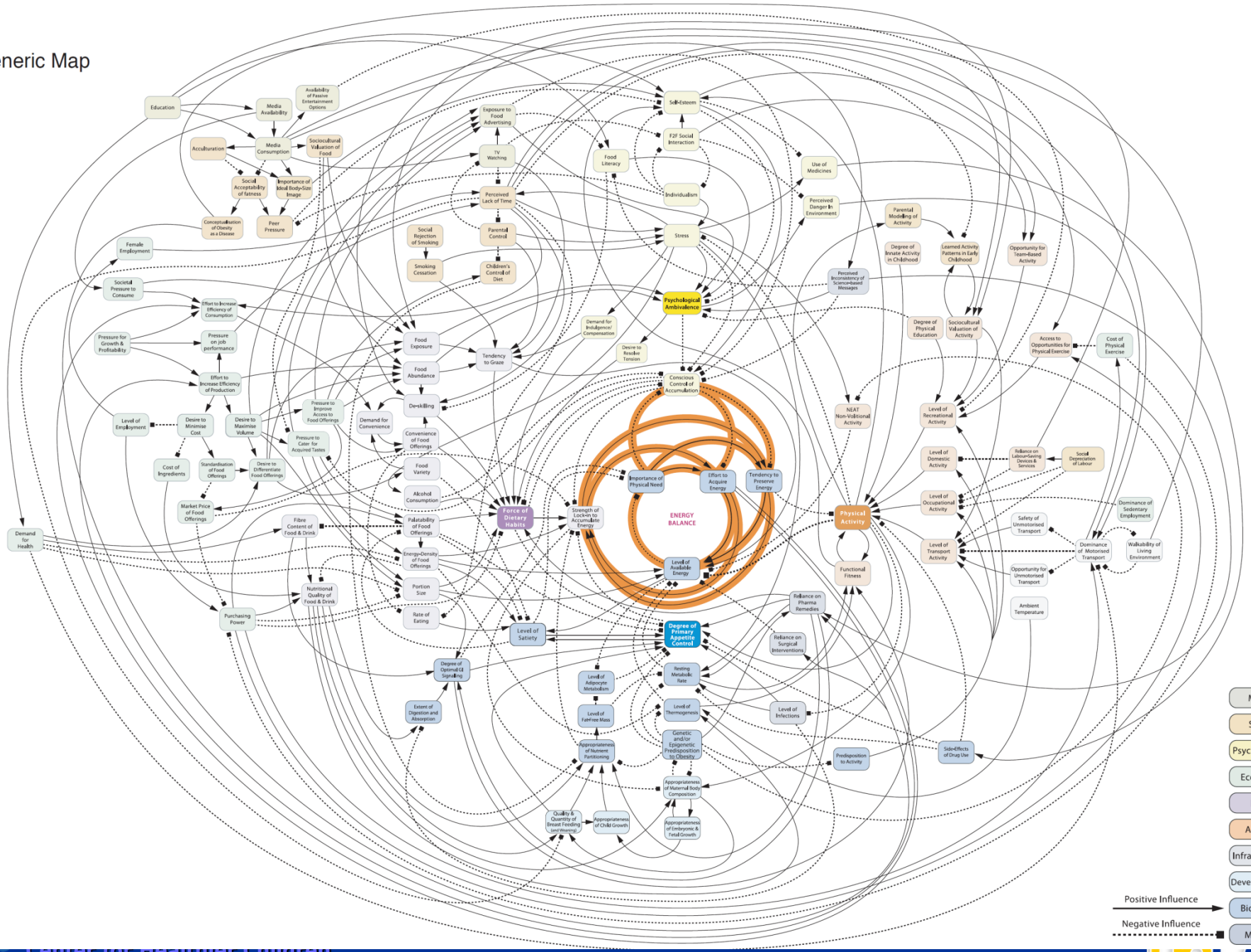
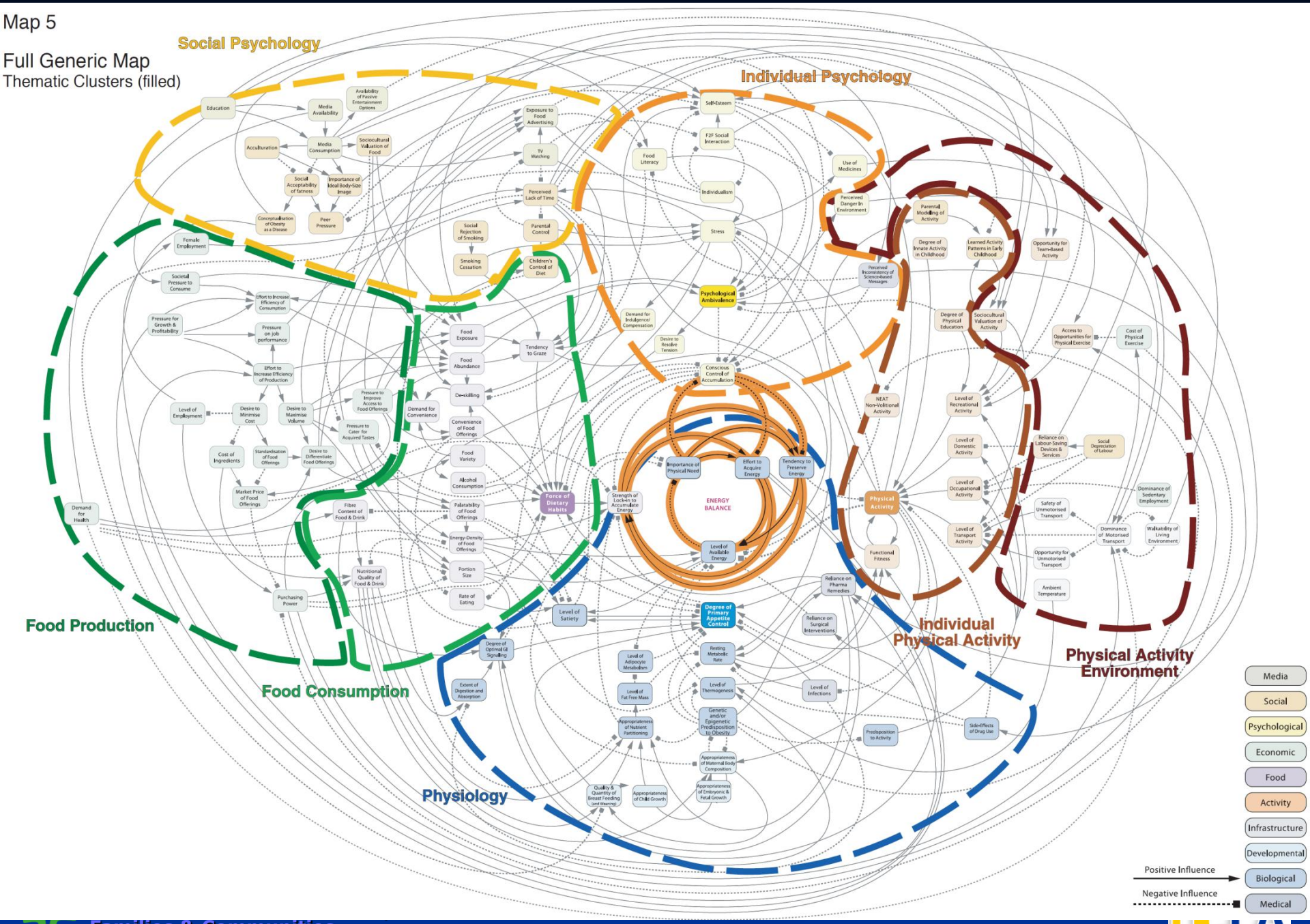
Map 0

Full Generic Map



Vandenbroeck P, Goossens J, Clemens M. Obesity System Atlas. Foresight Tackling Obesities: Future Choices Project. UK: Government Office for Science; 2007.



Vandenbroeck P, Goossens J, Clemens M. Obesity System Atlas. Foresight Tackling Obesities: Future Choices Project. UK: Government Office for Science; 2007.

LCHD & Obesity

- Obesity is a “wicked problem”
- Complex, Multi-factorial, Multi-level, Multi-generational
- Linked to deep changes in society, culture, and human development
- Requires a “Complex Systems” approach
- Change in Complex Systems
  - Fixit strategies not likely to work
  - Incremental improvements – too little to make a difference
  - Transitional strategies
  - Transformational

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LCHD & Obesity

- Approach to preventive interventions
  - Developmentally focused, systems-based
  - Intergenerational
  - Curve Shifting strategies along with Individual focused interventions
  - Modify trajectories
  - Multiple factors (in utero and external) lifestyle factors, addresses issues of health disparities
- Interdisciplinary & Transdisciplinary approaches
  - Epigenetics, economics, policy
- Responsive to complexity of causes, drivers, and adaptations
  - Transitional and Transformative strategies

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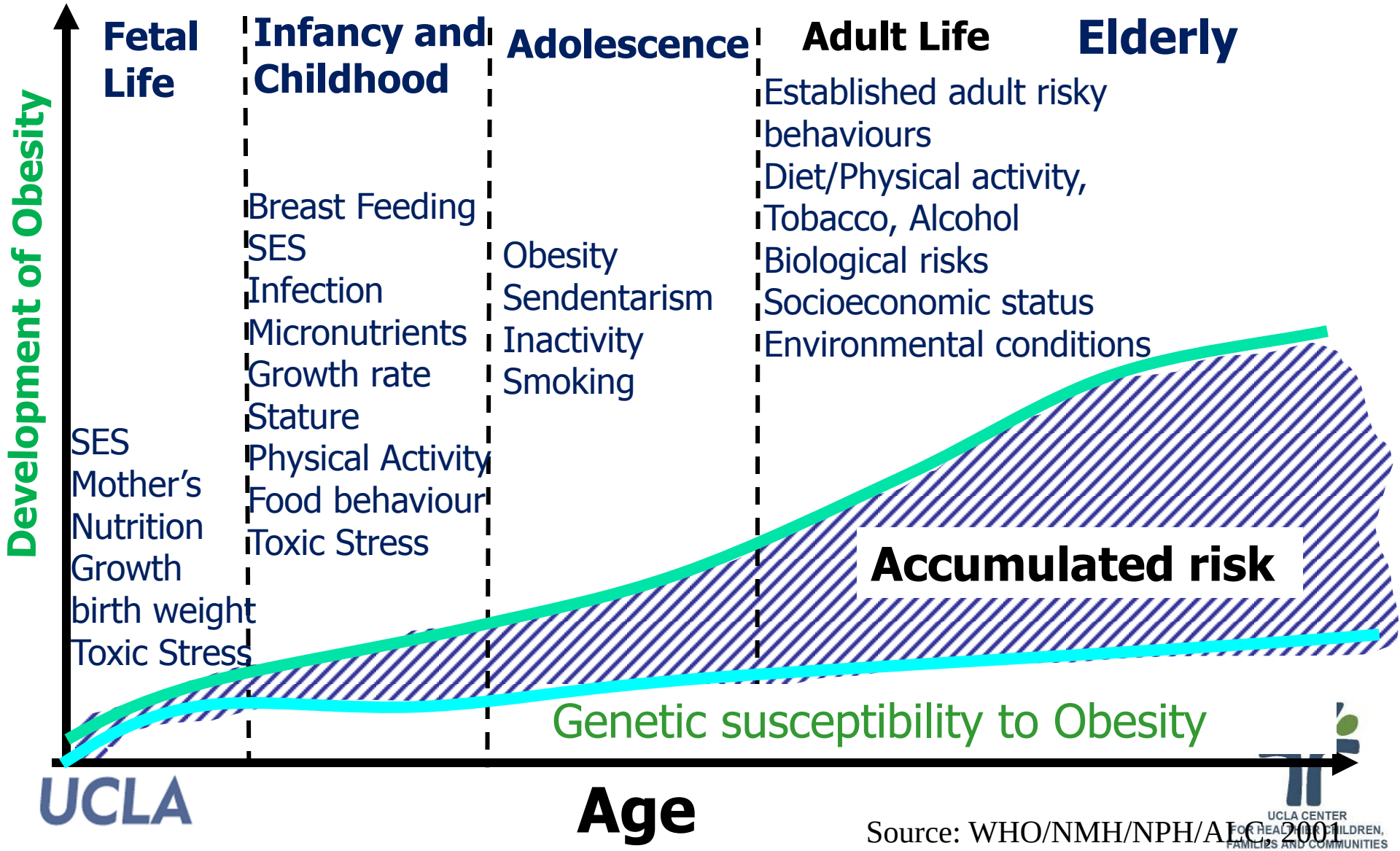
Obesity prevention : a Life Course Approach (to optimize healthy weight)

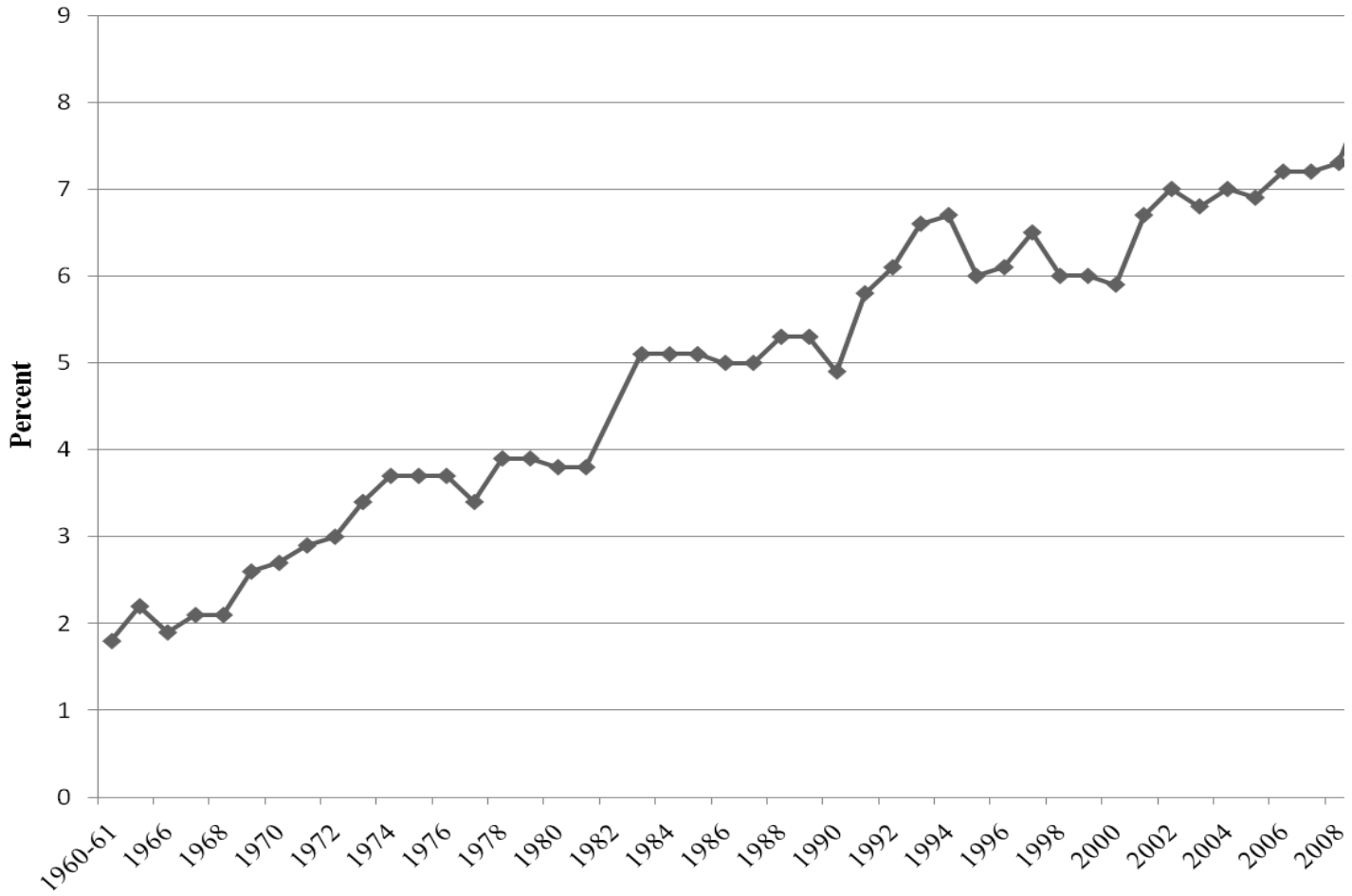


Source: WHO/NMH/NPH/ALC, 2001

Mental Health

The New Obesity

Trends in Limitation of Activity due to Chronic Conditions for U.S. Children 1960-2009



From Halfon et al 2012, Future of Children

Leading Causes of Limitation in Usual Activities Due to Chronic Conditions, U.S. Children

1979–81[a]	**1992–94**[b]	**2008–2009**[c]
1. Diseases of the respiratory system	1. Diseases of the respiratory system	1. Speech problems
2. Impairment of speech, special sense, and intelligence	2. Impairment of speech, special sense, and intelligence	2. Learning Disability
3. Mental, nervous system disorders	3. Mental, nervous system disorders	3. ADHD
4. Diseases of the eye and ear	4. Certain symptoms, ill-defined conditions	4. Other emotional, mental, behavioral problems
5. Specified deformity of limbs, trunk and back	5. Deafness and impairment of hearing	5. Other developmental problems
6. Nonparalyticorthopedic impairment	6. Nonparalyticorthopedic impairment	6. Asthma/breathing problems

[a] Newacheck, P. W., Halfon, N. & Budetti, P. P. (1986). Prevalence of activity limiting chronic conditions among children based on household interviews. *J Chronic Dis*, 39(2), 63-71. [b] Newacheck, P. W. & Halfon, N. (1998). Prevalence and impact of disabling chronic conditions in childhood. *Am J Public Health*, 88(4),610-617. [c] Authors' tabulations of data from the 2008–09 National Health Interview Survey.
Note: The age range is under 17 for the 1979-81 data but under 18 for 1992-94 and 2008-09. Includes main and secondary causes of activity limitations.

From Halfon et al 2012, Future of Children

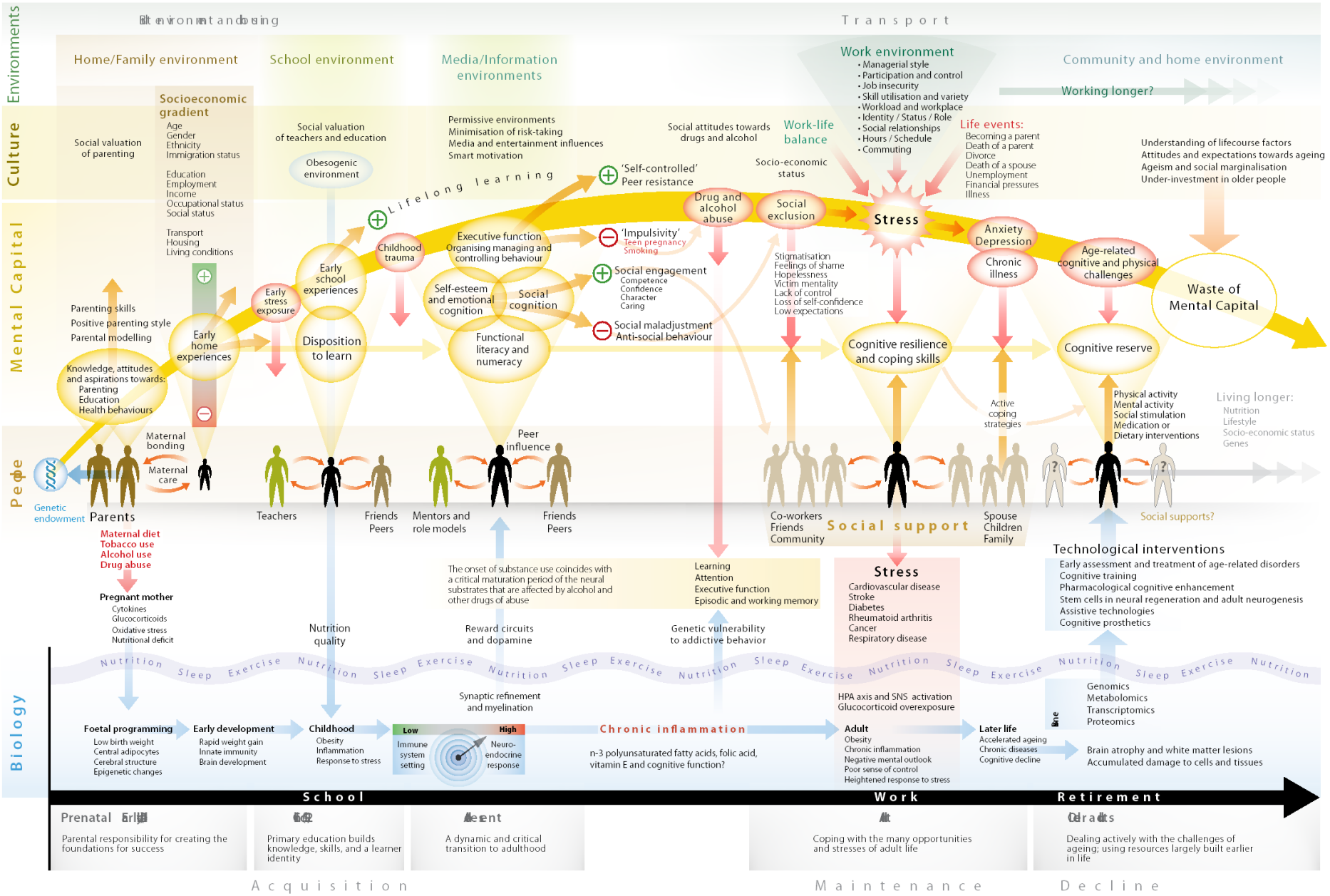
Mental Health of Children, Adolescents & Adults

- Prevalence of mental health disorders is increasing rapidly, not unlike obesity
- More than 20% of adolescents have mental or behavioral disorders
- Many of these disorders begin earlier in life and go unrecognized or unaddressed due to lack of services, stigmatization, ignorance
- Most children do not get the appropriate treatment (20/20 problems)

Mental health of young children

- Child and Adolescent mental and behavioral disorders have complex developmental origins
- A combination of genes, temperament, exposures and experience within the family and other setting contribute
- Stress and especially toxic stress has a significant influence during the early years
  - Maternal depression, anxiety, drug use
  - 40% of young kids in single parent families
  - 47 % living in low income households
  - Too much violent and disturbing media
  - Many not in ECE or quality inadequate
  - Constantly texting, ever distracted parenting

Appendix B: Synthetic view of the mental capital trajectory and factors that may act upon it



LCHD & Mental Health

- Mental Disorders are “wicked problems”
- Complex, Multi-factorial, Multi-level, Multi-generational
- Linked to deep changes in society, culture, and human development
- Requires a “Complex Systems” approach

How well is the 2.0 Child Health System Performing?

The existing Child Health System

- Fragmented service delivery
  - Different sectors, (health, education, welfare) funding streams, cultures
  - Lack of co-ordination - operate in silos
- Difficulty accessing services
  - Demand greater than services available
  - Narrow programmatic criteria for eligibility
  - Socio-economic factors limit access - social gradient in treatment and outcomes

The existing Child Health System

- Uneven quality
  - Families have complex needs, often beyond capability of any single service
  - Variable understanding of early years issues
- Model of care is outmoded
  - focus on treatment rather than prevention/early intervention
  - episodic contact
- Limited local community responsibility
  - Hard to take Whole Child, Whole Family, Whole Community approach

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

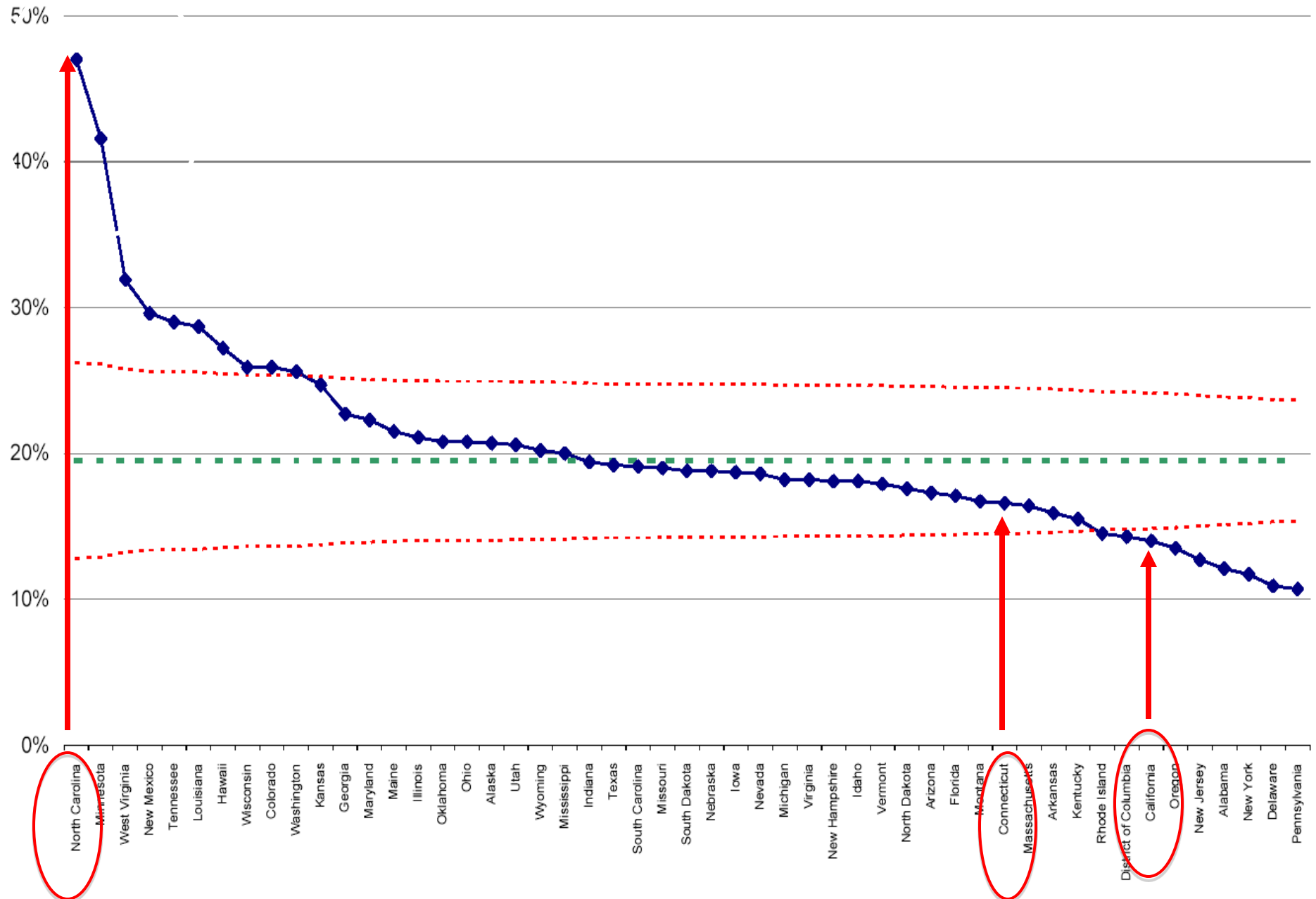
The Quality of Ambulatory Care Delivered to Children in the United States

Rita Mangione-Smith, M.D., M.P.H., Alison H. DeCristofaro, M.P.H., Claude M. Setodji, Ph.D., Joan Keesey, B.A., David J. Klein, M.S., John L. Adams, Ph.D., Mark A. Schuster, M.D., Ph.D., and Elizabeth A. McGlynn, Ph.D.

Table 3. Adherence to Quality Indicators, Overall and According to Type and Function of Care.

Variable	No. of Indicators	No. of Eligible Children	Total No. of Times Indicator Eligibility Was Met	Weighted Adherence Rate (95% CI)
				percent
Overall care	175	1536	11,886	46.5 (44.5–48.4)
Type of care				
Preventive	57	1528	8,809	40.7 (38.1–43.4)
For acute condition	77	862	2,077	67.6 (63.9–71.3)
For chronic condition	41	394	1,000	53.4 (50.0–56.8)
Function				
Screening	55	1514	6,419	37.8 (34.6–41.0)
Diagnosis	32	378	1,018	47.2 (43.3–51.1)
Treatment	64	1056	2,981	65.9 (62.4–69.4)
Follow-up	24	754	1,468	44.7 (40.9–48.5)

Developmental Screening (2007 NSCH)



Transforming Early Childhood Community Systems

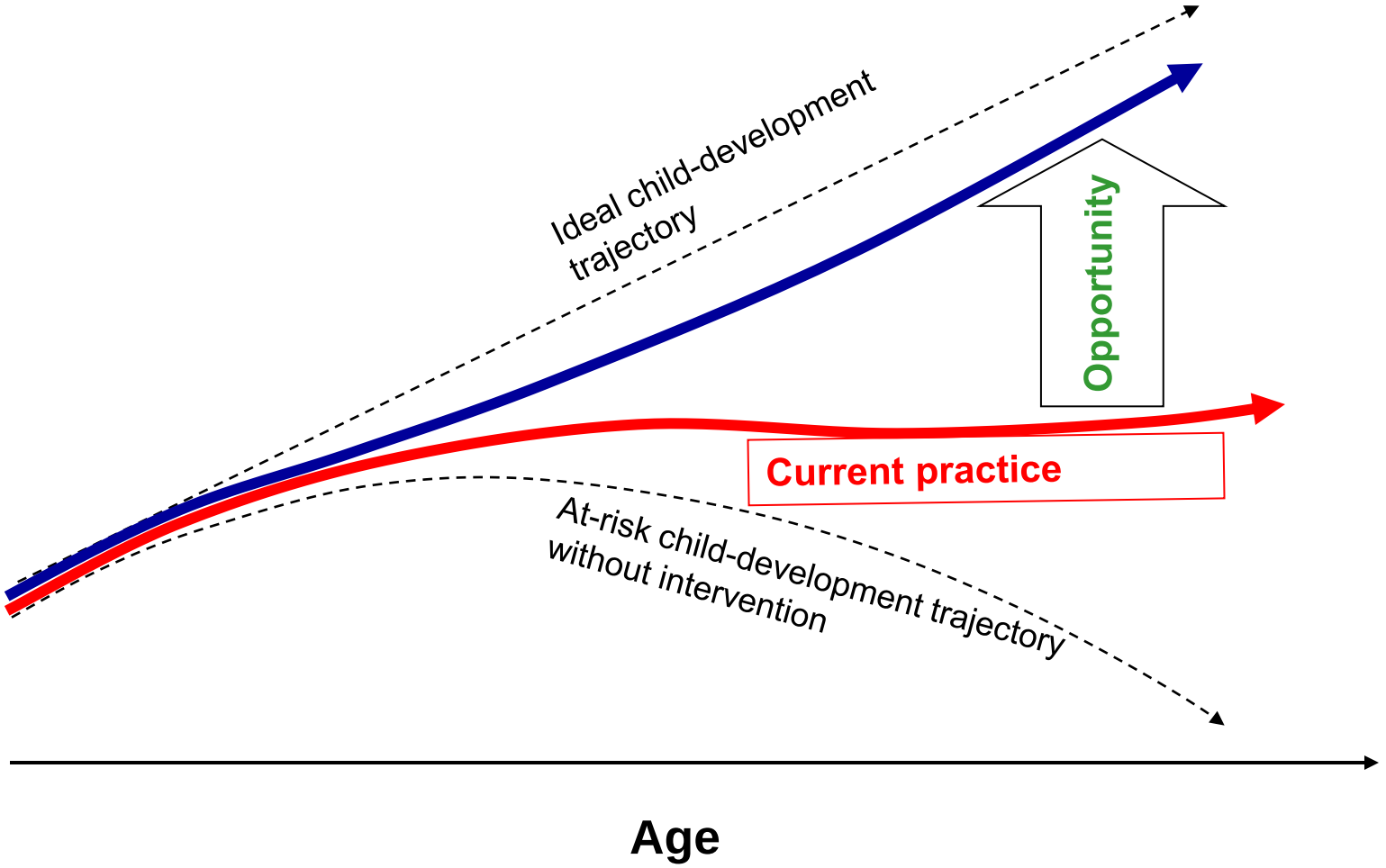
THE SCIENCE FOR A BETTER START

Every system is perfectly designed to achieve exactly the results it gets

Therefore: New levels of performance can only be achieved by re-design of existing systems

Optimizing Health Development

Addressing the factors shaping health development trajectories over the lifespan



How do we get the health system that children need?

Incremental vs. Transformational Reforms

The Historical Momentum for Change

3 Eras of Health Care

Major Paradigm Shifts in how we define, conceive, and approach the production of health

The Evolving Health Care System

The First Era (Yesterday)

- Focused on acute and infectious disease
- **Germ Theory**
- Short time frames
- Medical Care
- Insurance-based financing
- Industrial Model
- **Reducing Deaths**

Health System 1.0

The Second Era (Today)

- Increasing focus on chronic disease
- **Multiple Risk Factors**
- Longer time frames
- Chronic Disease Mgmt & Prevention
- Pre-paid benefits
- Corporate Model
- **Prolonging Disability free Life**

Health System 2.0

The Third Era (Tomorrow)

- Increasing focus on achieving optimal health
- **Complex Systems - Life Course Pathways**
- Lifespan/ generational
- Investing in population-based prevention
- Network Model
- **Producing Optimal Health for All**

Health System 3.0

Transforming the Child Health System: New Paradigm vs. Old System

- Child health system was designed for the first era of health care (acute, infectious disease model)
- It was upgraded a bit for the 2nd era, with more regionalization, chronic disease care
- Ill equipped for this new era
- Under-performing
- Facing many new challenges

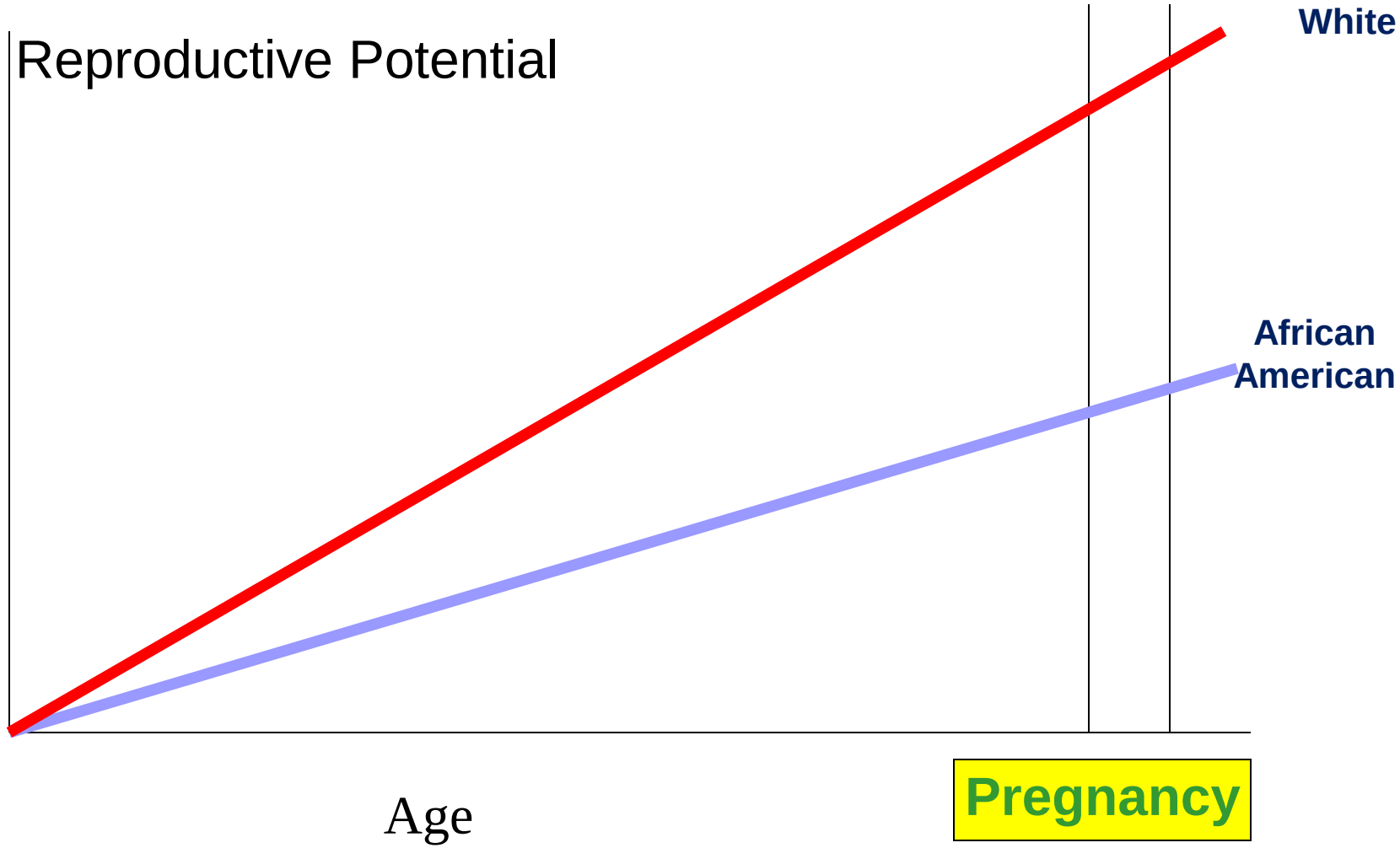
Child Health System Transformation Framework

Components	Current System	Transformed System	Change Strategies
Logic			
Organization of Health Producing Sectors			
Organization & Delivery of Individual Care			
Medical Education & Workforce			
Market			
Funding			
Regulation & Governance			
Performance Monitoring			

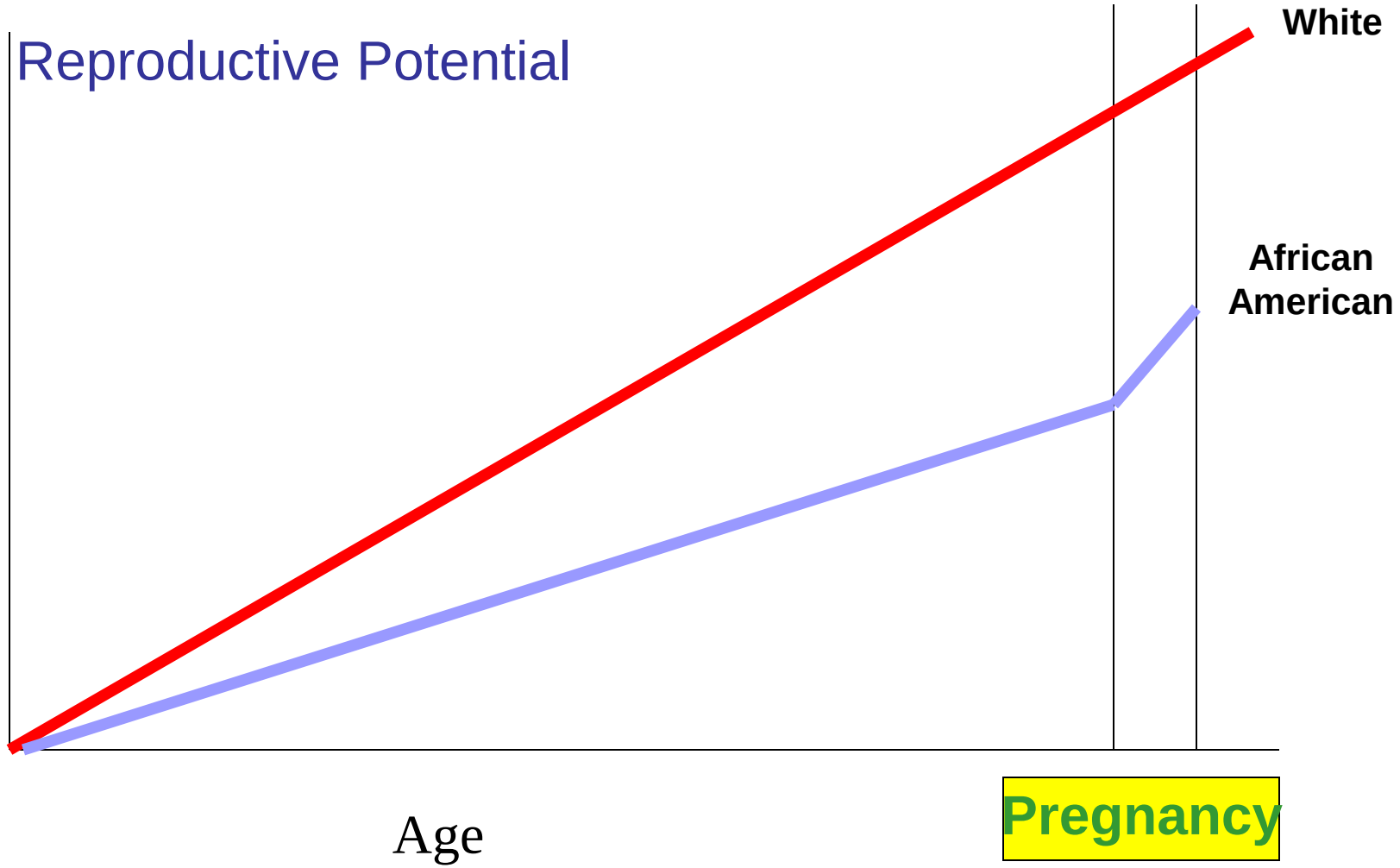
Framework for Change in Operating Logic

	Old Operating Logic	New Operating Logic
Definition of Health	Absence of disease & disability	Health is a positive concept emphasizing social and personal resources, as well as physical capacities (Ottawa, 1986)
Goals of Health System	Health maintenance & prolonging life of individual	Optimizing population health
Client Model	Individual	Individual, community & population
Model of Health Production / Disease Causation	Biomedical	Biopsychosocial
Intervention Approach	Diagnosis & treatment	Emphasize disease prevention, health promotion and optimization of function as core components
Time Frame	Episodic	Lifespan

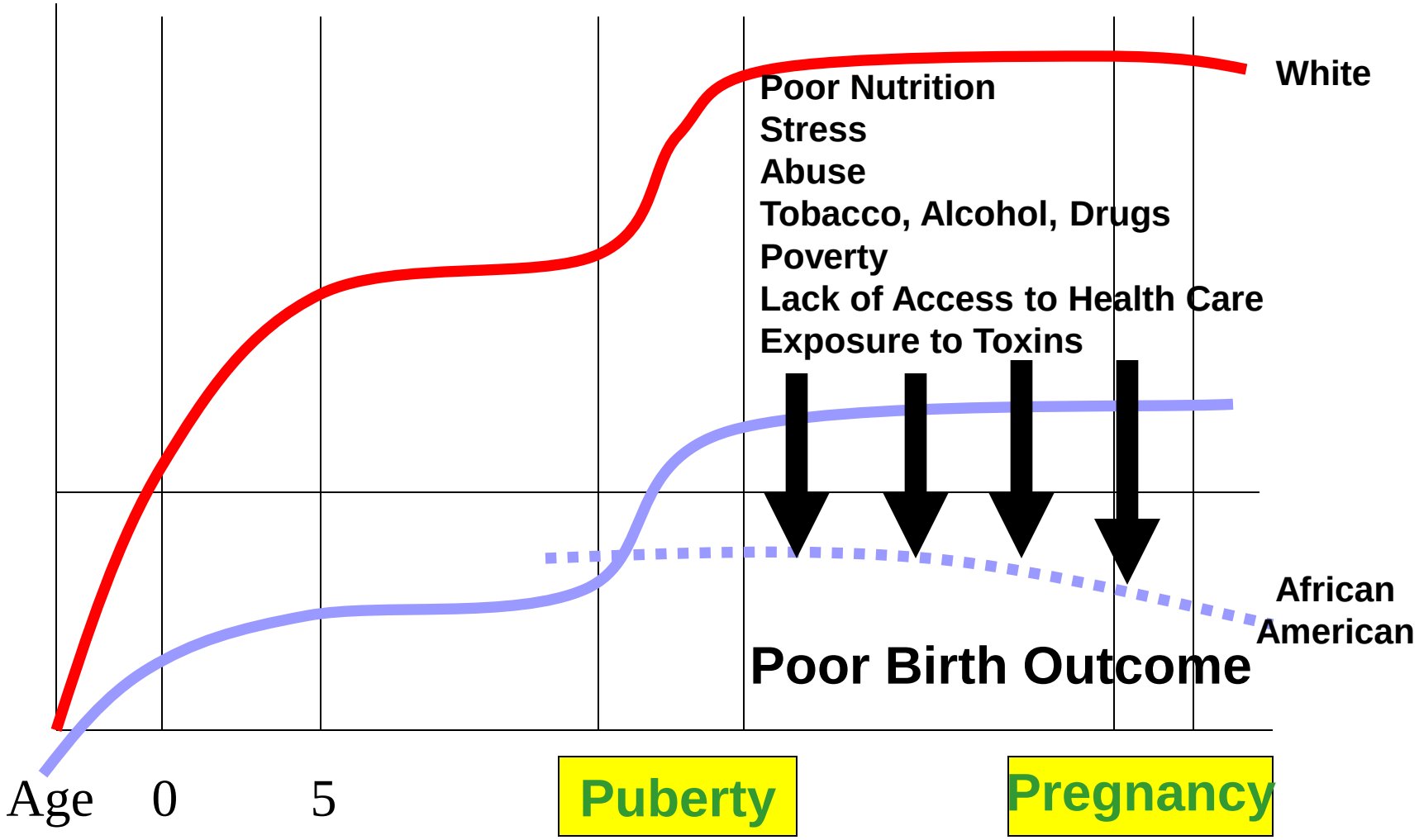
LCHD and Birth Outcomes



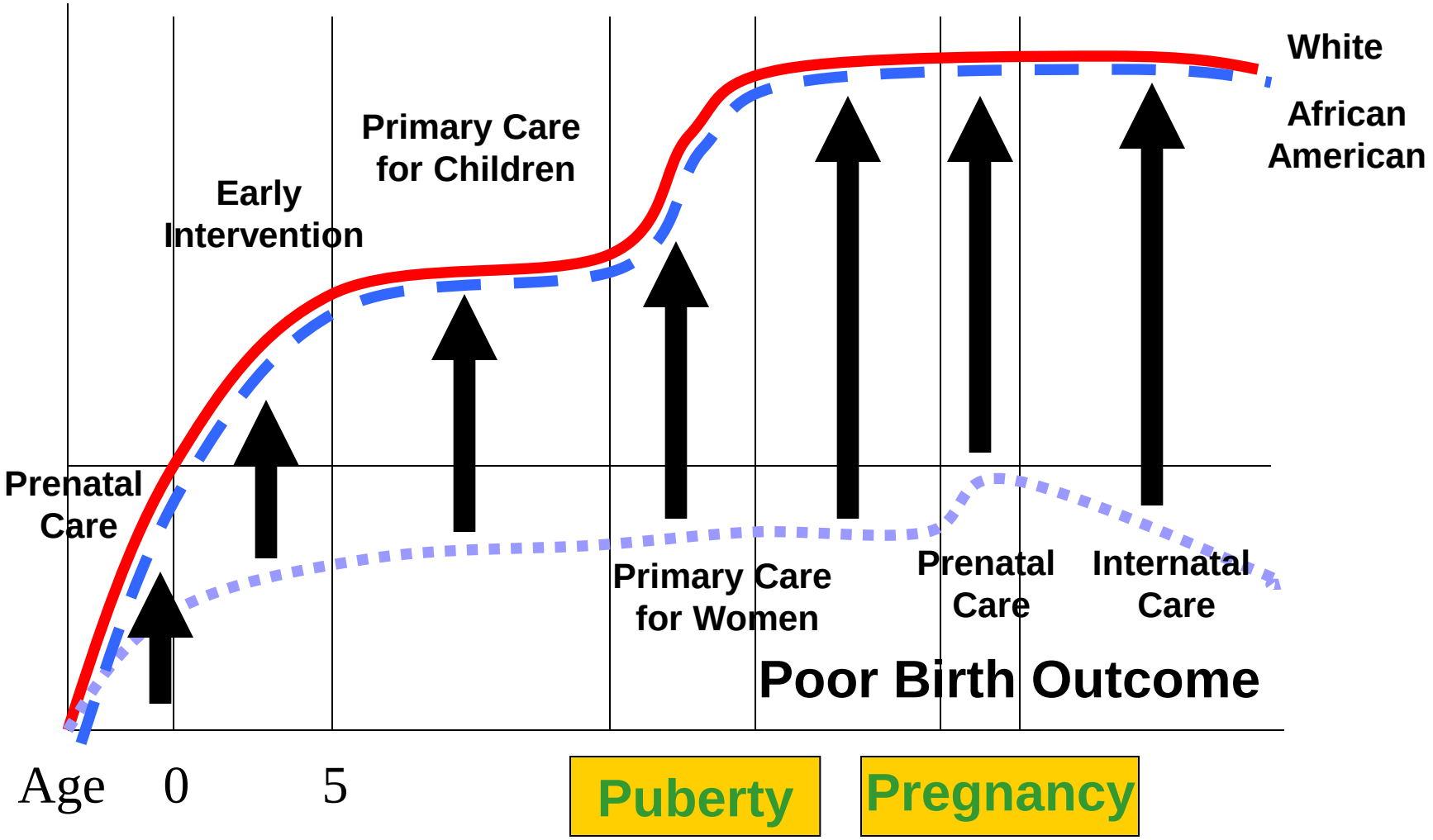
LCHD and Birth Outcomes



Life Course Health Development



LCHD: AA – White Birth Outcomes



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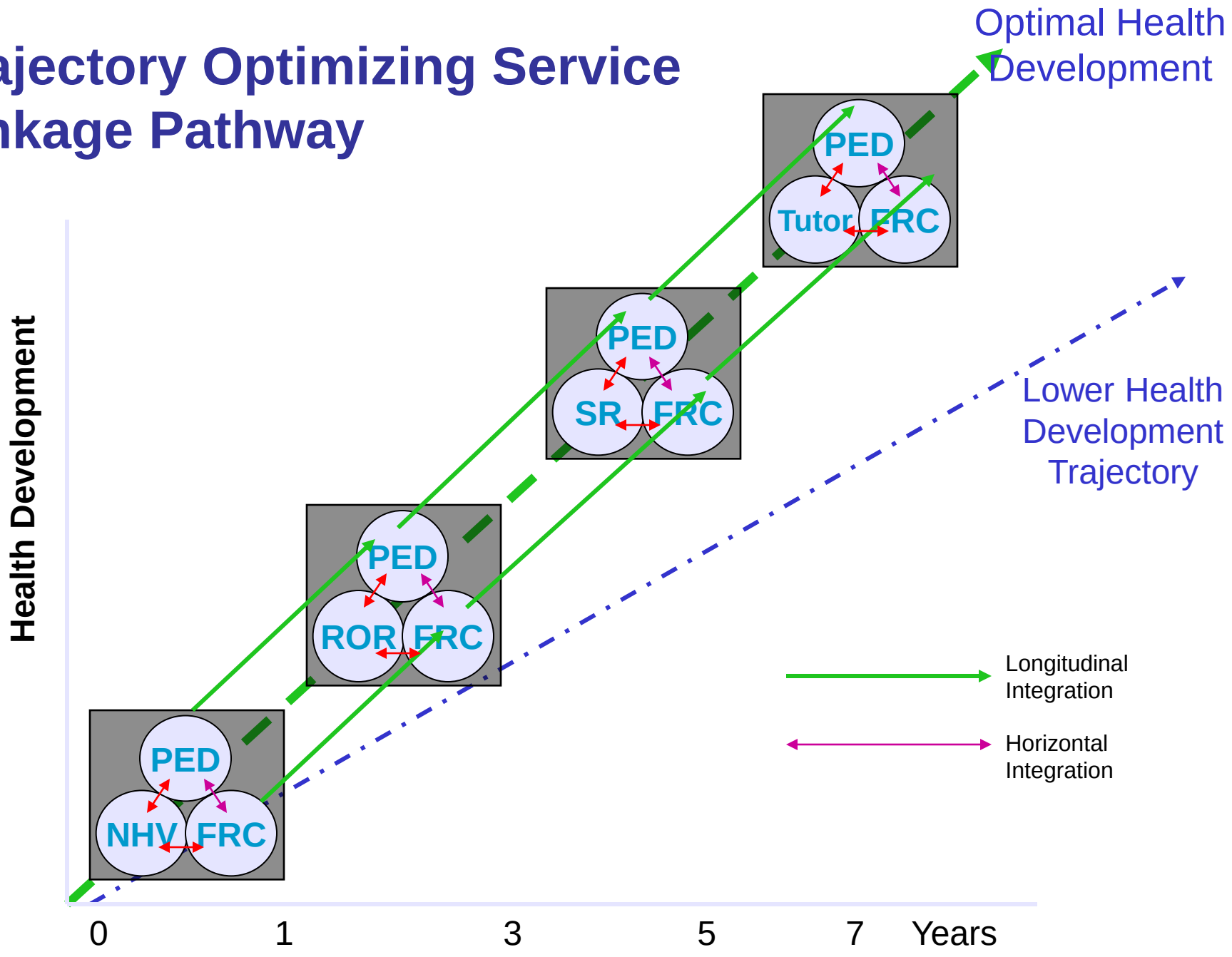
Regulation & Governance			
Performance Monitoring			

Design

What kind of health care vehicle do we want our children to ride in?

What standards or building codes do we use to build it?

Trajectory Optimizing Service Linkage Pathway



Comprehensive and Integrated Systems

Require Alignment:

Services

Sectors

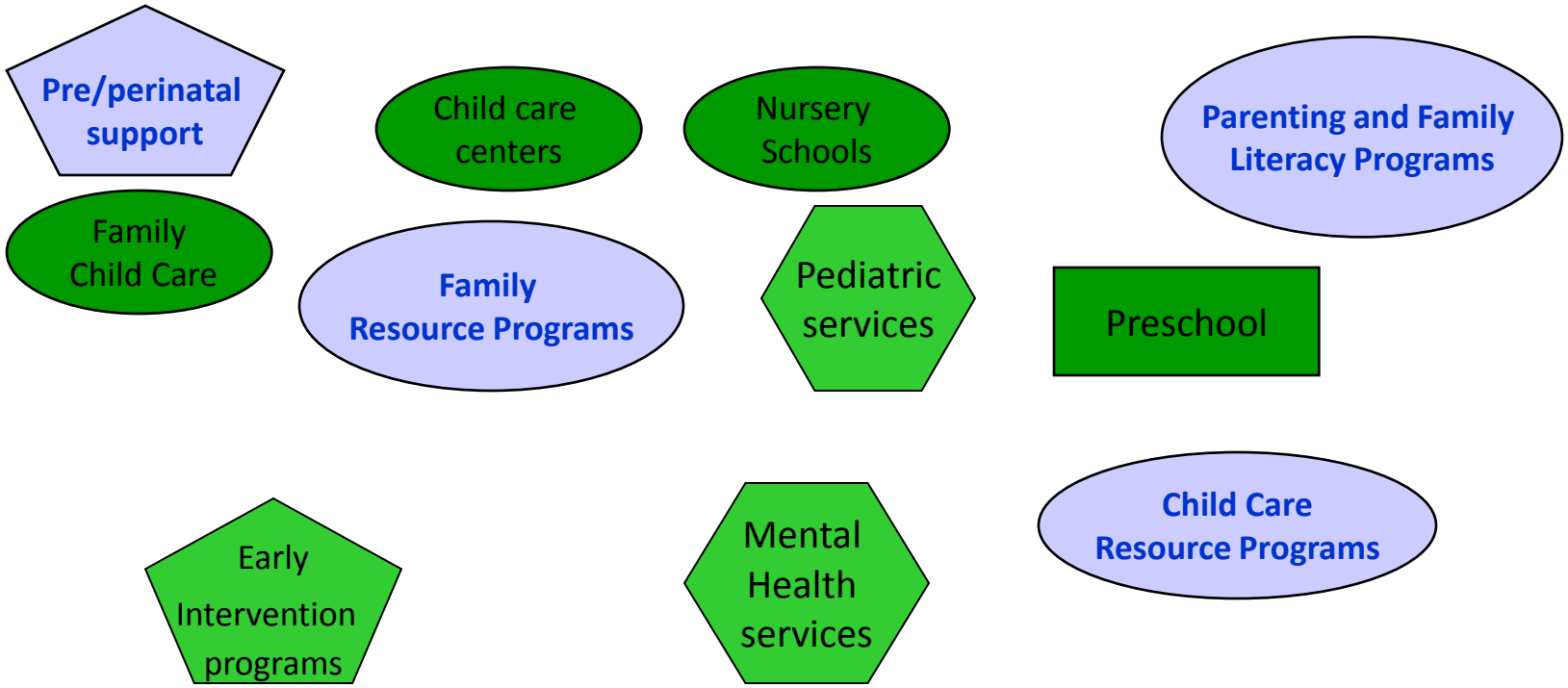
Delivery System

Service Organization

Promoting Optimal Health Development

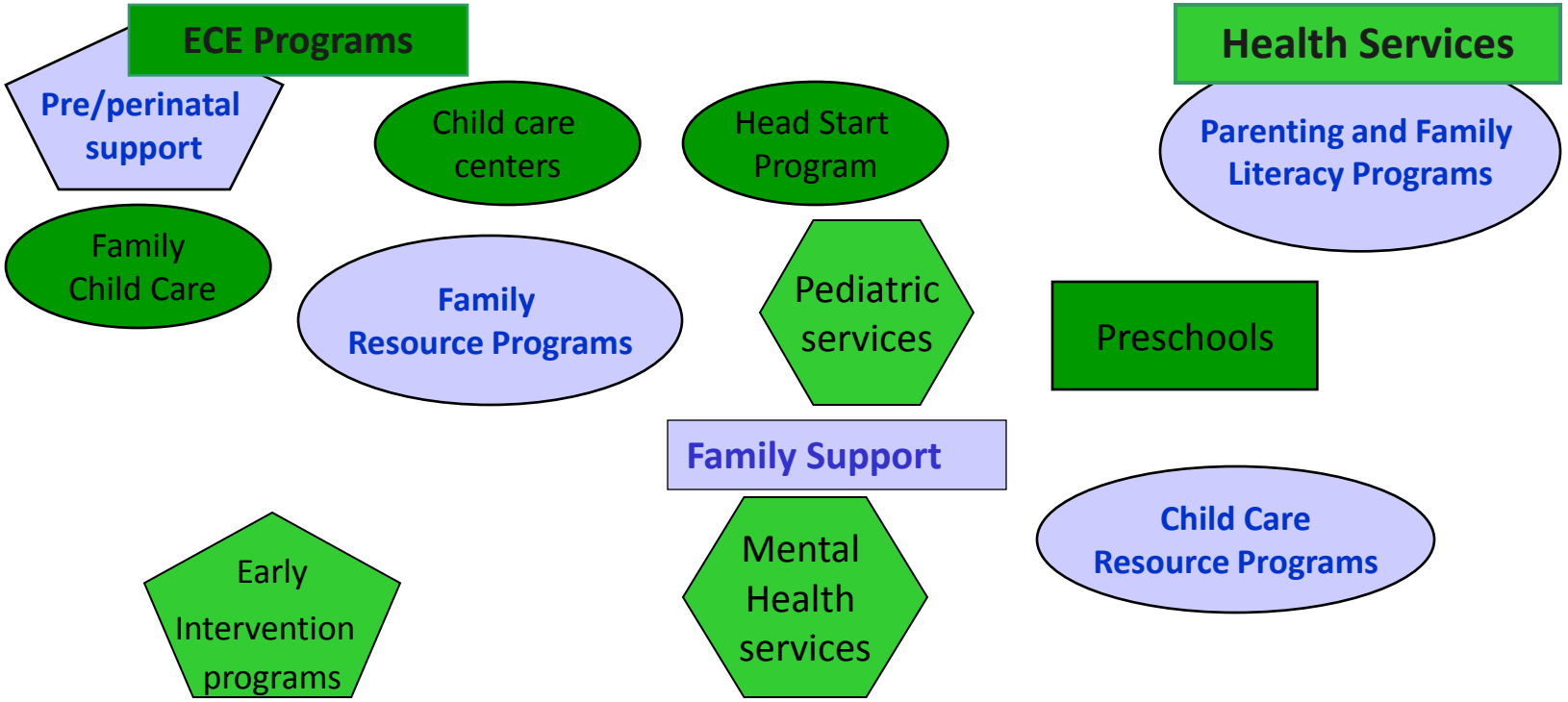
PROGRAMS

Influencing Early Brain, Child Development & School Readiness



Service Organization
for Early Brain and Child Development

SECTORS
influencing Early Brain, Child Development & School Readiness



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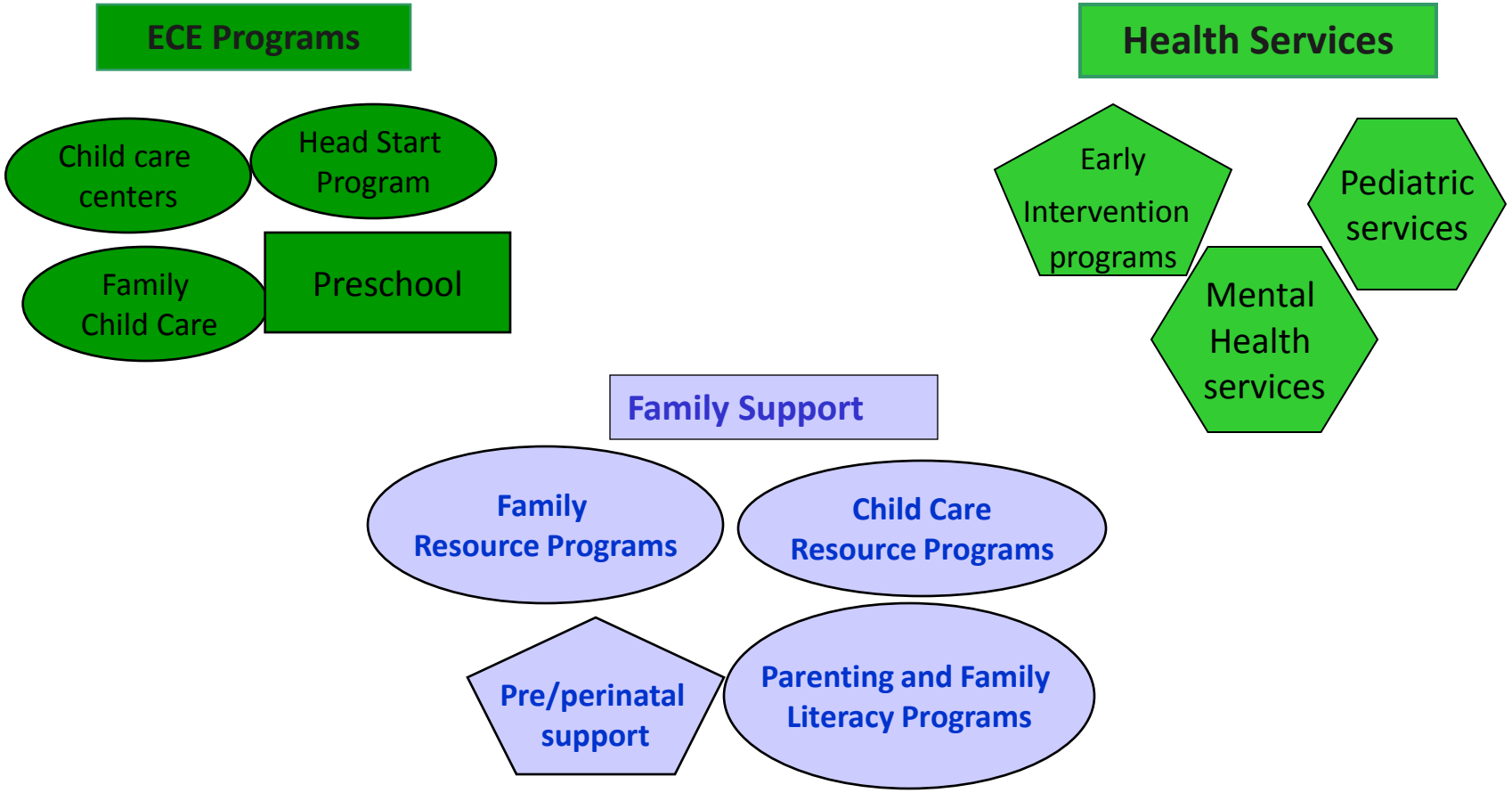

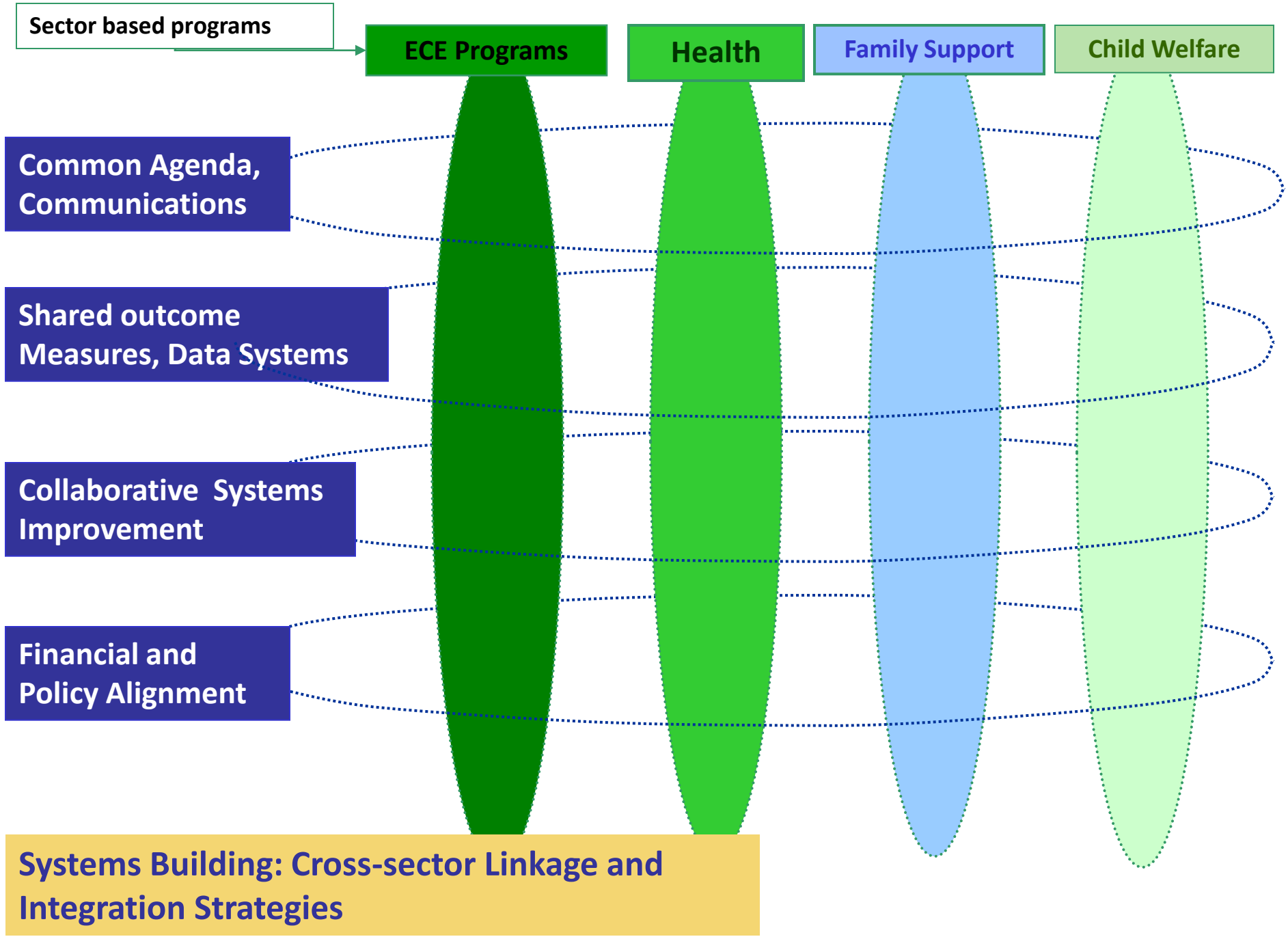
Sector based programs
ECE Programs
Health
Family Support
Child Welfare
Common Agenda, Communications
Shared outcome Measures, Data Systems
Collaborative Systems Improvement
Financial and Policy Alignment
Systems Building: Cross-sector Linkage and Integration Strategies

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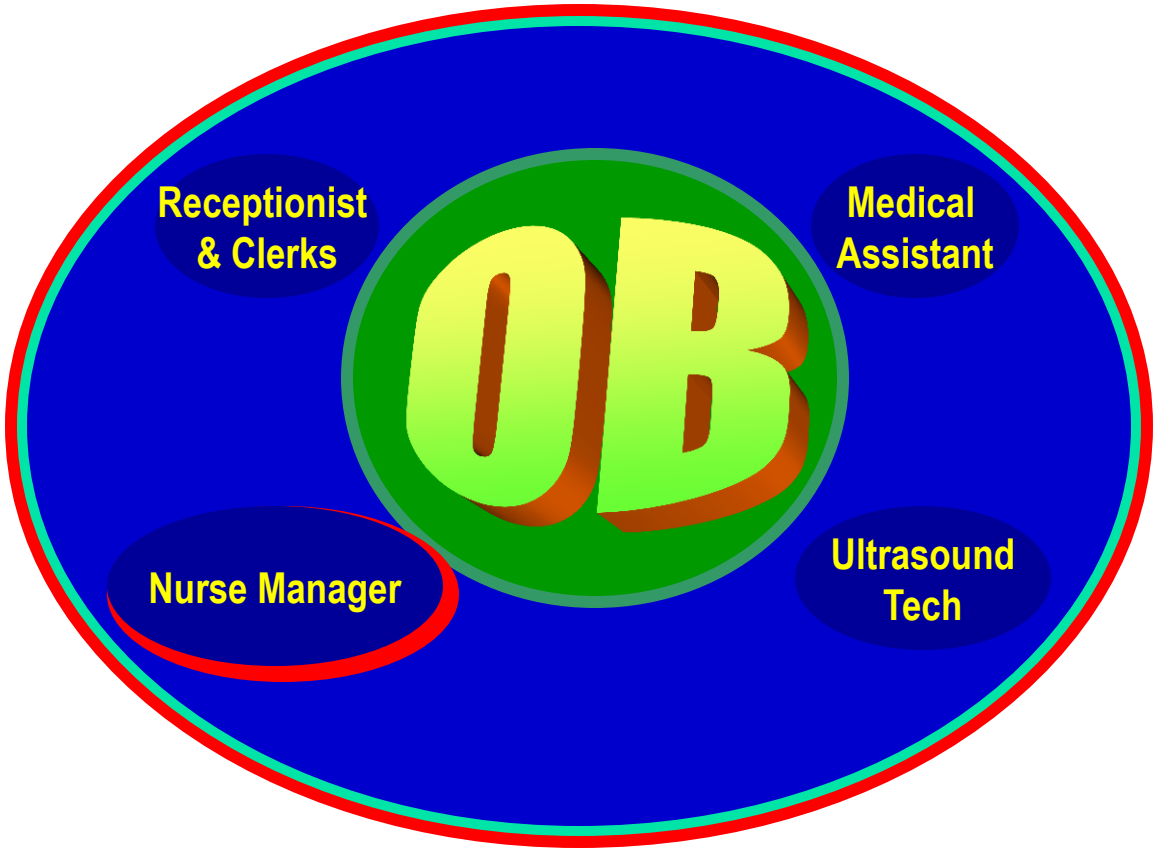
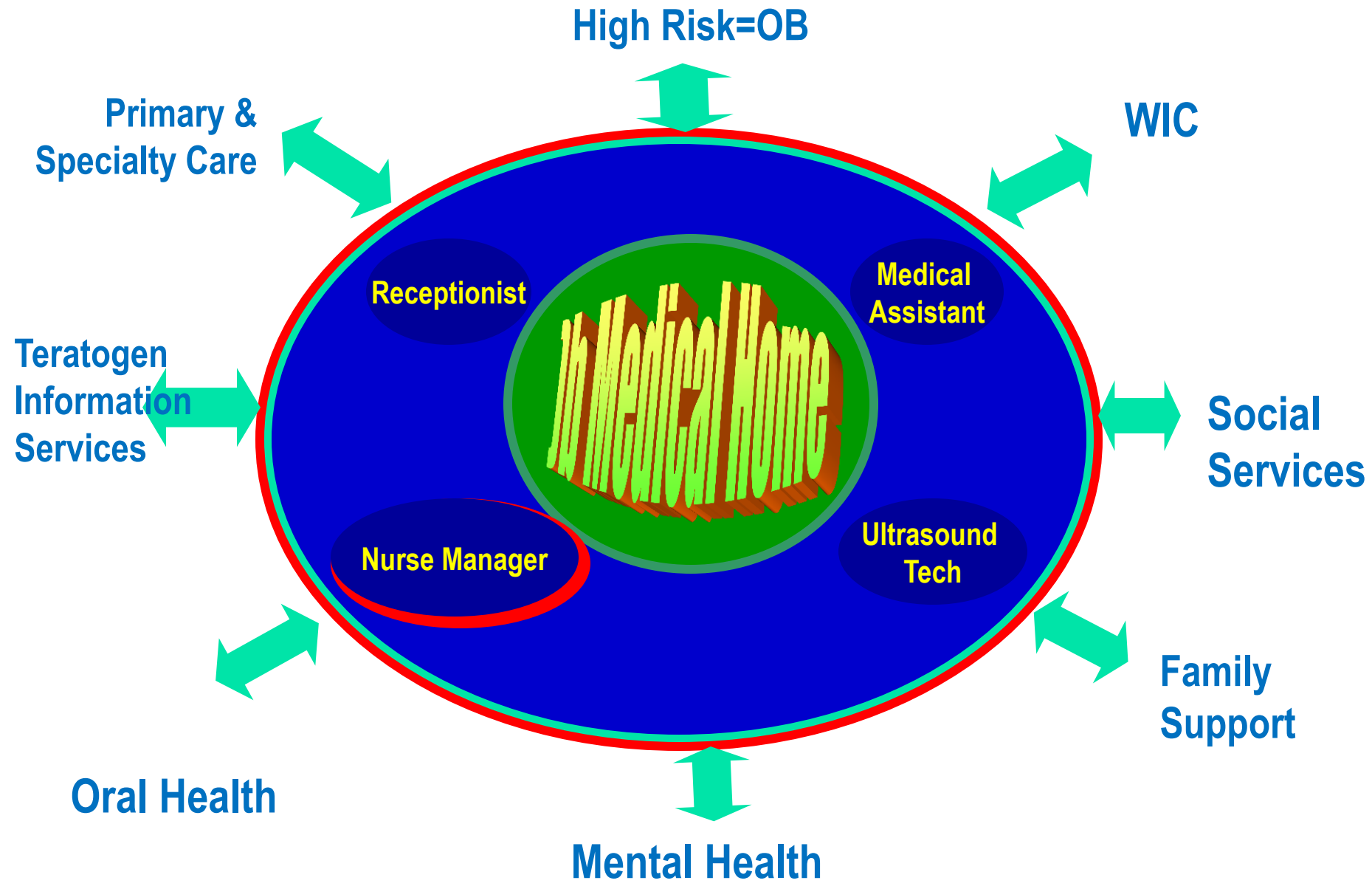
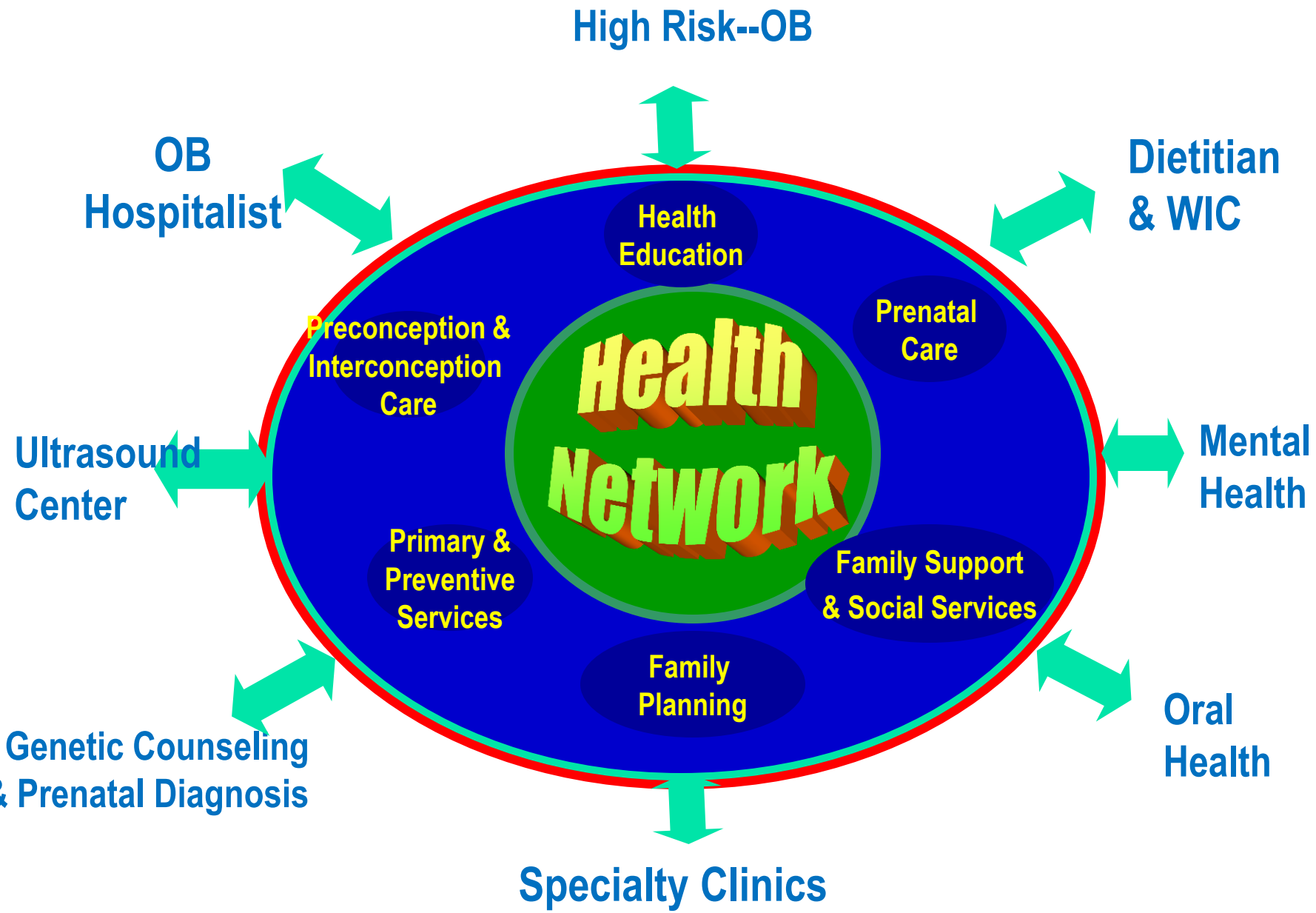
Prenatal Care 1.0



Prenatal Care 2.0

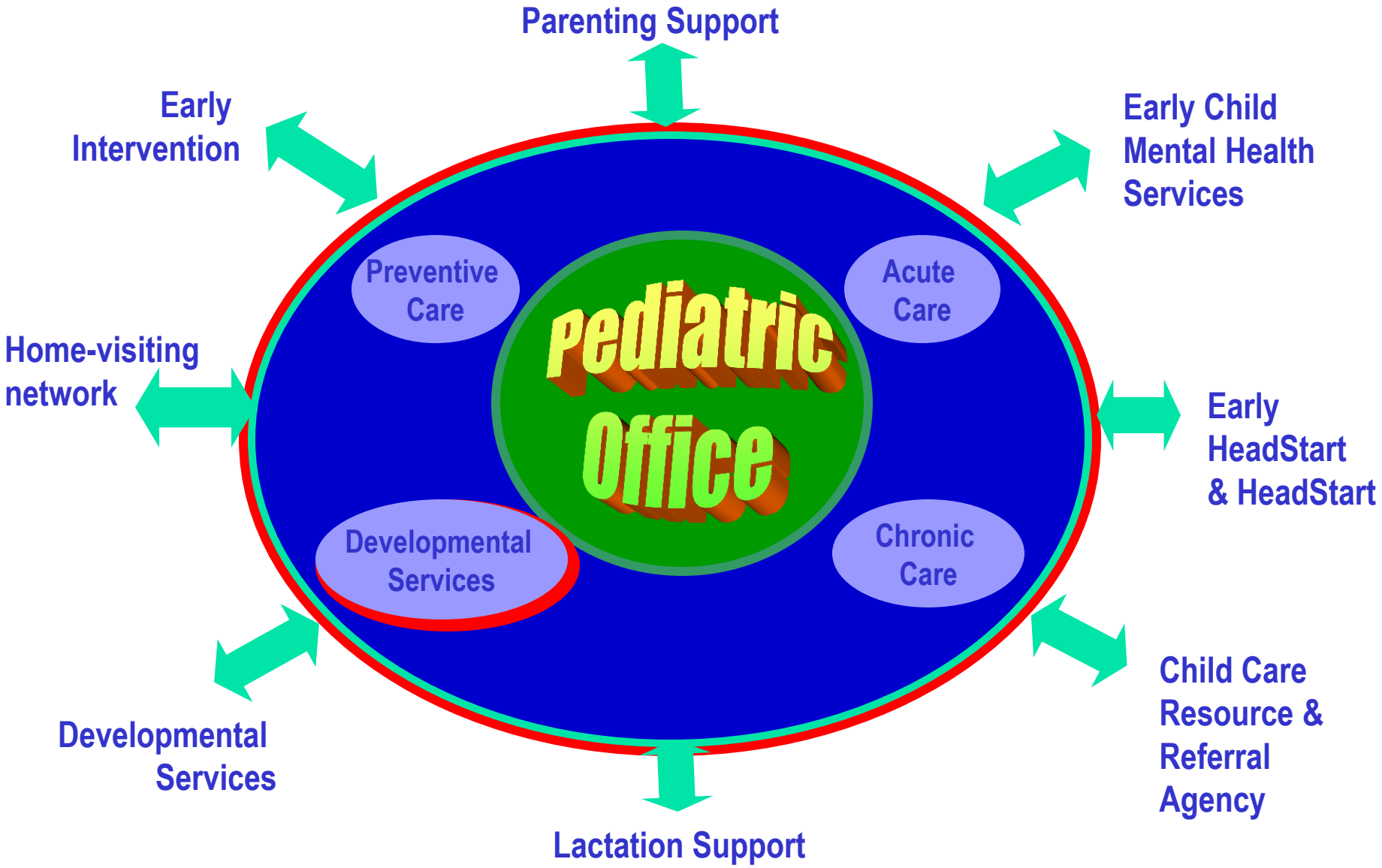


Maternal Care 3.0



Shared Resource- Utility

Pediatric Office 3.0



2.0 vs. 3.0 >>>18 month visit

- **Pediatric Care 2.0**
  - C.D – Disability
  - Screen 4-6 % w/ disability
  - Screening tools & Pathway
  - Pediatric Office connected to Regional Center
- **Pediatric Care 3.0**
  - Optimize Developmental Health
  - I.D 30-40% developmental risk
  - Screening tools & Pathway
  - Pediatric Office connected:
    - Child care
    - Many other programs
    - Coordination
    - Regional center ++

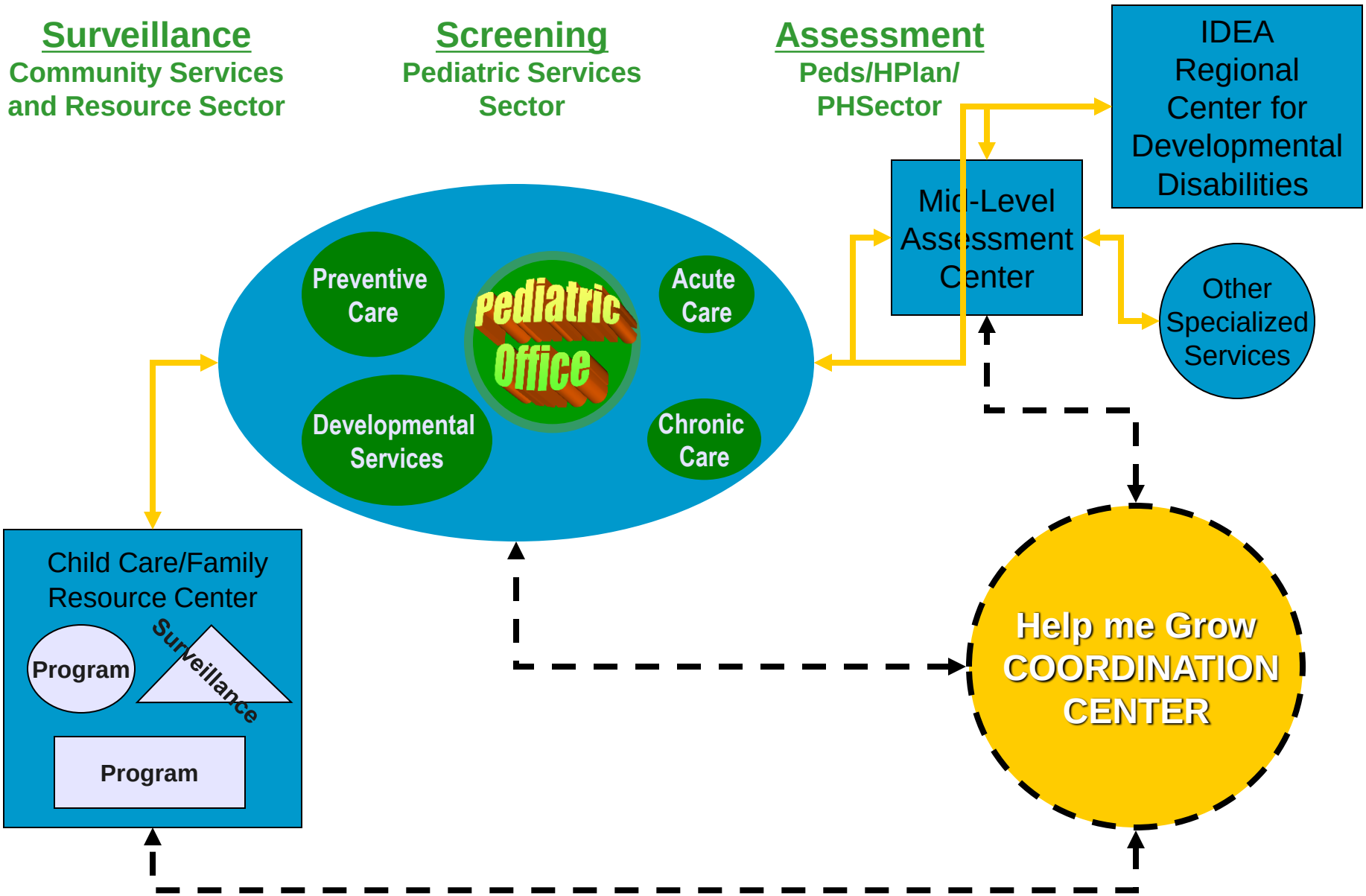
DS Community Services Pathway

Surveillance
Community Services and Resource Sector

Screening
Pediatric Services Sector

Assessment
Peds/HPlan/ PHSector

Evaluation
(IDEA Sector



Child Health System Transformation Framework

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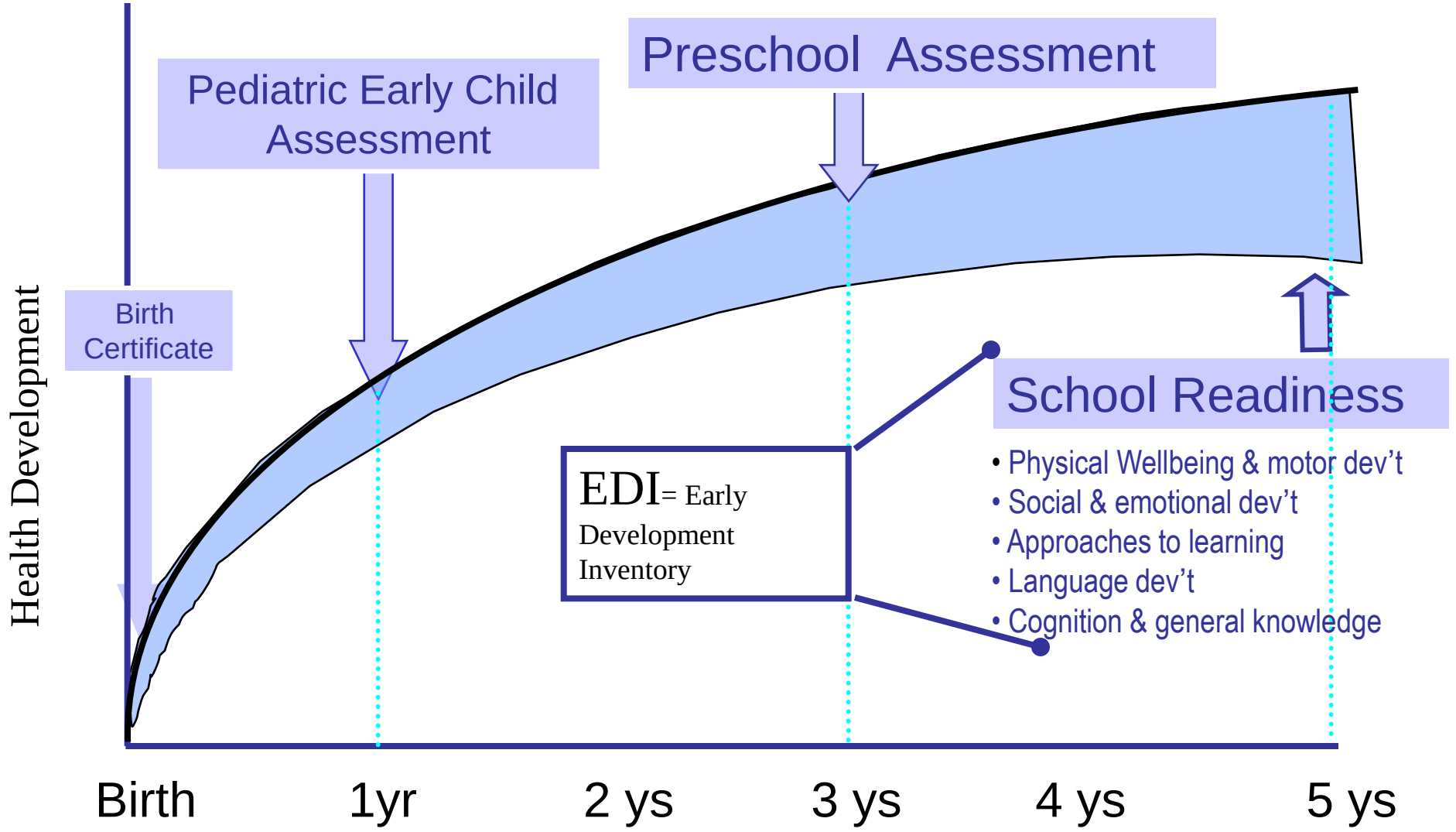
Performance Monitoring			

Systematic Data Collection

For tracking Health Development Trajectories



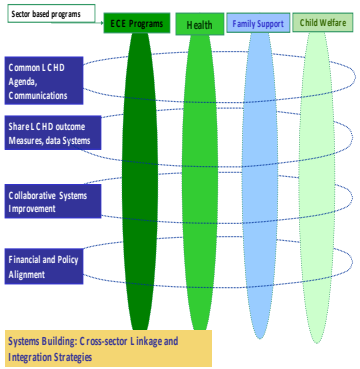
HIT & Focus of Reform

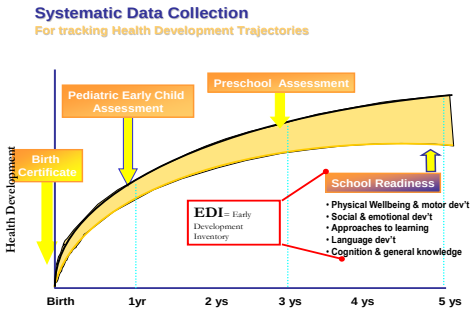
- 1.0 Acute Medical
  - Dx, Tx, and basic Public Health Protection
  - Prescribing, charting, linking outpatient and inpatient records ,
- 2.0 Chronic Disease
  - Management and Prevention
  - Decision Support for Chronic Disease Management,
  - Disease and Prevention Registry,
- 3.0 Promotion Optimal Health for All
  - Population Health Systems,
  - Health Trajectories,
  - Cross sector health impact assessments

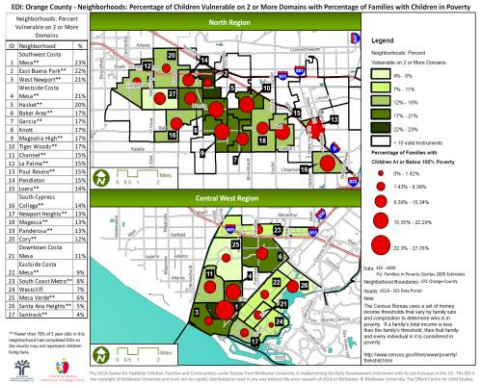
Transforming Early Childhood Community Systems (TECCS)

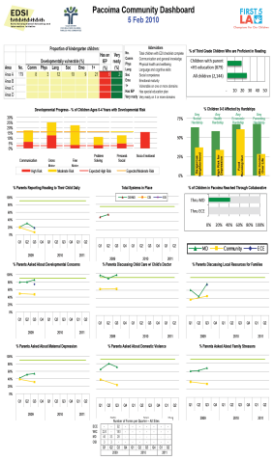
UCLA, UWW, WK Kellogg, Cincinnati Children's Hospital

States, Counties, Communities





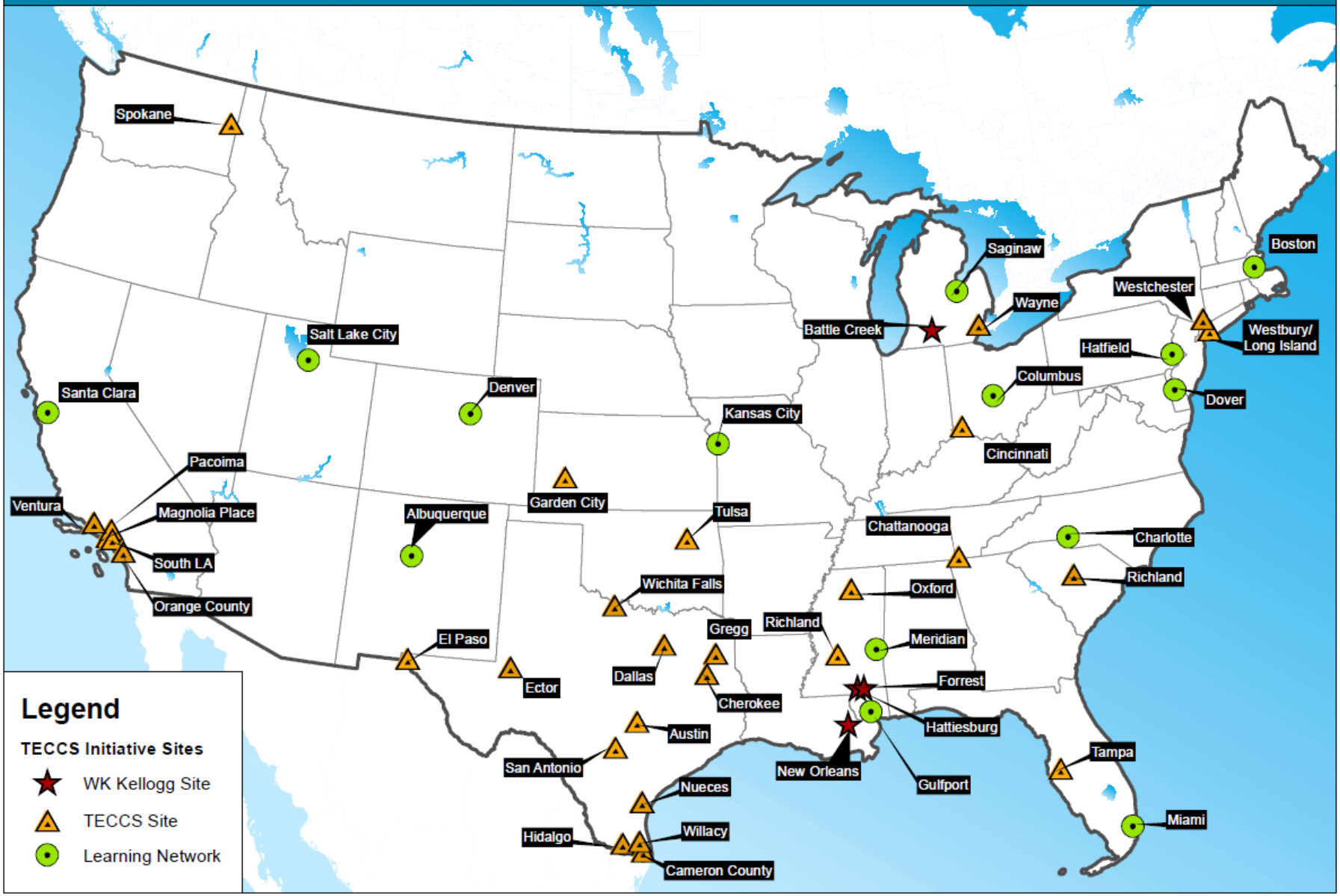




Four Key Strategies for TECCS

1. **Community Engagement**
   - Mobilize local EC coalitions around data collection, planning and improvement
2. **Measurement & Mapping**
   - Of children's developmental outcomes using the Early Development Instrument (EDI) and related data to inform planning & improvement
3. **Targeted System Improvement**
   - Work with communities to identify and prioritize barriers, test and refine specific strategies to address those barriers
4. **Shared Learning with a Collaborative Innovation Network (COIN)**
   - Help communities share experiences, resources and lessons learned, and harvest knowledge about effective practices

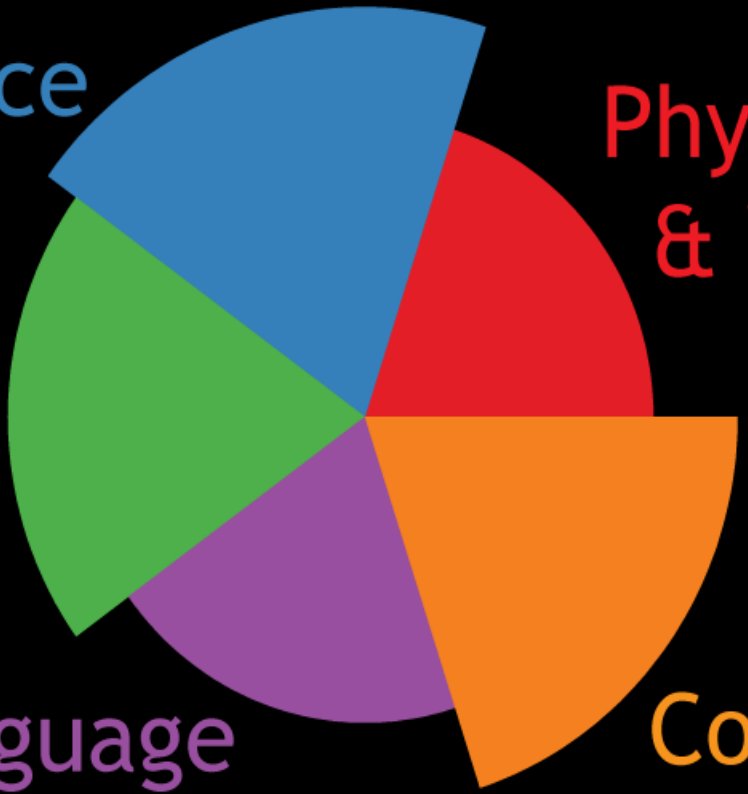
TECCS Initiative: National Pilot Sites 2011-2012



Early Development Instrument

- 104 items
- Extensive validity and reliability data from several countries
- Not a test
- Teacher at age 5 is respondent
- Five developmental domains, with sixteen subdomains

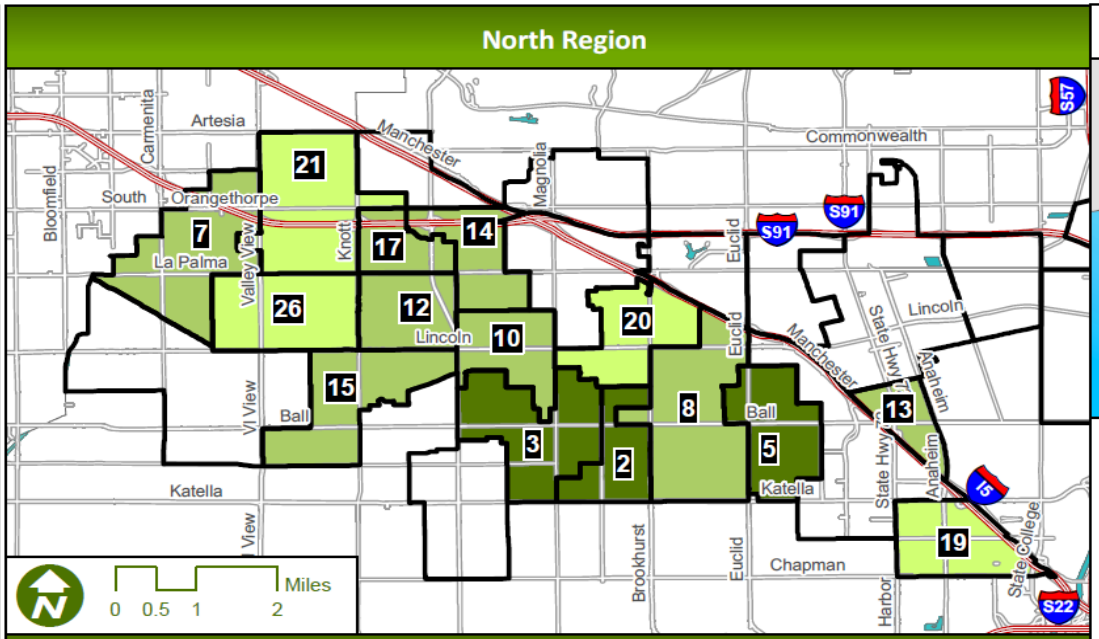
What Does the EDI Measure?

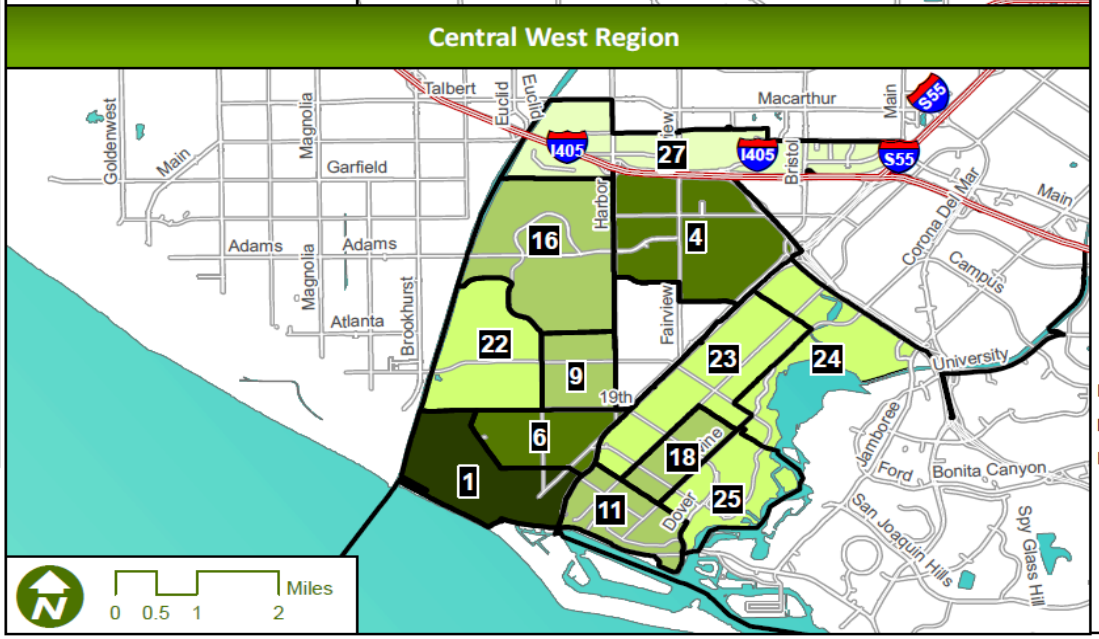


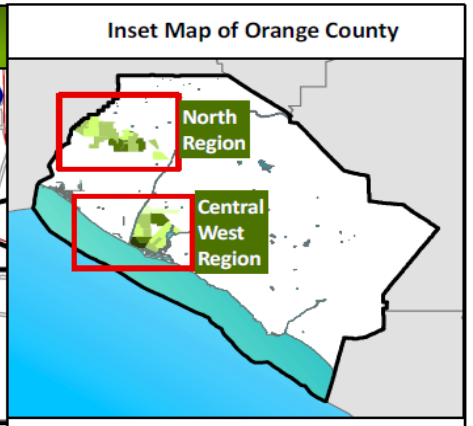
EDI: Orange County - Neighborhoods: Percentage of Children Vulnerable on 1 or More Domains

Neighborhoods: Percent Vulnerable on 1 or More Domains		
ID	Neighborhood	%
1	West Newport**	53%
2	Garcia**	41%
3	Magnolia High**	41%
4	Baker Area**	36%
5	Loera**	36%
6	Southwest Costa Mesa**	35%
7	La Palma**	33%
8	Magesca**	33%
9	Westside Costa Mesa**	32%
10	Hasket**	32%
11	Newport Heights**	31%
12	Knott	31%
13	Paul Revere**	31%
14	East Buena Park**	28%
15	South Cypress College**	27%
16	Mesa Verde**	25%
17	Pendleton	25%
18	Downtown Costa Mesa	24%
19	Panderosa**	22%
20	Tiger Woods**	22%
21	Cory**	21%
22	Channel**	20%
23	Eastside Costa Mesa**	18%
24	Santa Ana Heights**	15%
25	Westcliff	15%
26	Santrack**	14%
27	South Coast Metro**	8%

** Fewer than 70% of 5 year olds in this neighborhood had completed EDIs so the results may not represent children living here.







Legend

Percentage of Children Vulnerable on 1 or More Domains

- 8% - 13%
- 14% - 22%
- 23% - 33%
- 34% - 42%
- 43% - 53%
- < 10 valid Instruments

Data: EDI - 2009

Neighborhood Boundaries: CFC Orange County

Roads: UCLA - GIS Data Portal

UCLA Center for Healthier Children, Families and Communities

Children & Families Commission of Orange County

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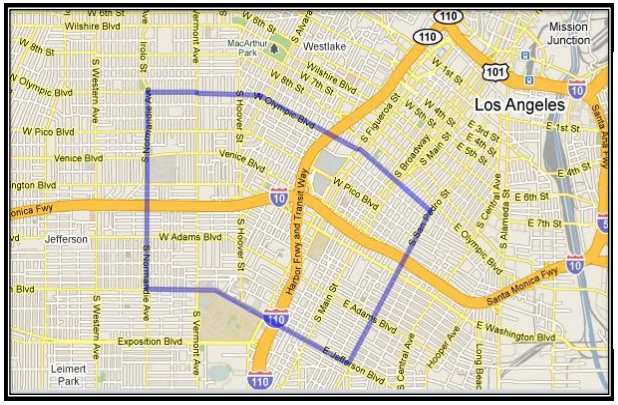


magnolia place
Community Initiative

Magnolia Place Community Initiative

Aim: All 35,000 children in the Magnolia catchment area will break all records of success in their education, health, and the quality of nurturing care and economic stability they receive from from their families and community. We will increase protective factors and the reliability of service/support systems in providing prevention and timely need-based care.

Leadership and Improvement Drivers

- Cultivate accountable leadership focused on population outcomes
- Active participation in an organized process improvement effort
- Support the human element of change
- Measure & share data on how the system is working
- Build networks to sustain, scale and spread

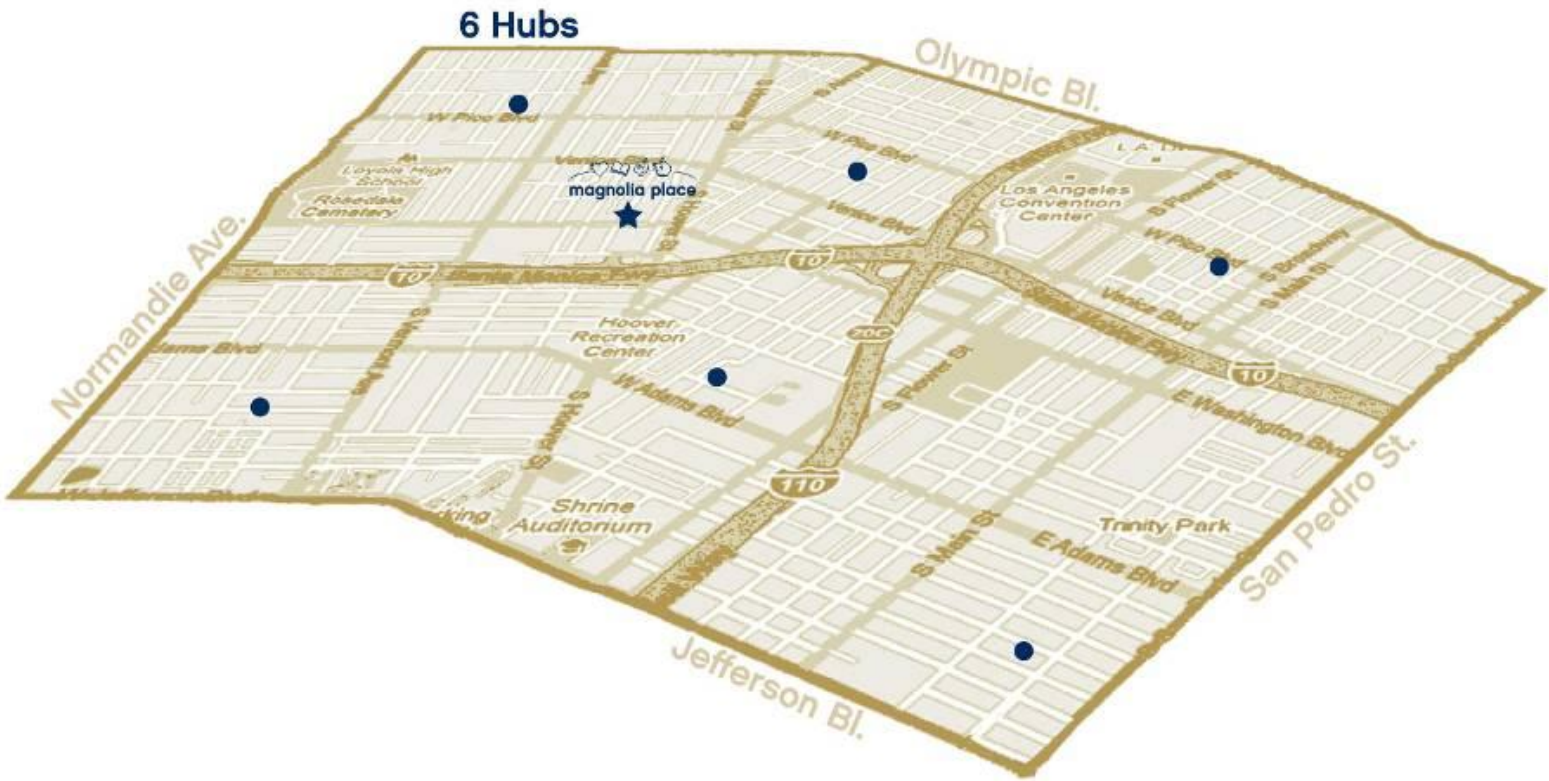
Culture and Practice Drivers

- Actively manage the care of a population of children
- Develop cross-sector care pathways
- Improve flow to supports and services
- Increase access to & effectiveness of services & supports
- Support parents to manage their child's needs & promote development
- Increase effectiveness through greater empathy in care
- Increase relationships among and between residents, community groups and organizations

Goal Targets

- < 10% of young children are developmentally vulnerable at school entry
- 10% annual increase in % of parents sharing books daily
- 90% of mothers report a positive relationship with their child
- 90% of parents have ties to neighbors
- 90% of parents receive empathic care
- 90% of parents asked if they have child development concerns
- 90% of parents report having discussed resources for families in their community
- 90% of parents report having discussed resources for social support
- 90% of parents asked about depression
- 90% of parents asked about family stressors
- 90% of parents have a bank account

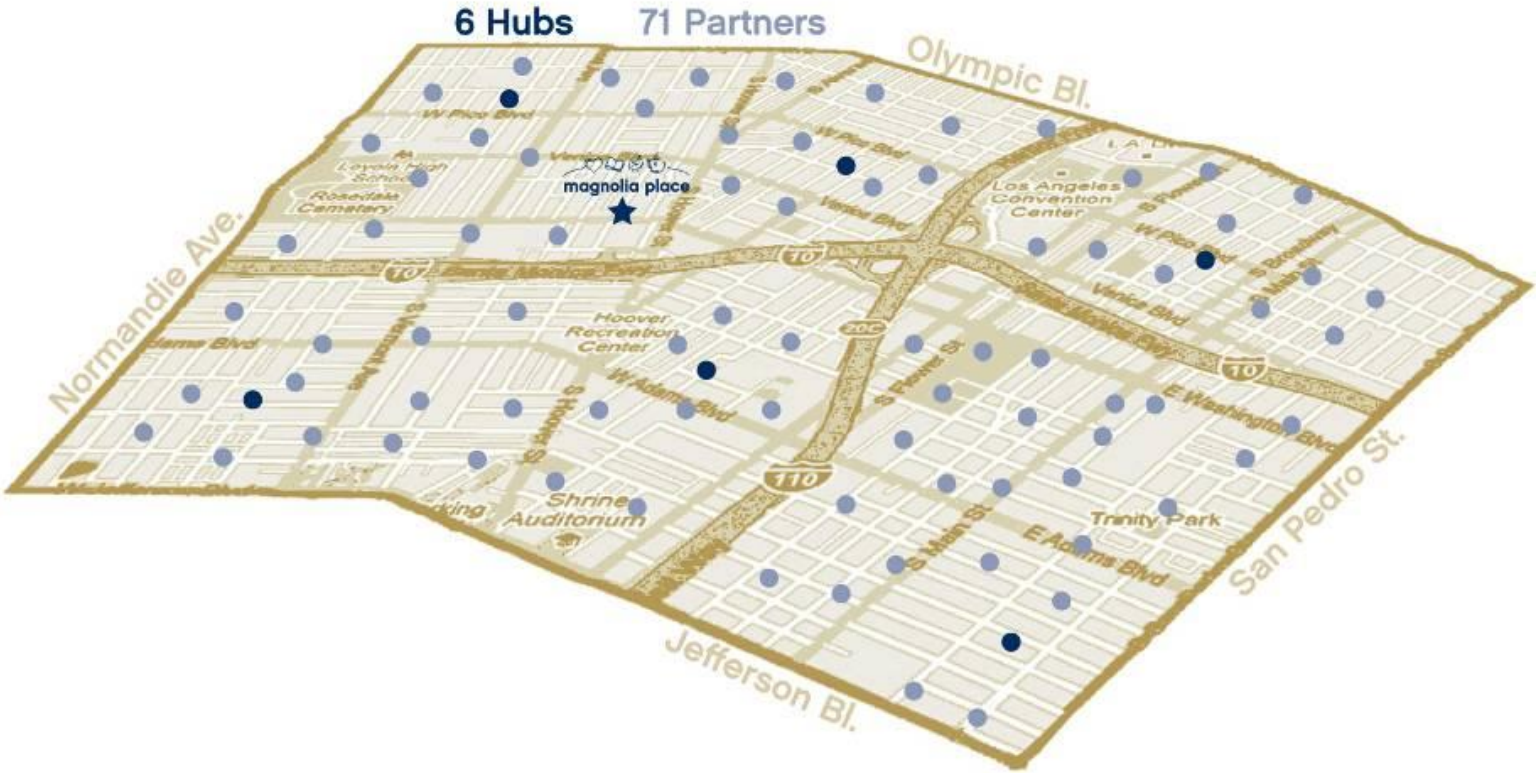
6 Hubs



35,000 Children/Youth
500 Blocks
5 Square Miles

magnolia place

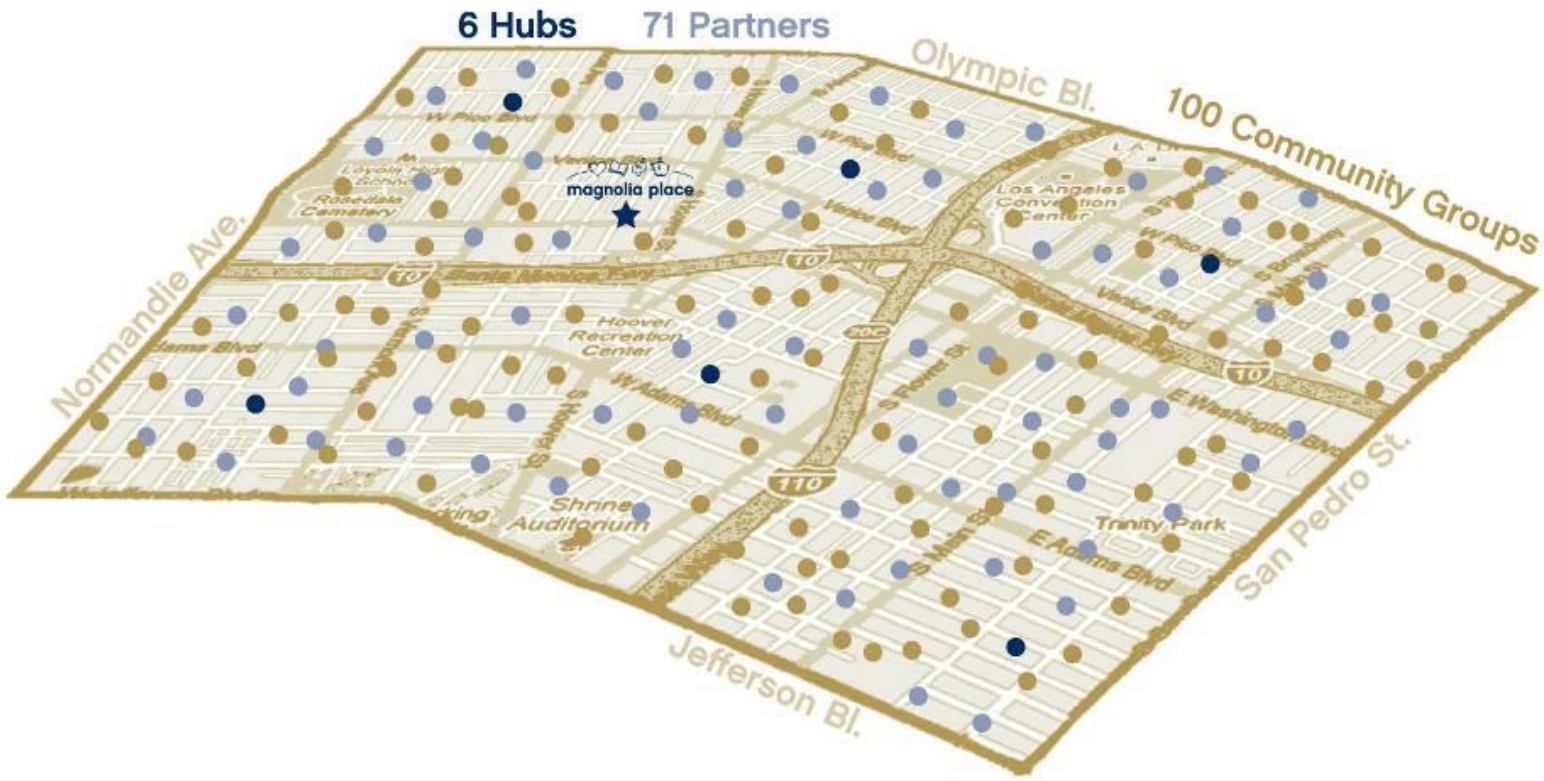
71 Partners



35,000 Children/Youth
500 Blocks
5 Square Miles

magnolia place

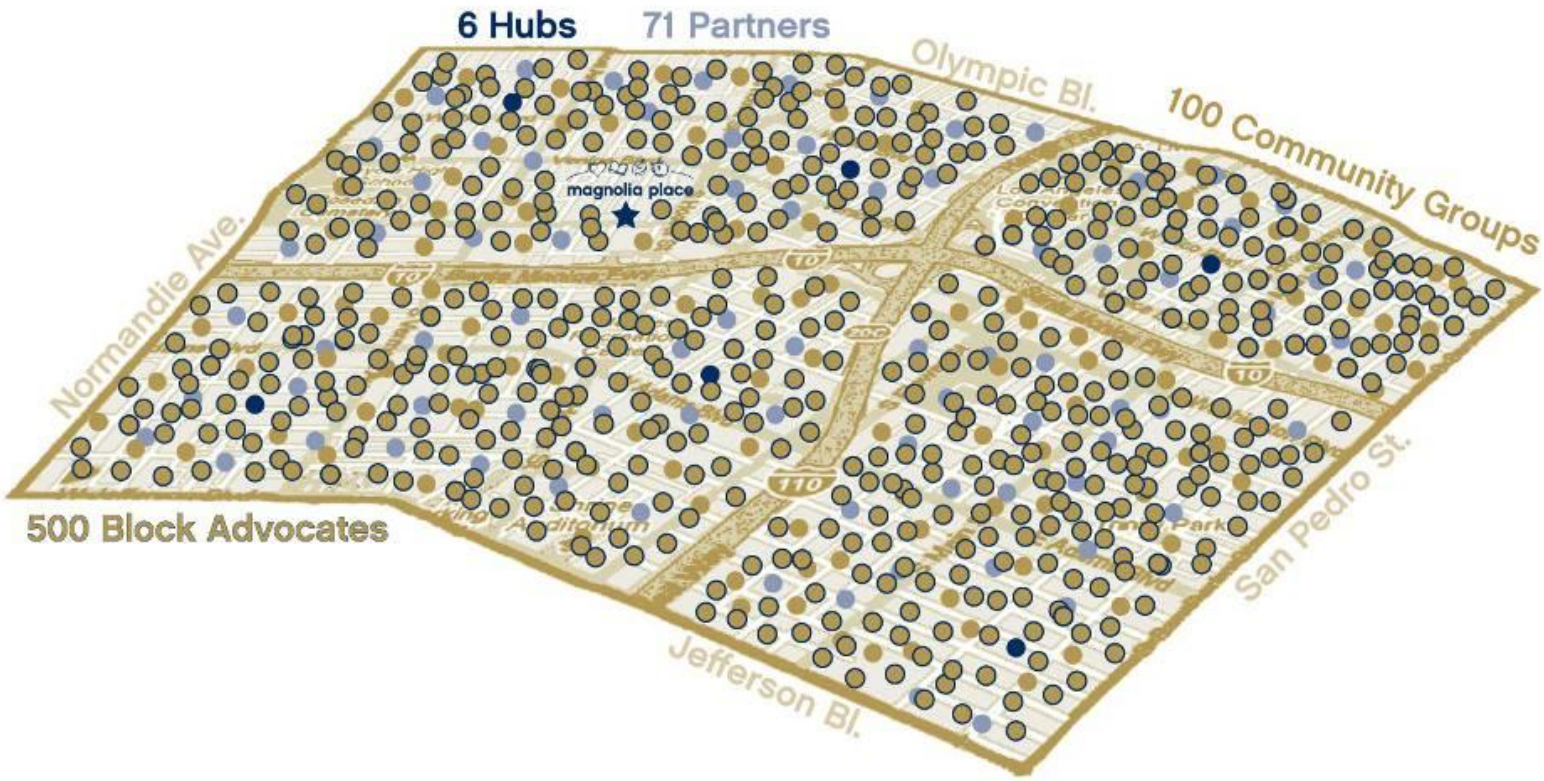
100 Community Groups



35,000 Children/Youth
500 Blocks
5 Square Miles

magnolia place

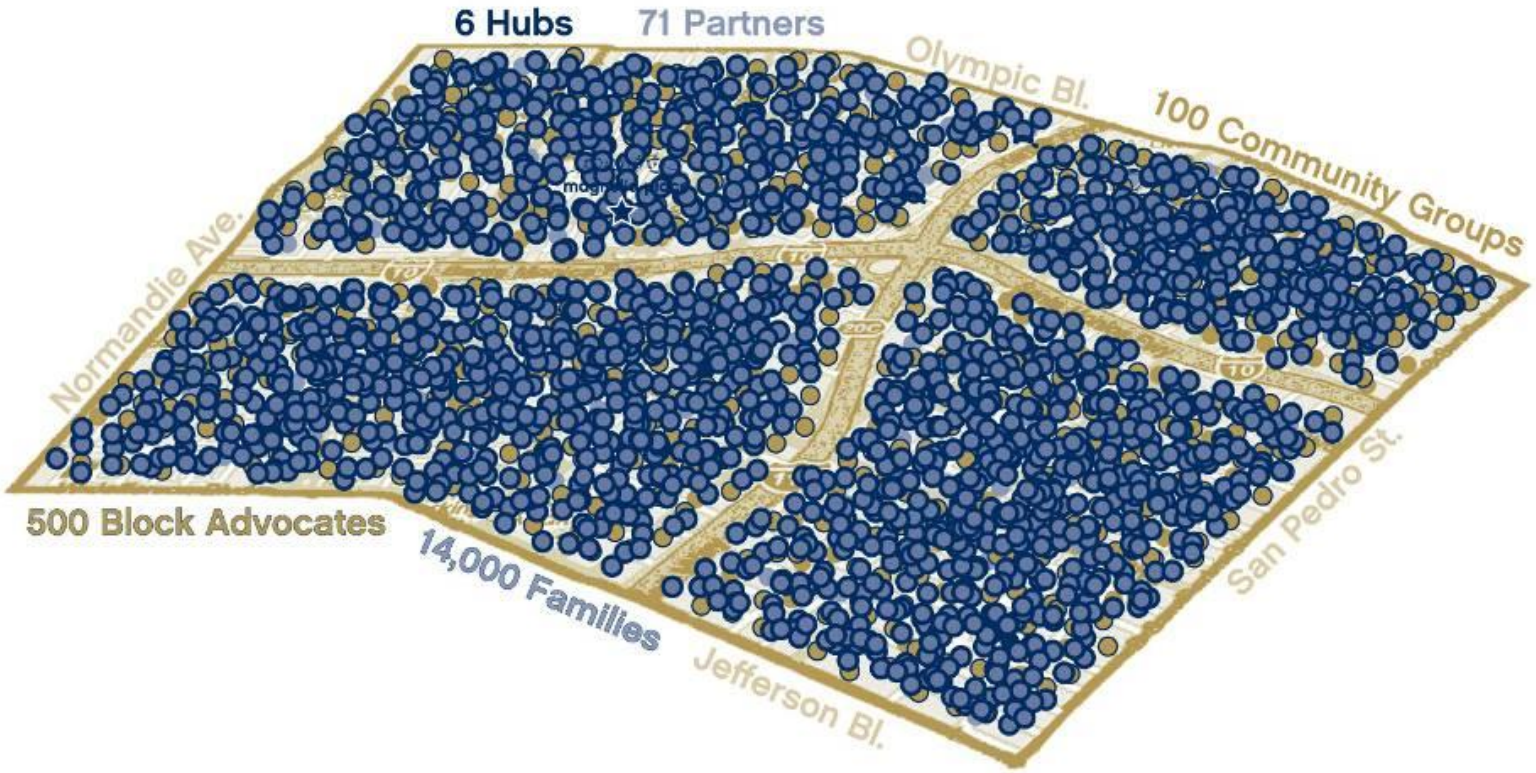
500 Block Advocates



35,000 Children/Youth
500 Blocks
5 Square Miles

magnolia place

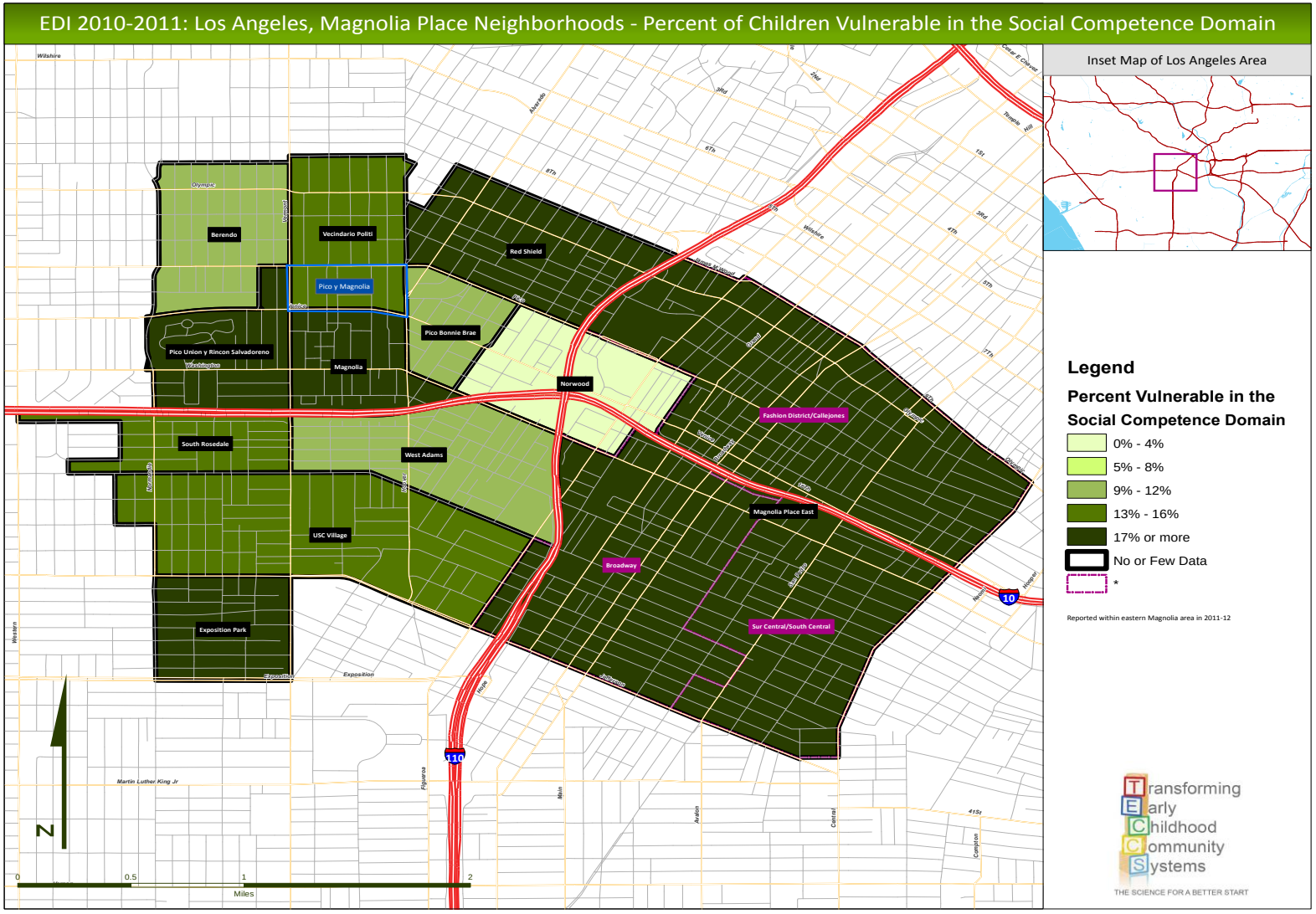
14,000 Families



35,000 Children/Youth
500 Blocks
5 Square Miles

magnolia place

Loss of Developmental Potential, by Kindergarten Entry



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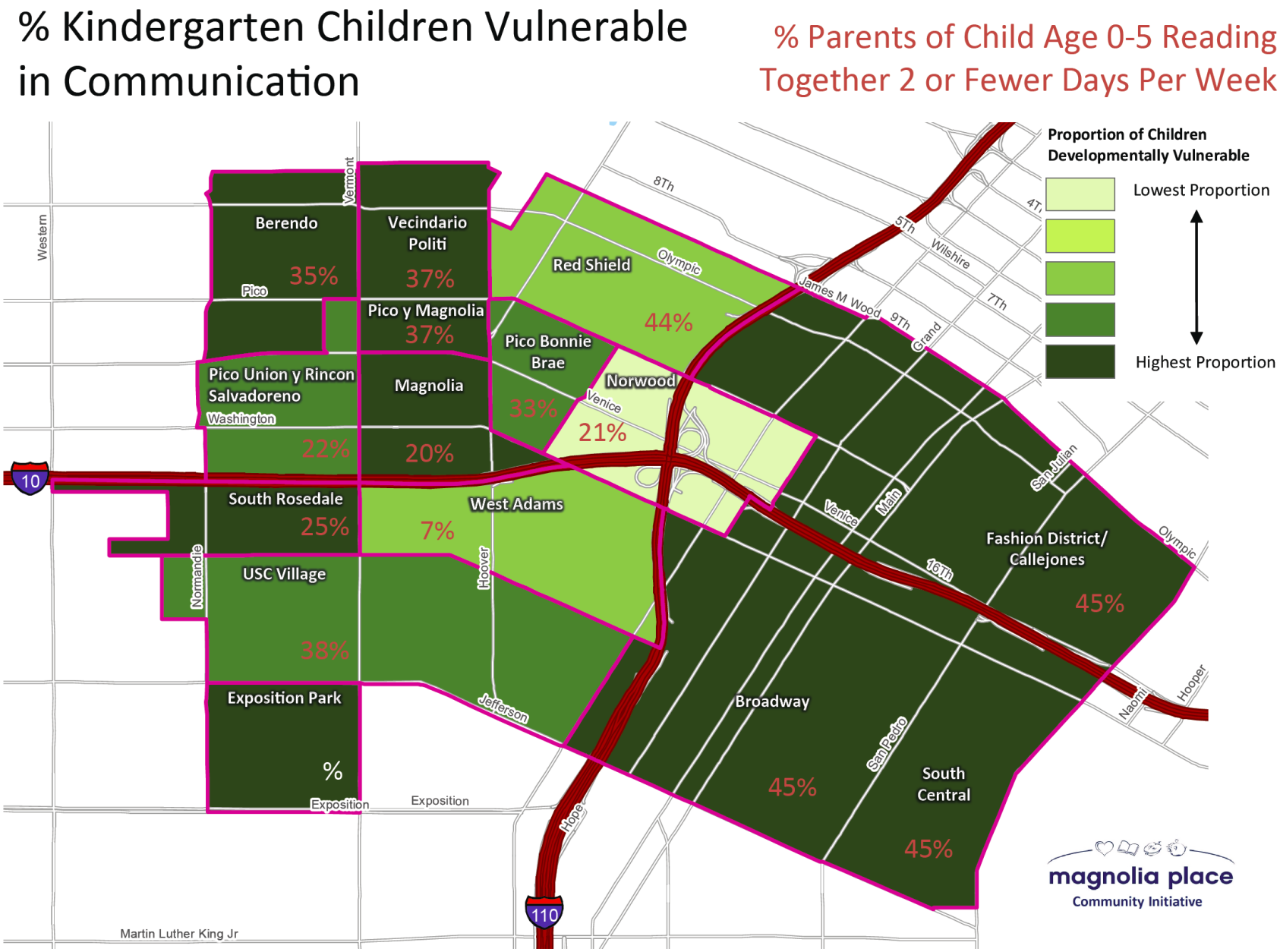
Using Population Data for Learning, Engagement and Collective Action

% Kindergarten Children Vulnerable in Social Competence

% Mothers with Depression Risk (PHQ-2)

Using Population Data for Learning, Engagement and Collective Action



Measuring Progress for the Population

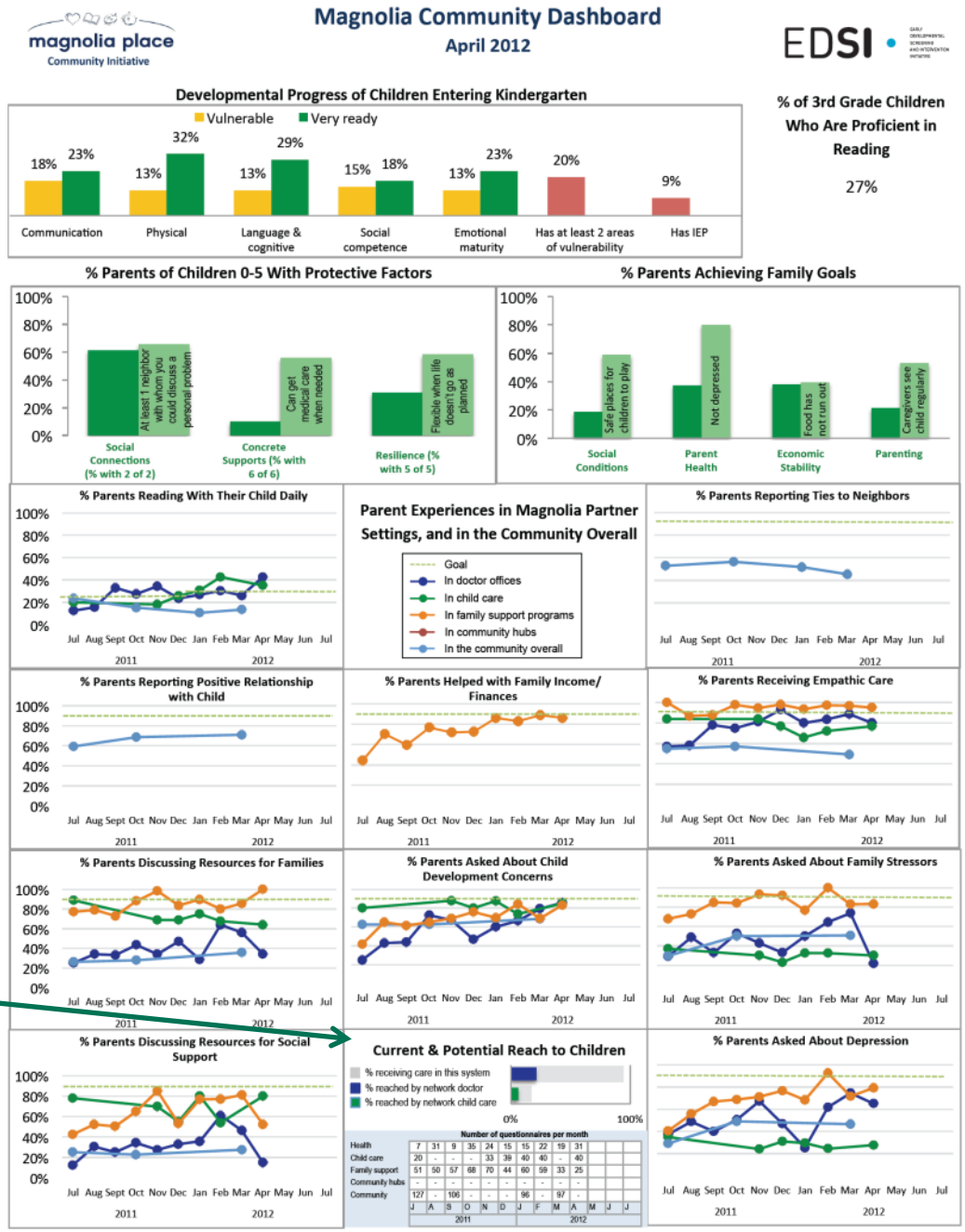
magnolia place
Community Initiative

Developmental progress, by kindergarten

Protective factors for families

Parent activities and behaviors

Potential and actual reach to children in the community



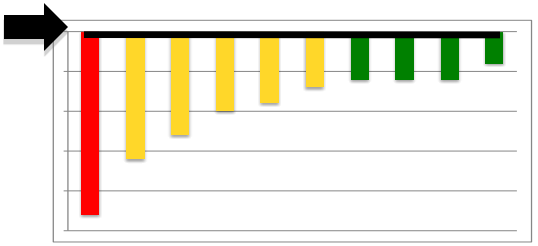
Reading proficiency, third grade

Family and community conditions

Measures of real-time improvement in services and supports

Magnolia Community Initiative: Mission, Approach and Working Groups

Goal
100% of children succeed in health and education

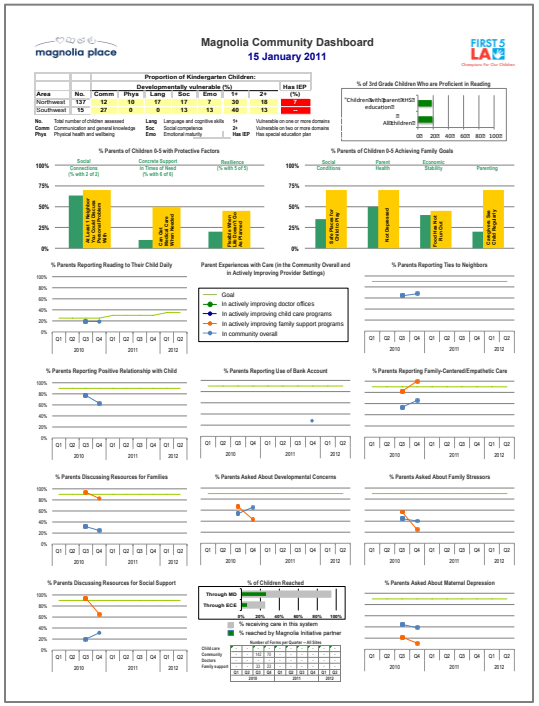


Mission

All children in the Magnolia catchment area will break all records of success in their education, health and the quality of nurturing care they receive from their families and community

Approach

Increase protective factors and the reliability of service/support systems in providing prevention and timely need-based care



Leadership Group

Goal: Set expectations and align and guide efforts toward sustainable strategies that have the greatest positive impact on development

System Improvement

Goal: Standardize care for all, based on need

Discuss well-being

↓

Identify risk

↓

Assess need in core services/ supports

↓

Response (provide care) → Referral/connection

↓

Tracking/follow-up

It Takes a Community

Goal: Increase effectiveness via empathy in care

Promotora Outreach

Goal: Increase social connections

Economic Stability

Goal: Increase resources and financial stability

Linkage and Referral

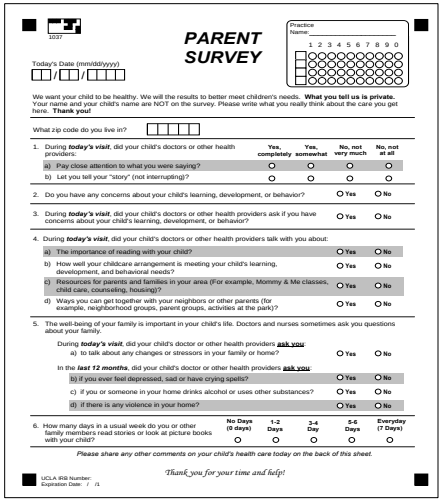
Goal: Improve flow to supports & services

Research and Improvement

Goal: Support effective change and results

Sharing Data for Action

Parent Survey



PARENT SURVEY

Practice Name:

Today's Date (mm/dd/yyyy)

We want your child to be healthy. We will the results to better meet children's needs. **What you tell us is private.** Your name and your child's name are NOT on the survey. Please write what you really think about the care you get here. **Thank you!**

What zip code do you live in?

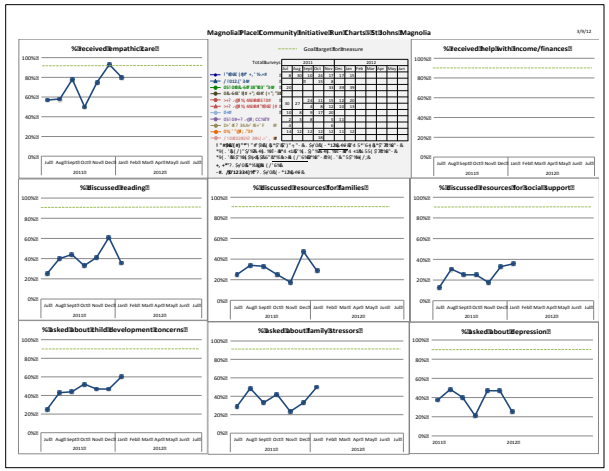
1. During ***today's visit***, did your child's doctors or other health providers:
   - a) Pay close attention to what you were saying? — Yes, completely / Yes, somewhat / No, not very much / No, not at all
   - b) Let you tell your "story" (not interrupting)?
2. Do you have any concerns about your child's learning, development, or behavior? — Yes / No
3. During ***today's visit***, did your child's doctors or other health providers ask if you have concerns about your child's learning, development, or behavior? — Yes / No
4. During ***today's visit***, did your child's doctors or other health providers talk with you about:
   - a) The importance of reading with your child? — Yes / No
   - b) How well your childcare arrangement is meeting your child's learning, development, and behavioral needs? — Yes / No
   - c) Resources for parents and families in your area (For example, Mommy & Me classes, child care, counseling, housing)? — Yes / No
   - d) Ways you can get together with your neighbors or other parents (for example, neighborhood groups, parent groups, activities at the park)? — Yes / No
5. The well-being of your family is important in your child's life. Doctors and nurses sometimes ask you questions about your family.
   During ***today's visit***, did your child's doctor or other health providers **ask you**:
   - a) to talk about any changes or stressors in your family or home? — Yes / No
   - In the ***last 12 months***, did your child's doctor or other health providers **ask you**:
   - b) if you ever feel depressed, sad or have crying spells? — Yes / No
   - c) if you or someone in your home drinks alcohol or uses other substances? — Yes / No
   - d) if there is any violence in your home? — Yes / No
6. How many days in a usual week do you or other family members read stories or look at picture books with your child? — No Days (0 days) / 1-2 Days / 3-4 Day / 5-6 Days / Everyday (7 Days)

Please share any other comments on your child's health care today on the back of this sheet.

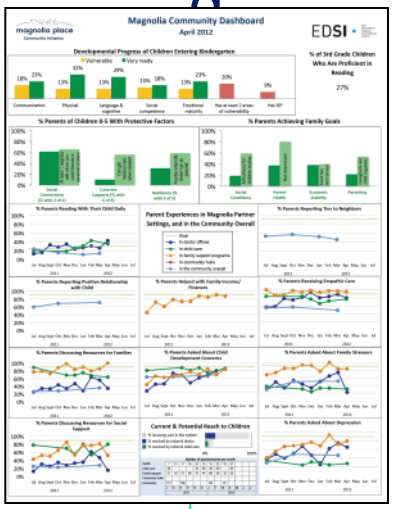
Thank you for your time and help!

UCLA IRB Number:
Expiration Date: / /1

Run Charts



Dashboard

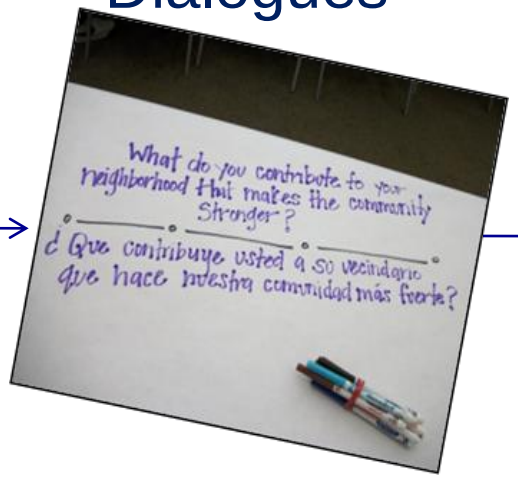


Taking Collective Action

Sharing Data for Action with Residents

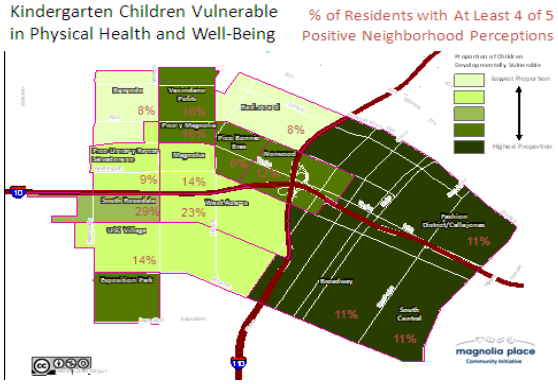
Community Survey

Community Dialogues



Mapping Local Neighborhoods

Discussing and Acting on Results



Can Best Babies Zone's Make A Difference in Birth Outcomes

BBZ Vision and Mission

- All babies are born healthy, into communities that enable them to thrive and reach their full potential

- To give every baby born in a Best Babies Zone the best chance in life

What makes BBZ different?

Multi-level: not only individuals – but families, communities, systems and policy.

Several different domains: not only health services – but educational, economic, and community development.

Life-course: not only disease prevention – but health promotion and optimization over the life course, with strategic investments in sensitive periods.

BBZ Goal 1

- To improve health and key life course outcomes for pregnant women, young children and their families in the four Best Babies Zones.

BBZ Goal 2

- To assist communities in building their capacity to achieve sustainable multi-sector systems change to promote and improve family health and wellbeing.

BBZ Goal 3

- To transform and align systems across sectors to promote and address MCH priorities and populations

Conclusions

- Child Health and Health Care System needs to move from version 2.0 to 3.0
- This requires a major change in the operating system
- New and More Integrated System Design
  - Vertical, horizontal, longitudinal
- System Improvement Initiatives
  - Place Based Initiatives – Magnolia, BBZ
  - Cross Sector Learning Systems –CCLC
- New and Better Data, Information, Analytics – TECCS

Priority Areas : multi-sector Health Promotion and Development

- Preconception health and Prenatal Care –optimize birth outcomes
- Mental and Behavioral health for children and their families – optimize family function
- Comprehensive, Adaptive Prevention Systems- Minimize chronic health problems
  - Smoking
  - Drug and Alcohol use
  - Obesity
  - Media exposure, parental engagement

Priority Areas : multi-sector Health Promotion and Development

- Developmental, Early, and Pre-emptive Intervention – optimize development Health
  - Developmental , behavioral, mental health issues
- Oral Health Services
  - Oral Health Home, OH Neighborhood, OH System
- Vulnerable Populations
  - Child Welfare and Foster Care
  - Children of Immigrant Parents
  - Children of Depressed and Substance Abusing Parents

Connecticut Early Childhood Health 3.0

- Establish a Ct ECH&D Innovation Network
  - Public private partnership for Ct future
- Development Formal Collaborative Innovation Networks (CoINS)
  - Across MP like place based efforts in 5-10 sites ala TECCS, BBZs
  - Across child health providers – ala IHI & NICHQ
  - Child Care providers – ala Delaware's CCLC
- Use major health centers and birth hospitals as hubs
- Build the infrastructure for 3.0 Child ACOs

UCLA Center for Healthier Children, Families and Communities
&
National Center for Infancy and Early Childhood Health Policy

Http.//healthychild.ucla.edu