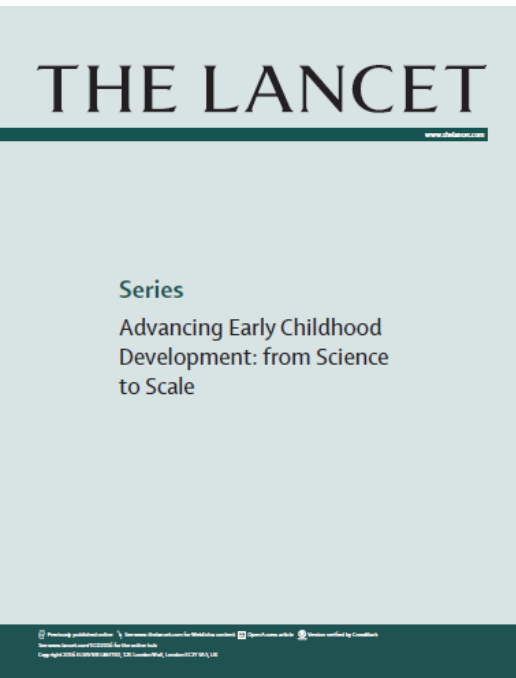


THE LANCET



Advancing Early Childhood Development: from Science to Scale

Maureen Black, Ph.D.
University of Maryland School of Medicine
and
RTI International

www.thelancet.com/series/ECD2016

What happens to children who survive?

Child development in developing countries 1

Developmental potential in the first 5 years for children in developing countries

2007

**Sally Grantham-McGregor, *Yin Bun Cheung, Santiago Cueto, Paul Glewwe, Linda Richter, Barbara Strupp, and the International Child Development Steering Group†*

Over 200 million children under 5 years of age in LMICs are not fulfilling their developmental potential

2011

Inequality in early childhood: risk and protective factors for early child development

Susan P Walker, Theodore D Wachs, Sally Grantham-McGregor, Maureen M Black, Charles A Nelson, Sandra L Huffman, Helen Baker-Henningham, Susan M Chang, Jena D Hamadani, Betsy Lozoff, Julie M Meeks Gardner, Christine A Powell, Atif Rahman, Linda Richter

THE LANCET

2016 ECD Series: 3 papers, plus 8 commentaries & notes

Advancing Early Childhood Development: from Science to Scale 1

Early childhood development coming of age: science through the life course

Maureen M Black, Susan P Walker, Lia CH Fernald, Christopher T Andersen, Ann M DiGirolamo, Chunling Lu, Dana C McCoy, Günther Fink, Yusra R Shawar, Jeremy Shiffman, Amanda E Devercelli, Quentin T Wodon, Emily Vargas-Barón, Sally Grantham-McGregor, for the Lancet Early Childhood Development Series Steering Committee†*

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What's new?

2016 Early Child Development Series

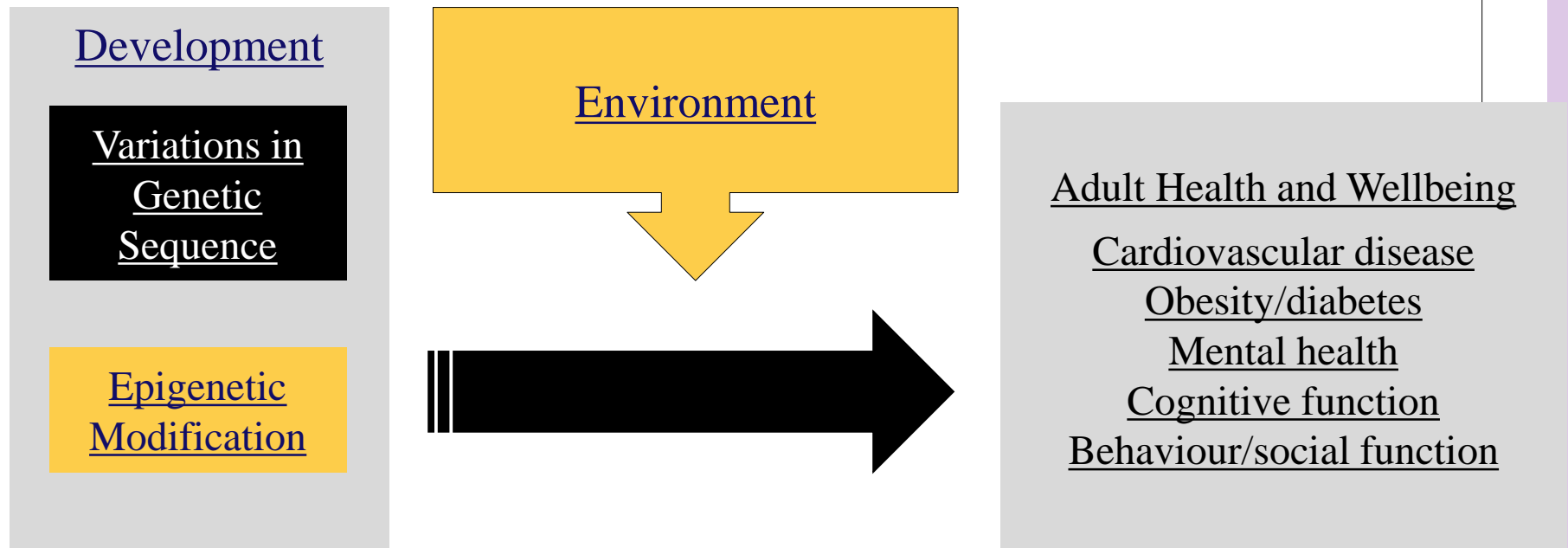
■ **Science**

- Focus on young children – conception to age 3y
- Life-course approach
- Nurturing care

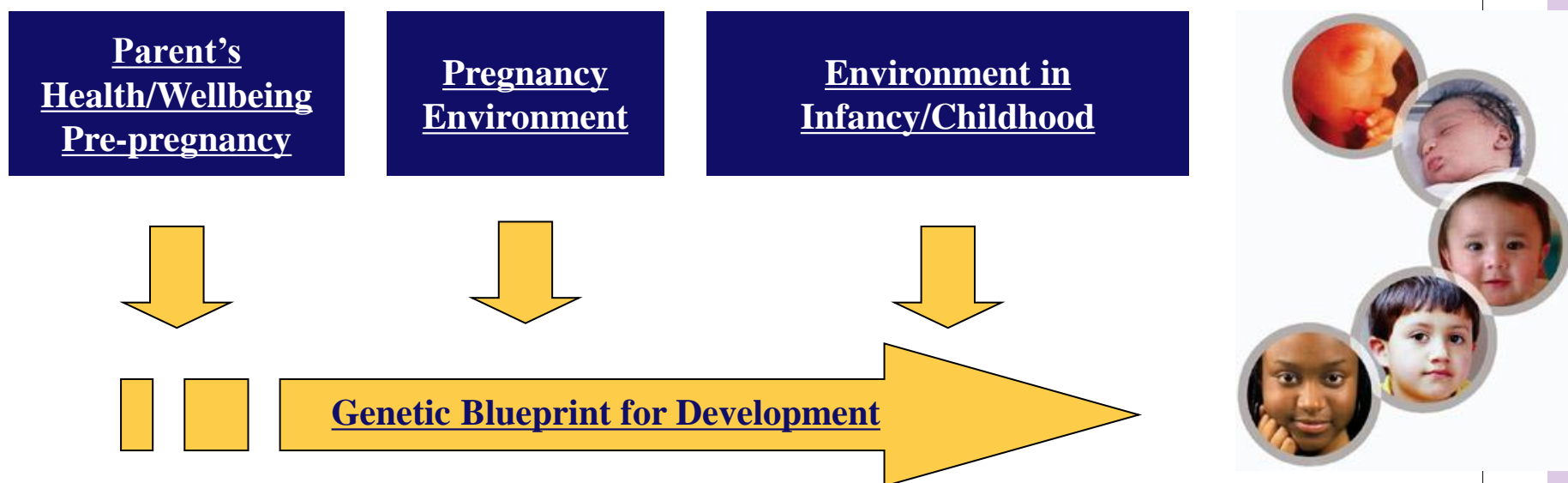
■ **Policies**

- Updated estimates of the burden
- Cost of inaction
- Widespread endorsement as strategy to achieve Sustainable Development Goals (SDGs)

Gene environment interactions underlie developmental programming

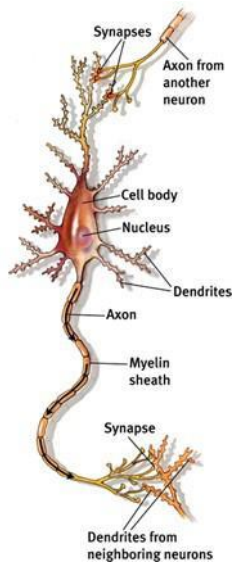


Environments across the life-course



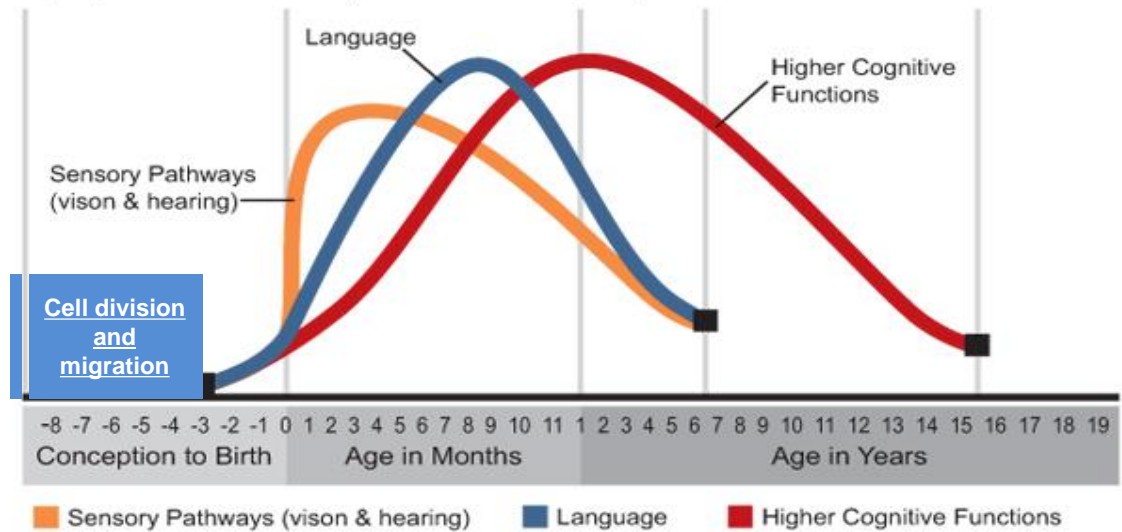
Quality & timing of early environments shape children's potential

Sensitive periods and the developing brain

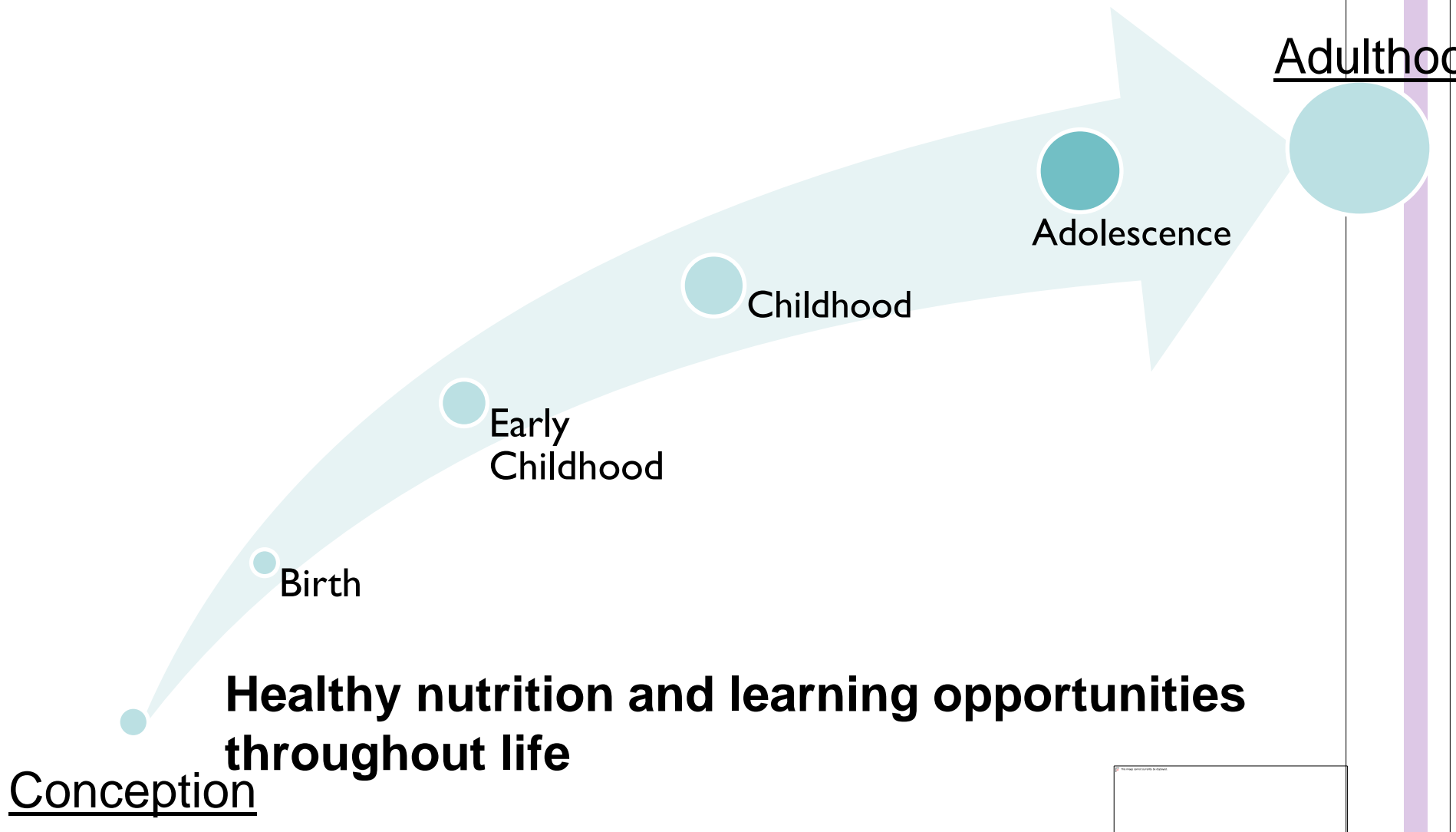


Human Brain Development

Synapse formation dependent on early experiences



Life Course Perspective to Child Development



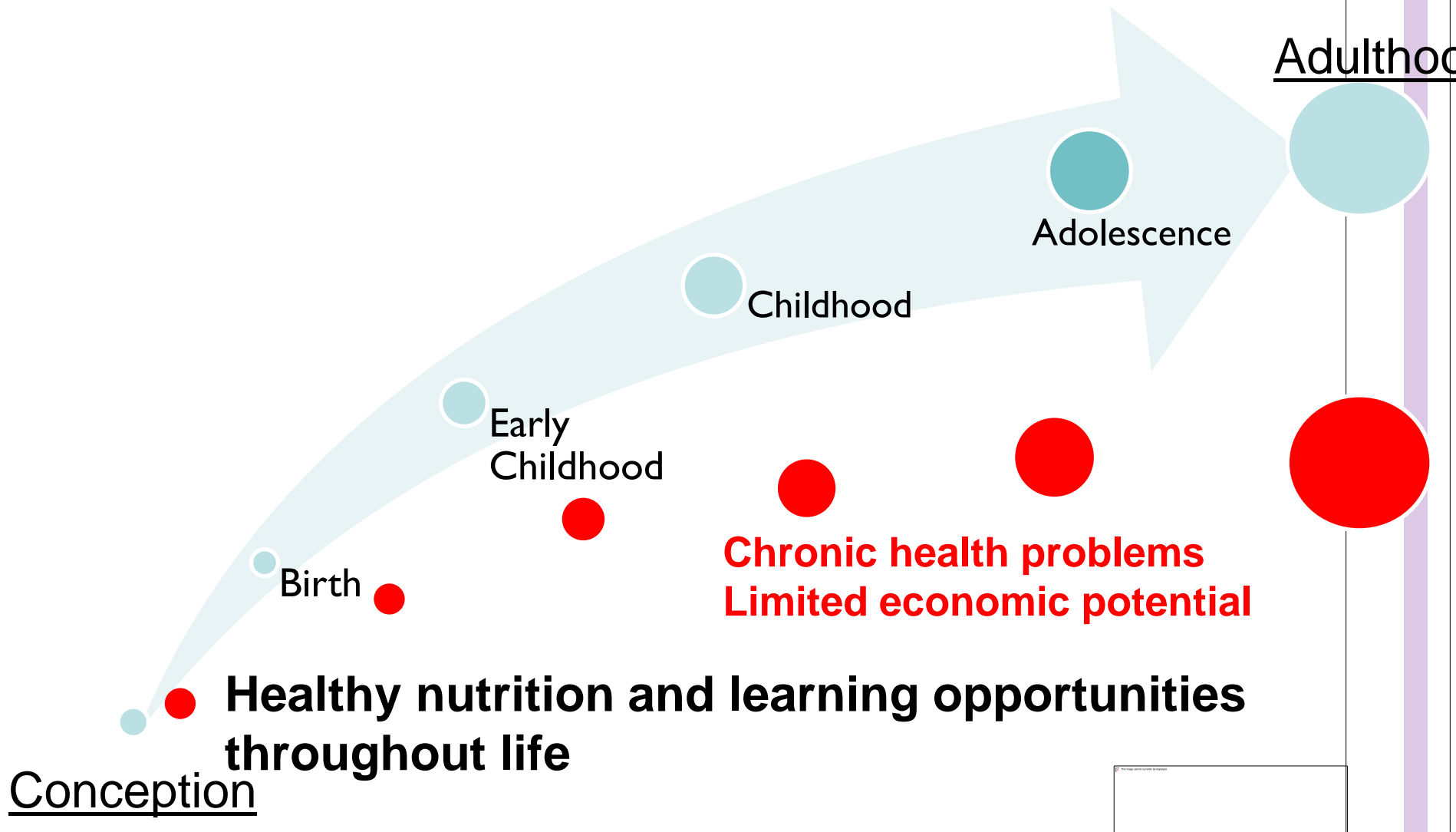
Conception

Healthy nutrition and learning opportunities throughout life



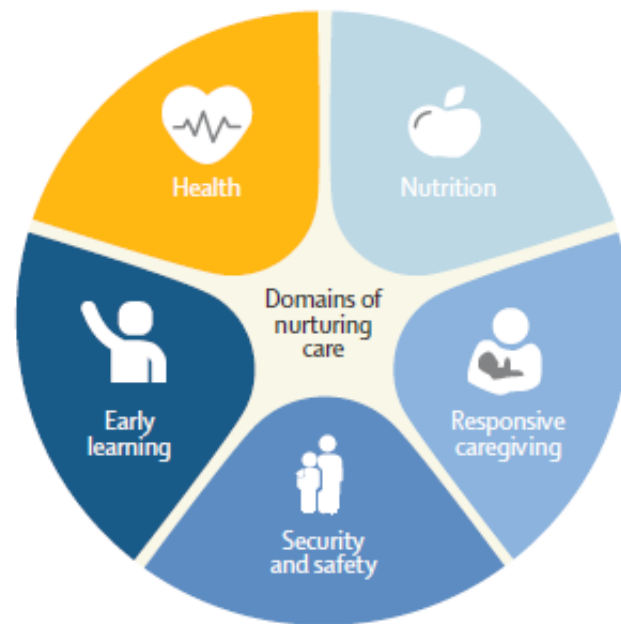
Adulthood

Life Course Perspective to Child Development



Nurturing Care

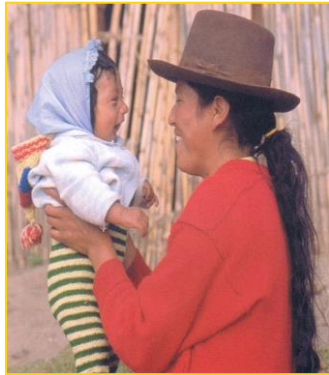
- Nurturing care promotes early child development
 - Nutrition
 - Health care
 - Responsive caregiving
 - Protection from danger
 - Opportunities to explore, learn and discover



What is Nurturing Care?

1. Contingent Responsiveness: parent responses are prompt, related to child, & developmentally appropriate.
2. Nurturant: warm & sensitive
3. Routines: reduced household chaos
4. Early learning: Shared book reading, story telling, opportunities for exploration
5. Promote child health, nutrition, & safety: (e.g., prenatal care breastfeeding, adequate nutrition, etc.)
6. Guidance: appropriate (not harsh) discipline

Nurturing care is fostered by a supportive environment



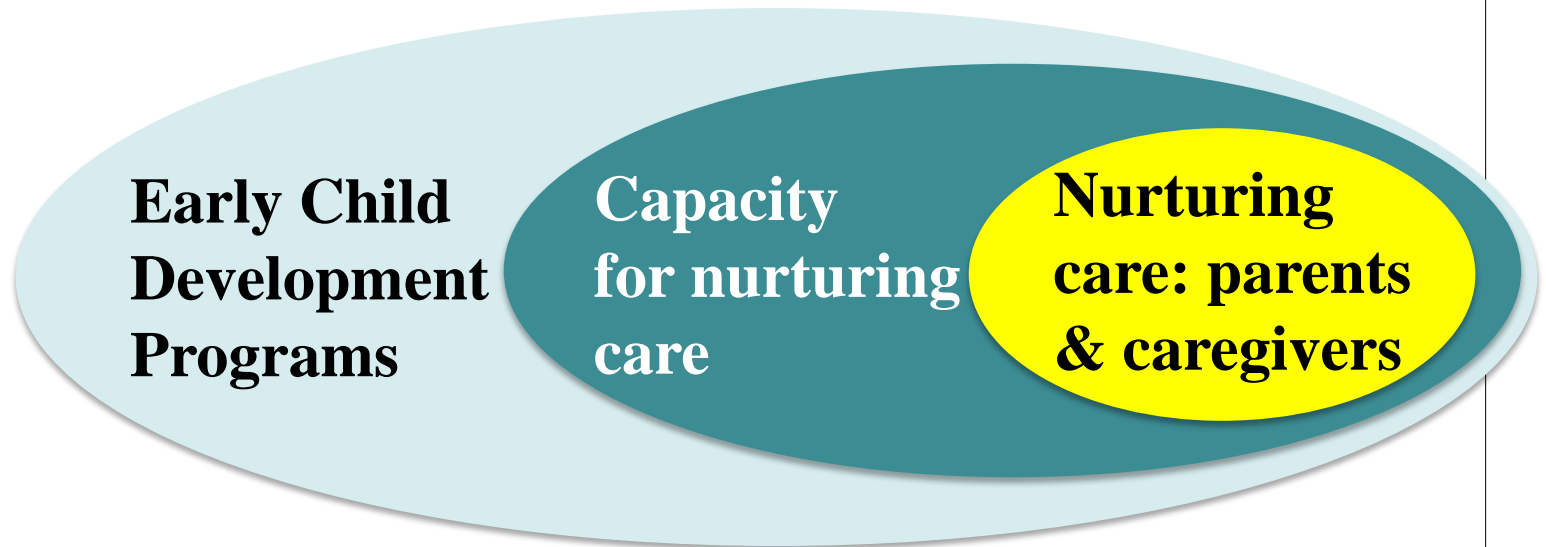
**Nurturing
care: parents
& caregivers**



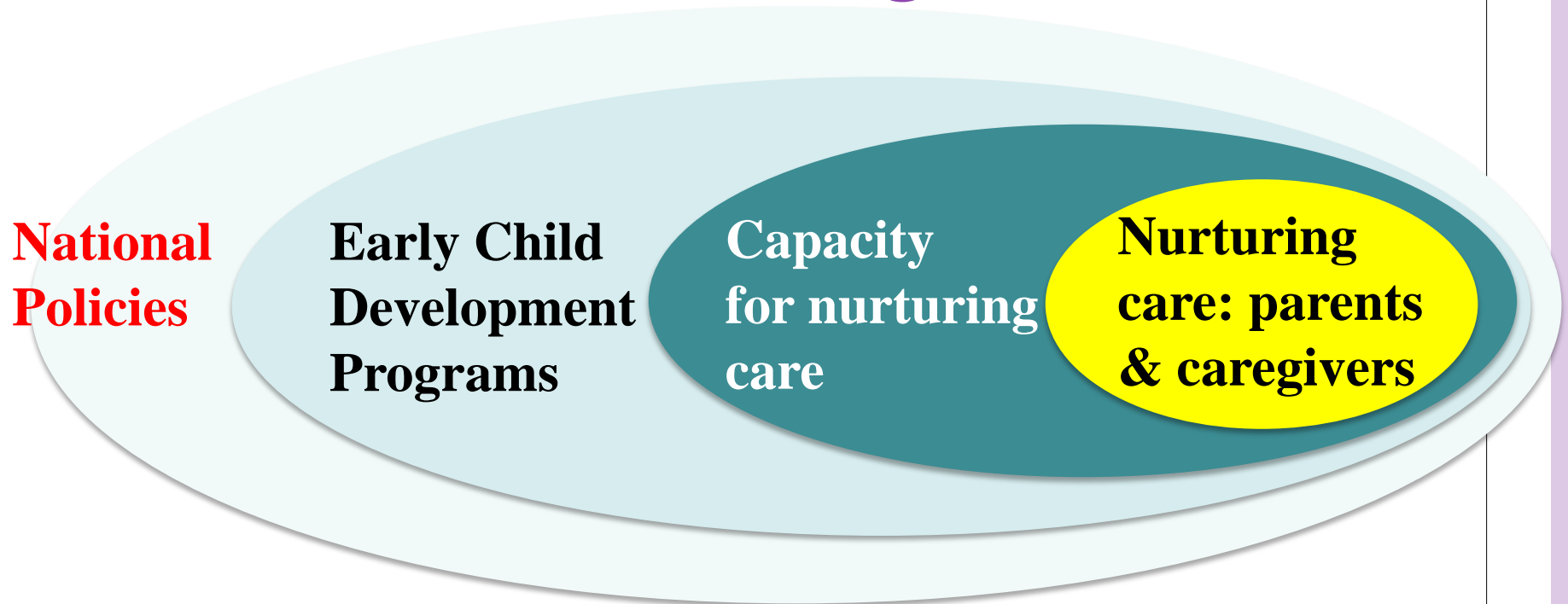
Nurturing care is fostered by a supportive environment – the ecological model



Nurturing care is fostered by a supportive environment – the ecological model

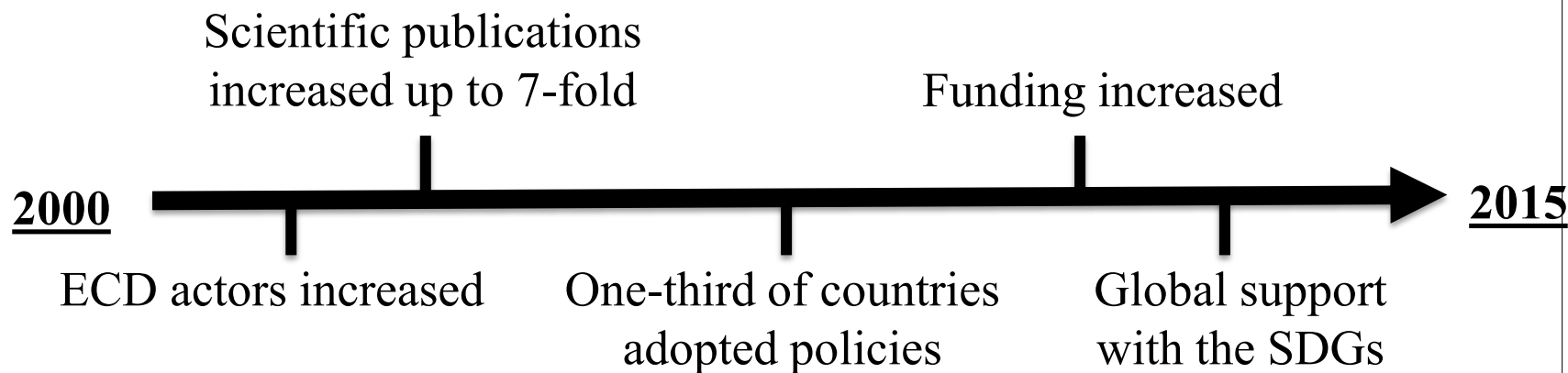


Nurturing care is fostered by a supportive environment – the ecological model



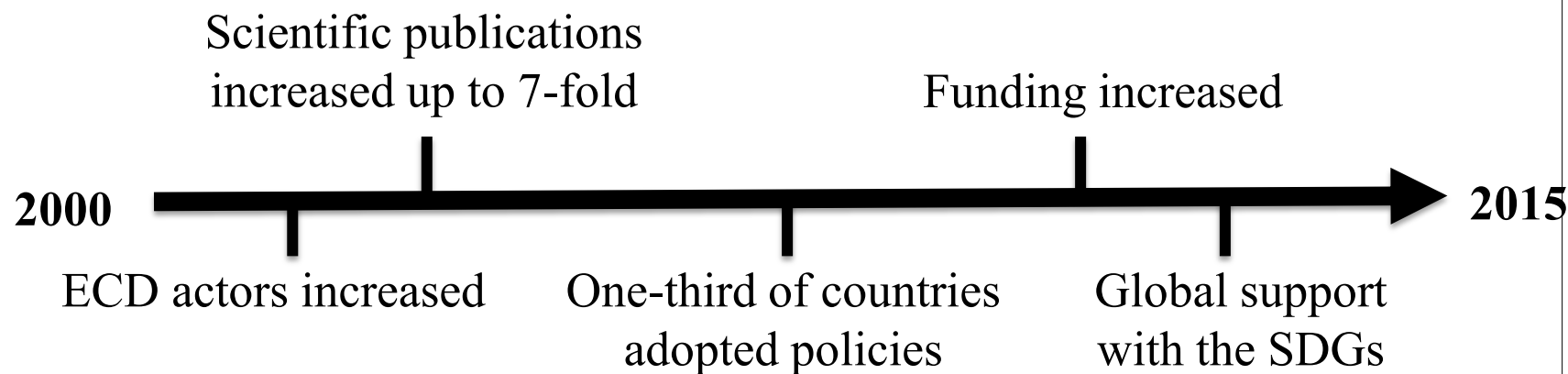
Momentum is growing

- Since *The Lancet* published the landmark series, *Child Development in Developing Countries* in 2007 and 2011



Momentum is growing

- Since *The Lancet* published the landmark series, *Child Development in Developing Countries* in 2007 and 2011



2000
7 countries

2007
40 countries

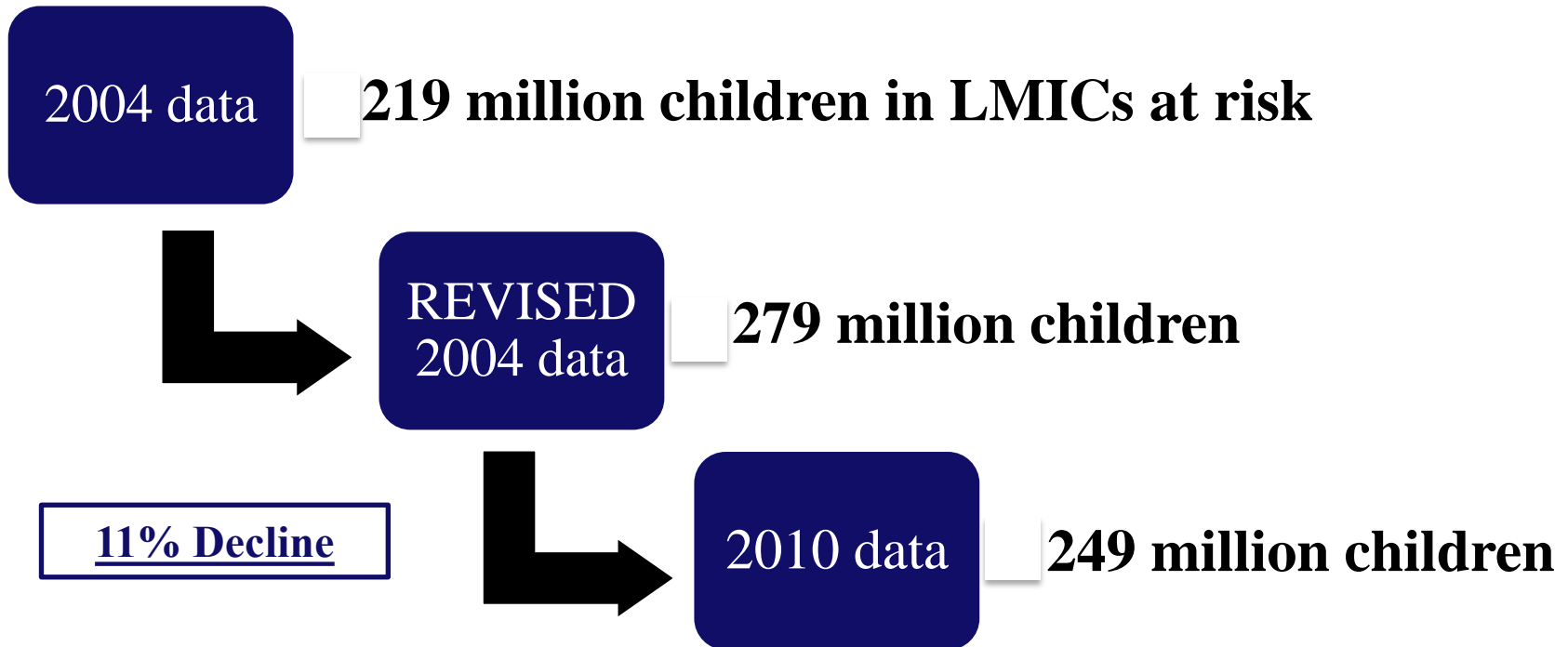
2014
68 countries



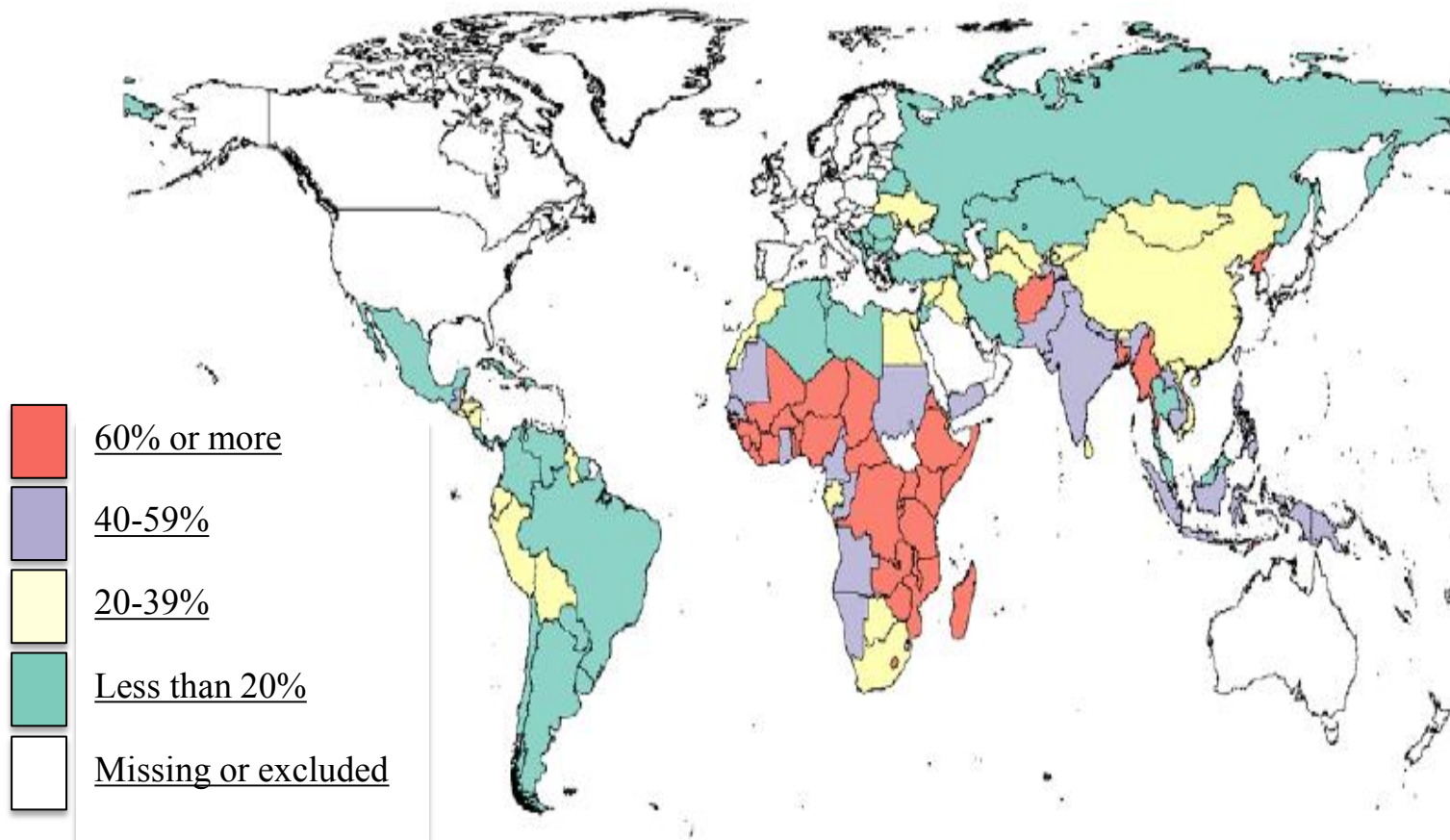
Countries with a national
multi-sectoral early
childhood development
policy instrument in 2014



Burden of risk



Risk varies significantly by low, middle and upper-middle income countries



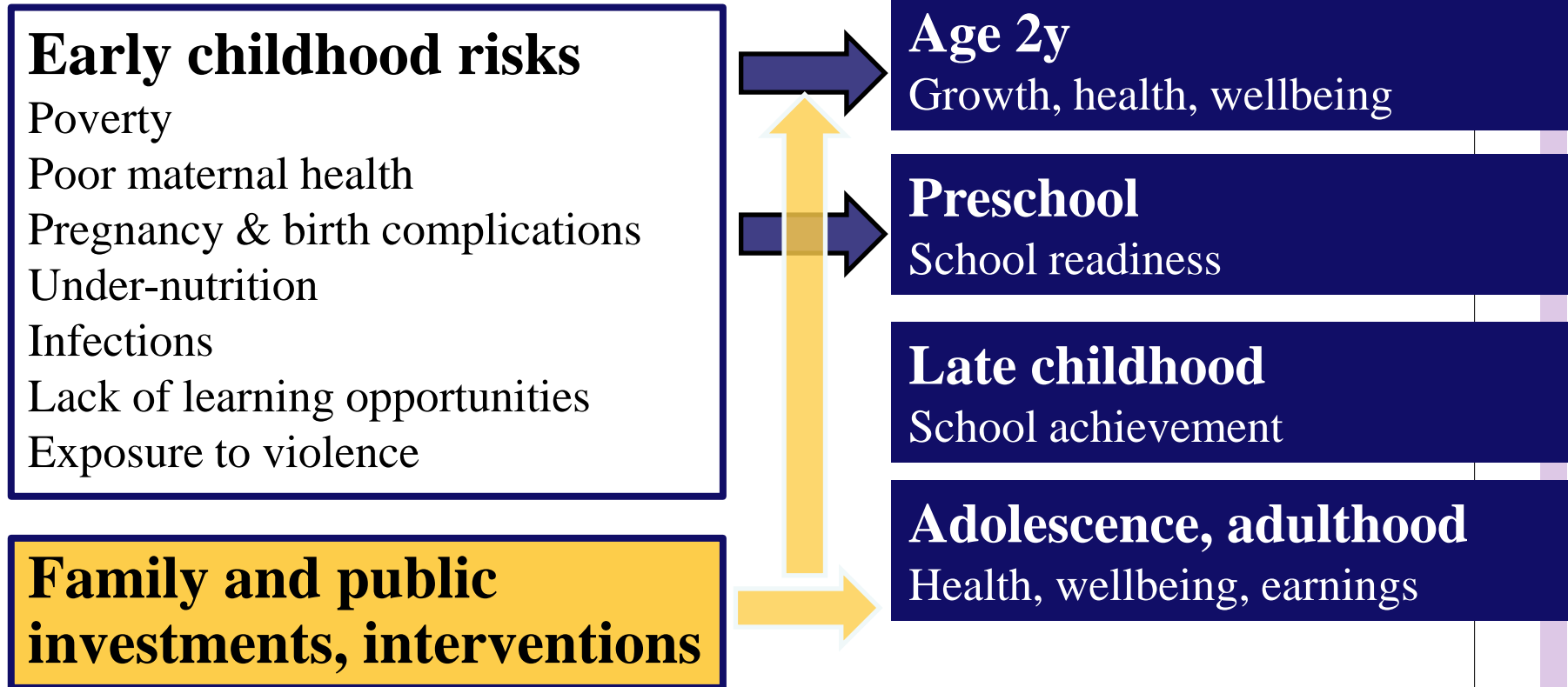
The personal cost of inaction in grades and earnings lost

	Grade Deficit	Income Loss	Children
Stunted only	4.67	42.3%	106.5m (18.5%)
Poor only	0.71	5.8%	75.6m (13.1%)
Stunted and poor	6.56	32.4%	67.2m (11.7%)
			249.3m (43.3%)

Cost of inaction in grades and earnings lost

43% of children in LMICs (249 million)
lose **26.6%** of average adult income

Societal costs of inaction



Features of large-scale successful programs

1. Political concern

2. Inf

4.

5. ... government

6. ... multiple entry points – begin early - pregnancy or before

**Political commitment
& leadership**



Sustainable Development Goals (SDGs) 2016-2030

- Universal (not only low & middle income countries)
- How to provide for 7.4 billion people
- Requires healthy, productive citizens

- **Lifespan perspective**

<https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals>



Improving Early Child Development: Key to achieving the SDGs



SDGs: Nutrition & Early Child Development

- By 2030 end all forms of **malnutrition**, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons
- By 2030 ensure that all girls and boys have access to quality **early childhood development**, care and pre-primary education so that they are ready for primary education. No clear indicators.



Early Child Development

A good start in life ensures a sustainable future for all

Margaret Chan, WHO

Anthony Lake, UNICEF

Jim Yong Kim, The World Bank Group

Ban Ki-Moon, United Nations

Post Lancet.....

- Early Childhood Development Action Network (ECDAN)
 1. Scaling-up multi-sectoral interventions
 2. Building ECD workforce
 3. Strengthening national data
 4. Finance
 5. Advocacy
- African Early Childhood Network
- 0 – 3 Population-based Measure

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- **Disciplines:** Biology, Developmental Psychology, Economics, Education, Epidemiology, Genetics, Global Health, Neuroscience, Nursing, Nutrition, Pediatrics, Psychiatry, Political Science, Public Health, Statistics, Sociology

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Thank you

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