Optimizing Mental Health Development for Children & Youth: A Life Course Approach

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Life Course Approach to Children's Mental Health Webinar Series
MCH Life Course Intervention Research Network (LCIRN) –
National Academy of Sciences Forum on Child Well Being

UCLA CENTER
FOR HEALTHIER CHILDREN,
FAMILIES AND COMMUNITIES

Welcome

Introduction to the webinar Series

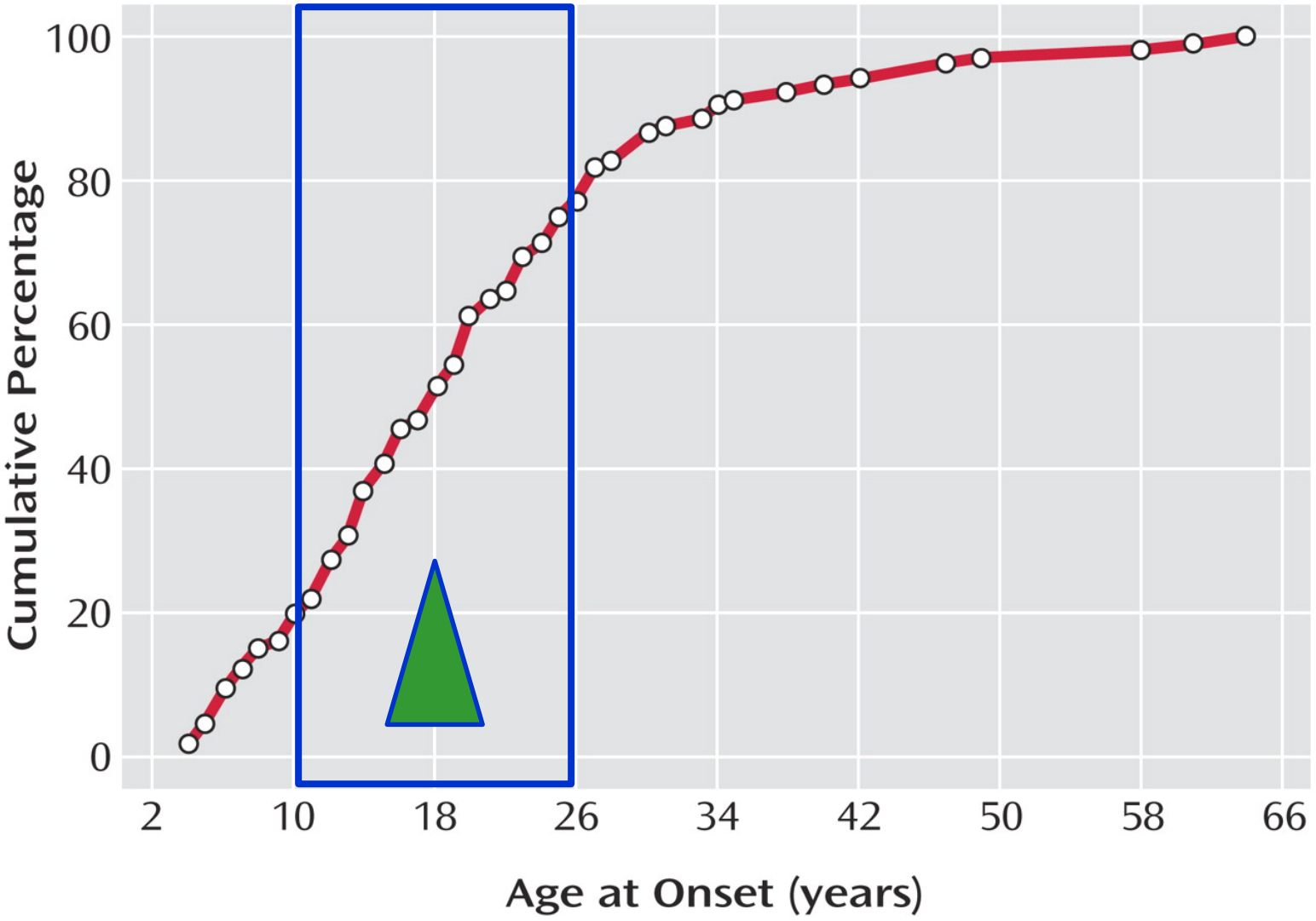
Life Course Approach to the Mental Health of Kids

- 8 Webinars Co-developed & sponsored
  - MCH Life Course Intervention Research Network (LCIRN)
  - National Academy of Science's Forum for Child Well-Being
- How mental health and mental health disorders develop over the lifespan
- Identify gaps in knowledge, explore new strategies, consider new approaches to prevention and optimization
- Catalyze transdisciplinary and transformational approaches
- LCIRN research nodes (families, schools, early childhood mental health)
- Summary "workshop" publication created by NAS

Mental Health in the US

- Mental health disorders are the leading cause of disability in individuals 15-44;
- They are a fundamental component of the recent unprecedented decline in US life expectancy, as the deaths of despair continue to increase
- 75% of mental health disorders begin by age 24, making the first two decades of the life course an important strategic target for prevention and mental health promotion activities
- Yet, mental health in general, and the mental health of young people has not been a big priority of the US health system
  - Coverage, parity, services, training, data systems

Mental Health Disorder Across the Life Span



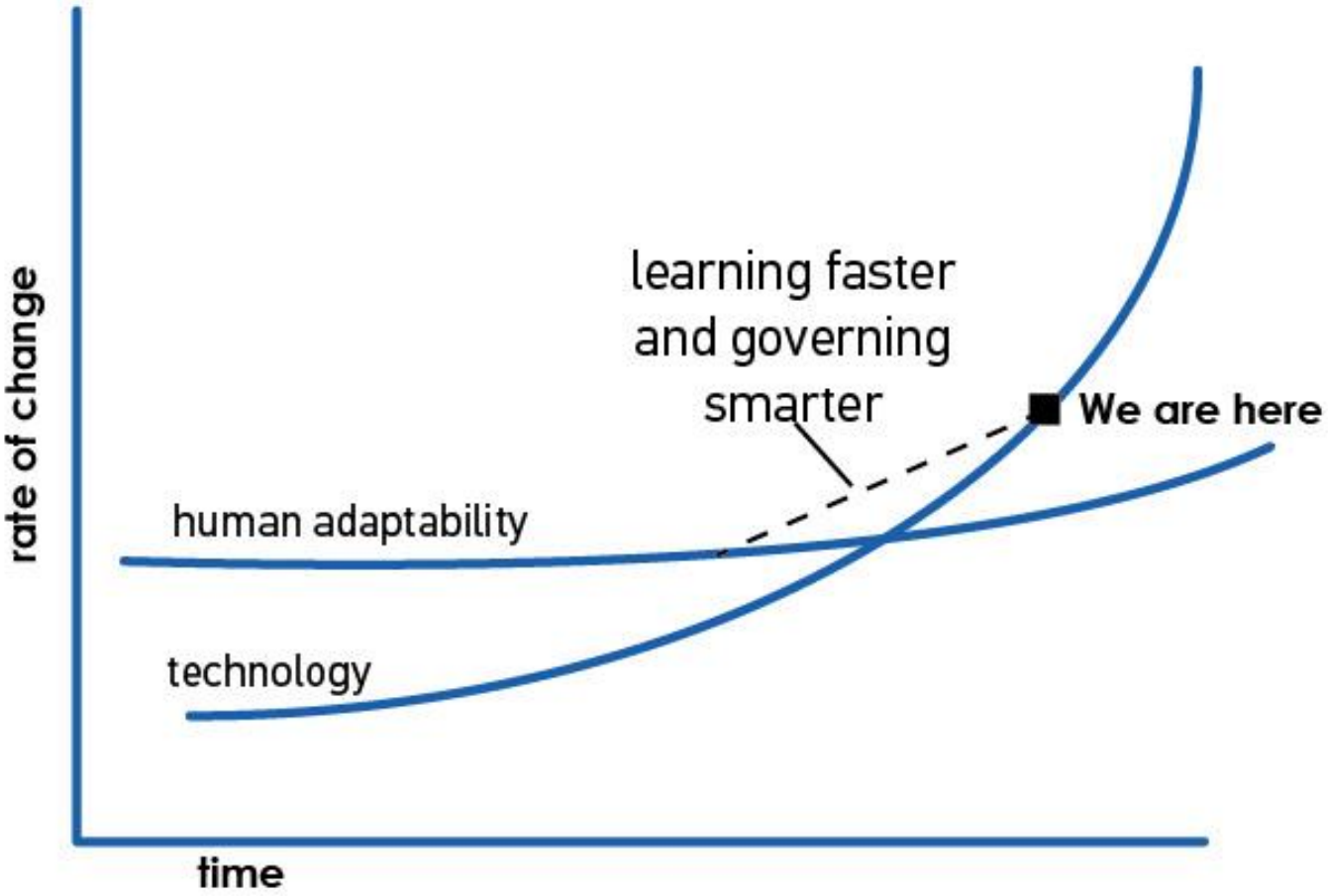
Mental Health of Kids

- There appears to be a significant increase in number of children and adolescents with mental health disorders
  - YRBS, NHIS, NSCH, NVS
  - Suicide, self harm rates, mental disabilities
  - Reported rates of depression, anxiety disorders
- MH data and monitoring systems are spotty at best
- This relative rapid change in epidemiology of mental health problems in children suggests rapid shift in the ecosystem of risks
  - Distribution & organization of risk and protective factors
  - Developmental scaffolding of positive health development

Deep Drivers of Human Ecosystem Change

- Change of age (economies/ production ecosystems)
  - agriculture> industrial> digital
- Major disruptions in our social ecosystems
  - cultural forms, value streams, production models, relationship to environment/planet
- Accelerators of change –require rapid adaptation
  - Globalization X Technology X Climate Change
- Speed of change is increasing (faster than we can adapt to; disease and disability due to adaptive failures)

The Adaptive Challenge of our Age



Tom Friedman: Thank You For Being Late

3 Alternative Analytic Frameworks for making sense of complex systems/problems

- Life Course Health Development
  - Building on relational developmental systems theory
- 3.0 Health System Transformation Framework
  - Evolution from 1.0 medical care system to a 2.0 health care system and now a 3.0 health system
- Three Horizon Transformative Innovation Framework
  - A fore sighting method to create alternative futures


The Three Horizons Required for Innovation's Management
H3
H2
H1
Seeing beyond

By Neal Halfon, Peter Long, Debbie I. Chang, James Hester, Moira Inkelas, and Anthony Rodgers

DOI: 10.1377/hlthaff.2014.0485
HEALTH AFFAIRS 33,
NO. 11 (2014): 2003–2011

ANALYSIS & COMMENTARY

Applying A 3.0 Transformation Framework To Guide Large-Scale Health System Reform

ABSTRACT **Implementation of the Affordable Care Act is unleashing historic new efforts aimed at reforming the US health system. Many important incremental improvements are under way, yet there is a growing recognition that more transformative changes are necessary if the health care system is to do a better job of optimizing population health. While the concept of the Triple Aim—dedicated to improving the experience of care, the health of populations, and lowering per capita costs of care—has been used to help health care providers and health care systems focus their efforts on costs, quality, and outcomes, it does not provide a roadmap for a new system. In this article we describe the 3.0 Transformation Framework we developed to stimulate thinking and support the planning and development of the new roadmap for the next generation of the US health care system. With a focus on optimizing population health over the life span, the framework suggests how a system designed to better manage chronic disease care could evolve into a system designed to enhance population health. We describe how the 3.0 Transformation Framework has been used and applied in national, state, and local settings, and we suggest potential next steps for its wider application and use.**

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The US health system is both expensive and inefficient, producing less value at a higher cost than the health systems of most other developed countries while yielding strikingly large health disparities across population subgroups.[1–6] These shortcomings ripple across society, affecting not only the health of the population but also the productivity of the workforce; the competitiveness of products in the global marketplace; and the ability to invest in education, economic infrastructure, and the future vitality of the nation.

The Affordable Care Act (ACA) provides an unprecedented opportunity to transform the current *health care system* into a multisector *health system* focused on producing population health. Population health is the health outcomes of a group of individuals, including the distribution of such outcomes within the group.[7] It is understood that population health outcomes are the product of multiple determinants of health, including medical care, public health, genetics, behaviors, social factors, and environmental factors.[8] Already many disruptive innovations are emerging in the form of novel payment strategies, new delivery mechanisms such as accountable care organizations (ACOs), and the rapid expansion of health information technology that have a transformative influence on the health care system.[9] This new environment is transforming the current volume-driven payment model to one that rewards value, improves the experience of care, and promotes population

The Evolving Health Care System

The First Era (Yesterday)

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

Medical Care System 1.0

The Second Era (Today)

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

Health Care System 2.0

The Third Era (Tomorrow)

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

Health System 3.0

health transformation framework

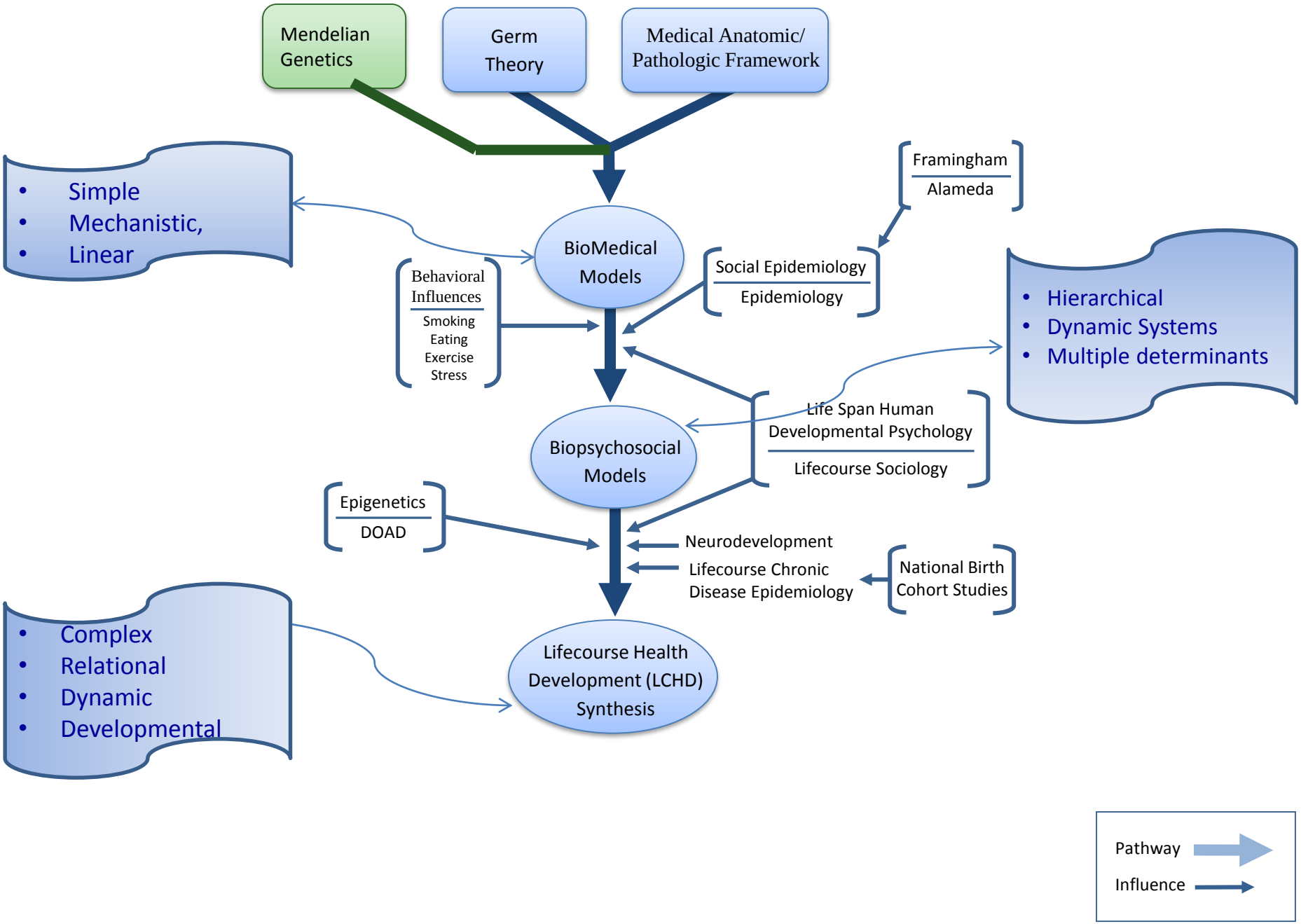
SYSTEM DESIGN	Health service providers, operating separately	Team-based care within health	Community integrated services, health care as one component
CARE MODEL	Little coordination between in/out patient care, episodic treatment	Chronic condition management, patient-centered care coordination	Health, psychosocial, and wellness care integrated across the life course
DOMINANT PAYMENT APPROACH	Fee-for-service	Value-based health payments	Population-based global budgets, linked to multi-sector financial impact
APPROACH TO QUALITY	Variable, low transparency	Consistent, standardize processes and outcomes	Continuous learning and quality improvement
BENEFICIARY LENS	Individual	Patient and family	Subpopulations and communities, equity- oriented

Halfon et al., 2014. Adapted from Figure 2.

LCHD as a catalyst for transformation

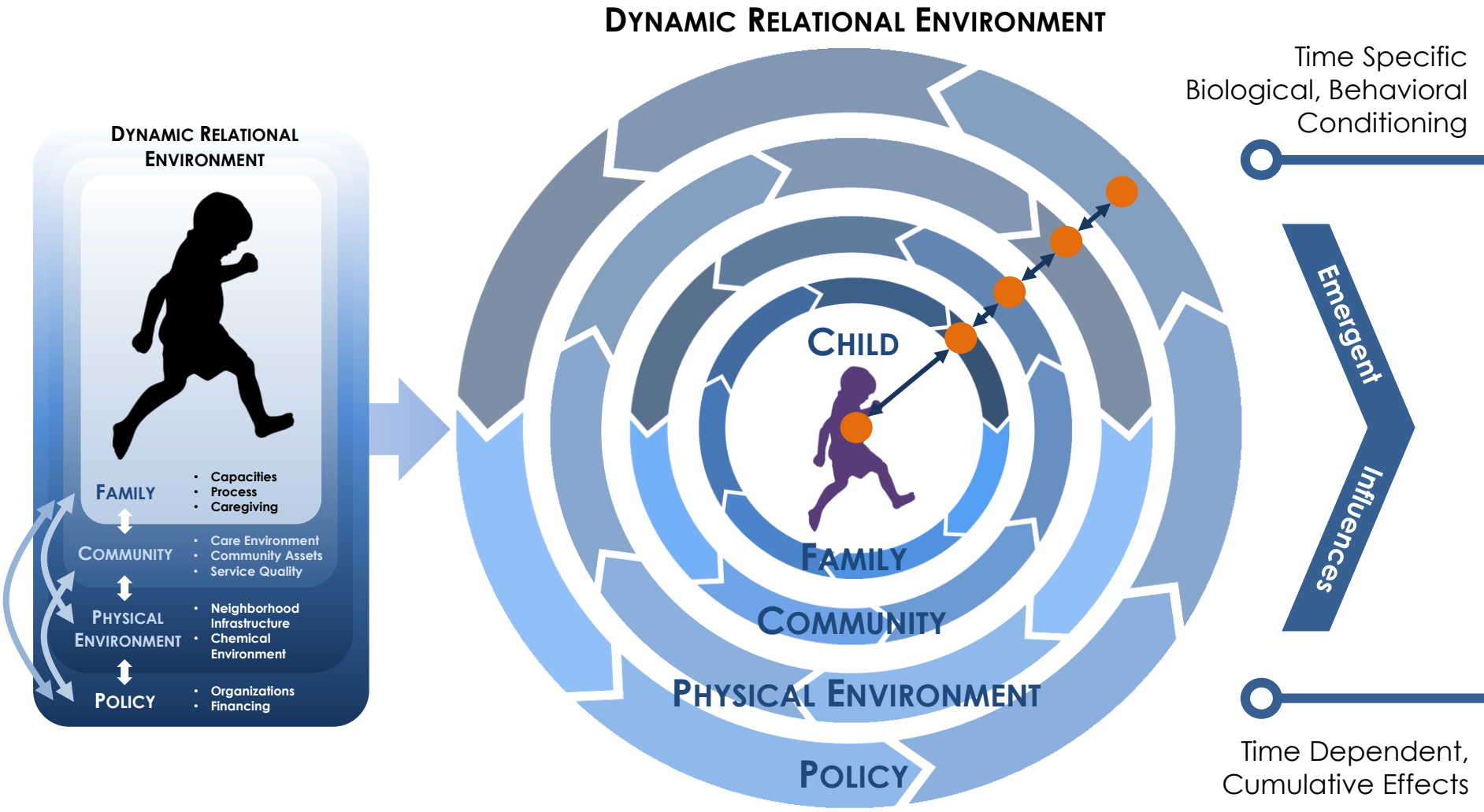
- Life Course Health Development – LCHD – is analytic framework or model, used to make sense of the world,
- LCHD provides a new way thinking about the origins and development of children's mental health, development and wellbeing
- LCHD illuminates how health and disease develop across the life course and across generations
- LCHD focuses on the multiple ways risks and protective factors “get under our skin” during sensitive periods of development and condition our behaviors and biology

Evolving Conceptual Models of Health



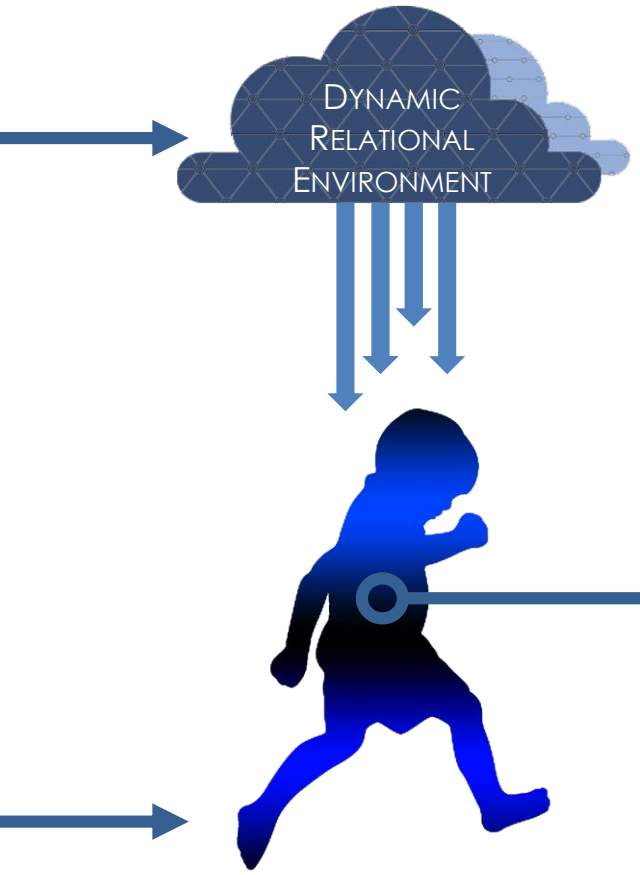
Changing Contexts of Health Development:

Multiple Factors, Dimensions, & Levels Dynamically Transacting



Variable Adaptive Responses:

Plasticity & Optimization of Regulatory Processes



Behavioral Adaptation

- Responsiveness
- Temperament
- Aggression
- Attachment
- Self Regulation

Physiological Adaptation

- Hypothalamic-Pituitary Adrenal Axis
- Autonomic Nervous System
- Metabolic Processes
- Inflammatory & Immune Responses
- Allostatic Load
- More

Developmental Adaptation

- Adaptive Plasticity through Developmental Switches
- Selective Optimization Strategies
- More

Dynamics of Health Development:
Phases, Trajectories and Outcomes

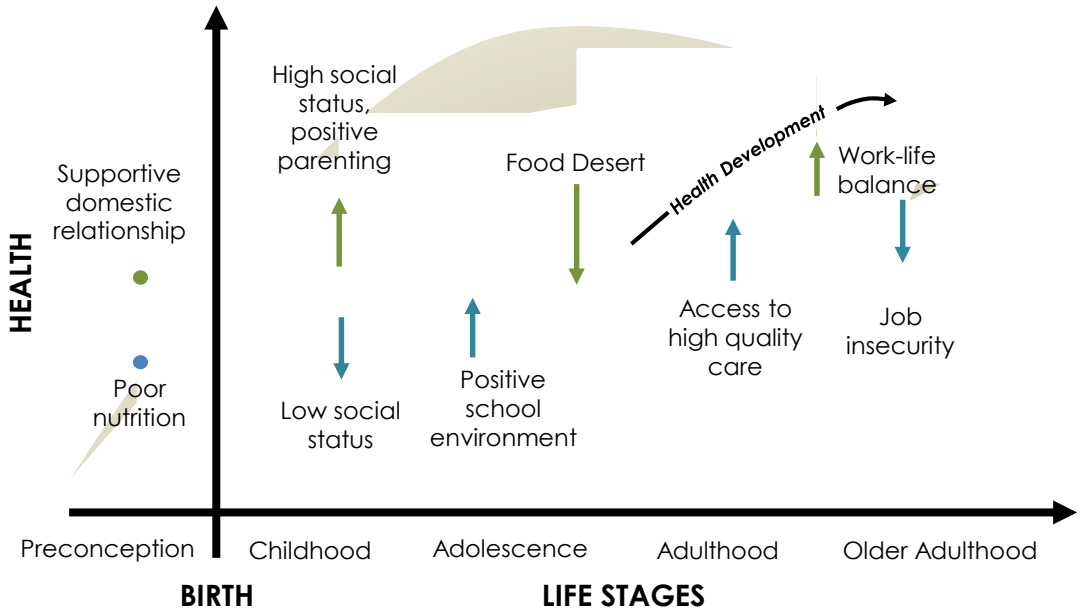
Health Development Trajectories

Patterns of changes in health assets over time, affected by environmental and intrinsic factors.

1 LATENT EFFECTS
Resulting from experiences, particularly during sensitive periods, that influence health later in life.

2 CUMULATIVE EFFECTS
Resulting from experiences that accumulate over time & manifest in health.

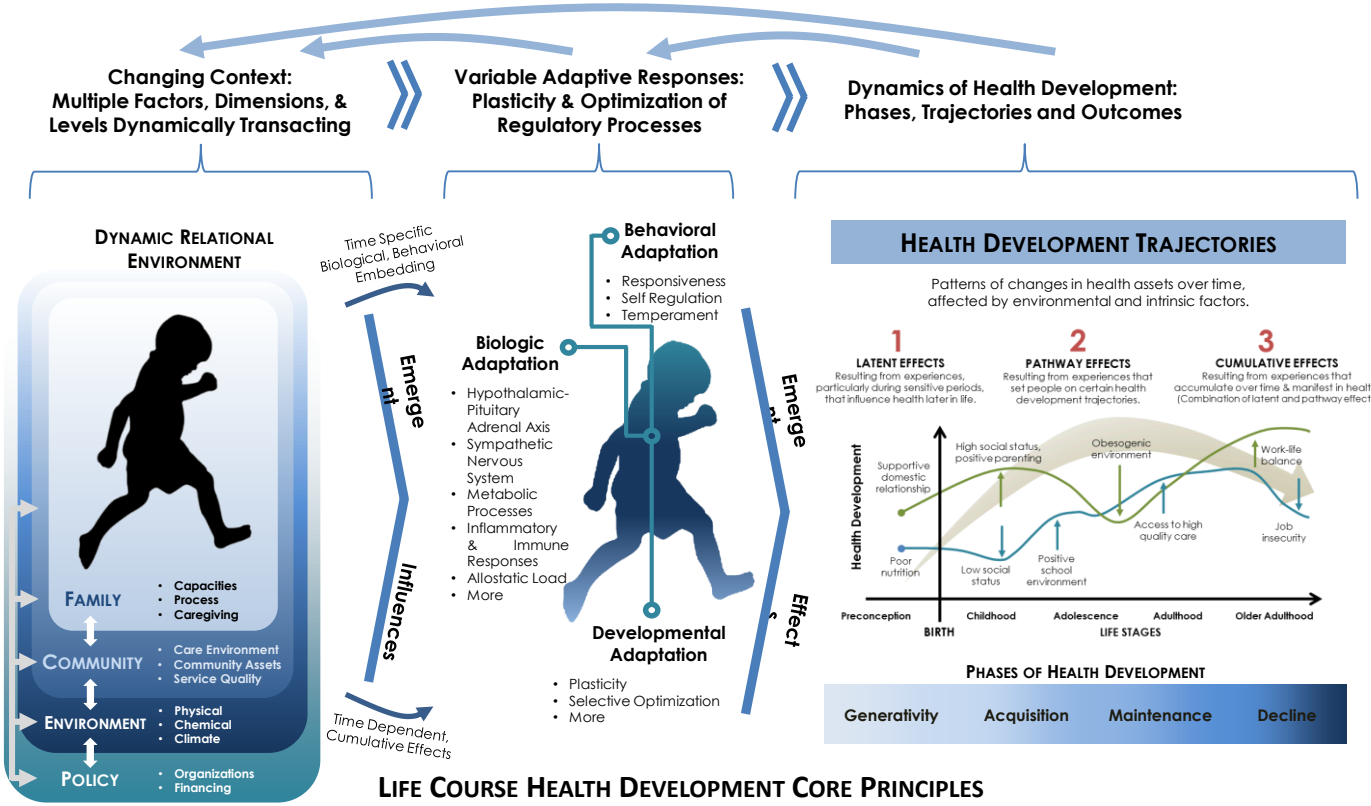
3 PATHWAY EFFECTS
Resulting from multiple, converging environmental and genetic influences, regulated by an array of specific developmental switches that set people on certain health development trajectories. (Combination of latent & cumulative effects)



Phases of Health Development

Generativity | **Acquisition** | **Maintenance** | **Decline**

Life Course Health Development



Life Course Health Development Core Principles

1. Health Development integrates health & development into a unified whole

2. **Unfolding** -HD **unfolds continuously** over the lifespan, shaped by experiences & environments

3. **Complexity** HD results from **adaptive, multilevel, and reciprocal interactions** between individuals and environments .

4. **Timing** -HD is **sensitive to the timing and social structuring** of l exposures & experiences .

5. **Plasticity** –HD phenotypes are **systematically malleable & constrained** by evolution .

6. **Thriving** -Optimal health development **promotes survival, enhances thriving and protects against disease.**

7. **Harmony** –HD results from **balanced interactions** of molecular, physiological, behavioral, cultural and evolutionary processes .

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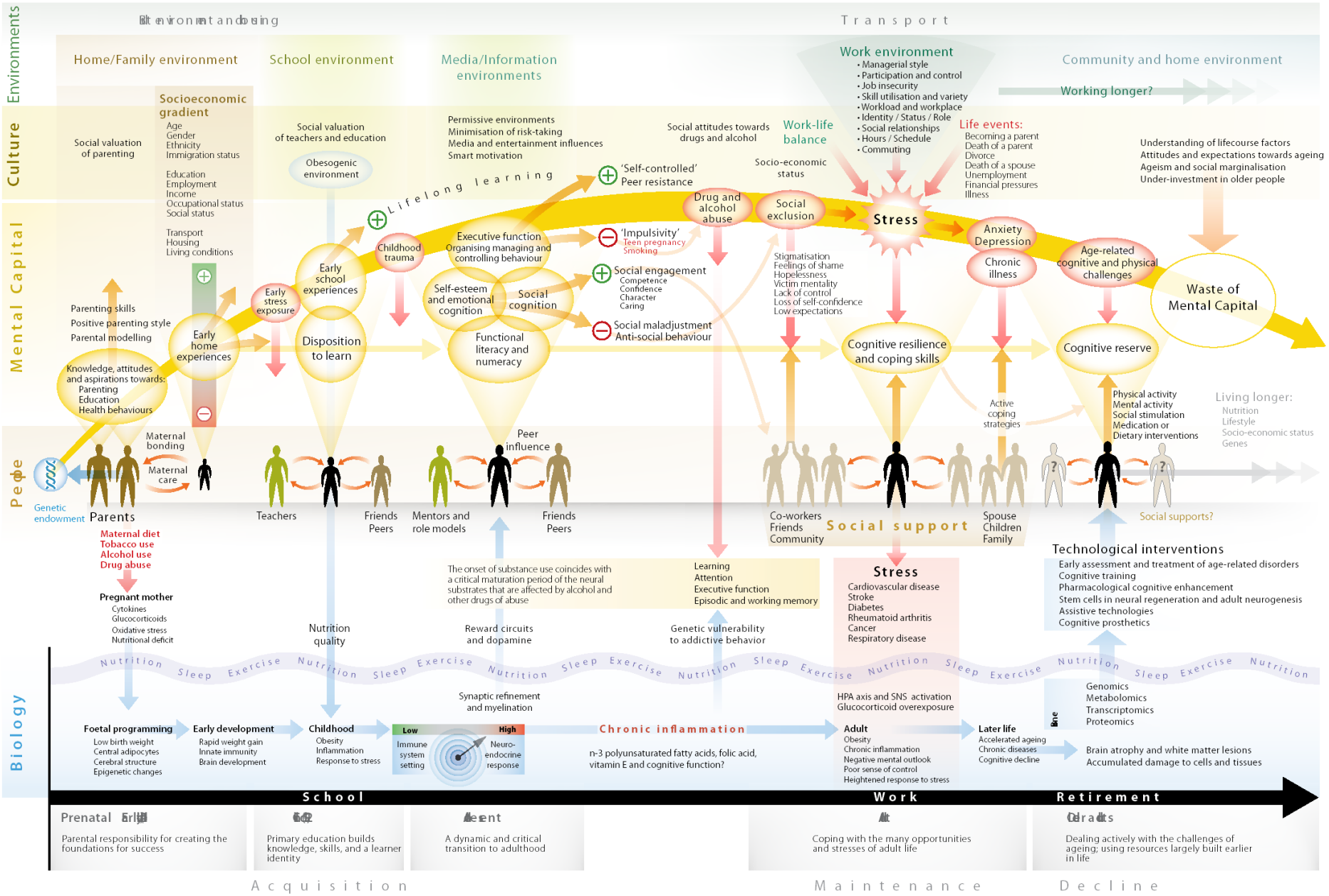
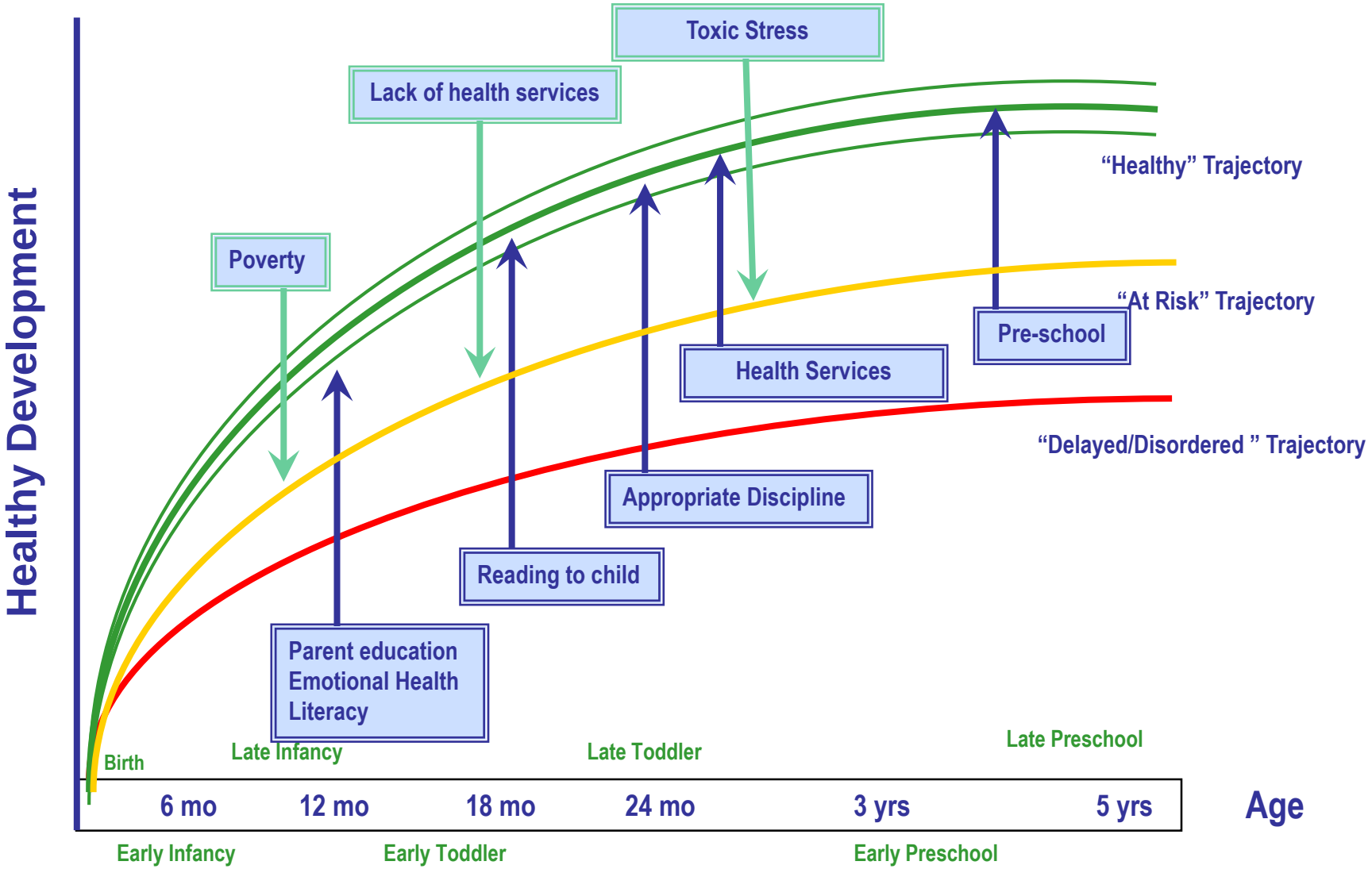
Appendix B: Synthetic view of the mental capital trajectory and factors that may act upon it



Reducing Risk & Optimizing Protective Factors



Strategies to Improve Developmental Trajectories