

PROTECTING THE FIRST 1000 DAYS OF A CHILD'S LIFE AND THE 280 DAYS BEFORE

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Abundant evidence shows that the first 1000 days of a child's life set the stage for the many wonderful years that follow. One can wind back the hands of the developmental clock by another 280 days to include embryonic and fetal life, a period when fetal programming of adult health takes place. During these biologically complex and vital times, considerable social, medical, economic, and policy support are needed, which if lacking, may cause unfortunate consequences.

The first 1000 days of a child's life are a time of dynamic brain development and organ maturation. Over the first 1000 days after birth, the brain increases to nearly adult size and proper wiring of the central nervous system takes place. Reflecting progressive biology, this period is marked by behavior evolution, spanning from when an infant is totally dependent on the parent to when the infant matures into an independent and verbal child.

This process is a blend of progressive biological maturation that is dependent upon nutrition and medical care, along with behavioral shaping and intellectual stimulation. Highlighting the need for proper policy, each of these factors is influenced by state and federal laws.

In the United States, about 20% of children are reared in poverty, and 40% of children are reared in low-income households.¹ Considering that there are more than 75 million children in the United States,² the number of children reared in economically challenged households is staggering, topping 30 million.

Fortunately, nutritional needs can be assisted by the federal Supplemental Nutrition Assistance Program (SNAP), which provides food assistance for low-income families. In the United States, the cost of this program is more than \$70 billion.³ It is thus a relief that recent conversations about reduction of this program have taken a pause.

Likewise, medical care for children is dependent upon the federal government for support through the Title XIX and Title XXI programs.⁴

1. *Child Poverty*, NAT'L CTR. FOR CHILD. IN POVERTY, <http://www.nccp.org/topics/childpoverty.html> (last visited Oct. 2, 2018) [<https://perma.cc/XW6V-AJQL>].

2. William O'Hare, *The Changing Child Population of the United States: Analysis of Data from the 2010 Census*, ANNIE E. CASEY FOUND. 4 (Nov. 2011), <https://www.aecf.org/m/resourcedoc/AECF-ChangingChildPopulation-2011-Full.pdf> [<https://perma.cc/KW7Q-Z83Y>].

3. *Supplemental Nutrition Assistance Program Participation and Costs*, U.S. DEP'T AGRIC.: FOOD & NUTRITION SERV. (Sept. 7, 2018), <https://fns-prod.azureedge.net/sites/default/files/pd/SNAPsummary.pdf> [<https://perma.cc/VF2X-Z4V8>].

4. Elisabeth Wright Burak, *How Restructuring Medicaid Could Affect Children*, GEO. U. HEALTH POL'Y INST.: CTR. FOR CHILD. & FAMILIES (Feb. 24, 2017),

Forty-five million children are enrolled in these Medicaid programs in the United States. This program is costly resulting in \$800 billion in expenditures annually.⁵ Because of this hefty number, states from coast to coast are looking for different ways to curtail Medicaid expenditures.

Economic pressures on the healthcare system have led these programs to run lean, reduce services, and curtail access in some circumstances. A balance needs to be struck so that cost reduction efforts do not result in a denial of services for children or place an undue administrative burden on practitioners that takes time away from their medical activities. This unfortunate drift in physician activities to more administrative tasks is well recognized and has led to a wave of physician dissatisfaction.⁶

Focusing on the 5% of children with complex medical conditions, who account for 60% of pediatric healthcare costs, is important as well.⁷ This focus is important, not only for cost control purposes, but to maximize medical care with the goal of helping to ensure healthy and prosperous futures. It is tempting for state legislatures to impose at risk and capitated models for this group of children. Yet, such models may not be effective.⁸ The development of patient-centered medical home models that include care providers and academic centers which coordinate the care of subspecialists has proven beneficial. Legislation to support such models has been introduced at the federal level and is currently pending.⁹

Learning and literacy development during the first 1000 days of a child's life is also influenced by policy and the child's environment. In the United States, more than 50% of children are raised by parents who work and many young children in the United States spend a sizeable proportion of their formative years in day care centers. Available

<https://ccf.georgetown.edu/2017/02/24/how-restructuring-medicare-could-affect-children/>
[<https://perma.cc/4XRL-3NVF>].

5. Barbara S. Klees et al., *Brief Summaries of Medicare & Medicaid*, DEP'T HEALTH & HUMAN SERV.: CTRS. MEDICARE & MEDICAID SERV.: OFF. ACTUARY 31 (Nov. 20, 2017), <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/Downloads/MedicareMedicaidSummaries2017.pdf> [<https://perma.cc/NV8Y-2YUE>].

6. Sandhya K. Rao et al., *The Impact of Administrative Burden on Academic Physicians: Results of a Hospital-Wide Physician Survey*, 92 ACAD. MED. 237, 238–39 (2017).

7. Jay G. Berry et al., *Children with Medical Complexity and Medicaid: Spending and Cost Savings*, 33 HEALTH AFF. 2199, 2201 (2014).

8. *Value-Based Payment Models for Medicaid Child Health Services*, REP. TO SCHUYLER CTR. FOR ANALYSIS & ADVOC. & UNITED HOSP. FUND 24–25 (July 13, 2016), http://www.scaany.org/wp-content/uploads/2016/07/ValueBasedPaymentChildren_071316.pdf [<https://perma.cc/MS6E-CCFG>].

9. S. 428, 115th Cong. (2017–2018).

evidence shows that, in a proper setting, children in day care thrive.¹⁰ However, there are few national standards for day care provider training or recommendations for programs to be implemented that stimulate childhood intellectual development. Early literacy programs have proven beneficial as well, yet these programs are not widely available.¹¹

In considering policy implications for the first 1000 days of a child's life, it is important to consider the 280 days that come before birth. Premature birth is a major risk factor for long-term health problems for children. Premature births account for about 9.6% of all births in the United States and many premature infants have considerable medical problems.¹² Fortunately, the premature birth rate has declined slightly over the past several years, in part due to changes in obstetrical practices. Yet, there is considerable state-to-state variability in premature birth rates and approaches to curbing prematurity.

Shortages of prenatal care providers are well recognized and there are also critical shortages of obstetricians recognized in many regions.¹³ Policies are needed at both the state and federal levels to address this critical practitioner need.

Evidence also shows that the origin or blueprint for several adult diseases, including heart disease and obesity, lie in the prenatal period. Maternal education and care programs aimed at reducing maternal medication and recreational substance consumption are important for improving fetal outcome. Ensuring proper maternal nutrition and prenatal care is vital as well.

Overall, it is impossible to separate the future of our children from policy. Support for the war on poverty, support for prenatal care, and support for medical care of children is crucial. Efforts aimed at allowing the developing mind to reach its full potential through early literacy and effective day care programs, likewise, will have a favorable impact over the decades ahead. As such, child-centric local and federal policies are

10. *Raising Kids and Running a Household: How Working Parents Share the Load*, PEW RES. CTR. (Nov. 4, 2015), <http://www.pewsocialtrends.org/2015/11/04/raising-kids-and-running-a-household-how-working-parents-share-the-load/> [<https://perma.cc/2NQH-T8X9>].

11. Susan H. Landry, *Enhancing Early Literacy Skills for Preschool Children: Bringing a Professional Development Model to Scale*, 39 J. LEARNING DISABILITIES 306, 306 (2006).

12. *2016 Premature Birth Report Card*, MARCH OF DIMES (2016), <https://www.marchofdimes.org/materials/premature-birth-report-card-united-states.pdf> [<https://perma.cc/R9BX-2NYY>].

13. *Maternal Health in Crisis: Ensuring Nationwide Access to Maternity Care Providers*, NAT'L INST. FOR HEALTH CARE MGMT. FOUND. (Aug. 22, 2017), <https://www.nihcm.org/events/recent-events/event/maternal-health-in-crisis-ensuring-nationwide-access-to-maternity-care-providers> [<https://perma.cc/7ZKM-8NQ6>]; William F. Rayburn, *The Obstetrician-Gynecologist Workforce in the United States*, AM. CONGRESS OBSTETRICIANS & GYNECOLOGISTS vii (2017), <https://www.acog.org/Clinical-Guidance-and-Publications/The-Ob-Gyn-Workforce/The-Obstetrician-Gynecologist-Workforce-in-the-United-States> [<https://perma.cc/3SCM-44VR>].

important to ensure that children achieve their full potential.