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Foreword

This is the Executive Summary of a longer report, which is the second in a Robert Wood Johnson Foundation (RWJF) series on health equity. The series aims to assist those working in public health, health care, and other fields that powerfully shape health—such as education, child care, housing, and community development—to build a world in which everyone can be as healthy as possible.

The first report in the RWJF health equity series, What Is Health Equity? And What Difference Does a Definition Make? defines health equity (below) and takes a deeper look at what it means and the implications for action.

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health, such as poverty, discrimination, and their consequences—including powerlessness; lack of access to good jobs with fair pay; quality education and housing; safe environments; and health care. For the purposes of measurement, health equity means reducing and ultimately eliminating disparities in health and its determinants that adversely affect excluded or marginalized groups.

According to this definition, health inequities are produced by inequities in the resources and opportunities available to different groups of people based on their racial/ethnic group; socioeconomic, disability, or LGBTQ status; gender; and other characteristics closely tied to a history of being marginalized or excluded.

This document focuses on the first five years of life. Other periods of life also shape lifelong health. They are, however, beyond the scope of this report.
Conditions in Early Childhood Shape Health Throughout Life

The first few years of life set us on paths toward—or away from—health and well-being in childhood and as adults. Experiences in early childhood—defined here as the first five years of life—are therefore critical to having a fair chance to be healthy across the entire lifespan. The diagram on page 3—which is not intended to be comprehensive—highlights a few examples of important pathways through which the effects of poverty and racism when experienced in early childhood can lead to poorer health in adulthood. These pathways—involving influences of poverty and racism on living conditions, stress, and early childhood development—are discussed below.

Poverty limits families’ options for healthy living conditions.
All parents want the best for their children, including the best health.1 Young children in families with limited economic resources, however, often experience hardships that can undermine their health, with lifelong consequences. Poverty or low income can limit parents’ opportunities to provide health-promoting environments for their children.1-3 Children who are disadvantaged socioeconomically are more likely to experience unhealthy conditions at home, such as exposure to lead or mold; and in their neighborhoods—air pollution or many fast-food outlets. They also may lack access to health-promoting conditions—such as high-quality child care, green spaces, and having parents whose jobs provide health insurance and paid family leave.

i “Parent” is used in this report to refer to any primary guardian or caregiver, including a grandparent or foster parent when appropriate.
How Can Poverty and Racism Affecting Early Childhood Increase Risks of Worse Health Throughout Life?

Children living in poverty face increased risks of worse health throughout life. Experiences of racism often lead to poverty or low income, but can harm health in other ways as well. This diagram—not intended to be comprehensive—highlights examples of pathways through which the effects of poverty and racism, when those effects are experienced in early childhood, can lead to poor health in adulthood. (A limitation of the diagram is that it does not illustrate the synergistic effects of poverty and racism.)
Structural racism also limits families’ options for healthy living conditions.

Children in black, American Indian, and Latino families of all economic levels are often disadvantaged by structural racism—race-based, unfair treatment built into institutions, policies, and practices—as a historical legacy of discrimination that not long ago was overt and legal. This legacy persists regardless of whether any particular individual now consciously intends to discriminate. Examples of structural racism include residential segregation into impoverished neighborhoods; discrimination in bank lending to residents of largely minority neighborhoods; and discriminatory policing and sentencing practices. All of these can constrain parents’ ability to provide healthy living conditions for their children.

The health consequences of unhealthy living conditions can accumulate across lifetimes and generations. Young children can suffer the effects of racism experienced by their parents years or even decades ago. For example, poverty experienced by young children often reflects lack of educational opportunities for their parents due to racial discrimination when they were children and young adults.

Sustained poverty can create overwhelming chronic stress in children, compromising their development and lifelong health.

Children’s early physical, cognitive, and socioemotional development provides the foundation for physiological and psychological processes that shape health in both childhood and adulthood. Experiencing multiple chronic hardships can produce toxic stress, defined by child development expert Jack Shonkoff as “strong, frequent, and/or prolonged activation of the body’s stress-response systems in the absence of the buffering protection of adult support.” Toxic stress in early childhood can harm normal brain and immune system development, impairing the body’s systems that help to manage stress. For example, research has linked disadvantage in early childhood with cardiovascular disease and diabetes later in life, physiologic damage resulting from chronic stress, including inflammation and altered immune function, is thought to play an important role. Developmental damage related to toxic stress can lead to difficulties paying attention and poor impulse control. These can hamper educational success (and thus later economic well-being, which influences adult health), and increase the risks of engaging in unhealthy behaviors. All of these may contribute to health inequities in adulthood.
Sustained poverty can also create chronic stress in parents, with developmental and health consequences for their children.

Chronic stress from facing ongoing demands with limited resources can create cognitive overload for parents, making it more difficult for them to cope with parenting challenges. Chronic stress among parents may therefore result in chronic stress among young children, for example, by creating distress and interparental conflict. Financial hardship creates stress that can impede the ability of even highly motivated parents to provide the supportive and stimulating home environments needed for optimal brain and immune system development. The results can have potentially lifelong adverse health consequences for children.

Middle-class, as well as poor children, are often at a developmental disadvantage compared with their economically better-off counterparts. This may be because the most affluent families are relatively protected from the type of chronic financial strain faced by financially less well-off families. In addition, greater economic resources make it easier to provide cognitive stimulation to young children, for example, by hiring a trained nanny or enrolling children in high-quality preschool.

Racism can also create chronic stress and harm children’s development.

Chronic stress related to racism—even if the discrimination appears to some observers to be unintentional, subtle, or ambiguous—can harm health on its own or by adding to poverty’s health-harming effects. Structural racism can negatively affect early childhood development by limiting parents’ wealth and educational attainment. For example, it relegates many people of color to living in neighborhoods with little opportunity to escape poverty.

Structural racism also makes children of color more likely than others to be suspended or expelled from preschool for behavioral issues—often arising from traumatic experiences—that warrant supportive social and mental health services rather than punishment. Excluding young children from preschool deprives them of support for their cognitive and socioemotional development, consequently limiting their future economic opportunities and therefore, their health. Racially discriminatory criminal justice practices have deprived many children of their fathers’ involvement in their early lives.
Health Equity: We Can Set All Children on a Path Toward Lifelong Health

While social and developmental disadvantages in childhood can limit opportunities for lifelong good health, encouraging evidence points to opportunities for intervention, suggesting the need to intervene at the policy level and in multiple domains, not simply with isolated programs. Intervening in early childhood has the potential to interrupt the inequitable cycle linking young children’s experiences of social and health disadvantage with social and health disadvantage throughout their lives.

**Addressing child poverty and structural racism is crucial—and possible.** Poverty, discrimination, and their consequences are key obstacles to thriving in early childhood. The United States has the highest rates of both child and overall poverty among affluent nations. On average, we also have the worst health outcomes in childhood and until age 75. While keeping in mind unique features of the U.S. context, we can learn from the experiences of other countries with far less child poverty—for example, through policies to provide a living wage or minimum income standard. To reduce child poverty and/or its deleterious consequences, we can also build on successful homegrown approaches, such as the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC), the Supplemental Nutrition Assistance Program (SNAP), and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC).
We can consider how Medicare and Social Security have transformed the lives of the elderly—and their families—and how those programs might inform interventions for young children. While ensuring income support for struggling families is crucial, we should also strengthen an array of additional supports and services—including improved access to affordable, high-quality child care, housing, nutrition, and medical and mental health care.

Reducing poverty and strengthening family supports will not be sufficient, however, without focused efforts to end structural racism. Addressing structural racism requires multiple, mutually reinforcing efforts involving all of society, not just families with young children. While no single strategy can succeed on its own, there are many potentially worthwhile approaches to eliminating racism and building a more inclusive and just society—for example, criminal justice reform,36 school desegregation,37 and wealth-building investments in largely minority communities38—that should be tried and evaluated.39-43

**Early care and education can also help narrow the inequitable gaps.**

More than 40 years of research links short- and long-term health and health-related outcomes with a range of early-care and education programs.44-48 These programs are designed to provide young children with experiences that protect against the negative effects of social and economic challenges. Studies have linked these types of interventions with lower rates of negative health outcomes—such as child injuries; child abuse/maltreatment; later depression; cigarette smoking;47 and marijuana use45—as well as with positive health-related outcomes—such as better eating habits and use of health services like screenings and immunizations.48-51 Research has also linked early care and education with social outcomes that strongly influence health, such as educational attainment, teen pregnancy, arrests, and incarceration.

Much of the evidence, however, comes from studies of a small number of intensive early-care and education programs;44-48,52-55 These studies have been limited by small sample sizes, participant attrition over time, and concerns about replicability.56-58 For example, a 2014 study found biomedical evidence that participants in the Carolina Abecedarian Project had lower risks of heart disease and diabetes as adults than nonparticipants44—but its small sample size and high loss-to-follow-up rate limit the conclusiveness of its findings.58 Larger-scale programs, such as Head Start, have often had less consistent or dramatic results, particularly when participants are followed over time. Some Head Start programs, however, have shown both short- and long-term (but not necessarily intermediate-term) positive effects.59 Center-based programs that have included children from low-income families have shown favorable impacts among all participants, including children in middle-class families.60 Overall, these results support a need to conduct larger, more rigorous studies of outcomes from a wide range of promising programs.
While promising interventions exist, access is very limited for lower-income families. Only 4 percent of the infants and toddlers who are eligible for Early Head Start are enrolled, due to limited available slots.  

Supporting children requires supporting families.

Children live with adults. Addressing child poverty therefore requires reducing poverty in families (or households) with children, which may require different strategies than those that focus on services for children alone. Income support is crucial, but strategies to support families must also address the persistent stress that makes it difficult for many parents to provide stable and nurturing care. Although poverty creates particularly powerful stressors, middle-class parents—especially those who are single—often face major obstacles as well. Many early childhood interventions include support for parents, ranging from social service referrals and parenting training to helping parents continue schooling, find work or job training, and enhance their life skills. While most programs target mothers, some have recognized a need to provide more support for fathers, including providing mental health and social services and reducing institutional barriers to paternal involvement.

In addition, flexible and paid time off options for parents may promote early childhood development by reducing obstacles to positive parent-child interactions and breastfeeding, both of which have been linked with improved neurocognitive development. Parental leave has long-term benefits for children, especially when mothers have limited schooling. The United States is the only industrialized country that does not guarantee paid time off after a birth or adoption; low-wage workers are far less likely to have paid parental leave than higher earners.
No single solution, but a range of promising approaches.
The full report includes examples of promising early childhood interventions\(^i\) that could contribute to achieving health equity. Current knowledge tells us that multiple, mutually reinforcing efforts are needed, and that effective solutions will require changes at the structural and institutional levels. Even for programs and policies that have been studied extensively, more research is needed to determine how they can be most effectively and efficiently implemented, particularly on a large scale. Types of policies and programs described include:

- **Center-based early-care and education programs** to improve children’s cognitive, socioemotional, and physical development, particularly when accompanied by significant supports for parents;

- **Home-visiting programs** serving pregnant and/or postpartum mothers and their infants/toddlers;

- **Initiatives to strengthen systems of care and education** for young children by promoting coordination across multiple programs and sectors;

- **Efforts at pediatric medical care sites** to refer parents to social services or to promote positive parent-child interaction; and

- **Broad economic and social policies/programs**, such as tax credits, affordable and fair housing initiatives, community development, nutritional supports for low-income families, and initiatives to eliminate racial discrimination. Although not exclusively focused on early childhood, such efforts may substantially reduce the economic and social inequities that underlie inequities in health throughout life.

\(^i\) Child care (or “day care”) is not included in this report’s list of policies and programs because child-care settings that focus on promoting early childhood development would be categorized as center-based early-care and education programs.
The Business Case for Investing in Early Childhood

Investments in early childhood will likely translate into long-term economic savings and security for society.

Investing in children can strengthen our economy by producing healthier, better-educated adults. Early childhood investments must focus not only on early-care and education services, but also on ensuring that children grow up in health-promoting homes, schools, and neighborhoods.

Without precisely quantifying the benefits, current knowledge tells us we can expect favorable returns—in both human and economic terms—on investments in evidence-informed policies affecting young children and their families, including policies to reduce child poverty and discrimination. The benefits may not, however, be measurable for years or decades, because results of investments in early childhood may not show up as health outcomes until adulthood.

Costs of early-care and education programs have ranged widely according to program design, duration, and location. The more important consideration, however, should be the return on investment. Even without considering the impact of reducing child poverty, estimates of the expected rate of return on investment in preschool programs have ranged from $3 to $17 for every $1 spent—due, for example, to “less need for special education services, improved high school graduation rates, higher earnings, and less criminal activity in adulthood.” Estimates of the return on investment in home visiting programs have ranged from $1.80 to $5.70 per dollar spent. Despite the wide range of estimates for early-care and education programs, many experts have concurred that the returns will be substantial and, at the very least, break even with costs.

Investments in early childhood living conditions, care, and education may also contribute to national security; currently, 71 percent of Americans between the ages of 17 and 24 do not qualify for military service because they lack a high school diploma, have a criminal record or drug abuse history, or are too overweight. By helping children succeed in school, avoid crime, refrain from drug abuse, and maintain a healthy weight, effective early childhood interventions may increase the military recruitment pool.
A Call to Action: Investing in Early Childhood Is Key to Achieving Health Equity

We need systematic national, state, and local investments and policies to give all children the chance to reach their full potential. Universal high-quality early-care and education programs are likely to substantially improve health and health-related life prospects for all, and especially for children in families with the most limited opportunities. However, we must also focus more broadly on achieving equity in the opportunities and conditions that powerfully shape health in early childhood and throughout life.

Reducing child poverty and racial discrimination will be essential for breaking the cycles of disadvantage that create and perpetuate large, avoidable health disparities across the life span. Promising approaches have been identified in the United States and other countries, but we must determine the most effective and efficient methods for implementing them under varying conditions and on a larger scale in this country. The only way to fill current gaps in knowledge and practice is by rigorously testing the most promising approaches and then using the results to inform policies. Our children’s futures, and our nation’s future, are at stake.


