

AGENDA: RALEIGH, N.C. FIELD HEARING

MARBLES KIDS MUSEUM

JUNE 12, 2008

8:30 A.M. – 1:40 P.M.

- 8:30 – 8:40 a.m. **Welcome/Overview**
- Mark McClellan and Alice M. Rivlin, Commission Co-Chairs
- 8:40 – 8:50 a.m. **Keynote Speaker**
- Jack Shonkoff, Julius B. Richmond FAMRI Professor in Child Health and Development, Director, Center on the Developing Child at Harvard University
- 8:50 – 9:15 a.m. **Q&A**
- 9:15 – 9:35 a.m. **Panel I – Early Life Programs: Family Support and Early Education**
- *The Carolina Abecedarian Project*
Frances Campbell, Senior Scientist, FPG Child Development Institute
 - *Nurse-Family Partnership*
C. Robin Britt, Executive Director, Guilford Child Development
 - *North Carolina Smart Start*
Stephanie Fanjul, President, The North Carolina Partnership for Children, Inc.
 - *FPG Child Development Institute Child Care Program*
Ricky Hill, Parent of two year-old child enrolled in the FPG Child Care Program
- 9:35 – 10:05 a.m. **Q&A**
- 10:05 – 10:25 a.m. **Panel II - Early Life Programs: Family Support and Early Education**
- *The Family Life Project*
Lynne Vernon-Feagans, William C. Friday Distinguished Professor Child Development and Family Studies, University of North Carolina at Chapel Hill
 - *More At Four Pre-Kindergarten*
John Pruetto, Executive Director, North Carolina Office of School Readiness
 - *T.E.A.C.H. Early Childhood Project and Child Care WAGE\$ Project*
Sue Russell, President, Child Care Services Association
 - *Durham Connects*
Jeannine Sato, Director, Office of Community Resources, Center for Child and Family Policy, Duke University
- 10:25 – 10:50 a.m. **Q&A**
- 10:50 – 11:05 a.m. **Break**

11:05 – 11:25 a.m.

Panel III - Meeting Goals and Measuring Progress

- *Durham City and County Results Based Accountability (RBA) Initiative*
Marsha Basloe, Executive Director, Durham's Partnership for Children
- *The Early Childhood Research Collaborative*
Arthur Reynolds, Co-Director, The Early Childhood Research Collaborative and Professor, University of Minnesota
- *Using Sub-State Data to Target Programs and Monitor Progress*
Barbara Pullen-Smith, Director, North Carolina Office of Minority Health & Health Disparities
- *Lulu's Child Enrichment Center*
Dan Gauthreaux, Vice President of Human Resources, Mitchell Gold + Bob Williams

11:25 – 11:50 a.m.

Q&A

11:50 – 12:30 p.m.

Lunch Break

12:30 – 1:30 p.m.

Public Comment Session

1:30 – 1:40 p.m.

Observations

- Risa Lavizzo-Mourey, President and CEO, Robert Wood Johnson Foundation

SPEAKER BIOGRAPHIES AND PROGRAM DESCRIPTIONS

Welcome and Overview

Mark B. McClellan (Co-Chair), M.D., Ph.D., is the director of the Engelberg Center for Health Care Reform at the Brookings Institution. The Center studies ways to provide practical solutions for access, quality and financing challenges facing the U. S. health care system. Additionally, McClellan is the Leonard D. Schaeffer Chair in Health Policy Studies and a senior fellow of Economic Studies.

McClellan is the former administrator for the Centers for Medicare and Medicaid Services (2004-2006) and the former commissioner of the Food and Drug Administration (2002-2004). He also served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House (2001–2002). In addition, he served as the deputy assistant secretary for economic policy at the Treasury Department.

McClellan has also served as an associate professor in both economics and medicine at Stanford University where he directed Stanford's Program on Health Outcomes Research. McClellan received a Master's Degree in Public Administration and Medical Degree from Harvard University and a Doctor of Philosophy in Economics from MIT.

Alice M. Rivlin (Co-Chair), Ph.D., is a Senior Fellow in the Economic Studies program at the Brookings Institution and a visiting professor at the Public Policy Institute of Georgetown University. She is the director of Brookings Greater Washington Research Project. Before returning to Brookings, Rivlin served as Vice Chair of the Federal Reserve Board (1996-1999) and served as the Director of the White House Office of Management and Budget in the first Clinton Administration. She also chaired the District of Columbia Financial Management Assistance Authority (1998-2000).

Rivlin was the founding Director of the Congressional Budget Office (1975-83) and served as the Assistant Secretary for Planning and Evaluation at the Department of Health, Education and Welfare. She is also a former director of the Economic Studies Program at Brookings.

In addition to receiving a MacArthur Foundation Prize Fellowship, Rivlin has taught at Harvard University, George Mason University, and The New School Universities. She has also served as President of the American Economic Association and is currently a member of the Board of Directors of the New York Stock Exchange.

Rivlin received a Bachelor's Degree in Economics from Bryn Mawr College and a Doctor of Philosophy from Radcliffe College (Harvard University) in Economics.

Keynote Speaker

Jack P. Shonkoff, M.D., is the Julius B. Richmond FAMRI Professor of Child Health and Development at the Harvard School of Public Health and Harvard Graduate School of Education, and Founding Director of the university-wide Center on the Developing Child at Harvard University. He also chairs the National Scientific Council on the Developing Child, a multi-university collaboration comprising leading scholars in neuroscience, psychology, pediatrics, and economics, whose mission is to bring credible science to bear on policy affecting young children.

Under the auspices of the National Academy of Sciences, Dr. Shonkoff served as Chair of the Board on Children, Youth, and Families and chaired a blue-ribbon committee that produced a landmark report entitled, *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Dr. Shonkoff has served on numerous professional networks and public interest advisory boards, including the core scientific group of the MacArthur Research Network on Early Experience and Brain Development, the Governing Council of the Society for Research in Child Development, and the Executive Committee of the Section on Developmental and Behavioral Pediatrics of the American Academy of Pediatrics. He has authored more than 130 publications, including nine books; co-edited two editions of the widely-heralded *Handbook of Early Childhood Intervention*; and served on the editorial board of several scholarly journals, including *Child Development*.

Dr. Shonkoff has been a visiting professor or delivered named lectureships at 29 universities in the United States, Australia, Canada, China, Israel, Japan, Mexico, and Puerto Rico. Prior to assuming his current position, he was the Samuel F. and Rose B. Gingold Professor of Human Development and Social Policy and Dean of The Heller School for Social Policy and Management at Brandeis University.

Panel One - Early Life Programs: Family Support and Early Education

Frances Campbell, Senior Scientist, FPG Child Development Institute

Frances Campbell is a senior scientist at FPG Child Development Institute. During her 30 years with FPG, Dr. Campbell has served as an objective, knowledgeable force for social change to enhance the lives of children and families. She has continued to gather information on the positive influences of early intervention. Among her many accomplishments, Dr. Campbell served as a member of the White House Conference on Early Literacy and a part of the Pritzker Consortium on Early Childhood. Dr. Campbell received the 2007 Alumni Distinguished Service Award from the University of North Carolina at Greensboro. Frances Campbell is internationally recognized for her work on the Carolina Abecedarian Project, one of the longest running longitudinal studies in the world.

The ***Carolina Abecedarian Project*** was a comprehensive early education program for young children at risk for developmental delays and school failure. The program operated in a single site, between 1972 and 1985, in North Carolina. The intensive, center-based program provided year-round, full-day care in infancy and continued until kindergarten. Children participated in educational, age-appropriate, individualized “games” that emphasized communication and motor, social and cognitive skills. Program features included low child-teacher ratio (3:1 for infants and 6:1 for older children), health care and nutritional and social services for children, and transportation. Teachers were required to have a high school diploma for the infant program and a bachelor’s degree for the older children program. Findings from the study are frequently cited by experts and policymakers when discussing the importance of quality early childcare.

C. Robin Britt, Executive Director, Guilford Child Development

Robin Britt is the Executive Director of Guilford Child Development in Greensboro, North Carolina. Britt was a Morehead Scholar at the University of North Carolina at Chapel Hill (UNC), later graduating from the UNC law school. He received a graduate law degree (LLM) from New York University. In 1983-85, he was elected to Congress serving on the House Armed Services, the Small Business Committee and the Select Committee on Hunger. Britt founded Project Uplift in Greensboro, which helped low income children and parents and served as the North Carolina Secretary of Health and Human Resources from 1993 to 1997.

The ***Nurse-Family Partnership*** is an intensive, comprehensive home visitation program by nurses during pregnancy and the first two years after birth of the child. As of December 2007, it is implemented in 23 states and four states have undertaken state initiatives to expand the program to serve all eligible mothers (Oklahoma, Colorado, Pennsylvania, and Louisiana). Currently, Guilford Child Development operates the only Nurse-Family Partnership program in the state of North Carolina.

Stephanie Fanjul, President, North Carolina Partnership for Children, Inc.

Stephanie Fanjul is the President of North Carolina Partnership for Children, Inc. Fanjul previously served as Director of the North Carolina Division of Child Development in the state's Department of Health and Human Services from 1994 to 2000. During those seven years Fanjul worked with advocacy groups, community organizations and multiple partners to improve the quality and availability of child care in North Carolina. Fanjul was instrumental in the creation of Smart Start, The North Carolina Partnership for Children Inc., the design and implementation of the rated license for child care, the expansion of the child care subsidy system, and major efforts to improve and support the child care workforce.

Smart Start is a multi-disciplinary, comprehensive, community-based initiative designed to serve North Carolina children under age 6 and their families. It was established in 1993 as a partnership between state government and local leaders, service providers, and families. Smart Start's approach requires that local community partnerships plan how best to meet their own community's needs, improve and expand existing programs for children and families, and design and implement new programs. Three major areas of service are targeted: child care, family support programs, and health services with a substantial focus on improving the quality of early childhood education, including center-based care. By legislative mandate, partnerships spend at least 70% of their funds on child care. Statewide, about half of this amount is spent on child care subsidies for poor or working class families and about half is spent on child care quality improvement activities, both in centers and family child care homes. Activities to improve child care include on-site technical assistance, quality improvement and facility grants, teacher education scholarships, teacher salary supplements, license upgrades, and higher subsidies for families to purchase higher child care quality. Smart Start's National Technical Assistance center provides assistance to states and localities for help in developing an early education initiative.

Ricky Hill, Parent

Ricky Hill is the father of Andre Hill, a toddler at FPG Child Development Institute Child Care Program. He is a member of the FPG child care management team. He received his Bachelor of Arts degree from East Carolina University in psychology. He is currently employed as a mental health professional for Freedom House Recovery Center.

Panel Two - Early Life Programs: Family Support and Early Education

Lynne Vernon-Feagans, William C. Friday Distinguished Professor Child Development and Family Studies, University of North Carolina at Chapel Hill

Lynne Vernon-Feagans is the William C. Friday Distinguished Professor in Child Development and Family Studies in the School of Education at the University of North Carolina at Chapel Hill. She is the author of over 100 publications that are related to her long history of interest in young children at risk for school failure. Vernon-Feagans began her career as a developmental psychologist and linguist who used that interdisciplinary background to understand the school and home language environments of children in relationship to literacy development and school success. She has had a particular interest in children who live in rural poverty, children with language/reading disabilities and children with hearing loss due to otitis media (ear infections). She is co-director of the National Research Center on Rural Education support that has developed a successful classroom intervention for struggling readers in low wealth rural communities called the Targeted Reading Intervention. In her role on the board of directors of the Christian Children's Fund, she has been the chair of the program committee for the last four years, helping the organization in their mission of developing programs for over 13 million, mostly rural, children living in poverty in 33 countries around the world.

Vernon-Feagans is currently the principal investigator of the multidisciplinary **Family Life Project**, a ten-year 30 million dollar Program Project that has followed a representative sample of children from birth in six low-wealth rural U.S. counties. The Family Life Project's primary goal is to develop a better understanding of how growing up in smaller cities, towns, and rural areas might influence the development of young children in the birth to three year age range. More specifically, how differences in children's development are linked to variations in temperament, family experience, community structure, economic circumstances, and ethnicity.

John Pruette, Executive Director, North Carolina Office of School Readiness

John Pruette moved into the role of Executive Director of the North Carolina Office of School Readiness (OSR) in March of 2007. Having previously served as the Assistant Director of the OSR and a Program and Policy Chief within Governor Michael Easley's Office, his influence has helped shape the direction of early care and education in the state. Most notably, his contributions have been to the evolution of the More at Four Pre-Kindergarten Program. Now funded to serve over 28,000 children, it is recognized nationally as a model for high-quality state-funded pre-kindergarten efforts. John has over 23 years of experience in early childhood education. Having worked in the North Carolina Department of Public Instruction and Guilford County Schools Central Office Administration, he views his tenure as a pre-kindergarten and kindergarten classroom teacher as most important in shaping who he is as a professional in the field of education. John received both his B.S. and M.Ed. from the University of North Carolina at Greensboro.

The OSR works to strengthen collaboration among early childhood agencies and programs at the state and local levels, including the public schools, child care, Smart Start, the Division of Child Development, North Carolina Early Intervention Services, Head Start, and other programs toward our common goal of school success for all children. The OSR builds on the work of all those who have invested themselves in ensuring success for North Carolina's children. In continuing North Carolina's long and rich history of early childhood initiatives, the OSR strives to strengthen the efforts of preschool programs to meet the needs of North Carolina's preschool children and ensure their later success in school and life. **More at Four** is a state-funded initiative for at-risk 4 year olds designed to help children be more successful when they enter school through provision of a classroom-based educational program during the year prior to kindergarten.

Sue Russell, President, Child Care Services Association

Sue Russell is currently President of Child Care Services Association (CCSA), a nonprofit agency committed to promoting affordable, accessible, high quality child care. CCSA works locally, statewide and nationally, providing services, conducting research and engaging in advocacy in the furtherance of its mission. Russell has over thirty-five years of experience in the child care profession and holds a Masters Degree in Child Care Administration. She has written a number of articles in the child care field and has provided numerous hours of training and technical assistance to direct service providers and policy makers both in North Carolina and nationally.

Russell developed both the **T.E.A.C.H. Early Childhood®** and **Child Care WAGE\$® Projects**, initiatives that have been successful in increasing the education, compensation and retention of participants. T.E.A.C.H. provides scholarships to child care providers to partially cover the cost of tuition, books, release time, and travel expenses. The WAGE\$ project provides salary supplements directly to low-wage teachers, directors, and family child care providers working with children ages 0-5. CCSA licenses its successful programs to states across the country and provides consultation to others addressing child care concerns. T.E.A.C.H. is now licensed and operating in twenty-one states. Russell's research interests center on building effective systems to serve young children, their families and early care and education providers. She has conducted numerous studies of the child care workforce in North Carolina and in other states, and has examined a variety of system issues, including building an effective child care subsidy system for families and children. She currently serves on various statewide and national boards and committees and is President of the Board of the National Association for the Education of Young Children.

Jeannine Sato, Director, Office of Community Resources, Center for Child and Family Policy, Duke University

Jeannine Sato is Director of the Office of Community Resources with Durham Connects. **Durham Connects** is a universal newborn visiting program, which is a collaborative of the Durham County Health Department and the Durham Family Initiative at Duke University. Prior to Durham Connects, Ms. Sato was Director of Marketing and Communications at Carolina Donor Services, the region's organ donation agency. There she was instrumental in creating the state's first online donor registry and crafting legislation to reinforce first person consent for donation on the North Carolina driver's license. Prior to her work with non-profits, Ms. Sato worked in high-tech public relations and media. Ms. Sato holds a B.A. in Broadcast Journalism from SUNY Buffalo and worked as a television reporter, anchor and producer through the 1990s. She is currently a candidate for a Master of Arts in Liberal Studies at Duke University.

The mission of the **Center for Child and Family Policy** is to solve problems facing children in contemporary society by bringing together scholars from many disciplines with policy makers and practitioners. The Center is addressing issues of early childhood adversity, education policy reform, and youth violence and problem behaviors. It is home to the largest violence-prevention study ever funded by the National Institute of Mental Health, the largest youth-violence-prevention experiment for middle schools ever funded by the Centers for Disease Control and Prevention, a major effort to evaluate the effects of education reforms on children across North Carolina, and an effort to promote healthy child development in the community of Durham, North Carolina by focusing on parent-child relationships.

Panel Three - Meeting Goals and Measuring Progress

Marsha Basloe, Executive Director, Durham's Partnership for Children

Marsha Basloe is the Executive Director of Durham's Partnership for Children, the local non-profit agency that administers North Carolina's early childhood initiative Smart Start and the More at Four Pre-Kindergarten Program in Durham County. Prior to joining Durham's Partnership for Children, Marsha had more than 20 years experience as an educator, resource development director and non-profit director in Update New York and Florida.

Marsha is in her sixth year as Executive Director of Durham's Partnership for Children. She is a board member of the Greater Durham Chamber of Commerce and the Durham City Workforce Development Board. She and her staff at Durham's Partnership for Children are three time winners of the Alfred P. Sloan Award for Business Excellence in Workplace Flexibility. Marsha co-chairs the Durham Results Based Accountability (RBA) Children's Outcome Committee with Dr. Deborah Pitman of Durham Public Schools titled "Children Ready for and Succeeding in School."

The **Durham Results Based Accountability (RBA) Initiative** is a master plan and tracking module to report progress on eight community priorities including safety, culture, health, environment, children, prosperity, housing and neighborhoods. The initiative is a collaboration of the Durham County Commissioners, the City Council, nearly 100 businesses and organizations, and more than 300 individuals. This group leads a unified commitment to develop and evaluate strategies to improve the quality of life in Durham. Marsha Basloe co-chairs the Durham Results Based Accountability (RBA) Children's Outcome Committee with Dr. Deborah Pitman of Durham Public Schools titled "Children Ready for and Succeeding in School."

Arthur Reynolds, Co-Director, the Early Childhood Research Collaborative and Professor, University of Minnesota

Arthur Reynolds is the co-director of the Early Childhood Research Collaborative and Professor at the University of Minnesota. Reynolds conducts research focused on children's social adjustment and academic success, with a particular emphasis on how environmental conditions influence the development and well-being of low-income children from early childhood through young adulthood. He is the director of the Chicago Longitudinal Study, a landmark study begun in 1985. It traces 1,500 low-income children born in 1980 who participated in the Chicago Child-Parent Center Program and other government-funded early childhood programs in 25 Chicago public schools. The study looks at the long-term effects of participation in the program and other early experiences on educational attainment, social behavior, economic well-being, utilization of social welfare services, and mental health.

The **Early Childhood Research Collaborative** is sponsored by the University of Minnesota's Center for Early Education and Development and the Federal Reserve Bank of Minneapolis. The center fosters multidisciplinary research on early childhood development from birth to age 8. The topics covered include evaluation and policy analysis of early learning programs, family, school, economic, and community influences as well as biological and psychological foundations of child health and well-being. Established in 2006, the Collaborative explores links between early education and economic development, public health, K-12 education and other connections. The Collaborative promotes new research, convenes researchers from many different fields, provides web resources, and disseminates research through a Discussion Paper Series.

Barbara Pullen-Smith, Director, North Carolina Office of Minority Health and Health Disparities

Barbara Pullen-Smith, MPH, Director of the Office of the Office of Minority Health and Health Disparities (OMHHD) started her career in 1981. Ms. Pullen-Smith worked as a Health and Human Services Specialist for the General Baptist State Convention. In this position, she developed and implemented health promotion and disease prevention programs in Black Churches in North Carolina using the lay health advisor model. Her other community-based works included serving as a District Representative for the American Cancer Society in 1984. In 1985, Ms. Pullen-Smith started her career with the state as the first consultant for the Adolescent Pregnancy Prevention Program in the Division of Maternal Child Health. In this capacity, she assisted 33 projects throughout North Carolina in the areas of community organization, coalition building, program development and evaluation. In 1990, Ms. Pullen-Smith was hired as the Program Coordinator for the Local Health Services in the Division of Adult Health (now Division of Public Health). On February 1, 1993, she became the first Director of the OMHHD and she currently holds that position. She provides leadership and develops initiatives to improve the public health system's ability to respond to the specific needs of racial and ethnic minorities. Ms. Pullen-Smith works closely with the programs in the Department of Health and Human Services, local health departments and other public and private agencies and organizations, including minority community-based organizations, in a collaborative and advocacy role to insure the minority health issues are addressed.

Dan Gauthreaux, Vice President of Human Resources, Mitchell Gold + Bob Williams

Dan began his career with Mitchell Gold + Bob Williams, a home furnishings company based in Taylorsville, N.C. in 1995 as a field sales trainer. He then transitioned to manage the Customer Care Department and in 1999 was promoted to head the Human Resources efforts for the company. While in his current role, the company has added hundreds of new positions in its manufacturing facility. Mitchell Gold + Bob Williams is a \$100M home furnishings brand employing 750+ individuals and also owns and operates retail stores in Washington, DC, New York City & Greenwich, CT.

Lulu's Child Enrichment Center is a 2,700 square foot on-site corporate daycare facility at the Mitchell Gold + Bob Williams furniture manufacturer in the rural community of Taylorsville, N.C. The prices for the daycare are based on break-even and it is run as a rent-free, not-for-profit operation so that Mitchell Gold + Bob Williams employees and the community can take full advantage of this exceptional facility with excellent educational programs, an excellent nutritional plan and superior equipment.

Observations

Dr. Risa Lavizzo-Mourey, M.D., M.B.A., president and CEO of the Robert Wood Johnson Foundation, is a national leader in transforming America's health systems so people live healthier lives and receive the health care they need. A practicing physician with business credentials and hands-on experience developing national health policy, she was drawn to the Robert Wood Johnson Foundation by the opportunity, as she puts it, to "alter the trajectory and to push society to change for the better."

Lavizzo-Mourey was a leader in academic medicine, government service and her medical specialty of geriatrics before joining RWJF in 2001 as senior vice president and director of the health care group. Previously, at the University of Pennsylvania, she was the Sylvan Eisman Professor of medicine and health care systems and director of Penn's Institute on Aging. In Washington, D.C., she was deputy administrator of what is now the Agency for Health Care Research and Quality. She is a member of the Institute of Medicine of The National Academies.

Raised in Seattle by physician parents, Lavizzo-Mourey earned her Medical Degree from Harvard University Medical School, and a Master's of Business Administration from the University of Pennsylvania's Wharton School. She completed a residency in Internal Medicine at Brigham and Women's Hospital in Boston, was a Robert Wood Johnson Clinical Scholar at the University of Pennsylvania, and trained in Geriatrics at Penn. Always a physician as well as an agent for wide-scale social change, she still treats patients at a community health clinic in New Brunswick, N.J. She and her husband of 30 years have two adult children.

BACKGROUND ON THE ROBERT WOOD JOHNSON FOUNDATION COMMISSION TO BUILD A HEALTHIER AMERICA

The Robert Wood Johnson Foundation launched the Commission to Build a Healthier America – a national, independent, non-partisan group of leaders with involvement both in and outside the health care field – to provide better opportunities for Americans in every community to grow up and stay healthy.

Traditionally, America's public debate on "health" has centered on access to and affordability of care, even though a large body of evidence tells us that, in most cases, whether or not a person gets sick has little to do with seeing a doctor. This Commission will focus on those factors beyond medical care that have an enormous influence on health and will ask what we can do about it. While data are collected on many of these factors, these data are rarely analyzed or acted upon with the intention of improving health.

WHY DO WE KNOW IT'S TIME TO ACT?

- Some of us can expect to live an average of *20 years* less than others, depending on our race and which U.S. county we live in.
- While we spend more than \$2 trillion a year on health care – one sixth of our economy and more than any other country – our health falls short. In life expectancy and infant mortality, the United States ranks near the bottom in comparison with other industrialized nations.
- Poor health limits the productivity of our citizens. Nearly one in every three poor adults is limited by chronic illness. And when people are sick, they can't do as well at school, at home, or at work.
- Despite tremendous progress in medicine, science and technology, many health gaps have not decreased in more than a generation. In fact, some gaps within the United States and between the U.S. and other countries have grown wider.
- Within each racial and ethnic group, lower-income adults have higher rates of poor or fair health than their more affluent counterparts.

How did this happen in the richest country in the world? Why aren't Americans among the healthiest people and why are some Americans so much healthier than others?

There is no single reason – and no simple solution. While people must take responsibility for their own health, there are some factors and conditions beyond individual control. New research from the Robert Wood Johnson Foundation confirms that rather than linking our health shortfalls to flaws in our medical system, a far greater determinant is the relationship between how we live our lives and the surrounding economic, social and physical environment.

How can someone eat a healthy diet if she does not have access to a grocery store with fresh produce? How can someone safely exercise in a crime-ridden community or a neighborhood sandwiched between highways with no sidewalks?

The Commission was formed in February 2008. As next steps, it plans to hold three field hearings across the country to listen to experts who will discuss non-medical interventions that have been proven to produce measurable health improvements. In early 2009, the Commission will recommend specific, feasible steps that foundations, corporations and government at every level can take to improve the health of *all* Americans.

For more information about the Commission and its activities, the Commission members, news related to the Commission and related data and reports, please visit www.commissiononhealth.org.

COMMISSIONER BIOGRAPHIES

Mark B. McClellan, Co-Chair

Mark B. McClellan is the director of the Engelberg Center for Health Care Reform at the Brookings Institution. The Center studies ways to provide practical solutions for access, quality and financing challenges facing the U. S. health care system. Additionally, McClellan is the Leonard D. Schaeffer Chair in Health Policy Studies and a Senior Fellow of Economic Studies.

McClellan was the former administrator for the Centers for Medicare and Medicaid Services (2004-2006) and the commissioner of the Food and Drug Administration (2002-2004). He served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House (2001–2002). He also served as the deputy assistant secretary for economic policy at the Treasury Department.

McClellan has also served as an associate professor in both economics and medicine at Stanford University where he directed Stanford's Program on Health Outcomes Research.

McClellan received a Master's Degree in Public Administration and Medical Degree from Harvard University and a Doctor of Philosophy in Economics from MIT.

Alice M. Rivlin, Co-Chair

Alice M. Rivlin is a Senior Fellow in the Economic Studies program at the Brookings Institution and a visiting professor at the Public Policy Institute of Georgetown University. She is the director of Brookings Greater Washington Research Project. Before returning to Brookings, Rivlin served as Vice Chair of the Federal Reserve Board (1996-1999) and served as the Director of the White House Office of Management and Budget in the first Clinton Administration. She also chaired the District of Columbia Financial Management Assistance Authority (1998-2000).

Rivlin was the founding Director of the Congressional Budget Office (1975-83) and served as the Assistant Secretary for Planning and Evaluation at the Department of Health, Education and Welfare. She is also a former director of the Economic Studies Program at Brookings.

In addition to receiving a MacArthur Foundation Prize Fellowship, Rivlin has taught at Harvard University, George Mason University, and The New School Universities. She has also served as President of the American Economic Association and is currently a member of the Board of Directors of the New York Stock Exchange.

Rivlin received a Bachelor's Degree in Economics from Bryn Mawr College and a Doctor of Philosophy from Radcliffe College (Harvard University) in Economics.

Katherine Baicker

Katherine Baicker is a professor of health economics in the Department of Health Policy and Management at Harvard University. Her background is in health economics and health insurance financing, as well as public and labor economics. Baicker served as a Senate-confirmed member of the Council of Economic Advisers from 2005-2007, where she focused on health reforms but had a wide-ranging portfolio including issues such as immigration, tax policy, and the education and training of American workers. She received her Bachelor's Degree in economics from Yale University and a Doctor of Philosophy in Economics from Harvard University.

Angela Glover Blackwell

Angela Glover Blackwell is founder and chief executive officer of PolicyLink, a national research and action institute advancing economic and social equity by Lifting Up What Works. Based in Oakland, California, PolicyLink works with local and national partners to use policy solutions to address inequity. Before founding PolicyLink, Blackwell was senior vice president for The Rockefeller Foundation where she directed the foundation's domestic and cultural divisions and developed the Next Generation Leadership and Building Democracy programs, centered on issues of inclusion, race, and policy. She received a Bachelor's Degree from Howard University, and a Juris Doctor Degree from the University of California at Berkeley.

Sheila P. Burke

Sheila P. Burke is faculty research fellow and adjunct lecturer in public policy at the Malcolm Wiener Center for Social Policy, Kennedy School of Government at Harvard University. Previously, Burke served as the executive dean of the Kennedy School of Government. Burke also served as deputy secretary and chief operating officer of the Smithsonian Institution and was chief of staff to former Senate Majority Leader Bob Dole and deputy staff director of the Senate Committee on Finance. Burke holds a Bachelor's Degree in Nursing from the University of San Francisco and a Master's Degree in Public Administration from Harvard University.

Linda M. Dillman

Linda Dillman is executive vice president of benefits and risk management for Wal-Mart Stores, Inc., where she has been instrumental in making changes to the company's health care benefits, concentrating on providing associates and family members with affordable, accessible and high quality options for health coverage. She previously served as executive vice president and chief information officer at Wal-Mart. Linda has been named to Fortune Magazine's "50 Most Powerful Women in Business" list for the past five years. Linda joined Wal-Mart in 1991, and also worked for Hewlett-Packard Company. Her degree in Business Administration is from the University of Indianapolis.

Sen. Bill Frist

Sen. Bill Frist is the Schultz Visiting Professor of International Economic Policy at Princeton University's Woodrow Wilson School of Public and International Affairs. He represented Tennessee in the U.S. Senate from 1995 until his retirement in 2007, serving as Majority Leader from 2003 to 2007. As a cardiothoracic transplant surgeon, Frist's primary legislative focus was health care. He co-chairs Save the Children's global campaign to reduce infant mortality (*Survive to 5*) and ONE Vote '08, a bipartisan effort to make global health a priority in the presidential election. He received a Bachelor's Degree from Princeton University and Medical Degree from Harvard University.

Allan Golston

Allan Golston is the president of the U.S. Program of the Bill & Melinda Gates Foundation where he oversees the Foundation's Education, U.S. Libraries, and Pacific Northwest grant initiatives, as well as U.S. Program Advocacy and Special Initiatives. Golston, who joined the Foundation in 1999, most recently served as the chief financial and administrative officer. Golston's professional background is in business including consulting, public accounting, software development, finance and health care. He holds a Master's Degree in Business Administration from Seattle University and a Bachelor's of Science in Accounting from the University of Colorado.

Kati Haycock

Kati Haycock is one of the nation's leading child advocates in the field of education. She currently serves as president of The Education Trust, a Washington-based education organization that provides hands-on assistance to urban school districts and universities seeking to improve student achievement. Before joining The Education Trust, Haycock served as executive vice president of the Children's Defense Fund, the nation's largest child advocacy organization. She received a Bachelor's Degree in Political Science from the University of California, Santa Barbara and a Master's Degree in Education Policy from the University of California, Berkeley.

Hugh Panero

Hugh Panero is co-founder and former president and chief executive officer of XM Satellite Radio. A business leader and media entrepreneur, Panero was a pioneer in both the cable TV and pay-per-view businesses and is credited with launching the satellite radio industry. Panero has served as chairman of the D.C. Chamber of Commerce, which honored him with the D.C. Business Leader of the Year Award in 2000 and is a board member on a number of nonprofit boards including The Marrow Foundation and Hope For Henry. Mr. Panero received Bachelor's Degrees in Government and Sociology from Clark University and has a Master's Degree in Business Administration from Baruch College.

Dennis Rivera

Dennis Rivera chairs SEIU Healthcare, a union of over one million health care workers dedicated to health care reform. SEIU Healthcare was launched in June 2007 as the health care division of the two million-member Service Employees International Union, America's largest labor union. In addition to heading SEIU Healthcare, Rivera chairs the Partnership for Quality Care. He served as president of New York-based 1199 SEIU from 1989 to 2007. Born in Aibonito, Puerto Rico, Rivera attended the Colegio Universitario de Cayey.

Carole Simpson

Carole Simpson retired from ABC News in 2006 to become Leader in Residence at Emerson College's School of Communication in Boston, where she is a full-time faculty member teaching courses in public affairs reporting, political communication, and broadcast journalism. Simpson is also a commentator for National Public Radio's "News and Notes" program. At ABC News, Simpson was the anchor of the weekend editions of "World News Tonight" from 1988-2003 and a senior national correspondent. She was the first African American woman to anchor a major network evening news broadcast. Simpson received a Bachelor's Degree in Journalism from the University of Michigan.

Jim Towey

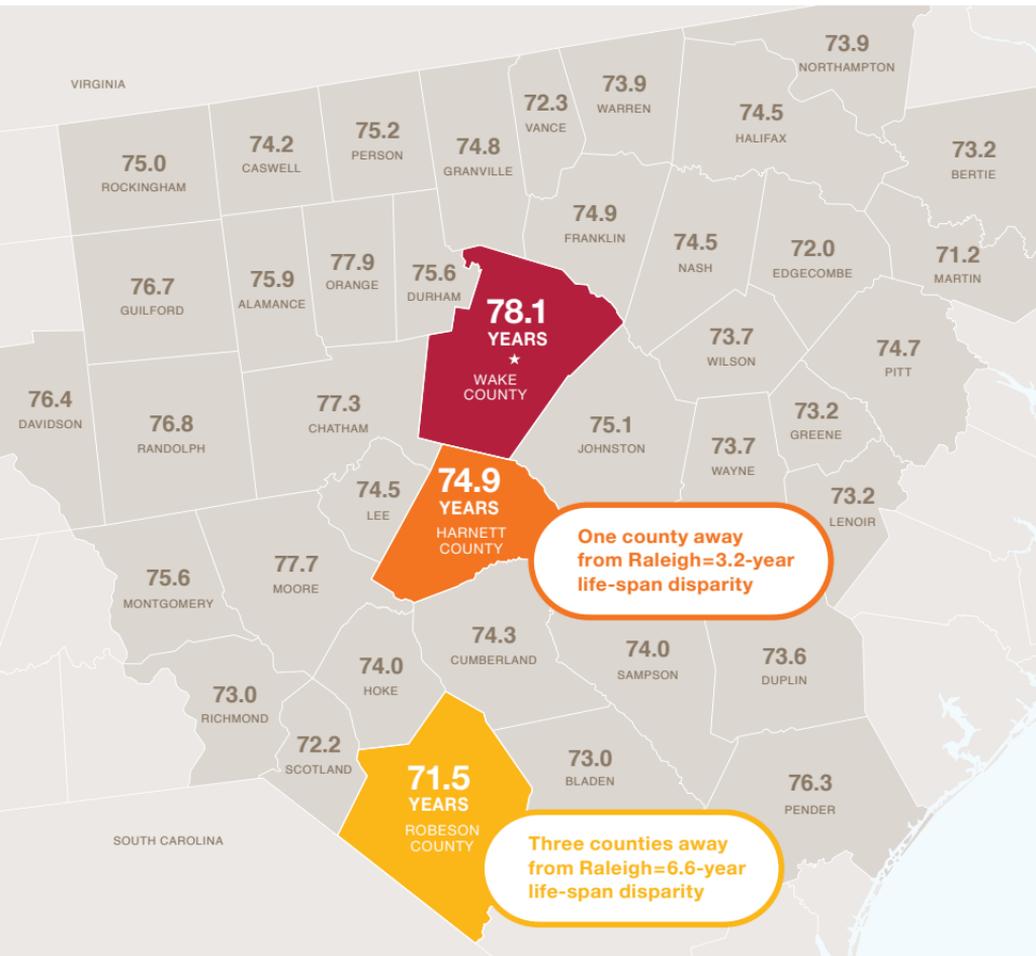
Jim Towey is president of St. Vincent College in Pennsylvania. Previously, he served as director of the White House Office of Faith-Based & Community Initiatives and reported to the President on matters pertaining to federal grants to religious and community-based charities, corporate and foundation grantmaking to social service agencies, tax incentives for enhanced charitable giving, and the implementation of individual choice in housing and other federal programs. He served for 12 years as legal counsel to Mother Teresa of Calcutta and lived for one year in her Washington, DC, home for people with AIDS. He is also former secretary of the Florida Department of Health and Rehabilitative Services. Towey earned a Bachelor's Degree from Florida State University and a Juris Doctor from the Florida State University College of Law.

Gail L. Warden

Gail L. Warden is a professor at the University of Michigan School of Public Health and president emeritus of the Henry Ford Health System in Detroit, Michigan, one of the nation's leading health care systems. Before joining Henry Ford Health System, Warden served as president and chief executive officer of Group Health Cooperative of Puget Sound in Seattle. In 1997, he was appointed to the Federal Advisory Commission on Consumer Protection and Quality in the Health Care Industry. Since then he has worked on several boards and committees focusing on health care issues, including the RAND Health Board of Advisors. Warden received a Bachelor's Degree from Dartmouth College, a Master's Degree in Health Administration from University of Michigan, and an Honorary Doctorate in Public Administration from Central Michigan University.



ROBERT WOOD JOHNSON FOUNDATION
Commission to Build a Healthier America



Life Expectancy: Where You Live Matters

In Wake County, home to the state capital of Raleigh, N.C., the average life expectancy is 78.1 years. In Harnett County—just one county away—people can expect lives that are 3.2 years shorter. That difference doubles in Robeson County, where life expectancy is 6.6 years less than in Wake County. But early childhood development programs in North Carolina are increasing the chances of living longer and healthier lives.



The Road to a Long and Healthy Life Starts Early

Social and economic conditions such as family income, education and neighborhood resources affect health at every stage of life. Many of the factors that determine life expectancy are linked with experiences in the earliest years of life.

The Robert Wood Johnson Foundation launched the *Commission to Build a Healthier America*—a national, independent, nonpartisan group of leaders—to look at factors outside the health care system that affect America's health.

Why North Carolina?

North Carolina is a leader in early childhood development, which has been shown to strongly affect health in adulthood. The Commission is holding its first field hearing in Raleigh, N.C. to learn about some of the state's most promising programs.

The Commission Wants to Hear from You

In 2009, the Commission will recommend specific, feasible steps that foundations, corporations and governments at every level can take to improve the health of all Americans.

Visit ideas.commissiononhealth.org to tell the Commission about early childhood interventions or other promising policies or programs.

Find out more at commissiononhealth.org.



Early Childhood Development

Building Blocks for a Healthier Life



ROBERT WOOD JOHNSON FOUNDATION
Commission to Build a Healthier America



Nariya Farrington



The Farrington Family



Josh Singleton



The Singleton Family



Latesha Foushee
Teacher



Karen Reid
Teacher



Maggie Connolly
Director of Child Care,
FPG Child Development Institute
Child Care Program

Nariya Farrington punches a text message into a toy cell phone.
Two boys wrestle for a spot on the bench beside her.

Clutter surrounds the 3-year-olds: credit cards, rubber balls, a fireman's hat, wooden blocks, half-naked dolls and neon green binoculars.

“That’s my seat,” one boy hollers.

“It’s mine,” shouts another before being knocked to the floor.

One flight down, in Room 123, Josh Singleton skips wildly to the unmistakable beat of the “Addams Family” theme song. Josh and friends race past classmates huddled over a glass aquarium and just barely miss knocking one girl off her sparkly high heels.

Bedlam reigns at the FPG Child Development Institute Child Care Program in Chapel Hill, N.C.

And the parents and teachers couldn't be happier.

“Children learn through play,” explains teacher Latesha Foushee. “They actually don’t know that they’re learning, but they are all the time.”

Josh and fellow 5-year-olds, for instance, are blissfully unaware that teachers have embedded a lesson into the “Addams Family” lyrics.

“There’s Sunday and there’s Monday, there’s Tuesday and there’s Wednesday, there’s Thursday and there’s Friday and then there’s Saturday,” the group belts out. “Days of the week.”

Snap, snap.

Even the barely controlled chaos upstairs in Nariya’s classroom is learning in disguise. Counting blocks teaches math, catching a ball hones hand-eye coordination, and roleplaying helps introduce real-life concepts such as using money and communicating with computers and cellular phones.

But all this has another surprising benefit. Just as the youngsters don’t know they are being taught, most adults don’t realize that the children are getting a big boost in the lifelong quest for better health.

“Being a single parent you appreciate
the guidance and the things the teachers can do
while you’re working.”

—Kenita Farrington, mother of Nariya and Nadiya



Many factors affect a person's health. Age, heredity and access to medical care all contribute to well-being. Equally, if not more important, however, are factors such as early life experiences, housing, income, education, nutrition and physical activity. Good health, it turns out, is about much more than medical care.

"The data have clearly shown that high-quality early childhood education can make a big difference," says Maggie Connolly, director of child care at the center, which was founded in 1966 and was formerly known as the Frank Porter Graham Child Development Center. The problem nowadays, she adds, is demand far outstrips availability and quality day care is too pricey for many families.

Extensive research has shown that people with low incomes or less education, those living in substandard housing, unsafe neighborhoods or areas with limited access to healthy food and recreation, tend to die earlier and suffer more health problems throughout life.

Scientists believe the cycle begins even before birth. A child's well-being is a strong predictor of adult health, and high-quality early interventions have been shown to make an enormous impact. Research shows that early childhood development can affect educational attainment, which is linked to lower rates of cardiovascular disease, stroke, hypertension, diabetes, obesity, smoking, drug use and depression.

Below: Nadiya Farrington (right) chats with McDougle Elementary School classmate Quintin Schraff (left). Farrington, 8, spent two-plus years in the FPG Child Care Program before entering kindergarten. Her mother and teachers say FPG gave Nadiya a strong academic foundation, as well as social skills and confidence.



One of the hallmarks of a strong child development program is the ability to monitor a youngster's progression. Because of cost, few schools or day-care centers administer formal assessments. FPG, however, employs the "Ages and Stages" test regularly to measure each child's growth.

"As a pediatrician, that's a huge relief to me," says Josh's mother, Jennifer Singleton. "If there is a developmental issue there, it's going to be picked up."

Youngsters from economically disadvantaged families such as Nariya Farrington tend to benefit the most from early intervention, according to several studies, including research conducted by the FPG Child Development Institute, the research facility affiliated with the child-care center. But there is also evidence to suggest that children from middle- and upper-income families such as Josh Singleton also profit from the experience.

In many respects, the two children are worlds apart.

Nariya Farrington and her older sister, Nadiya, are being raised by a single, black mother whose ancestors worked as slaves on the rural stretch of land where they now live.

Kenita Farrington dropped out of North Carolina Agricultural and Technical University eight years ago when she gave birth to her first child. Today, she earns a modest salary as a school secretary. Government subsidies to the family and to FPG cover most of the cost of day care, as well as school meals and health care for the two girls.

Money is always tight, forcing the family to make compromises. Farrington, who has struggled with weight issues and elevated blood pressure, knows how important it is to stay physically fit. She wants to re-enroll her older daughter in gymnastics classes, but can't afford the \$80-a-month fee.

**"Kindergarten has gotten so much harder today.
If they haven't had experiences in
a quality preschool they are behind.
Nadiya was ready when she walked in the door."**

—Karen Reid, Nadiya Farrington's kindergarten teacher





“Having a preschool you trust and that you know is taking care of your kids is such an enormous weight off of you. Just alleviating the stress of that is huge.”

–Jennifer Singleton, mother of Josh and Matthew

Jennifer and Scott Singleton, a white couple, moved to a house on Morgan Creek four years ago, when he was offered a professorship at the University of North Carolina. Jennifer works three days a week as a pediatrician, which leaves time for her to spend with Josh and his older brother, Matthew, age 8. The couple spends nearly \$1,000 a month at FPG and enjoys buying produce at a local farmers’ market.

Despite the obvious economic and cultural differences between the Farringtons and the Singletons, what is striking are their commonalities, especially when it comes to their children. Both fret about whether their youngsters are getting a sound education, making friends and developing healthy habits. Both say that exposing their children to culturally diverse experiences is a high priority.

“I’ve been to other day-care centers that are straight ghetto,” says Farrington. “They throw the kids in the room with some toys, soiled diapers, a TV and the adults go off and chitchat...At FPG my child actually has a curriculum.”

For the mothers in particular, having a safe, nurturing, stimulating environment for their children brings a peace of mind that enables them to pursue their own careers.



Kenita Farrington pushes her 3-year-old daughter, Nariya, while older sister, Nadiya, swings on her own. Enrolling her daughters in a good early childhood development program has given Farrington the peace of mind to pursue her career.

“Having a preschool you trust and that you know is taking care of your kids is such an enormous weight off of you,” says Jennifer Singleton. “Just alleviating the stress of that is huge.”

READY FOR KINDERGARDEN

Kenita Farrington initially resisted sending her children to day care.

“I was petrified,” she recalls. “My biggest concern was safety. Was somebody going to do something to my child and she’s not going to be able to tell me?”

But she became a convert after watching her first daughter, Nadiya, thrive during two-plus years at FPG.

“Kindergarten has gotten so much harder today,” says Karen Reid, Nadiya’s kindergarten teacher. “If they haven’t had experiences in a quality preschool they are behind. Nadiya was ready when she walked in the door.”

Deja

Elsie

Fantastic

Do

Ellen

Forest

Dog

Elephant

Fish

Duck

Eye

Friday

Dad

Eat

Fun

Down

Ear

February

Door

Fruit

Fast

Frog

Four

+





FPG teacher Erin Webb has been watching over Nariya Farrington since she was 4 months old.

At the time, the family was struggling. Kenita Farrington worked the night shift and was pregnant with Nariya. When their apartment became infested with fleas, they moved in with her mother.

“You could not look at Nadiya and tell she was living under those circumstances,” recalls Reid. Setting Nadiya on a solid course “empowered her mother to be the best possible mother she could be. She knew that her daughter was being well taken care of when she was out looking for jobs.”

Nariya was born a month early, frail and burdened with health problems—eczema, asthma and a small hole in her heart, which was repaired this spring.

“It was even harder for me to let go of Nariya,” says Farrington. “She was an extra special delicate case.”

Farrington knew FPG was the only place she would send Nariya, though there was no guarantee she’d secure one of the coveted slots. Unemployed at the time, she received a slot in part because the family qualified for Early Head Start. Sensitive to stereotypes about black families receiving government aid, Farrington explains: “I’m using the system, not abusing the system.”

She was pleasantly surprised when FPG encouraged her to come and breastfeed Nariya as often as she wanted. “That mother-child bond is so important,” she says.

Since the day Nariya arrived at FPG as a 4-month-old, teacher Erin Webb has been watching over her. She administers Nariya’s inhaler, monitors her diet and knows when she is “clingy and lethargic or bouncy and playful,” as Farrington puts it. “I respect her opinion above my own sometimes.”

Although the playroom has a trove of toys, a long slender cardboard box that previously housed an attic ladder is the hot item on this particular morning. Nariya scooches inside behind three friends and tugs the lid as if it were a door to a secret, magical world.



At age 5, Josh Singleton is already crafting sentences in his daily journal.

Back in the classroom, Nariya and the other “Penguins” line up at two miniature sinks to wash their hands before sitting down to Rice Krispies, milk and canned peaches. Virtually every child is potty-trained and each youngster clears his or her place when finished eating.

“They’re responsible for everything that they’ve taken out,” says teacher Kate Melillo. “It gives them a sense of responsibility and independence and they learn that cleaning up is a way we take care of our things.”

The program has provided Nariya “with the structure she needed,” says her mother. “She needed routine, like when to take a nap, and boundaries and her own personal space. She takes pride in her cubby,” the cubicle where she stows clothes, artwork and personal treasures.

For the 2- and 3-year-olds, chairs are child-friendly 12 inches high, puzzles have knobs for easy maneuvering and the “housekeeping” area is bursting with colorful hats. Dressing up and mimicking adults “is a way for children to make sense of their world,” says Connolly.

By the time children reach ages 4 or 5, the chairs have grown to 16 inches, the costumes are more elaborate, a computer is added and the classroom is loaded with letters, words and books in preparation for kindergarten. Each day, Josh and 12 fellow “Peacekeepers” present a drawing and caption from their journal. Some need help writing, but Josh pens his own.

“This is a bat flying in the sky,” Josh says.

When the Singletons arrived in Chapel Hill, it was hard to find child care. First they enrolled Josh in a bilingual school, but the teachers didn’t speak English.

Research shows that early childhood development can impact educational attainment, which is linked to lower rates of cardiovascular disease, stroke, hypertension, diabetes, obesity, smoking, drug use and depression.

“It was more like a Spanish school, which was okay,” says Jennifer Singleton, “except we couldn’t communicate with the teachers.” Next was a rather unremarkable home-based center.

After several months on a waiting list and a bit of luck, Josh, at age 1, was accepted into FPG. The center holds a lottery to ensure its 85 slots are balanced by race, gender, income and disability. One-third of the students have a physical or cognitive disability.

The Singletons welcome the diversity, saying Josh’s experiences have benefited the entire family.

“With our professional careers, we probably run in a pretty tight circle,” says his father Scott Singleton. “One of the things he brings back and teaches the family is how to live in the world.”

The Singletons marvel at how their son has thrived in a large group with lots of stimulation.

“One of the things Josh has benefited from is he’s a very confident kid,” says his mother. “He believes he can do things. He’s starting to read on his own because he thought he could. Matthew didn’t believe he could,” she says of his older brother who did not attend FPG.

When the “Peacekeepers” get their turn in the playroom, Josh and his friend, Kameron, cartwheel across the mats, providing their own color commentary.

“Here he goes with a double,” Josh calls out, imitating a television sports announcer.

“We’re gonna replay that,” Kameron says.

The Singletons, more introverted and bookish, were surprised when Josh, at age 2, grabbed a microphone at the school picnic and sang “Twinkle, Twinkle Little Star.”

The singing was pretty good, his father recalls. More importantly, Josh had no fear.

“That was the beginning for me of the recognition that at school he was learning things he probably wouldn’t have learned from me,” says Scott Singleton. “That integrated approach that develops kids’ creativity; he wouldn’t have gotten from me.”

The Carolina Abecedarian Project

Landmark study shows early childhood development pays dividends for decades



Latesha Foushee
Former Student, Teacher



Maggie Connolly
Director of Child Care

It began with a bold premise, an idea ahead of its time: give disadvantaged children high-quality, stimulating care from the earliest possible age and they will fare better academically, socially and physically.

In 1972, researchers at the University of North Carolina tested the theory, enrolling 57 low-income, predominantly black infants at the FPG Child Development Institute's Child Care Program in Chapel Hill, named after Frank Porter Graham, the late U.S. senator and president of the University of North Carolina.

One of those youngsters was Latesha Foushee. Her mother began taking Latesha to the center when she was just 6 weeks old. For five years, she and her classmates played "games" designed to develop motor, cognitive and social skills.

At the same time, the researchers tracked a control group of 54 low-income children who stayed at home or attended traditional day-care centers.

They discovered that the children enrolled at the center were better prepared for elementary school. Even more remarkable, research has shown that many of the academic, health and social benefits have continued into their adult lives.

“We’re building healthy kids in all aspects of their life, in all areas of development.”

–Maggie Connolly

Director of Child Care,
FPG Child Development Institute
Child Care Program

Today, the experiment, known as the Carolina Abecedarian Project, and the FPG Child Development Institute are international models for childhood development. And Foushee, 32, has returned to FPG as a teacher, putting into practice the philosophy of teacher-guided play.

“A lot of us really did learn,” she says. “One of the things I remember is we had so many different things to do. I felt challenged.”

In addition to the academic curriculum, her mother—poor, black and single—was drawn to the promise of free diapers, milk, transportation and immunizations.

“From where I come from, mothers want the best for their children, but if they can’t pay for it, they take what they can get,” says Foushee.

She and her classmates have been monitored over decades. Compared to the control group, the children enrolled in the study have scored higher on mental aptitude tests, remained in school longer, had fewer delinquency problems and have been employed at higher rates. They were also less likely to smoke and were older when they themselves became parents.

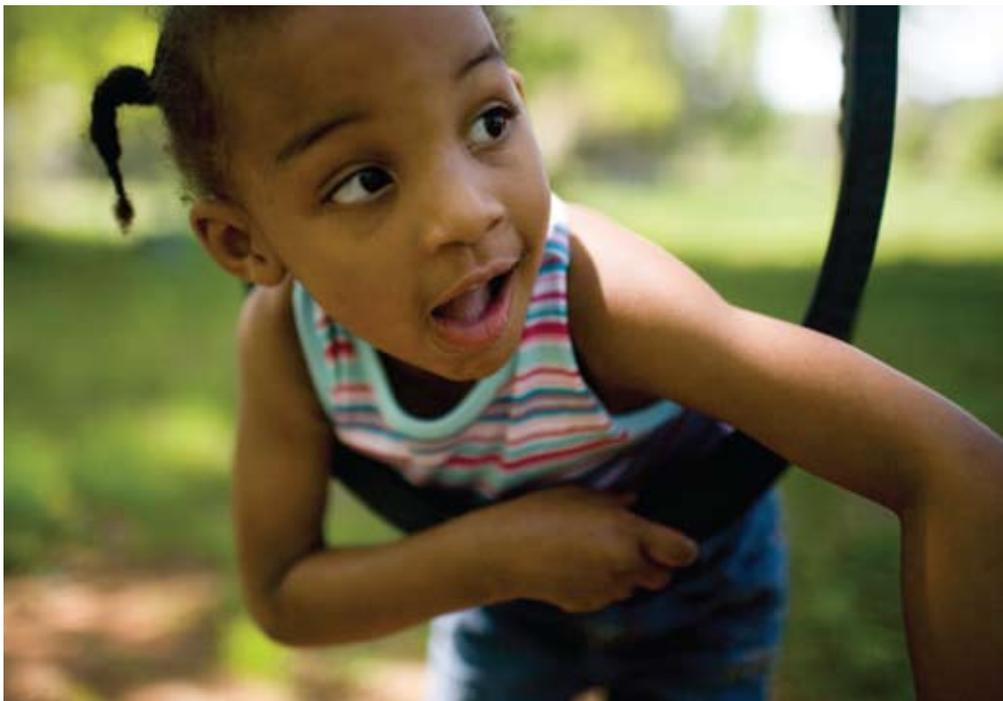
Today there is broad consensus that high-quality early interventions make a lasting impact, particularly for less-advantaged youth. But critics say the approach is costly and cite the shortage of slots and teachers.

And early childhood programs are not a panacea. Foushee, reflecting the experiences of many in the study, is herself a single mother of two who is considered poor enough to qualify for Head Start assistance.

“I would not be able to afford high-quality child care without it,” she says.

Successful programs typically provide a balance between structured consistency and freeform exploration, says Director of Child Care Maggie Connolly. They require better-educated teachers, low student-teacher ratios, developmental screenings, parental involvement and access to specialists such as speech therapists.

“We’re building healthy kids in all aspects of their life, in all areas of development,” says Connolly. Instilling healthy habits at a young age—from proper hygiene, to a well-balanced diet, from enjoying nature to appreciating a diverse mix of people—can last a lifetime.





ISSUE BRIEF 1: EARLY CHILDHOOD EXPERIENCES AND HEALTH

JUNE 2008

The earliest years of our lives set us on paths leading toward—or away from—good health.

Early Childhood Experiences: Laying the Foundation for Health Across a Lifetime

1. Introduction

The earliest years of our lives are crucial in many ways, including how they set us on paths leading toward—or away from—good health. Family income, education, and neighborhood resources and other social and economic factors affect health at every stage of life, but the effects on young children are particularly dramatic. While all parents want the best for their children, not all parents have the same resources to help their children grow up healthy. Parents' education and income levels can create—or limit—their opportunities to provide their children with nurturing and stimulating environments and to adopt healthy behaviors for their children to model. These opportunities and obstacles, along with their health impacts, accumulate over time and can be transmitted across generations as children grow up and become parents themselves.

As noted in an earlier Robert Wood Johnson Foundation report ¹, a large body of evidence now ties experiences in early childhood with health throughout life, particularly in adulthood. Strong evidence also demonstrates that it is possible to turn vicious cycles into paths to health, by intervening early. Although effects of early childhood interventions are greatest for children who are at greatest social and economic disadvantage, children in families of all socioeconomic levels experience benefits from early childhood programs that translate into improved development and health.

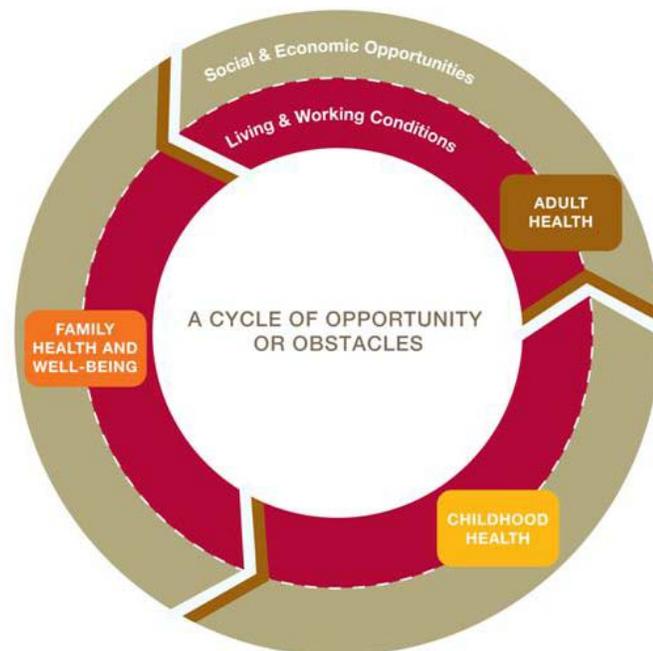


Figure 1. A cycle of opportunity or obstacles. At every stage of our lives, social advantage—or disadvantage—is linked to health. Social and health advantage or disadvantage accumulates over time, creating favorable opportunities or daunting obstacles to health. Opportunities or obstacles play out across individuals' lifetimes and across generations. Intervening early in life can interrupt a vicious cycle, transforming it into a path to health for all children and leading to a healthy and productive adult workforce. Improving early childhood social circumstances is one of the most effective ways for a society to achieve its health potential.



By kindergarten or even earlier, children in both lower-income and middle-class families are at a developmental disadvantage compared with children in the most affluent families.

2. How do social and economic conditions early in life shape children's health and development, thus shaping adult health?

Children's social and economic conditions have direct effects on health

The association between socioeconomic factors and child health is evident from birth, as children born to mothers with low income and educational levels are more likely to be premature or of low birth weight; these birth outcomes are strong predictors of infant survival and also of health across the entire life course. In addition, it is widely recognized that factors such as nutrition, housing quality, and household and community safety—all linked with family resources—are strongly linked with child health. Research shows that children's nutrition varies with parents' income and education and can have lasting effects on health throughout life; for example, inadequate nutrition is linked with obesity during childhood, which in turn is a strong predictor of adult obesity and its accompanying risks of chronic disease, disability, and shortened life. Similarly, children exposed to lead-based paint, most commonly found in lower-income neighborhoods, are more likely to suffer from lead-poisoning that can lead to irreversible neurologic damage.

Social and economic conditions also affect children's development

A large body of research also has shown that experiences in early childhood affect children's brain, cognitive, and behavioral development. Scientific advances in recent decades have demonstrated how social experiences in the first few years of life shape infants' and toddlers' development, creating physiological as well as behavioral foundations—adverse or favorable—for health throughout life. Studies tracking children's development have documented environmental factors and interactions of parents and other caregivers with children while measuring cognitive, behavioral and physical development and in some cases physical health; some of these studies have followed children into adulthood. The results consistently link children's development with social and economic advantages and disadvantages in the home environments of young children. Neighborhood conditions—such as safety, presence of parks and playgrounds, and access to fresh produce—can have a significant impact as well.

Parents' social and economic resources can affect the quality and stability of their relationships with their infants, and parent-infant relationships affect children's emotional development and the cognitive stimulation they receive. Maternal depression, which can inhibit mother-infant bonding, is more prevalent among low-income mothers than among those with higher incomes². Higher income and/or educational attainment among parents are associated with more stimulation of and response to infants and young children, which is directly linked to brain development³. The effect of family socioeconomic circumstances on children's language development is evident as early as 18 months; children in families of middle as well as low socioeconomic status are at a disadvantage compared with their better-off counterparts⁴. Results of the Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K), a national sample of children entering kindergarten, showed that family income is associated with children having the academic and social skills necessary for kindergarten. Compared to children in the highest-income families, children in the lowest-income families were least likely to have the needed skills, but children in middle-class families also performed less well, both socially and academically, than those at the top⁵.

The links between social and economic conditions and children's development may be explained in part by educational differences in parents' awareness of early



Brain, cognitive, and behavioral development early in life are strongly linked to an array of important health outcomes later in life, including cardiovascular disease and stroke, hypertension, diabetes, obesity, smoking, drug use, and depression.

childhood developmental needs. Research also shows, however, that higher income generally means lower levels of chronic stress in the home, as well as greater resources to cope with stressors—both of which enable parents to interact more often and more favorably with their children.

Children’s development shapes social and economic well-being throughout life

The first few years of life are crucial in establishing the path—including the opportunities and obstacles along the way—that a child will follow to social and economic well-being in adulthood. Particularly without intervention, the gaps in academic and cognitive skills that are apparent when children enter school generally do not close. In fact, these gaps can grow even larger as disadvantaged children progress more slowly than children from higher-income and better-educated families. ECLS-K study results showed that children at higher social risk had lower reading and math scores in kindergarten and also experienced smaller gains in both these areas by the end of third grade than children with fewer family risk factors⁶. Poor academic performance is linked to subsequently dropping out of high school, lower educational attainment, delinquency and unemployment later in life.

Children’s development shapes health throughout life

How a child develops shapes his or her health as an adult. A large body of research has consistently shown that brain, cognitive, and behavioral development early in life are strongly linked to an array of important health outcomes later in life, including cardiovascular disease and stroke, hypertension, diabetes, obesity, smoking, drug use, and depression—conditions that account for a major portion of preventable morbidity and premature mortality in the United States. The links between children’s development and adult health may involve “connecting the dots” through effects on important social outcomes including educational attainment and/or on health-related behaviors, but in some cases they may be more direct. For example, the chronic stress generally associated with families having very limited socioeconomic resources can affect children’s bodies in ways that lead to lifelong cognitive limitations and behavioral problems as well as poor physical and mental health. Physiologic effects of chronic stress in early childhood have been linked with depression, anxiety, diabetes, cardiovascular disease and stroke later in life⁷.

3. How strong is the evidence connecting early childhood development programs with health?

There is very strong evidence that social disadvantages experienced in childhood can limit children’s opportunities for health throughout life. At the same time, however, there also is strong evidence that it is possible to intervene in early childhood, breaking the vicious cycle (from social disadvantage to health disadvantage to more social disadvantage, etc). Knowledge accumulated over the past 40 years supports the conclusion that children who participate in high-quality early childhood development (ECD) programs experience a range of immediate and long term health benefits. These health benefits are *in addition to* cognitive gains and better academic achievement measured in the short term and lower rates of delinquency and arrests later in adolescence—which themselves have strong health effects. The impact appears universal but is particularly great for socially disadvantaged children, for whom early child care, education, and family support programs can act as buffers, providing stability and stimulation to the children and strengthening parents’ ability to meet children’s developmental needs at home.



“The general question of whether early childhood programs can make a difference has been asked and answered in the affirmative innumerable times.”

- Institute of Medicine, 2000

Table 1 briefly describes several of the most well known and well evaluated early child development programs in the U.S.; it also notes estimates of the programs’ potential impact in monetary terms. Table 2 summarizes results of studies of these programs, giving an overview of the range of important health and health-related outcomes that have been demonstrated in association with them⁸. Studies of early child development (ECD) interventions provide strong evidence that ECD programs (a) directly affect health and health care; and (b) indirectly affect health by affecting multiple social outcomes with well-established health consequences.

The evidence linking early childhood experiences with health

Relevant studies can be divided into two major categories: (1) studies of child development and its health consequences, showing that early childhood experiences affect health indirectly by affecting children’s mental, behavioral and physical development; and (2) studies of early child development (ECD) interventions, which provide strong evidence that ECD programs: (a) directly affect health and health care; and (b) indirectly affect health by affecting social outcomes with well-established health consequences.

1. Studies of early childhood experience and its links with health: research findings have consistently shown that **(a) social experiences in early childhood are linked to brain, cognitive, and behavioral development;** and **(b) brain, cognitive, and behavioral development are in turn strongly linked--often through effects on educational attainment—to an array of important health outcomes,** particularly later in life. Examples of adult health outcomes linked to early child development by connecting the dots between these two bodies of knowledge include cardiovascular disease and stroke, hypertension, diabetes, obesity, smoking, drug use, and depression; these conditions account for a major portion of preventable morbidity and premature mortality in the United States.
2. Studies of ECD programs (see Table 2):
 - a) Findings from observational and experimental studies provide evidence of **direct links between particular ECD programs and important health and health care outcomes.** The evidence linking ECD programs directly to health outcomes is less extensive than for social outcomes, but it is important to note that the health effects of interventions in early childhood often do not manifest until middle or later adulthood and few evaluations have followed subjects for several decades. Despite this limitation, **health outcomes** directly linked with ECD programs have been documented, including *child injuries, child abuse/maltreatment, depressive symptoms, and health-promoting and health-damaging behaviors* such as improved eating habits and hygiene and reduced use of marijuana. Many studies have directly linked particular ECD interventions with **optimal use of health services,** including *health screenings, childhood immunizations, fewer hospital days, and fewer emergency room visits.*
 - b) Experimental and observational studies **indirectly link particular ECD interventions with health outcomes by demonstrating their impact on social outcomes that have well-established and important health consequences.** These outcomes include, for example, *teen pregnancy, cognitive development, school performance, IQ, placement in special education, and/or educational attainment, employment* (of the child’s mother and of the child in adulthood), *income, delinquency, and criminal behavior/arrests/incarceration.*



Major business groups have advocated universal high-quality pre-school as an essential means of achieving a productive—which means both a healthy and educated—future workforce.

4. Successful early childhood development programs often have been multi-faceted. Do we know what specific components work?

A report issued by the Institute of Medicine (IOM) in 2000 concluded that “the general question of whether early childhood programs can make a difference has been asked and answered in the affirmative innumerable times.” The questions in need of investigation are about the most effective and efficient ways of intervening in early childhood, especially, according to the IOM report, among “children and families who face differential opportunities and vulnerabilities⁹.”

There is wide consensus that key elements of ECD programs include early education and stimulation for preschool children along with support and training for parents and caregivers to improve children’s experiences at home and in the community. Some studies have concluded that programs need to be sustained over multiple years to have lasting effects. Highly trained and responsive caregivers, small class sizes with low child-teacher ratios, safe and adequate physical environments, and age-appropriate activities focused on enhancing the cognitive and socio-emotional development of the child are often cited as hallmarks of high-quality child development and day care centers.

Some of the well-evaluated ECD programs have provided a range of services to parents and families in addition to education and stimulation for the children. The Perry Preschool and the Chicago Child-Parent Centers programs tried to improve the parent-child relationship and increase parental involvement in the child’s education through parental education and participation. The Nurse-Family Partnership and Parents as Teachers provide parent training and supportive guidance with the goal of increasing parents’ self-efficacy and life skills. Head Start and the Carolina Abecedarian Project have provided health care, nutrition, and social services to participants and their parents. In addition to child care and early education, a range of policies and programmatic interventions can support the healthy development of infants and young children. They include work-based income supplements for the working poor, paid maternity and parental leave, workplace policies promoting and supporting breastfeeding, periodic developmental screening and follow-up services, and environmental protection policies.

5. Investing in early child development to achieve America’s health and economic potential

Several national business organizations—including the Committee for Economic Development (CED), PNC Financial Services Group, and the Business Roundtable—as well as Nobel Prize-winning economist James J. Heckman and economists Arthur Rolnick and Rob Grunewald of the Federal Reserve Bank of Minneapolis have called for universal early childhood development programs as a wise financial investment in the future U.S. workforce¹⁰.

A larger investment in early child development would benefit the overall economy of the United States. Children who participate in ECD programs are more likely to have the necessary skills—such as abstract reasoning, problem solving and communication—to meet the demands of tomorrow’s work force. A cost-benefit analysis of the Perry Preschool program estimated that approximately 80% of the monetary benefits of the program are benefits to the general public, with the remaining 20% accruing to the individual children and/or the adults they will become¹¹. Children who participate in ECD programs are more likely to be healthy, have higher earnings, and are less likely to commit crime and receive public assistance. These benefits translate into tremendous savings for society.



Investing in improving children's development at the beginning of life is probably the most effective strategy for realizing the health potential of all Americans.

Based on current knowledge, it is reasonable to expect large returns—in human and economic terms—on investment in high-quality early child development programs; at the same time, we must realize that this is a long-term investment, with benefits that may not be measurable for years. If we can, however, take the long view, current knowledge tells us that investing in improving children's development at the beginning of life is probably the most effective strategy for realizing the health potential of all Americans.

About the Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation's largest philanthropy devoted exclusively to improving the health and health care of all Americans, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful and timely change. For more than 35 years the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime.

About the Commission to Build a Healthier America

The Robert Wood Johnson Foundation Commission to Build a Healthier America is a national, independent, non-partisan group of leaders that will raise visibility of the many factors that influence health, examine innovative interventions that are making a real difference at the local level and in the private sector, and identify specific, feasible steps to improve Americans' health.

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ADDITIONAL RESOURCES

- Hertzman C. "The Biological Embedding of Early Experience and Its Effects on Health in Adulthood." *Annals of the New York Academy of Science*, 896: 85-95, 1999.
- Early Childhood Research Collaborative, <http://www.earlychildhoodrc.org/>
- National Institute for Early Education Research, <http://nieer.org/>
- National Scientific Council on the Developing Child, <http://www.developingchild.net/>

**Table 1: What are the components of promising early childhood development programs?
And what do we know about their economic impact?**

Program	Description	Dollars saved for every dollar spent on early childhood development*
Nurse-Family Partnership	Intensive home-visiting program providing medical and psychosocial service beginning during pregnancy and continuing 2 years postpartum for first-time mothers who are generally young, unmarried and/or of low socioeconomic status.	Participants were followed to age 15: Overall sample: \$2.88 saved for every \$1 spent <ul style="list-style-type: none"> Higher-risk sample (both unmarried and low income/education): \$5.70 for every \$1 spent Lower-risk sample (unmarried or low income/education but generally not both): \$1.26 for every \$1 spent
Early Head Start	Federally funded community-based program for low-income pregnant women and families with children up to age 3. Provides family and child development services using a range of strategies (variable across sites) such as home visiting, parenting education, child care, health care and family support.	Not available
Carolina Abecedarian Project	Center-based program operating from 1972-1985 for infants at high-risk for developmental delays and school failure. Emphasized language development. Pre-school and elementary school components. Health, nutrition and social services.	Participants were followed to age 21: \$3.23 saved for every \$1 spent
High/Scope Perry Preschool Project	Center-based early childhood education for low-income, African-American pre-schoolers with low IQ scores. Conducted in Ypsilanti, MI from 1962-1967. Participatory learning approach. Daily classroom sessions emphasized learning through active and direct child-initiated experiences. Weekly home visits to strengthen the parent-child relationship and increase parent involvement in the child's education.	Participants were followed to age 27: \$5.15 to \$8.74 saved for every \$1 spent, (depending on how crime costs were calculated) Participants were followed to age 40: \$17.07 saved for every \$1 spent
Chicago Child-Parent Center Program	Federally funded, center-based program providing preschool and K-3 education to children living in high-poverty Chicago school neighborhoods eligible for Title I funding. Emphasizes parent participation and a child-centered, individualized approach to social and cognitive development.	Participants were followed to age 21: \$7.14 saved for every \$1 spent
Head Start	Federally funded, comprehensive community-based early child development program focused on improving school readiness among children ages 3 to 5 years in low-income families. Programs vary across sites.	Not available

Monetary costs and savings (discounted to 2003 dollars) were determined by estimating the costs/savings associated with child care, child health, education, labor force participation, use of welfare programs, crime, smoking, substance abuse and childbearing. Costs and savings may be based on outcomes for the child, parent and/or the child's descendant.

* Due to differences in the outcomes measured and in the follow-up periods, the savings-cost ratios should not be used to compare programs.

Source: Karoly LA, Kilburn MR and Cannon JS. *Early Childhood Interventions: Proven Results, Future Promise*. MG-341. Santa Monica, CA: The RAND Corporation, 2005.

Table 2: How do early childhood development programs affect health? Program highlights. Impact on child participants during their childhood, adolescence and adulthood.*

Early childhood development programs	Health, health behaviors and health services	Social outcomes that affect health				
		Children's socio-emotional and/or cognitive development	Educational outcomes	Adult employment and earnings	Adult social services use	Crime
Nurse-Family Partnership	↓ Child abuse ↓ Sex partners (teen) ↓ Alcohol consumption (teen) ↓ Emergency room visits (child) ↓ Hospital days (child)	↑ Positive social/emotional behaviors ↑ Achievement test scores				↓ Arrests, convictions and violations of probation (teen)
Early Head Start		↑ Positive social/emotional behaviors ↑ Achievement test scores				
Carolina Abecedarian Project	↓ Depressive symptoms [†] (adult) ↓ Teen pregnancy ↓ Marijuana use (adult)	↑ IQ scores ↑ Achievement test scores	↓ Special education placement (child/teen) ↓ Grade retention (child/teen) ↑ Years of completed schooling (adults) ↑ Ever attended four-year college (adults)	↑ Skilled employment		
High/Scope Perry Preschool Project	↓ Teen pregnancy.	↑ IQ scores ↑ Achievement test scores	↓ Special education placement (child/teen) ↑ High school graduation (adult)	↑ Employment ↑ Earnings ↑ Income	↓ Use of social services	↓ Arrests (teen/adult) ↓ Arrests for violent crimes (adults) ↓ Time in prison/jail (adults)
Chicago Child-Parent Center Program	↓ Child abuse ↓ Depressive symptoms ^{a,†} (adult)	↑ Social competence ↑ Achievement test scores	↓ Special education placement (child/teen) ↓ Grade retention (child/teen) ↑ High school graduation (adult) ↑ Highest grade completed (adult) ↑ Ever attended four-year college (adults)			↓ Delinquency (teen) ↓ Felony arrests (adults) ↓ Incarcerations (adults)
Head Start	↑ Positive health behaviors (child) ↑ Immunizations (child)	↑ IQ scores	↓ Grade retention (child) ↑ High school graduation (white adults) ↑ College attendance (white adults)			↓ Booked or charged with crime (black adults)

*This does not include impact on the children's parents. "Children" includes teenagers.

↑ = The program was associated with an increase in the specified outcome. ↓ = The program was associated with a decrease in the specified outcome.

^ap-value=0.06, all other results were statistically significant at the p≤0.05 level.

[†]From McLaughlin AE, Campbell FA, Pungello EP et al. "Depressive symptoms in young adults: The influences of the early home environment and early educational child care." *Child Development*, 78(3):746-756, 2007

[‡]From Reynolds AJ, Temple JA, Ou S et al. "Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families." *Archives of Pediatrics & Adolescent Medicine*, 161(8):730-739, 2007

Adapted from Tables S.2 and S.3 in Karoly LA, Kilburn MR and Cannon JS. *Early Childhood Interventions: Proven Results, Future Promise*. MG-341. Santa Monica, CA: The RAND Corporation, 2005.