PATHWAY TO

Children Ready for School and Succeeding at Third Grade

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Upon this gifted age, in its dark hour,
Falls from the sky a meteoric shower
Of facts . . . they lie unquestioned, uncombined.

Wisdom enough to leech us of our ill
Is daily spun; but there exists no loom
To weave it into fabric.

Edna St. Vincent Millay

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PATHWAY TO CHILDREN READY FOR SCHOOL AND SUCCEEDING AT THIRD GRADE

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Guide to the Pathway to Third Grade School Success

The Pathway to Third Grade School Success assembles a wealth of findings from research, practice, theory, and policy about what it takes to improve the lives of children and families, particularly those living in tough neighborhoods. By laying out a comprehensive, coherent array of actions, the Pathway informs efforts to improve community conditions within supportive policy and funding contexts.

The Pathways framework does not promote a single formula or program. Rather, our emphasis is on acting strategically across disciplines, systems, and jurisdictions to increase the number of children who are ready for school and succeeding at third grade. The Pathway provides a starting point to guide choices made by community coalitions, services providers, researchers, funders, and policymakers to achieve desired outcomes for children and their families.

The Pathway Is Only One Piece
The Pathway offers guidance to communities which, in combination with local wisdom, provides a structure for planning and acting strategically.
Pathway Components

Increasing the number of children who are ready for school and succeeding at third grade is not the sole responsibility of any single agency or professional group; rather it is a shared community concern. Effective strategies require multiple actions at the individual, family, and community levels—as well as in state and national policies—to reduce risk factors and strengthen protective factors. Communities can increase rates of school readiness and success at third grade by working effectively toward the following Goals:

**GOALS**

1. **Healthy, Well-Timed Births**
2. **Health and Development On Track**
3. **Supported and Supportive Families**
4. **High Quality Child Care and Early Education**
5. **Continuity in Early Childhood Experiences**
6. **Effective Teaching and Learning in K-3 Classrooms**

The following components of the Pathway will help communities, funders, and policy makers to take ACTION to achieve these goals, to use INDICATORS to measure their progress, to identify the INGREDIENTS of effective implementation, to understand the RATIONALE connecting actions and results, and to examine the EVIDENCE documenting the effectiveness of the actions.

**Actions**
- specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome

**Examples**
- program and policy initiatives illustrating how actions have worked elsewhere

**Indicators**
- measures for targeting and monitoring the impact of actions and documenting progress toward the outcome

**Ingredients**
- elements of how actions are implemented that make them effective

**Rationale**
- research-based reasons to believe that identified actions are likely to contribute to the desired outcome

**Evidence**
- research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome
How to Use Pathway Components

The Pathway organizes an extensive collection of information as a starting point for effective action. It does not define a planning protocol. Change agents can make use of the Pathway in many ways regardless of where they are in the process of planning, implementation or working toward greater effectiveness of their current activities. The following diagram illustrates how the components of the Pathway can be useful as part of a typical strategic planning approach.
Moving from Comprehensive Vision to Focused Action

How you use the Pathway will depend on your objectives and the role you play in efforts to increase school readiness and third grade school success. The Actions Overview presents a comprehensive framework illustrating the breadth of Actions that contribute to the outcome. Communities certainly can’t do everything worth doing all at once. The supporting materials within each Goal help to focus on what it takes to act effectively within complex political and financial constraints. The Pathway provides a starting point for grappling with hard trade-offs and working to build the connections and infrastructure necessary to sustain change.
Possible Applications for the Pathway

While initiatives must draw on local wisdom to be effective, communities can act more strategically by learning from what has worked elsewhere and what appears promising. The Pathway can help users facing common questions and challenges, such as the following:

- **Current efforts do not seem to be achieving desired results. How can we use existing resources more effectively to achieve greater impact?**
- **New funds are available. Where is the additional investment likely to enhance results for children, families, and communities?**
- **How do we expand our partnerships and engage allies beyond a core group of service providers? How do we value informal supports and integrate them into our efforts?**
- **How do we convince policy makers and funders that taking action will reduce the harm caused by failures to strengthen supports to children and families that will optimize healthy development?**
- **How do we know the extent to which our efforts are achieving desired results? How can we track progress?**

**SCENARIO 1**

The community foundation of a large urban city has decided to respond to a newly elected mayor’s call for a bold initiative to substantially increase the proportion of children who are ready for school at the time of school entry. The mayor has mobilized the enthusiasm of staff, agency heads and education officials, and is hoping the community foundation will help fund and design the initiative. With the outcome defined, the community foundation is putting together a coalition of community leaders, and will use the Pathway to Children Ready for School and Succeeding at Third Grade as a framework for setting the agenda, finding common language and a shared vision, and determining the breadth of stakeholders who have a role to play in achieving the outcome.

The coalition will use the **Actions Overview**, in combination with current information about local conditions, to create a “map” of existing institutions, services and supports and unmet needs. This map of the terrain will be useful in working with decision-makers in public, philanthropic, educational and business organizations in efforts to define priority actions, to establish criteria for investing resources, and to track impact. They will use the **Rationale and Evidence** sections of the Pathway to make the case for taking the approach they decide on, and the **Indicators** to focus evaluation efforts on a small number of measures. The Indicators will be selected to reflect real progress and to measure what is likely to be most persuasive to key stakeholders, including the tax payers. Given the number of stakeholders likely to be involved in a city-wide effort, the community foundation will also use the Pathway to promote clear, on-going communication based on a shared understanding of what needs to happen to increase rates of school readiness.

Should the coalition decide to focus, initially or sequentially, on one, two or three of the six Goals that are part of achieving the Outcome, its members or staff will want to dig more deeply into the particular Goal(s) to examine the range of Actions that will contribute to achieving the Goal(s), and the **Ingredients** that are key to making those Actions effective.
 Counties with dedicated resources have used Pathways as a framework to manage the complexity of their efforts to improve rates of school readiness and early school success and to guide the development of long-term plans.

Starting with the Actions Overview, partners are able to see the big picture, establish common language and a shared vision, and see where each partner fits. Whether they are at the outset of their efforts, or taking stock after some years of operation, after a rough scan of existing efforts, resources and opportunities, planners select from one to six Goals as immediate priorities from the Actions Overview.

If the planners and decision-makers decide, for example, to focus most immediately on Goal 4, high quality child care and early education, they review the two action areas that contribute to this Goal, and the array of actions and examples of what has worked elsewhere. They compare existing efforts to reach this Goal with the information on the Pathway. Through interviews and available data, an assessment team confirms the reliability of anecdotal reports that (1) children whose were placed in child care with family and friends are having the greatest trouble in Kindergarten, and that (2) specialized help is not reaching children and families needing such help because families are isolated and not adept at seeking out such help. The group may then choose these Actions:

Funders, policymakers and local community groups collaborate to strengthen the capacity of providers of informal child care, by offering formal and informal training and other opportunities for home-based caregivers to strengthen their skills, and by creating hubs of support that pool resources from different community institutions (e.g., health centers, museums, libraries, family support centers, and child-care centers).

Providers and coalitions create links among services for child care, health care, mental health, substance abuse, developmental assessment, and child protection so that they can mobilize specialized help for individual children and families who have social, emotional, or developmental difficulties, are isolated, or otherwise at high risk.

The Examples shown with these Actions suggest practical approaches that may stimulate innovation and engage folks who may be too ready to dismiss any action as undoable or ineffective. They will guide decisions about the most important partners to enlist.

The decision-makers or staff would go to the Ingredients section of Goal 4 to make sure that the Actions are implemented in ways that were most likely to be effective. They would draw on the Rationale and Evidence to persuade partners, including policymakers and funders, business people, influential citizens, and the public about the connections between the proposed actions and desired results. They would use the Indicators to focus their evaluation efforts on a small number of indicators and measuring what is likely to be most persuasive for key stakeholders.

As they add additional Goals and Actions to their agenda, they might tailor the Pathways framework to develop their own "Pathways Actions Map" that captures their priorities and clearly ties areas of action to the desired Goals.

1Examples include (1) the Children's Board of Hillsborough County (FL), an independent tax authority with a budget of approximately $30 million annually, charged with investing in services and supports for families with children up to age 8, and (2) First Five of Humboldt County (CA), established after California voters in 1998 approved an increase in the excise tax on tobacco products, with revenues distributed to California's counties primarily to provide all children, prenatal to five years of age, with a comprehensive, integrated system of early childhood development services.
### Actions Overview, Pathway To Children Ready for School and Succeeding at Third Grade

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**CHILDREN SUCCEEDING AT THIRD GRADE**
- Children are “on track” in kindergarten assessments and proficient in third grade reading and arithmetic.
- Fewer children have untreated health conditions, avoidable developmental delays, or are chronically absent.
- More children are in schools where income- and race-based reading gaps are eliminated at third grade.
SUMMARY OF GOALS, ACTION AREAS, AND ACTIONS

GOAL 1: Healthy, Well-Timed Births

A. High-quality, accessible prenatal care
Health care providers and insurers make high-quality, comprehensive health care available, accessible, and affordable to all women of reproductive age and to all pregnant women; they make available family-friendly environments for childbirth. Providers of prenatal care and preconception health care provide counseling and support and connect families to help with nutrition, childbirth and parenting preparation, housing, maternal depression, substance abuse, and domestic violence.

Community groups work with public agencies to encourage healthy habits and behavior during pregnancy, including good nutrition and not smoking. They help connect prenatal care with services that treat substance abuse and other problems likely to interfere with healthy childbearing or parenting and with help minimizing stress.

B. High-quality, accessible family planning
All health care providers provide counseling on family planning options, including abstinence and birth control, to all women and men of reproductive age. Providers of family planning services offer a range of reproductive services that are effective, affordable, and acceptable to a variety of actual and potential users, provided in settings, locations, times, and ways that enable clients to choose and use contraception and other means of ensuring that pregnancies are intended.

C. Opportunities for teens that compete successfully with early childbearing
Local coalitions monitor programs and outcomes for an entire population, neighborhood, or community to determine what is available and what is missing to support intended, well-timed pregnancies; they act to fill the gaps.

Local organizations promote positive alternatives to early childbearing aimed at postponing first and subsequent pregnancies among teens.

GOAL 2: Health and Development on Track

A. High-quality, accessible child health care
Health care providers make high-quality, comprehensive health care (including preventive, acute, emergency, and chronic care) available, accessible, and affordable to all families with infants and young children. Child health services are delivered primarily within the context of a "medical home," where continuity of care and personalized relationships are maintained over time.

Providers of pediatric care pay attention to the living conditions of the children they see, including homelessness, domestic violence, and dangers posed by the home or neighborhood environment. Providers take responsibility for connecting families with people and agencies that can help them provide safe and stimulating environments for their children.
Local coalitions reach out to families and work with policymakers to help families obtain public and private health insurance for their children. All stakeholders work to expand eligibility for and enrollment in health insurance coverage to low-income children through Medicaid, State Children's Health Insurance Program (SCHIP), and other, broader programs.

B. Early detection of developmental obstacles

Providers of routine pediatric care make health screenings and developmental assessments easily accessible to all families. They provide or link families promptly to follow-up, diagnostic, and treatment services by appropriate specialists and community resources.

Policymakers seek to remove or reduce barriers to effective screening, early detection, and treatment that require solutions at the funding, policy, or regulatory level.

C. Prevention of and protection from abuse and neglect

Child welfare agencies partner with community groups in neighborhoods that have a high concentration of families involved with the child welfare system to make services more effective and acceptable and to build a community presence. They connect formal services and agencies with neighborhood networks so individual families experience services and agencies as responsive and on their side.

Funders and policymakers design funding and eligibility policies to make services and supports available to families when they need them rather than requiring a diagnostic label or an open child welfare case to trigger funding and access, and to enable agencies to identify families that are socially isolated and link them to services and supports.

Funders and policymakers make it possible for agencies to select, train, and supervise frontline child protection staff so that services meet high quality standards and staff have the resources and tools they need to make the best possible decisions about placing children out of their home, connecting families to treatment and supportive services, and reunifying families.

GOAL 3: Supported and Supportive Families

A. Support to parents to strengthen parenting capacity and literacy skills

Providers of services and supports constantly look for opportunities to strengthen parents in their child-rearing role and to build strong relationships between young children and their parents and other adult caregivers. Providers promote and model effective parenting skills by engaging parents in their homes or other familiar settings, and through evidence-based parent training programs; they help supportive adults (including spouses, kin, and neighbors) participate actively in child rearing.

Providers of a wide variety of services and supports use diverse approaches to promote literacy-centered practices at home. Providers encourage parents to read to children daily, have rich conversations with children, and limit TV use. Adult literacy and General Education Degree (GED) programs are offered in many settings to equip parents and informal child care providers to engage children in reading and other cognitively stimulating activities.

Community groups work with libraries, health and child care providers, places of worship, and community organizations to increase parents' access to books and reading awareness programs.
Funders provide resources to expand the number and reach of high-quality family literacy programs and other efforts to help parents cultivate their children's interest in reading and learning. Funders provide resources for services and supports that help parents balance workforce participation with good parenting.

**B. High-quality treatment and follow-up for parents with substance abuse, mental health, or domestic violence problems**

Community organizations, institutions, funders, and other stakeholders help families faced with maternal depression, substance abuse, impaired parent-child relationships, child abuse, and domestic violence to easily obtain the services and supports they and their children need, including basic supports, treatment in a safe environment and at appropriate levels of intensity, and help learning to parent in new ways.

Agencies that see families routinely learn to recognize children and families at greatest risk; staff have the training, consultation, support, and community connections to mobilize the services these parents and children need.

Policymakers ensure that providers of services for parents who are depressed or involved with drug abuse or domestic violence pay attention to the needs of the children of the parents they treat and integrate intensive early childhood and family-focused services into substance abuse and mental health settings.

**C. Fewer children in poverty**

Community-based programs help low-income families obtain the financial supports they are entitled to and the opportunities they need to become self-sufficient. With the support of policymakers, they mobilize multiple sources of income for parents and other caregivers of young children who lack employment.

National, state, and regional programs connect inner-city residents to good jobs.

National and local programs encourage and support low-income residents’ efforts to create and maintain small businesses.

A range of programs is available to enhance financial literacy, money management, and asset building.

**D. Neighborhoods safe, stable, and supportive**

Community policing and neighborhood-building activities promote neighborhood safety.

Efforts to promote home ownership and establish social connections make neighborhoods more stable.

A variety of community-building strategies contributes to neighborhood supportiveness, a sense of belonging, and improved economic prospects for the neighborhood’s residents.
GOAL 4: High-Quality Child Care and Early Education

A. High-quality child care and early education are widely available and support social and cognitive development

Federal, state, and local public agencies and philanthropists provide funds to make high-quality child care and early education widely available, especially to families of children most at risk, and to strengthen providers’ capacity to continually improve the quality of child care and early education and its ability to support social, emotional, and cognitive development.

Providers of early care and education maintain high quality standards, often with outside support. They structure activities to promote social, cognitive, and psychological growth of children and to individualize care in response to family context and parent input. They respond to the various developmental stages of the children in care, including infants and toddlers, preschoolers, and school-age children.

Local coalitions foster networks of child care environments that meet high quality standards and respond to families’ needs in ways that support their linguistic heritages and cultural beliefs about education and child rearing.

States take special responsibility for coordinating efforts to expand and improve child care and early education services, providing consultation and technical assistance, and assuring that resource allocation supports high quality, coherent services, including professional training and decent wages and benefits for staff.

Funders, policymakers, and local community groups collaborate to strengthen the capacity of providers of informal child care. They offer formal and informal training and other opportunities for home-based caregivers to improve their skills, and they create hubs of support that pool resources from many community institutions (e.g., health centers, museums, libraries, family support centers, child-care centers).

National and local groups campaign to shape community norms to confirm that stable, affordable, high-quality out-of-home care is important and that social, emotional, and cognitive development are inter-related.

B. Child care linked to health, mental health, substance abuse, and developmental services

Providers and coalitions create links among services for child care, health care, mental health, substance abuse, developmental assessment, and child protection so that they can mobilize specialized help for individual children and families who are isolated, have social, emotional, or developmental difficulties, or otherwise are at high risk.

Child care programs partner with neighborhood-based child welfare services and intensive family support in efforts to prevent and respond to abuse and neglect.

Funders and policymakers make money available in sufficient amounts and on terms that enable programs to use multiple funding streams to build consultation into their daily work and their professional development activities.
GOAL 5: Continuity In Early Childhood Experiences

A. Curricula and expectations aligned among providers of early education and schooling
   Through local leadership and support, curricula, expectations, standards, and assessments are aligned from pre-K to grade 3 to bring about stable, predictable learning environments throughout the early years.

   New schools are established to improve pre-K to grade 3 education; they include a focus on aligning curricula, expectations, standards, and assessments from pre-K to grade 3.

B. Providers of early education, schooling, and social and health services connected with each other and with families
   Efforts to connect child care, preschools, schools, and services are supported by strong local leaders and are often sustained by outside intermediaries.

GOAL 6: Effective Teaching and Learning in K-3 Classrooms

A. Conditions are in place to produce and maintain excellent teaching and learning.
   Schools and school districts have the knowledge, resources, and community support needed to attract and retain effective teachers and principals and to maintain classrooms with high expectations, good instructional practice, emotional support for students, and professional support for teachers.

   States, districts, and unions remove impediments and create incentives to provide excellent teachers to the children who need the best teaching. Stakeholders collaborate to attract enough talent into the teaching profession that it becomes politically realistic to assign highly skilled teachers to the students who need them most.

   Schools and school districts establish and maintain data systems to provide decision makers, practitioners, and parents with easy-to-understand feedback on attendance, instructional quality, and classroom climate.

B. Trusting relationships exist within schools and between communities and schools.
   Communities, states, the federal government, and philanthropies encourage, fund, and strengthen efforts, including the establishment of after-school programs and community schools, to connect students and families to schools and to health and social services and other supports.
RATIONALE FOR WORKING TOWARD THE OUTCOME OF SCHOOL READINESS AND THIRD GRADE SCHOOL SUCCESS

Rationale for a Focus on School Readiness

Recent advances in knowledge about children’s early years show that the period from pregnancy to school entry is crucial. A healthy birth and early, everyday nurturing and learning from parents and other caregivers have a powerful effect on life trajectories, especially for children growing up with multiple risk factors. The brain’s unusual plasticity during the first few years of life seems to make young children unusually responsive to environmental influences (Ludwig & Sawhill, 2007).

Poor and minority children have the odds stacked against them even before they enter school. Before kindergarten, the average cognitive scores of children from the highest socioeconomic group are 60 percentage points higher than those of children from the lowest (Lee & Burkam, 2002). While the average 4-year-old in a family on public assistance has heard some 13 million spoken words, for example, a child from a working-class family has heard about 26 million and a child with parents in professional occupations almost 45 million (Hart & Risley, 1995). Children who score poorly in cognitive and non-cognitive skills before entering kindergarten are likely to do less well in school and more likely to become teen parents, to engage in crime, and to be unemployed as adults (Rouse et al., 2005).

Society can increase the odds of favorable outcomes through planned interventions that strengthen families, service and support systems, and neighborhoods. The most comprehensive study ever attempted in the science of child development concluded that "the course of development can be altered in early childhood by effective interventions that change the balance between risk and protection, thereby shifting the odds in favor of more adaptive outcomes" (Shonkoff & Phillips, 2000). This conclusion is even stronger when applied to young children whose future prospects are threatened by socioeconomic disadvantages, family disruptions, or diagnosed disabilities. High-quality early childhood programs, for instance, can reduce grade-level retention and special education placement while increasing school achievement and social skills (Barnett, 1995; Ramey & Ramey, 1998; Yoshikawa, 1995; Raver & Knitzer, 2002).

Several business groups have presented data on the cost-effectiveness of early interventions with young children and their families. Most recently the Federal Reserve Bank of Minneapolis sponsored a conference on "The Economics of Early Childhood Development," based on a paper by the bank's senior vice president entitled, "Early Childhood Development: Economic Development with a High Public Return" (Rolnick & Grunewald, 2003). See Links to Cost-Effectiveness Arguments at www.PathwaysToOutcomes.org. Other economic analyses also indicate that it is cost-effective to invest in the early years (Heckman, Layne-Farrar & Todd, 1996; Barnett, 1996; Reynolds, Temple, Robertson & Mann, 2002; Masse & Barnett, 2002).

A long-term vision for healthy child development becomes even more important during an era of shrinking federal, state, and local human-service budgets, skepticism about the impact of large-scale intervention, and philanthropic retrenchment—a time when incrementalism has its limits. As Gary Walker of Public/Private Ventures points out, we may not be just a tinker away from a set of strategies that will optimize child development, strengthen families, and protect vulnerable youth. By crafting a set of strong, coherent strategies to achieve valued outcomes, however, and then documenting progress toward the outcomes, communities may be able to mobilize public will to resist the cutbacks and make significant progress possible.
Rationale for a Focus on Third Grade School Success

A large body of research in social science, psychology, and neuroscience shows that children are disadvantaged when their early environments do not simultaneously cultivate non-cognitive abilities (such as motivation, perseverance, and self-restraint) and cognitive abilities. When their early environments do stimulate both sets of abilities, however, children’s life prospects are significantly enhanced.

• “The interactive influences of genes and experience literally shape the architecture of the developing brain, and the active ingredient is the ‘serve and return’ nature of children’s engagement in relationships with their parents and other caregivers in their family or community….When parents, informal community programs, and professionally staffed early childhood services pay attention to young children’s emotional and social needs, as well as to their mastery of literacy and cognitive skills, they have maximum impact on the development of sturdy brain architecture and preparation for success in school” (National Scientific Council on the Developing Child, 2007).

• “Toxic stress in early childhood is associated with persistent effects on the nervous system and stress hormone systems that can damage developing brain architecture and lead to lifelong problems in learning, behavior, and both physical and mental health” (National Scientific Council on the Developing Child, 2007).

• “[C]hildhood is a multi-stage process where early investments feed into later investments. Skill begets skill; learning begets learning” (Cunha, Heckman, Lochner, & Masterov, 2005). Child development is a foundation for community development and economic development, as capable children become the foundation of a prosperous and sustainable society” (National Scientific Council on the Developing Child, 2007).

• “Multiple years of services are associated with successful transition to schools” (Reynolds, et al., 2006).

• “[T]he concept of school readiness is not exclusively a matter of fostering literacy and number skills but must also include the capacity to form and sustain positive relationships with teachers, children, and other adults, and develop the social and emotional skills for cooperating with others” (National Scientific Council on the Developing Child, Working Paper #1, 2004)

• “Social-class disparities in preschool participation have not noticeably declined in the last decade” (47% of children below poverty compared to 59% above poverty attended preschool in 2001). This places low-income children at a disadvantage when they enter school, a disadvantage that persists throughout school levels (Stipek, 2005; Boots, 2005).

• “Policy initiatives that promote supportive relationships and rich learning opportunities for young children create a strong foundation for higher school achievement followed by greater productivity in the workplace and solid citizenship in the community. Substantial progress toward this goal can be achieved by assuring growth-promoting experiences both at home and in community-based settings, through a range of parent education, family support, early care and education, preschool, and intervention services” (National Scientific Council on the Developing Child, 2007).
Third grade increasingly is acknowledged as a critical point in children’s education, because achievement at that age reflects what happened to the children between birth and third grade (individually and as a population) and predicts what may happen next—academically, socially, and economically.

- Third grade is the first year of testing with major consequences (Bogard & Takanishi, 2005).
- Children’s own sense of mastery and their perceptions of their future prospects are affected by their school achievement at third grade.

**Third-grade literacy skills are especially important.**

- “Starting in the fourth grade, it is widely acknowledged that children stop learning to read and begin reading to learn” (Boots, 2005, citing National Research Council, 1998).
- “Literacy is a prerequisite to the acquisition of new information and the formulation of new ideas. Almost everything kids learn from the fourth grade on they have to learn by reading and writing. Kids who struggle with the task of reading or writing—through which they must convey what they’ve learned—are unable to show their teachers that they understand” (Snow, 2005).
- “[A]bout half of the achievement gap between black high school students and white high school students in both math and reading could be explained by skill differences these children had at the start of their school careers” (Boots, 2005 citing NCES, ECLS-K; also cites Torgesen, 2004 and Haskins & Rouse, 2005).

**Disparities in early literacy and other academic skills at third grade are linked to persistent achievement gaps.**

- “Children’s prospects for school success rise not so much when they enter kindergarten ready to learn as when they complete third grade with solid school readiness skills, particularly those fundamental and critical skills of reading and arithmetic. Beyond third grade the academic terrain gets steeper, and children must begin using their skills to learn social studies, science, mathematics, literature—to acquire deeper knowledge and engage in more complex problem-solving and critical thinking” (Graves, 2005).
- “[C]hildren who are poor readers at the end of first grade almost never acquire average-level reading skills by the end of elementary school” (Torgesen, 2004 as quoted in Graves, 2005).
- If children are behind by third grade, they stay behind (Bogard & Takanishi, 2005).
- Children who do not attain literacy skills, including reading and writing, by third grade struggle to catch up in future years (Snow, 1991; Snow, Burns & Griffin, 1998). Felton (1998) found that students who were poor readers in third grade did not improve their skills by eighth grade.

The gaps that appear by third grade have implications for the United States’ long-term economic competitiveness, which requires a sufficient pool of appropriately skilled workers and healthy adults “to confront the growing challenges of global economic competition and the rising costs of Social Security, Medicare, and Medicaid for the aging baby boomers” (National Scientific Council on the Developing Child, 2007).
• Given the persistence of skill gaps that begin early in life, poor education outcomes for young children have implications for the long-term competitiveness of the United States economy (Boots, 2005).

• In a paper entitled “Early Childhood Development: Economic Development with a High Public Return,” the Federal Reserve Bank of Minneapolis concludes that “well-focused investments in early childhood development yield high public as well as private returns” (Rolnick and Grunewald, 2003).

• Responsible investments in services for young children and their families focus on benefits relative to cost. Inexpensive services that do not meet quality standards are a waste of money. Stated simply, sound policies seek maximum value rather than minimal cost (National Scientific Council on the Developing Child, 2007).

• Investments and access to Pre-K in the U.S. lags behind other countries (Boots, 2005; Stipek, 2005).

Pre-kindergarten intervention alone is not sufficient to prevent achievement gaps and their consequences.

• “[G]ood early development is not a kind of inoculation that will protect a child for life. Future good development builds on the past and is mediated continuously by more mature people, step by step” (Comer, 2001).

• Research indicates that the benefits of pre-K programs alone are not sustained (Bogard & Takanishi, 2005; Graves, 2005). However, aligned, coherent programs that run from pre-K to third grade show evidence of long-term effectiveness. Children participating in both pre-K and K-3 programs in the Chicago Child-Parent Centers (CPCs), with four or more years of participation, had higher academic achievement compared to those participating in one or the other program. The longer children participated (e.g., through first, second, and third grades), the greater the effects (Reynolds, et al., 2006).

• ECLS-K correlations indicate that children who receive two years of preschool and full-day kindergarten perform better academically by the end of third grade than children who do not experience these components of pre-K-3 programs (Reynolds, et al., 2006).

• The quality of early childhood services depends on staff’s expertise, skills, and capacity to build positive relationships with young children. “The striking shortage of well-trained personnel in the field today indicates that substantial investments in training, recruiting, compensating, and retaining a high-quality workforce must be a top priority” (National Scientific Council on the Developing Child, 2007).

Creating the right conditions for early childhood development is likely to be more effective and less costly than addressing problems at a later age. A maturing brain becomes increasingly specialized. “Once a circuit is ‘wired,’ it stabilizes with age….For the brain, this means that greater amounts of physiological energy are needed to compensate for circuits that do not perform in an expected fashion. For society, this means that remedial education, clinical treatment, and other professional interventions are more costly than the provision of nurturing, protective relationships and appropriate learning experiences earlier in life (National Scientific Council on the Developing Child, 2007).
Once a child falls behind in fundamental skills he is likely to remain behind, and remediation for impoverished early environments becomes more costly as the child ages (Heckman, 2006). Early intervention is a better investment than remediation (Boots, 2005).

Vulnerable children need informal family support and, sometimes, formal preventive services before they exhibit significant behavioral or developmental problems. When policymakers assure that all young children who are at high risk for poor outcomes are enrolled in high-quality programs whose effectiveness has been documented, the returns are far greater than those achieved when only a subgroup of eligible children is served. Some early concerns may be self-correcting delays in maturation, however, which underscores the need to avoid prematurely labeling vulnerable children and families who could benefit from early assistance (National Scientific Council on the Developing Child, 2007).

“[E]xtensive research indicates that investment in high-quality interventions will generate substantial future returns through increased taxes paid by more productive adults and significant reductions in public expenditures for special education, grade retention, welfare assistance, and incarceration. Stated simply, the largest returns will be realized from effective services for the neediest children and families well before they enter school” (National Scientific Council on the Developing Child, 2007).

Research indicates that policymakers can achieve a greater return on investment from early education for children from families with low incomes and limited parent education than from remedial programs for adults with limited workforce skills. “Long-term studies show that model programs for three- and four-year-olds living in poverty can produce benefit-cost ratios as high as 17:1 and annualized internal rates of return of 18% over 35 years, with most of the benefits…accruing to the general public. While it is not realistic to assume that all scaled-up early childhood programs will provide such handsome returns, it is likely that benefit-cost ratios still will be considerably greater than 1:1” (National Scientific Council on the Developing Child, 2007).
**OUTCOME: MORE CHILDREN READY FOR SCHOOL AND SUCCEEDING BY THIRD GRADE**

- More children are “on track” in kindergarten assessments and proficient in third-grade reading and arithmetic
- Fewer children have untreated health conditions, avoidable developmental delays, or chronic absenteeism
- More children are in schools where income- and race-based reading gaps are eliminated at third grade

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Healthy, Well-Timed Births

High quality, accessible prenatal care
High quality, accessible family planning
Opportunities for teens that compete successfully with early childbearing

Actions
specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome

Examples
program and policy initiatives illustrating how actions have worked elsewhere

Indicators
measures for targeting and monitoring the impact of actions and documenting progress toward the outcome

Ingredients
elements of how actions are implemented that make them effective

Rationale
research-based reasons to believe that identified actions are likely to contribute to the desired outcome

Evidence
research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome
Actions with Examples: Healthy, Well-Timed Births

A. High-quality, accessible prenatal care

Health care providers and insurers make high-quality, comprehensive health care available, accessible, and affordable to all women of reproductive age and to all pregnant women; they make available family-friendly environments for childbirth. Providers of prenatal care and preconception health care provide counseling and support and connect families to help with nutrition, childbirth and parenting preparation, housing, maternal depression, substance abuse, and domestic violence.

**EXAMPLES**

- **Birmingham (AL) Healthy Start**, a project of the Jefferson County Department of Health, enhances clinical services through outreach and case management, broad-based public information campaigns, support services, and individual and group health education. The Birmingham program improved the adequacy of prenatal care and reduced the incidence of premature and low-birthweight babies. [www.jcdh.org/PGA/BhamHealthyStart.aspx](http://www.jcdh.org/PGA/BhamHealthyStart.aspx)

- The **Ounce of Prevention Fund** provides the services of doulas—experienced women who offer continuous physical, emotional, and informational support to families before, during, and just after childbirth—at 18 locations throughout Illinois. The services are embedded in existing community-based programs, including Parents Too Soon, Healthy Families Illinois, and Early Head Start. The doulas develop a caring and consistent relationship with the expectant mother, especially teen mothers, in preparation for the powerful experience of childbirth. The doulas engage the mothers' natural support network, including the baby’s father and other family members. The doulas also ensure that teen parents are hooked into services and/or other activities in the community. [www.ounceofprevention.org/index.php?section=programs&action=program&program=3&page=10](http://www.ounceofprevention.org/index.php?section=programs&action=program&program=3&page=10)

- The **Fresno County (CA) Nurse-Family Partnership Program** (with similar programs in 250 sites nationwide) helps pregnant women acquire healthy behaviors and avoid unhealthy ones through nurse home visits that focus on personal health, the maternal role, family and friends, and connecting pregnant women to services. Visiting nurses have strong interpersonal skills and are sensitive to the values and beliefs of differing racial and ethnic communities. A licensed mental health clinician consults with the nurses and may accompany them on home visits. A support group for first-time mothers aims to prevent depression and isolation. [www.fresnohumanservices.org/CommunityHealth/MaternalChildAdolescentHealth/PrenatalChildNurseHomeVisitation.htm](http://www.fresnohumanservices.org/CommunityHealth/MaternalChildAdolescentHealth/PrenatalChildNurseHomeVisitation.htm)

- At **Mercy Hospital Fairfield** in Cincinnati, Ohio, mother and baby receive high-quality, family-centered care in a setting that feels like home. Through labor, delivery, and recovery the mother, baby, and family can stay in one room. Mercy also provides childbirth and family
education programs by experienced obstetric nurses who work in the birthing centers.  
http://216.68.156.42/regions/Cincinnati/content/ffbirthvt.asp

* The **UC Medical Center in San Francisco** offers classes in labor and birth preparation, 
  baby care, and parenting. The hospital's Birth Center provides private birthing suites with 
  bathrooms, showers, whirlpool tubs, and refrigerators. Patients typically labor, deliver, and 
  recover there and then move to a private postpartum room with a deep-soaking tub and chairs 
  that convert into sleepers for family members or guests. Intensive care nurseries and doctors 
  who specialize in high-risk pregnancies are available if necessary.  
  www.ucsfhealth.org/childrens/medical_services/preg

* The **DC Developing Families Center (DCDFC)** offers continuous, uninterrupted care 
  for low-income women and their families during the important childbearing and early child-
  rearing years. Services include health checkups for women, children, and teens; immunizations; 
  pregnancy testing; prenatal care and education; a free-standing, homelike birth center; early 
  childhood development services; social service assistance, family resource and support services, 
  and confidential counseling; job training; and continuing education. Through collaboration with 
  the DC Birth Center (www.developingfamilies.org/dcbc.html), the Healthy Babies Project 
  (www.healthybabiesproject.org), and Nation’s Capital Child and Family Development, the 
  DCDFC offers comprehensive services under one roof in a personalized setting that is easily 
  accessible to the low-income communities of Carver Terrace and Trinidad/Ivy City in northeast 
  Washington, DC.

* Social workers at **Pregnancy to Employment** in Washington State assess the health and 
  social service needs and resources of expectant mothers and parents of infants under age one. 
  Case managers help participants connect to services that may include medical care for mothers 
  and infants; child care; transportation assistance; job preparation; and classes on parenting, child 
  development, nutrition, family planning, and life skills. These activities may serve as alternatives 
  to the TANF work requirement during the first 6 months of pregnancy and until infants are 4 
  to 12 months old. www.dshs.wa.gov/ESA/wfhand/5_1.htm

* The **Magnolia Project** is an interconceptional strategy for improving birth outcomes, 
  under the auspices of the Northeast Florida Healthy Start Coalition, and its partners the Duval 
  County Health Department, the Shands Jacksonville Medical Center, and the JP Expression 
  Ministries. The target population is African American women aged 15 to 44 residing in a five-
  zip code area of Jacksonville, Florida, who, if they became pregnant, would be at-risk of having a 
  poor pregnancy outcome. The project provides outreach, case management, risk reduction 
  including treatment of SDTs, family planning, well-woman and prenatal care, health education, 
  and community development.

* **Presumptive eligibility for health coverage of pregnant women** was offered by 
  31 states under their Medicaid programs in 2006. States have the option to allow “presumptive 
  eligibility” under both Medicaid and the State Children’s Health Insurance Program (CHIP), to 
  ensure reimbursement for services provided to pregnant women and/or children who appear 
  to be eligible, based on a declaration of income. Presumptive eligibility brings the enrollment 
  process into the community, increasing opportunities for families to apply for health care 
  coverage, and promotes immediate attention to medical needs while families collect the 
  verification requires to complete the application process.  www.StateHealthFacts.org
Community groups work with public agencies to encourage healthy habits and behavior during pregnancy, including good nutrition and not smoking. They help connect prenatal care with services that treat substance abuse and other problems likely to interfere with healthy childbearing or parenting and with help minimizing stress.

**EXAMPLES**

* The **Institute for Health and Recovery** was founded in 1989 as a five-year research and demonstration program by the Coalition on Addiction, Pregnancy and Parenting in Cambridge (MA), using federal Center for Substance Abuse Prevention funds. The Institute intervenes early in the pregnancies of women with substance abuse problems to help them stay drug-free during pregnancy, avoid relapse after delivery, and acquire appropriate parenting skills. It also works to increase pregnant women’s access to substance abuse treatment across Massachusetts and has become a recognized leader in the state and nation for developing cross-disciplinary service models that support individual and family recovery. The Institute’s mission expanded in 1998 to serve individuals, youth, and families affected by alcohol, tobacco, and other drug use, mental health problems, and violence/trauma, although the emphasis on pregnant and parenting women and their children continues. [www.healthrecovery.org](http://www.healthrecovery.org)

* To reduce the unusually high rate of smoking among pregnant women in Marion County (IN), the **Family Strengthening Coalition** (part of the local Making Connections initiative supported by the Annie E. Casey Foundation) is collaborating with Indianapolis First Lady Amy Minick Peterson, the Marion County Health and Hospital Corporation, Midtown Community Mental Health Centers, the American Legacy Foundation, and other partners to publicize “Quitline.” This hotline offers free, confidential telephone counseling and connects expectant mothers with a trained counselor who helps them develop plans to quit smoking using written guides, videos, and local smoking cessation programs. [www.indyfamilies.org](http://www.indyfamilies.org)

**B. High-quality, accessible family planning**

All health care providers provide counseling on family planning options, including abstinence and birth control, to all women and men of reproductive age. Providers of family planning services offer a range of reproductive services that are effective, affordable, and acceptable to a variety of actual and potential users, provided in settings, locations, times, and ways that enable clients to choose and use contraception and other means of ensuring that pregnancies are intended.

**EXAMPLES**

* Through several outreach programs, including **Teen Outreach, Adult Role Models (ARMS), and Gurlz Talk**, Planned Parenthood of New York City engages community members as partners in efforts to reduce teen pregnancy and improve sexual health. Counselors work with families and individuals to remove financial barriers to services, which include reproductive health care, pregnancy testing, and STD and HIV testing. [www.ppnyc.org](http://www.ppnyc.org)
Planned Parenthood Golden Gate’s **Promotoras Program**, operating in the San Francisco Bay Area, is an education and medical outreach program in which trained, neighborhood-based Latina adults share information about reproductive health and sexuality with other Latinas. Promotoras are trained to distribute non-prescription birth control, talk with peers, and escort women to the clinic. Outreach happens during “platicas” (small talks) and in homes and other familiar settings. [www.ppgg.org](http://www.ppgg.org)

C. Opportunities for teens that compete successfully with early childbearing

Local coalitions monitor programs and outcomes for an entire population, neighborhood, or community to determine what is available and what is missing to support intended, well-timed pregnancies; they act to fill the gaps.

**Examples**

**Plain Talk** is a neighborhood-based initiative that was implemented in Atlanta, San Diego, Seattle, New Orleans, and Hartford to help adults, parents, and community leaders communicate effectively with adolescents about reducing sexual risk-taking. Each Plain Talk community developed strategies suitable to its own cultures and circumstances. The initiative is being replicated in 19 sites in 9 states and Puerto Rico. [www.plaintalk.org](http://www.plaintalk.org), [www.aecf.org/Home/MajorInitiatives/PlainTalk.aspx](http://www.aecf.org/Home/MajorInitiatives/PlainTalk.aspx)

Local organizations promote positive alternatives to early childbearing aimed at postponing first and subsequent pregnancies among teens.

**Examples**

**Durham County (NC) Health Department’s TEAS (Together Everyone Accomplishes Something)** works with teenagers and their parents, guardians, or mentors to reduce early childbearing by helping teens delay the beginning of sexual activity, use contraceptives if sexually active, stay enrolled in school, and avoid using illegal drugs. [www.co.durham.nc.us/common/db-dept.cfm?ID=25](http://www.co.durham.nc.us/common/db-dept.cfm?ID=25)

**The Children’s Aid Society’s Adolescent Sexuality and Pregnancy Prevention Program** works to reduce early childbearing by helping teens succeed in school, obtain meaningful employment, and obtain high-quality medical and mental health services, and by facilitating interactions with high caliber, role-model adults. Initially launched in a community center in Harlem by Michael Carrera, the program has been adapted in 20 states. Services include employment experience, individual academic assessment, tutoring, homework help, assistance with college entrance, family life and sex education, and self-expression through the arts and sports. [www.stopteenpregnancy.com](http://www.stopteenpregnancy.com)
**Indicators: Healthy, Well-Timed Births**

1. **Fewer low birth-weight births**

**INDICATOR DEFINITION**

The percent of births at low birth-weight refers to children who are born weighing less than 2,500 grams or 5 pounds, 8 ounces, as a proportion of total births in a specified population (Chandra, 1995). Newborns weighing less than 3.3 pounds are designated as very low birth-weight.

**SIGNIFICANCE**

Being born at a low birth-weight is a risk factor for developmental problems, including early problems in school. Children aged 4 to 17 who were born at low birth-weight were more likely to be enrolled in special education classes, to repeat a grade, or to fail school than children who were born at a normal birth-weight (McCormick, Gortmaker, & Sobol, 1990). Very low birth-weight newborns face an even high risk of developmental complications and delays than low birth-weight babies.

2. **Fewer births to teens**

**INDICATOR DEFINITION**

The percent of births to teenage mothers is calculated by taking the number of live births to women under 20 years of age and dividing it by the total number of live births in a specified population (Sarin, 2002).

**SIGNIFICANCE**

Parental age is significantly related to child well-being. Children of teenage mothers have lower levels of cognitive and educational attainment, lower levels of academic achievement, and higher levels of behavioral problems than children born to mothers age 20 and over (Hofferth, 1987; Maynard, 1997; Moore, Morrison, & Greene, 1997).
3. Fewer women receiving late or no prenatal care

**INDICATOR DEFINITION**

The percent of pregnant women who receive no prenatal care or prenatal care that began in their second or third trimester as a proportion of the total number of women giving birth in a specified population (CDC, 2002).

**SIGNIFICANCE**

High-quality prenatal care has long-term effects on child well-being. Prompt and continuous prenatal care helps to detect and treat pregnant women’s pre-existing medical conditions and to reduce harmful behaviors. High-quality care also helps decrease the occurrence of conditions, such as low birth-weight, that put babies at risk for poor health and developmental delays (Child Trends, 2000; Zuckerman & Khan, 2000; McCormick, et al., 1992; Eastman & Boyce, 2003; Olds & Kitzman, 1993; Martin, et al., 2002).

3. More children being breastfed at six weeks after birth

**INDICATOR DEFINITION**

The percent of women who exclusively or primarily breastfeed their babies for at least six weeks following delivery (as opposed to primarily using bottles of formula) in relation to the total number of new mothers in a specified population (CDC, 2001).

**SIGNIFICANCE**

Breastfeeding has both physical and emotional benefits for infants. Breastfeeding has a range of protective effects including decreasing the incidence and/or severity of respiratory, ear, and digestive infections, and diabetes; it probably also reduces the incidence of sudden infant death syndrome, and allergic reactions. Breastfeeding promotes frequent tender physical contact between mother and infant and may also be related positively to children’s cognitive development (American Academy of Pediatrics, 2002; National Center for Health Statistics, 2001; Morrow-Tlacak, Haude, & Ernhart, 1988; Wang, & Wu, 1996).
Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because *how* interventions are implemented and *how* services are provided is as important as *whether* they are provided.

Key ingredients are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Key Ingredients that apply to all goals in this Pathway can be found in Appendix 4. They include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

Key Ingredients that apply specifically to GOAL 1, Healthy, Well-Timed Births, appear below. They include the Ingredients of effective implementation for

- High-quality prenatal care
- Family planning services

**INGREDIENTS: High-quality prenatal care**

*Providers of prenatal care meet appropriate quality standards,* such as those set by the American College of Obstetricians and Gynecologists (ACOG), the American College of Nurse-Midwives (ACNM), and the American Academy of Family Physicians (AAFP).
In addition to providing competent medical care, prenatal care professionals provide:

- **Links to (or provision of) health education**, especially childbirth preparation and encouragement of breastfeeding
- **Information and support to prepare parents** for the demands of parenting, including the essentials of infant development
- **Assistance from health care personnel in obtaining family health insurance**
- **Time for providers to talk with patients** about their concerns and to develop warm, mutually respectful relationships
- **Counseling and treatment** regarding the use and abuse of drugs, alcohol, and tobacco
- **Pleasant environments and convenient times** and locations for prenatal care
- **Counseling and support to minimize stress** during pregnancy; links for pregnant women to supportive health professionals and trained paraprofessionals if informal supports (from fathers, family, friends) are insufficient
- **Nutrition counseling**, with referrals to supplementary nutrition as needed (through WIC, food stamps, food pantries, and meal programs)

**Providers of prenatal care pay attention to the living conditions** of pregnant women, including homelessness and domestic violence. Someone on the health care team takes responsibility for connecting patients with people and agencies who can help resolve problems.

Health care providers ensure that families have access to positive childbearing experiences by making available:

- **Information and support** that prepares them for childbirth
- **Continuous support during childbirth** from family, friends, Doulas, Promotoras, or trained coaches
- **Birthing settings** that provide skilled professional care; are safe, family-friendly, and culturally sensitive; provide appropriate pain management; minimize separation of mothers and babies at the time of childbirth; and maximize opportunities for early breastfeeding and for bonding between the baby and significant family members.

Policymakers and funders create payment structures and other policies that promote effective prenatal care by:

- **Supporting training** for health care professionals that encourages them to develop strong relationships with high-risk pregnant women
- **Allowing presumptive eligibility for insurance** when a pregnant women seeks prenatal care
- **Recognizing the need for, and funding, non-medical support** services such as home visits, social services, and housing assistance
**INGREDIENTS: High-quality family planning services**

Family planning services are provided in locations and settings, at times, and in ways that make them conveniently accessible and enable clients to choose and use with satisfaction contraception and other means of ensuring that pregnancies are intended.

Providers of family planning services offer a range reproductive services that are effective, affordable, and acceptable to a variety of actual and potential users.

- They provide culturally sensitive information.
- They provide reproduction-related health education in a variety of forms (including information about both abstinence and contraception) appropriate to a variety of actual and potential users.
- They minimize barriers to family planning services and reproduction-related health education, through outreach and other means.

Policymakers minimize barriers to reproductive health services by:

- Modifying policies as necessary to support comprehensive coverage of family planning and reproductive services, by public and private health insurers
- Modifying policies as necessary to ensure that a full spectrum of reproductive health services is available in the community
- Simplifying health insurance eligibility and enrollment processes
- Expanding eligibility for affordable health insurance
Rationale: Healthy, Well-Timed Births

Research shows it is important for pregnant women to have high-quality, accessible prenatal care because:

Women who have access to **high-quality, affordable prenatal care** have healthier babies with fewer physical obstacles that would prevent them from being ready for school (Kagan, et al., 1995; Kogan, et al., 1998). Prompt, continuing, high-quality prenatal care can reduce a pregnant mother’s use of drugs and alcohol, decreasing the chances of brain damage or other developmental problems in the infant (Olds & Kitzman, 1993). Women who receive prenatal care in the first trimester have healthier birth outcomes than those who do not receive prenatal care, because they are more likely to have pre-existing medical conditions detected and they may also receive health advice for the remainder of the pregnancy (Kids Count Data Book, 2000).

**A lack of prenatal care** is linked to poor child outcomes, including low birth-weight, which puts babies at high risk for poor health and developmental outcomes (Child Trends, 2000). Poor outcomes include serious cognitive impairments such as: cerebral palsy and mental retardation (Zuckerman & Kahn, 2000); behavioral and learning disorders, asthma, and other health problems, with "the incidence and severity of those problems increases[ing] as birth-weight falls" (McCormick, et al., 1992); and visual and auditory impairments, learning disorders, behavioral problems, grade retention, and school failure (Eastman & Boyce, 2003).

The type and amount of **support available to a woman during pregnancy** has a significant impact on the mother’s capacity to relate to her baby. A woman with no or little support becomes at high risk of difficulties transitioning into motherhood and in relating to her child (Solchany & Barnard, 2001, citing Rubin, 1975).

**Prenatal drug or alcohol exposure** can place the fetus at risk for a variety of negative outcomes, including: poor coordination and problems with learning (Stratton, et al., [eds.], 1996); and low birth-weight and delays in mental skills during toddler years, compared with children not exposed prenatally to such drugs (Substance Abuse and Mental Health Services Administration, 2001). Children prenatally exposed to drugs and raised in homes with ongoing parental drug use are more likely to display problems with cognitive development when compared with prenatally drug-exposed children raised in drug-free environments (Griffith, et al., 1994; Hawley, et al., 1995).

Research shows it is important to ensure high-quality, accessible family planning because:

**Planned and intended pregnancies** are associated with better birth outcomes and better child outcomes (Barber, Axinn, & Thornton, 1999; Thompson, et al., 1992), fewer low-birth-weight babies, and decreased infant mortality (Moore, Manlove, et al., 1998).

**Teenage mothers** are more likely to have low-birth-weight babies (Ventura, et al., 1999), a risk factor for a variety of health and developmental problems. Teenage mothers...
are more likely to smoke during pregnancy than older pregnant women (Levine, et al., 2001), which is associated with a greater chance of having a premature birth and a low-birth-weight baby (Ventura, Curtin, Mathews, & Hamilton, 2001) and greater risk of serious and long-term illnesses, developmental delays, and death in the first year of life (Ventura, Curtin, Mathews, & Hamilton, 2001).

Teen mothers are more likely than older mothers to have unstable relationships, lower educational attainment, and less spacing between children and they are less likely to cultivate stimulating home environments for their children (Furstenberg, et al., 1987; Levine, et al., 2001; Moore, et al., 1997). Children of teen mothers have lower levels of cognitive and educational attainment, lower levels of academic achievement, and higher levels of behavioral problems (Baldwin & Cain, 1981; Broman, 1981; Furstenberg, et al., 1987; Hofferth, 1987; Maynard, 1997; Moore, et al., 1997).

Children raised by teen mothers are less likely to become high school graduates and are more likely to engage in early sexual activity and become teenage parents themselves (Haveman, et al., 1997; Kahn & Anderson, 1992; Levine, et al., 2001; Manlove, 1997; Manlove, Terry, Gitelson, Papillo, & Russell, 2000; Manlove, et al., 2001). The risks of low birth-weight, poor health outcomes, developmental problems, and school absenteeism increase for children born to teenagers who already have a child (Brooks-Gunn, et al., 1999; National Educational Goals Panel, 1995). The risks also increase for the teen mothers, who are less likely to obtain a high school diploma, more likely to live in poverty or receive welfare (Manlove, et al., 1998), less likely to hold down jobs, more likely to earn lower wages, and have fewer opportunities for career advancement than women who postpone additional births (Hofferth, et al., 1978).

Teens who have easy access to information about reproductive health are more likely to use contraception than those who lack such access (Manning, et al., 2000; Mauldon & Luker, 1996). Some studies show that reproductive health classes, offered in many schools, decrease sexual activity and increase the use of birth control (Ku, et al., 1998; Manning, et al., 2000). Teen beliefs about their peers’ practices affect their reproductive behavior. Teens who believe that their friends do not use condoms or do not like using them are less likely to use condoms. Adolescents who discuss sexual risk with their partners are much more likely to use contraceptives than those who do not discuss such risks (Manning, et al., 2000; Whitaker, et al., 1999; Whitaker & Miller, 2000).

Research shows it is important to provide opportunities for teens that compete successfully with early childbearing because:

Success in school, meaningful employment, access to high-quality medical and health services, and interactions with high-caliber, role-model adults have a potent contraceptive effect on teens. The combined strategy of keeping teen mothers in school and living at home may help to prevent subsequent pregnancies. Additionally, involvement in social institutions (e.g., churches, community centers, sports, after-school activities) may help prevent pregnancies because they engage at-risk teens in positive activities (Manlove, Mariner, Romano, & Papillo, 2000).
Evidence: Healthy, Well-Timed Births

A. High quality, accessible prenatal care

First-time mothers at risk for parenting problems who participated in the STEEP program and received home visits beginning in the second trimester of pregnancy experienced less depression and anxiety, better life management skills, better understanding of their child’s needs, and an appropriately stimulating home environment compared to a control group. Home visits continued through the baby’s first year to help mothers prepare for the child’s needs and develop realistic expectations for parenthood (Zero to Three, 1999).

The Maternal and Infant Health Outreach Worker Program (www.mihow.org), a home visiting program for pregnant women and families with infants, found that participating mothers received earlier and more frequent prenatal care, had better nutrition during pregnancy, and were less likely to smoke (Clinton, 1988).

First-time, single, low-income pregnant women who received home visits by trained nurses through the Elmira Prenatal/Early Infancy Project engaged in fewer unhealthy behaviors, such as cigarette smoking and poor nutrition. Those mothers who did smoke had 75% fewer pre-term babies than smokers in the control group. Teen mothers in the treatment group had heavier babies than those in the control group (Olds, et al., 1997; Karoly, et al., 1998).

Teens who participated in Parents Too Soon, a home visit program focusing on the responsibilities of parenting, the importance of child development, and the warning signs for problems in child growth and development, were 20% less likely to have a low-birth-weight baby than a comparable national sample (Zero to Three, 1999).

Pregnant women who enrolled in Healthy Families America (www.healthyfamiliesamerica.org) to receive home visits and links to other services had fewer pre-term and low-birth-weight babies than mothers who did not receive prenatal home visits. In New Jersey, premature infants of participating mothers weighed more at birth than premature infants whose mothers were not enrolled (6.3 pounds vs. 5.2 pounds). In Virginia, 18% of participating mothers had babies with one or more complications, compared to 40% of infants in the control group (National Center on Child Abuse Prevention Research, 2002).

The Healthy Start program gives low-income pregnant woman prenatal and other services to reduce rates of infant mortality, low birth-weight, and other poor birth outcomes. Participants gained access to more prenatal care and had significantly fewer low-birth-weight babies than women in comparison groups (Devaney, et al., 2000).
The Women, Infants, and Children program (WIC, www.fns.usda.gov/wic), a nutritional program for low-income families, has had positive effects on the utilization of prenatal care and on measures of infant health including birth-weight, the incidence of low birth-weight, gestational age, and infant mortality (Currie, 1998).

A sample of more than 1,600 high-risk participants in Cincinnati’s Every Child Succeeds program received regular home visits from social workers, child development experts, or nurses during pregnancy and after delivery. A matched sample of almost 5,000 participants who did not receive home visits had two and a half times as many infant deaths as the visited group (Donovan, et al., 2007).

B. High-quality, accessible family planning

Improved access to health services, including family planning initiatives, has contributed to healthier births and to the prevention of unwanted and high-risk pregnancies (Chavkin, Breitbart, & Wise, 1994).

High-risk mothers participating in the Nurse-Family Partnership (www.nccfc.org/nurseFamilyPartnership.cfm) receive visits from registered nurses and early education professionals. In its first trial in Elmira (NY), low-income, first-time unmarried mothers had 43% fewer subsequent pregnancies than comparable mothers who did not receive home visits. Participants also delayed their second pregnancy an average of 12 months longer than comparable mothers (Olds, et al., 1997). Subsequent analysis of three separate, randomized controlled trials of NSP found consistent effects in at least two of the three trials in the following domains:

- Improvements in women’s prenatal health
- Reductions in children’s healthcare encounters for injuries
- Fewer unintended subsequent pregnancies
- Increases in intervals between first and second births
- Increases in father’s involvement and mother’s employment
- Reductions in families’ use of welfare and food stamps
- Increases in children’s school readiness demonstrated by improvements in language, cognition, and behavioral regulation (Olds, 2002).

Teens participating in Parents Too Soon (www.welfareinfo.org/parents.htm), a home visit program focusing on the responsibilities of parenting, the importance of child development, and the warning signs for problems in child growth and development, were less than half as likely to become pregnant again within a year after giving birth. They were 20% less likely to have a low-birth-weight baby than a comparable national sample (Zero to Three, 1999).
Mothers participating in Early Head Start (www.ehsnrc.org) were less likely to have subsequent births during the first two years after they enrolled than mothers in a comparison group (Love, et al., 2002).

Plain Talk, a program designed to provide parents and community adults with the information and skills they need to communicate more effectively with teens about responsible sexual behavior, found that teens who talked with adults about sexuality used contraceptives and birth control more often and were less likely to have a pregnancy than teens who did not talk to an adult (Grossman, et al., 2001).

Healthy Families America (www.healthyfamiliesamerica.org), which provides home visits and links to other services for pregnant women and new parents in 11 states, found that 95% of participating mothers in Florida did not have a subsequent pregnancy within two years of the target child’s birth. In Maryland, 100% of teen mothers and 94% of adult mothers did not have a repeat birth. The repeat birth rate for participating Virginia teens (9.4%) was substantially lower than the citywide rate of 35.8% and the statewide rate of 29.8% (National Center on Child Abuse Prevention Research, 2002).

C. Opportunities for teens that compete successfully with early childbearing

Reach for Health and Community Youth Service Learning, a community service-based program aimed at reducing high-risk behaviors among middle-school students, significantly reduced sexual activity in the short term and during a three-year follow-up period. These results did not hold up when health education was implemented without service learning (Sawhill, 2003).

The Teen Outreach Program (TOP), a year-long community volunteer program for high school students coupled with weekly teacher-facilitated discussions about values, decision-making, parenting, and life options, reduced pregnancy rates among participants as compared to controls (Sawhill, 2003).

Young teen girls who participated in the Children’s Aid Society-Carrera program (www.stopteenpregnancy.com) delayed sex, increased contraceptive use, and reduced pregnancy and childbearing rates over a four-year period. The program offered a comprehensive mix of daily activities during the school year, including family life and sexuality education, tutoring, arts, sports, health care, and work in the community, supplemented by evening and summer programs (Kirby, 2001).
GOAL 2

Health and Development On Track

High quality, accessible child health care  Early detection of developmental obstacles  Prevention of and protection from abuse and neglect

Actions
specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome

Examples
program and policy initiatives illustrating how actions have worked elsewhere

Indicators
measures for targeting and monitoring the impact of actions and documenting progress toward the outcome

Ingredients
elements of how actions are implemented that make them effective

Rationale
research-based reasons to believe that identified actions are likely to contribute to the desired outcome

Evidence
research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome
A. High-quality, accessible child health care

Health care providers make high-quality, comprehensive health care (including preventive, acute, emergency, and chronic care) available, accessible, and affordable to all families with infants and young children. Child health services are delivered primarily within the context of a "medical home," where continuity of care and personalized relationships are maintained over time.

EXAMPLES

- The **Codman Square Health Center in Boston** is a community-based, ambulatory care center that provides primary and urgent care, using staff who are multi-lingual and multi-cultural to meet the needs of a diverse community of clients. The Health Center was conceived in the 1970s by a group of neighborhood activists. It employs a broad array of medical professionals including family practice physicians, OB/GYNs, pediatricians, dentists, nurse midwives, optometrists, social workers, and psychologists. The Center also addresses the social, emotional and educational needs of adults and youth while celebrating the cultural and ethnic diversity of the community and the potential of every individual. [www.codman.org](http://www.codman.org)

- **Unity Health Care** in Washington, DC, provides high-quality health services to medically underserved, uninsured, and homeless persons, regardless of ability to pay, through a network of clinics operating in homeless shelters and community agencies throughout the DC area. [www.unityhealthcare.org](http://www.unityhealthcare.org)

- The **Harlem Children’s Zone (HCZ)**, working with Harlem Hospital, Columbia University, Harlem Health Promotion Center, Touchpoints, and the New York City Department of Health, found that 26% of Harlem children from birth to age 12 have asthma—over four times the national average. HCZ now screens all children within the HCZ for asthma and follows up with those who are diagnosed. HCZ offers home visits to conduct individual assessments and provides information, services, and medical support to families dealing with asthma. It publicizes the message that when asthma is properly managed, children can enjoy normal lives that include participation in sports and other outdoor activities. [www.hcz.org](http://www.hcz.org)

Providers of pediatric care pay attention to the living conditions of the children they see, including homelessness, domestic violence, and dangers posed by the home or neighborhood environment. Providers take responsibility for connecting families with people and agencies that can help them provide safe and stimulating environments for their children.
The Boston Medical Center’s Department of Pediatrics, recognizing “that medical care doesn’t mean just caring for illnesses or injuries, but treating the whole child and family,” provides onsite assistance to families with health-related needs through:

- The Medical-Legal Partnership for Children (formerly the Family Advocacy Program), which offers legal assistance on problems relating to housing, public benefits, domestic violence, nutrition, health care, employment, education, and immigration; educates health care professionals to identify poverty-based barriers to health; and addresses systemic problems and gaps in services through multidisciplinary policy advocacy. [www.mlpforchildren.org](http://www.mlpforchildren.org)

- Project HEALTH seeks to interrupt the link between poverty and poor health by leveraging community resources to address needs that range from swim programs for asthmatic children to exercise and nutrition programs for obese children and housing for families trapped in unsafe living conditions. [www.projecthealth.org](http://www.projecthealth.org)

Local coalitions reach out to families and work with policy makers to help families obtain public and private health insurance for their children. All stakeholders work to expand eligibility for and enrollment in health insurance coverage to low-income children through Medicaid, State Children’s Health Insurance Program (SCHIP), and other, broader programs.

- The Healthy Start/Medicaid component of the Cuyahoga County Early Childhood Initiative enrolls children in state and federally funded health insurance programs and connects low-income children with health providers for well-child services. [www.nccp.org/initiative_5.html](http://www.nccp.org/initiative_5.html)

- The C Partnership’s Express Lane Eligibility website provides advocates, community leaders, and policymakers with tools for extending health insurance (through Medicaid and SCHIP) to more than four million uninsured children enrolled in such public programs as Food Stamps, WIC, and School Lunch. This online resource is a central clearinghouse for information about Express Lane Eligibility strategies in more than a dozen states and cities. [www.expresslaneinfo.org/AM/Template.cfm?Section=Home2](http://www.expresslaneinfo.org/AM/Template.cfm?Section=Home2)

- Covering Kids and Families—Rhode Island, a network of advocacy organizations, community-based organizations, neighborhood health centers, and state agencies, works to ensure that all eligible Rhode Island Families are covered by the state health insurance program, R1te Care. Covering Kids, part of a national program funded by the Robert Wood Johnson Foundation, places trained workers at family-friendly sites around the state to enroll every eligible family. It has given Rhode Island the lowest rate of uninsured children in the country. [www.rikidscoun.org](http://www.rikidscoun.org)

- The Texas CHIP Coalition, a broad-based group of 72 statewide organizations representing the provider, consumer, education, and faith communities, gained passage in 1999 of a strong Children’s Health Insurance Program (CHIP). The Texas program covers children
in families below 200% of the federal poverty level with a comprehensive benefits package and a simplified application that requires minimal income documentation and no asset test. Families can apply by phone or mail without appointments, and all enrollees have 12-month continuous eligibility.  
www.childrensdefense.org/site/PageServer?pagename=childhealth_chip_whatsworking_lonestar

- The increased eligibility level for **South Dakota's CHIP program** from 140% to 200% of the federal poverty level significantly raised the number of children who are eligible for free or low-cost health coverage. The state also simplified its application process for CHIP and Medicaid by issuing a single card for both.  
www.childrensdefense.org/site/PageServer?pagename=childhealth_chip_whatsworking_frontier

### B. Early detection of developmental obstacles

Providers of routine pediatric care make health screenings and developmental assessments easily accessible to all families. They provide or link families promptly to follow-up, diagnostic, and treatment services by appropriate specialists and community resources.

**EXAMPLES**

- **Healthy Steps for Young Children** is a Commonwealth Fund-supported national initiative designed to improve the quality of preventive health care for infants and toddlers. It emphasizes a close relationship between health care professionals and mothers and fathers in identifying problems early and addressing the physical, emotional, and intellectual development of children from birth to age three. The program’s Healthy Steps Specialists, who have special training in child development, participate in health care teams. The program uses enhanced well-child visits, home visits, materials for parents, periodic child development screening and family health assessments, a child development information phone line, parent groups, and links to community resources. Training institutes enhance the knowledge and skills of pediatric clinicians.  
www.healthysteps.org

- **The Maryland Family Support Centers Network** aims to catch developmental delays early in a child’s life and provide individualized follow-up. Infants and toddlers are assessed through standardized testing and daily observation; those with delays are referred to the state’s Early Intervention Program for further evaluation.  
www.nccp.org/initiative_17.html

- Connecticut’s **Help Me Grow** initiative is a statewide single-point-of-access system for children from birth to age eight who are at risk for developmental or behavioral problems. It helps families and providers identify developmental concerns, find appropriate resources, and connect with programs and services. It includes a statewide Child Development Infoline, partnerships with community-based agencies, and child development community liaisons that connect services and telephone access points. With one phone call to the Child Development Infoline (a collaborative effort of the Children’s Trust Fund, United Way/Infoline, Connecticut Birth to Three System, and the state Department of Education’s Preschool Special Education), a child health provider or parent with any concern about a child’s development or behavior can
access professional assistance and a database of community-based support services.  

- The **Hawaii HealthyStart** program identifies at-risk families of newborns beginning at hospital registration. Targeted families receive home visits to screen for developmental delays, assess parent-child interactions, provide support and information, and ensure that families have a pediatric primary care provider.  
  www.ywcahawaiiisland.org/subpage4.html

- The **Newborn Individualized Developmental Care and Assessment Program**, which operates in neonatal intensive care units in multiple sites, is built around developmental specialists who observe the infants for signals of stability and stress. Professional caregivers work with family members to develop a plan for nurturing and interacting with each infant based on those observations and the infant's physical condition and health. Caregivers are trained to recognize the infant's communication and respond appropriately.  
  www.nidcap.com

Policymakers seek to remove or reduce barriers to effective screening, early detection, and treatment that require solutions at the funding, policy, or regulatory level.

**EXAMPLES**

- **Part D of the Individuals with Disabilities Education Act (IDEA)** funds competitive federal grants, cooperative agreements, and contracts to help states and local communities make systemic changes that improve results for children, youth, and families from birth through age 21. As of January 1, 2003, there were about 290 early childhood projects nationwide, including model demonstrations, research and training institutes, in-service and pre-service training, outreach, and technical assistance. These projects are generating new knowledge and practices involving service-delivery mechanisms that promote family involvement and respond to the changing needs of diverse populations of young children with special needs and their families.  
  www.ideapartnership.org/topicdetail.cfm?topicid=34

- Medicaid’s child health program, **Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)**, emphasizes health promotion and disease prevention as vehicles to ensure that children are ready for school and able to succeed in life. EPSDT services are structured to promote children's healthy development prior to school entry. Periodic and as-needed screenings detect developmental delays, while guidance is designed to help parents anticipate and meet children's needs. Treatment under EPSDT is not limited to illness; it also covers interventions to prevent the onset or worsening of a disabling condition. EPSDT also emphasizes care coordination and case management and recognizes that flexibility is essential because of the diversity among young children and the challenges of detecting subtle problems.  
  www.cmwf.org/publications/publications_show.htm?doc_id=467997&#doc467997

- The **Family, Infant and Toddler Program** of the Vermont Department of Health is a family-centered, coordinated system of early intervention services for infants and toddlers whose development is delayed or who have a health condition that delays development, and their families. The program links families with public and private agencies, parent child centers, local school districts, health care practitioners, private therapists, and child care providers. Services and supports are provided in the most convenient and natural places for the family and child, including the home, child care setting, and community play groups.  
  www.dcf.state.vt.us/cdd/programs/prevention/fitp/index.html
The National Academy for State Health Policy (NASHP) and The Commonwealth Fund have worked with eight Assuring Better Child Health and Development (ABCD) states to show that state Medicaid policies can promote improvements in the quality of preventive and developmental services provided to young children. The states participating in ABCD have shown that state policies, especially for Medicaid, can promote improvements in the quality of preventive and developmental services provided to young children. They have targeted the problems of under-detected developmental delays in low-income young children, failures to counsel parents of young children about developmental issues, and failures to refer children to needed services in the community.

www.cmwf.org/publications/publications_show.htm?doc_id=434687&doc434687

C. Prevention of and protection from abuse and neglect

Child welfare agencies partner with community groups in neighborhoods that have a high concentration of families involved with the child welfare system to make services more effective and acceptable and to build a community presence. They connect formal services and agencies with neighborhood networks so individual families experience services and agencies as responsive and on their side.

| EXAMPLES |

- The **St. Louis Neighborhood Network** is part of Community Partnerships for Protecting Children, a coordinated effort to foster widespread, shared responsibility for keeping children safe, strengthening families, and increasing community participation in child protection. Key features include decentralized, neighborhood-based services; collaboration among public agencies in Kentucky and Louisville with local nonprofit service providers, faith-based institutions, schools, neighborhood associations, civic and voluntary organizations, residents, and community leaders to establish networks of protection and prevention and to integrate formerly disparate programs; a commitment to strength-based, individualized, family-oriented solutions based on an understanding of families’ strengths, needs, and circumstances; and the promotion of shared decision making between agencies and residents. stlouis.missouri.org/501c/slhn/index.html

- Through Family Support Centers, the **Rhode Island Family Support Initiative** helps families obtain legal help, clothing, housing assistance, furniture, health care, Early Head Start, and parent education. Center staff locate appropriate services for families, help them apply, accompany them to community-based services, and provide follow-up advocacy and transportation when necessary. Families are encouraged to connect with other families and to enjoy group activities. www.nccp.org/initiative_10.html

- **Parents and Children Together (PACT)** in Honolulu, Hawaii, creates opportunities for families and children to identify and address their own strengths, needs, and concerns. PACT’s programs include early childhood education through Early Head Start and Head Start; prevention and treatment of child abuse, neglect, and domestic violence; mental health support; community building and economic development; and family literacy, educational, and vocational
activities (ESL, GED, etc.). Family support workers help families in crisis obtain comprehensive health, education, and social services. www.cssp.org/doris_duke/index.html

- **Shared Family Care (SFC)** in Contra Costa County, California prevents the separation of a child from his or her parents and provides a safe environment for reuniting families that have been separated. The program can temporarily place a family in crisis into the home of a trained and supportive host family, which helps the biological parents develop skills and supports necessary to care for their children and move toward independent living. aia.berkeley.edu/information_resources/shared_family_care.php

- **Crossway Community** in Kensington, Maryland, provides education, training, support services, and transitional housing for families in the Washington metropolitan area. Its Family Leadership School is a two-year residential education program for single mothers and their children striving to overcome the risks of homelessness, poverty, domestic violence, and/or severe social isolation. www.montgomerycountymd.gov/mc/services/volunteer/iris/agenall/470isqj1.htm

- **Parents Anonymous** is a community-based parent education and support program through which parents and professionals form partnerships to share responsibility, expertise, and leadership for strengthening families and improving services and communities. Adult group sessions focus on parenting issues and challenges, with parents setting their own goals and timelines. Parents can expand their networks of support, reduce stress and isolation, and learn about community resources. While parents are meeting, children and youth participate in leadership and problem-solving activities. www.parentsanonymous.org

- The **Center for Family Life in Sunset Park**, Brooklyn (New York), is the community nucleus for immigrant families who need help overcoming cultural, economic, and language barriers to help their children succeed in school. The program’s centerpiece is intensive individual, family, and group counseling conducted in a nurturing, supportive atmosphere either in clients’ homes or at the center. The center pioneered neighborhood-based foster care and provides emergency services such as crisis intervention, food, and clothing. Networking extends to the police, churches, and elected officials. www.cflsp.org

- **Hope Street Family Center**, housed on the grounds of the California Hospital Medical Center, is a public-private partnership that provides services and supports, including community-based child welfare services, to young children and families living in inner-city Los Angeles. Families affected by child abuse and neglect receive intensive services, including home visits by professional social workers and public health nurses from a widely known and respected community-based setting. www.healthychild.ucla.edu/HopeStreetFamilyCenter.asp

Funders and policymakers design funding and eligibility policies to make services and supports available to families when they need them rather than requiring a diagnostic label or an open child welfare case to trigger funding and access, and to enable agencies to identify families that are socially isolated and link them to services and supports.

**EXAMPLES**

- **The Kentucky Office of Family Resource and Youth Services Centers**, established by the state legislature, provides administrative support, technical assistance, and
training to Kentucky’s local school-based Family Resource and Youth Services Centers (FRYSC). Each center has unique components but all promote the flow of resources and support to families in ways that improve their functioning and development. To enhance students’ school success, the centers develop partnerships that promote early learning and successful transition into school. cfc.ky.gov/frysc

Funders and policymakers make it possible for agencies to select, train, and supervise frontline child protection staff so that services meet high quality standards and staff have the resources and tools they need to make the best possible decisions about placing children out of their home, connecting families to treatment and supportive services, and reunifying families.

**EXAMPLES**

- **The Michigan Family Independence Agency**, concerned with the large percentage of families re-referred for child abuse and neglect, sought to strengthen its initial assessment and service determination by developing and implementing the Structured Decision Making (SDM) case management model. The model improves decision making and service delivery in child protective service and foster care by guiding workers through each decision point with a structured assessment. SDM clarifies the purpose of each decision, focuses on the factors needed to make a decision, and helps the agency monitor compliance with established policies and procedures. www.michigan.gov/dhs/0,1607,7-124-5452_7119_7194-15399--,00.html

- **The Family Builders Program** allows child protective workers in several Arizona counties to refer selected low-risk child abuse reports to a network of community-based providers for family assessments and case management services, after triage by Child Protective Services. The program uses a strengths-based, family-centered approach to reduce the reoccurrence of substantiated child abuse and neglect reports. www.de.state.az.us/dcyf/opfs/annual.asp. Minnesota’s Alternative Response is a similar program used by child protective services in all Minnesota counties. www.de.state.az.us/dcyf/opfs/annual.asp. Minnesota’s Alternative Response is a similar program used by child protective services in all Minnesota counties. www.de.state.az.us/dcyf/opfs/annual.asp.

- **As part of its fundamental reforms, the St. Louis Division of Family Services** stationed assessment and investigative workers, service caseworkers, and a supervisor in the Sigel Elementary School. Sigel functions as the hub for an array of family support services and activities, including public benefits, Medicaid, Food Stamps, and referrals to other services. Being community-based has helped staff become more familiar with local resources; they work closely with other service providers and are better able to make referrals and follow-up. They know local residents and children because they see them in a variety of normal, neighborhood settings. www.cssp.org/uploadFiles/Doing_Business_Differently.pdf

- **The New Jersey Department of Human Services Kinship Navigator Program** helps caregivers navigate through various governmental systems to find local supports and resources. Information is specifically designed for kinship caregivers and can include referrals about support groups, TANF, Medicaid benefits, child support, housing assistance, custody procedures and other legal issues, child care resources, and respite services. www.state.nj.us/humanservices
Working with the St. Louis (Missouri) Neighborhood Network of the Community Partnership for Protecting Children, the Missouri State Division of Family Services developed a low-key response to situations that do not involve a specific incident of abuse or neglect (such as educational neglect). At the same time, to deal with some of the toughest family issues reported to Child Protective Services, DFS created a several specialist positions—staff who provide case consultation, training, and hands-on help to families with such problems such as substance abuse, sexual abuse, and medical needs.


The Annie E. Casey Foundation's Family to Family Initiative assists states and communities with technical assistance and funding to plan and implement innovations in their systems of services for children and families. The Foundation’s support includes funds for development and for transitional costs that accelerate system change.

www.aecf.org/Home/MajorInitiatives/Family%20to%20Family.aspx
Indicators: Health and Development  
On Track

1. Fewer children with elevated lead levels in their blood

INDICATOR DEFINITION
The percent of children between birth and age five who have blood lead levels greater than 10 micrograms per deciliter as a proportion to the total number of children screened or in the population at risk (Needleman, 1990; National Center for Health Statistics, 2006).

SIGNIFICANCE
Elevated blood lead levels in the early years are associated with intellectual impairments, attention and behavioral problems, and lower achievement in school. It is especially important to monitor lead exposure between ages zero and five because blood lead levels peak during this period, and because early detection, when followed by intervention, can prevent long-term damage. Children living in poverty have higher blood lead levels and are more likely to experience adverse effects than do other children because of the higher lead levels in their environment and because of the interaction of lead exposure with other risk factors, especially poor nutrition (CDC, 1991; Needleman, et al., 1990; Silva, Hughes, & Williams, 1988; Thomson, Raab, & Hepburn, 1996; Stein, et al., 2002; Ruff, 1999; Chugani, Muller, & Chugani, 1996; U.S. Department of Health and Human Services, 2000).

2. More parents reporting their children are in good or excellent health

INDICATOR DEFINITION
The percent of parents who report in a survey that their children’s health status is excellent, good, fair, or poor (National Household Education Survey, 1995).

SIGNIFICANCE
Parents’ self-reported health status of their children strongly correlates to their children’s actual health, particularly at a young age. Good health is important for children to achieve the cognitive and social component of school readiness as healthy children are better able to engage in experiences crucial to the learning process (Krause & Jay, 1994; Fertig & Reingold, 2006; Kagan, Moore, & Bradekamp, 1995).
3. More children with health insurance

**INDICATOR DEFINITION**

The percent of children with health insurance (under private insurance, Medicaid, state health insurance program, etc.) as a proportion of the total number of children in the population of interest, such as by county, city, or census tract (Kids Count, 2006).

**SIGNIFICANCE**

Access to quality health care is important for disease prevention, prenatal care, health supervision, preventive services such as immunizations, and acute care. Lack of health insurance is the primary reason families do not seek out regular health care or follow up on recommended treatments or testing, and may foster the development of preventable conditions or worsen existing ones (Currie, 2006; Kagan, et al., 1995; Kids Count, 2006; Seccombe, 2000).

4. More children in expected weight and height range for their age

**INDICATOR DEFINITION**

The percent of children whose height and weight fall into their expected growth ranges as a proportion of the total number of children in the sample (CDC, 2001).

**SIGNIFICANCE**

When children are not within their expected height and weight ranges, they may be suffering from malnutrition, impairments in the caregiver-child relationship, or chronic illness. Being either obese or underweight in infancy or early childhood can have long-term health and social consequences (Dawson, 1992; Kagan, et al., 1995).

5. More parents who have a particular place to take children for routine care

**INDICATOR DEFINITION**

The percent of parents who report having a particular place (i.e., a “medical home”) to take children for care as a proportion of the total population.
SIGNIFICANCE

When a family has a regular medical care provider for check ups, shots, and anticipatory guidance, children are more likely to receive prompt and appropriate care for acute and chronic conditions, as well as continuing preventive care. Consistent care by the same individual, or group of individuals, ensures monitoring of and familiarity with children’s health over time, awareness of the family, and also may avoid delayed diagnosis of health and developmental problems, worsening of existing conditions, and the occurrence of preventable conditions (Chen, Matthews, & Boyce, 2002; Kagan, et al., 1995).
Ingredients: Health and Development
On Track

Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because how interventions are implemented and how services are provided is as important as whether they are provided.

Key ingredients are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Key Ingredients that apply to all goals in this Pathway can be found in Appendix 4. They include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

Key Ingredients that apply specifically to GOAL 2, Health and Development on Track, appear below. They include the Ingredients of effective implementation of

- High-quality, accessible child health care
- Early detection of developmental obstacles
- Prevention of and protection from abuse and neglect
INGREDIENTS: High-quality, accessible child health care

Providers of child health care meet appropriate quality standards, such as those set by the American Academy of Pediatrics, the American Academy of Family Physicians, and the American College of Pediatric Nurse Practitioners.

Child health care provided in the context of a "medical home" is supervised by qualified child health specialists; continuity of care and personalized relationships between health professionals and families are maintained over time. The child's medical home is incorporated into emergency care, acute care, and follow-up.

In addition to competent medical care, health services for children and their families include:

- **Nutrition counseling**, with referrals to supplementary nutrition as needed (through WIC, food stamps, food pantries, and meal programs)
- **Links** to (or provision of) health education, parent education, and family support
- Assistance to families trying to obtain **health insurance**
- **Time for providers to talk with patients** about their concerns and to develop warm, mutually respectful relationships
- **Information and support** for the demands of parenting, including the essentials of infant development
- **Pleasant environments and convenient times** and locations for child care

Providers of pediatric care pay attention to the living conditions of the children they see, including homelessness, domestic violence, and dangers posed by the home or neighborhood environment. Providers take responsibility for connecting families with people and agencies that can help them deal with such problems.

Dental professionals make high-quality, regular dental assessments and dental care available to all children. They make sure that child health providers, children, parents, and other caregivers are informed about the importance of dental health and oral health habits.

Policymakers and funders create payment structures and other policies that promote effective child health care by:

- **Supporting training** for health care professionals that encourages them to develop strong relationships with high-risk families
- **Recognizing the need for, and funding, non-medical support** services such as home visits, social services, and housing assistance

Policymakers work to expand eligibility for and enrollment in health benefits through Medicaid, State Children's Health Insurance Program (S-CHIP), and other, broader programs. They seek to:
- **Minimize barriers** to public and private health care coverage through outreach, simplified rules, and other improvements
- **Put safety-net policies in place for uninsured individuals and families** and the providers serving them

**INGREDIENTS: Early detection of developmental obstacles**

Health care providers who screen children, conduct developmental assessments, and follow up on individual cases [link the children’s families promptly to diagnostic, early intervention, therapeutic, and remedial services](#) by appropriate specialists (including hearing, speech, vision, and physical therapy professionals) and community resources.

Providers of child care, family support, and early education recognize their role in identifying infants and young children who are at biological risk of poor outcomes, have developmental delays, or have relationships with parents that undermine healthy development. These providers [enlist children’s primary health care providers as well as health, mental health, and developmental consultants](#) to make further judgments about these children’s needs and to provide follow-up services.

Some providers have stepped up their efforts to detect developmental obstacles early by adopting an approach promoted by the Commonwealth Fund, known as “developmental surveillance.” Unlike developmental screening, developmental surveillance is a flexible, continuous process in which knowledgeable professionals observe children while providing care. It encompasses all activities involved in detecting developmental problems, including eliciting and attending to parental concerns about a child’s behavior, learning, or development; obtaining a developmental history; observing the child’s development; and communicating with others in the child’s life (such as childcare providers or preschool teachers). Development is continuously monitored within the context of overall well-being, rather than viewed in isolation during a testing session.

**INGREDIENTS: Prevention of and protection from abuse and neglect**

Communities work with child welfare agencies to build capacities, including those needed to monitor:
- Program, neighborhood, and community-wide outcomes
- The availability of primary and preventive services in addition to crisis interventions
- The availability of appropriate services and supports to everyone who needs them, both through individual programs and through community-wide decisions and resource allocations
Ingredients

- The cultural and linguistic appropriateness of services
- Barriers that issues of race, language, and culture might pose to families trying to obtain support

Local collaboratives reduce social isolation by:

- Helping families obtain needed services
- Encouraging community organizations and natural helpers to support their hard-to-reach neighbors
- Helping families use informal networks and services to support each other
- Encouraging programs to act together, aggressively and coherently, to prevent family homelessness and to support homeless families
- Promoting neighborhood revitalization and safety efforts
- Creating opportunities for civic involvement and public service

Frontline staff of child welfare agencies have the training, resources, and relationships with families needed to identify developmental, health, and interpersonal concerns among the children and families they serve. Staff who interact with young children have skills to identify and address families’ needs and risk factors or to mobilize appropriate responses. Staff have enough time to build trust with families, with providers of specialized services, and with police and the judiciary. They work in settings that also can address families’ needs for food, clothing, and shelter.

Frontline child protection staff are selected, trained, supervised, and provided with resources and tools so they can make the best possible decisions about out-of-home placements, support services, and family re-unification. Protocols used by child welfare departments and courts have provisions that address the needs of children and families, including developmental needs and warning signs in children within their biological families and in out-of-home care.

Child protection agency managers track and monitor outcomes in ways that assure the safety of all children; they set priorities for services to children and families in a systematic, thoughtful way. Agency procedures ensure that abused children receive therapeutic services.

Child welfare agency procedures ensure that children receive comprehensive, pre-adoption health and developmental screenings that fully inform adoptive parents of current and potential developmental issues and offer access to future assistance and support as needed.

Child welfare agency procedures ensure that families involved in unsubstantiated child maltreatment reports are referred to family support services.

Child welfare agencies have a spectrum of interventions at their disposal, including:

- A full range of out-of-home care options (e.g., neighborhood-based foster care and adoption, kinship care, kinship respite care, and subsidized guardianship)
- Supervised residences in single and group homes for mothers and their infants, and for whole families
• **Support for families that can avoid out-of-home placement** through in-home services, supports, and help meeting basic needs

• **Post-adoption services**

Child welfare agencies partner with community groups to make services more effective and acceptable and to build a "community presence." Efforts include:

• **Providing resources and information** to parents involved in the child welfare system to alert them to possible developmental issues and other potential problems, and connect them to sources of help.

• **Developing neighborhood-based child protection teams** and locating child protection workers in neighborhoods

• **Keeping children who are in out-of-home placements within the neighborhood** to the extent possible

• **Involving family members** and other concerned adults in monitoring children’s placements and making decisions about children’s placement and families’ support

• Working with all elements of the community and service system to **minimize disruptions** in out-of-home placements

• **Making information about resources and supports readily available** in a form accessible to parents and kin

Child welfare agencies stimulate community support for neighborhood-based services and for foster parents by:

• **Recruiting** neighborhood foster homes; encouraging families to become foster and adoptive parents

• **Facilitating frequent, structured contacts** (in friendly settings) between birth parents and foster children so the foster parents can serve as "unification partners"

• **Facilitating foster parent support groups,** through foster parent associations or other mechanisms, to enable foster parents of young children to support and learn from each other and from experts in the field

• **Providing respite care** for foster parents who serve young children, especially those with multiple needs

Child welfare agencies partner with community organizations to ensure a full range of supports and services are available to prevent serious problems:

• Agencies **link essential services across programs** to ensure access 24 hours a day, seven days a week.

• Agencies **integrate responses** to child and family problems with primary services, so that access is seamless.

• Agencies **integrate parent education and therapeutic services** for children into substance abuse and mental health treatment for adults, recognizing that concern for
their children can motivate change in parents affected by substance abuse, domestic violence, and depression.

- Agencies ensure that all services for children and families facing severe poverty, domestic violence, substance abuse, or depression go beyond the simple provision of advice, information, and support. They organize services to promptly address the effects of a child’s experiencing and/or witnessing violence.

**Child abuse prevention strategies that emphasize both the developmental needs of children and the importance of community-based supports for families** are most likely to be effective. Evaluating and treating abuse or neglect requires sophisticated expertise in both early childhood and adult mental health. Referrals of suspected cases of child abuse or neglect from the child welfare system to the early intervention system would be the best way to ensure appropriate developmental and behavioral assessment and treatment (National Scientific Council on the Developing Child, 2004).

**“Warm lines” and specialized call centers are efficient, cost-effective access points to services** that can help prevent child abuse when adequately staffed by trained telephone caseworkers who have substantive knowledge of child development, offer cultural and language diversity, have access to a searchable (computerized) inventory of community-based resources, and have reciprocal relationships with direct service providers (Carey, 2006).
**Rationale: Health and Development**

Good physical and mental health help make young children ready to learn and to succeed in school. Lack of access to a regular source of high-quality health care, lack of health insurance, malnutrition, and under-nutrition contribute to health problems that are preventable and existing conditions that deteriorate; both can lead to long-term learning and behavior problems. Early identification of problems during the crucial developmental years of birth to age five makes it possible to intervene while a child’s brain, body, and behavior are most malleable and before the problems become overwhelming.

**Research shows that high-quality, accessible health care is important because:**

Healthy children are not distracted by pain, discomfort, or fatigue. Therefore, they are better able to engage with the learning process and less likely to be absent from school (Kagan, Moore, & Bradekamp, 1995; Krause & Jay, 1994).

Lack of access to affordable health insurance is associated with inadequate access to high-quality health care, which may result in the development of preventable conditions or the deterioration of existing conditions (Kagan, et al., 1995). Becoming eligible for Medicaid reduces the probability that a child will go without a doctor’s visit in the past year and improves the quality of care that the child receives (Currie, 1998).

Home visiting programs that focus on postpartum and neonatal health can help establish a regular source of medical care for children (a *medical home*) so they receive required well-baby medical visits and immunizations and so their growth and development can be monitored for problems that need early treatment. Home visiting programs can address barriers to the use of medical services that are particularly formidable for low-income families, such as scheduling difficulties, lack of transportation, long waiting room times, and lack of personally responsive care (Riportella-Muller, et al., 1996; Wagner & Clayton, 1999). Home visiting programs have also been shown to affect smoking during pregnancy (Gomby, et al., 1999), accidental injuries (Olds, et al., 1999), incidence of child abuse (Olds, et al., 1999; Wagner & Clayton, 1999), delay of subsequent pregnancies (Kitzman, et al., 1997), domestic violence (Duggan, et al., 1999), and adequacy of parenting skills (Duggan, et al., 1999; Gomby, et al., 1999). The savings that accrue from the provision of home visiting services to low-income families have been shown to exceed the cost of these programs (Karoly, et al., 1998).

Increased access to a variety of sources of health care, including public health institutions, can provide children with immunizations against communicable or preventable diseases. Immunizations protect children from diseases that can lead to absenteeism and developmental disabilities that limit children’s ability to succeed in school (Child Trends, 2000; Zaslow, Halle, Zaffe, Calkins, & Margie, 2000).

High-quality child health care includes attention to malnutrition and under-nutrition, which may lead to greater vulnerability to illness (Korenman, Miller, & Sjaastad,
1995), decreased learning ability, lower levels of attention (Pollitt, et al., 1996), fatigue (Center on Hunger Poverty and Nutrition Policy, 1994), anxiety, decreased motivation, apathy, and compromised emotional development (Pollitt, et al., 1996), and a higher frequency of school absence (Center on Hunger Poverty and Nutrition Policy, 1994).

Children with iron-deficiency anemia (IDA), the most common form of malnutrition in children (especially poor children), are more likely to have "persistent developmental delays and behavior problems such as decreased attention to tasks and poor social interaction" (Zuckerman & Kahn, 2000), lower IQ scores, reading disability, impaired coordination, and school dropout (Bellinger, et al., 1991; Bellinger, Stiles, & Needleman, 1992).

Poor dental care may lead to tooth loss, dental caries, and gingivitis, resulting in high rates of absenteeism, inability to concentrate in school, and poor speech development. Dental problems may also impair a child's ability to eat correctly and therefore to achieve good nutrition and health (Platt & Cabezas, 2000; Platt & Cabezas, 2000; Kagan, Moore, & Bradekamp, 1995.)

Research shows that it is important to ensure early detection of developmental obstacles because:

Early identification of problems during the crucial developmental years of birth to age five makes it possible to address problems while a child's brain, body, and behavior are most malleable and before the problems become overwhelming.

Child health services should be delivered primarily within the context of a "medical home," which offers the best opportunity for continuity of care and personal relationships. The primary care practitioner's office is the place where most children under age 5 are seen routinely, and thus is ideal for developmental and behavioral screening and for attending to parental concerns (American Academy of Pediatrics Committee on Children with Disabilities, 2001).

Timely screening and assessment of individual children leads to early diagnosis of learning problems, makes appropriate interventions possible, and helps teachers make appropriate decisions about curriculum and instruction. It also serves as a basis for providing guidance to parents (Katz, 1997).

Early interventions with children at high risk can improve their social competence and cognitive abilities prior to school entry. Often, long-term educational benefits can be reaped from effective early intervention programs (Karoly, et al., 1998; Reynolds & Wolfe, 1997; Berlin, O'Neal, & Brooks-Gunn, 1998). The children of less-skilled and more vulnerable mothers derive more benefits from early intervention than children of better-educated mothers (Berlin, O'Neal, & Brooks-Gunn, 1998). Early identification of young children's special needs allows early childhood programs to adapt to these children's needs and strengths and to ensure that students with physical, sensory, or cognitive disabilities can learn some or all of the same lessons as other students (ERIC/OSEP Topical Brief, 1998).

The developmental delays that are prevalent among low-income children are significantly under-detected. Although more than 95% of young children see a child health care clinician during their first three years, most of these clinicians miss opportunities to
detect developmental problems, counsel parents of young children about developmental issues, or refer children to needed services in the community. There are, however, health care delivery and policy options that can be used to increase the detection of children’s developmental problems and to facilitate access to assessment and treatment services for those children and families needing follow-up care (Kaye, May, & Abrams, 2006).

**Undetected developmental problems and emotional disturbance** may cause delays in acquiring speech and language, inability to maintain relationships, and serious impediments to school learning (Boyer, 1991; Terman, et al., 1996). Poor peer relationships are associated with later emotional and mental health problems, school dropout, delinquency, aggression, poor social skills, and lack of empathy for peers (Harter, 1983; Marshall, 1990). Barriers to early identification and intervention for developmental problems include primary health care providers’ lack of requisite expertise, failure to take seriously parents’ reports of delays and problems (Hendrickson, et al., 2000), and lack of access to screening programs and follow-up services.

**Early detection and intervention** for elevated blood-lead levels, especially between birth and age 5, may prevent irreparable long-term neurological damage, related learning and behavior problems, and lower achievement in school (Needleman, et al., 1990; Silva, et al., 1988; Thomson, et al., 1996). Because of the plasticity of the human brain, a reduction in blood-lead to below threshold levels during early childhood, a time of significant brain growth and development, may allow a return to normal functioning (Stein, et al., 2002).

Children in neighborhoods with high concentrations of poverty are likely to have **increased levels of lead in their blood** (National Research Council, 2000) and are more likely to experience the adverse effects because the lead exposure interacts with other risk factors, including poor nutrition (Needleman, et al., 1990; Silva, et al., 1988; Thomson, et al., 1996).

Lack of access to **early detection and treatment of hearing and vision problems** raises the chances that health barriers will limit children’s ability to fully engage in home, school, community, or social activities (U.S. Department of Health and Human Services, 2000). Normal or corrected hearing and vision contribute to coordinated movement, which is essential to school readiness (Kagan, et al., 1995). Early detection and treatment of vision problems may prevent developmental delays and further visual deterioration, since vision that is lost cannot be restored (U.S. Department of Health and Human Services, 2000).

Research shows that it is important to act to prevent and protect children from abuse and neglect because:

**Children who have been neglected or abused are more likely to suffer serious negative consequences**, including: attention deficit disorders, depression, conduct problems, reduced cognitive development, language deficits, reduced emotional stability, poor self-regulation, poor problem-solving skills, an inability to cope with or adapt to new or stressful situations, and shortfalls in physical health. All of these are important factors in school readiness and school success. Prompt and effective responses to abuse, neglect, and other crises can ameliorate or protect against many of these negative effects.
Connecting low-income, high-risk families to responsive and supportive networks, services, and institutions prevent child abuse and neglect because they help to identify warning signs and link children and parents with the help they need. Depression, attachment difficulties, and post-traumatic stress, prevalent among mothers living in poverty, undermine mothers' development of empathy, sensitivity, and responsiveness to their children—often leading to poorer developmental outcomes (National Research Council, 2000). Children who have clinically depressed parents or parents reporting signs of depression are at risk for a variety of negative outcomes, including health, cognitive, and socio-emotional problems (Child Trends, 2002), behavioral problems, poorer performance on math and reading assessments (U.S. Department of Health and Human Services, 1999), and poor emotional adjustment as they grow up (Korenman, Miller, & Sjaastad, 1994; Miller, 1998). Their parents have poorer parenting skills, and fewer cognitive, stimulating, and supportive interactions with their children (Downey & Coyne, 1990; Zaslow, et al., 2001). Treatment is more effective and recurrences less likely the earlier treatment begins (National Institute of Mental Health, 2000).

**Connections to responsive and supportive networks, services, and institutions can buffer the stressful context created by poverty**, which threatens positive interactions with children and raises the potential for punitive or otherwise negative relationships (National Research Council, 2000). Lower levels of parental stress and family conflict are connected to positive child outcomes, including social ability, literacy, and school readiness (Fenichel & Mann, 2002).

**Connections to responsive and supportive networks, services, and institutions can increase knowledge and understanding of proper child development and parental behavior** for parents of infants, which is likely to lead to improved outcomes in social development and school readiness (Fenichel & Mann, 2002). Such connections can help parents improve the manner in which they interact with children, the physical environment of the home, and their emotional health, all of which are associated with a child's cognitive, social, and emotional development (Radke-Yarrow, et al., 1992).

**Social support networks and other informal supports reduce social isolation and buffer the cumulative burden of multiple risk factors** and sources of stress, which compromise the caregiver's capacity to promote sound health and development (National Research Council, 2000). Social support networks are associated with improved parenting skills, greater knowledge of child development, and improved family relations (Mueller & Patton, 1995). Mothers who have larger social networks, including strong kinship networks, are more likely to be involved in their children's lives, both at home and in school (Sheldon, 2002). Mothers who have social support are more likely to provide stimulating home environments (Adamakos, et al., 1986) and more responsive parenting, adopting a style that is responsive, accepting, and involved rather than being overly controlling of their child's behavior (Burchinal, et al., 1996). Mothers who are socially isolated or insulated from others in their networks are more likely to be abusive or neglectful of their children than mothers who have a strong social network to rely on for support (Jennings, et al., 1991; Salzinger, et al., 1983).

**Maltreatment can have a negative impact on children's emotional stability and self-regulation**, problem-solving skills, and the ability to cope with or adapt to new or stressful situations—all of which are important to school readiness and
school success (Chalk, Gibbons, & Scarupa, 2002). Children who have been neglected or physically abused are more likely to have cognitive and emotional problems, to suffer from attention deficit disorder, depression, conduct problems, and limits in cognitive development and functioning (Mental Health: A Report of the Surgeon General, citing Kaufman, 1991 and Famularo, et al., 1992). Abuse and neglect are linked with language deficits, reduced cognitive functioning, and attention deficit disorders (Augustinos, 1987; Eckenrode, et al., 1991; Fantuzzo, 1990; Guterman, 2001; Wolfe & Mosk, 1983) and with shortfalls in physical health, including failure to thrive, somatic complaints, and high mortality (Hart, et al., 1998). Children who have been neglected or physically abused tend to perform poorly in school, as evidenced by low grades, low standardized test scores, and frequent retention in grade; the negative effects are even greater for neglected than for abused children (Chalk, Gibbons, & Scarupa, 2002). They tend to have lower grades, lower standardized test scores, and lower rates of grade promotion (Augustinos, 1987; Eckenrode, et al., 1991; Guterman, 2001; Wolfe & Mosk, 1983).
Evidence: Health and Development
On Track

A. High-quality, accessible health care

Children who received health care from a program that integrates home visiting with traditional pediatric care had lower rates of hospitalization and fewer emergency room visits (Kaplan-Sanoff, et al., 1997). When compared with similar members of the general population, families that participated in Healthy Families America (www.healthyfamiliesamerica.org), which provides home visits and links to other services in 11 states, were healthier and used medical services more appropriately. Specifically:

- In Iowa, the uninsured rate of participants was 1.3%, markedly lower than the state average (17%).
- In New York, 75% of participating children received the recommended number of well-baby visits by 15 months, compared to 46% of children enrolled in New York State Medicaid managed care plans. Among one-year-olds, 96% had up-to-date immunizations, compared to 80% of one-year-olds statewide (National Center on Child Abuse Prevention Research, 2002).
- Participating Michigan families had fewer emergency room visits compared to the control group (6.2% vs. 42%), and 99% of participating children had current immunizations (compared to 72% of the control group).
- In Georgia, 98% of one-year-old participants were completely up to date on their immunizations, compared to the statewide rate of 80% (National Center on Child Abuse Prevention Research, 2002).

Monetary incentives and letters sent to families about child immunization status have a high impact on immunization rates (Yokley & Glenwick, 1984).

When low-income families become eligible for Medicaid, their children are more likely to visit a doctor yearly, and the relative quality of care that the children receive improves (Currie, 1998).

Children aged 6 months to 5 years whose pediatricians provided books and literacy advice to parents through Reach Out and Read (www.reachoutandread.org) demonstrated significant increases in spoken language and language comprehension at 18 months and older (High, et al., 2000).

Low-income children enrolled in the State Children's Health Insurance Program (S-CHIP), a publicly funded health insurance program, were more likely to receive preventive health care than children without health insurance. Compared to their experience prior to enrollment, children participating in S-CHIP increased their number of well-child care or outpatient visits (Eisert & Gabow, 2002).
Several high-quality, comprehensive programs for infants have demonstrated a positive effect on child health:

- The **Newborn Individualized Development Care and Assessment Program** is a relationship-based program to aid premature babies through intensive care, support, and by strengthening early parent-child ties. An assessment of participating infants found they were able to leave respirators and feeding tubes earlier, experienced shorter hospital stays, and showed improved behaviors compared to non-participating pre-term babies (Fleisher, et al., 2002).

- The **Infant Health Development Program**'s pediatric, family support, and child care interventions led to higher levels of receptive language and visual-motor special skills among premature and low-birth-weight babies compared to babies in a control group (Brooks-Gunn, Liaw, & Klebanov, 1992).

The federal nutrition programs (www.fns.usda.gov)—**School Lunch and Breakfast, Summer Food Service, WIC, and Child and Adult Care Food Program**—reduce hunger; improve school performance and behavior; provide essential nutrition; and improve the health of mothers, infants, and children. For many children, these programs provide more than half the nutrition they need each weekday.

- The **WIC Farmer's Market Nutrition Program** helps low-income women and children gain access to fruits and vegetables needed for proper nutritional intake (Rose, et al., 1998; Leff, 2002; FRAC, 2003).

- Low-income children who participate in the **School Breakfast Program** (www.fns.usda.gov/cnd/Breakfast/default.htm) have higher standardized test scores and are tardy and absent less frequently than low-income students who do not eat breakfast at school (Leff, 2002).

- Low-income families that participated in **Women, Infants, and Children** (WIC, www.fns.usda.gov/wic), which provides supplemental foods, nutrition education and counseling, and screening and referrals to other health, welfare, and social services, saw a decrease in the percentage of anemic children by more than half after three visits (Currie, 1998).

- Low-income children whose mothers received **nutritional supplements** beginning in the third trimester of pregnancy scored higher on assessments of cognitive development than their older siblings who did not begin receiving the supplements until after they were one year old (Currie, 1998).

## B. Early detection of developmental obstacles

Children involved in the **ENRICH project**, which provides home visits, parenting information, and other services and supports to children with disabilities and their families, had substantial increases in motor skills, self-care, and social functioning (Zero to Three, 1999).
Low-birth-weight and pre-term children who participated in the **Infant Health and Development Project**, which provided pediatric follow-up visits, center-based developmental intervention, and parent support groups, achieved higher test scores and had fewer special education placements at 9 years old, compared to a control group (Child Mental Health Foundations and Agencies Network, 2000, citing Hollomon & Scott, 1998).

A national evaluation of the **Healthy Steps for Young Children Program**, designed to improve developmental and behavioral services to young children, found improved quality of care, enhanced communications between pediatricians and parents, and children receiving more appropriate preventive services. The study found that physician practices with childhood developmental specialists on staff showed "significant improvements" in parental satisfaction with the services they received; timelier preventive care such as immunizations; and receipt of more developmental services (Minkovitz, et al., 2003).

The eight states participating in the **Assuring Better Child Health and Development (ABCD)** initiative, which addressed the quality of preventive and developmental services provided to young children and their families, saw improvements in:

- Benefit coverage, as a result of clarifying the state’s expectations to individual providers (including pediatricians) to encourage the use of formal, valid screening tools as part of an Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) screen
- Eligibility, as a result of clarifying that children with specific mental health problems were eligible for the state’s Early Intervention (Part C) program
- Reimbursement policies to promote developmental services, by clarifying that providers (including primary care clinicians) can bill for conducting a developmental screen with a formal and valid screening instrument
- Performance by physicians and others who provide developmental services to young children, as a result of requiring managed care organizations to improve the quality of developmental screening, develop processes to ensure feedback from follow-up service providers to the primary pediatric clinician, and implement policies for measuring performance in delivering child development services (Kaye, May, & Abrams, 2006).

**C. Prevention of and protection from abuse and neglect**

Mothers who participated in the **Maternal and Infant Health Outreach Worker** program ([www.mihow.org](http://www.mihow.org)), a home visiting program for pregnant women and families with infants, were more likely to know how to obtain services such as affordable medical care, well-baby care, and assistance with substance abuse or depression (Maloney, 1995).

**Project New Hope**, an intervention that provided child care subsidies, low-cost health insurance, job search assistance, and earnings supplements to low-income parents, produced better educational outcomes for participants’ children, higher occupational and educational expectations, and more social competence. Parents said they felt less stress, more social support,
Evidence

Pathways Mapping Initiative: School Readiness and Third Grade School Success

and greater goal expectations for themselves than peers in control groups (Bos, et al., 1999; Child Trends, 2000).

Project BEFORE (Bridging Empowers Families to Overcome Risks and Excel) provided home visits and informal supports to families with young children that had or were at risk of having substance abuse or mental health problems. Participating mothers and their children demonstrated better use of physical and mental health services, less exposure to violence, less substance and child abuse, and fewer family arrests. The number of women working or attending school also increased (Knitzer, 2000).

Healthy Families America provides home visits and links to other services for parents in 11 states who are identified as overburdened and at risk for abusing or neglecting their children. In all states, the incidence of abuse and neglect decreased for HFA families. In addition:

- New York participants reported a decline in social isolation (from 36% to 30%), relationship difficulties (from 52% to 44%), domestic violence (from 25% to 14%), substance abuse (from 14% to 4%), and alcohol abuse (from 11% to 3%) (National Center on Child Abuse Prevention Research, 2002).
- In Arizona, HFA families had fewer substantiated reports of child abuse (3%) than a comparison group (8%).
- In Hawaii, HFA children were much less likely to be hospitalized for maltreatment than children in a comparison group.
- In Oregon, the 1999 incidence rate of child abuse was lower for HFA families than for non-served families in the same counties (National Center on Child Abuse Prevention Research, 2002).

Physically and sexually abused children who attended a therapeutic preschool and received home visits through KEEP SAFE (the Kempe Early Education Project Serving Abused Families) increased their language and cognitive skills over three years (Child Mental Health Foundations and Agencies Network, 2000).

Starting Early Starting Smart (www.casey.org/sess), which provided mental health services to low-income, resource-poor families in early child care settings, increased families' access to needed services. Participating parents were more likely to enroll in substance abuse programs and to reduce their substance use than parents in a comparison group (Casey Family Programs, 2001).
Supported and Supportive Families

Support to parents to strengthen parenting capacity and literacy skills
High quality care for parents with substance abuse, mental health, or domestic violence problems
Fewer children in poverty
Neighborhoods safe, stable and supportive

**Actions**
Specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome

**Examples**
Program and policy initiatives illustrating how actions have worked elsewhere

**Indicators**
Measures for targeting and monitoring the impact of actions and documenting progress toward the outcome

**Ingredients**
elements of how actions are implemented that make them effective

**Rationale**
Research-based reasons to believe that identified actions are likely to contribute to the desired outcome

**Evidence**
Research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome
**Actions with Examples: Supported and Supportive Families**

**A. Support to parents to strengthen parenting capacity and literacy skills**

Providers of services and supports constantly look for opportunities to strengthen parents in their child-rearing role and to build strong relationships between young children and their parents and other adult caregivers. Providers promote and model effective parenting skills by engaging parents in their homes or other familiar settings, and through evidence-based parent training programs; they help supportive adults (including spouses, kin, and neighbors) participate actively in child rearing.

**EXAMPLES**

- **The Avancé Child and Family Development Program** is a community-based intervention that operates throughout Texas to provide education and support to Latino parents with children under age three in under-served communities. It focuses on parent education, early childhood development, literacy, and school readiness. Parents are taught that they are the first and most important teachers for their children. The nine-month core program operates in housing projects, community centers, and schools. Avancé instructors guide parents through their children’s stages of emotional, physical, social, and cognitive development with special attention to the importance of reading, nutrition and effective discipline. Parents also attend classes in literacy, English and obtaining a GED. [www.avance.org](http://www.avance.org)

- **The Cuyahoga County Early Childhood Initiative** identifies families in need of support and links them to services. It conducts public awareness campaigns to increase understanding of positive child development and administers two home visiting programs for new and at-risk families: Welcome Home provides a one-time universal home visit () at the time of birth for all first-time and teen mothers; Early Start provides extended home visitation program for new parents who need ongoing assistance. [www.cuyahogacounty.us](http://www.cuyahogacounty.us)

- Homeless families receive needed social services as part of their search and placement in permanent housing under California’s **Beyond Shelter Housing First Program**. A case manager continues working with the family for at least six months after the family moves into a new home. [www.beyondshelter.org](http://www.beyondshelter.org)

- Families participating in **Healthy Families Arizona** receive weekly visits from specialists who help them with coping skills, child health and nutrition, early developmental assessments, accessing school readiness programs, and obtaining information on other services. Home-visitors are specially trained in cultural competency, substance abuse, domestic violence, and drug-exposed infants. [www.healthyfamiliesarizona.org](http://www.healthyfamiliesarizona.org)
The Baby College of the Harlem Children’s Zone is a nine-week program of workshops that teach expectant and new mothers about child development and parenting. The course is followed by monthly gatherings to further parenting education and promote mother-to-mother bonding. [www.hcz.org](http://www.hcz.org)

Parent encouragement and education are key features of the community-based Maryland Family Support Centers Network. Parenting classes, parent-child activities, and peer education encourage positive and healthy parenting practices. [www.nccp.org/initiative_17.html](http://www.nccp.org/initiative_17.html)

In the Nurse-Family Partnership, nurse home visitors throughout the United States work intensively with low-income women and their families to improve parents’ ability to care for themselves and their infants and toddlers, thereby preventing child maltreatment and childhood injuries, unintended subsequent pregnancies, school drop out, unemployment, and welfare dependence. [www.nursefamilypartnership.org](http://www.nursefamilypartnership.org)

Baby Steps in Okolona, MS, seeks to ensure the success of all its children by rallying the entire town around its children, and by enhancing parents’ roles in their children’s learning. It was launched by journalist and Okolona native William Raspberry to build on the power of parents to influence their children’s academic success and to teach fundamental skills, such as self-confidence, perseverance, teamwork, and responsibility, that can be taught at home. [www.okolona.org/odfc/babysteps.html](http://www.okolona.org/odfc/babysteps.html)

The Incredible Years Training for Parents is designed to promote emotional and social competence and to prevent, reduce, and treat aggressive, defiant, oppositional, and impulsive behaviors in young children 2 to 8 years old. It targets parents of high-risk children and those displaying behavior problems. It emphasizes parenting skills known to promote children's social competence and reduce behavior problems such as: how to play with children, helping children learn, effective praise and use of incentives, effective limit-setting and strategies to handle misbehavior. [http://www.modelprograms.samhsa.gov/pdfs/model/IncYears.pdf](http://www.modelprograms.samhsa.gov/pdfs/model/IncYears.pdf)

Providers of a wide variety of services and supports use diverse approaches to promote literacy-centered practices at home. Providers encourage parents to read to children daily, have rich conversations with children, and limit TV use. Adult literacy and General Education Degree (GED) programs are offered in many settings to equip parents and informal child care providers to engage children in reading and other cognitively stimulating activities.

**EXAMPLES**

The Harlem Children’s Zone's Harlem Gems program conducts workshops on ways that parents can stimulate children’s cognitive growth through reading and talking. [www.hcz.org](http://www.hcz.org)

Pediatricians who participate in Reach Out and Read emphasize the importance of reading with children. They give families a book at each well-child visit after the child is six months old. [www.reachoutandread.org](http://www.reachoutandread.org)

The Hope Street Family Center offers family literacy programs and training to help parents and child care providers develop the emerging language skills of infants and toddlers. [www.healthychild.ucla.edu/HopeStreetFamilyCenter.asp](http://www.healthychild.ucla.edu/HopeStreetFamilyCenter.asp)
To encourage parents to read with their children, the **Maryland Family Support Centers Network** offer parents GED preparation, tutoring, and literacy instruction guidance. [www.nccp.org/initiative_17.html](http://www.nccp.org/initiative_17.html)

Community groups work with libraries, health and child care providers, places of worship, and community organizations to increase parents' access to books and reading awareness programs.

**EXAMPLES**

- The **Prenatal to Three Initiative** of San Mateo County (CA) promotes early literacy development through close ties to libraries and a local foundation’s child literacy efforts. Home visitors give each family a book, library card application, voucher for a free child T-shirt available at the libraries, and access to a book lending service. Parent support groups and special events are held at libraries. [www.co.sanmateo.ca.us/smc/department/home/0,,1954_194745_194736,00.html](http://www.co.sanmateo.ca.us/smc/department/home/0,,1954_194745_194736,00.html)

- **Ready to Learn Providence**, in conjunction with the Providence Public Library, reaches out to bring under-served families to the library, gives families information about child development, and provides family literacy services. Bilingual outreach workers recruit parents at community events to come with their children to any of 10 library branches for a five- to nine-week program. Parents take courses in child development while their children participate in literacy activities. [www.r2lp.org](http://www.r2lp.org)

- The Hartford School Readiness Council’s **Raising Readers** program, in partnership with the Annie E. Casey Foundation’s Making Connections initiative, the Greater Hartford Literacy Council, and the Maria Sanchez School, develops reading circles within the targeted neighborhoods. Parents receive free children’s books and are encouraged to read them with their children. Parents also learn how to raise open-ended questions that foster discussion about the books. [www.mchartford.org](http://www.mchartford.org)

Funders provide resources to expand the number and reach of high-quality family literacy programs and other efforts to help parents cultivate their children's interest in reading and learning. Funders provide resources for services and supports that help parents balance workforce participation with good parenting.

**EXAMPLES**

- **Even Start**, a federally funded, comprehensive family literacy program, builds on existing community resources to provide a unified program of adult education, parenting education, early childhood education, and interactive parent and child literacy activities. [www.evenstart.org](http://www.evenstart.org), [www.famlit.org/site/c.gjt/WjdMQIsE/b.2013985/k.3373/Even_Start.htm](http://www.famlit.org/site/c.gjt/WjdMQIsE/b.2013985/k.3373/Even_Start.htm)

- The San Mateo County (CA) Health Department’s **Prenatal to Three Initiative** provides home visits, parent support groups, and seminars on child development to low-income pregnant women. The Initiative’s practices are based on pediatrician T. Berry Brazelton’s Touchpoints concepts, which hold that parents who have a “map” of their child’s...
behavioral and emotional development are better equipped to navigate child-rearing challenges.

- The **Los Angeles Department of Water and Power (DWP)**, with 9,000 employees, was one of the first large employers to offer lactation support for employees and their families through its child care services. By promoting breastfeeding as a family issue in a predominantly male company, DWP successfully educated supervisors and employees about breastfeeding. [healthychild.ucla.edu/Publications/documents/slusser.breastfeeding.pdf](healthychild.ucla.edu/Publications/documents/slusser.breastfeeding.pdf)

- The **Vermont Agency of Human Services' Intensive Home Visiting program** provides home visits for families with children under age six who face challenges associated with social isolation, significant physical and emotional problems, family disorganization, personal safety issues, compromised resources, or substance addiction. The home visitor provides direct support and coordinates referrals and support services for the family. [www.healthvermont.gov](www.healthvermont.gov)

- The **Vermont Health Department's Breastfeeding-Friendly Employers program** helps employers adopt breastfeeding-friendly policies in the workplace and formally recognizes employers who do so. [www.healthvermont.gov/family/breastfeed/employer_project.aspx](www.healthvermont.gov/family/breastfeed/employer_project.aspx)

- The **Family Connection** is a collaboration of the Georgia state departments of children and youth services, education, human resources, and medical assistance; the Governor's Office of Planning and Budget; Georgia Academy; communities; and private and civic partners working to serve children at risk. Local collaborative partners receive funds and technical assistance to develop a vision for children and families; assess resources and needs; identify desired results; and develop strategies, benchmarks, resources, and accountability measures to achieve the results. In early 2003 there were 159 Family Connection sites throughout Georgia. [www.gafcp.org/fcnetwork/collsearch.asp](www.gafcp.org/fcnetwork/collsearch.asp)

- The **National Partnership for Women and Families** supports local campaigns to expand the Family and Medical Leave Act and other policies so that they cover more working people and more family needs and include paid leave benefits. [www.nationalpartnership.org](www.nationalpartnership.org)

- The **Ounce of Prevention Fund** is a public-private partnership founded in 1982 with matching grants from the Pittway Corporation and the Illinois Department of Children and Family Services. It uses private funding to leverage public support targeted to:
  - Increasing the quality, comprehensiveness, and reach of health, education, care, and family support programs that promote the healthy development of low-income young children and their families
  - Improving program development and implementation
  - Advocating for policy and system reforms at the local and state level
B. High-quality treatment and follow-up for parents with substance abuse, mental health, or domestic violence problems

Community organizations, institutions, funders, and other stakeholders help families faced with maternal depression, substance abuse, impaired parent-child relationships, child abuse, and domestic violence to easily obtain the services and supports they and their children need, including basic supports, treatment in a safe environment and at appropriate levels of intensity, and help learning to parent in new ways.

**EXAMPLES**

- **California Safe and Healthy Families (Cal-SAHF)** is a home visiting program whose staff address families’ multiple and complex needs related to substance abuse, domestic violence, and mental health. It provides a combination of services and support to improve children’s health and developmental outcomes, reduce the need for child welfare interventions, decrease psychiatric and other medical costs, promote positive parenting, and reduce dependence on public assistance. Families receive home visits supplemented by weekly group meetings for parents and children, help with child care and transportation, and other supports as needed. Multidisciplinary teams that include a licensed clinical social worker or registered nurse, a child development specialist, and a child care aide work with 20 to 25 families at a time. Seven Cal-SAHF programs are funded by a combination of federal (Child Abuse Prevention and Treatment Act) and state funds; many incorporate intensive case management and are linked with family resource centers. casrc.org/projects/completed/calshf.htm

- **Starting Early Starting Smart (SESS)** is a 12-site initiative to support the development of children up to age seven affected by alcohol, other substance abuse, and serious mental health issues. It is a collaboration of the Johns Hopkins Center for the Prevention of Youth Violence, Baltimore City Head Start, and the Marguerite Casey Foundation. Sites include primary health care settings, early childhood programs, and programs designed for Native American tribes and children in foster care. SESS aims to: (1) build a statewide system of behavioral supports for young children and families; (2) increase skills of early childhood staff to help multi-need families; (3) integrate family-focused services into substance abuse and mental health settings; (4) connect children who don’t live with their parents to prevention, treatment, and support services; (5) address the needs of both fathers and mothers affected by substance abuse, violence, and mental health issues; (6) use welfare-related money to promote integrated behavioral and child development services for the most at-risk families and children; and (7) unify TANF, early childhood, substance abuse, mental health, and domestic violence staff. The practice segment of SESS includes staff training, universal interventions, targeted family and child support strategies, and clinical services. www.jhsp.edu/preventyouthviolence/Community/SESS.html

- **The Nurturing Program for Families in Substance Abuse Treatment and Recovery** targets parents of young children who are in substance abuse treatment and recovery and may have current or past mental health issues and/or trauma. The program focuses on the effects of substance abuse on families, parenting, and the parent-child relationship. The approach is designed to enhance parents’ self-awareness and thereby increase
their capacity to understand their children. Recognizing that the parent-child bond may be weakened by periods of physical and/or emotional unavailability, resulting in gaps in parents' knowledge of their children’s experiences, milestones, and growth, the program helps parents re-establish strong connections with their children. The focus throughout the program is on nurturing the parent while expanding the parents' ability to transmit this nurturance to their children. Adaptations of the program have been used in various settings. Selected as a promising prevention program by the Substance Abuse and Mental Health Services Administration (SAMHSA), it is being used by SAMHSA grantees in the Family Strengthening program of the Center for Substance Abuse Prevention.

www.cachildwelfareclearinghouse.org/program/33/detailed

**Exodus**, a program in Compton (CA), combines safe housing with substance abuse treatment for pregnant women or women with infants who have a long history of substance abuse and are at risk of homelessness; 80% also report having been abused. Mothers may have older children with them. Staff include a substance abuse specialist, a clinical psychologist, a child psychologist, and staff experienced in dealing with sexual abuse. Every family has a counselor, case manager, and child development specialist. Young children attend a child development program or a therapeutic center. Families stay between 10 months and two years. Exodus offers families lifetime after-care services and is part of a comprehensive, community-based set of programs for families affected by substance abuse in south central Los Angeles. Explicit strategies for young children (e.g., providing on-site, enriched, therapeutic child care, access to mental health and developmental services, and connections to other early childhood programs) are integrated into intensive residential programs for their mothers, since both the parents and their young children need help. [www.nccp.org/media/cwr00h-text.pdf](http://www.nccp.org/media/cwr00h-text.pdf)

**Operation PAR** (Parental Awareness and Responsibility), serves four Florida counties as part of its mission to “strengthen our communities by caring for families and individuals impacted by substance abuse and mental illness.” PAR Village houses an innovative treatment model that provides up to 18 months of residential treatment for women and their children. Services for children are offered at the PAR Village Developmental Center, a licensed therapeutic preschool for children whose mothers are in residential substance abuse treatment at PAR Village. The goal of the center is to interrupt multi-generational chemical dependency and decrease the developmental differences that exist between the children and their peers. In another site, Operation PAR provides outpatient services in a community-based setting to pregnant and parenting women who have a history of substance abuse, plus therapeutic child development interventions. [www.operationpar.org/about.htm](http://www.operationpar.org/about.htm)

**PROkids**, at Connecticut Children’s Medical Center in Hartford, provides comprehensive primary care linked with home visitation, outreach, and advocacy for mothers affected by substance abuse and their children from birth through age three. PROkids uses the Empathic Care model, a therapeutic 12-point intervention. Staff, including a clinical psychologist, a social worker, infant mental health promoters (home visitors), and a pediatrician, work as a team. The goals are to promote positive infant mental health by strengthening the attachment relationship and ensuring the child's safety and well-being. The mother’s relationship with the newborn infant becomes a powerful motivator for recovery and change (McLaren, 2006).

[www.ccmckids.org](http://www.ccmckids.org)
Agencies that see families routinely learn to recognize children and families at greatest risk; staff have the training, consultation, support, and community connections to mobilize the services these parents and children need.

**Examples**

- **Day Care Plus** in Cleveland is a highly respected (and relatively rare) parent-driven early intervention program for the most challenged and challenging children and families. The Parent Intervention Centers of the Positive Education Program joined with the local child care resource and referral agency to develop this consultation and outreach program for local child care centers. The goal is to reduce child care staff turnover, reduce the number of children at risk of being expelled, and help staff improve program quality. Blended funding for the initiative comes from the local child care resource and referral agency, the county mental health board, and the Parent Intervention Centers. The model relies on a train-the-trainer approach, working intensively with a cohort of child care programs for a limited period, followed by decreased but ongoing support. Family advocates are available to assist the parents of participating children. Recognizing the disconnect between the early childhood community and behavioral services professionals, Day Care Plus works to build relationships between child care staff and staff at substance abuse and mental health treatment agencies. [www.pepcleve.org/serv_consult_daycareplus.html](http://www.pepcleve.org/serv_consult_daycareplus.html)

- The **Strengthening Families through Early Care and Education** works with seven states to implement policies and practices available through collaboratives of the early childhood, child abuse prevention, and child protective services sectors. State-level learning partnerships provide information, training, and other incentives to change state policy, form new links between early childhood and child protection settings, and enhance training and support for staff of early childhood programs. [www.cssp.org/doris_duke/index.html](http://www.cssp.org/doris_duke/index.html)

- The **Hilton/Early Head Start Training Program (H/EHSTP)** is supported by a partnership of the U.S. Department of Health and Human Services Head Start Bureau, the Conrad N. Hilton Foundation, and the California Institute on Human Services (CIHS) at Sonoma State University. The program provides specialized training and ongoing support to Early Head Start (EHS) and Migrant and Seasonal Head Start (MSHS) programs. H/EHSTP focuses on developing the skills of EHS- and MSHS-based teams of staff, parents, and community partners to improve care and services for infants and toddlers with disabilities and their families. [www.specialquest.org](http://www.specialquest.org)

- **Healthy Steps for Young Children**, initiated by The Commonwealth Fund and co-sponsored by other private foundations, the American Academy of Pediatrics, and medical care facilities, offers expanded services and information to parents of young children in the context of ordinary well-child medical care. The initiative focuses on increasing the time families spend with health and child development specialists, strengthening relationships between families and health care providers, and linking families with resources to identify and prevent problems at an early stage. [www.healthysteps.org](http://www.healthysteps.org)

- **Free To Grow (FTG)** is a national demonstration program testing an innovative approach to two closely related public health problems—substance abuse and child abuse. Free To Grow was created by a partnership between National Head Start Bureau and the Robert Wood Johnson Foundation, seeking to identify the best ideas and practices in the field of prevention in general, and substance abuse and child abuse prevention in particular, and apply
them to the crucial early years. Free To Grow brings together broad-based community partners to support locally tailored, integrated approaches for strengthening families and communities. Program strategies target the young child’s overall environment, not the child. Today, there are 15 FTG sites across the country. These sites work with local funding and program partners, including school systems, law enforcement, and substance abuse and mental health treatment programs, to develop integrated family- and community focused prevention approaches that fit the local community context. [www.freetogrow.org](http://www.freetogrow.org)

Policymakers ensure that providers of services for parents who are depressed or involved with drug abuse or domestic violence pay attention to the needs of the children of the parents they treat and integrate intensive early childhood and family-focused services into substance abuse and mental health settings.

**EXAMPLES**

- **Project BEFORE** (Bridging Empowers Families to Overcome Risks and Excel), based in rural Kansas, targeted young children under age six and their caregivers who either had, or were at risk of having, a substance abuse or mental health problem. Project BEFORE combined a home visiting/case management strategy with individualized supports to families, such as strengthening a family’s informal support network or connecting a mother with a 12-step program. Each family designated key members of its case management team, which typically included the parent(s), a home visitor, an early childhood specialist, and one or two others (such as a supportive neighbor, or a mental health or vocational counselor). Staff training was built on the Healthy Families America home-visiting curriculum, supplemented by mental health and substance abuse skills and strategies. Researchers found that even as families sought to address their special challenges, they continued to confront the basic pressures that all low-income families face: access to housing, adequate income, health services, transportation, and child care. [www.nccp.org/media/cwr00h-text.pdf](http://www.nccp.org/media/cwr00h-text.pdf)

- **The Substance Abuse and Mental Health Services Administration (SAMHSA)** identified lack of knowledge about how to integrate a focus on parenting and young children into substance abuse treatment and mental health settings as a problem. SAMHSA made eight grants between 1995 and 1998 to substance abuse treatment or prevention and mental health programs to improve young children’s mental health, social development, and general family functioning. One of these grants went to Project BEFORE. [www.samhsa.gov](http://www.samhsa.gov)

- **The Children’s Upstream Project (CUPS)** is the state of Vermont’s system of behavioral supports for young children and families. (Vermont teachers estimate that about 30% of the state’s young children lack emotional skills and others needed to succeed in school.) Funded by a Children’s Mental Health Services grant, CUPS is the nation’s first statewide early childhood mental health initiative. It includes prevention and treatment and engages the early childhood community and multiple systems in planning and implementation. CUPS builds on existing regional early childhood planning networks by promoting new partnerships that link the early childhood community with parents and with planners and providers from mental health, substance abuse, domestic violence, and child health agencies. Although the lead agency is the mental health agency, CUPS’ state-level outreach team involves many agencies. CUPS has seeded training for family workers, child care providers, mental health workers, and TANF
workers. It also has arranged for mental health professionals to become the core providers if families being served by home visitors through Vermont’s Healthy Babies program need more intensive services. www.nccp.org/publications/pdf/text_389.pdf

**C. Fewer children in poverty**

Community-based programs help low-income families obtain the financial supports they are entitled to and the opportunities they need to become self-sufficient. With the support of policymakers, they mobilize multiple sources of income for parents and other caregivers of young children who lack employment.

**EXAMPLES**

* The **Providence Asset Building Coalition (PABC)**, a program of Making Connections-Providence, ensures that low-income families apply for and receive the Earned income Tax Credit. The coalition of community groups, financial institutions, and community residents trains volunteer tax preparers who offer their services at community based-organizations throughout Providence. www.mcprovidence.org/matriarch/default.asp

* **New Economics for Women (NEW)** in Los Angeles was founded to help women overcome poverty and achieve personal and family prosperity. NEW applies a holistic approach to family needs, beginning by helping participants find stable, safe, and affordable housing. Participants are encouraged to enroll in NEW’s programs, including its comprehensive management program, financial literacy programs, baby care, wellness programs, Para Mi Futura Family Resource Center services, and after-school learning centers. Families may use as many or as few services as they like. NEW also supports participants’ entrepreneurial ventures through its NEWConnect Business Growth Center. www.neweconomicsforwomen.org/home.html

National, state, and regional programs connect inner-city residents to good jobs.

**EXAMPLES**

* The **STRIVE** job readiness program helps people who have significant barriers to employment to find and retain good jobs by combining attitudinal training with fundamental job skills. It promises lifetime access to developmental and support services at no cost to participants or employers. www.strivenational.org

* The **New Orleans Jobs Initiative (NOJI)** links unskilled inner-city residents to jobs that pay family-supporting wages, offer career-ladder opportunities, and provide benefits. NOJI focuses on the job growth sectors of manufacturing, construction, health care, and office work, which pay high wages to entry-level workers. NOJI has forged relationships among low-income residents, community organizations, business leaders, churches, and community college administrators. www.doleta.gov/usworkforce/communityaudits/docs/Files%20for%20CA%20Website/LA-New%20Orleans/LA-New%20Orleans-Other-Industry%20Concept%20Paper.pdf
The **St. Louis Regional Jobs Initiative (RJI)** sees MetroLink, the light rail system that runs through the city’s urban core, as the ticket to connecting under-employed workers with good jobs. RJI recruits participants along the public transit corridor and plans a campaign to advocate for light rail, bus service, and reverse-commute programs. RJI works to increase both the supply and demand for skilled labor in St. Louis; to strengthen links among low-skilled youth and adults, employers, and training programs; to help hard-to-employ people find family-sustaining jobs; and to provide employers with a workforce that can keep their businesses productive.


The **One Rhode Island Coalition** comprises more than 100 labor, religious, social service, public advocacy, and philanthropic organizations. The coalition developed a legislative platform of supports in housing, income, access to jobs, and child care intended to reduce poverty, hunger, and homelessness. The coalition organizes lobbying and direct action to get the reforms passed and has succeeded in increasing child care subsidies, protecting threatened public benefits, and passing the first state Earned Income Tax Credit for low-income families.

[www.povertyinstitute.org](http://www.povertyinstitute.org)

National and local programs encourage and support low-income residents’ efforts to create and maintain small businesses.

**EXAMPLES**

The **Center for Community Change** provides onsite assistance to grassroots groups working to launch businesses and create new jobs. [www.communitychange.org](http://www.communitychange.org)

A range of programs is available to enhance financial literacy, money management, and asset building.

**EXAMPLES**

The **Alternatives Credit Union** in Ithaca, New York, uses education and integrated services and products to help participants move from being "transactors" to being savers, borrowers, owners, and investors. [www.alternatives.org](http://www.alternatives.org)

**Get Checking** is a national financial education program designed to help consumers establish a primary banking relationship and gain access to mainstream financial services. Get Checking is sponsored by eFunds Corporation and the University of Wisconsin Extension Service. It offers six hours of training in checking and savings accounts. A certificate allows completers to open a qualifying checking or savings account at a participating financial institution. Twenty-five Get Checking programs are now offered throughout the United States, and more are added monthly. [www.getchecking.org](http://www.getchecking.org)

**Money Smart** is a training program that helps adults develop financial knowledge and confidence and learn how to use banking services effectively. It can help banks fulfill part of their Community Reinvestment Act obligations. [www.fdic.gov/consumers/consumer/moneysmart](http://www.fdic.gov/consumers/consumer/moneysmart)
D. Neighborhoods safe, stable, and supportive

Community policing and neighborhood-building activities promote neighborhood safety.

**EXAMPLES**

- The **Chicago Alternative Policing Strategy (CAPS)** is a community policing model that relies on proactive, prevention-oriented, neighborhood-based strategies to solve problems. Trained officers who have intentionally small beats get support from city agencies so they can respond to issues that concern residents, such as graffiti and abandoned cars. Community involvement and cooperation is fostered through “beat meetings” where residents, district advisory committees, and police discuss concerns and set priorities.  
  [www.ncjrs.org/pdffiles1/nij/189909.pdf](http://www.ncjrs.org/pdffiles1/nij/189909.pdf)

- One goal of San Jose’s **Mayfair Improvement Initiative (MII)**, originally funded by the William and Flora Hewlett Foundation, is to create a safer and more pleasant neighborhood for residents by neighborhood clean-ups, sidewalk repairs, community garden projects, and renovation of community centers. MII also arranges for street crossing aids and streetlights.  
  [www.mayfairneighborhood.org](http://www.mayfairneighborhood.org)

- The **East Bay Asian Youth Center**, an Oakland Making Connections community partner, has organized a 23rd Avenue Neighbors group that conducts clean-up days and works to make the neighborhood safer.  
  [www.ebayc.org](http://www.ebayc.org)

- The **LISC Community Safety Initiative** helps local groups build partnerships between police, community development corporations, and local residents to create safer neighborhoods.  
  [www.lisc.org/section/aboutus/mission](http://www.lisc.org/section/aboutus/mission)

Efforts to promote home ownership and establish social connections make neighborhoods more stable.

**EXAMPLES**

- **Five Oaks and Dunbar Manor Communities** (Dayton, OH) reorganized an urban grid of residential streets to create “defensible space” in the neighborhood. The Dayton experience showed that a high level of citizen participation is crucial at every stage and that efforts to make neighborhoods more stable should also involve code enforcement, special police attention, and first-time homeownership initiatives.  

- Oakland-based **Lao Family Community Development Inc.** used a $35,000 seed grant from the Annie E. Casey Foundation to start a Multilingual Homebuyers Center in July 2002. Its purpose is to help low- to moderate-income immigrant and refugee families with limited English proficiency buy their first house in this country. In its first 18 months, the center helped two dozen families buy houses and had another four dozen actively looking.  
  [www.laofamilynet.org](http://www.laofamilynet.org)
A central mission of the Bethel New Life community development corporation is to provide high-quality, affordable, energy-efficient housing for Chicago’s west side residents. Bethel’s efforts include expanding assisted-living housing, developing affordable multi-family condominiums, and providing a housing facility for the formerly homeless. Bethel’s Supportive Housing Programs offer resources and extensive support services in addition to secure living accommodations. www.bethelnewlife.org

A variety of community-building strategies contributes to neighborhood supportiveness, a sense of belonging, and improved economic prospects for the neighborhood’s residents.

**EXAMPLES**

- The Dudley Street Neighborhood Initiative (DSNI) is collaborating with several city and private agencies to build a community green house for the Roxbury/North Dorchester area of Boston. The state-of-the-art greenhouse is intended to convert a Brownfields site into an environmentally friendly business that will employ local residents. www.dsni.org

- Chatham Estates in Chester, Pennsylvania, is a 150-unit public housing program with a nationally recognized model for providing support services and case management to residents. The program’s One-Stop Shop helps families move to self-sufficiency through employment services, wellness/fitness programs, computer education, recreational programs for children, and programs to prevent domestic violence. www.abtassoc.com/attachments/Chatham_Estates_CS_R1.pdf
**Indicators: Supported and Supportive Families**

1. More parents who regularly read to their children

**INDICATOR DEFINITION**

The proportion of parents in a specified population who self-report that they have read to their children within the past seven days (National Household Education Survey, 1991).

**SIGNIFICANCE**


2. More families connected to supportive networks and to needed services

**INDICATOR DEFINITION**

The percent of families in a specified population who perceive they are able to connect to both informal and formal supports and services that enable them to best raise their children.

**SIGNIFICANCE**

Services and supports that help families obtain basic necessities like food, housing, and medical care, that reduce social isolation, and that enhance protective factors all contribute to children’s overall well-being and increase families’ abilities to deal with a range of issues. Families connected to supportive networks and services are strengthened in their parenting and better able to expose their children to activities and educational opportunities that will help them succeed (Shonkoff & Phillips [eds.], 2000; Child Trends, 2002; Dept. of Health & Human Services, 1999; Korenman, Miller, & Sjaastad, 1995; Downey & Coyne, 1990; Zaslow, et al., 2001; Fenichel & Mann, 2002; Radke-Yarrow, et al., 1992; Halsall & Green, 1995; Waddell, Shannon, & Durr, 2001; Mueller & Patton, 1995; Sheldon, 2002; Adamakos, et al., 1986; Burchinal, Follmer, & Bryant, 1996; Hashima & Amato, 1994; Burchinal, Peisner-Feinberg, & Bryant, 1986; Jennings, Stagg, & Connors, 1991; Salzinger, Kaplan, & Artemyeff, 1983).
3. Lower substantiated rates of child abuse and neglect

**INDICATOR DEFINITION**

The number of substantiated or confirmed cases of child abuse reflects the number of cases in which investigation determines the presence or risk of maltreatment as a proportion of a specified population (Administration on Children, Youth & Families, 2001).

**SIGNIFICANCE**

Child abuse and neglect are linked to language deficits, reduced cognitive functioning, social and behavioral difficulties, and attention deficit disorders. The incidence of child abuse and neglect is reduced when protective factors (such as social support, high quality reliable out-of-home child care, access to treatment of depression, decent housing) are strengthened and risk factors (such as poverty, social isolation, absence of supportive adults, violence in the home or neighborhood) are ameliorated. (Augoustinos, 1987; Eckenrode, Laird, & Doris, 1991; English, 1998; Fantuzzo, 1990; Guterman, 2001; Hart, S Bingelli, & Brassard, 1998; Kolko, 1992; National Research Council, 1993; Shonkoff & Phillips, [eds.], 1999; Wolfe & Mosk, 1983). While this indicator is widely available and frequently used, it must be used with caution, as rates of involvement with the child welfare system may be skewed by changes in policies or procedures, and media reports of child trauma.

4. Fewer families below the poverty level

**INDICATOR DEFINITION**

The percent of children under age 5 whose families have incomes below the poverty line and whose families live in extreme poverty (50 % of the poverty line) as a proportion of the total number of children in a specified population (Annie E. Casey Foundation, 2002).

**SIGNIFICANCE**

Child poverty is linked with a range of negative outcomes including diminished academic achievement, more health problems and lower nutrition, and lower overall well being. Children from extremely poor families tend to have lower cognitive skills including reading, problem solving, and concentration ability, and experience greater developmental losses during the non-academic year (Brooks-Gunn, Britto, & Brady, 1999; McLoyd, 1998; Moore & Redd, 2002; Seccombe, 2000; Stipek & Ryan, 1997)
5. Fewer children who moved more than once in past year

**INDICATOR DEFINITION**
The number of children whose families have moved more than once within the past 12 months as a proportion of the specified population.

**SIGNIFICANCE**
Residential mobility affects children’s social capital and ability to learn because of disruptive absences from school, discontinuity of teaching styles, and insecure social relationships. Families that move frequently may be less successful at developing social ties and may be unfamiliar with available resources to help their children (Aquilino, 1996; Case & Paxson, 2006; Hango, 2006; Pettit & McLanahan, 2003; Wood, et al., 1993).

6. More adults who report their block is safe enough for children to play outside

**INDICATOR DEFINITION**
The number of adults who report on a survey that they feel their block is safe enough for their children to play outside as a proportion of a specified population (Administration for Children and Families, 2000).

**SIGNIFICANCE**
Perceived neighborhood safety affects child development because it affects parents’ willingness to use available resources such as parks, libraries, and children’s programs. When parents feel connected to their neighborhood, their children benefit from community resources and collective socialization opportunities (Brisson & Usher, 2007; Lipsey & Wilson, 1993; Shonkoff & Phillips, 2000; and Singer, et al., 1995).
**Ingredients: Supported and Supportive Families**

Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because how interventions are implemented and how services are provided is as important as whether they are provided. For example, when home visitors are able to develop and maintain respectful relationships with clients, the chance that home visits will improve outcomes goes up significantly.

Key Ingredients are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Key Ingredients that apply to all goals in this Pathway can be found in Appendix 4. They include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

Key Ingredients that apply specifically to GOAL 3: Supported and supportive families appear below. They include the Ingredients of effective

- Family Support Services and Programs
- Home Visiting Services
- Parent Education Programs
- Other Basic (Primary) Services
**INGREDIENTS: Family Support Services and Programs**

*Staff of family support centers work together with families* in relationships based on equality and respect. Staff enhance families’ capacity to support the growth and development of all family members.

*Programs encourage families to serve as resources* to their own members, to other families, to programs, and to communities. Practitioners work with families to mobilize formal and informal resources that support family development.

*Programs affirm and strengthen families’ cultural, racial, and linguistic identities* and enhance their ability to function in a multicultural society.

*Programs are embedded in their communities* in ways that contribute to the community-building process.

*The knowledge and skills of staff, and the quality of implementation, match the magnitude of the challenges* being addressed.

*Programs advocate for services and systems* that are fair, responsive, and accountable to the families served.

*Programs model the principles of family support* in all program activities, including planning, governance, and administration.

**INGREDIENTS: Home Visiting Services**

*Sources of prenatal care make available well-trained, supervised adults* who offer home support during pregnancy, childbirth, and the child's early life.

*Home visits are of sufficient duration, frequency, and intensity* to respond effectively to family strengths, crises, and care-giving challenges.

*Home visiting programs make special provisions to reach and retain the highest-risk families*, including those involved in abusive relationships or substance abuse and those with severe depression or impaired parent-infant relationships.

*Home visiting programs develop a mix of training, supervision, support, and consultation* that reflect the purpose of the visits and the visitors' sophistication and experience. They have strong capacity for supervising home visitors and providing them with ready access to consultation. Programs that use paraprofessionals emphasize intensive pre-service training and ongoing support, supervision, and consultation.
**Programs make connections for families** among home visiting, peer support, family support centers, health and mental health services, child care and preschool programs, and specialized services.

**The relationship between the home visitor and the families served is considered crucial** to the home visitor’s effectiveness.

**INGREDIENTS: Parent Education Programs**

Effective parent training and education programs are interactive, not didactive.

Effective parenting programs vary with the very different parent and child needs associated with the child’s age, and help parents understand the different expectations appropriate to different developmental stages.

Effective parent training and education programs focus on parent-child interactions and help parents to respond in clear, predictable ways, including around play, limit setting and monitoring strategies, praise and rewards, and handling misbehavior, including nonviolent discipline techniques.

Duration of effective parent education programs is long enough to engage participants and to bring about behavioral change; some model programs require participation lasting at least 25 hours for group sessions and 15 hours for individual sessions.

**INGREDIENTS: Other Basic (Primary) Services**

**NOTE:** Basic or primary services include education, health care, housing, training in work skills and life skills, income and employment supports, parent education, literacy development, safe parks, church and volunteer affiliations, and recreational and cultural opportunities.

Primary service providers, systems, and institutions are family-friendly, supportive, accessible, trusted, and responsive to neighborhood residents.

Primary services and supports incorporate family support and mental health principles, especially those focused on relationship-building, along with clinical consultation and outreach.

Primary service providers have capacity to identify the need for specialized services and link children and families to them, including services that respond to health, mental health, substance abuse, and family interaction problems.
Rationale: Supported and Supportive Families

A stable, secure, nurturing relationship with one competent, caring adult is the most important factor in helping young children to be ready for school, succeed in school, and overcome later obstacles. When adults read to young children and engage them in rich conversations, children develop larger vocabularies, learn to read more easily, and grow stronger emotionally.

Many new parents (especially in high-risk families) are hampered in their parenting by lack of time, resources, and supportive environments. Nonetheless, many can be helped to develop responsive, nurturing parent-child relationships, and many can be helped to expand their own literacy skills. Services that respond to family risk factors, especially parents’ economic security and neighborhood stability, also enhance parents’ capacity to support their children’s healthy development.

Research shows that it is important to provide support to parents to strengthen their parenting capacity and literacy skills because:

Child-caregiver relationships are the most important component of supportive social and cognitive environments; stable, secure, nurturing relationships are a central feature of healthy human development and can help young children overcome many risk factors (National Research Council, 2000). Young children who have warm, supportive relationships with their mothers show greater academic competence in school and display better classroom conduct and work habits (Thompson, 2002). The converse is also true: A disturbed relationship between the primary caregiver and the child is one of the most significant risk factors for later poor outcomes (Solchany & Barnard, 2001).

"Cognitive stimulation within the home appears to be particularly important for children’s cognitive development. The more positive home learning environments of high- vs. low-income children account for as much as half of the high- vs. low-income gap in test scores of pre-school children and as much as one-third of the gap in the achievement scores of elementary school children" (Duncan & Magnusen, 2003).

Secure, stable, supportive relationships with caring adults in the family and community contribute significantly to children’s healthy brain development. Such relationships assure that young children are adequately nourished; protected from dangerous illnesses, exposure to toxins, and hazards that can lead to preventable injuries; provided with preventive health check-ups; protected from excessive stress; and afforded predictable daily routines that convey a sense of security (Shonkoff & Phillips [eds.], 2000). The quality of the mother-infant relationship can influence areas of the brain that regulate social and emotional function. The nature of the mother-infant relationship also can have long-term influences (into adulthood) on how the body copes with stress, both physically and emotionally. (National Scientific Council on the Developing Child, 2006).

Interventions that help parents and children form relationships that are warm, nurturing, individualized, responsive in a contingent and reciprocal manner, and characterized by "good
fit" promote optimal child development (National Research Council, 2000). Such interventions can help parents understand their child’s unique characteristics and build a mutually rewarding relationship—results that aid the child’s development and give parents a sense of well-being. Such interventions also can buffer the cumulative burden of multiple risk factors and sources of stress that compromise the caregiver’s ability to promote sound health and development (National Research Council, 2000).

**Support provided to parents at the time a woman becomes pregnant and when she gives birth** is an important way of promoting school readiness and academic achievement and preventing child abuse (Daro, 2006).

**Families with two married parents provide a more stable home environment**, have fewer material hardships (such as insufficient food, inadequate housing, or lack of utility services), and live fewer years in poverty than single-parent families (The Urban Institute, 2002). Conversely, children born to unmarried mothers in single-parent households are likely to have lower educational attainment than their counterparts in dual-parent households (Aquilino, 1996). Households in which parents are cohabiting are less stable than households in which parents are married (Axinn & Thornton, 1992).

**Parental leave policies in the United States seem troubling** when viewed against (a) extensive scientific evidence of the importance of establishing a strong, healthy mother-infant bond beginning in the early months of life; and (b) concerns about the potential adverse effects on very young babies of early and extended experiences in out-of-home child care arrangements of highly variable quality. Current policies ensure a maximum of only three months of unpaid leave for parents of newborns, and they cover only about half of American workers (National Scientific Council on the Developing Child, 2004). Extending the length and coverage of leave currently provided under the Family and Medical Leave Act would provide the critical necessities of time and economic security that parents need in order to develop nurturing relationships with their children (Waldfogel, Higuchi, & Abe, 1999).

**Emerging data suggesting that maternal employment in the first six months of an infant’s life may be associated with later developmental problems raises serious concerns** about the potential harm of mandated maternal employment and the limited availability of affordable, high-quality child care, particularly for the already vulnerable babies of low-income women on public assistance (National Scientific Council on the Developing Child, 2004). Federal and state welfare policies reflect a wide gap between what we know about the importance of early family relationships and actions that could promote the health and well-being of the nation’s most vulnerable young children. For mothers receiving welfare support under Temporary Assistance to Needy Families (TANF), federal rules require that states impose work requirements of 30 or more hours per week. About half of the states do not exempt mothers of children less than one year old, and some states permit mandated maternal employment beginning a few weeks after a baby’s birth (Duncan & Chase-Lansdale, 2002; Huston, 2002).

**Reading to and with children helps to develop children’s imagination, creativity, and motivation to read**, which in turn helps them do better in school (National Education Association, 2002). Early interactions between adults and children around books also have an important positive influence on children’s emotional development (Halsall & Green, 1995; Kagan, Moore, & Bradekamp, 1995; Bus, van Ijzendoorn, & Pellegrini, 1995). Children who are exposed to reading and writing prior to school and live in homes where
reading and writing are common and valued have a greater probability of success with reading as they begin school (Halsall & Green, 1995).

Later reading proficiency is causally related to the extent of pre-literacy skills and experiences, including: pretending to read and write before age 3, reciting nursery rhymes by age 3 or 4, naming all the letters by age 5, and having valued adults read books to children and engage them in substantive conversations (Regalado, et al., 2001). Children of parents who interact with their children while reading (i.e., asking questions, relating similar true-life stories) learn to read more easily than other children (Halsall & Green, 1995). Literacy levels at kindergarten are a good predictor of reading ability throughout a child's educational career (Whitehurst, et al., 1994).

The ability to count the number of objects in a set, and similar early mathematical knowledge, is essential for the later development of mathematical operations and problem solving (Kagan, et al., 1995). Sorting, classifying, and comparing materials, and the ability to determine relationships between objects, events, and people, require the kind of complex thinking essential for the development of mathematical operations and problem solving (Kagan, et al., 1995).

Family literacy programs can enhance children's cognitive development by educating parents about the role of the parent teacher (Hayes, 1996; Nickse, 1993). Preschool children who attend family literacy programs have been widely shown to enjoy being in school with their parents. Teaching children to like learning and the educational process improves the chances of children achieving higher levels of educational attainment (Hayes, 1996). When mothers improve their own literacy skills, they increase in-home literacy activities with their children (Lewis & Piak, 2001).

Research shows it is important to assure high-quality treatment and follow-up for parents with substance abuse, mental health, or domestic violence problems because:

Maternal depression and other mental health problems, substance abuse, and domestic violence have a serious negative impact on a mother's ability to nurture, support, and provide structure for her young children. A substantial body of research suggests a high incidence of these conditions among low-income mothers. Children whose mothers are depressed or involved with substance abuse or domestic violence have lower levels of academic achievement, more behavior problems, lower levels of social competence, and poorer physical health. They are most vulnerable to developmental delays, failure to thrive, lack of school readiness and school success, health problems, and other difficulties that significantly compromise their innate resiliency and ability to succeed at school and to negotiate critical developmental milestones.

Young children are emotionally vulnerable to the adverse influences of parents’ mental health problems and family violence. One of the best-documented vulnerabilities is the negative impact of a mother’s clinical depression on her young children’s emotional development, social sensitivity, and concept of themselves—effects that have been demonstrated in both developmental research and studies of brain functioning. Young children who grow up in seriously troubled families, especially those who are vulnerable temperamentally, are prone to developing behavioral disorders and conduct problems (Dawson
Rationale

Maternal depression and co-occurring conditions, such as substance abuse and domestic violence, have a serious negative impact on a mother's ability to nurture, support, and provide structure for her young children. A substantial body of research suggests a high incidence of maternal depression among low-income mothers. Approximately half of African-American single mothers report depressive symptoms (Onunaku, 2005). Nearly half of mothers of Early Head Start children (48%) were found to be depressed at the time of enrollment (Love, et al., 2005).

Children whose mothers are depressed have lower levels of academic achievement, more behavior problems, lower levels of social competence, and poorer physical health. They are most vulnerable to developmental delays, failure to thrive, lack of school readiness, physical problems, and other difficulties that significantly compromise their innate resiliency and ability to successfully negotiate crucial developmental milestones (Onunaku, 2005).

Depression, attachment difficulties, and post-traumatic stress are prevalent among mothers living in poverty. When undiagnosed and untreated, those conditions undermine mothers' development of empathy, sensitivity, and responsiveness to their children—often leading to poorer developmental outcomes for the children (National Research Council, 2000).

Research shows it is important to reduce rates of children in poverty because:

Children who experience poverty before age 5 have lower cognitive skills (e.g., reading, number skills, problem solving, creativity, memory) than children living above the poverty line (Stipek & Ryan, 1997). Conversely, small gains in family income and assets have been shown to improve cognitive development in children (Dearing & McCartney, 2001).

Children in poor families have more physical health problems and worse nutrition than their non-poor counterparts (Brooks-Gunn, et al., 1999). Children from socio-economically disadvantaged circumstances are at greater risk of emotional and social difficulty and are therefore in greater danger of problems when they reach kindergarten (Brooks-Gunn, Duncan, & Aber [eds.], 1997).

Family income in early childhood matters for children's academic achievement (Duncan & Magnusen, 2003), particularly for children in low-income families. Children who experience poverty before age 5 have fewer total years of schooling, more school failure, and more dropout (McLoyd, 1998). Children in poor families score lower on standardized tests of verbal ability (Brooks-Gunn, et al., 1999).

Low-income parents are at a greater risk of mental health problems that can affect the emotional development of their children. Poverty creates special...
stresses that threaten positive interactions with children, and punitive or otherwise negative relationships may result (National Research Council, 2000). Job loss can result in mental health problems and can disrupt or dissolve a previously stable family relationship. Job loss also has been linked to child abuse (Price, et al., 1998).

**Parental employment seems to have a positive effect on outcomes for children,** especially for low income families headed by single mothers, where "the associations between maternal employment and children's cognitive and social development appear to be positive" (Morris, et al., 2001).

Research shows it is important to make neighborhoods safe, stable, and supportive because:

**Greater neighborhood safety, stability and supportiveness can reduce exposure to the violence that puts children at higher risk** for psychiatric problems, aggression, emotional distress, immature behavior, and poor school performance. Neighborhood safety and stability can reduce the some of the stresses that interfere with good parenting (Jenkins & Bell, 1997; Singer, et al., 1995; Zuckerman & Kahn, 2000).

**Neighborhood conditions that increase stress, such as crime and drug selling, may directly affect parents' ability to nurture and protect their children** by creating anxieties that interfere with good parenting (Furstenburg & Hughes, 1994; Korbin, 1994). In poor communities, the perception of danger has a clear effect on the interactions of families and neighbors. Families are reluctant to gather in parks and playgrounds or venture out after dark with children, and neighbors limit interactions among each other out of fear for personal safety (*Kids Count Data Book*, 2000). Perceived neighborhood safety is important for child development since it affects the willingness of parents to take advantage of resources such as parks, libraries, and children's programs (National Research Council, 2002). Parents in unsafe neighborhoods may protect their children by restricting their movement (Lipsey & Wilson, 1993), which may affect the child's cognitive stimulation, physical fitness, and ability to establish a sense of autonomy (Osofsky, 1995).

"**Networks of friends are associated with reduced crime and social disorder.** When residents form local social ties, their capacity for community social control is increased because they are better able to recognize strangers and more apt to engage in guardianship behavior against victimization" (Skogan, 1986). "Informal socializing with neighbors in the building, along with strong pro-social norms and participation in the residents' council, is associated with better building conditions and lower levels of crime than buildings with less social capital" (Anderson & Milligan, forthcoming).

**Residential stability promotes a variety of social networks and local associations.** "At the individual level, length of residence has a positive relationship with local friendships, attachment to the community, and participation in local social activities. At the community level, residential stability has significant contextual effects on an individual's local social ties and participation in local social activities" (Sampson, 2000).

**Home ownership is positively linked** to family stability, improved property maintenance, neighborhood stability, and increased civic participation (Pew Partnership for Civic Change, 2001). Home ownership can provide improved levels of neighborhood stability and community participation (Pew Partnership for Civic Change, 2001, citing Rossi & Weber,
Community policing promotes greater involvement on the part of residents in the life of their neighborhood by establishing relationships between police and communities in various crime-reduction and crime-prevention initiatives. "One of the major goals of community policing is for the police to spark a sense of local ownership over public space and thus greater activation of informal control" (Sampson, 2000, citing Moore, 1992).
Evidence: Supported and Supportive Families

A. Support to parents to strengthen parenting capacity and literacy skills

Home visiting programs have produced evidence of a range of positive effects for both mothers and children. The fact that these effects are not uniform or universal should not be surprising, since “home visiting” is fundamentally only a delivery mechanism, bringing into homes a wide range of services and supports, of varying durations and beginning and ending at different stages of development, varying in content and quality, and utilizing many kinds of skills and relationships.

- The Nurse-Family Partnership is the most clearly designed and rigorously evaluated home visiting program now in operation. Registered nurses visit weekly for the first month after enrollment (ideally, visits begin early in the second trimester) and then every other week until birth. Visits are weekly for six weeks after the baby is born and then every other week through the child’s first birthday. Visits continue every other week until the baby is 20 months old. The last four visits are monthly until the child is two years old. Randomized controlled trials of the model were conducted with three diverse populations, beginning in Elmira (NY), 1977; Memphis, 1987; and Denver, 1994. All three trials targeted first-time, low-income mothers. The following program effects have the strongest evidentiary foundations because they were found in at least two of the three trials (Olds, 2002):

  - Improved prenatal health
  - Fewer childhood injuries
  - Fewer subsequent pregnancies
  - Increased intervals between births
  - Increased maternal employment
  - Improved school readiness

Positive effects documented by other programs include:

- **Less depression and more positive mother-child interactions** among mothers who lacked social skills and had few social supports but received home visits from the Clinical Nursing Models Project in Seattle, Washington, beginning in their second trimester of pregnancy and continuing through the child’s first birthday (Zero to Three, 1999).

- **Less depression and anxiety, better life management skills, better understanding of their child’s needs, and an appropriately stimulating home environment** among first-time mothers at risk for parenting problems who participated in the STEEP (Steps Toward Effective, Enjoyable Parenting) program. STEEP home visits began in the second trimester and continued through the child’s first year to help the mother prepare for the baby’s needs and develop realistic expectations about parenthood (Zero to Three, 1999).
• **Mothers more likely to breastfeed their babies, have them immunized, and provide stimulating care** among participants in the Maternal and Infant Health Outreach Worker Program (www.mihow.org), a home visiting program for pregnant women and families with infants in the Southern U.S. (Clinton, et al., 1988).

• **Higher IQ scores of children at age two**, compared to a control group, among participants in the Parent-Child Development Center (Houston, TX), an intervention consisting of home visits and parent education for low-income Mexican-American families during their child's first two years. When participating children were three years old, they scored better on measures assessing mother-child interactions and the home environment. At ages 4-7 they demonstrated fewer behavior problems, and at ages 8-11 they showed better achievement scores (Karoly, et al., 1998; also see www.colorado.edu/cspv/blueprints/promising/programs/BPP05.html).

Home visiting programs combined with high-quality child care have produced evidence of positive effects on social and cognitive environments. For example:

• The Infant Health and Development Project, which provided home visits and high-quality child care for premature and low-birthweight infants during their first three years, yielded **better mother-child interactions at 30 months** for participants than for families in a control group. At 36 months, the **treatment children had higher IQ scores** than control children (by nearly 10 points), higher receptive vocabulary scores, and fewer maternal-reported behavior problems (Karoly, et al., 1998).

The following positive effects are documented by reports from parents enrolled in home visitation programs (Daro 2006):

• **Fewer acts of abuse or neglect** toward their children over time

• **More positive health outcomes** for the infant and mother

• **More positive and satisfying interactions** with their infants

• **A greater number of life choices that create more stable and nurturing environments** for children than experienced either by participants in a control group or by comparison groups with similar demographic characteristics and service levels

Parents of three-year-olds who participated in Early Head Start programs (www.ehsnrc.org) were **more emotionally supportive, had significantly higher scores on measures of the home environment, provided more support for their child’s language and learning, and were more likely to read** to or with their children daily. Early Head Start children engaged their parents more often and more positively and were rated lower in aggressive behavior by their parents (Love, et al., 2002).

Parents who participated in Starting Early Starting Smart (www.casey.org/sess), an initiative that provided mental health services to low-income, resource-poor families of children from birth to age seven, demonstrated **gains in appropriate discipline techniques and positive reinforcement** compared to a control group that showed declines (Casey Family Programs, 2001).
Parents who participated in Dare To Be You (www.coopext.colostate.edu/DTBY), a program that helps families of young children acquire stronger parenting skills, showed **lasting increases in parental competence and satisfaction, more appropriate disciplinary techniques, and less use of harsh punishment.** The developmental attainment of their preschool children was twice that of peers in a control group (Miller-Heyl, et al., 1998).

**Family support programs have been found to promote school readiness** when they work with both parent and child, are relationship-based, are grounded in knowledge about child development, are integrating into existing networks and services, and are of sufficient duration and intensity.

- The Avance Program, which aims to improve child outcomes by providing parenting services for the child’s mother through monthly home visits and early care and education for the child, was found to **improve the home learning environment and maternal attitudes and behaviors** (Johnson, 1993).

- The Even Start Family Literacy Program, a federally funded program administered through state education departments offering adult education, early childhood education, parent-child together time, and adult basic skills, **improved children’s home learning environments and cognitive development** (St. Pierre, Swartz, Murray, Deck, & Nickel, 1993).

- Healthy Families America is a home-based program to promote positive child outcomes and prevent child abuse and neglect among parents who are at high risk of abuse/neglect. Documented effects included **improvement in parent-child interactions, parental capacity, health care status, and maternal life course** (Daro & Harding, 1999).

- HIPPY (Home Instruction Program for Preschool Youngsters) is a home visiting program that enhances preschool children’s readiness for school by helping parents provide educational enrichment. The intervention is centered around age-appropriate parent-child learning activities, which are modeled by the home visitor and then used by the parent and child every day. HIPPY participants showed greater **gains in cognitive measures and greater adaptation to classroom environment in early grades** (Baker & Piotrkowski, 1996; Baker, Piotrkowski, & Brooks-Gunn, 1999).

- Parents as Teachers is a home/group setting model that seeks to educate and empower parents so they can give their children the best start in life. Components include home visits, group meetings, developmental screenings, and a resource network. The model typically includes one home visit and one group meeting per month, although it can be implemented weekly or biweekly. Early studies show **positive outcomes in cognition and school readiness, improvement in child’s social well-being, and cognitive development** in children from low-income families (Wagner & Clayton, 1999).

- Minnesota Early Learning Design (MELD) is a group-based model of parent support that targets parents of children 0-5 who are at risk because they are teens or have a child with special needs. Groups typically are facilitated by a parent volunteer. Program goals are to: (1) reduce isolation of new parents; (2) provide early learning and child development information; and (3) help parents set goals for managing the family. Pre/post tests show
positive, significant shifts in attitudes and beliefs of teen parents toward nurturing children (www.meld.org/faq.html).

Mothers of young children who received children’s books and advice on promoting literacy from their pediatrician, through Reach Out and Read (www.reachoutandread.org), were four times more likely to read aloud as a favorite activity or as a regular bedtime activity than before they entered the program. Participating mothers who received welfare benefits were eight times more likely to read to their children (Zuckerman & Kahn, 2000).

Parents and Children Together (www.pacthawaii.org), an early intervention program that offers high-quality classes in child development and parenting skills to new parents, found that participating children outscored children in a comparison group on local reading and math readiness tests and on national achievement tests (Drazen & Haust, 1996).

Low-income African American preschoolers who took part in the Early Training Project, a summer preschool program with year-round home visits, were less likely to be placed in special education classes, less likely to be retained in grade, and more likely to graduate from high school than students in the control group (Currie, 2000; Karoly, et al., 1998).

Two-year-olds who had at least one year of Early Head Start (EHS, www.ehsncrc.org) performed significantly better on measures of cognitive, language, and social-emotional development. EHS parents scored higher on measures of home environment, parenting behavior, and infant/toddler development (Fenichel & Mann, 2001).

Starting Early Starting Smart (www.casey.org/sess), which provided mental health services to low-income, resource-poor families of children from birth to age seven, increased learning stimulation and decreased verbal aggression in participating homes, while those qualities worsened in the homes of a comparison group (Casey Family Programs, 2001).

The Early Childhood Education and Assistance Program (ECEAP) is a community-based program that provides children of low-income families with education, health care, and other services while helping their parents become financially independent and self-sufficient. Participating children perform better academically and are perceived by teachers to have better classroom behaviors than comparison groups. A 10-year study of the program found that 57% fewer participating families were at or below the poverty level, compared to 20% fewer families from the control group (Northwest Educational Research Laboratory, Child and Family Program, 2000).

Families who participated in Early Head Start were, during the first 2 years after enrollment, significantly more likely to receive a wide variety of services, much more likely to receive intense services, and more likely to receive intensive services focused on child development and parenting than control families were (U.S. Department of Health and Human Services, 2006).
B. High-quality treatment and follow-up for parents with substance abuse, mental health, or domestic violence problems

Remission of maternal depression has a positive effect on both mothers and their children; for instance, remission after only three months of medication treatment is significantly associated with reductions in children’s diagnoses and symptoms. These findings support the importance of vigorous treatment for depressed mothers in primary care or psychiatric clinics and suggest the utility of evaluating children, especially those whose mothers continue to be depressed (Weissman, et al., 2006).

Project Before served caregivers of young children under age six who either had or were at risk of having a substance abuse or mental health problem. An evaluation found improved use of physical and behavioral health services for the mothers and their children, significant reductions in changeable risk factors (e.g., decreases in exposure to violence, substance use, child abuse, and family arrests), and increases in the numbers of women working or in treatment. (At intake, 17% of the women were working or going to school; after six months, 67% were working and 19% were going to school.) (Knitzer, 2000; www.nccp.org/media/cwr00h-text.pdf).

Mothers who were referred for mental health treatment and received home visits through the Infant-Parent Program at San Francisco General Hospital were more empathetic and interactive with their children at the time of their child’s second birthday (Zero to Three, 1999).

A study of 467 women and their 1,374 children who completed a comprehensive residential family-based treatment program in Jacksonville (FL) found that 72% remained clean of alcohol and drugs one year after exiting the program and 92% experienced no further interaction with the criminal justice system (Tupper, 2005).

C. Fewer children in poverty

Welfare-to-work programs that include earnings supplements have the greatest positive effects on young children and tend to lead to higher school achievement. Some programs also reduce behavior problems, increase positive social behavior, and/or improve children’s overall health. Programs that increase parental employment without increasing parental income have few positive effects on young children in those families. Programs that provide earnings supplements without mandatory employment services improve children’s school achievement and have either neutral or favorable effects on children’s health (Morris, et al., 2001).

In the AECF Jobs Initiative, which provided job training and other supports, 65% of participants were working 18 months after enrollment, up from 25% at the time of enrollment. An independent evaluation found effects on children of working families ranging from more material goods to a move to a safer neighborhood (Fleischer, 2002).
The federal Earned Income Tax Credit (EITC), which supplements the income of working families that earn less than 200% of the poverty level, lifted 2.5 million children out of poverty in 1999 and was shown to promote employment. Three-fifths of the increase in workforce participation was found attributable to EITC increases (Berube & Forman, 2001).

The Minnesota Family Investment Program (MFIP) gave long-term welfare recipients and their families financial rewards for work, including lifting incomes above the poverty rate. MFIP increased the employment rate by 35%, decreased long-term dependency on welfare, increased earnings (23% on average), increased marriage stability, and decreased domestic violence for participating families, compared to those that participated in Aid to Families with Dependent Children. These results persisted into the third year of follow-up. Participants also were more likely to have had continuous health coverage and to own their home at the end of follow-up (Knox, Miller, & Gennetian, 2000).

Public housing families that received housing vouchers through the Moving to Opportunity initiative reported improvements in physical and mental health (Leventhal & Brooks-Gunn, 2002).

Mothers of low-birth-weight and preterm infants who participated in the Infant Health and Development Project, an early intervention program that included full-time child care, were employed more often during the three-year intervention and returned to work sooner than mothers in a control group (Karoly, et al., 1998).

More parents who were enrolled in Early Head Start (EHS; www.ehsnrc.org) also participated in education or job training programs than parents in a comparison group, and more EHS parents were employed at some time during their child's participation in EHS (Love, et al., 2002).

Low-income African American mothers who received home visits and high-quality, educational child care through the Syracuse Family Development Research Program were more likely to complete high school during the five-year intervention than mothers in a comparison group (Karoly, et al., 1998, citing Honig & Lally, 1982).

Healthy Families America provides home visits and links to other services, including employment-related services, to parents in 11 states who are identified as overburdened and at risk for abusing or neglecting their children. Participating parents had greater success than a control group in finding and maintaining employment:

- In Arizona, the percentage of employed participants grew from 17% to 40% after 12 months.
- In Florida, 35% of participating families ended their dependence on public assistance, 19% obtained a GED/job training, 64% obtained employment, and 41% obtained better housing in 2000.
- In New Jersey, participating mothers increased their employment rate from 10% to 34%. For mothers in New York, the rate of housing problems fell from 35% to 19% during the first year of participation (National Center on Child Abuse Prevention Research, 2002).

Mothers who participated in the Minnesota Family Investment Program, a welfare program that combined financial work incentives with participation or work requirements, were less likely than
Evidence

Pathways Mapping Initiative: School Readiness and Third Grade School Success

Evidence

mothers who received AFDC to report that their children exhibited problem behaviors such as cheating, moodiness, cruelty, or disobedience. MFIP mothers reported that their children were more engaged in school, did their homework, and had better school performance than those in AFDC families (Knox, Miller, & Gennetian, 2000).

Boys whose parents received child care subsidies, low-cost health insurance, job search assistance, and earnings supplements from Project New Hope scored higher than control groups on measures of educational progress and motivation. They also received better teacher ratings and were seen as less disruptive, aggressive, and hyperactive (Child Trends, 2000, citing Huston & Wright, 1998).

Parents whose children participated in Early Head Start (EHS; www.ehsnrc.org) were more likely than comparison parents to participate in education or job training programs. More EHS parents were employed at some time during their child’s tenure in the program (Love, et al., 2002).

Low-income, African-American mothers whose children participated in the Carolina Abecedarian preschool program had obtained more education when their children were 54 months old than mothers in a comparison group that began with the same level of education. They also were less likely to be unemployed and more likely to hold a skilled or semi-skilled job when their children were 54 months old (Karoly, et al., 1998, citing Ramey, et al., 1983).

D. Neighborhoods safe, stable, and supportive

Efforts to involve tenants in building management or in neighborhood-wide efforts to improve safety and land use expanded residents' casual ties and networks of acquaintances (Cordero, Guzman & Auspos, forthcoming, citing Briggs & Mueller, 1997). Involving tenants in building ownership and management also had positive effects on the community at large, since tenants "who were more engaged in the formal and informal social organization of their co-ops felt more confident of their social participation skills and were more likely to be involved in community organizations" and more likely to vote (Saegert & Winkel, 1998).

Residents in the Urban Edge CDC, which involved residents in neighborhood-level organizing for safety in a public square and the surrounding area, had significantly larger acquaintanceship networks at the neighborhood level than did their counterparts in the matched comparison location (Briggs & Mueller, 1997).

A prototype comprehensive service center for public housing residents found that participants who used the center showed "increased educational aspirations, higher self-esteem, and a greater sense of control over one’s life"—attributes that could be community assets—but "no evidence of higher economic status in the short term" (Shlay, 1993, and Bratt & Keyes, 1997).
In three CDC housing communities, coordinating services with housing increased residents’ access to employment services. However, the study did not determine whether participation was maintained or whether the services were effective (Briggs & Mueller, 1997).

Efforts to coordinate job assistance with supportive housing for adults who face multiple barriers to employment show some promising interim results on employment, earned income, and entitlement dependence” (Proscio, 1998; Long, Doyle, & Amendolia, 1999; Fleisher & Sherwood, 2000; Parkhill, 2000).

First Source programs in Portland (OR), and Berkeley (CA) found that employment linkage programs can be effective in placing low-income community residents with limited work histories and multiple barriers into jobs that pay above the minimum wage. The study also found evidence of increased capacity in the organizations responsible for recruiting and referring local residents for jobs, improved relationships between the employers and the neighborhood groups, and expanded job networks among community residents who said they had not previously known about the business where they are now working (Cordero, Guzman, & Auspos, forthcoming, citing Molina, 1998).

Bringing major retail institutions into a community mall or commercial strip, coupled with physical revitalization efforts, can save time and money for residents. It has also been found to generate business for other stores or services in close proximity to the commercial strip (Cordero, Guzman, & Auspos, forthcoming, citing Bendick & Egan, 1993; Vidal, 1995).

Collective advertising, community celebrations, and other efforts to promote a community, its stores, and eating establishments increased market demand in the Korean section of Los Angeles and helped the South Side of Pittsburgh become known as a dining destination. Such efforts are more likely to succeed when the areas have ethnic character and are viewed as safe or friendly (Bendick & Egan, 1993).

Community policing as implemented in Chicago has been shown to reduce crime. Chicago’s community policing program involves strategies such as training for police personnel, civic education, beat meetings, problem solving for neighborhood concerns, and improved access to city services (Skogan, et al., 2002). Other evaluations suggest that community policing tactics can decrease fear of crime, improve relationships between police and communities, and improve police attitudes but do not necessarily reduce levels of crime and disorder (Schuck & Rosenbaum, forthcoming).

Neighborhood watch-type programs have resulted in fewer reports of property victimization by participants than non-participants. Target areas reported sizable drops in property crime after programs began. Neighborhood watch-type activities that are part of comprehensive initiatives have shown reductions in fear of crime and property crime, although the independent effects of the watch activities are difficult to discern (Schuck & Rosenbaum, forthcoming).

A well-organized, paid walking patrol in Columbus (OH) was associated with a decline in several types of crime, especially burglary and auto theft (Rosenbaum, 1988).
Residents of South Central Los Angeles reduced the number of liquor stores in their community by undertaking needs assessments, providing testimonials at public and media forums, advocating for the conversion of liquor outlets to other uses that met residents' needs, and defending the community's legal rights (Themba, 1999).

"Apartment buildings surrounded by trees and greenery in a Chicago public housing development are dramatically safer than buildings devoid of green. Compared with apartment buildings that had little or no vegetation, buildings with high levels of greenery had 52% fewer total crimes, including 48% fewer property crimes and 56% fewer violent crimes. Even modest amounts of greenery were associated with lower crime rates" (Kuo, Sullivan, et al., 2001). In inner-city Chicago, graffiti, vandalism, noise and other incivilities were systematically lower in neighborhood spaces with trees and grass than in comparable barren spaces (Brunson, Kuo, & Sullivan, 1996).

**Strategies that make it difficult for criminals to commit and get away with crimes have been linked to reduced crime rates.** These include improving security to access points (e.g. locks, bars, grills, alarms), restricting pedestrian access and movement at public housing developments, using closed-circuit TVs at housing complexes, holding owners responsible for drug dealing on their property, and closing streets (Sherman, et al., 1999).

An experiment that enabled families to move from high-poverty public housing projects to low-poverty neighborhoods found that children in these families had less likelihood of injuries, asthma attacks, and victimization by crime (Katz, King, & Liebman, 2001).
High Quality Child Care and Early Education

High quality child care and early education are widely available and support social and cognitive development.

Child care linked to health, mental health, substance abuse and developmental services.

**Actions**
specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome.

**Examples**
program and policy initiatives illustrating how actions have worked elsewhere.

**Indicators**
measures for targeting and monitoring the impact of actions and documenting progress toward the outcome.

**Ingredients**
elements of how actions are implemented that make them effective.

**Rationale**
research-based reasons to believe that identified actions are likely to contribute to the desired outcome.

**Evidence**
research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome.
Actions with Examples: High-Quality Child Care and Early Education

A. High-quality child care and early education are widely available and support social and cognitive development

Federal, state, and local public agencies and philanthropists provide funds to make high-quality child care and early education widely available, especially to families of children most at risk, and to strengthen providers’ capacity to continually improve the quality of child care and early education and its ability to support social, emotional, and cognitive development.

**EXAMPLES**

- The largest federal program supporting child care services for low-income families is the **Child Care and Development Block Grant**. States that receive these funds must establish child care standards, including health and safety requirements, that apply to all types of child care providers. [www.acf.dhhs.gov/programs/ccb](http://www.acf.dhhs.gov/programs/ccb)

- The federal **Head Start** program funds over 2,000 local child care providers who offer comprehensive, early childhood development services to low-income families with children from age three to five. Services encompass education, health, nutrition, social and emotional development, and parent involvement, all of which are intended to prepare children for school entry. Local programs are center-based, home-based, or some combination. All Head Start services must meet quality standards established by federal law and regulations. [www.headstartinfo.org](http://www.headstartinfo.org)

- **Early Head Start (EHS)** is a federally funded community-based program for low-income families with infants and toddlers and pregnant women. Its mission is to promote healthy outcomes for pregnant women, enhance the development of very young children, and promote healthy family functioning. EHS evolved out of Head Start's history of providing services to infants and toddlers through Parent Child Centers, Comprehensive Child Development Centers (CCDPs), and Migrant Head Start programs. [www.ehsnrc.org](http://www.ehsnrc.org)

Providers of early care and education maintain high quality standards, often with outside support. They structure activities to promote social, cognitive, and psychological growth of children and to individualize care in response to family context and parent input. They respond to the various developmental stages of the children in care, including infants and toddlers, preschoolers, and school-age children.
**Examples**

- **Hope Street Family Center** is a public-private partnership that provides comprehensive child care and preschool education to nearly 2,000 young children in inner-city Los Angeles. Founded in 1992 with a research and demonstration grant from the federal Head Start Bureau, the Hope Street Family Center focuses on both child and family as well as their social environment. The program strives to enhance and optimize child outcomes by providing child and youth development programs and services that strengthen family stability and economic self-sufficiency. Hope Street responds to the varied needs of families with young children through partnerships and agreements to share facilities, staff, and funding with the Los Angeles School District, the County Department of Health Services, the University of California-Los Angeles, and the California Hospital Medical Center.
  
  [www.healthychild.ucla.edu/HopeStreetFamilyCenter.asp](http://www.healthychild.ucla.edu/HopeStreetFamilyCenter.asp)

- The **Educare Center** is a birth to age five program with a strong focus on children age three and younger, in the hope of connecting at-risk children from low-income families with intensive services before problems occur. Educare staff partner with parents to ensure that young children receive educational and other support needed for intellection, social, emotional, and language development, all day and year-round. Educare also strives to meet the needs of working parents. The centers are designed as physical spaces where private and public sector leaders can visit and observe first-hand what high-quality programs for at-risk children look like and what changes in policy, funding, and standards for teacher training and professional development are needed.

  The first Educare Center opened in 2000 in Chicago, under the sponsorship of the Ounce of Prevention. The Ounce and the Buffett Early Childhood Fund later formed a partnership to help additional Educare Centers develop high-quality programs to serve as models for the field. New Educare Centers are in development in Omaha, Milwaukee, Wisconsin, Kansas City (KS), and Tulsa. Sponsors of Educare see it as:
  - A platform from which to leverage strong and lasting investments in early childhood
  - An effort to substantially raise quality standards for 0-5 programs
  - A demonstration of the power of public/private partnerships and the strength of pushing for policy and systems changes over time


- **Curiosity Corner**, developed by Success for All as a national program operating in multiple locations, engages three- and four-year-olds in literacy-focused problem solving. Instruction revolves around active teaching, detailed support structures, and the developmental needs of young children. One key to Curiosity Corner’s success is the in-depth professional development provided by staff from the Success for All Foundation, which helps teachers implement the thematic units. Each unit features active, integrated experiences that enhance children’s language, literacy, cognitive, mathematical, social, personal, creative, and physical development.

  [successforall.com/early/early_curiosity.htm](http://successforall.com/early/early_curiosity.htm)

- The **Allegheny County (PA) Early Childhood Initiative (ECI)**, a United Way program, created high-quality early education services in 80 targeted high-risk neighborhoods in and around Pittsburgh. ECI has attracted more than $36 million in funding since it began in 1996, including a HUD grant of $1 million to establish ECI in public housing. With the guidance of broad-based neighborhood coalitions, communities assess the status of young children,
families, and early education resources and propose systems of high-quality early childhood services to replace the existing patchwork of services. Substantial time and energy has been devoted to linking and integrating funding sources and providers and to changing perspectives and practices. Policy work by ECI managers helps to develop cross-system agreements with state and locally funded services providers, including a uniform intake form for early education services. www.nccic.org/ccpartnerships/profiles/allegheny.htm

- **The Ounce of Prevention Fund** reaches about 1,200 children daily through its Head Start and Early Head Start programs at 15 ethnically diverse sites around Chicago. The programs focus on the earliest days, months, and years of life and on fostering social-emotional development and healthy adult-child relationships—given their strong influence on children’s coping ability, persistence, and self-motivation. The Ounce of Prevention Fund also provides training and technical assistance through its direct operation of Early Head Start and Head Start programs, annual trainings, and face-to-face consultations with hundreds of Illinois early childhood professionals. Training emphasizes staff competencies in the early detection of developmental delays, support for children and families in highly stressed communities, recognition of child abuse and neglect, and language development. www.ounceofprevention.org/index.php?section=programs&action=program&program=3

- **Project Relationship** was developed by the Los Angeles Unified School District, Division of Special Education Infant and Toddler Programs, with support from the U.S. Department of Special Education. Its goal is to enhance the competencies of people who work directly with children and families through a process of inquiry, reflection, and respect. The program, outlined in a manual and accompanying video, is based on a structured problem-solving approach. It facilitates open communication and responds to the specific issues, interpersonal dynamics, and cultures of each child care setting. Project Relationship aims to help staff understand children’s behavioral cues; promote special attachments between caregivers and young children; and facilitate dialogue among staff, children, and families about feelings, issues, and conflicts. www.nccp.org/media/cwr00h-text.pdf

- **ReadBoston** trains early childhood care providers in effective reading instruction. Three literacy specialists and one resource librarian focus intensively on a small number of early child care centers in Boston to help their teachers and day care providers prepare young children to be competent readers. www.cityofboston.gov/bsb/ReadBoston/JCSRB.asp

Local coalitions foster networks of child care environments that meet high quality standards and respond to families’ needs in ways that support their linguistic heritages and cultural beliefs about education and child rearing.

**EXAMPLES**

- **The Haitian Health Institute**, with support from Boston Medical Center, serves as facilitator and networking point for the Haitian Multi-Service Center of Dorchester (Massachusetts). The center prepares and assists immigrants in their move toward social and economic self-sufficiency. In addition to child care, it provides education; adult and children’s health services; emergency support; immigration services; and HIV/AIDS counseling, case management, and support. www.bmc.org/program/haiti/hcomfact.html#anchor643617
States take special responsibility for coordinating efforts to expand and improve child care and early education services, providing consultation and technical assistance, and assuring that resource allocation supports high-quality, coherent services, including professional training and decent wages and benefits for staff.

**EXAMPLES**

- **The Build Initiative** is a multi-state partnership created by the Early Childhood Funders’ Collaborative, a consortium of national and local foundations. It helps states construct a coordinated system of programs, policies, and services that respond to the needs of young children and their families. By supporting those who set policies, provide services, and advocate for children from birth through age five, Build serves as a catalyst for change and a national resource on early learning. It strives to stimulate public investments in early learning to counteract the forces that cause programs, policies, and services for young children and families to operate in isolation, at cross purposes, or without enough resources to meet crucial needs. [www.buildinitiative.org](http://www.buildinitiative.org)

- **The Kansas Early Head Start Expansion** provides early, continuous, and intensive child development and family support services to low-income pregnant women and families with infants and toddlers. It uses the state’s TANF block grant and federal program funds to enable grantees to offer early, continuous services to three-year-old children who would not otherwise receive Head Start services until age four. The program also delivers services through home visits, center-based child care, and family child care providers. Early Head Start programs make money available to their child care partners for equipment and supplies needed to meet federal standards, and program staff make weekly visits to offer guidance. [www.srskansas.org/kidsnet/kehskhs.htm](http://www.srskansas.org/kidsnet/kehskhs.htm)

- **The Illinois Facilities Fund** is a community lender that provides low-interest loans and technical assistance to non-profits, including child care providers, for facility renovation and construction. The Fund pulls together the public- and private-sector resources and expertise necessary to support capital improvements. Partners include the Illinois Department of Children and Family Services, the City of Chicago, national and local foundations, financial institutions, community development corporations, and child care providers. [www.nccic.org/ccpartnerships/profiles/ilfacilities.htm](http://www.nccic.org/ccpartnerships/profiles/ilfacilities.htm)

- **Smart Start**, established by the North Carolina legislature, funds 82 local partnerships in 100 counties. The partnerships assess local needs and resources, develop plans for a continuum of community-based services, make decisions about new programs that may need to be developed, allocate Smart Start funds to agencies and providers, and integrate other resources with Smart Start. The local menu of services may include subsidized child care, child care quality enhancement projects, health and developmental screenings, literacy enrichment, and parent education. [www.smartstart-nc.org](http://www.smartstart-nc.org)

- **The First 5 California School Readiness Initiative**, financed by earmarked tobacco taxes, implements programs in all of California’s 58 counties to engage families, community members, and educators in the work of preparing children from birth to age five for elementary school. Efforts focus on communities with low-performing schools as measured by the Academic Performance Index; activities can be based at schools or in school-linked settings. Five Essential and Coordinated Elements are required of every program: early care and
education, parenting and family support services, health and social services, schools’ readiness for children/school capacity, and supportive infrastructure (participant/site/district/county coordination, staff training and development, program evaluation, fiscal accountability, and collaborative governance). Services are culturally and linguistically appropriate and sensitive to the needs of diverse populations, including children with disabilities and other special needs.

www.cccf.ca.gov/SchoolReady1.htm

* The **Children's Services Council** of Palm Beach County, Florida, is a special district of local government established by the Florida legislature in 1986; county voters authorize local property taxes to support services for children and their families. It focuses on early education and care, family support networks, maternal and child health and youth development. It helps local child care centers to obtain equipment and training, and to hire staff that represent the cultures of enrolled children and speak their parents' languages. All materials are printed in the three languages spoken by participants, and interpreters attend all events. World of Difference training is provided to staff through the Miller Early Childhood Initiative.  www.cscpbc.org

* Through its state-funded **Illinois early childhood block grant**, the state has, over the past 20 years, made high-quality early learning a priority. Illinois has become an innovator in expanding early learning to include home-based and birth-to-three programs, and in enacting a funding set-aside for birth-to-three programs.


* **New Jersey's Abbott Preschool Programs** receive $365 million annually from the state as a result of a New Jersey Supreme Court mandate that all children in districts where at least 40% of children qualify for free or reduced-price school lunches have access to high-quality pre-K programs. “Non-Abbott” children benefit from a separate preschool program that receives $30 million annually. New Jersey provides the highest level of funding for pre-Kindergarten programs of any state.


* **Tennessee's Child Care Report Card System** requires all child care programs (including child care centers and family child care homes) to undergo an evaluation that includes a review of staff or caregiver training and qualifications, ratios, group size, family involvement, and staff salary and benefits. Department of Human Services (DHS) staff also conduct an on-site assessment using the Early Childhood Environmental Rating Scale (ECERS). Each program receives a detailed report with assessment results from each classroom. In addition, programs may volunteer to participate in the Tennessee Star Quality rating system. Participants receive a bonus of 5%-20%, depending on their quality rating, in addition to their usual payment rate for subsidized children. The star rating system also is a tool to educate parents about child care quality. Star-rated facilities serve 73% of the children in subsidized child care. To help assure the rating program’s effectiveness, in 2006 the state DHS hired eight infant-toddler specialists to provide technical assistance to caregivers of children under age three.

www.tennessee.gov/humanserv/adfam/ccrcsq.htm

* Iowa is one of 17 states with **infant/toddler specialist networks** to improve the quality of child care and the healthy development of infants and toddlers. The state has five regional infant-toddler specialists housed in Child Care Resource and Referral agencies across the state. They conduct outreach to infant and toddler providers in their communities and support a statewide train-the-trainers effort, using the Program for Infant-Toddler Caregivers (PITC) to build the quality of the infant-toddler workforce. The goal is to have more infant and
toddler teachers and caregivers participate in both training and technical assistance, as part of a comprehensive approach to professional development. There are currently 90 trainers certified by WestEd in all four PITC modules and in an additional module specific to children with disabilities. The state covers the cost of training, but each trainer must agree to deliver 40 hours of voluntary training in return. In Iowa, family child care providers who care for fewer than five children are not required to register with the state, so infant-toddler specialists also try to identify unregistered providers and encourage them to receive training.

www.dhs.state.ia.us/children_family/early_childhood/infant_toddler.html

Funders, policymakers, and local community groups collaborate to strengthen the capacity of providers of informal child care. They offer formal and informal training and other opportunities for home-based caregivers to improve their skills, and they create hubs of support that pool resources from many community institutions (e.g., health centers, museums, libraries, family support centers, child-care centers).

**EXAMPLES**

* The **Program for Infant/Toddler Caregivers**, a collaboration between WestEd and the California Department of Education, provides formal and informal child care staff with pre- and in-service training that emphasizes children’s developmental and learning needs. It operates in California and other states. PITC’s goal is to help caregivers recognize the importance of giving tender, loving care and assisting infants’ intellectual development by attentively reading each child’s cues. The program also offers educational materials, a certification program for infant and toddler caregivers, and an annual conference.

www.pitc.org/pub/pitc_docs/about.html

* The **Arizona Kith and Kin Project** helps family, friend, and neighbor child care providers through support and training groups that meet weekly for 14 weeks to discuss topics such as guidance and discipline, daily schedule planning, nutrition, parent/caregiver relationships, business practices, health and safety, language development, and literacy. To spur attendance, the project offers free on-site child care and transportation to and from meetings. This project receives funding from city and state government, private foundations, the United Way, and several local businesses. www.asccaz.org/1_kith.htm

* **Infant/Toddler Family Day Care**, Inc. in Fairfax (VA) oversees a network of more than 100 providers who receive ongoing skills training and monthly home mentoring visits from the program’s child-care specialists. www.infanttoddler.com

* Hawaii’s Good Beginnings Alliance helped create **Play and Learn Centers** throughout the state to provide neighborhood gathering places where families and caregivers could connect with each other. The centers, staffed by volunteers and early childhood education specialists, are venues where parents and caregivers can get together, learn about child development, and informally develop leadership skills. The centers also provide early childhood learning materials and supplies to local families. Many neighborhood residents have been inspired to pursue further child-care and child-development training after participating in center activities.

www.goodbeginnings.org
The **Family Support Center** run by the Ashe County (NC) Partnership for Children—a nonprofit organization led by local volunteers and staffed by a coordinator, early childhood caregivers, and therapists—teaches caregivers how to better promote early literacy skills. Many of the participants are grandparents who care for their teenage daughters’ children. The Partnership also supports a Cooperative Play Center, open to the entire community, which has a wide variety of resources including a kitchen, science center, playroom, infant center, and music room. Several programs also address the programmatic and business aspects of running a home-based child-care service. [www.acpartnership.org](http://www.acpartnership.org)

The **San Antonio Department of Community Initiatives** contracts with agencies city-wide to link family, friend, and neighbor child care providers with learning opportunities, resources, and activities with schools, museums, libraries, community centers, and churches. The partnering agencies tailor their services to the care providers’ needs, offering everything from basic information to networking and help pursuing credentials and licensing. Some also provide child care, food, and other incentives to make it easier for providers to get involved. [www.sanantonio.gov/cominit/?res=1024&ver=true](http://www.sanantonio.gov/cominit/?res=1024&ver=true)

**Ready to Learn Providence** (Rhode Island) is a community-based approach centered on improving the school readiness of children across the city. A large part of its work connects Spanish-speaking family child care providers in the neediest neighborhoods to each other and to community resources. Its mini-grants can be used to purchase educational materials and resources, and it offers English as a Second Language classes conducted by the local community college at Ready to Learn’s offices. [www.r2lp.org](http://www.r2lp.org)

The **Head Start At-Home Partners Project** of the Child Care Resource Center in Cambridge, Massachusetts, works with 25 families that use in-home relative care. Services include health and dental screenings, child development learning activities, and field trips with other caregivers. The Center also created a home video, “When a Relative, Friend, or Neighbor Takes Care of Your Child,” which provides one-on-one technical assistance to parents and caregivers. [www.ccrcinc.org](http://www.ccrcinc.org)

Minnesota is one of several states aiming to reach all in-home caregivers through techniques such as home visits, tailored outreach to specific communities, support groups, and links to center-based and state pre-kindergarten programs. The state Department of Human Services commissioned studies that describe the population of home-based caregivers statewide, with a focus on caregivers who serve children in the state subsidy system and caregivers within immigrant and refugee communities. The state relies on the **Minnesota Child Care Resource and Referral Network** and other grantees working on child care development programs to reach out to all family, friend, and neighbor caregivers in the communities they serve. While this initiative is open to all caregivers, those who care for infants and toddlers and for other specific populations are a priority. [www.clasp.org/ChildCareAndEarlyEducation/StartingOffRight/5008_Clasp.pdf](http://www.clasp.org/ChildCareAndEarlyEducation/StartingOffRight/5008_Clasp.pdf)

National and local groups campaign to shape community norms to confirm that stable, affordable, high-quality out-of-home care is important and that social, emotional, and cognitive development are inter-related.
**In Chicago, a high-profile group of representatives from the media, business, direct service agencies, and city government launched a citywide Heart Start public awareness campaign.** With matching funds from local foundations and businesses, the group drew attention to the social and emotional characteristics that underlie cognitive achievement. [www.zerotothree.org/sch_read.html](http://www.zerotothree.org/sch_read.html)

**In Dade County (FL), community leaders spearheaded a range of efforts, including collaboration with the local PTA, to develop two-day Heart Start awareness training sessions for high school students.** A local university joined in the campaign by adding content on children’s social and emotional development to its new certification program for teachers of children from birth to age four. [www.zerotothree.org/sch_read.html](http://www.zerotothree.org/sch_read.html)

**The Partnership for America’s Economic Success was created by a group of funders, business leaders, economists, policy experts, and advocates who believe that investing in children during the earliest years of their lives will yield high returns for the nation’s economy.** The partnership plans to document the results of early childhood investments and bring them to the attention of policymakers and the public. It is commissioning research on the economic benefits of investments in children, the policy changes needed to fund services commensurate with their economic value, and a communications and coalition-building effort needed to advance these policies. [www.partnershipforsuccess.org](http://www.partnershipforsuccess.org)

**B. Child care linked to health, mental health, substance abuse, and developmental services**

Providers and coalitions create links among services for child care, health care, mental health, substance abuse, developmental assessment, and child protection so that they can mobilize specialized help for individual children and families who are isolated, have social, emotional, or developmental difficulties, or otherwise are at high risk.

**Examples**

**The Calvary Bilingual Multicultural Learning Center (Washington, DC) provides early care and education to more than 400 families from three urban neighborhoods.** It emphasizes the arts, technology, bilingualism, and multiculturalism in order to nurture children’s learning and development and engage parents. The center provides prenatal home visiting, health and developmental screenings, social service referrals, school-age child care, youth development activities, and family support services (e.g., workshops on parenting, abuse and neglect, domestic violence, life skills, job skills; help with school-family relationships; continuing education). All staff who work with families meet weekly to review families’ needs and solutions. [www.centronia.org](http://www.centronia.org)

**Strengthening Families through Early Care and Education is an initiative that forms state-level partnerships across the early childhood, child abuse prevention, and child protective services sectors to make available the information, training, and other incentives**
needed to change policy and practices. It currently operates in seven states. The partnerships work to change in state policy, form new links between the early childhood and child protection settings, and enhance training and support for program staff. Their goal is to enable a critical mass of local early childhood programs implementing Strengthening Families practices. www.cssp.org/doris_duke/index.html

In Cleveland, the Parent Intervention Centers of the Positive Education Program, a specialized early intervention program for children with special emotional and behavioral challenges, has joined forces with the local child care resource and referral agency to develop a consultation and outreach program for local child care centers. www.pepcleve.org

KIDS Now (Kentucky Invests in Developing Success) arranged for early childhood mental health specialists, located in regional mental health centers, to provide prevention and intervention services to early care and education programs and the young children and families they serve. kidsnow.ky.gov

The Addison County Parent/Child Center in Middlebury, Vermont, provides child care and preschool to children up to age three, using a curriculum that promotes social and emotional development. Mental health services based at the center enable professionals to look in on the children they serve and to coach and interact with childcare providers and parents. Onsite job training, workshops, and meetings with social service staff, plus transportation provided by the center, make it easy for isolated families to access services. www.sover.net/~thepcc

Child care programs partner with neighborhood-based child welfare services and intensive family support in efforts to prevent and respond to abuse and neglect.

Hope Street Family Center blends its early childhood programs with an array of health, education, parenting, and social services to produce a coherent strategy for improving child and family outcomes. Families affected by child abuse and neglect receive intensive child welfare services, including home visits by professional social workers and public health nurses, as part of the Family Center’s community-based services. www.healthychild.ucla.edu/HopeStreetFamilyCenter.asp

In 2002, 24 Early Head Start (EHS) programs received extra funds to target families involved with the child welfare system or at risk for child abuse or neglect. Each of the EHS programs re-designed and individualized services, including home visits, center-based care, group socialization, parent education activities, and goal setting. As a result of enhanced training and joint planning, staff from EHS and the child welfare agency have adjusted referral, assessment, and tracking efforts to achieve the desired results. Initial evaluation data suggest parents have increased their knowledge and skills, families are experiencing less stress, and children’s homes are safer. Low levels of participation and client retention are ongoing challenges, however (James Bell Associates, 2006). www.ehsnrc.org
Funders and policymakers make money available in sufficient amounts and on terms that enable programs to use multiple funding streams to build consultation into their daily work and their professional development activities.

**Examples**

- With funding from 15 private and community foundations, two Proposition 10 Commissions, the United Way, and the city and county of San Francisco, the **Early Childhood Mental Health Project** provides mental health consultation to 46 low-income child care centers. By helping teachers better understand of their interactions with children, the model seeks to improve overall care while targeting the developmental needs of individual children.  
  [www.jfcs.org/Services/Children,_Youth,_and_Families/Parents_Place/Early_Childhood_Mental_Health_Consultation/ChildCareCenterConsultationinAction.pdf](http://www.jfcs.org/Services/Children,_Youth,_and_Families/Parents_Place/Early_Childhood_Mental_Health_Consultation/ChildCareCenterConsultationinAction.pdf)

- **Healthy Child Care America (HCCA)** uses federal funds, managed by the American Academy of Pediatrics, to try to ensure that all children are cared for in a nurturing environment and have a medical home. HCCA’s principles hold that families, child care providers, and health professionals collectively can promote the healthy development of young children in child care settings and can increase access to preventive health services and safe physical environments.  
  [www.healthychildcare.org](http://www.healthychildcare.org)

- The **Hilton/Early Head Start Training Program** is a public/private partnership between the Conrad N. Hilton Foundation, the Head Start Bureau, and the California Institute on Human Services to help Early Head Start and Migrant and Seasonal Head Start programs serve infants and toddlers with disabilities, and their families. Training is designed to increase Early Head Start/Migrant and Seasonal Head Start capacity to provide disabled infants and toddlers, and their families, with high-quality services.  
  [www.specialquest.org](http://www.specialquest.org)
Indicators: High-Quality Child Care and Early Education

1. More children in high-quality early childhood programs

**INDICATOR DEFINITION**

The percent of children ages 0-3 and 4-5 attending accredited or quality rated early childhood programs such as preschool, pre-kindergarten, Early Head Start, Head Start, or a child care program with an education and parent support component as a proportion of the overall population.

**SIGNIFICANCE**


2. More early childhood teachers with a CDA, teacher’s certification or degree in early childhood development

**INDICATOR DEFINITION**

The percent of early childhood teachers with a CDA, teacher’s certification or degree in early childhood development as a proportion of the overall number of early childhood teachers in a specified area.

**SIGNIFICANCE**

Specialized education and training in child development for teachers is linked to more sensitive caregiving and better developmental outcomes for children. However, education, training, and credentialing are not consistently related to classroom quality in the presence of factors such as high turnover, large classrooms, etc. which may be stronger influences (Bellm & Whitebrook, 2006; Bowman, Donovan & Burns, 2001; Currie & Hotz, 2001; Dunn, 1993; Early, et al., 2006;

3. Lower annual rates of turnover among early child care providers

**INDICATOR DEFINITION**

The number of child care centers that have less than a 30% annual turnover rate in child care providers as a proportion of the overall number of child care centers in a specified area (Center for the Study of Childcare Employment, 2001).

**SIGNIFICANCE**

Greater staff stability is linked to better educational and developmental outcomes for children, with particular benefits cited for poor children and those at risk for educational underperformance. Stable attachments with their child care providers lay the foundation for children’s later developmental outcomes, from academic performance to mental health and interpersonal skills (National Research Council, 2000; National Scientific Council on the Developing Child, 2004; Pianta, 1999; Twombly, et al., 2001; Whitebrook, et al., 1990; and Whitebook, et al., 2001).

4. Higher salaries of child care providers

**INDICATOR DEFINITION**

A greater number child care providers and early education teachers receiving higher salaries as a proportion of the overall number of child care providers in a specified area (Center for the Study of Childcare Employment, 2001).

**SIGNIFICANCE**

Higher wages for child care workers are associated with better quality care and lower staff turnover. While standards and compensation are interdependent issues, the fundamental availability of a skilled, stable, and high-quality workforce throughout the child care system is tied to adequate wages (Center for the Child Care Workforce, 2006; Dukakis, et al., 2007; Gormley, et al., 2005; Lamb, 1998; Pianta, Nimetz, & Bennett, 1997; Shonkoff & Phillips [eds.], 2000; Stremmel, et al., 1993; Whitebook, et al., 2001).
5. Higher rates of consistent attendance

**INDICATOR DEFINITION**

The number of children with regular attendance at child care and/or early education programs as a proportion to the overall number of children in a specified population.

**SIGNIFICANCE**

Children, particularly those with multiple risk factors, benefit from regular attendance at a high-quality early education program where they learn to work on tasks independently and follow directions. Child care settings also provide opportunities to identify warning signs, and to establish good attendance and learning habits (Belsky, et al., 2007; Bridges, 2004; EdWk Quality Counts, 2007; Kagan, et al., 1995; Magnuson, et al., 2004; NICHD Early Child Care Research Network, 2002; Pianta, 1999; Sheehan, et al., 1991).
**Ingredients: High-Quality Child Care and Early Education**

Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because how interventions are implemented and how services are provided is as important as whether they are provided.

Key Ingredients are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Key Ingredients that apply to all goals in this Pathway can be found in Appendix 4. They include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

Key Ingredients that apply specifically to Goal 4, High-quality child care and early education, appear below. They include the Ingredients of effective

- Funding
- Programming, curriculum, and instruction

**INGREDIENTS: Funding**

*States and the federal government expand child care subsidies* through all available mechanisms, including the Child Care and Development Block Grant and TANF funds, to enable all families to afford high-quality, out-of-home care.
Policymakers and funders ensure that investments in child care are made on terms that support high quality services. Toward this end, they:

- **Ensure that child care providers have decent wages, benefits**, and other incentives to minimize staff turnover and maximize staff continuity
- **Ensure that child care staff receive all income and work support for which they are eligible**, plus training, scholarships, career ladders, and compensation enhancements
- **Support quality improvements**, including professional development and training, program accreditation and licensing, technical assistance, monitoring, enforcement of standards, and application of Quality Rating Systems such as those now in use in several States, including Colorado, Iowa, Kentucky, Maryland, Minnesota, Montana, New Mexico, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Vermont and Wisconsin
- **Provide capital and technical support for construction and renovation of physical facilities** used to provide child care in low-income communities
- **Enable parents to easily obtain and retain child care subsidies** on terms that promote continuity of care, even if the family’s economic circumstances change
- **Make it possible for programs to use multiple funding streams** to build ongoing consultation into their daily work and their professional development activities
- **Provide resources to coordinate governance activities and form links among systems** that provide child care, health care, mental health, substance abuse, developmental assessment, and child protection
- **Facilitate the development of a continuum of services and supports**, including coordination between part-day Head Start and pre-K programs, early education programs, and the child care subsidy system
- **Encourage the appropriate state and community governance bodies to collaboratively (and continually) assess child care needs and expand child care capacity**, including through infant/toddler centers and family child care settings
- **Act to expand the number and proportion of parents of young children, especially infants and toddlers, who are able to choose** between taking paid parental leave and obtaining child care that is nurturing, trustworthy, and affordable.

Components of state policy found by the Center for Law and Social Policy to be necessary for promoting child development from birth to age 3 include (Schumacher, Hamm, Goldstein, & Lombardi, 2006):

- **High standards and guidelines** for healthy child development and early learning programs that move beyond basic health and safety requirements
- **Qualified and well-compensated teachers and supported caregivers** to increase the likelihood that infants and toddlers form positive and stable relationships with those who care for them
• **Links to comprehensive services** that support families and promote healthy child development, especially for children living in poverty

## INGREDIENTS: Programming, curriculum, and instruction

Child care and early education programs use an intentional curriculum and provide teachers with the kinds of professional development and supports that can help them to promote early literacy and math skills in the context of nurturing and emotionally supportive classrooms. A joint position statement on curricula issued by the National Association for the Education of Young Children and the National Association of State Early Childhood Specialists in State Departments of Education proposes that effective, intentional curricula are:

- **Content-driven**
- **Research-based**
- **Focused on active engagement** with children
- **Attentive to social and regulatory skills**
- **Responsive to cultural diversity** and English language acquisition for non-native speakers
- **Directive without using drill-and-kill strategies**
- **Fun** for young children
- **Supportive of positive peer and teacher interactions**
- **Developmentally appropriate**

**Professional development activities are hands-on** and include on-going, on-site follow-up and support.

**Programs serve families with a “mixed approach”—**for example, providing center-based services to some families, home-based services to others, or a mixture of both at the same or at different times. Early Head Start programs that had this characteristic showed the strongest pattern of impacts for the families they served (U.S. Department of Health and Human Services, 2006).

**Adherence to the Head Start Program’s performance standards** was found to be crucial for the broad impacts documented for children and parents in Early Head Start programs. The more fully programs met performance standards, the more likely children were to have improved outcomes (U.S. Department of Health and Human Services, 2006).

Because recent studies of Early Head Start failed to find positive impacts among families who had extremely high numbers of demographic risk factors, researchers recommend that programs **explore new or alternative strategies for serving families with such risk factors** (U.S. Department of Health and Human Services, 2006).

**Child care that enhances children’s social competence, behavior, and thinking and reasoning skills** can overcome the barriers of high caregiver turnover, poorly designed programs, and inadequate staff preparation (National Scientific Council on the Developing Child, www.developingchild.net).
Early Head Start programs that enroll families during pregnancy or very early in the child’s life seem to achieve the greatest impacts (U.S. Department of Health and Human Services, 2006).
Rationale: High-Quality Child Care and Early Education

Research shows it is important for high-quality child care and early education to be widely available and to support social and cognitive development because:

High-quality child care that promotes social, emotional, and cognitive development is an essential component of any strategy to promote school readiness and school success. Because young children develop so rapidly between birth and school entry, many of the skills, abilities, and dispositions that go into school readiness and later success are learned in child care and early education programs. At the time of school entry, the average cognitive scores of children from the highest SES group are 60% above those of children from the lowest SES group. High-quality early education helps to mitigate these disparities (EdWk Quality Counts, 2007). Child care settings also offer opportunities to identify warning signs and to link children and parents with the help they need, which can often head off serious, long-term negative consequences.

Participation in high-quality early childhood programs can help low- and middle-income children prepare for school and is associated with better performance in the early years of school (National Research Council, 2000; Reynolds, 1994; Sheehan, et al., 1991; Warash & Markstrom-Adams, 1995; Kagan & Neuman, 1997). Positive outcomes of high-quality child care include:

- **Language abilities and general cognitive development** that allow children to communicate effectively with other people, express themselves, reason, and solve problems, and lay the foundation for later literacy (Burchinal, et al., 1996; Clarke-Stewart, et al., 2000; McCartney, 1984; NICHD Early Child Care Research Network, 2000; Peisner-Feinberg, et al., 2000; Kagan, et al., 1995).

- **Social skills** that help children understand how actions elicit responses from others, explore their environment with confidence, experience and deal with thoughts and feelings (National Research Council, 2000), and make a smooth transition into school (Zaslow, et al., 2000).

- The **ability to count the number of objects** in a set, and similar early mathematical knowledge, that is essential for the later development of mathematical operations and problem solving (Kagan, et al., 1995).

- **Sorting, classifying, and comparing materials** and the ability to determine the relationships between objects, events, and people that underlies complex thinking and the development of mathematical operations and problem solving (Kagan, et al., 1995).

- The **ability to work on a task independently and despite distractions**, which is crucial to success in a formal learning environment; the **ability to attend to, interpret, and follow directions** that enables a child to fully participate in and benefit from a classroom setting (Kagan, et al., 1995).
The impact that child care quality has on later outcomes is greatest for children with multiple risk factors, who also are the children with greatest probability of being enrolled in poor-quality programs (National Research Council, 2000). Poor children and children of color seem to benefit more in terms of language and cognitive outcomes compared with children from higher income families (Burchinal, et al., 2000; Dearing, et al., 2001). Thus Head Start and Early Head Start programs may be particularly important to the cognitive and behavioral development of the low-income children they target.

Staff-to-child ratios are one of the more sensitive indicators of quality of care, across settings and for both younger and older children (Howes, et al., 1992; National Research Council, 2000). Children who are enrolled in child care programs with low student-to-teacher ratios score higher on tests of language and cognition (Adams, 1990). Providers in these programs are better able to give sensitive and stimulating care, and children appear less apathetic and distressed (National Research Council, 2000; Vandell & Wolfe, 2000). Conversely, children in settings with high child-adult ratios were more likely to be uninvolved in classroom activities (Love, 1993).

Child care centers with highly qualified staff tend to achieve positive outcomes for children (National Research Council, 2000). Children whose child care providers are sensitive, responsive, and attentive fare better in all aspects of development (National Research Council, 2000), and they are more likely to enter school eager and prepared to learn.

Child care centers with low staff turnover tend to achieve positive outcomes for children (National Research Council, 2000). When young children are securely attached in stable relationships to their child care providers, they are more socially competent with adults and peers (Thompson, 2002). Staff turnover can result in vacancies being filled by less qualified staff and in poor continuity of care, raising the chances that child care providers will not develop optimal, responsive relationships with children (National Research Council, 2000; Twombly, et al., 2001). Child-care providers with job stability are more attentive to children and engage them more often (Stremmel, et al., 1993; Whitebook, et al., 1990; Whitebook, et al., 2001).

Child care staff who have more specialized education and training in child development tend to give more sensitive care and the children they care for have better developmental outcomes, in both center-based and family care (Dunn, 1993; Fischer & Earhart, 1991; Guralnick, 1976; NICHD Early Child Care Research Network, 1996; Whitebook, et al., 1990). "Regulations requiring directors of child care centers to have more education significantly reduce the risk of both fatal and non-fatal injury" (Currie & Hotz, 2001).

Higher wages for child-care workers are associated with better-quality child care and lower staff turnover (Whitebook, et al., 2001).

Unintentional injuries and accident rates are lower among children in the most regulated child care settings when compared to children in less-regulated child care settings (Currie & Hotz, 2001).

For families that receive no help paying for child care, or whose assistance is inadequate, the results are often not good for children or their working parents. The federal Child and Dependent Care Tax Credit currently defrays only a small
share of the cost of child care: 20% to 35% of the first $3,000 for one child or $6,000 for two or more children, and families with incomes below $20,000 receive less than 1% of its benefits. Low-income working families that pay for child care purchase cheaper care than do high-income families, and they often wind up with lower-quality care (Center for American Progress Task Force on Poverty, 2007).

**Investment in universal preschool would increase the gross domestic product** by $988 billion within 60 years, according to an estimate by Isabel Sawhill, director of economic studies at the Brookings Institution, a nonprofit Washington-based policy organization. But it is not easy to persuade politicians of preschool’s economic value, Sawhill found, because the initial investment is relatively high and it takes years to reap the benefits (Lewin, 2006).

Relationships outside the family—with child care providers, peers, teachers, neighbors, and other adults and children in the community—have an important influence on young children’s development (National Scientific Council on the Developing Child, [www.developingchild.net](http://www.developingchild.net)).

**The warmth and support of the caregiver in a child care setting influence the development of important capabilities in children**, including greater social competence, fewer behavior problems, and enhanced thinking and reasoning skills at school age. Young children benefit in these ways because of the secure relationships that develop, because of the ways in which caregivers provide cognitively stimulating activities, and because they get support for developing positive relationships with other children. Unfortunately, the high caregiver turnover, poorly designed programs, or inadequate preparation of staff found in many child care arrangements in the United States do not support these benefits (National Scientific Council on the Developing Child, [www.developingchild.net](http://www.developingchild.net), citing: Shonkoff & Phillips, Eds., 2000; Pianta, Nimetz, & Bennett, 1997; Lamb, 1998; NICHD Early Child Care Research Network, 2002; Pianta, 1999).

**Research shows it is important to link child care with health, mental health, substance abuse, and developmental services because:**

The child care setting provides **opportunities to identify warning signs and to link children and parents with the help they need** (Knitzer & Raver, 2000). This is especially important because depression, attachment difficulties, and post-traumatic stress are prevalent among mothers living in poverty. In the absence of recognition and interventions, those conditions undermine mothers’ development of empathy, sensitivity, and responsiveness to their children—often leading to poorer developmental outcomes (National Research Council, 2000)—and the opportunity to head off more serious, long-term consequences may be missed.
**Evidence: High-Quality Child Care and Early Education**

**A. High-quality child care and early education are widely available and support social and cognitive development**

Participation in preschool may close as much as half of the gap in children’s developmental proficiencies among socio-economic and ethnic groups, a disparity that is firmly established at entry to kindergarten. Studies of a representative sample of children entering kindergarten in California found that children who attend center-based programs are at least two months ahead cognitively of those who do not participate in these programs. The positive effects hold for children from all income groups; poor children show stronger effects in acquiring basic knowledge, such as recognizing letter and numbers and understanding events in storybooks (Bridges, 2004).

Children who attended child care with better "classroom practices" scored better on language and math skills in elementary school. Children who had closer teacher-child relationships in child care had better classroom social skills, thinking skills, language ability, and math skills from preschool to elementary school (Lombardi, 2003).

Children participating in the Chicago Child-Parent Center (a 24-site program characterized by comprehensive services, mandatory parent participation, and child-centered approaches to social and cognitive development) had **significantly higher reading and math scores in third grade and were less likely to be retained in grade or placed in special education** than those in a comparison group. Participating parents became **more involved in their children’s education**. At age 14, children who had spent six years the program had the largest gains in reading and math achievement scores, less grade retention, and fewer special education placements compared with controls and children who did not continue in the program after preschool (Reynolds & Wolfe, 1997).

The Father/Male Involvement Preschool Teacher Education Program, which conducts outreach to encourage male participation in pre-school education, produced significant **improvements in the quality and quantity of male involvement in preschool**. Before the program began, 5% of parent involvement in the preschool came from men; during the program’s third year, men were responsible for 23% of parent involvement and teachers reported significantly more contact with fathers/males (McBride, et al., 2000).

Compared to siblings who did not attend, Head Start children demonstrated long-term positive effects that persist through the middle school years and into young adulthood. African-Americans who participated in Head Start are **less likely to ever have been booked or charged with a crime**. Non African-Americans who participated in Head Start are **more likely to complete high school and attend college**. While children of different racial and ethnic backgrounds showed similar benefits from Head Start at 5, "fadeout" of positive effects over time was more likely for African-American children (Currie, 2000).
Three-year-old participants in Early Head Start (www.ehsnrc.org) performed significantly better on a range of measures of cognitive, language, and social-emotional development than a randomly assigned control group. Their parents scored significantly higher than control group parents on many aspects of the home environment and parenting behavior and made greater progress toward self-sufficiency. At age 3, Early Head Start children were more engaged with their parents, less negative toward their parents, more attentive to objects during play, and significantly less likely to score in the at-risk range of developmental functioning than control groups were. Early Head Start parents rated their children as lower in aggressive behavior than control parents did; they were more emotionally supportive and less detached than control group parents and provided significantly more support for language and learning than control group parents. EHS parents were more likely to report reading to their child every day and reported a greater repertoire of discipline strategies, including more mild and fewer punitive strategies. Impacts were especially large for families that enrolled during pregnancy, African American families, and those with a moderate number of demographic risk factors. The program also had positive impacts on two groups that other studies have found difficult to serve: teen parents and parents who were depressed at baseline (U.S. Department of Health and Human Services, 2006).

Head Start (www.headstartinfo.org) children from the National Longitudinal Survey's child-mother dataset had initial gains in vocabulary and reading test scores, less overall grade retention, and persistent gains in test scores when compared to siblings who did not attend preschool programs. Participating children also maintained gains in general cognitive and analytic ability, although the effects decreased over time (Child Mental Health Foundations and Agencies Network, 2000). The vocabularies of low-income children who participated in Head Start came closer to those of all children their age in the U.S., although they remained below average. Head Start attendance also resulted in better social adjustment not attributable to any other factors (Currie, 2000).

High-quality early education interventions targeting children with multiple risks resulted in IQ test score gains of 4 to 10 points by age 5, and those children who began participation in infancy sustained these effects into adolescence. Preschool interventions with home visits (e.g., High/Scope Perry Preschool, Carolina Abecedarian) produced higher achievement scores for participating children, compared to controls, through junior high (Barnett, 1995). In particular:

- Children who completed the High/Scope Perry Preschool program had IQ scores 11 points higher than controls, and this difference persisted until participants were 8 years old (Karoly, et al., 1998, citing Schweinhart & Weikart, 1980). Participants also had better relationships with friends and neighbors (Barnett, 1995).

- Low-income, predominately African-American children who participated in the Carolina Abecedarian program had higher IQ scores higher than control groups at age 1, upon completion of preschool, and at ages 8 and 12. Participants had higher reading and math achievement at ages 8, 12, and 15 and lower rates of grade retention and special education at age 15 (Karoly, et al., 1998, citing Ramey & Campbell, 1981; Currie, 2000).

- Participants in the Early Training Project, which provided home visits and a summer preschool program to children of low-income families, had higher IQ scores than children in a control group. They scored higher on three of four sections of the Metropolitan Achievement Test in first grade, were more likely to graduate high school, and were less
likely to be placed in special education classes or to be retained in grade (Karoly, et al., 1998).

- Children in low-income families whose mothers received home visits beginning in their last trimester and who were enrolled in high-quality child care through the Syracuse Family Development Research Program had IQ scores almost 20 points higher than those of controls at age 3. This difference, while diminished, still existed when the children were 4 years old. Participating children scored higher than controls on assessments of socio-emotional behavior at age 5. At age 15, former participants had better school attendance and grades and lower rates of delinquency than controls (Karoly, et al., 1998, citing Lally, et al., 1988).

B. Child care linked to health, mental health, substance abuse and developmental services

English-speaking, monolingual preschoolers who participated in Starting Early Starting Smart (www.casey.org/sess), which provided mental health services to low-income, resource-poor families in early childcare settings, showed greater increases in receptive language skills than children whose preschool program did not include the services. SESS increased learning stimulation and decreased verbal aggression in participating homes (Casey Family Programs, 2001).

Head Start (www.headstartinfo.org) children are 8% to 9% more likely to be immunized than their siblings who did not attend any preschool (Currie, 2000).

Children of low-income families who participated in Smart Start (www.ncsmartstart.org), North Carolina’s comprehensive community-based initiative that provides health care, child care, and family support and education, were significantly better prepared for school than similar children who did not participate. Smart Start also improved the quality of child care at participating centers compared to non-program facilities (Bryant, et al., 1998; Maxwell, et al., 1998).
GOAL 5

Continuity in Early Childhood Experiences

Curricula and expectations aligned among providers of early education and schooling

Providers of early education, schooling, and social and health services connected with each other and with families

**Actions**
specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome

**Examples**
program and policy initiatives illustrating how actions have worked elsewhere

**Indicators**
measures for targeting and monitoring the impact of actions and documenting progress toward the outcome

**Ingredients**
elements of how actions are implemented that make them effective

**Rationale**
research-based reasons to believe that identified actions are likely to contribute to the desired outcome

**Evidence**
research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome
Actions with Examples: Continuity in Early Childhood Experiences

A. Curricula and expectations aligned among providers of early education and schooling

Through local leadership and support, curricula, expectations, standards, and assessments are aligned from pre-K to grade 3 to bring about stable, predictable learning environments throughout the early years.

**Rolling Hills Elementary School**, situated in a high-poverty area of Orlando, Florida, was close to failing in the mid-1990s, in part because of students’ high mobility rates. A new principal in 1996, Patrick Galatowitsch, worked to create a climate of high expectations for every child—a place where teachers and administrators don’t use students’ challenges (including poverty, family background, race, ethnicity, or mobility) as excuses for low achievement. School staff focus on classroom structure and the alignment of curricula, teaching strategies, and assessments with state standards, within and across grade levels. They make sure that students who may not have consistent routines at home are able to fall into a rhythm at school. In 2004, 67% of Rolling Hills students passed the Florida Comprehensive Reading assessment (compared to 28% in 1997); 55% passed the math assessment and 71% met high standards on Florida Writes (compared to 32% and 29%, respectively, in 1997).


**The Natrona County (WY) School District** helped schools define alignment and craft a coordinated strategy for meeting Wyoming’s early childhood readiness standards. These connect to state education standards, offering a clear map toward meeting elementary proficiency goals beginning in pre-kindergarten. Fourth-graders in Natrona’s pilot school recently exceeded the state average on reading and writing sections of the Proficiency Assessment for Wyoming Skills.


**Paradise Valley Elementary School** in Casper, Wyoming, builds connections with local pre-kindergarten providers and spreads the word about kindergarten readiness and state early learning standards. In the early 1990s, when teachers sought a way to help the younger siblings of struggling students, the elementary school created an in-school pre-K program aligned with the school’s primary curriculum. Paradise Valley’s All Ready Preschool, which focuses on at-risk students from low-income families, started with seed money from the Wyoming Community Foundation. As the program became established, grants from other business and community groups kept it going until a mix of district, state, and federal funding began sustaining the half-day sessions. Paradise’s principal says the pre-K program is a leading factor in a 50% reduction in the percentage of kindergarten students identified with learning disabilities.


**At the McFerran Elementary School** in Louisville, Kentucky, pre-K teachers spend the first week of every school year helping to teach kindergarten, which reminds them which skills
children need by the end of pre-K. The pre-K center at McFerran uses a curriculum created by the district and connected to state standards for what students should know at fourth grade.  

www.jefferson.k12.ky.us/Schools/Elementary/McFerran.html

* Policymakers in 41 states and the District of Columbia have **aligned early-learning standards and curricula with state academic standards** for the elementary grades. The goal is to make the transition from preschool to elementary education smoother by specifying the knowledge and skills young children need to be ready for school. Thirteen states have defined what young children need to know and be able to do to be ready for school. Sixteen states require districts to assess the school readiness of entering students. And 18 states have developed programs to help young children who do not meet school-readiness expectations. www.edweek.org/ew/articles/2007/01/04/17execsum.h26.html

New schools are established to improve pre-K to grade 3 education; they include a focus on aligning curricula, expectations, standards, and assessments from pre-K to grade 3.

**EXAMPLES**

* **Lee Academy**, a public school in the Dorchester neighborhood of Boston, follows a developmentally sequenced learning model and will ultimately serve children from age three through fifth grade. Currently, it enrolls 88 three-, four-, and five-year-olds and will add one grade each year through 2009. The goal is to break down the barrier between preschool and primary school by housing both in one setting. The school’s pre-K instruction focuses on four areas that early childhood experts believe are critical to later academic success: oral language development, literacy development that is closely aligned with oral language instruction, mathematics preparation that emphasizes understanding of numbers and spatial relationships, and the development of social-emotional competencies. Unlike their counterparts in much of the country, preschool teachers at Lee Academy have training, salaries, and professional status comparable to those of teachers in the elementary grades. “We hope to provide a pre-K through grade 5 school where, for 6 to 10 hours every day beginning at the developmentally crucial age of 3, our kids are exposed to the most loving, supportive, and intellectually rich environment possible,” the principal says. www.boston.k12.ma.us/leeacademy/aboutus.html

* The **Children’s Academy** in New Albany, Indiana, is a pre-kindergarten to third grade school where everything is “about helping little children learn how to read.” It offers intensive and focused professional development; classroom teachers plan together and advance their own learning while children are in music, art, or physical education classes. www.genemaeroff.com

* **Laguna Elementary School** is a K-5 school on an Indian reservation in New Mexico, operated by the Laguna Tribe in collaboration with the Pueblo of Laguna Department of Education and the New Mexico Community Foundation. Tribal leaders aim to build a coordinated system of early childhood education that includes a Head Start program, an early Head Start program for infants to three-year-olds, a special services program for children with developmental disabilities, and a child care center that provides wrap-around services to children from six weeks to 12 years old. Under the leadership of Principal Brenda Kofahl, the elementary school works with Head Start to align expectations for early learning and school
readiness. Teachers meet with Head Start staff to improve alignment and build a shared understanding of key learning principles. The school invites parents of Head Start children to conversations about kindergarten learning standards. In the spring, Head Start children visit elementary classrooms to meet teachers and get to know the building. The Head Start center shares developmental evaluations with elementary teachers so they can assess gaps and build on what children have learned. “I want the children to see moving to elementary school as a small step, not a huge step,” Kofahl says. www.naesp.org/client_files/PK3/sparks.pdf

B. Providers of early education, schooling, and social and health services connected with each other and with families

Efforts to connect child care, preschools, schools, and services are supported by strong local leaders and are often sustained by outside intermediaries.

**EXAMPLES**

- **Laguna (NM) Elementary School** is a part of the **SPARK (Supporting Partnerships to Assure Ready Kids)** initiative of the W.K. Kellogg Foundation, which supports community-based action to align early learning, elementary school, health, and social services and systems for children who are likely to be unprepared to learn.  

- **The Chicago Child-Parent Center and Expansion Program** is a center-based early intervention that provides comprehensive educational and family-support services to economically disadvantaged children from preschool to early elementary school. Initially implemented in four sites and later expanded to 25, the program targets families in high-poverty neighborhoods that are served by other early childhood programs. It includes a child-centered focus on the development of reading/language skills, and comprehensive services. Parents are supported in their efforts “to provide a better life-style for their children and also to ultimately provide opportunity for their own life dreams.” Children participating in the preschool and follow-on services have higher academic achievement when compared to children receiving only the preschool or follow-on programs. Among students followed to age 24, participation in the extended program was associated with higher rates of high school completion and full-time employment and with lower rates of violent arrest (Reynolds et al., 2005). www.waisman.wisc.edu/cls/Program.htm

- **At Howe Elementary School** in Green Bay, Wisconsin, children arrive at 6:30 a.m. for an Early Bird program at the Family Resource Center next door. Throughout the day, Urban 4-H, YMCA of Green Bay, Head Start, and local businesses offer an array of services and opportunities for students and their families at the resource center. A parent educator conducts adult literacy and child development classes for families, and mothers bring infants and toddlers to a play group. Dental needs are met on-site, and the lending library is kept busy. www.naesp.org/ContentLoad.do?contentId=1659
Indicators: Continuity In Early Childhood Experiences

1. More children in schools that connect with child care programs and families, and that are welcoming to children and families

**INDICATOR DEFINITION**

The percent of children attending schools that systematically involve child care programs and families before the transition to formal school as a proportion of the overall population (National Center for Early Development & Learning, 2004).

**SIGNIFICANCE**

Children experience a smoother transition when they enter school when there is coordination between schools, early childhood programs, and parents. When schools have a systemic relationship with parents and early childhood programs, the open communication promotes greater problem solving, language development, and learning among children, as well as reinforcing parents’ comfort with their crucial roles in their children’s learning process (Henry et al, 2003; Kagan & Neuman, 1998; Kelin & Knitzer, 2007; Lynch, 2007; Melton, Limber & Teague, 1999; Pianta & Kraft-Sayre, 2003; Reynolds, 2003; Reynolds, et al., 2006; Reynolds & Wolfe, 1997; and, Zill, et al., 2003).


**INDICATOR DEFINITION**

The percent of children enrolled in schools with classrooms with acceptable teacher-child ratios as a proportion of the overall population (National Research Council, 2000).

**SIGNIFICANCE**

Staff-to-child ratios is one of the most sensitive indicators of quality of care. Children who develop relationships with their teachers are more excited about learning, thus more likely to perform better academically and socially. This relationship cannot develop as fully if a teacher has to work with too many students (Adams, 1990; Bellm, et al., 2002; Birch & Ladd, 1997; Graves, 2006; Howes, et al., 1992; National Research Council, 2000; Reynolds, et al., 2006; Pianta & Steinberg, 1992; Vandall & Wolfe, 2000).
3. More children in schools that have aligned curricula and expectations among K-3 classrooms and with early childhood programs

**INDICATOR DEFINITION**

The percent of children, as a proportion to the overall population in a specified area, who are attending grades kindergarten through third grade in schools whose curricula and expectations are continuous within the schools and aligned with early childhood programs.

**SIGNIFICANCE**

A developmentally-sequenced approach to learning that builds on what children are capable of learning at a particular age and stage, and what they have already learned in pre-school, is the most effective method to ensure a continuation of learning. Learning fadeout greatly diminishes when children attend programs and schools that have a coherent education program with aligned standards and curriculum in preschool through third grade (Bogard & Takanishi, 2005; Gormley & Gayer, 2005; Griffin, 2007; Graves, 2002; Kauerz, 2006; Kelin & Knitzer, 2007; Raver & Knitzer, 2002; Raver & Zigler, 1997; Sanders & Rivers, 1996).
Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because *how* interventions are implemented and *how* services are provided is as important as *whether* they are provided.

Key ingredients are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Key Ingredients that apply to all goals in this Pathway can be found in Appendix 4. They include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

Key Ingredients that apply specifically to GOAL 5, *Continuity in Early Childhood Experiences*, include the Ingredients of standards for professional development, curriculum, assessment practices, and expectations.

**INGREDIENTS: Standards for professional development, curriculum, assessment practices, and expectations**

Standards for professional development, curriculum, assessment practices, and expectations for pre-K and early elementary classes are aligned and take into account children’s changing developmental characteristics and abilities.

- **Communication is ongoing** between schools, preschools, and families so children and parents know what to expect and so schools can respond to the needs and strengths
of incoming children. These relationships also preserve continuity of services during transitions and help to align expectations for children’s learning.

- The National Board for Professional Teaching Standards has identified **10 core competencies** that educators from preschool through third grade need in order to teach effectively and to prepare all young children for education beyond third grade:

  1. Knowledge of child development
  2. Methods for teaching diverse children
  3. Use of multiple forms of assessment
  4. Organization of learning environments
  5. Curriculum design that helps children make connections
  6. Strategic use of resources and technologies
  7. Parent and family outreach
  8. Professional collaboration and development
  9. Reflection for enhanced teaching
  10. Vertical alignment


**Rationale: Continuity In Early Childhood Experiences**

Continuity in early childhood experiences, especially during the transition into kindergarten and formal schooling, sets a trajectory for continuous developmental progress and later academic achievement and success.

Research shows it is important for curricula and expectations to be aligned among providers of early education and schooling because:

- Stable, predictable learning environments enable children to function at their highest scholastic and social levels, and they promote higher rates of school and home stability. The transition from preschool to kindergarten and the primary grades, however, necessitates changes in the roles, settings, and expectations of individual children and their families. Early childhood programs that continue into the primary grades promote stability by making transitions more successful, and they also help prevent the positive effects of preschool intervention from fading. Most developmental theories indicate that personal and environmental support during the transition to formal schooling is important for children’s continued success (Reynolds, et al., 2006).

- High-quality experiences for children that are aligned across the early grades are related to positive outcomes for children (Sanders & Rivers, 1996).

- Pre-kindergarten experiences are important for the development of certain basic skills, but these gains may not be sustained if they are not followed by aligned and integrated experiences in grades K-3. When kindergarten teachers build on the skills learned in pre-K and teach new age-appropriate skills, children’s learning builds from one grade to the next (Bogard & Takanishi, 2005).

Research shows it is important for providers of early education, schooling, and social and health services to reach out and connect with each other and with families because:

- When preschool children can visit the kindergartens they will attend, they learn what to expect and feel less anxiety early in kindergarten. The effectiveness of this practice was demonstrated by the Head Start Transition Project (Kagan & Neuman, 1998).

- When the connections between schools and homes are strong, parents know what their children are learning and can support the development of new skills and knowledge at home. (Melton, Limber, & Teague, 1999).

- Cognitive and social skills help together to increase the likelihood that children will succeed in school (Raver & Knitzer, 2002; Raver & Zigler, 1997).
Several studies link parent involvement in pre-K activities to emerging literacy skills, improved scores on cognitive and general knowledge tests, and fewer problem behaviors among children (Zill, et al., 2003; Reynolds, 2003; Henry, et al., 2003b).

Relationships are important to school adjustment. Children who develop warm, positive relationships with their kindergarten teachers are more excited about learning, more positive about coming to school, and more self-confident and they achieve more in the classroom. Relationships with peers also are important. Children whose peers accept them and who have friends tend to have more positive feelings about school and perform better in the classroom (Birch & Ladd, 1997; Ladd, et al., 1996; Pianta & Steinberg, 1992).
Evidence: Continuity In Early Childhood Experiences

A. Curricula and expectations aligned among providers of early education and schooling

An intentional curriculum is an important component of high-quality early learning and has been found most effective when it is **consistent with district-wide K-3 professional development** activities and early learning standards (Kelin & Knitzer, 2007).

B. Providers of early education, schooling, and social and health services connected with each other and with families

The National Center for Early Development and Learning’s Kindergarten Transition Project demonstrated that a **systematic approach emphasizing long-term relationships among the child, family, schools, teachers, peers, and wider community benefited all stakeholders.** Almost all participants, regardless of their professional role, acknowledged a shift in approaches and expectations. Relationships among kindergarten teachers, family workers, and principals tended to be more positive and supportive, and their programming more integrated, across preschool and school (Pianta & Kraft-Sayre, 2003).

Families in the Kindergarten Transition Project valued assistance during transitions and reported that their children made positive academic and social adjustments to school. **Teachers got to know children faster because there was communication between home and kindergarten and between preschool and kindergarten;** the communication also established a vehicle for problem solving (Pianta & Kraft-Sayre, 2003).
Effective Teaching and Learning in K-3 Classrooms

Conditions in place to produce and maintain excellent teaching and learning

Trusting relationships within schools and between communities and schools

**Actions**
- Specific strategies, activities, or steps taken to impact the quality and capacity of local services and supports, the availability of resources, or the policy contexts that contribute to the outcome

**Examples**
- Program and policy initiatives illustrating how actions have worked elsewhere

**Indicators**
- Measures for targeting and monitoring the impact of actions and documenting progress toward the outcome

**Ingredients**
- Elements of how actions are implemented that make them effective

**Rationale**
- Research-based reasons to believe that identified actions are likely to contribute to the desired outcome

**Evidence**
- Research documenting that identified actions contribute to achieving the targeted outcome or conditions that lead to the outcome
**Actions with Examples: Effective Teaching and Learning in K-3 Classrooms**

**A. Conditions are in place to produce and maintain excellent teaching and learning.**

Schools and school districts have the knowledge, resources, and community support needed to attract and retain effective teachers and principals and to maintain classrooms with high expectations, good instructional practice, emotional support for students, and professional support for teachers.

**EXAMPLES**

- The city of Chattanooga, Tennessee, had nine of the worst elementary schools in the state. Only 18% of third-graders were reading at or above grade level. When Chattanooga's Public Education Foundation (PEF) asked what needed to be done, residents answered: “Get a high-quality teacher in every classroom.” The community and schools worked together to make that happen. Teachers had to reapply for their jobs, and 100 of them left. Teachers and principals went through rigorous retraining, paid for in part by a five million-dollar grant. The local university offered a free master’s program just for teachers in the failing schools. The Urban League started an after-school literacy program. The mayor’s office provided bonuses for high-performing teachers, and the Bar Association offered free legal services for teachers. Community volunteers partnered with parents to help them read to their kids at home. Today, 74% of students test at the proficient or advanced levels in reading, and the city’s schools have outpaced more than 90% of all the schools in the state (Parade, 2006). Staff turnover has dropped and teacher quality improved in the city’s most troubled schools. [www.pefchattanooga.org](http://www.pefchattanooga.org)

- Success for All is a comprehensive, whole-school reform model that operates in more than 1,200 schools nationwide. It focuses on reading achievement and the prevention of reading problems, and emphasizes the development and use of language through the reading of children’s literature. Children have 90 minutes of targeted reading instruction daily. Reading groups are organized across grade levels, based on frequent assessments, using formal measures and teacher observations. Students discuss stories and learn from each other, which reinforces teachers’ instructions and builds social skills. Children who fall behind receive one-to-one tutoring designed to reinforce classroom reading instruction, or help with other issues that are impeding success (such as health or behavior problems). Success for All teachers, facilitators, and leaders receive intensive professional development in proven instructional strategies and ongoing support. [successforall.com](http://successforall.com), [www.brookings.edu/views/papers/200702ludwig-sawhill.htm](http://www.brookings.edu/views/papers/200702ludwig-sawhill.htm)

- The First Things First school reform model is based on the premise that when teachers are involved with their students, encourage their autonomy, and provide structure in the form of high, clear, and fair expectations, students are more likely to be engaged in their schooling. The result is better academic performance and higher achievement. Conversely, low levels of...
Better working conditions and professional development for teachers emerges as the most promising response to the maldistribution of effective teachers, according to “Excellence in the Classroom,” the Spring 2007 issue of the Princeton-Brookings *Future of Children*. This collection of analyses concludes that the distribution of effective teachers may be the most urgent problem facing American education, because poor children and children of color are disproportionately assigned to teachers who have the least preparation and the weakest academic backgrounds. There are few proven remedies, but the editors suggest that likely solutions include better working conditions—i.e., reduced class sizes, greater instructional support, and better facilities, safety, and leadership—and professional development that is linked to the curriculum, has substantive content, and is sustained over time. www.futureofchildren.org

States, districts, and unions remove impediments and create incentives to provide excellent teachers to the children who need the best teaching. Stakeholders collaborate to attract enough talent into the teaching profession that it becomes politically realistic to assign highly skilled teachers to the students who need them most.

**Examples**

The **Charlotte-Mecklenburg (NC) School District** is trying to break the stranglehold of socio-economic status on student achievement by recruiting and retaining teachers and principals who have demonstrated success with high-poverty students in high-poverty schools. The district gives incentives (including larger signing bonuses, pay for performance, tax-deferred annuities, and support of doctoral studies) to master teachers willing to serve in the most challenging schools. Other benefits for teachers include low-cost housing loans and repayment of teachers’ college loans; the district also is exploring legislation that would award retirement credits to teachers who work in designated schools. The district also is trying to attract the best principals to the most stressed schools through large signing bonuses for principals who come from outside the district and a performance-based retention bonus that will be kept in a growth fund for three years. [www.americanprogress.org/issues/2005/02/b494131.html](http://www.americanprogress.org/issues/2005/02/b494131.html)

Schools and school districts establish and maintain data systems to provide decision makers, practitioners, and parents with easy-to-understand feedback on attendance, instructional quality, and classroom climate.

**Examples**

The **Montgomery County (MD) Public Schools** have been fearless about collecting data—good and bad—and using them to drive decision making at every level. The district established an accountability system that publicly reports individual school performance by student characteristic, including race/ethnicity, poverty, disability, and English language proficiency. An integrated, Web-based technology system gives teachers and principals easy access to lesson plans, curriculum documents, diagnostic tools, and assessment data so they can...
monitor student performance and improve instruction. Kindergarten teachers received more than 100 hours of training in the curriculum and methodology for assessing student knowledge. Superintendent Jerry Weast recommends that teachers have access to hand-held, wireless computers so they can use assessment as a diagnostic tool more efficiently. www.mcps.k12.md.us/departments/superintendent/docs/early_success.pdf

- The Center for the Advanced Study of Teaching and Learning (CASTL), led by University of Virginia education professor Robert Pianta, has demonstrated that teachers who provide high levels of instructional and emotional support to students are able to help close the achievement gap for at-risk children. They earn higher marks on standardized tests and adjust to school better. A key aspect of Pianta’s work is his evidence that the K-5 classroom dimensions that close the achievement gap can be observed and measured objectively in the wide range schools across the country. These observations also can be used as objectives for teacher training and support. CASTL uses Web-based technology to provide feedback and support to teachers in Virginia and Wyoming in a project called MyTeachingPartner. Pianta is now applying his approach to pre-service, university-based teacher education. www.virginia.edu/vprgs/CASTL/about/index.php

B. Trusting relationships exist within schools and between communities and schools.

Communities, states, the federal government, and philanthropies encourage, fund, and strengthen efforts, including the establishment of after-school programs and community schools, to connect students and families to schools and to health and social services and other supports.

- Long Beach, California, has the country’s third-highest youth poverty rate, and most of the students at the Stevenson-YMCA Community School are eligible for free school lunches. Yet this elementary school became a California Distinguished School because of a partnership with the YMCA, which operates a school-based after-school program in conjunction with the teachers. The program, which links the school with the community, trains parents in literacy skills and sends them out to teach other parents at home. The school also provides adult classes in computer skills, English as a second language, and conflict resolution. In one of several community projects initiated by the school, parents collected 700 signatures asking the city to repair broken sidewalks around the school. (Parade, 2006) www.communityschools.org/CCSDocuments/Awards/Stevenson.pdf

- In Montgomery County (MD) Public Schools, one of the largest and most diverse school districts in the nation, K-3 students perform at higher levels in reading, language, and math than their counterparts nationwide. Moreover, the achievement gap between White, Hispanic, and African American students is shrinking. The gains are system-wide and occur at a time of rapid growth in racial and linguistic diversity. Administrators targeted these results after noticing that a growing number of young children affected by poverty and language differences began school lagging behind their peers in basic literacy and mathematics skills, and
they often remained behind. The district developed an early childhood education strategy to ensure that:

- Teachers have the necessary skills and knowledge to teach all students, hold high expectations for every child, and create a classroom climate in which students feel special, safe, and respected.
- Teachers have a curriculum with instructional guides aligned to standards, a staff development plan, and a process for supporting new and low-performing teachers.
- Teachers assess student progress throughout the year and use the data to improve instruction.
- Parents and teachers are equal partners in children’s education.
- Students have access to a focused and challenging curriculum, more instructional time, and smaller classes.

Parts of the plan were put in place in the district’s 125 elementary schools while others (e.g., full-day kindergarten and reduced class size) were implemented only in the highest-poverty schools. [www.mcps.k12.md.us/departments/superintendent/docs/early_success.pdf](http://www.mcps.k12.md.us/departments/superintendent/docs/early_success.pdf)

- After-school programs under the auspices of The After School Corporation (TASC) offer children a safe environment where they can participate in active, hands-on learning activities that are not always available during the school day. The programs aim to strengthen and reinforce regular school day learning and unlock young peoples’ potential. TASC began in 1998 with 25 programs in New York City, and now serves more than 250,000 children in New York and beyond by funding, monitoring, evaluating and supporting more than 320 after-school programs in public schools. TASC programs are operated by 83 community-based organizations such as neighborhood settlement houses and the YMCA, with support from 30 partnering colleges and cultural organizations. To date, TASC has leveraged more than $425 million in public and private funds. [www.tascorp.org](http://www.tascorp.org)

- Oregon’s Schools Uniting Neighborhoods (SUN) initiative seeks to ensure children’s success and close the achievement gap by bringing together parents, schools, businesses, government agencies, and non-profit community organizations that serve students and their families. Services include in-school support teams; after-school programming; enrichment activities; cultural competency training; and connections to social services such as counseling and health care. For example, Woodmere Elementary, a SUN school in Portland, offers homework assistance, enrichment activities, and mentoring for students through extended-day classes that also involve parents. Parents can learn English and parenting skills or receive in-home support to improve family dynamics. Although three-quarters of students come from low-income families, test scores have risen substantially over the last few years. [www.greatschools.net](http://www.greatschools.net)

- The Evansville-Vanderburgh (IN) School Community Council evolved from a single, full-service school launched by a principal with support from the United Way of Southwestern Indiana. During its first year as a full-service school, Cedar Hall Elementary’s test scores rose nearly 15%. In 2000, the Evansville-Vanderburgh School Corporation, with continuing help from United Way, expanded the full-service model to other district schools. Today the council encompasses more than 70 community organizations including the United Way, two local hospitals, social service agencies, and city and county departments. The council enables partners to understand school, student, and family needs and find ways to bring effective services and supports to school sites. The council has secured additional funding from
Through the Lincoln, Nebraska, Community Leaning Center Initiative, an array of experienced community-based service agencies provides educational and recreational programs, physical and behavioral health services, housing referrals, and prevention programs that contribute to positive outcomes for children, families, and neighborhood residents. In many schools, the programs include adult literacy and GED classes, homeowner education, and financial fitness classes. Health, dental, and vision care partnerships respond to children’s basic physical health needs. A leadership council with representation from across the community guides the effort. www.ascd.org/ASCD/pdf/sharingresponsibility.pdf

The National Network of Partnership Schools (NNPS), established at Johns Hopkins University in 1996, works with schools, districts, states, and organizations to organize and sustain excellent programs of family and community involvement that will increase student success in school. NNPS guides district leaders to help their schools develop goal-oriented programs of family involvement and community connections, and to meet NCLB requirements for parent involvement. In addition, NNPS assists state departments of education and organizations to develop policies and take actions that will support districts and schools in strengthening their partnership programs. The Center on School, Family, and Community Partnerships at Johns Hopkins University works with the members of NNPS to increase knowledge of new concepts and strategies; use research results to develop tools and materials that will improve policy and practice; provide professional development conferences and workshops; share best practices of parental involvement and community connections; and recognize excellent partnership programs at the school, district, organization, and state levels. www.csos.jhu.edu/P2000/index.htm

Prime Time Palm Beach County is a non-profit, intermediary organization dedicated to quality after-school programs. It was created in response to evidence that after-school programs are most likely to be effective when they address multiple developmental domains, are of high quality and led by professional staff, and engage children on a regular and sustained basis. It offers training, technical assistance and professional development for program staff, a broad and diverse range of program activity enhancements, a set of quality standards and a system for reaching quality standards through assessment, program improvement plans and resource allocation. With funding from the Children’s Services Council of Palm Beach County, the John S. and James L. Knight Foundation and The Picower Foundation, it aims to create an integrated and sustainable system of standards, supports and resources for all after-school programs in the county.
Indicators: Effective Teaching and Learning in K-3 Classrooms

1. More children in classes with skilled teachers with high expectations

INDICATOR DEFINITION
The percent of children who have highly skilled teachers who are dedicated to each child's success as a proportion to the overall population (Child Trends, 2000).

SIGNIFICANCE
Teachers who provide both instructional and emotional support improve children’s academic outcomes. Improving the quality of teachers is crucial to efforts to narrow race- and income-based achievement gaps: A child in poverty who has a good teacher for five years in a row makes learning gains large enough, on average, to close completely the achievement gap with higher-income students. When skilled teachers have high expectations of their students, children will rise to these expectations with the help of their peers, teachers, and parents (Borman, et al., 2002; Gordon, Kane & Staiger, 2006; Hamre & Pianta, 2005; Loeb, Rouse, & Shoris, 2007; Rice, 2003; Wilson, Floden, & Ferrini-Mundy, 2001).

2. More children attending school regularly

INDICATOR DEFINITION
The number of children with regular school attendance as a proportion of the overall number of children in a specified population. (Or, conversely, the number of children who miss more than 20 days during the school year as a proportion of the overall number of children in a specified population.)

SIGNIFICANCE
Regular school attendance helps boost children’s academic learning, achievement, and motivation. Early chronic absenteeism is associated with lower academic achievement, truancy in middle school, school dropout, delinquency, and substance abuse. When children miss a substantial number of school days, it is more difficult for them to learn to read and to acquire other crucial academic skills. The educational experience of regularly attending children may also be adversely affected when teachers must divert their attention to meet the learning and social needs of chronically absent children when they return to school (Bryk & Schneider, 2002; Ford & Stutphen,

3. More children in schools that address health, developmental, attendance, and family issues

**INDICATOR DEFINITION**
The percent of children, as a proportion of a specified population, enrolled in schools that effectively address non-academic factors that interfere with children’s ability to learn.

**SIGNIFICANCE**
Non-academic factors that influence students’ academic achievement include family income and education, health and nutrition, parent engagement with children’s school learning, time spent watching television, and student mobility (Barton, 2003). Effective efforts to remove non-academic barriers to school achievement include prompt and appropriate responses to signs of children’s or families’ distress or difficulties, and careful attention to chronic absenteeism. Additional effective efforts create social capital and produce the “relational trust” between schools and families that often have to accompany other reforms if they are to be effective in the most alienated communities (Lee, Smith, Perry, & Smylie, 1999; Bryk & Schneider, 2002).

4. Fewer children who changed schools during the past year

**INDICATOR DEFINITION**
The percent of children who changed schools during the school year as a proportion of the overall student population in a specified area.

**SIGNIFICANCE**
More effective learning—both for the individual student and the classroom as a whole—occurs when the general student population mobility rate is low. The frequency of moves during childhood is associated with a decreased probability of completing high school and college, an increased probability of repeating a grade and in behavioral problems and lower levels of academic achievement. The most negative effects of mobility were found when moves occurred during the early grades. (Hall, et al., 2000; Hango, 2006; Haveman & Wolfe, 1995; Hagan, MacMillan, & Wheaton 1996; Newacheck & Nessim, 1993; Moore & Vandivere, 2000; Ingersoll, Scamman, & Eckerling, 1989).
**Ingredients: Effective Teaching and Learning in K-3 Classrooms**

Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because *how* interventions are implemented and *how* services are provided is as important as *whether* they are provided.

Key Ingredients are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Key Ingredients that apply to all goals in this Pathway can be found in Appendix 4. They include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

The following ingredients apply specifically to **GOAL 6, Effective Teaching and Learning in K-3 Classrooms**.

**INGREDIENTS: Effective teaching and learning in K-3 classrooms**

**Children interact with one another and the teacher in a positive manner.** The teacher moves around the room monitoring activities and offering support as children need it, using a positive, friendly voice. The teacher notices the subtle ways children ask for help and responds to those cues before children get frustrated or act out; the children are comfortable asking for help. The teacher gives children rich opportunities to learn and use language; she challenges them to use reasoning and problem solving; and it is clear that students know they are in class to learn and they know what the goals and expectations are for different activities. Daily
activities are not passive, such as filling out worksheets; teachers and children interact in an active, focused manner.

**Teachers use a variety of formats to keep children interested in course content and give them a range of opportunities to display and perform new skills.** They communicate high expectations for student achievement; push students academically; and give expanded, detailed feedback beyond a right or wrong checkmark on a test.

**Teachers give emotional and social support** to students.

The Learning First Alliance cites the following attributes as characterizing effective early learning settings:

- Physical and psychological safety
- Challenging and engaging curricula
- A sense of belonging and connection to others
- Reassurance by others of children’s capability and worth as key factors to development ([www.learningfirst.org](http://www.learningfirst.org))

The following approaches were identified in “Excellence in the Classroom” (*The Future of Children*, Spring 2007) as most likely to enhance the quality of teaching and thus improve student learning:

- **Reform salary structures** by targeting large pay incentives for highly effective teachers in hard-to-staff subject areas or less desirable schools.
- **Improve working conditions** by reducing class sizes, providing instructional support, and ameliorating adverse conditions such as crime and dilapidated buildings.
- **Loosen certification and entry requirements** to increase the pool of talented people interested in teaching.
- **Strengthen professional development** by moving away from hours spent in general, unspecified professional development and invest in professional development programs that are linked to the curriculum, have substantive content, are sustained over time, and including coaching and release time for directed collaboration among teachers.
- **Remove staffing constraints** so schools can remove poorly performing teachers, adjust to changing needs, and make predictable hires in a timely manner. ([www.futureofchildren.org/usr_doc/Exec_Summary.pdf](http://www.futureofchildren.org/usr_doc/Exec_Summary.pdf))

Success for All (SFA) has found that **monitoring student progress** is essential to ongoing improvement in student outcomes. Informal measurement tools include daily classroom observations by teachers and classroom observations by school leaders. Data are used by teachers to inform instructional decisions and by school leaders as they plan interventions for groups and individual children each day. SFA identifies the following attributes of effective and meaningful monitoring (Slavin & Madden, 2006):

- Identifying the starting point
- Tracking growth throughout the quarter
- Assessing end-of-quarter growth
- Using data to motivate staff and students
The Center on School, Family, and Community Partnerships at Johns Hopkins University found that effective partnership programs that help students succeed do the following: provide information to families who cannot attend meetings, communicate in languages that all family members can understand, help families work with their children on schoolwork, and strengthen ties to community organizations and resources for students (Sheldon, 2004).
Rationale: Effective Teaching and Learning in K-3 Classrooms

Getting teaching and learning right in the first place—i.e., during the preschool and early school years—“is the most obvious way to give students what they will need to prosper in the classroom. Otherwise, every intervention afterward becomes remedial—expensive, difficult, bruising to children” (Maeroff, 2006).

Research shows it is important to put conditions in place that produce and maintain excellent teaching and learning because:

Teachers have a huge impact on student learning. For education reform to make a difference, it must penetrate the classroom and affect the quality of teaching (The Future of Children, 2007). Research shows that in public schools, teacher quality has a greater effect on student learning than parents’ level of education, family poverty, race, or other attributes believed to put children at risk. Yet far too many children, particularly those in high-poverty, high-minority schools, rarely see the most effective teachers (Gordon, Kane, & Staiger, 2006).

The gulf between people who thrive and those who struggle financially is increasingly driven by differences in skills, and skill differences are influenced by variation in the quality of K-12 education. Technological advances have routinized manufacturing and clerical jobs and facilitated international competition, thereby increasing the demand for cognitive skills, especially problem solving and communication skills. Thus an education that was good enough to allow Americans to earn a decent living in the economy of 1973 is not good enough to enable them to earn a decent living today (Murnane & Steele, 2007).

Without effective intervention, the schooling process magnifies any inequalities that develop before children reach school. However one defines school quality—in terms of higher student achievement, more school resources, more qualified teachers, more positive teacher attitudes, better neighborhood or school conditions, private vs. public schools—the least advantaged U.S. children begin their formal schooling in consistently lower-quality schools (Lee & Burkam, 2002).

The quality of classroom learning processes influences achievement and emotional/behavioral outcomes. A key indicator is the quality of the match between teacher practices and children’s developmental need for positive interactions (Pianta, et al., 2002; NICHD, 2003b; Henry, et al., 2003b).

A supportive, positive school environment for teachers and children has been shown to be related to higher achievement among students. Pre-K teacher compensation, in particular, is significantly linked to cognitive and social-emotional gains for children (Zill, et al., 2003).
Research shows it is important to establish trusting relationships within schools and between communities and schools because:

While good relationships and trust won’t compensate for bad instruction, poorly trained teachers or unworkable school structures, **reform efforts will fail unless there are strong levels of trust among teachers, between teachers and principals, and between all school staff and parents** (Bryk & Schneider, 2002). Having established with empirical evidence the links between “relational trust” and academic achievement, Bryk and Schneider conclude that "a broad base of trust across a school community lubricates much of a school’s day-to-day functioning and is a critical resource as local leaders embark on ambitious improvement plans."

Contact between schools, families, and community resources helps to ensure that children attend school regularly (Bryk & Schneider, 2002). Regular school attendance, in turn, helps boost children’s academic learning, achievement, and motivation. In contrast, early chronic absenteeism is associated with lower academic achievement, truancy in middle school, school dropout, delinquency, and substance abuse. When children miss a substantial number of school days, it is more difficult for them to learn to read and to acquire other crucial academic skills. The educational experience of regularly attending children may also be adversely affected when teachers must divert their attention to meet the learning and social needs of chronically absent children when they return to school. Chang and Guy have concluded that using absenteeism as a trigger for early intervention could be especially important for closing the achievement gap for low-income families as well as African American and Latino children (Chang & Guy, 2007).

**Children’s social development and academic development are inextricably connected.** Efforts to improve development in one domain will be more successful if attention is given to development in the other. Research findings confirm the importance of teaching literacy effectively in the early grades of school. Intervention for children who have trouble with literacy early in their schooling may help prevent aggressive behavior that makes it difficult for children who have initial academic difficulties to succeed as they progress through the elementary school years (Miles & Stipek, 2006).

There is strong evidence that **family involvement in children’s education at home and in school has a significant impact on student performance and attendance** (Epstein & Sheldon, 2002; Sheldon, 2003; Sheldon & Epstein, 2004; Sanders & Campbell, 2006).

**Several non-school factors influence students’ academic achievement, including nutrition, parent participation, time spent watching television, student mobility, family income and education** (Barton, 2003). Effective efforts to remove the non-academic barriers to school achievement include prompt and effective responses to children who come to school hungry, sick, abused, or needing eyeglasses; and efforts to create social capital and to produce the “relational trust” between schools and families that must come first in deeply alienated communities. But even the most supportive—schools—those that make children more ready to learn, reduce absenteeism, lessen behavior problems, and encourage both student and family engagement—are unlikely to improve school achievement unless there are also changes in the classroom (Lee, Smith, Perry, & Smylie, 1999).
A University of Virginia study found that classroom teachers who provide instructional and emotional support can improve academic outcomes for first-graders who are considered at risk for school failure. Children whose mothers had less formal education than a college degree achieved at the same level as children with more highly educated mothers when placed in first-grade classrooms where the instruction was focused and direct and the teacher provided ongoing feedback. Socio-economically disadvantaged students who did not receive such instructional attention scored lower on achievement measures than their peers (Hamre & Pianta, 2005).

Having a high-quality teacher throughout elementary school can substantially offset or even eliminate the disadvantage of low socioeconomic background. Students assigned to the most effective teachers three years in a row performed 50 percentage points higher than peers who were assigned to the least effective teachers (Gordon, Kane, & Staiger, 2006).

An analysis of empirical research on the relationship between teacher attributes and their effectiveness concludes that: (1) investing in teachers can make a difference in student achievement, and (2) neither an extreme centralized bureaucratization nor a complete deregulation of teacher requirements is a wise approach for improving teacher quality. The study points up the complexity of the issue and recommends adopting multiple measures along many dimensions to support existing teachers and to attract and hire new, highly qualified teachers. It also recommends careful attention to the context of teaching since a specific teacher attribute (e.g., a subject-specific master’s degree) may be an important predictor of teacher effectiveness in some contexts (e.g., high school math) but may not matter at all or may even have a negative effect in other contexts (e.g., first-grade reading) (King Rice, 2003; Wilson, Floden, & Ferrini-Mundy, 2001. Teacher preparation research: Center for the Study of Teaching and Policy, University of Washington, 2001).

A 2002 meta-analysis of student achievement outcomes from 29 leading comprehensive school reform (CSR) models reported that the overall effects of CSR are significant, meaningful, and “appear to be greater than the effects of other interventions that have been designed to serve similar purposes and student and school populations” (Borman, Hewes, Overman, & Brown, 2002).

An analysis of elementary school comprehensive school reform (CSR) models reviewed nearly 800 studies of 22 widely implemented elementary school CSR efforts, and put two in its highest category, based on both research quality and outcomes. The two models were Success for All (www.successforall.net/elementary/index.htm) and Direct Instruction (www.nifdi.org/index.html#about) (Comprehensive School Reform Quality Center, 2005).
The Success for All reading reform model has been found to increase students’ reading performance and attendance and to reduce special education placements and retentions (Slavin & Madden, 2001, 2006). A three-year U.S. Department of Education-funded evaluation involving 41 Title I schools that were randomly assigned to use Success for All or continue with existing programs in grades K–2 found that children in the Success for All schools achieved at significantly higher levels on the three reading measures used. The three-month achievement gap for first-graders increased to slightly more than a full grade equivalent by fifth grade (Borman, Slavin, Cheung, Chamberlain, Madden, & Chambers, 2005; Slavin, Madden, Cheung, Borman, Chamberlain, & Chambers, 2006). A study that followed Success for All students to the eighth grade found lasting, significant effects on standardized reading measures and reductions in special education placements and retentions (Borman & Hewes, 2003). In six studies, a Spanish bilingual version of Success for All and an English language development supplement to the English version were found to be significantly more effective in helping children read than traditional approaches (Slavin & Madden, 1999; Cheung & Slavin, 2005).

B. Trusting relationships within schools and between communities and schools

In analyzing empirical data from Chicago school reform efforts, Bryk and Schneider found that schools with a high degree of “relational trust” are far more likely to make the kinds of changes that help raise student achievement than those where relations are poor. They found that:

- Schools with strong levels of trust at the outset of reforms had a one in two chance of making significant improvements in math and reading, while those with weak relationships had a one in seven chance of making gains.

- In top-quartile schools, three-quarters of teachers reported strong or very strong relations with fellow teachers and nearly all reported such relations with their principals. By contrast, at schools in the bottom quartile a majority of teachers had little or no trust in their colleagues and principals, and fewer than 40% reported positive, trusting relations with parents (Bryk & Schneider, 2002).

Sixty-nine Ohio elementary schools working with the National Network of Partnership Schools (NNPS) to develop goal-oriented programs of family involvement and community connections were compared to a matched sample of 69 Ohio schools that were not NNPS members. After controlling for prior attendance and pupil support, researchers found that NNPS schools improved their rates of attendance significantly more than did schools in the comparison group. Further investigation found that the more schools worked to meet challenges of family involvement the more likely they were to experience improved student attendance (Sheldon, 2004).
APPENDIX I: THE PATHWAYS MAPPING INITIATIVE

The Pathways Mapping Initiative (PMI) provides a broad, deep, and coherent body of information as a basis for action to improve outcomes for vulnerable children, youth, and families.

PMI was established in 2000 as part of the Project on Effective Interventions at Harvard University and initially developed with support from The Annie E. Casey Foundation. It extends the wealth of current findings about what works by drawing not just on the traditional evaluation literature but on lessons from theory and practice. PMI organizes these findings in a coherent, contextual framework that shows how actions connect to intended impacts, illustrates the actions with specific examples, describes key ingredients of effective implementation, identifies indicators to measure progress, and provides rationale that makes the case for action and research evidence of effectiveness.

PMI’s work is based on the conviction that communities and funders should not have to start with a blank slate or scrounge, unaided, to uncover the rich lessons learned by others. We believe that communities will be able to act most effectively when they can combine local wisdom and their understanding of local circumstances with “actionable intelligence” from outside—the accumulated knowledge about what has worked elsewhere, what is working now, and what appears promising.

With support of the Annie E. Casey Foundation and the W.K. Kellogg Foundation, PMI has constructed three Pathways:

- the Pathway to Children Ready for School and Succeeding at Third Grade
- the Pathway to Successful Young Adulthood
- the Pathway to the Prevention of Child Abuse and Neglect

In addition, the Annie E. Casey Foundation directly constructed a Pathway to Family Economic Success.

Access to the Pathways is available at www.pathwaystooutcomes.org.

Each of the Pathways is designed to:

- **Give communities reliable guidance about what has worked elsewhere**—information these users can combine with their understanding of local conditions and opportunities to improve outcomes for children and families, especially those living in disinvested neighborhoods

- **Give philanthropic funders new ways of understanding what works** so they can think and act more strategically and coherently to improve outcomes for children and families

- **Create a forum** through which community experience can continuously inform and modify the knowledge base

- **Make it easier for an array of stakeholders to agree on plausible strategies** that hold promise to produce the child and family outcomes that the majority of citizens consider important—and thereby to leverage investment of energy and resources across disciplines, jurisdictions, and systems
Our approach to harvesting the extensive and growing body of knowledge about what works follows a process we call "Mental Mapping." The mental mapping process is similar to the Consensus Conferences convened by the National Institutes of Health. Both are attempts to move beyond reliance on isolated pieces of evidence and a narrow range of interventions that have proven their effectiveness. Instead, the mental mapping process systematically applies reasonable judgments and plausible interpretations to a preponderance of evidence culled from accumulated experience, theory, and research.

Mental Mapping has allowed us to identify:

- **Actions across systems and silos**, cutting across conventional boundaries to include actions in all domains that contribute to an outcome
- **Actions that include informal community supports** as well as contributions from formal helping systems
- **Actions that take account of policies and funding**—the broader context that supports or undermines local action
- **Key ingredients of effectiveness**, with a focus on how actions are implemented and the implications this holds for results and for "scaling up"

We believe that so much of what needs doing is not amenable to the program-by-program solutions now capturing the bulk of attention from those who are trying to become more intentional in their efforts. Mental Mapping has allowed us to assemble information about "what works" that goes beyond individual programs and practices to the strategies, connections among programs, and community-wide efforts that often are the keys to improved outcomes.

Although the Pathways Mapping Initiative draws from a larger universe of knowledge about "what works" than other approaches, much of what we do builds on other well-known work:

- Many of the actions and key ingredients identified as effective by Pathways are similar to the **best practices** and promising practices identified elsewhere. PMI’s Pathways differ from most sources of information about best practices in that they place the practices within a larger, outcome-based context.
- Like the **theory of change** approach to program design and evaluation, PMI makes explicit the links among actions, the contexts in which actions occur, and intended outcomes.
- The Pathways suggest **indicators of progress** toward the goals and outcome that are significant and will, over time, become increasingly easy for communities to assemble.
- Although we recognize the importance of governance, community engagement, and similar aspects of the **process of change**, PMI focuses on the **content** rather than the process of change in the belief that most users of Pathways already have access to assistance with the change process from many other sources.
APPENDIX 2: MENTAL MAPPING AS A TOOL FOR IMPROVING OUTCOMES

During the last decade, researchers and practitioners have learned much about how communities can act to improve the life chances of the individuals and families who live in America’s tough neighborhoods. Most of that knowledge, however, comes in small, isolated, and disjointed pieces; arrives too late; is derived from a severely limited range of interventions; and fails to identify what really made the intervention work.

The Pathways Mapping Initiative (PMI) offers an alternative. It broadens the knowledge base about what works by applying reasonable judgments and plausible interpretations to a preponderance of evidence culled from accumulated experience, evaluation findings, and strong theory. PMI’s information is developed, organized, and presented in a way that helps communities to think coherently and systematically, across systemic and disciplinary boundaries, about (1) the combination of actions needed to produce a desired outcome, (2) the key ingredients that make those actions effective, and (3) the community and policy contexts that influence effectiveness. The emphasis is not on specific programs but on actions that cut across them.

Our challenge has been to develop criteria and methods for identifying credible evidence about promising efforts, going beyond the circumscribed programs that can be evaluated with experimental methods. We sought to strike a balance between assessing what works by methods that are a poor fit with complex, cross-cutting, community based initiatives, and efforts that amount to little more than a champion’s anecdotal accounts. The Mental Mapping process represents that balance.

WHAT IS THE MENTAL MAPPING PROCESS?

Mental Mapping is a process similar to the National Institutes of Health (NIH)’s Consensus Conferences, which are “a vehicle for moving beyond the piecemeal presentation of evidence from diverse bodies of literature and for ensuring the unbiased synthesis of findings that can inform broader discussions of effective strategies.” The goal of the process is not only to elicit useful information but also to make it easier for policy and program people to think about their work more rationally and coherently.

To do Mental Mapping, we convene groups of highly knowledgeable, experienced individuals, including researchers and practitioners, who are steeped in their respective fields and diverse in their perspectives and beliefs. Drawing on their accumulated wisdom, we ask them to review and add to the findings from research and to make explicit their “mental maps” of what works to reach the outcome under consideration. Participants are asked to respond initially to the question, “Considering the evidence from the research, theory, and experiences you have been exposed to, what actions are most likely to achieve the specific outcome under consideration (e.g., higher rates of school readiness, third grade school success, or successful transition to young adulthood)?”

As they respond, we encourage participants to dig deep and put on the table issues that might otherwise remain hidden. We want Pathways to stimulate action in areas that are typically neglected; we want to highlight the importance of filling gaps among interventions, services, and supports and forging connections between them. For example, when we asked Mental Mapping participants in school readiness sessions what interventions were most likely to help change
outcomes for the highest-risk, most disadvantaged families, they did not primarily recommend new programs. Rather, they emphasized the connections that must be built into existing programs and institutions to make it easier and more routine for child care staff, for example, to obtain the training and support to improve their skills, or to be able to mobilize developmental assessments of a child they are concerned about.

Because we take great care to ensure a rich mix of backgrounds and outlooks among Mental Mapping participants, we have been able to protect both the process and the product from bias. We distinguish claims for which there is strong consensus from those that fail to stimulate consensus, are drawn exclusively from a single program or organization's experience, or represent an idiosyncratic point of view, and we discard the latter.

PMI supplements the information generated by Mental Mapping meetings by asking other experts to fill any remaining gaps. We also field-test the information with groups of potential users to make sure it is readily understood, useful, and relevant.

WHAT HAS PMI DONE WITH THE MENTAL MAPPING FINDINGS?

We have used the Mental Mapping process to construct three Pathways to better outcomes:

- the Pathway to Children Ready for School and Succeeding at Third Grade
- the Pathway to Successful Young Adulthood
- the Pathway to the Prevention of Child Abuse and Neglect

In addition, the Annie E. Casey Foundation directly constructed a Pathway to Family Economic Success.

Access to the Pathways is available at www.pathwaystooutcomes.org.

Four distinctive features of the Pathways are made possible by the use of Mental Mapping:

1. Pathways bridge disciplines. People know it takes more than family support services to strengthen families, more than child welfare services to keep children safe, more than the police to keep neighborhoods free of violence, and more than good preschool programs to get children ready for school. But there are few frameworks for drawing such cross-cutting conclusions. The diversity of Mental Mapping participants, and the mandate to think across boundaries, meant we were no longer looking at disciplinary domains and systems in isolation. Consequently, Pathways users see the many ways that communities can act effectively and explore those which are most useful to them.

2. Pathways identify the actions and strategies that contribute to specified outcomes and provide concrete examples from real places. We identify specific actions (services, supports, and other interventions) that are likely to achieve the stipulated goals and outcomes, including actions on the front lines, at the community level, and at the policy and systems level. We illustrate the actions with examples that feature real programs achieving real results.

3. Pathways identify the key ingredients of effective actions. The Mental Mapping process helps us identify the key ingredients, or traits, that seem to characterize effective interventions—such as the extent to which interventions are family-centered, community-based, and
culturally sensitive. This information broadens our knowledge not only about what works but how it works. Being able to describe the essential elements with precision and in some depth, even in the absence of absolute certainty, makes it more likely that promising efforts can be taken to scale or transported successfully to new environments.

4. Pathways identify the elements of community and system infrastructures that support and sustain effective change over time. The Mental Mapping process identifies community and policy contexts that are essential to improving outcomes but don’t attach to a single program or intervention. For instance, a hostile regulatory, funding, or accountability climate can seriously undermine the ability of organizations and community groups to take effective action or to develop the institutional characteristics that underlie more successful programs. This deeper level of analysis helps to clarify the limitations of individual programs and illuminate synergy in the work that cuts across domains.
# APPENDIX 3: LIST OF EXAMPLES

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<th>EXAMPLE</th>
<th>LOCATION</th>
<th>GOAL/ACTION</th>
</tr>
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<tbody>
<tr>
<td>Addison County Parent/Child Center</td>
<td>Middlebury, VT</td>
<td>4.B.</td>
</tr>
<tr>
<td>Allegheny County Early Childhood Initiative (ECI)</td>
<td>Pittsburgh, PA</td>
<td>4.A.</td>
</tr>
<tr>
<td>Alignment of early-learning standards and curricula with state academic standards</td>
<td>multiple locations</td>
<td>5.A.</td>
</tr>
<tr>
<td>Alternatives Credit Union</td>
<td>Ithaca, NY</td>
<td>3.C.</td>
</tr>
<tr>
<td>Arizona Kith and Kin Project</td>
<td>Arizona</td>
<td>4.A.</td>
</tr>
<tr>
<td>Assuring Better Child Health &amp; Development (ABCD)</td>
<td>multiple locations</td>
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</tr>
<tr>
<td>Avancé Child and Family Development Program</td>
<td>Texas</td>
<td>3.A.</td>
</tr>
<tr>
<td>Baby Steps</td>
<td>Okolona, MS</td>
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<tr>
<td>Bethel New Life</td>
<td>Chicago, IL</td>
<td>3.C.</td>
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<tr>
<td>Better working conditions and professional development for teachers</td>
<td></td>
<td>6.A.</td>
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<tr>
<td>Beyond Shelter Housing First Program</td>
<td>California</td>
<td>3.A.</td>
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<tr>
<td>Birmingham Healthy Start</td>
<td>Birmingham, AL</td>
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</tr>
<tr>
<td>Boston Medical Center Dept. of Pediatrics:</td>
<td></td>
<td>2.A.</td>
</tr>
<tr>
<td>- Medical-Legal Partnership for Children</td>
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<tr>
<td>- Project HEALTH</td>
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<tr>
<td>Build Initiative</td>
<td>multiple locations</td>
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<tr>
<td>California Safe and Healthy Families (Cal-SAHF)</td>
<td>California</td>
<td>3.B.</td>
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<tr>
<td>Calvary Bilingual Multicultural Learning Center</td>
<td>Washington, DC</td>
<td>4.B.</td>
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<tr>
<td>Center for the Advanced Study of Teaching and Learning (CASTL)</td>
<td>Charlottesville, VA</td>
<td>6.A.</td>
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<tr>
<td>- My Teaching Partner</td>
<td></td>
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<tr>
<td>Center for Community Change</td>
<td>national program</td>
<td>3.C.</td>
</tr>
<tr>
<td>Center for Family Life in Sunset Park</td>
<td>Brooklyn, NY</td>
<td>2.C.</td>
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<tr>
<td>Charlotte-Mecklenburg School District</td>
<td>Charlotte, NC</td>
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<tr>
<td>Chatham Estates</td>
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<tr>
<td>Chicago Alternative Policing Strategy (CAPS)</td>
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<td>multiple locations</td>
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<tr>
<td>Children’s Partnership’s Express Lane Eligibility Website</td>
<td>multiple locations</td>
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<tr>
<td>Children’s Services Council</td>
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<td>4.A.</td>
</tr>
<tr>
<td>Children’s Upstream Project (CUPS)</td>
<td>Vermont</td>
<td>3.B.</td>
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<tr>
<td>EXAMPLE</td>
<td>LOCATION</td>
<td>GOAL/ACTION</td>
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<td>Codman Square Health Center</td>
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<tr>
<td>Community Center Learning Initiative</td>
<td>Lincoln, NE</td>
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<tr>
<td>Covering Kids and Families – Rhode Island</td>
<td>Rhode Island</td>
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<td>C Partnership’s Express Lane Eligibility</td>
<td>multiple locations</td>
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<td>Crossway Community</td>
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<td>Cuyahoga County Early Childhood Initiative</td>
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<tr>
<td>Day Care Plus</td>
<td>Cleveland, OH</td>
<td>3.B.</td>
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<td>DC Developing Families Center (DCDFC)</td>
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<td>Dudley Street Neighborhood Initiative (DSNI)</td>
<td>Boston, MA</td>
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</tr>
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<td>Durham County Health Department’s TEAS (Together Everyone Accomplishes Something)</td>
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<td>Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)</td>
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<td>Early Childhood Mental Health Project</td>
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<td>East Bay Asian Youth Center</td>
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<td>Excellence in the Classroom</td>
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<td>Exodus</td>
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<td>3.B.</td>
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<td>Family Builders Program</td>
<td>Arizona</td>
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<td>Family Connection</td>
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<td>Family to Family Initiative</td>
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<td>Dayton, OH</td>
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<tr>
<td>Free To Grow</td>
<td>multiple locations</td>
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<tr>
<td>Get Checking</td>
<td>National program</td>
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<td>Hawaii HealthyStart</td>
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<td>➢ Play and Learn Centers</td>
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<tr>
<td>EXAMPLE</td>
<td>LOCATION</td>
<td>GOAL/ACTION</td>
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APPENDIX 4: CROSS-CUTTING INGREDIENTS OF EFFECTIVE IMPLEMENTATION

Key Ingredients are the underlying elements that make certain services and supports effective in contributing to school readiness and third grade school success. They matter because how interventions are implemented and how services are provided is as important as whether they are provided. For example, when home visitors are able to develop and maintain respectful relationships with clients, the chance that home visits will improve outcomes goes up significantly.

The ingredients of effective implementation are important not only to achieve outcomes but also to:

- Understand which elements are essential to success, so that program models are not diluted or distorted when they are expanded, scaled up, or replicated;
- Determine the extent to which actions now in place or being designed are likely to succeed; and
- Identify elements of current actions that need to be added or modified.

Cross-cutting Ingredients that apply to all goals in this Pathway include:

- Accessibility
- High Quality
- Effective Management
- Results Orientation
- Connections to and across Services and Supports
- Community Engagement and Social Networks
- Sustainability
- Funding

ACCESSIBILITY

Outreach and enrollment procedures ensure that families can easily locate and reach needed services:

- Aggressive outreach attracts all who could benefit from the intervention.
- Outreach occurs at times and locations convenient to families, including locations where high-risk individuals congregate or pass through.
- Outreach includes efforts to reach children and families in rural or remote areas.
- Materials are written in the language(s) of the target population(s). To the extent possible, staff members speak those languages.
- Program design, materials, and staff reflect and respect clients’ cultural norms.
- Program requirements are simple, streamlined, and results-oriented.

Programs do all they can to make services affordable:

- Programs offer services at no cost and/or offer sliding fee scales to remove financial barriers.
- Programs obtain third-party payments on behalf of clients whenever possible.
- Programs avoid burdensome eligibility requirements and asset thresholds.
Services emphasize prevention in addition to treatment and remediation. Interventions occur in the early stages of a problem, before multiple risks accumulate and conditions reach “diagnosable thresholds.” Individuals can receive services without a formal diagnosis.

Service systems work continuously with community entities to ensure that all appropriate services and supports are available to everyone who needs them.

Systems are designed to make possible multiple entry points to essential services and supports.

Systems encourage programs to reach and serve high-risk populations (e.g., teen moms, families with low-birth-weight babies, families with multiple risk factors) without limiting other populations' access.

Policies and payment mechanisms maximize eligibility for services:

- Policies and payment mechanisms promote services for hard-to-reach and high-risk populations without imposing eligibility requirements that limit other populations’ access.
- Policies expand low-income families’ eligibility for and access to all needed services and supports.
- Policies ensure that legal immigrants are eligible for all child and family benefits, including food stamps.
- Third-party payers (including child care subsidies, S-CHIP, and Medicaid) and public-private partnerships presume eligibility while families’ applications are under review, thus ensuring continuous coverage.

Means-tested programs (e.g., health care, subsidized child care, preschool programs) are under continuous review to assess trade-offs between targeting resources to those in greatest need and achieving universal coverage.

**HIGH QUALITY**

Services and supports are as comprehensive as necessary to be responsive to the needs of families, children, and the population served:

- Programs are designed to meet the specific needs of individual families and children.
- To the extent compatible with their primary mission, programs mobilize a mix of formal and informal supports as well as therapeutic interventions.
- To the extent compatible with their primary mission, programs are flexible and broad-ranging. They include long-term services for chronic difficulties, crisis intervention, and responses to evolving challenges in the same setting.
- Providers identify circumstances that prevent clients from using services and supports effectively and adopt practices that remove barriers (e.g., clients’ transportation, mobility, language, and child care needs).
- Program staff do not compartmentalize families’ problems.
- The focus, duration, frequency, and intensity of interventions, services, and supports are carefully calibrated to the needs, resources, and risk factors of specific children, families, and the population that the program targets.
Services and supports are family-centered and respond to the needs of individual children and families:

- Programs respond to individuals in the context of their family and to families in the context of their community.
- Programs address the “whole child.”
- Services reflect the language, values, and cultural backgrounds of clients.
- Programs are characterized by mutually respectful interactions.
- Services engage families in positive activities and build networks of support while also addressing their problems.
- Whenever possible, assistance with problems is an integral part of activities with families (e.g., parent support groups; English as a Second Language, citizenship, or exercise classes; family suppers).

Service settings, procedures, and staff explicitly encourage the development of on-going, mutually respectful relationships among staff and clients:

- Service settings are welcoming to families and cognizant of their diverse needs.
- Staff have time to build relationships with clients in order to thoroughly understand their strengths, needs, and circumstances.
- Staff involve families and caregivers in identifying needs and solutions.
- Policies and practices for interacting with families make them feel comfortable and safe seeking help.

Programs are sensitive to clients with diverse cultural backgrounds, values, languages, education, and communities:

- They make efforts to attract staff who share the cultural heritage and speak the language of the children and families they serve.
- They encourage staff to share with each other their experience and expertise on issues of culture and race.
- They target outreach and services to traditionally underserved families that may have experienced racism and language barriers.
- They give staff time to learn about the different cultures and child-rearing practices of the families and communities they serve.

Programs have staff, supports, facilities, and supports needed to maintain the highest quality standards established by public jurisdictions and professional organizations.

Policies, regulations, and payment mechanisms impose minimal burdens on providers and families.

Policies, regulations, payment mechanisms, and staff training support the provision of competent, comprehensive, continuing, appropriate, and acceptable care and services.

Policies and staff training encourage the development of respectful, trusting relationships between providers and families.
Policies and systems strategically address individual behaviors and institutional practices that cause inequitable distribution of services and disparities in outcomes because of race or income.

Systems invest money and time to address issues of social justice and equity.

EFFECTIVE MANAGEMENT

Explicit principles are articulated to guide decision-making and practice.

The program’s practices in recruiting, hiring, and retaining qualified staff are aligned with intended results:

- Programs are mission-driven. Staff demonstrate a belief in the mission.
- Staff roles, training, and guidance reflect the skills, sophistication, and needs of staff as well as clients.
- Program takes measures to minimize staff turnover.

Administrative practices support front-line discretion while maintaining program quality, individual rights, and accountability:

- Families who present multiple needs and challenges are welcomed and engaged by staff.
- Staff help families prioritize interventions to avoid adding stress to fragile families.
- Staff coordinate services, such as family support and home visiting, to reduce unnecessary duplication and improve effectiveness.
- Programs monitor their efforts to ensure that families are not overwhelmed by services and do not have multiple case managers.

Professional staff and others who provide support to families are well-trained and well-supervised:

- Staff have continuing access to training, supervision, and consultation that help them acquire necessary knowledge and skills and develop a rich repertoire of responses to unexpected circumstances.
- Staff feel supported by their colleagues and supervisors.
- Staff have easy access to consultation with and support from experts in mental health, substance abuse, domestic violence, impaired parent-child relationships, and child development.
- Staff working with children have skills, support, and time to be sensitive to the needs of their families. Staff working with families and other adults have skills, supports, and time to be sensitive to the needs of their children.

Systems have capacity for on-going, cross-program training and support to front-line providers, especially in settings and under auspices that serve high-risk children and families.
RESULTS ORIENTATION

To the extent practical, effectiveness is gauged by the results and outcomes experienced by children and families—the results that the public and funders are most likely to value and that can most reliably guide program improvement.

- Regular assessment of impacts informs professional development, resource allocation decisions and other efforts to ensure continuous improvement.
- The best measures of results are significant, reliable, understandable and relatively easy to assemble.
- Assessments of results do not rely on a single measure, but do focus on a limited, carefully chosen set of measures, which may include “sentinel indicators” of particular significance.
- Even initiatives where no single program can by itself achieve desired outcomes can be judged by results and outcomes experienced by children and families, as long as all involved recognize that results cannot be attributed to each agency’s or each program’s separate contribution.

When effectiveness cannot be gauged directly by the results and outcomes experienced by children and families (as in initiatives that involve community-wide efforts, systems change, and complex interventions that combine changes in programs, policies, and systems), or when it is important to demonstrate early, visible gains while working toward long-term goals, impact can be assessed indirectly.

- Useful indirect or interim measures include changes in capacities, behavior, attitudes, skills, information, participation, and satisfaction experienced by residents, clients, staff, etc.

- When such indirect or interim measures are used their relationship to results and outcomes experienced by children and families is clearly understood and documented.

Community groups assess the extent to which actions and key ingredients known to be associated with higher rates of school readiness and third grade school success are in place. They use this information to identify gaps, and work toward filling them:

- Communities have the capacity to monitor program, neighborhood, and community-wide outcomes.
- Community groups track the availability, accessibility and quality of services and supports (both formal and informal).
- Community groups track the availability of primary and preventive services in addition to crisis interventions.

CONNECTIONS TO AND ACROSS SERVICES AND SUPPORTS

Programs take responsibility for forging connections to and across services and supports:

- Staff have the capacity to link children and families with primary supports and services (e.g., housing, child care, jobs) and with specialized services.
- Staff communicate across programs and agencies, plan solutions jointly, agree on common objectives, and share responsibility for attaining goals.
• Program staff recognize the importance of building social connections, organizing and mobilizing community residents, and developing local leaders.
• Agencies coordinate services to minimize burden on families, reduce duplication, and improve effectiveness.

**Community groups work to share information about families and guide families to entry points** for primary and specialized services and supports.

**Systems are designed to connect families with basic supports, supportive networks, and specialized services.**

**Systems develop policies and practices to minimize administrative demands on families:**

• Client information is shared appropriately across programs to facilitate referrals and avoid duplication in obtaining data and histories.
• Services and supports use common eligibility definitions and determinations.
• Case-management services are coordinated across programs.
• Fundraising methods promote community-wide planning and the appropriate coordination of services and supports.

**Training and supervision are designed to cross disciplines and systems.**

**Systems go beyond program boundaries** to collect and analyze data on the effectiveness of actions and strategies.

**COMMUNITY ENGAGEMENT AND SOCIAL NETWORKS**

**Community groups continually prepare residents** to participate confidently in community-wide planning and decision making and to use experts as needed to help shape and implement strategies.

**Residents participate actively** in community visioning, planning, service design, decision making, and neighborhood improvement efforts.

**Community activities and events promote belonging,** social connectedness, and the development of relationships.

**The community is committed to building bridges across race, class, and language.** Community initiatives:

• Explicitly recognize that issues of race, class, and language bias have traditionally limited the diversity of participants in the decision-making process. They promote a greater understanding of issues of race, language, culture, class, social justice, and equity, and they identify and build on the assets of diverse people and groups who reside in the community.
• Foster opportunities to identify common ground and understanding across racial, language, cultural, and class lines within a community.
• Regularly assess how well they are addressing issues of social justice, equity, and diversity.
SUSTAINABILITY

Stakeholders develop alliances at the local, state, regional, and national levels to maximize the chances of sustaining what works over time. Alliances that support leadership development, technical assistance, and funding are especially important.

Policies governing supports for training, recruitment, retention, reimbursement, credentialing, and licensing (including loan forgiveness) ensure an adequate supply of high-quality providers.

Systems establish early, ongoing efforts to identify alternative funding sources and leverage private-sector support.

Sustainability strategies encourage community engagement around issues that are priorities for children and families.

FUNDING

Funding investments are made on terms and at levels that ensure high-quality implementation:

- Adequate, stable, predictable funding is available for services and supports that prevent problems as well as for services provided in response to identified problems.
- Funding policies recognize the importance of strengthening service providers and community organizations by providing core funding for essential activities that cannot be supported through categorical projects or programs.
- Funding is available to respond to children and families at high social risk, in addition to those who have biological impairments or risks.
- When new standards are applied or quality standards are raised, funding and other resources are available for technical assistance, training, and compliance monitoring.

Funding is sufficiently flexible that services and supports can be tailored to the needs of specific families and communities:

- Funding policies facilitate the efforts of programs to integrate multiple funding streams in support of two- and three-generation services.
- Funding is available to connect services across traditional categories (e.g., when a prenatal care provider finds that his/her patient needs housing assistance or substance abuse treatment).
- Funding policies allow for “glue money” to promote a continuum of services and supports across disciplines and systems, networks of services, links between services, and on-going expert consultation for service providers.
- Funding policies are designed to assure the availability of temporary and emergency assistance (e.g., to prevent homelessness).
Funding is allocated through processes that are simple, streamlined, and focused on achieving results for children, families, and neighborhoods.

- Rules for funding, reimbursement, and eligibility do not undermine the accessibility and effectiveness of services.
- Funding is available to produce information that is linguistically and culturally appropriate for families.
- Funding processes are coordinated to help families navigate and use helping systems, communicate effectively with staff, and make informed decisions about lifestyle choices, treatment options, and other aspects of services and supports.

Funding policies take into account the greater needs for intensive services among high-risk populations.
APPENDIX 5: SOURCES


Early Childhood Longitudinal Program (n.d.). Early Childhood Longitudinal Study- Kindergarten Cohort (Fall Parent Interview), Questions CCQ.210 and CCQ.265. Available online at: nces.ed.gov/ecls/pdf/fallkind/interview.PDF


Sources


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