

# EARLY CHILDHOOD INTERVENTIONS: PUBLIC- PRIVATE PARTNERSHIPS

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HEARING  
BEFORE THE  
SUBCOMMITTEE ON HUMAN RESOURCES  
OF THE  
COMMITTEE ON GOVERNMENT  
REFORM AND OVERSIGHT  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED FIFTH CONGRESS  
SECOND SESSION

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JULY 16, 1998

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**Serial No. 105-170**

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# EARLY CHILDHOOD INTERVENTIONS: PUBLIC-PRIVATE PARTNERSHIPS

THURSDAY, JULY 16, 1998

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON HUMAN RESOURCES,  
COMMITTEE ON GOVERNMENT REFORM AND OVERSIGHT,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 9:37 a.m., in room 2154, Rayburn House Office Building, Hon. Christopher Shays (chairman of the subcommittee) presiding.

Present: Representatives Shays, Towns, Barrett, Kucinich and Scott.

Also present: Representative Morella.

Staff present: Lawrence J. Halloran, staff director and counsel; J. Vincent Chase, chief investigator; Jesse S. Bushman, clerk; and Cherri Branson, minority counsel.

Mr. SHAYS. Good morning. I would like to call this hearing to order and welcome our witnesses and our guests.

In calculating the trajectory of an object in space, a course correction of 1 degree at launch can change the destination by millions of miles. Today, we discuss human trajectories and changing the course of children's lives.

Both physical and social science support the critical role of prenatal care and effective parenting in each child's emotional and cognitive development. A growing body of research concludes an infant's earliest encounters play a decisive role in wiring the brain for learning, for love, for life. Missed opportunities to program the human navigational computer cannot be regained, and the cost of later course corrections for children and their mothers increases exponentially as they go further down the path of low self-esteem, poor school performance, neglect, abuse, and dependency.

This is our third hearing on early childhood development programs. Previous oversight of the Healthy Start and Early Head Start programs offered optimistic, even moving, testimony that well-designed efforts can have positive and lasting effects on infants and families. Those at risk due to poverty, poor health, teen pregnancy and substance abuse can be put on the road to better health, better parenting and self-sufficiency. But rigorous evaluation of these programs is still in progress and important questions remain about the effectiveness, efficacy and sustainability of various prenatal and early childhood intervention strategies.

We address some of those questions today. Specifically, we ask, how are public and private investments in early childhood programs contributing to successful outcomes for infants and mothers?

And how can those successes be measured and replicated as States implement welfare reforms and demand for quality child care grows?

We focus on public-private partnerships in the development of early childhood programs because one fundamental premise is already clear: affecting the lives of pregnant women and their children requires a comprehensive, intense and integrated approach, involving government, health care providers, employers and others. Charting a healthy, productive course for a mother and her baby serves human service, public health and economic development goals. Both public and private sectors have an undeniable stake in the outcome, and each has an indispensable role to play in achieving it.

At our hearing on Early Head Start programs, my friend and colleague Senator Chris Dodd put these issues in the right perspective when he observed that children represent only 27 percent of our population, but 100 percent of our future. In well-designed, science-based early childhood development efforts, we have the power to shape that future for the better.

Our witnesses today bring diverse experiences, deep commitment and impressive expertise to the discussion of early childhood development issues. We sincerely look forward to their testimony.

At this time, I would recognize the ranking member of this subcommittee and an equal partner in all of our hearings, Mr. Towns.

[The prepared statement of Hon. Christopher Shays follows:]



**Statement of Rep. Christopher Shays**  
**July 16, 1998**  
**Page 2**

We focus on public-private partnerships in the development of early childhood programs because one fundamental premise is already clear: affecting the lives of pregnant women and their children requires a comprehensive, intensive and integrated approach, involving governments, health care providers, employers, and others. Charting a healthy, productive course for a mother and her baby serves human service, public health and economic development goals. Both public and private sectors have an undeniable stake in the outcome, and each has an indispensable role to play in achieving it.

At our hearing on the Early Head Start program, my friend and colleague Senator Chris Dodd put these issues in the right perspective when he observed that children represent only 27 percent of our population, but 100 percent of our future. In well designed, science-based early childhood development efforts, we have the power to shape that future for the better.

Our witnesses today bring diverse experiences, deep commitment and impressive expertise to the discussion of early childhood development issues. We look forward to their testimony.

Mr. TOWNS. Thank you very much, Mr. Chairman, for holding this hearing.

The future of our Nation depends on the education of our children. Early intervention assures that each child begins school with an understanding of basic concepts, learning in a group setting, cooperating with others, and following instructions. These concepts are key in school, society and life.

We in Congress fund these programs as if they are not important. A total of \$4 billion has been appropriated for Head Start for fiscal year 1998 and \$279 million for Early Head Start. These programs provide a comprehensive preschool experience for low-income children. However, Head Start only meets for part of the day.

Part of the welfare reform mandate is that parents of preschool children work for 20 hours per week. Most of these parents will only find work in service occupations. Hotels, restaurants, and retail stores, do not run on a 9 to 5 schedule. They are open almost 24 hours a day, 7 days a week. Finding decent, affordable child care for this kind of nonstandard work schedule is very, very difficult. Finding an enrichment preschool program that fits this kind of schedule is almost impossible. Therefore, the child care promised by many during the welfare reform debate will not be the kind of care that will help families succeed.

According to the Inspector General of the Department of Health and Human Services, so far child care under welfare reform has only produced a voucher system that requires parental co-payments. Most of the care is given through informal arrangements.

Mr. Chairman, in Denmark, France and Italy, preschool teachers are public employees who receive salaries, pensions, leave and health benefits. These countries have decided that the care and education of preschool children is important, and they have made it a priority. In America, we call children our greatest natural resource, but we do not act as if they are. Therefore, while we discuss these wonderful State and private programs here today, let us not forget that most of America's poor children, the children who need these programs the most, will not participate in any kind of enrichment activities and will receive second-class care.

Let me again, Mr. Chairman, thank you for holding this hearing today, and I look forward to working with you to demonstrate that our children are important. And I agree with you. They are only 27 percent of the population, but they are 100 percent of our future. And I yield back.

Mr. SHAYS. I thank the gentleman very much.

[The prepared statement of Hon. Edolphus Towns follows:]

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**OPENING STATEMENT OF**

**REP. EDOLPHUS "ED" TOWNS**  
**RANKING MINORITY MEMBER**

**BEFORE THE**

**SUBCOMMITTEE ON HUMAN RESOURCES**

**JULY 16, 1998**

Mr. Chairman, thank you for holding today's hearing on early childhood intervention programs. The future of our nation depends on the education of our children. Early intervention assures that each child begins school with an understanding of basic concepts, can learn in a group setting, cooperate with others and follow instructions. These concepts are key in school, society and life.

Yet, we in Congress fund these programs as if they are not important. A total of \$4 billion has been appropriated for Head Start for FY1998 and \$279 million for Early Head Start. These programs provide a comprehensive preschool experience for low income children. However, Head Start only meets for part of the day, for part of the year. Welfare reform mandates that parents of preschool children work for 20 hours per week. Most of these parents will only find work in service occupations. Hotels, restaurants and retail stores do not run on a nine to five schedule. They are open almost 24 hours a day, seven days a week. Finding decent affordable child care for this kind of non-standard work schedule is difficult. Finding an enrichment preschool program that fits this kind of schedule is almost impossible. Therefore, the child care promised by many during the welfare reform debates will not be the kind of care

that will help families succeed. According to the Inspector General at the Department of Health and Human Services, so far child care under welfare reform has only produced a voucher system that requires parental co-payments. Most of the care is given through informal arrangements.

Mr. Chairman, in Denmark, France and Italy, preschool teachers are public employees, who receive salaries, pensions, leave and health benefits. These countries have decided that the care and education of preschool children are important priorities. In America, we call children our greatest natural resource, but we do not act accordingly. Therefore, while we discuss these wonderful state and private programs here today, let us not forget that most of America's poor children-- the children who need these programs the most-- will not participate in any kind of enrichment activity and will receive second class care. Mr. Chairman, again, I thank you for holding today's hearing and I look forward to hearing the testimony of the witnesses.

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Mr. SHAYS. Mr. Barrett.

Mr. BARRETT. Thank you, Mr. Chairman.

Very briefly, I am pleased you are holding this hearing, as a Member of Congress, but probably more importantly as a father. I have three young children, ages 5, 4 and 1. My wife is pregnant with our fourth. I point out that I have run for Congress four times. Each election year, my wife has been pregnant, an issue that hits home in a major league way for me.

Mr. SHAYS. It raises the question, it is an election year.

Mr. BARRETT. It is an election year. But I think there is nothing more important. This is it. This is what it is all about, getting the world ready for our children. And I am excited to hear from our panelists today, all of whom are really dedicated to this issue. I am pleased to be here.

Thank you.

Mr. SHAYS. My staff counsel on my left said we need natural term limits.

Let me introduce our panel; and, as they know, we swear in all of our witnesses. This is an investigative committee, and we even swear in Members of Congress when they testify as well.

Our first witness is Rob Reiner, part of I Am Your Child Campaign from California. Our second witness is Governor Lincoln Almond from the State of Rhode Island, a great State; and Felicia Pearson, who has been part of a program in northern Virginia, Healthy Families. She is the mother of a 9-month-old child and a wonderful witness today. We deeply appreciate you being here today as well, Ms. Pearson. You are all equals in this group, and we are grateful to have all three of you speak.

At this time, if you would stand and raise your right hand.

[Witnesses sworn.]

Mr. SHAYS. Thank you.

I am going to also just do some housekeeping and ask unanimous consent that all members of the subcommittee be permitted to place an opening statement in the record and that the record remain open for 3 days for that purpose, and without objection, so ordered.

I ask further unanimous consent that all witnesses be permitted to include their written statements in the record, and without objection, so ordered.

We welcome your testimony.

Mr. Reiner, you have the floor first. Thank you.

**STATEMENTS OF ROB REINER, I AM YOUR CHILD CAMPAIGN, BEVERLY HILLS, CA; LINCOLN C. ALMOND, GOVERNOR, STATE OF RHODE ISLAND; AND FELICIA PEARSON, ALEXANDRIA, VA**

Mr. REINER. Thank you. I want to thank Congressman Shays and Congressman Towns and members of the committee for inviting me here to testify on behalf of America's youngest citizens.

Many of you may know the story of—

Mr. SHAYS. Mr. Reiner, before you start, I just wanted to state how we are going to work so no one is confused. The light is going to be green for 5 minutes. I will leave it on red for a second, then we are going to switch it and you will have another 5 minutes.

Then after 10 minutes, we would seek to go to the next speaker. But that is how it works. So the first time you see a red light, don't panic.

OK. You are on.

Mr. REINER. OK. The story many of you may know is about the stream of babies that you see floating down the river, continuous stream of babies heading toward the waterfall, and there is this concerned citizen feverishly yanking these babies one by one out of the river.

A second guy comes up, and he looks and says, what is going on here? He says, well, these babies, they are going down the river. They are going to fall over the waterfall. They are going to die. Please help me, help me. And he looks at this, the second guy, and he starts running up river. And the first guy says, well, what are you doing? I need help here. And he says, I am going upriver to see who is throwing the babies in the water. I want to stop that guy.

And I think that is why we are here today. It's about stopping the loss of our children to failure in schools and drugs and teen pregnancy and welfare dependency and violent crime before it starts. That is what this, in my opinion, what this hearing is all about.

Now, we know through efforts of the I Am Your Child Campaign and efforts of early childhood development groups around the country that, in no uncertain terms, the human brain grows to 90 percent of its adult size in the first 3 years, that's undisputed, and that the emotional and physical and intellectual environment that a child is exposed to in those first critical years, vis-a-vis parents and primary caregivers, has a profound physiological effect on how that child's brain will develop. That is undisputed brain research and brain development.

Now whether he or she will be healthy and enter school ready to learn and subsequently succeed in life or will become a toxic and very costly burden to society is in a very large part determined by his or her earliest experiences.

Almost 15 years ago, I started thinking about how a child's early development could affect social outcomes, and 4 years ago, my wife, Michele Singer Reiner, myself, and Ellen Gilbert of the International Creative Management Talent Agency in Los Angeles, we began the I Am Your Child Campaign, and it was a public awareness and engagement campaign and we had three goals.

The first goal was to raise awareness of the critical importance of the prenatal period for the first 3 years of life. What I had come to understand was this information had been available but had only been disseminated in the scientific community. It had been known for 15 years.

I took it upon myself to get it out to the public. To that end, we coordinated an effort with a White House Conference on Early Childhood Brain Development. This was in April of last year.

We also went to Newsweek Magazine, and we asked them to give us a special edition. They published a special edition of Newsweek, which was the single largest selling edition in their history, solely devoted to the period zero to 3.

I also asked ABC to give me an hour of television time to bring this to the American public, and that show has been aired now twice, and it has been seen by 15 million people. I had a very short period of time to get some messages across, but we got two ideas across, and I want to share them.

One was we now, through the new imagining techniques, we have—we presented two brains. One was a perfectly formed brain with all the gray matter filled in. The second was a brain about two-thirds the size with a lot of black crevices where gray matter should be but wasn't. We asked neuroscientists and neurobiologists what to make of these images, and they said this is clearly the scan of a normal person, and this is the scan of a person who has Alzheimer's disease. When we explained that these were both brains of 3-year-olds and that one of them was the product of a healthy, nurturing, loving situation at home in those first 3 years and the other one was a product of extreme neglect like we see in Romanian orphanages and other places in the country where children are deprived of stimulation and love and contact, this brain did not grow. It wasn't a question of the brain growing and then shrinking, as it would in Alzheimer's. It was a question of the brain not growing, and it will never grow. It is stunted.

These are creating attachment disorders, which is the single most important thing in terms of the effectiveness of how we function as a society. If we do not make these secure attachments early on in life with parents and primary caregivers, we will not be able to attach to teachers in school, to workers in the workplace and to other members of society as we become adults. This is what we tried to do.

The second thing we got across, and this was with help from the RAND Corp., was we did a graph that showed the curve of the brain growth and development over the course of a lifetime. And what we saw, no surprise, was that the brain grew from—to 90 percent, from zero to 3, from 3 to 10, another 10 percent, and then from then on it was a flat line, a little dip at the end, unfortunately.

And what we did was the inverse curve, was with public spending, and we found, again, no surprise, during the first 3 years, virtually no money was spent, and then as people got older, more money was spent. So we had the time of greatest risk, the time of greatest opportunity, no public resources spent, that was first.

The second thing we tried to do with the campaign was present materials to parents and caregivers. We have videos, we have brochures on child care, on parenting, we have a web site in Yahoo, and we got a lot of information out to millions of Americans.

The third thing was to get policymakers like yourselves to pay attention to this and what were the implications in terms of public policy.

Now it's becoming very clear that to make a real impact on crime and teen pregnancy and drug abuse and child abuse, welfare dependency, and homelessness, we must make a real investment in our children in the earliest years. We also know that in order to affect public policy we not only have to have the scientific evidence in place but we have to have the economic evidence in place as well.

Now, as I said, the scientific evidence has been in place for quite a while, but the economic evidence is starting to become known through the RAND Corp., investing in our children, and we can see the cost benefits of investing in intervention programs.

Because, historically, there have been so few resources devoted to early childhood development programs, measurable outcomes were limited. However, the RAND study has shown there are significant findings with respect to early interventions for families at risk. The bottom line is, with the right kinds of interventions, we can make dramatic reductions in these social ills. And this, simply stated, means a sizable saving to not only the government but the taxpayer.

Early childhood development experts and people in law enforcement have long known the wisdom of investing in our youngest children. Recently, there was a State-wide conference in Ohio of all the attorneys general, the chiefs of police, the judges, and one district attorney said that justice doesn't start in the electric chair, it starts in the high chair. And I think this is very well understood now in the law enforcement community, and there are wonderful programs all over the country going on.

Vermont, under Governor Dean, has Success By Six, which provides families with quality child care, nutrition and literacy programs, as well as extensive parent education.

North Carolina Governor Jim Hunt has initiated the Smart Start Program, a public-private partnership, which helps all children of families throughout the State obtain quality, affordable child care, health care and family support services.

Missouri Governor, at that time, Governor Bond, started the Parents As Teachers program, which is internationally recognized as one of the great early childhood education programs in Rhode Island.

You will hear from Governor Almond in a minute. He helped create Right Care and Starting Right, an expansive effort to make quality child care more accessible and affordable.

And the National Governors Association, under Governor Miller and Governor Voinovich, has made early childhood development a top priority.

And I, myself, I have taken what I have learned in the last 4 years and have crafted and am chairing a California initiative which is officially qualified for the November ballot called the California Children and Families Initiative, and if it passes—it proposes the creation of a comprehensive, integrated approach to early childhood development which will link up health care, quality child care, intervention programs for families at risk, and parent education from the prenatal period through age 5. And if it passes, it will be another great model from which to work.

But as successful as some of these programs have been, and, hopefully, the one in California will be, we as a Nation have approached early childhood development in a very ad hoc, piecemeal way. We have yet to recognize early childhood investment as an effective social problem solver, and until we recognize that the way to change outcomes is to attack social problems at the roots, we will continue to stand by the river futilely trying to grab babies before they go over the waterfall.

Now we at I Am Your Child have been reaching out to the State and local governments, to the business community, to the foundation world and, also, to the Federal Government to all come together and play a part to providing a support system to give our children the best start in life.

Again, I want to thank you, again, for allowing me to be part of what I hope will lead to a significant investment in our Nation's most precious resource, as the Congressman pointed out, our children. Thank you very much.

Mr. SHAYS: Thank you very much.

[The prepared statement of Mr. Reiner follows:]

**SUBCOMMITTEE ON HUMAN RESOURCES**

**Testimony by Rob Reiner**

**(to be delivered 9:30 a.m., 7/16/98)**

**I want to thank Congressman Shays and Congressman Towns for giving me the opportunity to testify on behalf of our youngest citizens.**

**You may have heard the story of the stream of innocent babies floating down the raging river towards the looming waterfall and the concerned citizen who feverishly tries to pull those babies out of the river as they head towards their certain doom. Another concerned citizen approaches and asks what the first guy is doing. He says, "I'm trying to save these babies—please help me." At which point the other guy starts running upriver. The first guy says, "Where are you going? The babies are passing us by." The second guy says, "I'm going upriver to stop whoever's throwing these babies in."**

**I feel that's what this hearing's about: stopping the loss of our children to failure in school, drugs, teen pregnancy, welfare dependency, and violent crime before it starts.**

**We now know in no uncertain terms that the human brain grows to 90 percent of its adult size in the first three years of life. And the emotional, physical, and intellectual environment a child is exposed to in those critical first three years vis-à-vis parents and primary caregivers has a profound physiological effect on how that child's brain will develop. Whether he or she will be healthy and enter school ready to learn and subsequently succeed in life or become a toxic and costly burden to society is in a very large part determined by his or her earliest experiences.**

**After almost 15 years of thinking about how a child's early development could affect social outcomes, four years ago my wife Michele Singer Reiner, Ellen Gilbert of the International Creative Management talent agency, and I began the I Am**

**Your Child Public Awareness and Engagement Campaign. We have three primary goals:**

- 1. Raise awareness of the critical importance of the prenatal period through the first three years of life;**
- 2. Provide parents with information and tools to help them understand their child's early development; and**
- 3. Make policymakers aware of the enormous opportunity to affect social outcomes.**

**We now clearly know that if we want to make a real impact on crime, teen pregnancy, drug abuse, child abuse, welfare dependency, and homelessness, we must make a real investment in a child's earliest years.**

**We also know that, in order to affect public policy, we must have not only scientific evidence of the wisdom of this kind of investment, but the economic evidence as well. As I've said, the scientific evidence with respect to brain development has been in place for quite some time, but now for the first time, with the release of the Rand Corporation's book entitled *Investing In Our Children*, we can also see the cost benefits. Because historically there have been so few resources devoted to early childhood development, programs with measurable outcomes are limited. However, the Rand study has shown significant findings with respect to early interventions for families at risk. The bottom line is that, with the right kinds of interventions, there can be dramatic reductions in crime, teen pregnancy, drug abuse, child abuse, and welfare dependency. Simply stated, this means sizable savings for the government and the taxpayer.**

**Early childhood development experts and people in law enforcement have long known the wisdom of investing in our**

**youngest children. Recently in a statewide law enforcement conference in Ohio, one district attorney said that justice doesn't start in the electric chair; it starts in the high chair. The fact is there are wonderful, effective programs throughout the country:**

- **Vermont, under Governor Dean, has instituted Success by Six, which provides families with quality child care, nutrition and literacy programs, as well as extensive parent education;**
- **North Carolina Governor Jim Hunt has initiated Smart Start, a public/private initiative which helps all children and families throughout the state obtain quality, affordable child care, health care, and family support services;**

- **Missouri, under then-Governor Bond, started Parents As Teachers, an internationally recognized early childhood family education and support program;**
- **In Rhode Island, Governor Almond helped create RIté Care as well as Starting RIté, an expansive effort to make quality child care more accessible and affordable;**
- **And the National Governors' Association, under Governor Miller and Governor Voinovich's leadership, has made early childhood development a top priority for the nation's governors.**

**I myself have taken what I've learned in the last four years and helped craft, and am chairing, a California initiative called the California Children and Families Initiative, which has recently officially qualified for the November ballot. It proposes the creation of a comprehensive, integrated approach to early**

**childhood development which will link health care, quality child care, intervention programs for families at risk, and parent education from the prenatal period through age five. And if it passes, it will be another great model from which to work.**

**But as successful as these programs have been—and, hopefully, the one in California will be—we as a nation have approached early childhood development in an ad hoc, piecemeal way. We have yet to recognize early childhood investment as an effective social problem solver. And until we do, until we recognize that the way to change outcomes is to attack social problems at the roots, we will continue to stand by the river, futilely trying to grab babies before they go over the falls.**

**Again, thank you for letting me be part of what I hope will lead to a significant investment in our nation's most precious resource, our children.**

Mr. SHAYS. Governor, you are a leader in this area, and you honor this committee with your presence. It is nice to have you here.

Governor ALMOND. Thank you very much, Mr. Chairman and members of the committee. It's a privilege for me to represent the people of Rhode Island and be before the subcommittee today, and it's also a privilege to be on this distinguished panel.

I look forward to hearing what I am sure is a compelling story from Ms. Pearson. And, Rob Reiner, I just want to say from all the people in Rhode Island, we thank him for what he has done for the children of this Nation, and I speak for, I know, for all of the Nation's Governors when I thank him for the tremendous commitment he has made. He joined me in Rhode Island yesterday to speak to our community about the importance of early childhood programs.

We all know, the evidence is irrefutable, that from birth to age 3 are the critical years in a child's life. We know that today. Ninety percent of the brain is formed during that period of time. And, of course, historically, we have put our money in other areas.

We all are working very, very hard, this Congress, all of the Nation's Governors, on education reform. Elementary and secondary education reform is extremely important. It's long-term. It's going to take a decade or more before we are going to see the real benefits of the work being done by the States in this Nation.

There is one thing we can do to help education reform, and it will work, and it will work quickly, and that is to provide good child care programs for the youngsters in the Nation. We have a changing economy. Times have changed since my children were born in the sixties. We have many single parents, unfortunately, in the United States. A lot of them have been on welfare. We need this help to transition them off of welfare, but we also have to help the working poor. There is no question about that.

We view every child in Rhode Island as sitting on a three-legged stool. One of those legs is the parent in a strong family and to have parents who know how to nurture their children and bring them up properly.

We also look at health care. And I am very, very proud as Governor to say that we have addressed the health care issues in the State of Rhode Island. We have a program of managed care for Medicaid where we insure all children to the age of 18 to 250 percent of the poverty level. We also ensure prenatal to 350 percent of the poverty level.

Rob was with me yesterday when Christine Ferguson, who used to be a staffer for Senator Chafee and is currently my Director of Human Resources, gave some preliminary figures, and some of them are very startling. She just completed the study of the two poorest census tracts in the city of Providence with respect to health care, and low weight births have decreased 50 percent in the last 3 years by providing good health care to children. Just think of what that means with respect to the health care industry and the savings.

You know, we know today that good preventive medicine can save us an awful lot of money in the future. We are seeing the spacing between births, which is so important to the health of a woman, the same for subsidized insurance as it is for private insur-

ance. We are seeing mothers and pregnant women who smoke or drink alcohol or abuse drugs declining as we get them the proper medical attention.

So if we can get children healthy, the next step is to make sure the children are developing, so that we can meet our goal in Rhode Island, which is a very, very simple one, to make sure every child enters school ready to learn. That alone can make a huge impact with respect to education reform.

Let's understand this. We do today, even with the problems in public education, graduate a significant number of extremely good students who go on to higher education. The problem is we have some who lag behind. What we can do is give them an early start, which is going to be a big boost to education and education reform for the future. It's similar to the medical issues with respect to putting money into preventive medicine as to what you save and what your product is in the future.

I am also very, very proud to say that, in the past couple weeks, the legislature at my request in Rhode Island passed the Starting Right program. Over the next 3 years, we will have, and we are the only State in the Nation that has, child care as an entitlement for the working poor and for our individuals on welfare. We are going to go to 250 percent of poverty with respect to a child care incentive. That is going to be our entitlement. That is going to be extremely important. And we are in the process of building a child care system that has to be, it has to be, affordable, it has to be quality. And this is not about baby-sitting, this is about the development of children, and we have to invest in those particular areas.

I will close by just saying to the Congress, I applaud you for what you did with respect to children's health care. You passed legislation last year that took us to 150 percent of poverty to the States. We have talked about devolution, how it would be a race to the bottom by the States and I know that hurt a lot of my fellow Governors and hurt me. Devolution has turned out to a race to the top, and we are doing what is right for the people of the State of Rhode Island and for the Nation.

One thing that bothers me is, when you passed that health legislation, Rhode Island was already well above what you passed, and there is about \$8 million sitting there that I cannot use that I need because we insure up to 250 percent of the poverty level. And when you have an individual who is leading the race to the top, and you say to me, we are going to penalize you because you were there before we said may I, or I asked may I, that is wrong. And I have a waiver in to HHS now to allow me to use that \$11 million, about \$8 of which I don't think I can use on health programs, to expand the RIte Care program for poor families.

But I could also use that. I need the flexibility to put that money to early childhood programs which can help children and help parents, build the work force, and help the economy of the State of Rhode Island.

Thank you very much.

Mr. SHAYS. Governor, thank you very much.

[The prepared statement of Governor Almond follows:]

**Testimony of Lincoln C. Almond, Governor of the State of Rhode Island**  
**Before the Committee on Government Reform and Oversight**  
**sub-committee on Human Resources**  
**July 16, 1998**

**Introduction**

Good Morning, Mr. Chairman, and distinguished members of the Committee on Government Reform and Oversight. It is an honor to be here today to speak with you on one of the most important issues facing our nation, early childhood interventions. Also, it is a pleasure to be speaking with a group of some of the great national leaders and academics of our time on this truly vital issue. In fact, just yesterday I had the distinct pleasure to host Mr. Reiner in Rhode Island for our first statewide early childhood summit focusing on these very issues. Mr. Reiner's compelling and dynamic address to the Rhode Island business community and statewide leadership will undoubtedly lead to meaningful partnerships between business and government.

Let me just add that many of us "outside the beltway" appreciate your willingness to review this issue and work toward a shared vision because how individuals function from the pre-school years all the way through adolescence and even adulthood hinges, to a very significant extent, on their experiences before the age of six. This is why our experience in Rhode Island has been so compelling.

**Problem**

Rhode Island families, like many others across the nation, are experiencing a child care crisis. With welfare reform underway and our increased understanding of brain-development in young children, it is clear that having quality child care available for all working families is of extreme importance. As the Governor, I have charged my administration with providing affordable and accessible quality child care and early intervention programs to low and middle income families so that tomorrow's generation is equipped to live in a technologically advanced and complex world. And I can say, that under the capable leadership of my Director of Human Services, Christine C. Ferguson, Rhode Island is well on its way to leading the nation in early intervention

for the most critical years of development, ages 0-6. We have recognized the broad economic implications of child care and early childhood policies, and we are taking a leadership role in developing programs for our children.

Quality early childhood care and intervention programs perform a dual function in the economy. In the short run, such services meet the needs of the existing work force by assisting working parents in meeting their child care needs. Research suggests that employers benefit from lower absenteeism and turnover, higher employee morale and reduced recruitment costs by providing child care assistance. In the long term, quality early childhood programs are also critical in preparing children to enter the workplace of the future. Research demonstrates that quality early childhood education programs all children contribute to higher levels of success in school, greater achievement motivation, higher vocational aspirations and higher employment rates.

Such strong outcomes, coupled with a changing economic environment, are sparking considerable interest across Rhode Island in expanding quality early education and childcare programs as an economic development strategy. Leading experts in Rhode Island indicate that economic growth over the past 20 years has been the result of an influx of people entering the workforce, a trend that is not expected to continue. With fewer people entering the labor force, each worker's productivity is critical to achieving a competitive edge in an increasingly global and information based economy. While educational achievement was less important in a largely manufacturing-based economy, the work place of the future will demand more critical thinking and learning capacities. Moreover without tapping the potential of more disadvantaged children, critical labor shortages are expected to stymie economic performance.

However, despite all of the progress in Rhode Island, we still face vexing issues that are similar to other states. And, for many poor and low-income families, child care and intervention problems can be severe:

- Studies like the Cost, Quality, and Child Outcomes Study have confirmed that low to middle income families still face great struggles in finding affordable, good-quality childcare — and that most care now retained by parents is mediocre, at best.

- ▶ Despite recent state initiatives to increase child care assistance to low and middle income families, long waiting lists and rising demands for child care help among both working and welfare families pose tough challenges for states. If additional underfunded work requirements are imposed on states by Washington challenges will become even more vexing.
- ▶ Welfare moms are finding it difficult to move from welfare to work while maintaining a healthy home. Middle income families are scrambling to survive financially and ensure that their children have the best possible environment in which to develop and grow.

***The Rhode Island Experience - A Solution That Works Right***

Although Rhode Island possesses perhaps the most equitable, balanced and positive child care policies in the nation, we are now faced with the challenges of making sure that they can be swiftly and fully enacted and maintained. Rhode Island will draw down all its child care block grant, 11 million, including matching dollars, and another 1.5 million from Title XX. In addition, RI will spend 13 million dollars in state funds to support working families. Currently, 43% of all families receiving child care subsidy are on cash assistance and 57% are not receiving cash. Even with statistics such as these, RI has not gotten to the core of beneficiaries on welfare. Of the families on assistance, only 18% are presently using child care, and we have only reached the tip of the welfare demand.

In Rhode Island, my administration has worked together with the State Legislature to dynamically re-engineer socio-economic programs such as health and welfare and their impact on economic development. In Rhode Island, 95% of all businesses have less than 50 employees. Small businesses struggle to provide good wages and are often unable to fund quality health and child care benefits. My administration is making it possible for Rhode Island small businesses to thrive and prosper by providing them with quality benefits to aid workers. It is our belief that this is helping small businesses in Rhode Island retain their best and brightest employees.

Rhode Island has adopted a simple goal: All children will enter school ready to learn and leave school ready to work. I believe that the ages of 0-6 are the most critical if our future stands a chance. We have made Rhode Island the only state in country in which child care and health

care is guaranteed to working families. I would like to outline a few of our accomplishments because I believe that they are national models which can be shared by other states. These programs are preparing our society with for the 21<sup>st</sup> century by ensuring a strong and healthy family and a positive economic future.

**1. Children's Health - The Rite Choice**

Health care is vital to every child's growth and development. Studies have shown that if children lack health insurance, they are less likely to receive needed primary and specialty care—including preventive care, treatment for acute and chronic illnesses, mental health services, dental care and prescriptions. Regular doctor visits are especially critical during early childhood to receive necessary preventive health care, immunizations and anticipatory guidance. In addition, health coverage is essential is for a vibrant and lively economy. To answer these needs, Rhode Island created the Rite Care program in August of 1994 to improve access to and quality of health care for Rhode Island families. My administration has devoted countless hours of time and commitment into increasing access for children and ensuring some of the highest quality of health care in the nation.

In Rhode Island, we have seen a change in the health status of children since they enrolled in Rite Care, the state's health insurance Program. Rite Care provides over 75,000 Rhode Islanders with access to quality, comprehensive health care.

The health outcomes for this program have exceeded our expectations. Results include:

- -a decrease in the number of low birth weight infants
- an increase in the percentage of infants who were up-to-date on their immunizations
- an increase in the percentage of newborns who had their first physician visit within the first 2 weeks of life

-an increase in the percentage of infants who waited less than 2 weeks for a specialty care appointment

-a decrease in emergency room visits and hospital utilization and an increase in primary care physician visits

-98 percent of parents who have children enrolled in a Rite Care health plan were satisfied or very satisfied with the quality of care received

These positive early intervention programs and outcomes are designed to ensure a healthier, skilled, workforce with healthier children.

## ***2. Starting Right- The Right Future***

As I said earlier, my administration is preparing the business community and our families for the 21<sup>st</sup> century. This means that we are ensuring that business and government work together as partners to create a dynamic working and living environment in Rhode Island. By investing in early education and child care we are laying the groundwork for families to have access to care and hence for our economy to thrive. With greater accessibility and quality health care in place, parents can enter the workforce with the peace of mind that their children are in excellent hands.

In January of this year, I announced an aggressive initiative called Starting Right, which picks up where Rite Care left off. I am happy to say that with the state legislatures assistance Starting Right is now law. Starting Right which will be implemented over three years is designed to provide a comprehensive child care and early education program focusing on the issues of quality, affordability, and accessibility. My goal with this is to ensure that all children in the state are well prepared and able to enter school ready to learn.

This innovative program will expand the state's child care subsidy program to include working families earning up to 250% of the federal poverty level (FPL), or about \$34,000 a year for a

family of three. The subsidy program would also be extended to provide age-appropriate activities for children 13 through 16. Starting Right will also partner with communities to develop pilot projects linking the state, business community, schools, child care, Head Start, preschool, and other similar programs. The number of eligible children enrolled in Head Start programs would also be increased by approximately 700 slots. Included in this is the enhancement of services to low-income children including: social services, health, nutrition services, mental health, parental involvement, and transitional services for children entering kindergarten.

Health insurance coverage will be offered to child care center employers. The state will offer partially subsidized health care coverage to licensed child care centers participating in the state's child care program. While the state leads the nation in providing similar coverage to home based providers, this plan would also result in an increase in child care placement in centers across the state. Under Starting Right, the state will work to increase training resources for child care providers. Enhanced training in the areas of childhood health and safety will be provided. Special training for care of newborns and infants will also be developed. And, one of the best ways to make sure our children make a successful step from child care to school is to coordinate links between the schools, pre-schools and child care providers allowing for a smooth transition.

In addition, since Rhode Island is primarily a small business state, some of these funds will be used to help small businesses join together in public-private partnerships to help create or offer early care opportunities for their employees' families. Another focus will be upon areas of geographic shortages, infant/toddler care, and care during non-traditional hours and for parents with alternating work schedules, including before and after school care. Once again, this will result in a workforce that is prepared to meet the demands of the new millennium and create greater economic growth.

***Conclusion- A brighter vision for tomorrow***

My administration has adopted a short and simple yet essential goal: All children will enter school ready to learn and leave school ready to work. What happens to a child between the ages

of 0 to 6 largely determines the outcomes of a child's life. All of us, federal, state, and private sector need to partner together to build a bridge toward maximizing the investments that we are all making in health care, child care, education and early intervention programs.

Families today face unprecedented challenges in raising their youngsters. Low earnings require many families to resort to multiple wage earners, moonlighting, and overtime, leaving them less time for their families. Growing numbers of young parents resort to extraordinary measures to make ends meet and arrange their child care. Concern about balancing work and family life is not confined to those with low incomes; fully half the population report that they have too little time for their families. This is why from the beginning of my tenure as Governor I have tried to make an integrated continuum of care for Rhode Island families a top priority of my administration.

The current needs for our great nation are many. However, in order to ensure the future, we must intelligently invest in the present. The most effective investment we can make is in the development of young children.

Thank you very much.

Mr. SHAYS. Before calling on you, Ms. Pearson, I will be happy, and I am sure my colleagues on the full committee will be happy, to work with you to determine how many other States are like yours.

Governor ALMOND. Vermont, Washington and Hawaii.

Mr. REINER. Minnesota as well.

Mr. SHAYS. It seems to me like that is a solvable problem.

Mr. REINER. Minnesota and Tennessee.

Governor ALMOND. Yes, they varied. We were the highest at 250 percent.

Mr. SHAYS. We will come back to it, but I just say that this is something we need to put on the record, and I am sure we can be helpful.

Governor ALMOND. Very good. Thank you very much.

Mr. SHAYS. Ms. Pearson, it's lovely to have you here, wonderful to have you here. You have the floor, and I look forward to hearing your testimony, and then we will be proceeding to ask all of you some questions.

I am just going to ask you to pull the mic a little closer. I am going to ask you to lower it down just a speck because I want to make sure we hear you. OK. Thank you.

Ms. PEARSON. I just want to start off by saying my name is Felicia Pearson. I am 31 years old, a single mother, and I would like to start off with a quote that I made once that wasn't really brought out, so this is my opportunity now.

That we, as adults, we have to eat. When we are hungry, we eat. And we have to think about our newborn babies, that this is a new life, a new world to them, and everything in front of them is overwhelming and exciting, and they want to know what is this for, what is that, how do I do that.

Well, as parents, we have to feed them, and this is their food, to learn. So that's something I just want everybody to think about. That in the first year a child's brain grows 70 percent, and it is very important that we try to push as much as we can with them in stimulating their minds, so that one day they will grow up and be healthy adults like us.

I got pregnant in the year of 1997, and by my 6th week, I got very, very sick, and I went into depression. I also attempted suicide, because I was sick morning, noon and night, and it never stopped. So I want everybody to imagine if you had the flu 24 hours a day, and it just never stopped. And all you feel like you want to do, you want to end your life. It's like when am I going to get relief, and that's all I kept saying to myself. And, of course, the cowardly thing to do is to take your life, and then I knew I would have to get help because I knew I wanted this baby, but, at the same time, I was hating the baby, and I would call it "the thing."

So I went to the doctor, and I told her what had happened and of course, she wanted to admit me. She was very upset in hearing that I wanted to do such an act, and I felt as though I could get through it, and I told her no, I would wait, and it just got worse. I completely stopped eating, I stopped drinking, and I would just wake up in the morning hoping there was blood in the bed, hoping that the baby was gone. So I knew that I had to get help.

So I went back to my doctor, and I told her to admit me. So they put me on the OB floor so that they could get my body back together. Because I was so dehydrated, they couldn't even put the IVs in me, so they had to put them in my neck, and that, of course, didn't work. At the same time, they were sending psychiatrists to visit me, and I was just deteriorating more, still not eating and drinking, and I just wanted the baby out of me. I wanted it to be in someone else to grow in and not in me. It was a horrible feeling, and no one ever prepares you for morning sickness.

They moved me to the psychiatric ward. And meeting with my psych doctor, she had been talking to me about the Healthy Families, that after leaving there that they wanted me to get in contact with them, and I told her that I would. And once I got home and got better—I was in the hospital for a month and a half—and after I got better, I did call Healthy Families, and they sent over an assessment worker to me, and she interviewed me, and then later I received a call from Lynn Kosanovich, my support worker.

At first, I didn't know if I really wanted the program because I was feeling much better and I didn't think I was as depressed. But as time went on, there were times I was still getting sick, and I still wasn't having love for this baby that I was carrying, and I didn't know whether or not—if I could love him once he was born and what I would do to him. Speaking with Lynn, I would tell her that, if he cried, I would just leave him there and do what I had to do, or I would sit him in front of the window and let him watch outside while I do what I had to do. And I thought it was cruel, but that's just how I was feeling and no one can understand that unless you are in that position and knowing what it's like.

But once Dominica was born, November 3rd, and he cried this little innocent cry, and all I could do was just cry and just think about how I called him the thing, and I saw how beautiful he was. I fell in love with that baby the moment he came out of me, and it was a beautiful moment.

After that, Lynn visited me once a week, and we just sat and talked about things that I would experience now, the crying and what I would do, and she would bring information for me to read. And, actually, I felt as though I was a pro, pretty much. I was really surprised. My mom was there with me, and I really didn't need her. After 4 days, I really wanted her to go home because I knew what to do with my baby and pretty much because, talking with my support worker of Healthy Families, she prepared me for a lot of this, but even then, I was like I don't know, I don't know if I can do this. But then after he was born, you pretty much—things fall into place.

And now doing all the things with Nico that they have prepared me with, I see so much now. The product is all coming together. Nico at 5 months started—yes, at 5 months, he started crawling, and that's pretty early, and now at 8 months, he can say hi and he is clapping his hands.

Mr. SHAYS. You are a typical mother because you are boasting.

Ms. PEARSON. I know, but I love him so much.

Anyway, moving on from my son. The program, I feel as though—my favorite quote is, I feel very rich being involved in the program with Healthy Families. I just do feel sorry for a lot of fam-

ilies that aren't involved, and mainly because I have some friends that could use the program, just having that support there behind you. And sometimes family is just not enough because sometimes family could be very critical and not telling you sometimes that you are doing a good job, whereas someone who is on the outside can, and their eyes are more open.

I do agree with what Mr. Reiner said, that giving information to our caregivers is very important as well, because we—teaching our children is still not enough when you send them to your baby sitter or your caregiver. What are they teaching them, once that door closes?

You are always constantly thinking, are they being nice to them, are they talking to them, are they singing to them, things I did when I was with him for the 4 months. I don't want that to stop. I don't want that to come to an end, because it does stimulate the mind, and I have seen the product, and it works.

And if we don't do something about it now, I mean, just like I said, what do we expect in the future for our children? They are just going to deteriorate and go down and down and down.

That's it. Thank you.

Mr. SHAYS. Thank you very much. If people would like to applaud, I would welcome that. Congratulations.

[The prepared statement of Ms. Pearson follows:]

House Testimony - Felicia Pearson - July 16, 1998

Hi. My name is Felicia Pearson. I am a 31-year-old single mother to Domenico, who is now 8 months old. I became pregnant in 1997. About the 6<sup>th</sup> week of pregnancy, I started getting really sick, so sick that I eventually became very depressed and finally attempted suicide. I started hating the baby and would call it "the thing." My doctor wanted to admit me to the hospital, but I turned her down, thinking that I could make things better. However, when it continued to get worse, I went back to her and finally was admitted. They first kept me on the OB/GYN floor, trying to get my body back to where it should be. However, the psychiatrists felt that because of the depression I continued to deteriorate and eventually I was moved to the psychiatric floor. I stayed in the hospital for 1 ½ months. When I was ready to be discharged, my psychiatrist gave me the name of Healthy Families and encouraged me to become involved with them once I left the hospital. I did contact them when I got home, and the Healthy Families assessment worker came to my home to interview me. My family support worker, Lynn Kosanovich, was assigned and began to visit me when I was 24 weeks pregnant, she came twice a month at the beginning, and then weekly as I approached the seventh month of my pregnancy.

Before I had the baby, I was having serious doubts about my ability to be a mother. I was very scared that I wouldn't be able to love this baby. My visits with Lynn often focused on this. I would describe what I planned to do once the baby was here, and what I said sounded so harsh, as if I had no care for this child. Even up until the eighth month, I still had feelings of not wanting to have this baby. Lynn would talk with me, help me plan for whatever happened, and let me know that I could call her at any time if I needed her. I liked that she came to my home and that I was able to be honest with my feelings and my fears. We talked about how I would respond in various situations, such as if the baby wouldn't stop crying or how I would discipline the child. She brought information about labor and delivery and helped me plan for my care and my child's care in case I suffered from postpartum depression. The object of the Healthy Families program is to support you and I truly felt like I had Lynn's support behind me.

My son was born on November 3, 1997. Once he was born, a lot of my feelings changed towards him. From the moment he came into the world, I fell in love with him. I cried my heart out, 1) because I was happy to have this beautiful child, but 2) from thinking about how I could have called this beautiful baby "the thing." Contrary to my psychiatrists' prediction, I did not suffer from postpartum depression and was immediately able to love and care for my child.

My Healthy Families support worker has continued to visit me once a week since I came home from the hospital. At first our visits focused on the needs of a newborn--Lynn would talk to me and also would leave information with me so I could look back on it if I needed help when she wasn't around. More recently, we have talked about child development, we have regularly completed developmental screenings to make sure my son is developing appropriately, we have discussed things like feeding and child care, and Lynn has brought me information about how to play with and stimulate my son.

Family members often give you advice and tell you what you're doing wrong. Lynn listens to me, she lets me know how competent a mother she thinks I am, she offers me suggestions and new ideas. To me the relationship that Lynn and I built, and that she then extended to my son, has been the most important thing. I feel so rich to have Healthy Families in my life and I feel that I have such a wonderful advantage over others who haven't been so fortunate. The Alexandria Healthy Families program is open to first-time parents with a lot of stress in their lives who have been enrolled either prenatally or before the baby turns two months old. I think the Healthy Families program should be available to all new parents, regardless of the amount of stress they have or the number of children they already have. It has truly enriched my life and my son's life.

Mr. SHAYS. Ms. Pearson, an individual who has been helping you is here with you. She doesn't need to be up there, so we are not going to invite her, but we would welcome you introducing her, if you would like to.

Ms. PEARSON. This is my support worker, Lynn Kosanovich, and I love her very much.

Mr. SHAYS. Well, you feel rich and you have enriched us, as have the other two witnesses.

First, let me just acknowledge the presence of our other members on the subcommittee, Mr. Kucinich and Mr. Barrett and Mr. Scott, who is here as well, and we also have Connie Morella, who is here from the full committee, and we welcome all of them, and all can participate.

I would call on the ranking member to start the questions.

Mr. TOWNS. Thank you, Mr. Chairman.

Let me begin by thanking all of you, all three of you for your testimony, and let me begin with you, Governor. I commend you on the job that you are doing in your State. As you know, some States are requiring co-payments from welfare recipients who seek to place their children in day care. Do you have any thoughts on the desirability of co-payments?

Governor ALMOND. I think it depends, of course, on how far your program goes. If you are at 100 to 150 percent of the poverty level, of course you can't have co-payments. But I think as you go higher up, you can have some co-payments with respect to day care until you can get the State resources to supplement those. You certainly want to cover as much as you can of the population. It's a question of resources.

As I mentioned earlier, we certainly could use the \$8 million that is sitting there allocated to Rhode Island for health care that I can't use over on child care, but I would prefer to see a fair program with respect to the sliding scale and no co-pay, just as we have no co-pay for the health care programs.

It is an expensive proposition. One of the biggest issues facing mothers in child care is the cost. Even for individuals who are doing very, very well, it's a disincentive to go into the work force. If mothers can stay home with children, that's fine. We have a lot of single mothers who can't stay home with their children, so they have to have child care.

Then we have the two-parent families. A lot of them have to have two parents working in order to provide for their children and provide for the future and provide for higher education at some point and use the savings account in order to be able to afford higher education for their children.

My wife is here with me today, because we are going to go over to Maryland to see my daughter who is over there with two children in day care. And I can tell you, she is a professional, she is an engineer, but it's expensive to have two children in full-time day care. No question about it.

So from a standpoint of co-pay with child care, if we can do it without, let's do it without, but it's going to take some resources.

Mr. TOWNS. OK. But, you know, when you say take some resources, I sort of hear two things. When you talk to people, you hear people saying it's just so important if we want to be able to

make certain our children have the kind of education and support and to be able to compete with other countries, that we need to make the investment now. So isn't there some way we can make the case that we actually are not spending more money. By doing it we probably will be saving money in the long run?

Governor ALMOND. I agree. And look at it from the standpoint of the nonprofits, for instance, who are providing child care. You have low wages in the industry. One of the things we do in Rhode Island, which is very unique, for home care child caregivers, we will give them RIte Care Health Insurance. Because many of these people who are staying at home and taking care of five or six of their neighbors' children so they can work are paid so low they don't have health care, and so we are doing that.

In the RIte Care Program, we are going to be subsidizing health insurance for day care providers. You know, they need resources in order to be able to do more than just baby sit. They have to hire professionals. They have to get individuals who are just as qualified as the first and second grade teacher. If you are going to have quality child care it's expensive. So those are some of the issues.

What I hear, and I am sure that I know I have heard Rob Reiner say this, if you have day care where you are having a change in staff on a weekly basis or a monthly basis because your wages are low, that isn't good for the children because there are no attachments. So you have to look at this as something very important. And you want the best staff, you got to pay them, and you got to give them benefits. That's the issue. So it's expensive. Somebody has to pay the bill.

Mr. TOWNS. All right. Let me move to—I guess I want to ask you this, Mr. Reiner. Thank you very much, Governor.

I am concerned that preschool enrichment programs will not be universal until they are designed to benefit children from the middle income families as well as children from poor families. I am reminded of the Medicare program, which provides health care for all seniors. Many believe that Medicare only continues because so many middle income seniors actually benefit from it. Do you share my concerns that maybe the best way to assure preschool for the poor is to provide preschool for the middle class?

Mr. REINER. Absolutely. And as the Governor pointed out, we are now living in a country where there is 60 percent of families have two wage earners, and I would bet that, of the 60 percent, a very, very high percentage of those really need those two incomes to survive. And we are talking about people in the \$45,000, \$50,000 a year category. Those are middle income. Those are middle class people.

And the fact of the matter is, brain growth and development is the same for a poor child as it is for a wealthy child or a middle income child. It is the same process. We are still wanting to create the best minds to compete in the global economy. And we are in the information age. There is no getting around it. We are going to need better educated people.

So regardless of whether or not it's poor people or middle income people—now wealthy people can afford their own child care, and they can do that, and they are lucky enough to do that. But middle income people need it as well. And I think if you surveyed this

country I think you would find the vast majority of people in the country would be crying for quality child care, not just people coming off of welfare and people in poverty levels.

Mr. TOWNS. Let me just ask what can we do on this side of the aisle, you know, to sort of create the kind of atmosphere and climate, that this is very, very important? You know, what can we do here from a legislative standpoint?

Because I think this issue, of course, is a very, very important issue, and I think that sometimes people don't realize how important it is, and I think we are saying something and then doing something different. What I mean by that is, if it's important, then we should behave like it's important by putting the resources there. And in the long run, I think we are fine. We are going to save money if we are doing what we are supposed to do in the beginning. So I think if we spend the money on the front end, we won't have to spend on the back end, and I think if we look at the whole pattern that we will find we will save money in the long run, along with all the other things that will happen in the process. And how do we create that kind of atmosphere?

Mr. REINER. Well, I mean, you have a number of child care pieces of legislation floating around Congress. Right now, I think there is something like 40 of them, and there has been an effort to try to coalesce all those pieces of legislation. But yet we don't see any kind of stepped up, you know, revenue stream.

As Governor Almond is pointing out, forget the \$8 million that he deserves. Wouldn't it be nice to have a revenue stream devoted to child care that can be block granted to the States to be used in an integrated way with health care? Because it has to be linked. It doesn't work all by itself. You have to link health care and child care and parent education. All those things need to be linked together. But if States are willing to participate in an integrated way, in a comprehensive approach to early childhood development, why can't we loosely block grant the money to them? I mean, it's floating around.

I worked on the Senate side with John Kerry, Senator Kerry, and Senator Kit Bond on a bipartisan piece of legislation to devote \$11 billion over 5 years for early childhood interventions and child care and so on, and, you know, we are pressing. But, I mean, it's difficult.

We don't have our priorities squared away, it seems to me. You know, if science is now clearly telling us that those first 3 years are the most critical in a person's life, and Congressman Shays pointed out about the trajectory, how we can get off course, and if we don't start people out right, we are paying for it in prison costs, we are paying for it in incremental health care costs. We are paying for it. The only question is, do we want to pay a lesser amount now or a greater amount later? Because we are going to pay for it one way or the other.

You will hear testimony later from Dr. Olds and from Lynn Karoly at the RAND Corp., that will show you conclusively, if you invest in the right kind of intervention programs like the one that was testified to here today, you will see, you know, anywhere from \$3 to \$4 to maybe even \$5 return on your investment for every dollar invested.

Well, it just makes good business sense. You know, the country is like a big corporation, and there is no CEO in this country that would eliminate their R&D. That's the way you grow your company. I have run companies. I have built companies. You have to invest in R&D in order to grow your company.

Well, this is investing in R&D. This is our precious resource, our children. We make that investment, and we will grow our tax base, reduce our crime, teen pregnancy, drug abuse, child abuse, and so on. And it is not arguable, I don't think.

Mr. TOWNS. I agree with you.

Governor ALMOND. May I also add, in addition to saving on the issues of drug abuse, crime, special education, et cetera, look what it would do for the economy. You know, I am from the Northeast and the chairman is from Connecticut, and we had a tough time coming out of a recession, but, thankfully, right now we are at full employment.

There are individuals out there who are on the margin whether they can have two parents working or one, and we have people at home taking care of children. There is nothing wrong today to have both parents working, as long as they have good, affordable child care that is going to take care of their child's development. And we have a lot of individuals who would enter the work force if they had access to quality, whether they pay it all or not, but it has to be good child care, and you can build a good child care system if you do it for all segments of society.

You know, when I go to child care centers in Rhode Island, 40 to 50 percent of the children in those programs are subsidized. They are altogether. That's great. That is good for society. It will help the economy.

Mr. TOWNS. Let me say, Governor, we really appreciate your leadership and the kind of things you are doing in Rhode Island. We just wish more States would follow.

Ms. Pearson, first of all, how old is your child?

Ms. PEARSON. He is 8 months.

Mr. TOWNS. All right. And, you know, when you leave your child, I think you are concerned about health and safety and all of that. You know, do you feel comfortable, in terms of safety and all the kind of things that a mother is generally concerned with? Do you feel that?

Ms. PEARSON. I love my caregiver, yes, but you always have that saying in the back saying, in the back of your mind, no one can ever take care of your child like you could. I feel like he is safe, but sometimes there are so many kids there. When does she have time or can she make time to sit down with all the children and read to them and sing to them and do the things that you would do? I mean, her views may be different from mine, and maybe I may not like it. I mean, I would love it if I could be home with my son for the first year or so, and then, maybe, once you imbed the things into them—because, you know, you are teaching them one thing and she is teaching them something, and I see that there might be some confusion if you don't communicate with each other, and I do try to tell her things I am doing, but is she doing it once the door is shut?

Mr. REINER. How many children does she take care of?

Ms. PEARSON. I don't know. There are many days I go and I see different children each day.

Mr. REINER. They are all infants and toddlers?

Ms. PEARSON. No. I think there are only two—well, my son is the youngest, and he is 8 months.

Mr. REINER. See, that's critical. When we talk about child care, we really have to talk about quality child care. Because you should have no more than three infants or toddlers for one caregiver. Otherwise, there is no way that those children can form attachments. The only way you are going to stimulate brain growth and development is through a secure attachment, and it has to be consistent over a couple years. So there has to be a relationship with the caregiver, and that caregiver works in conjunction with the parent so it's a team. It's a supportive team.

We don't live in groups anymore. If we lived in rural agrarian society like we did 150 years ago, we wouldn't have these issues in front of us. We had grandmas and grandpas and aunts and uncles all around to help out. Now we are living very separate lives, and we need to rebuild that support system so that we can work together. She needs to know that there is a consistent, responsible, loving caregiver that she can work with on a personal basis that is her sister, her aunt. And if it isn't, in fact, her sister or her aunt, it's somebody who is like that.

Mr. TOWNS. Let me say to this committee—

Mr. SHAYS. You have the floor, but I just wanted to comment that this is the first time in my 11 years that I have seen a witness ask another witness another question.

Mr. REINER. I was totally aware that that probably has never happened.

Mr. SHAYS. I am even more impressed. I continue to learn as well every day.

Mr. TOWNS. It was a good question.

Well, a few months ago, just talking about this committee and where we are and what we are trying to do, we tried to pass a bill which would have placed health and safety standards on all federally owned and operated day care centers. And, of course, I introduced several amendments to that bill. Unfortunately, after the bill passed the subcommittee, it never was placed before the full committee for a vote. So should Congress demonstrate its concerns about child care by requiring health and safety regulations in Federal child care centers? I mean, should we do that here, recognizing the fact that some people say that is the right of the State? But the point is, we do have Federal dollars going in; and if we put Federal dollars in, I am willing to think we should monitor the dollars.

Mr. REINER. Well, I think if there are Federal dollars assigned to child care, they should be assigned to what constitutes quality child care, and we know what that is. I mean, that's very easy to identify, and I think you wouldn't want to, you know, send loosely block granted money to the States and say, OK, you can use it on whatever kind of child care you want. I think it would have to be incumbent on the States to make sure the money was being used for quality child care and those standards we know.

I mean, there could be Federal guidelines; but, quite frankly, each State knows what those standards are; and there are accredited, you know, child care facilities. We know what those standards are.

Mr. TOWNS. Governor, do you want to comment on that?

Governor ALMOND. We have licensing requirements. We want the best possible child care that we can have. We want safe child care, and we are able to do that.

Let me say this. If you want to, you know, set some broad standards, minimal standards, we will exceed them. I can assure you of that.

Mr. REINER. I can agree with that. All the Governors I have talked to are more than happy—you know, they will exceed those standards.

Mr. TOWNS. OK. Well, you know, when I think about standards and regulations and all that, and I just listened to Ms. Pearson, who talked about the fact that—being able to communicate with it, and you have to set a number. Because if you have too many children, then it makes it very difficult for her to be able to communicate or to be able to share her concerns. So I think there are a lot of things that have to go into this, because she raises a very interesting point. The fact that if this person is now responsible for the care, you know, during the time that she is out working or whatever, and then if she doesn't have the opportunity to communicate with her views and feelings and concerns and if she has a lot of kids, I mean, I am not sure you can do that effectively.

Mr. REINER. That's why we know there is a ratio of 1 to 3 for infants and toddlers, a ratio of 1 to 6 with 3- and 4-year-olds. I mean, there are certain standards that are put forth by people like Patti Siegel in California who is, you know, one of the major child care proponents in this country. And there are child care people—you know, you can go to Children's Defense Fund and talk about what standards. I mean, it's pretty clear, you know, the ratios that you need in order to maximize, you know, brain growth and development. That is not rocket science.

Mr. TOWNS. I have no time to yield back, but I yield back.

Mr. SHAYS. Ms. Pearson, you went to the hospital with a very serious challenge, and you were told then about the northern Virginia Healthy Families program; is that correct?

Ms. PEARSON. Yes.

Mr. SHAYS. So you weren't sure at first you wanted to go into that program, and then decided you did; is that accurate as well? Just try to walk me through what your reluctance was. I mean, it seems normal but I would like to hear it from you.

Ms. PEARSON. I was very reluctant due to the fact that I was still going through the morning sickness. Then once they put me on the Zoloff that was for my emotional upset, and then they had me on the Compazine to help my nausea, I started feeling a little better. Then I was like, maybe I don't need this program; I can get through this, I can do it.

Once the assessment worker came to interview me, and my roommate at the time was with me, she explained everything to me and what would happen. I was like, well, I didn't think that I qualified for it. So I was like, well, I don't think I need it. My room-

mate pretty much coaxed me into it, why don't you just try it out and see what happens?

I did need the program.

Mr. SHAYS. At first the program was designed to help you. When did you realize that the program was going to help your child?

Ms. PEARSON. Of course, after he was born. I was really concerned, wondering if he was going to be the type of child that a friend of mine has, who was a very difficult baby. There were many times that he was at the house when I was pregnant with Nico, and I was like, I don't want to have this baby because I know this baby's going to come out acting like him and I'm not going to be able to deal with this. He was constantly crying, he demanded his mother's attention 24 hours a day. I didn't think I could do it.

Lynn would bring me information that if certain situations arise with the crying, that I could do what I could do, and after 10 minutes maybe if the baby is crying, go and check on him. I don't know whether I answered your question.

Mr. SHAYS. You answered it perfectly. Let me just delve a little deeper if you don't mind.

There is a point where you realized that not only were you being helped, but that your child would grow up to be a better child because of the program that you were involved in. When did you start to see the need for this program for your child, not just yourself?

Ms. PEARSON. Lynn would tell me, one thing it may not be that big but to me it is, telling me that 15 minutes every day put Nico on his stomach so he could start strengthening his arms. I didn't think that was a big deal until I noticed, when I first started doing it with him, he didn't like it, he cried a lot. But I left him there, anyway, because I really wanted to see if this worked. Then eventually Nico stopped crying a lot and he was much happier and he was moving all over the place. And also the consistency of me doing the colors with him. I read to him a lot, and now, like I said, he's now saying hi, which I think is pretty good for an 8-month-old.

Mr. REINER. It's amazing.

Ms. PEARSON. Of course that brings tears to my eyes when I hear that. I do the telephone. These are some of the games that I do with him. I will just say, "Ring, ring, telephone, Nico." He is the type of child who laughs at anything. He's a very happy baby. When I do that, he starts smiling because he knows what I'm talking about. I say, "Hello," put the phone to him, he looks around; one day he surprised me and he said, "Hi." All I could do was sit back, I was like, "I love this baby," and I love the program, because you see the product. And if you're consistent, and that's a hard thing to do, especially since being adults we tend to get tired of things after a while, but if you keep it up, you start seeing results.

Mr. SHAYS. This program has provided you wonderful help. You have developed, from your own words, some tremendous parenting skills. Did the program also help you get a job?

Ms. PEARSON. I was already employed.

Mr. SHAYS. So you took a leave of absence from work?

Ms. PEARSON. Yes, I was allowed to take—we have 3 months maternity leave, and I was able to take an extra month.

Mr. SHAYS. Was part of your concern about having a child that this was interfering with your ability to potentially work and have

your own productive life-style? Was that a factor in the whole issue?

Ms. PEARSON. I'm sorry, can you repeat that again?

Mr. SHAYS. Yes. Something that a man doesn't have to weigh as a general rule is that giving birth does not take that man from his employment, where giving birth, for a woman, takes her from her employment. In your early time, and even maybe now, did you see your child as interfering with your own opportunities?

Ms. PEARSON. There were selfish thoughts that I quickly got over.

Mr. SHAYS. I don't think those are selfish thoughts.

Ms. PEARSON. They were crazy thoughts. I was like, OK, so I have this baby, now I can't sleep like I want to anymore; and I quickly got over that. Now I don't even care about sleep. All I know is that my son comes first.

Mr. SHAYS. I had someone say to my wife when our child was born that she wouldn't have a good night's sleep until our child went off to college. That was not a very nice thought for my wife. The bottom line is that you are dealing with all the things that a woman has to deal with, and you received wonderful help.

You have provided tremendous insights to us, but it almost seems too good to be true. You are a very happy, beautiful young woman, who seems to be almost like a super mom, and I have to believe that you still have some challenges as well. But I really welcome your testimony.

Governor Almond, I would like to know how you got into this issue. I would like to know why you, as a public official—what triggered you? You have all these opportunities as Governor, as you pointed out. You chose to make this an issue. And you viewed it as being central to the future prosperity of your State and to your citizens. What triggered it?

Governor ALMOND. I think several things. I was a U.S. attorney for 21 years, but I also worked as a volunteer, as chairman of a very, very successful nonprofit group for economic development. I know the link of the economy and these types of programs.

I think second it was programs with Mr. Reiner and others at the National Governors Conference and compelling testimony on the importance of these particular issues.

None of us take a position in a vacuum. I have two children of my own. Both of my children my wife put in preschool, even though she was home with them and took care of them; and I could see the benefits to my own children of not only having good parenting, but having a good preschool program. And by the way, that was a preschool program run by the YMCA.

Now I have five grandchildren. I have a daughter-in-law with three boys who has decided to stay at home, but all of her children have 2 years of preschool before they're going to get to kindergarten.

And I have a daughter who works for the U.S. Government and is very, very fortunate to have day care within her Federal agency, so she takes her two children to work with her in the morning and they are right in the building. It is a very, very good quality program. I have been there and I see the benefits to my granddaughters, and I can tell you that being the grandfather and seeing

your first granddaughter born and finding out that your daughter is going to go back to work is a little unsettling. You wonder what's going to happen. Keep in mind, we're separated by several hundred miles. But to see the quality of the program that she is in is terrific.

It is all of those things, I think, combined that give you the feeling, this is the right thing to do.

Mr. SHAYS. Mr. Reiner, I am tempted to see if you have questions for the witnesses. I would like to ask you—when we talked earlier, you shared with me how you got involved in this issue, but there is not a person in this room who doesn't feel they know you. I just think for legislative history, it would be helpful to know why a famous movie actor and producer and businessman decides that he is going to champion this issue.

Mr. REINER. This is something I've been thinking about for almost 20 years. I went through a very difficult time in my life. I was going through a divorce, I went into therapy as people do when they're struggling. During that period, it became very clear to me that the earliest influences I had had a direct and profound effect on how I was functioning as an adult. I could see the direct correlation between the two. Being somebody who has been civic minded my whole life, I thought, there's something in this in terms of affecting social outcomes. I certainly didn't have any scientific evidence to back that up. It was just an instinct.

Then, as I got a little bit more successful and had a little bit of a power base from which to reach out, I started doing that. I started finding out what was going on around the country in terms of early childhood development. I convened a meeting at my house with policymakers and early childhood development experts, people from the Carnegie Corp., the Families and Work Institute; and during the course of putting together this group, the first person actually that I called, I called out of the blue, was Tipper Gore. I really was a babe in this. I really didn't know who to reach out to, but I heard she was interested in mental health issues; I figured I'd give her a call.

She took my call, we talked on the phone; she said, come to Washington, we'll sit around and talk. I went with my wife, met with her.

Then some of the members of the Department of Education, and they brought out—this was about 4 years ago; they brought Clinton's Goals 2000 out, the first goal of which was, every child must enter school with a readiness to learn, and then all these other goals. I said, it seems to me that if you can reach that first goal, all the rest of these goals would kind of fall into place. She said, yes, you're talking about zero to 3. I didn't even know the term at that time. I said, yeah, I guess I'm talking about early childhood experience and so on.

I then went and researched this, convened this group of people. During the course of that research, I came across the Carnegie Corp.'s Starting Points report, which came out in 1994 and very clearly, in no uncertain terms, said that there was hard scientific brain research to back up everything that I had been instinctively feeling for all those years up till that point.

I said, well, who knows about this? They said, well, just the scientific community. I said, I'll take it upon myself to get this word out, because I've always wanted—we've all done this, everybody in this room has spent their whole life trying to solve social problems. We come up with little piecemeal ways of doing it. I said, there's a direct nexus here between what we put in in those first 3 years and all of these social ills. I know that we can make that bridge. Instead of having to spend money on remedial costs and closing the barn door after the horses have left, this is a way to do it. I took it upon myself to do it.

I think—it's going to take a while. It's going to be a slow process, but I think ultimately if I can pass this legislation out in California, I think it will be a tremendous shot in the arm.

Mr. SHAYS. I am going to conclude by boasting about my daughter, Ms. Pearson. But reinforcing something that I feel very strongly about on this hearing. That is, that I have an 18-year-old daughter, my only child, our only child. I never took physics or chemistry in high school. My wife took chemistry and will not show me her grade. My daughter doesn't consider science her best subject, but she got an A in both physics and chemistry.

I said to her—her name is Jeramy—I said, Jeramy, why do you think you did so well in these programs? She said, dad—she worked very hard on them. She said, dad, I can't stand not understanding something. And I thought about that. And I thought, my wife in particular used to read to her all the time, discovery and new things, but we enrolled her in a Montessori program, a pre-kindergarten kind of program. The whole program was based on discovering and learning. I give a lot of the credit to her success in high school not to the high school, but to that program way back when.

Mr. Kucinich, you have the floor.

Mr. KUCINICH. Thank you very much, Mr. Chairman. Thank you also for the sensitivity that you have expressed on this issue in calling this meeting, as well as your overall commitment to these issues. I have at least one question for each witness.

I would like to start with Ms. Pearson. Welcome to this committee and thank you for sharing with us your heartfelt stories. I am interested, the medical care that you received, the doctor that you went to, how did you happen to get that doctor? Is this a family doctor you had for many years or is it a doctor who came through an insurance plan that you are involved in?

Ms. PEARSON. Insurance, yes.

Mr. KUCINICH. What kind of a plan was it just curiously? What kind of a plan was it? How did you happen to have that insurance? What kind of insurance plan was it?

Ms. PEARSON. It's an HMO.

Mr. KUCINICH. And so the doctor, did he refer you to the psychiatrist?

Ms. PEARSON. She did, yes.

Mr. KUCINICH. She did. OK. The Healthy Families program, is that a State-funded program?

Ms. PEARSON. I don't know. Is it?

Mr. KUCINICH. Mr. Chairman, could we have—I am interested in the answer.

Mr. SHAYS. We are not going to swear you in only because you are identified, but we will have you come up. Just state your name and tell us what the program is.

Ms. WAYNE. My name is Nicole Wayne. I work for Healthy Families, a northern Virginia family service.

Mr. SHAYS. Your question.

Mr. KUCINICH. The question, thank you. How do you receive your funding?

Ms. WAYNE. It's a public-private partnership. Northern Virginia family service is a private, nonprofit agency. Funding for our healthy families comes—for example, leadership support is given to us by the Freddie Mac Foundation. Then there are funding streams that include, in some cases, up to 20 different revenue streams, some public, some private, that go into our annual budget. You can see it is a tremendous process every year.

Mr. KUCINICH. How many clients do you serve?

Ms. WAYNE. Over 500 families in northern Virginia.

Mr. KUCINICH. Annually?

Ms. WAYNE. Yes.

Mr. KUCINICH. Thank you very much.

Governor, welcome. One of the things I think we are all going to be watching is whether welfare reform contributes to lowering or increasing the child poverty rate, since we know that two-thirds of welfare recipients, at least the figures that I have seen, have been children. And, of course, in the reports that I have seen, Rhode Island has done very well as compared to other States in terms of the overall reduction in the past 20 years in the rate of childhood poverty. The national average is a 12 percent increase; Rhode Island has a 17 percent decrease. But in addition to that, what I am interested in, have you yet had enough information to submit your State report that was, I think, required by the Personal Responsibility and Work Reconciliation Act?

Governor ALMOND. We have, I believe. My director is not with me this morning, but I'm positive we have submitted that.

Mr. KUCINICH. If you have, do you know offhand whether or not you have seen a continued reduction in childhood poverty or has there been an increase?

Governor ALMOND. I would say we have had a decrease, but keep in mind we have expanded the programs considerably, so that our caseload will be increasing, because our program is aimed at the working poor. Keep in mind the people on welfare are the worst in poverty, the issue of getting them off welfare. So most of our programs, whether it's the health care or the child care programs, the money goes to the working poor.

Mr. KUCINICH. The programs that you have, are they targeted for the parents as well as the children?

Governor ALMOND. Oh, sure.

Mr. KUCINICH. Are they for people who are not employed?

Governor ALMOND. Oh, sure, we have a lot of people who are getting the child care subsidy who may be in education programs, in transition from welfare.

Mr. KUCINICH. In terms of the expenditures that may have been made per capita on welfare, is there any difference between the amount of money that may have been spent before on welfare and

when you add up all the other programs that you are now using to try to provide a safety net for those people? Have you made any comparisons?

Governor ALMOND. I couldn't answer that, but I will get that information for you and have it transmitted to you.

[The information referred to follows:]

State of Rhode Island  
Total Welfare Expenditures

	Actual 1996	Planned 1999
Cash Assistance*	\$127,518,713	\$107,780,299
Employment and Training	4,343,430	10,530,101
DLT/ DCYF Emergency Asst.	16,518,486	18,281,767
DEFRA Payments	3,200,000	2,500,000
Subtotal	\$151,580,629	\$139,092,167
Child Care	15,855,353	32,368,893
Health Care	85,725,123	121,977,906
Total	\$253,161,105	\$293,438,966

\*Cash assistance cases have been steadily declining since 1994. Recipients totalled 62,624 in 1994, 58,405 in 1996 and are projected at 52,800 for 1999. In order to move recipients to employment more funds have been invested in training, child care and health care.

Mr. KUCINICH. I would be interested in that.

Do you have any comment on the methodology that the Federal Government has required the States to follow with respect to keeping your obligations as outlined in the Welfare Reform Act?

Governor ALMOND. We are currently evaluating our entire case-load and doing case studies for each family with a transition off the welfare program for each family. We are spending a lot of time and money on that particular issue, on an individual basis.

Mr. KUCINICH. That is good to hear. I salute you for that.

Governor ALMOND. And it took time because, keep in mind, the whole welfare system was geared toward receiving a check. Now we have had to retrain our entire work force.

Mr. KUCINICH. Mr. Reiner, thank you for your involvement in this. Do you have any other ideas on how the private sector can be more active? Certainly you have pointed the way to what an individual who is not involved in government directly can do. Have you communicated your concerns to the private sector in trying to enlarge the scope of involvement such as Healthy Families?

Mr. REINER. Yes. Yesterday we had a meeting in Rhode Island. The Governor convened leaders of the government, the business community, all the leaders of the State, brought them together in one meeting to talk specifically about how State government and private money and foundation money can all partner together and make this investment. That was the main purpose of the meeting and was a wonderful meeting and very energized.

The day before, I hosted a conference in New York City with Kaiser Permanente, where we brought business leaders from around the country to talk specifically about how they could get involved. Now, there are a couple of things they can do. One is within their companies: family friendly work practices, providing child care, flex time for parents to do the best for their children. Those practices are being promoted amongst the companies.

But there is another element to all this. That is, the fact that this is all for the common good. We're all part of—children are our future. We've been hearing that our whole lives. We all have to play a part in that. We have to find ways of partnering up Federal Government, State government, local governments, the business community, the foundation community, all together to play a part and create this integrated system.

Mr. KUCINICH. I think it is significant that Ms. Pearson received information and a referral. That was a critical moment, I take it, in your life when you received that referral to Healthy Families. Have you considered the role that social disorganization plays in trying to communicate?

Mr. REINER. Yes. Advertising. You have a problem, you have to advertise it. No question about it; it plays a big part.

Mr. KUCINICH. I am very interested in this.

Mr. REINER. Outreach.

Mr. KUCINICH. Let's talk about outreach a moment, because I think this is critical. Either you or the Governor might be helpful in commenting on this since Ms. Pearson has already given us testimony about the effect of someone who reached out, in this case a medical professional. Because I—and Mr. Towns, I think, we represent constituents that in some parts have some similarities. The

difficulty in areas where there is a high degree of poverty is, there might be programs there—

Mr. REINER. But they can't access them.

Mr. KUCINICH. Exactly. Talk about outreach for a moment.

Mr. REINER. That's one of the wonderful things that Healthy Families of America does. They engage the community. By the way, this has to be done on a community-by-community basis. It doesn't work any other way. If you have the right kind of intervention programs, you find the right entry.

I know what Healthy Families does, I know the programs it does because of the one we did in Hampton, VA. They take up with the churches, with businesses, with schools, with libraries, with the health care organizations, and State-run agencies and find many, many points of entry into the system. They look to find families at risk. They identify families at risk.

What I have experienced, and I don't know if Felicia will tell you, is 90 to 95 percent of the people who are approached, when they are identified and approached properly, say, yes, they want to be involved. Nobody wants to be a bad parent. They just don't know that it's available.

So you need the right kind of intervention program that understands the concept of outreach and is able to do it effectively. Healthy Families of America, I think—you will correct me—has about 260, 300 now, communities around the country and they are very successful. But we need to proliferate that, and it can be done.

Mr. KUCINICH. Mr. Chairman, I want to thank you. I think this overall point about outreach is critical, because no matter how many resources might be marshaled, we have to make sure that people can have a chance to be lifted out of the circumstances of their poverty, which includes such a degree of social disorganization that they may not even know that some service may exist, even though it is on the same block.

Mr. REINER. One of the things you are wrestling with is you have 3 million children eligible for Medicaid who don't get it because they don't know it exists. That's why we need an integrated system of health care, child care and parent education, so that we can link people up; so that whatever point of entry they make into our social system, they can be linked up; so that churches and schools and hospitals and pediatricians—one of the things we do is we have 154 national organizations which are trying to do that, link up with other organizations, so they're not working so piecemeal.

Mr. KUCINICH. Mr. Chairman, I want to thank you again.

Governor ALMOND. I was just going to add, in Rhode Island, we have what we call COZYS, child opportunity zones. They are in the urban areas. It is one-stop shopping; we integrate all the social service programs in the schools, working with the parents and with the children from health care to child care to every other service that's available. We provide that.

Mr. KUCINICH. If I could ask, Mr. Chairman, I would particularly be interested and I am sure the committee would.

Governor ALMOND. We will send you the material on that.

[The information referred to follows:]



Northeast and Islands  
Regional Educational Laboratory  
A Program of The Education Alliance at Brown University

in partnership with

Rhode Island KIDS COUNT



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# School-Linked Services:

Child Opportunity Zone Family Centers



by Catherine B. Walsh

## School-Linked *Services:*

*Child Opportunity Zone Family Centers* is the first in a series of reports focused on school-linked services, family support programs, and school-family-community partnerships in Rhode Island. School readiness, healthy child development, and school success are goals that can best be achieved by working across sectors.

Improving outcomes for children demands that schools, families, service providers, and community leaders work together to craft comprehensive solutions to complex problems.

There is increasing pressure on the public education system to monitor outcomes for children at school entry, in the fourth grade, and beyond. A school system striving for excellence is more likely to be successful when academic strategies are complemented by efforts to improve the quality of family and community life. Many children and families have complex needs that can not be met by the education system alone. School-linked service initiatives across the country are proving to be viable and encouraging vehicles to improve school success through active partnerships among schools, families, health and human service agencies, and other community resources.

This series of reports will highlight promising efforts in Rhode Island that go beyond institutional boundaries in order to improve the health, safety, education, and economic well-being of families. The programs highlighted by the series have

taken on the challenge of working across the health, education, and social service systems. It is hoped that the lessons learned from these innovative efforts will stimulate dialogue on how to best develop, support, and sustain programs and institutions that will improve outcomes for children and families.

### “School-Linked Services”

A strategy to improve educational, mental health, health, and social outcomes for children and families. School-linked services connect families with a wide range of informal supports, community activities, health care and social services.

### “Family Center”

A friendly, welcoming place in or near a school where parents and other family members can go to receive information, support, services or referrals. The program design for school-linked services often includes a family center.

### “Family Support”

A way of working with families that builds on their strengths and interests, focuses on the healthy development of the parent as well as the child, connects families with a wide-range of informal supports and opportunities in the community, and helps families access services as needed.

### “School-Community-Family Partnership”

A strategy used to improve the educational achievement of children. Schools, families, and community agencies work together to address the educational, health, social, and economic well-being of children and families. The most effective partnerships focus on results, make a commitment to shared decision-making, and allocate resources for activities that meet mutually identified needs.

*School-Linked Services:  
Child Opportunity Zone  
Family Centers*

Provides a rationale for school-linked services as a strategy to improve outcomes for children.

Describes Rhode Island's Child Opportunity Zone (COZ) Family Center initiative.

Highlights the current status of the initiative based on site visits and interviews in the 13 Rhode Island communities with COZ Family Centers.

Suggests program and policy implications.

### Attributes of Effective Programs for Children and Families

*Successful programs are comprehensive, flexible, responsive, and persevering.* Programs take responsibility for providing easy and coherent access to services that are sufficiently extensive and intensive to meet the major needs of the families they work with. Effective programs recognize that no matter where the point of entry into services takes place, families may need access to a range of prevention and intervention services. Services and supports are provided either directly or through formalized linkages to other agencies and community partners.

*Successful programs see children in the context of their families.* Successful programs are two-generational. Programs work to meet the needs of the parent as well as the child. At the same time, parents are helped to meet the health and developmental needs of their children.

*Successful programs deal with families as part of neighborhoods and communities.* Programs have deep roots in the community and respond to the needs perceived and identified by the community. To assure their relevance to the community they wish to serve, programs recognize cultural values in their design and offerings. Staff reflect the ethnicity of the community and the community takes part in planning the services.

*Successful programs operate in settings that encourage practitioners to build strong relationships based on mutual trust and respect.* Programs are based in organizations which are widely accepted by the community (e.g. schools, community organizations, community-based family support programs) and that

can be kept open year-round and during non-traditional hours. Staff have the time, training, skills, and institutional support necessary to create an accepting environment and to development meaningful one-to-one relationships. They establish a climate that is welcoming, continuous, and reliable.

*Successful programs have a long-term preventive orientation, a clear mission, and continue to evolve over time.* Programs do not wait until families are in trouble to provide services and to reinforce the strengths of the child, the family, and the neighborhood. Programs that are successful with the most disadvantaged populations persevere in their efforts to reach the hardest-to-reach and tailor their services to respond to the distinctive needs of those at greatest risk. Programs have a clearly articulated mission, yet managers are allow their programs to continually evolve to respond to changing individual, family and community needs. They operate in a culture that is outcomes-oriented, rather than rule-bound.

*Successful programs are well-managed by competent and committed individuals with clearly identifiable skills. Staff are trained and supported to provide high quality, responsive services.* Staff are versatile and flexible and actively collaborate across bureaucratic and professional boundaries. Staff do "whatever it takes" - they have the flexibility to respond to concrete needs for help with food or housing or a violent family member, as well as to subtler needs for a listening ear.

*Adapted from Schorr, L.B. (1997). Common Purpose. Strengthening Families and Neighborhoods to Rebuild America. New York: Anchor Books; Schorr, L., Beth, D., Copple, C. (Eds.), "Effective Services for Young Children: Report of a Workshop", Washington, D.C.: National Academy Press, 1991; Judith E Jones, "Strengthening Families in Need - Models and Commitment", New York: Columbia University, National Center for Children in Poverty, 1994.*

## Rationale for School-Linked Services

### *Promoting School Readiness and School Success*

Recent brain research has heightened awareness of the critical effects of the early environment on children's social, emotional, physical, and cognitive readiness for school.<sup>1</sup> Babies raised in safe and stimulating environments are better learners later in life than those raised in less stimulating environments.<sup>2</sup> In order to develop pre-reading skills, children need to have caring relationships with adults who listen and talk to them, tell them stories, share books and music, and play with toys, crayons, and writing materials.<sup>3</sup>

Students' economic conditions, home environments, and cultural backgrounds can profoundly affect their adjustment to and performance in school. Children's academic achievement is higher when they live in communities that provide supportive environments for parenting and have a variety of out-of-school learning opportunities for both adults and children.<sup>4</sup> Schools are finding that they can best serve the needs of children by becoming more family-centered and by increasing collaboration with support services in the community.<sup>5</sup>

Children who start school poorly prepared for formal schoolwork often fail further behind — until poor performance, low self-esteem, alienation, and frustration cause them to drop out of school.<sup>6</sup> Child welfare, human service, and juvenile justice professionals recognize that poor school performance is often an early warning sign of a child at risk for involvement in juvenile crime, substance abuse, teen pregnancy, or welfare dependency. School-linked services can be an important resource for children who are growing up in families struggling with poverty, language barriers, poor literacy

and basic skills; who live in families with substance abuse, domestic violence, or other social problems; or who live in communities with limited access to child care, before- and after-school activities, and recreational opportunities.

### *Improving Outcomes by More Effective Use of Education, Health, and Social Service Resources*

A second factor propelling the development of school-linked service models nationwide is the recognition that improving outcomes for children requires more effective integration of existing resources for health, education, and social services. The categorical funding approaches of the past two decades have made it difficult to provide appropriate preventive services to children and families. School-linked services offer an added value to the existing network of services that are often too fragmented, categorical, and crisis-oriented to offer a good match with what families need to succeed.<sup>7</sup>

By supporting families before they get into trouble and by connecting families to existing resources in the community, school-linked family centers support the missions of child and family serving agencies and the wider community. Schools want to improve student achievement. Health and social service providers want physically and emotionally healthy children and families that will become productive workers and citizens. Communities want better outcomes for children. Citizens want to be sure their tax dollars go to programs that work. Funders and policymakers are seeking ways to provide services that are cost-effective. Families want services that respond flexibly to their needs and priorities.

Child welfare, human service, and juvenile justice professionals recognize that poor school performance is often an early warning sign of a child at risk for involvement in juvenile crime, substance abuse, teen pregnancy, or welfare dependency.

To be most effective, services may have to be redesigned to minimize duplication and rigid categorical boundaries. Integrated services are meant to be easily accessible, flexible, comprehensive, and responsive to family needs and priorities.

**What We Know  
About Successful  
School-Linked Services**  
(From School-Linked Family Center  
Efforts in Other States)

**They are linked to schools** - where most of the early warning signs for health, education, and social problems first appear.

**They are prevention oriented, not crisis oriented.**

**They cut across categorical boundaries and address interrelated causes of problems.**

**Non-categorical funding provides incentives to "think outside the box" to create strategies that cut across systems.**

**They provide a connecting point for individual, specialized agencies to work together to craft comprehensive solutions to complex problems.**

**They use the strengths of families as resources.**

**They can help children succeed in school and in life.**

The most successful school-linked service programs reflect active and equal partnerships among schools, families, and community agencies.<sup>8</sup> While schools have an enormous influence on and unique access to children and families, successful programs enlist all community stakeholders and coordinate existing resources to improve educational, health, and social outcomes.

Research across the country has demonstrated that school-linked integrated services can promote school readiness and student success. School-linked services can help to increase student achievement, save money and reduce overlapping services, reach those children and families most in need, make schools more welcoming to families, increase community support for the school, and help at-risk families develop the capacity to manage their own lives successfully.

There is no single model of school-linked services that is accepted as most effective. Rather, school-linked services are based on the attributes of effective practice that have been documented in the literature. The most effective school-linked service models across the country connect families with services and supports that are family-focused, comprehensive, integrated, culturally diverse and responsive, preventive, community-based, and accountable for results.<sup>9</sup>

Experience in several states indicates that school-linked family centers are a cost-effective way to provide supports to families and to link families to needed services. School-based programs for

families with young children provide families with support and educational services, such as parenting classes, literacy education, and referrals to other agencies. Increased collaboration between schools and human service agencies is most effective when families are involved in a variety of roles. For example, a recent evaluation of the California Healthy Start School-Linked Services Initiative found that when parents are more involved, school-linked services tended to be more accessible, integrated into the life of the school, and more culturally relevant.<sup>10</sup>

Successful programs rely on a full-time coordinator or program director, who builds a team of personnel sensitive to issues related to youth development, family support, cultural diversity, and community empowerment. In many locations, bilingual staff are essential. A designated space such as a clinic or a center in a school acts as a focal point for bringing in services from the community. One of the most important outcomes of developing school-linked services is the ability to leverage resources to improve outcomes for children and families.<sup>11</sup>

Effective school-linked service programs emerge out of extended negotiations with health, social service, and other agencies. Each agency has a specific contribution to make, through relocating personnel, training, supervision, or accepting referrals. Experience has shown the importance of having a full-time person designated as coordinator of the program at a very early stage in development. Communities have a much better chance of developing school-based centers in states that stimulate program development with grants.<sup>12</sup>

### The Effectiveness of School-Linked Services

School-linked services can improve child and family well-being. Some examples of indicators that have been positively impacted by school-linked family center initiatives in other states include:

*Improvements in:*

Student achievement.  
Parent participation in the schools.  
Improved classroom behavior.  
Enrollment in Medicaid and other benefit programs.  
Access to health and dental care  
Access to child care and transportation.  
Parenting skills and family functioning.

*Reductions in:*

Student mobility.  
School violence.  
Suspension rates and unexcused absences.  
Grade retention.  
Unmet needs for food and clothing.

School-linked family centers are most effective when the following elements are supported by resource allocation and program design:

*Program Development:*

There are active and equal partnerships among schools, families, and community agencies.  
Efforts are well-integrated into the life of the school.  
Parents are more involved with site activities.

*Program Implementation:*

Services are two-generational - focusing on the child and family.  
Services are culturally competent.  
A mix of both prevention and intervention programs are available.  
Programs are flexible in responding to family needs and work with families over time.

### State School-Linked Service Programs

Efforts are underway in states across the country to build networks of school-linked family centers and to foster community partnerships that make health and human services more accessible to families and students. Two examples of school-linked service efforts that are showing promise include:

#### Kentucky Family Resource and Youth Services Centers

Kentucky's Education Reform Act of 1990 authorized support for Family Resource and Youth Service Centers in all elementary and high schools in which 20 percent or more of the students are eligible for free or reduced-price lunches. The Centers are designed to coordinate a community's social and health services for students and their families. Although the centers provide some services directly, the majority of efforts focus on accessing existing community services for families. Typical program components include preschool and after-school child care, information and referral, and family support services.

#### The School of the 21<sup>st</sup> Century

The School of the 21st Century was initiated in 1987 by the Bush Center on Child Development and Social Policy at Yale University. Communities across the country follow guiding principles set by the Yale Bush Center and receive training and technical assistance through an annual institute. The basic components of the program - child care, information and referral, home visits to new and expectant parents, and a network of family child care providers - are designed in accordance with community resources and needs.

"All over the country, school and community people are putting together the pieces to help schools meet the varied needs of today's students and their parents. I call the product of these collaborative efforts full-service schools. The full-service school is a homegrown product that can take many shapes: community schools, lighted school houses called Beacons, school-based clinics, family resource centers." *Joy Dryfoos, "Full-Service Schools", Educational Leadership, 1996*

### School-Linked Services in Rhode Island: Child Opportunity Zone Family Centers

There are many children who are not acquiring the skills and knowledge needed to support successful and productive lives. Educators, parents, and other community leaders must find ways to meet the social service and health needs of all our children to enable them to learn. *Report of the 21<sup>st</sup> Century Education Commission, 1992*

Children enter school ready to learn.

Children experience success in school.

Children graduate prepared to lead productive lives.

Child Opportunity Zone Family Centers are the first statewide effort to link schools with comprehensive support services for children and families. The national movement toward school-linked services provides evidence that school-linked services can be an effective strategy to improve the quality of family and community life, involve parents in their children's education, and improve outcomes for children. The concept of "Child Opportunity Zones" was first introduced in Rhode Island in 1992 as part of the *Report of the 21<sup>st</sup> Century Commission*. Legislation was passed in 1993 calling for the Rhode Island Department of Education and the Rhode Island Children's Cabinet to develop Child Opportunity Zone Family Centers in communities across the state.

A public-private partnership was established to oversee the development of the Family Centers and to provide a pool of funding for allocation to local school districts and their community partners. Founding partners of the COZ Family Center Initiative included the Rhode Island Department of Education, the Rhode Island Department of Substance Abuse (now part of the Rhode Island Department of Health), and the United Way of Southeastern New England. The COZ Family Center Initiative is currently managed by a statewide management team comprised of the Rhode Island Department of Education, the Rhode Island Department of Health, the United Way of Southeastern New England, and local COZ Family Center coordinators.

Child Opportunity Zone Family Centers are designed to address the

growing health, social and emotional needs of children in order to reduce barriers to learning. The goal is to promote school success among children currently in the education system and promote readiness for school among young children. A comprehensive response to the health, social and economic needs of children and families extends beyond the traditional mission of the school and requires the investment of social service agencies and community members. While the school districts are actively involved in forging partnerships with community agencies and families, schools are meant to be a partner among equals.

### Guiding Principles

Based on research from school-linked services nationwide, the COZ Family Center initiative developed guiding principles for use by local sites in program design and implementation. Schools, families, and communities are expected to work as equal partners in planning, developing, and implementing Family Center activities and to share resources and responsibilities. There should be a focus on the priorities and needs of the whole family, rather than individual members. Families should be assisted in identifying their capacities in order to build supports and access resources. Family Centers are to be located at, or close to, schools and serve as a hub of activities for all families. A Center becomes a place that facilitates the development of neighborhood networks and offers families leadership roles in decisions and governance. Family Centers are a source of information and support to families. Activities and services are flexible, accessible, and promote developmental prevention approaches.

### Child Opportunity Zone Family Centers 1993-1998

COZ Family Centers are operational in 13 Rhode Island communities as of the 1997-1998 school year. The Child Opportunity Zone Family Centers were originally funded with planning grants in 1993-1994 and 1994-1995. The range of funding in the planning years varied from \$3,000 to \$60,000 per community. During the planning phase, a community resource and needs assessment was completed by all sites to provide information used to set goals and priorities for the COZ Family Center. In a few communities, parents have been and continue to be extensively involved in making decisions about program design and implementation. Most COZ Family Center communities are just finishing their third or fourth year of operation.

Funding through the state COZ Family Center initiative in the 1997-1998 fiscal year is \$35,000 per COZ community. This funding level requires that COZ Family Center communities seek other sources of funds for programs and make linkages with existing programs in order to address local needs and priorities. Each COZ community has developed a working partnership that involves the school, human service agencies, community members, and parents. There is a deliberate focus on doing whatever it takes to break down the fragmentation of the existing service delivery model, facilitate access to services, and connect parents to each other and to informal support networks in the community.

Of the thirteen communities involved in the COZ Family Center initiative, nine are working in more than one school in the district. Eight have school-based locations for their Family Centers, one has a community-based location, and four have both school and community-based

locations. COZ Family Centers are connected with 32 elementary schools, 2 middle schools, and 2 high schools in the 13 participating communities.

### COZ Family Center Core Areas

While the COZ Family Center Initiative does not require a core set of program components, all sites are expected to develop programs and services that help children experience success in school by focusing on one or more outcomes in four core areas:

#### *Children's Learning Environments*

All children will have access to high quality and developmentally appropriate early childhood experiences and opportunities to learn in school, in before- and after-school programs, and during the summer - in environments free of drugs, crime, and environmental hazards.

#### *Physical and Mental Health*

All children and families will be provided with health information and education and will have access to primary care services, including prenatal care, well child care, specialty care, mental health care.

#### *Economic Opportunity*

All families will have access to opportunities, information, services and education that enable them to be economically self-sufficient including adult education, job skill training, literacy training, and career development.

#### *Family Support*

All parents will have access to information, opportunities, services and education to support their role as a parent. A continuum of opportunities will be available for parents to be involved in their children's education. All families will have access to food, clothing, and housing, among other basic needs.

While the school districts are actively involved in forging partnerships with community agencies and families, schools are meant to be a partner among equals. COZ Family Centers are often "in" the school but not solely "of" the school.

The COZ Family Center does not necessarily pay for all services and program components. Rather it links children and families to existing supports and services, taps into informal support networks and community associations, and develops partnerships with agencies or groups that can fill gaps in services.

**Child Opportunity Zone Family Center Funding 1993-1998**

The initial funding to launch the Child Opportunity Family Centers in 1993-1994 was a partnership among the Rhode Island Department of Education, Rhode Island Department of Substance Abuse (integrated into the Rhode Island Department of Health in 1995), and the United Way of Southeastern New England. The Department of Health joined the funding partnership in 1995-1996. Since that time the Child Opportunity Zone Family Center statewide initiative has been funded by a partnership of the Rhode Island Department of Education, the Rhode Island Department of Health and the United Way of Southeastern New England. Other funders of the initiative have included the Department of Children, Youth, and Families and the Rhode Island Foundation.

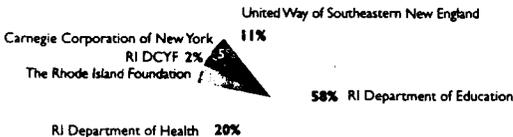
In 1996-1997 and 1997-1998, the State of Rhode Island received funds from the Carnegie Corporation of New York to integrate the Starting Points focus on children birth to three into Rhode Island's COZ Family Center initiative. Carnegie provided \$150,000 over two years to support early childhood work in nine communities with COZ Family Centers. The Starting Points funding was supplemented with \$215,000 in additional funds over two years from the United Way of Southeastern New England, the Rhode Island Department of Health, the Rhode Island Department of Education, and the Rhode Island Department of Children Youth and Families. The Starting Points funding has enabled the nine Starting Points communities to focus increased attention on issues of child care, early childhood education and the transition to kindergarten, and parent support and education.

- Guarantee Quality Child Care Choices
- Ensure Good Health and Protection
- Promote Responsible Parenthood
- Mobilize the Community to Support Young Children

**Statewide Funding of Child Opportunity Zone Family Centers 1993-1998**

Total funding over five years, including Starting Points: \$2,915,775

Total funding 1997-1998, including Starting Points: \$667,060



Total funding over five years= \$2,915,775

(does not include funds raised locally, school district match, or non-COZ Family Center grants to local communities; does include Starting Points funding of \$365,000 over two years)

### Program and Policy Implications

The COZ Family Center Initiative, planned and implemented in 13 Rhode Island communities over the past five years, shows promise as a mechanism for improving child and family well-being. The COZ Family Centers in each community are innovative, yet fragile, efforts to provide supports to families before they are in trouble, to build parent leadership, and to leverage resources across the education, health, and human service systems in order to improve outcomes. The full potential of school-linked family centered services in Rhode Island can not be realized without deliberate attention to program and policy issues that affect the quality and scope of the COZ Family Centers in each community.

### Financing

The level of funding and mechanism for financing children's programs have significant impacts on the quality and scope of the programs. It is still true that financing often drives the priorities and goals of the programs to be offered, making it difficult for local efforts to stay focused on achieving outcomes. The COZ Family Center initiative attempts to reverse this dynamic by providing a small amount of flexible funding to local communities in order to move toward the Family Center's desired outcomes. Most local COZ sites have been effective in creating strong linkages with existing resources, developing partnerships to fill gaps in services, and seeking funding to meet identified needs. The median budget for the 13 COZ Family Centers is \$83,000 and the range is from \$52,000 to \$268,000. Ten communities have more than doubled the state investment of \$35,000 per community and four COZ

Family Centers have program budgets totaling over \$100,000. These figures do not include the significant resources invested by partnership organizations that provide staff, space, and in-kind resources to meet Family Center goals and priorities.

Despite the progress COZ Family Centers have been able to make with extremely limited resources, the fragile financing of the initiative limits the potential to make lasting change and achieve long-term goals. Several barriers to progress include the overwhelmingly categorical, crisis-oriented nature of state funding. The purpose of linking services with a child's educational development is to ensure that supports are there when the child and family need them. COZ Family Centers will continue to be limited in scope and impact until more flexible, preventive funding is available across the health and human service systems.

### Evaluation

Investments in ongoing documentation and evaluation of school-linked family centers is critical to meeting long-term goals and making real change for children and families. The demand for accountability requires the identification and measurement of at least some indicators of child well-being related to school readiness and school success. The process of deciding on appropriate indicators must take into account not only those indicators that are most meaningful to the state and local agencies but also those with which parents and community members are most concerned.<sup>14</sup> Evaluation measures need to be realistic and not overpromise results that are not in line with the level of resources committed to the local communities. Investments in evaluation can confirm success and can reveal where programs need to be refined and improved.

Flexible, non-categorical, preventive funding encourages broader and more flexible approaches to the underlying situations confronting families. School-linked services can not move forward for the long-term or at sufficient scale unless deliberate attempts are made to move beyond temporary and fragile combinations of existing programs.<sup>15</sup>

The fact that COZ Family Centers span a number of schools in a single district and across thirteen communities guarantees a high degree of program variability, as each community adapts the general model to the particular circumstances of local funding, goals, and service availability. This complexity needs to be factored into the evaluation design, which should reflect some common elements that can be measured across sites but also unique elements important to individual communities.

COZ Family Centers

COZ Family Centers

As of the 1997-1998  
school year, COZ Family  
Centers were connected  
with:

32 Elementary Schools  
2 Middle School  
2 High Schools  
and were located in the  
following communities:

Bristol Warren  
Central Falls  
Coventry  
Cumberland  
East Providence  
Middletown  
Newport  
North Kingstown  
Pawtucket  
Providence  
Westerly  
Woonsocket

## Program Profiles

## BRISTOL WARREN CHILD OPPORTUNITY ZONE FAMILY CENTER

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
Hugh Cole School	K-5	301	36%
Main Street School	1-3	148	33%
Childs Street School	1-3	151	34%

### Advisory Board

A 32-member Service Committee is comprised of 18 agency staff, 5 school staff, and 4 parents. The Service Committee plans programs and coordinates resources to meet the goals of the COZ Family Center, including the Starting Points focus on children from birth to age three. The Family Center is in the process of establishing a Parent Advisory Board which will have increased representation on the Service Committee.

### Community and School Locations

The Bristol Warren Family Center is located in Mary V. Quirk Building, also known as the Bristol Warren Adult Education Community and Family Resource Center. In addition to the COZ Family Center program components, the Quirk Center offers adult education programs sponsored by the School District and family programs sponsored by Self-Help, Inc. The COZ does not have family center space in the three elementary schools. An after-school program for children in grades K-5 is offered on-site at the Hugh Cole School for 30 children who attend any of the three elementary schools. Mental health counseling services for children and families are offered on-site at the Main Street School by East Bay Mental Health Center.

### Funding 1997-1998: \$83,000

*(does not include in-kind support from school district, in-kind support from health and human service agencies, or time contributed by parent and community volunteers)*



### Program Components

#### Parent Support and Education

Parent Leadership Program  
Parents Anonymous  
Home Visits for Parents of Newborns  
Welcome Bags with Resource Information for Parents of All Newborns  
Infant/Toddler Car Seat Distribution  
Car Safety Education Program  
Parenting Skills Series  
Toy and Book Library at the Quirk Center

#### Infant and Pre-School Programs

Drop-In and Play Program  
Parents as Teachers (School District COZ)

#### Child Care

Before- and After-School Child Care  
Training for Family Child Care Providers  
Family Child Care Provider Network

#### Children's Learning and Enrichment

Summer Programs for Children (Barrington YMCA)

#### School-Linked Health and Social Services

School-Based Counseling Program (East Bay Mental Health Center)

#### Family and Community Development

Family Recreation (Self-Help/DCYF Family Preservation)

### Contact:

Joan Ricci, Coordinator

### Participating Schools:

3 Elementary Schools

### Auspices:

Bristol Warren Regional

School District

### Affiliations:

Schools of the 21st

Century - Yale Bush

Center

### Carnegie Starting Points

### Address:

COZ Family Center

Mary V. Quirk Building

790 Main Street

Warren, RI 02885

(401) 247-3730

### Staff:

Coordinator (full-time)

Senior Child Care

Coordinator (part-time)

Assistant Child Care

Provider (part-time)

2 Home Visitors (part-time)

Starting Points

Consultant (part-time)

2 Parent Anonymous

Facilitators

2 Parent Educators

### Children reach

kindergarten ready to learn.

Guarantee quality child care choices.

Parents have resources that support their role as parents.

COZ Family Center

Focus of Support Services

## CENTRAL FALLS CHILD OPPORTUNITY ZONE

COZ School	Grade Levels	Total Enrollment	Percent Low-Income
Captain Hunt Early School	preK and K	329	100%

**Contact:**

Mario Pepitro,

Coordinator

**Participating Schools:**

1 Early Elementary

School

**Auspices:**

Central Falls School

District

**Affiliations:**

Carnegie Starting Points

**Address:**

Central Falls COZ

Central Falls School

Department

21 Hedley Avenue

Central Falls, RI 02863

(401) 727-7700

**Staff:**

Coordinator (part-time)

**Advisory Board**

The COZ/Family Support Center Parent Advisory Board, comprised of 20 parents, gives advice and ideas on programs to be offered and publishes a parent newsletter. Representatives of 9 partner agencies, the Captain Hunt School principal, and 4 Captain Hunt teachers and staff participate in planning, meetings, and discussions but do not vote.

**School Location and Community Location**

Activities of the Central Falls COZ are linked with the Captain Hunt School. The COZ does not have family center space at the school. Staff for the COZ and the community-based COZ site are frequently at the school working with teachers, parents, and children. The Family Support Center, operated by Children's Friend and Service, is the community-based site for the Central Falls COZ. The Family Support Center offers intensive home, center, and school-based services to children under five and their families. Services are available in English and Spanish. The contact for the Family Support Center in Central Falls is Fauna Martins, 729-0008.

**Funding 1997-1998: \$91,456**

(does not include in-kind support from school district, in-kind support from health and human service agencies, funding for The Family Support Center operated by Children's Friend and Service, or contributions of parent and community volunteers).

COZ Family Center (Department of Education, Department of Health, United Way)



Starting Points (Department of Education, Department of Health, United Way, Carnegie

**Program Components****Parent Support and Education**

Family Support Center operated by Children's Friend and Service provides information, referral, and follow-up for individual families; Crisis intervention for families; Early Start - intensive home-based family support services; Parenting support groups; emergency clothing, diapers, formula; Resource Counselor for parents of children who are disabled (RI Parent Information Network); Transportation/ child care to programs (Starting Points).

**Infant and Pre-School Programs**

Parents as Teachers (School District, RI Youth Guidance); Building Bridges (School District); HIPPI (School District); Summer story hour; Healthy body curriculum at Captain Hunt School

**Children's Learning and Enrichment**

Literacy nights and lending library at Captain Hunt School

Family Support Center provides: Consultation with teachers on children's mental health; Expressive therapy group for children; Support for parents and children in the transition to kindergarten; The Right: Question Project; Teacher referral of children with signs of emotional problems.

**School-Linked Health and Social Services**

Child Outreach screening at the Family Support Center (School District); Intensive home-based family support, child counseling, service linkage (Family Support Center); Lead poisoning prevention education (VNA); Lead poisoning screening and treatment (Starting Points, Fauna Clinic); Playground safety project

**Adult Education**

GED/ ESL classes (RIRAL, Literacy Volunteers)

**Family and Community Development**

Parent Newsletter, Family field trips; Fall fair; May breakfast, Pot luck suppers

**Children reach**

kindergarten ready to learn.

Parents are involved in their children's education.

Children and families are physically, mentally, and emotionally healthy.

Parents have resources that support their role as parents.

## COVENTRY CHILD OPPORTUNITY ZONE FAMILY CENTERS

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
Blackrock School	K-6	453	23%
Hopkins Hill School	K-6	367	22%
Oak Haven School	K-6	301	31%
Tiogue School	K-6	480	18%
Washington Oak School	K-6	641	20%
Western Coventry School	K-6	387	11%
Coventry Middle School	7-8	858	20%
West Bay Area Career & Tech.	11-12	enrollment w/High School	--
Coventry High School	9-12	1,645	10%

### Advisory Board

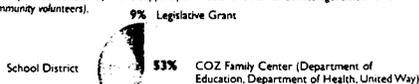
The Coventry COZ has a Steering Committee comprised of agency representatives, teachers, community members, business leaders, and parents.

### School Locations

The Coventry COZ considers all of the schools to be part of the COZ initiative. Washington Oak and Oak Haven Elementary Schools have a family resource center on site each staffed by a five hour per week parent coordinator. The remaining four elementary schools, the middle school, and the high school do not have physical space but parents, students, and school staff are involved in activities sponsored by the COZ. There is a small office at the high school for use by the COZ Coordinator, whose main office is at the Coventry school administration building.

### Funding 1997-1998: \$36,127

(does not include in-kind support from school district, in-kind support from health and human service agencies, or time contributed by parent and community volunteers).



Note: Coordinator position was vacant from October 1997-April 1998

### Program Components

#### Parent Education

Parenting skills training (School district)  
Family Resource Centers at two schools  
Community resource information at all schools  
Parent volunteer handbook

#### Infant and Pre-School Programs

Pre-school story hours  
Reading to children in home-based child care (RIC)

#### School-Linked Health and Social Services

Mental health counseling (Tides Family Services)  
Teen pregnancy prevention education  
Education on postponing sexual involvement  
Education on teen dating violence  
Student resource information at the high school

#### Family and Community Development

Health fairs  
Community fairs  
Red Ribbon Week parade (Substance Abuse Task Force)

### Contact:

Sue Conde, Coordinator

### Participating Schools:

6 elementary schools  
1 middle school  
2 high schools

### Auspices:

Coventry Public Schools

### Address:

#### Coventry COZ

Coventry Public Schools

222 MacArthur Blvd.

Coventry, RI 02814

(401) 822-9400

### Staff:

1 Coordinator (part-time)

2 Parent Coordinators

(part-time)

### Children reach

kindergarten ready to learn.

Children experience success in school.

Parents are involved in their children's education.

**CRANSTON  
CHILD OPPORTUNITY ZONE FAMILY CENTER**

<b>COZ Schools</b>	<b>Grade Levels</b>	<b>Total Enrollment</b>	<b>Percent Low-Income</b>
Arlington School	K-5	154	89%
Gladstone School	K-5	400	69%

**Contact:**  
Jeanne Rheame,  
Coordinator  
**Participating Schools:**  
2 Elementary Schools  
**Auspices:**  
Cranston Public School District  
**Affiliations:**  
Carnegie Starting Points  
**Address:**  
Cranston COZ Family Center  
Gladstone School  
50 Gladstone Street  
Cranston, RI 02920  
(401) 943-3029  
**Staff:**  
Coordinator (part-time)  
Parent Outreach Worker (part-time)  
Bilingual Parent Advocate (part-time)

**Advisory Board**

The COZ Family Center Advisory Board is comprised of 26 members, including 9 parents, 6 school representatives, 6 agency representatives, and 4 representatives from business, church, or civic organizations, and 1 representative of local government. The Advisory Board is responsible for planning, updating action steps, evaluating progress, and ensuring that activities meet family priorities and further the mission of the family center, including the Starting Points focus on children from birth to three.

**School Locations**

In the winter of 1998, the COZ Family Center moved into a large space at the Gladstone School that was renovated by school staff, parents, and community volunteers. The new Family Center allows for additional program capacity on-site at the Gladstone School, which is about two blocks from the Arlington School. Both schools serve children and families from the surrounding neighborhood. A bilingual parent advocate provides outreach to Southeast Asian families and provides translation services. The Cranston COZ has a small office space for information and referral at the Arlington School and COZ staff are frequently on-site working with families and teachers.

**Funding '97-98: \$74,400**

*(does not include in-kind support from school district, in-kind support from health and human service agencies, and contributions of parent and community volunteers).*



Children and youth experience success in school.  
Children and families are physically, mentally, and emotionally healthy.  
Young children are ensured good health and protection.  
Community members have access to adult education opportunities.

**Program Components**

**Parent Support and Education**

Family Center at Gladstone School; Information, referral, and follow-up for individual families; Parenting classes; Information on child care and health care; Clothing giveaway; Infant toddler car seat distribution; Car safety education program  
CPR classes; Infant care classes

**Infant and Pre-School Programs**

Parent/toddler story hour; Reach Out and Read (Cranston Community Health Center)

**Children's Learning and Enrichment**

Support for parents and children in the transition to kindergarten; Bilingual Child Outreach screening/Head Start registration; Support for parents and children in the transition to middle school

Professional development for school staff on social service issues; Financial aid/enrollment for summer camp (Cranston YMCA, PTA)

**Adult Education**

GED classes (Cranston Adult Education, School District); ESL classes (Cranston Adult Education, School District); Job skills workshops (SER-Job Development); Training of literacy tutors (Providence Literacy Volunteers)

**Family and Community Development**

Crimestop block party; Safety fairs for school and community; Community resource fair; Parent newsletter; Parent coffee hours at the schools

## CUMBERLAND CHILD OPPORTUNITY ZONE FAMILY CENTER

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
B.F. Norton School	K-5	408	33%

### Advisory Board

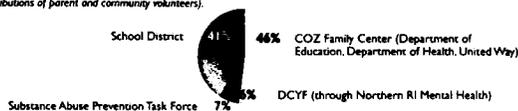
The B.F. Norton Family Center Governing Board is comprised of 6 parents, 6 agency representatives, and the school principal. The Governing Board meets quarterly to plan, evaluate progress, and ensure that activities meet family priorities as identified in the annual needs assessment.

### School Location

The B.F. Norton Family Center is a large room in the school building. The Family Center coordinator is also the Title I and Language Arts Coordinator for the school, facilitating close connections with teachers and staff. Parents are frequent volunteers and resources to Family Center programs. The school primarily serves children and families from the surrounding neighborhood. There are many Portuguese and Spanish speaking families in the area and the Norton School has the ESL classrooms for the district. Materials from the Family Center are provided in both English and Portuguese.

### Funding 1997-1998: \$73,448

(does not include in-kind support from school district, in-kind support from health and human service agencies, and contributions of parent and community volunteers).



### Program Components

#### Parent Support and Education

Family Center at the B.F. Norton School  
Information, referral, and follow-up for individual families

Coat and boot distribution

Parenting skills training - Megaskills, Systematic

Training for Effective Parenting (STEP)

Infant toddler car seat distribution

Car safety education program

#### Infant and Pre-School Programs

Parent-child cooperative preschool

Drop-in play group

#### Child Care

After-school child care on-site at Norton  
(Cumberland YMCA)

#### Children's Learning and Enrichment

After-school homework/mentoring program

(Substance Abuse Prevention Task Force)

After-school mini-courses for K-5 students

(Norton teacher, Cumberland-Lincoln Boys and Girls Club)

Scholarships to the Boys and Girls Club

(Substance Abuse Prevention Task Force)

Family literacy program - literacy book bags

Math games night for parents and children

Workshops for parents on education issues and

home/school involvement

#### School-Linked Health and Social Services

Child Outreach screening at the Family Center

(School District)

Workshops for teachers and parents on

children's mental health (Northern RI Mental

Health Center)

Feelings After Divorce-Support support group

(Substance Abuse Task Force)

#### Adult Education

GED classes (RIRAL)

English as a Second Language classes (School

District)

#### Family and Community Development

Family fun activities

### Contact:

Kathryn Desjardins, Title

I/Literacy/Family Center

Coordinator

Participating Schools:

1 Elementary School

Auspices:

Cumberland School

Department

Address:

Family Center

B.F. Norton Elementary

School

364 Broad Street

Cumberland, RI 02864

(401) 726-2030

Staff:

Family Center

Coordinator (part-time)

Parent-Child Preschool

Coordinator (part-time)

Program Assistant (part-

time)

Children reach

kindergarten ready to

learn.

Parents have resources

that support their role as

parents.

Parents are involved in

their children's education.

Family members have

access to adult education

opportunities.

## EAST PROVIDENCE CHILD OPPORTUNITY ZONE FAMILY CENTERS

**Contact:**  
Grace Osedlacz, Director

**Participating Schools:**  
3 Elementary Schools

**Auspices:**  
Self-Help, Inc.  
East Providence School

**Department**

**Affiliations:**  
Carnegie Starting Points

**Address:**  
East Providence COZ  
Family Centers  
Self Help, Inc.  
100 Bullocks Point Avenue  
East Providence, RI 02915  
(401)437-1000

**Staff:**  
COZ Director (full-time)  
3 Family Center  
Coordinators  
(part-time)  
Family Outreach  
Advocate (part-time)

COZ Schools	Grade Levels	Enrollment Total	Low-Income Percent
Grove Avenue Elementary School	K-6	292	57%
Orlo Avenue Elementary School	1-6	293	47%
Whiteknact Elementary School	K-6	279	49%

### Advisory Board

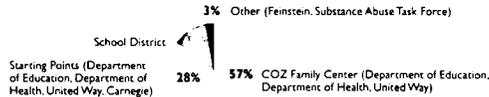
The East Providence COZ has a newly formed Governing Council comprised of 23 members. Fifty-one percent are parents and 49% are representatives of schools, community agencies, community members, government, and business.

### School Locations

The East Providence COZ has a community room at the Grove Avenue School, a Family Resource Room at the Whiteknact School, and office space and meeting space at the Orlo Avenue School. The three schools serve children from the surrounding neighborhoods. A Family Center Coordinator is assigned to each school 5 hours a week to organize events, work with the Parent Teacher Organization, and support parent involvement in the COZ Family Center and the school. After-school child care is provided at the Orlo Avenue and Whiteknact School by the Newman YMCA. Before-school child care is available at the Orlo Avenue and Grove Avenue School.

### Funding 1997-1998 \$60,893

*(does not include in-kind support from school district, in-kind support from health and human service agencies, and contributions of parent and community volunteers)*



Children experience success in school.

Parents are involved in their children's education.

Parents have resources that support their role as parents.

Family members have access to adult education opportunities.

### Program Components

#### Parent Support and Education

Information, referral, and follow-up for individual families

Family Resource Rooms at Grove and Whiteknact Schools

Information on community services

Parenting skills training

Conflict resolution training (School District)

#### Child Care

Before- and after-school child care (Newman YMCA)

#### Children's Learning and Enrichment

Mentoring and academic support (Rhode Island Children's Crusade); After-school tutoring (Substance Abuse Prevention Task Force)

Math/Science night for children and families

Students as mediators (School District)

#### Feinstein Good Deeds Program

Parent and teacher curriculum day/ice cream social

Open house/pizza party for parents and teachers

Parent-child lunches and classroom visits

Conflict resolution training for teachers (School District)

#### Adult Education

English as a Second Language classes (RIRAL)

GED classes (RIRAL)

Citizenship classes (RIRAL)

#### Family and Community Development

Family field trips

Parent coffee hours

Bike rodeo

Family fun activities

Voter registration

Father-daughter dance

## MIDDLETOWN CHILD OPPORTUNITY ZONE FAMILY CENTERS

COZ Schools	Grade Levels	Enrollment Total	Low-Income Percent
Forest Avenue Elementary School	K-4	315	40%
Aquidneck Elementary School	K-4	267	14%
Kennedy Elementary School	K-4	309	32%
Linden Elementary School	preK and K	153	30%

### Advisory Board

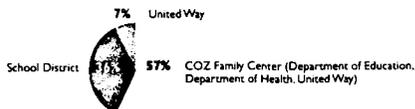
The Middletown COZ has a Steering Committee comprised of agency representatives, teachers, guidance counselors, and parents. Approximately 15 members participate each month to plan activities and evaluate progress.

### School Location

The Middletown COZ has a family resource center in each of the four participating elementary schools. The COZ staff, who have offices at the School Administration Building, are frequently on-site in the schools connecting with teachers, school staff, parents, and children. An after-school child care program for children in the Middletown school system is offered on-site at the Linden, Aquidneck, and Forest Avenue Schools by the Newport County YMCA. A before-school child care program is offered at the Linden School.

### Funding 1997-1998: \$61,907

(does not include in-kind support from school district, in-kind support from health and human service agencies, or time contributed by parent and community volunteers)



### Program Components

#### Parent Education

Parenting workshops (New Visions, Newport County Child and Family Services, Family Networks)  
Parent Resource Library at each school  
Learning Lending Library of toys, games, books, software

#### Infant and Pre-School Programs

Parents as Teachers play groups - birth to age 3  
Parents as Teachers (School District)  
Play groups for 3- and 4-year olds

#### Child Care

Before-school child care (Newport County YMCA)  
After-school child care (Newport County YMCA)

#### Children's Learning and Enrichment

Parent newsletter on how to support children's learning  
After-school science club  
Book swaps  
Book group for children with attention deficit disorder

#### Family and Community Development

Museum passes for families  
Parent-child celebration lunches

#### Contact:

Fatherine Jones,

Coordinator

Participating Schools:

4 Elementary Schools

Auspices:

Middletown Public

Schools

Affiliations:

Schools of the 21st

Century - Yale Bush

Center

Address:

Middletown Initiative for

Children and Families/

COZ

Oliphant School

Administrative Offices

25 Oliphant Lane

Middletown, RI 02842

(401) 849-2122

Staff:

Coordinator (part-time)

Resource Assistant (part

time)

2 Parent Educators (part-

time)

Children reach

kindergarten ready to

learn.

Children experience

success in school.

Parents are involved in

their children's education.

## NEWPORT CHILD OPPORTUNITY ZONE FAMILY CENTER

**Contact:**

Christine Arouth, Family  
Center Director

**Participating Schools:**

1 Elementary School

**Auspices:**

New Visions of Newport  
County

Newport Public Schools

**Affiliations:**

Carnegie Starting Points

**Address:**

Family Center  
Sullivan School  
Dexter Street  
Newport, RI 02840  
(401) 845-8579

**Staff:**

Family Center Director  
(full-time)

**Bilingual Outreach**

Worker (part-time)

**Family Development**

Specialist (full-time)

Program Assistant (part-  
time)

**Children reach**

kindergarten ready to  
learn.

**Children experience**

success in school.

Parents are involved in  
their children's education.

Parents have resources  
that support their role as  
parents.

COZ School	Grade Levels	Total Enrollment	Percent Low-Income
Sullivan School	preK - 5	234	100%

**Advisory Board**

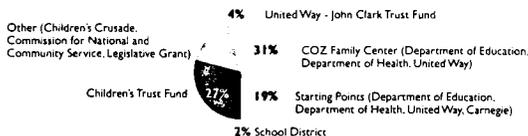
The Family Center has a 13-member Governing Council made up of 51% parents and 49% agency, school, and business representatives. The governing board provides input into the strategic direction of the Family Center, makes linkages with existing programs that support the Family Center's mission, and ensures that activities meet the priorities of parents in the school community.

**School and Community Locations**

The Sullivan School Family Center is located in a trailer attached to the school and shares space, staff, and resources with the Even Start Family Literacy Program. Recently an additional room was renovated in the Sullivan School building for a Parent Information and Resource Center, including a lending library and resource staff. A bilingual outreach worker and program assistant provide outreach and translation services to Spanish-speaking parents. The community site for the Sullivan School Family Center is the Florence Gray Center, located across the hill from the school at the Tonomy Hill Public Housing Development. The Florence Gray Center is a large community center with classrooms, office space, and resources for a variety of family and community programs.

**Funding 1997-1998: \$113,200**

*(does not include in-kind support from school district, in-kind support from health and human service agencies, or time contributed by parent and community volunteers).*

**Program Components****Parent Support and Education**

Family Center at Sullivan School, Parent Resource and Information Center in Sullivan School; information, referral, and follow-up; Mother-for-Mother mentoring program (Child and Family Services); Translation services; Lending library of toys, books, puppets, puzzles; Parenting workshops (Family Networks Program, Middletown and Newport COZs)

**Infant and Pre-School Programs**

Parents as Teachers; Books-Are-Us story hours; Kindermusik

**Children's Learning and Enrichment**

Reading mentors; Tutoring (Child and Family Services); Mentoring and academic support,

history project (Children's Crusade);

After-school activities for grades K-2 (AmeriCorps, City Year); After-school programs for grades 3-5; Art program with Newport Art Museum, Drama program with Newport Children's Theater, Hip-Hop dance program

**School-Linked Health and Social Services**  
Health Center at Florence Gray Center (New Visions), Developmental screening for children enrolled in Even Start, Bilingual Child Outreach screening (Even Start, School District)

**Adult Education**

GED classes and ESL classes (Even Start)

**Family and Community Development**

Adult health and aerobics (Child and Family Services, United Way); Family fun activities

## NORTH KINGSTOWN CHILD OPPORTUNITY ZONE FAMILY CENTER

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
Davisville Elementary School	1-5	211	42%
Forest Park Elementary School	1-5	281	26%

### Advisory Board

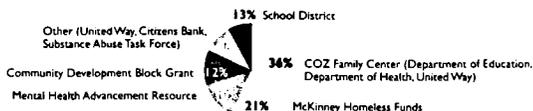
The North Kingstown Child Opportunity Zone has a Steering Committee of parents, community volunteers, and agency representatives. Workgroups are created as needed to plan and implement specific projects. If a need is identified as a priority for the school and the parents, the COZ seeks out appropriate community partners to ensure collaborative ownership of the program.

### School Location

The Child Opportunity Zone works with students and families in the Davisville and Forest Park Elementary Schools. Both are primarily neighborhood schools. Children from the transitional housing program for homeless families located in the neighborhood attend Forest Park School. The COZ seeks to develop programs that meet the needs of all children and families, with special attention to the needs of families in the transitional housing program. The COZ has office space in the Davisville School and is planning a community-based Family Resource Center to be located in the neighborhood.

### Funding 1997-1998: \$95,509

*(does not include in-kind support from school district, in-kind support from health and human service agencies, or time contributed by parent and community volunteers).*



### Program Components

#### Parent Education

Family resource literature and referrals; Handbook of "education terms"; Reference guide to support services; Scholarships to parenting conferences; Parent/school staff workshops; Car seat and bicycle safety

#### Infant and Pre-School Programs

Parents as Teachers, Pre-school story hours, Book bags for babies and parents

#### Children's Learning and Enrichment

Tutoring and Academic Support; After-school recreation and mini-courses; Arts enrichment program; Summer School Collaborative-Academic Support, Enrichment Camp, Scholarships (COZ, School District, Recreation Dept.); Reading skills support/classroom curriculum; Academic support and education plan development for children in transitional

housing; Healthy Foods Clubs; "Teaching tolerance" posters/curriculum; School breakfast pilot

#### School-Linked Health and Social Services

Health and dental services, immunizations (Bayside Family Health Services); Professional development on homelessness and children's mental health

#### Adult Education

Scholarships for adult education; Scholarships for computer skills training

#### Family and Community Development

"Welcome to Our School" Tile Art Mural Project; Gardens, nature trails, outdoor classrooms created by families and school staff (United Way, Citizens Bank); Stroller/walking club; Family swim night (Local fitness club); Aerobics (Local fitness club); Parent/child fitness activities (Local fitness club)

### Contact:

Donna Thompson

Coordinator

Participating Schools:

1 Elementary Schools

Auspices:

North Kingstown Public

Schools

Address:

Davisville Elementary

School

50 East Court

North Kingstown, RI

02852

(401)294-4581 ext. 252

Staff:

Coordinator (part-time)

Parent Educator (part-

time)

Children reach

kindergarten ready to learn.

Children experience success in school.

Parents are involved in their children's education.

Children are physically, mentally, and emotionally healthy.

**PAWTUCKET  
CHILD OPPORTUNITY ZONE FAMILY CENTER**

**Contact:**  
 Mary Parella  
 Coordinator  
**Participating Schools:**  
 1 Elementary School  
 1 Middle School  
**Auspices:**  
 Pawtucket Public Schools  
**Affiliations:**  
 Carnegie Starting Points  
 Carnegie Middle Schools  
 Robert Wood Johnson  
 School-Based Health  
 Centers  
**Address:**  
 Cunningham/Slater COZ  
 Cunningham School  
 40 Baldwin Street  
 Pawtucket, RI 02860  
 (401) 729-6293  
**Staff:**  
 Coordinator (full-time)  
 Parent Coordinator (part-time)

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
Cunningham Elementary School	K-5	477	100%
Slater Junior High School	6-8	511	75%

**Advisory Board**

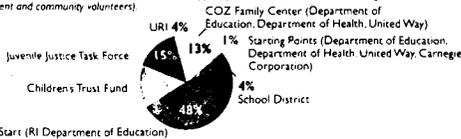
The Pawtucket Child Opportunity Zone Family Center creates or participates in workgroups as needed to plan and implement specific projects. The COZ Coordinator receives input and feedback on program needs from parents participating in programs, through outreach by the parent coordinator, and through participation on existing coalitions in the community.

**School Location**

The Child Opportunity Zone Family Center works with students and families in the Cunningham Elementary School and Slater Junior High School, two schools located adjacent to each other. Both are primarily neighborhood schools, serving children from the Woodlawn neighborhood of Pawtucket. The COZ Family Center is located in a large classroom in the Cunningham School.

**Funding 1997-1998: \$268,852**

*(does not include in-kind support from school district, in-kind support from health and human service agencies, or time contributed by parent and community volunteers)*



Children reach kindergarten ready to learn.  
 Children experience success in school.  
 Children are physically, mentally, and emotionally healthy.  
 Parents have resources that support their role as parents.

**Program Components**

**Parent Support and Education**

Parent-to-parent mentoring program (URI Cooperative Extension); Parenting skills training (URI Cooperative Extension); Resource counselor for parents of children with disabilities (RI Parent Information Network); Infant/toddler car seat distribution; Car and bicycle safety education; Child care and transportation to events

**Infant and Pre-School Programs**

Parents as Teachers (RI Youth Guidance, Starting Points); Home Instruction Program for Preschool Youngsters - HIPPPY (Pawtucket District); Pawtucket Home Visiting Program; Even Start Family Literacy Program

**Children's Learning and Enrichment**

After-school clubs for grades 3-8; After-school enrichment program for grades 3-5 (URI 4-H Program); Four-week summer camp for grades 3-4; Two-week summer enrichment institute for grades 5, 6, 7 (URI); Four-week summer academic

program for grade 8; Support for the transition to middle school; Support for the transition to high school; Guaranteed Admissions Program with URI; Students as Mentors; Girls Mentoring program (Brown University)

**School-Linked Health and Social Services**

Social Skills groups (Community Counseling Center); School-based health center to open 9/98 (RI Department of Health, Blackstone Valley Health Center, Memorial Hospital); Lead poisoning screening and treatment (Starting Points, Fatima Clinic)

**Adult Education**

Adult Basic Education classes; GED classes, ESL classes (Swearer Center); Citizenship classes (Project Hope); Summer literacy programs

**Family and Community Development**

Annual Family Fair; Breakfast with Santa; Family Field Trip; Family fun activities, Bike Rodeo; Parent coffee hours (Project Hope, Americorps)

## PROVIDENCE CHILD OPPORTUNITY ZONE FAMILY CENTERS

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
*William D'Abate Elementary School	K-5	392	96%
Gilbert Stuart Elementary School	K-5	772	100%
Fogarty Elementary School	K-5	529	100%
Camden Avenue Elementary School	K-5	638	97%

\*Of the four schools with COZ Family Centers, only the William D'Abate Family Center submits applications to and receives funding through the state COZ Family Center initiative described in this publication. The remaining three COZ Family Centers are part of The Providence Plan's Enterprise Community COZ Family Centers. The Gilbert Stuart COZ is operated by Dorcas Place Family Literacy Center; the Fogarty Elementary School COZ by the Salvation Army, and the Camden Avenue School COZ by the Smith Hill Center. The following information refers only to William D'Abate COZ.

### Advisory Board

The D'Abate COZ Family Center does not have an official governing board. A number of agencies serving the Olneyville neighborhood meet on a monthly basis to share information and to provide input on programs.

### Community Location

The D'Abate COZ is located in a large suite of offices/classrooms adjacent to the school building. There is no direct access to the school from the Family Center, which has office space for program staff from the COZ Family Center, Parents Making a Difference, Olneyville Housing, the Rhode Island Parent Information Network, the U.S. EPA, and Providence Community Police. Conference and classroom space in the Center is used by a variety of agencies and community groups.

### Funding 1997-1998 for D'Abate COZ Family Center: \$159,569

*(does not include support from health and human service agencies, or contributions of parent and community volunteers; does include in-kind from the Providence School Department).*

Starting Points (Department of Education).

Department of Health, United Way, Carnegie



COZ Family Center (Department of Health, United Way)

School District

### Program Components at the D'Abate COZ Family Center

#### Parent Support and Education

D'Abate COZ Family Center: Parents Making a Difference Family Center (Americorps); Resource counselor for parents of disabled children (RI Parent Information Network); Parenting skills workshops; Information and referral; Housing information and workshops

#### Children's Learning and Enrichment

Support transition to middle school; Peer mentoring for fifth graders (TIDES); Summer lending library; After-school computer club

#### School-Linked Health and Social Services

Immunization clinics (Travelers Aid); Mental

health counseling for student and families (TIDES, RI Youth Guidance); Child outreach screening (Providence School Department)

#### Adult Education

Community access computer lab (TechCorps); Child care worker job training (Starting Points); Job training (Youthbuild); GED and ESL classes (RIRAL Adult Academy); College, career, job skills counseling, scholarship information (URI, CCRI, EEOC)

#### Family and Community Development

Community projects in Olneyville; Community police office at Family Center (Providence Police Department); Environmental outreach and education (Olneyville Housing); Greenway Project (Providence Plan)

### Contact:

Thomas DiPippo,  
Director of Federal  
Programs

### Participating Schools:

4 Elementary Schools

Auspices: Providence

School Department

Affiliations:

Providence Enterprise

Community,

The Providence Plan

Address:

Providence School

Department

797 Westminster Street

Providence, RI 02903

(401) 456-9220

### D'Abate COZ

Contact:

Kathie Hackett,

Coordinator

Auspices:

Providence School

Department

Affiliations:

Carnegie Starting Points

Address:

Wm. D'Abate COZ

17 Hyaz Street

Providence, RI 02909

401-546-1710

Staff:

1 Coordinator (full-time)

1 Clerk (full-time)

## WESTERLY CHILD OPPORTUNITY ZONE FAMILY CENTER

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
Westerly High School	9-12	1,004	7%

**Contact:**

Sally Mitchell,

School Psychologist/  
WISSP Coordinator

Participating Schools:

1 High School

Auspices:

Westerly School

Department

Address:

Westerly Integrated  
Social Services Program

Westerly High School

23 Ward Avenue

Westerly, RI 02891

(401) 596-0315 ext. 218

(401) 596-2109

Staff:

1 Coordinator (part-time)

1 Program Assistant (full-time)

**Advisory Board**

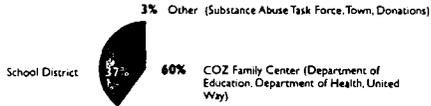
The Westerly Integrated Social Services Program has an Advisory Council of 17 members representing the school, human service agencies, town government, community members, and families. The advisory council meets 6-8 times a year to set the strategic direction of the WISSP Program and to provide input on programs and services. A Teen Committee of 15 students meets bimonthly to plan programs and to provide feedback on existing services.

**School Location**

WISSP is located in a suite of offices on the first floor of Westerly High School, adjacent to the Guidance Department and School-to-Career program. WISSP has a reception area that is staffed during the school day, 4 office spaces, and a medium size conference room. Programs are offered in the WISSP offices, throughout the school, and in the community.

**Funding 1997-1998: \$58,200**

*(does not include in-kind support from school district, in-kind support from health and human service agencies, or contributions of parent and community volunteers)*



**Program Components**

**Children's Learning and Enrichment**

- Peer Tutoring Program
- Natural Helpers Program - Peer Mediation
- Teen Helpline student volunteer training
- WISSP Teen Committee

**School-linked health and social services**

- Information, referral, and follow-up for individual students
- Teen Helpline 2pm - 10 pm
- Teen parenting group (Visiting Nurse Services)
- Dating violence education and support (Women's Resource Center)
- Anger management groups (DAPAC)
- Nutrition counseling (Westerly Hospital)
- Bereavement counseling (VNS Hospice)
- AJ-A-Teen

- Juvenile hearing board referrals for services
- Substance abuse assessment and referral (Marathon, Sympatico)
- Family meetings and counseling (DCYF)
- Individual counseling (South County Child and Family Consultants)
- Emergency crisis intervention (South Shore Mental Health)
- Joint staff development for schools, human service agencies
- Adult Education**
- GED Program and Tutoring (Washington County Adult Learning Center)

Children achieve success in school.

Children and families are physically, mentally, and emotionally healthy.

## WOONSOCKET CHILD OPPORTUNITY ZONE FAMILY CENTER

COZ Schools	Grade Levels	Total Enrollment	Percent Low-Income
Second Avenue School	K-3	63	100%
Fifth Avenue School	K-2	204	90%
Coleman Elementary School	3-5	277	91%
Citizens Memorial School	K-5	274	92%

### Advisory Board

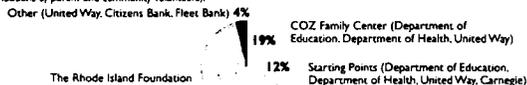
The Board of Connecting for Children and Families acts as the governing council for the Child Opportunity Zone. This 15-member Coordinating Council has fifty-one percent parents and forty-nine percent human service, education, business, and civic leaders. The Coordinating Council sets the strategic direction and gives advice on programs to be offered that meet parent priorities.

### School and Community Locations

The Fairmount Family Center operated by Connecting for Children and Families is the primary site for the Woonsocket COZ. Activities of the Fairmount Family Center are linked with three schools in the Fairmount neighborhood, all within a three-block area. Staff work with children and families at the Family Center, in the neighborhood, and in the schools. There is a family resource room in the Coleman school and activities are offered on site at Coleman after-school. A school-based health center is being planned for Coleman School and a Family Room is planned for Citizens Memorial.

### Funding 1997-1998: \$183,700

*(does not include in-kind support from school district, in-kind support from health and human service agencies, or contributions of parent and community volunteers.)*



### Program Components

#### Parent Support and Education

Fairmount Family Center: Family resource room at Coleman School; Information, referral, and follow-up; Parent support groups; Resource Counselor for parents of children who are disabled (RI Parent Information Center); Neighbor-to-neighbor prenatal support; Parent-to-parent mentoring; Outreach home visits; Translation services; Child care for events; Infant toddler car seat distribution; Car safety education

#### Infant and Pre-School Programs

Family Literacy Program (Even Start)

#### Children's Learning and Enrichment

After-school clubs and mini-courses; Self-esteem program (URI); Sports and art classes (Northern RI Mental Health Center); 6-Week Summer

Camp for ages 4-11; Summer Teen Employment (Family Resources); Neighborhood teen action group; Parent-teacher coffee hours; Translation support for the school events and IEPs

**School-Linked Health and Social Services**  
Immunization clinic (Thundermist); Supervised family visits at the Family Center (DCYP); School-based health center planned for Coleman School (Thundermist Health Center)

#### Adult Education

ESL and computer classes (RIRAL, Literacy Volunteers); Internships for adults enrolled in Pathways Program; Family home child care provider training

**Family and Community Development**  
Neighborhood safety committee; Lending library at the school; Safe Sitters class; Neighborhood newsletter; Multicultural festival; Family activities

### Contact:

Terese Curtin,

Executive Director

Participating Schools:

4 Elementary Schools

Auspices:

Connecting for Children and Families

Woonsocket Education

Department

Affiliations:

Carnegie Starting Points

Address:

Fairmount Family Center

28 First Avenue

Woonsocket, RI 02895

(401)766-3384

Staff:

1 Executive Director (full-time)

1 Community Outreach

Worker (full-time)

1 Secretary/Receptionist

(full-time)

1 Starting Points

Coordinator (part-time)

Children achieve success in school.

Parents have resources that support their role as parents.

Parents are involved in their children's education.

Children and families are physically, mentally, and emotionally healthy.

### Endnotes

<sup>11</sup> Shore, R. (1997). *Rethinking the Brain*. New York: Families and Work Institute.

<sup>12</sup> *Starting Points: Meeting the Needs of Our Youngest Children* (1994). New York: Carnegie Corporation of New York.

<sup>13</sup> *Years of Promise: A Comprehensive Learning Strategy for America's Children* (1996). New York: Carnegie Corporation of New York.

<sup>14</sup> Shartztrand, A.M., Weiss, H.B., Kreider, H.M., & Lopez, M.E. (1997). *New Skills for New Schools: Preparing Teachers in Family Involvement*. Cambridge, MA: Harvard Family Research Project.

<sup>15</sup> Dryfoos, J.G. (1994). *Full-Service Schools*. San Francisco, CA: Jossey-Bass, Inc.

<sup>16</sup> *Best Practices: Promising Practices* (1998). Quarterly publication of Georgia Academy (Vol. V, No. 3 Winter, 1998) Atlanta, GA: Georgia Academy Journal.

<sup>17</sup> Dryfoos, J.G. (1994). *Full-Service Schools*. San Francisco, CA: Jossey-Bass, Inc. and *The Future of Children: School-Linked Services* (1992). "Financing School-Linked Integrated Services" (Vol. 2, No. 1) Los Altos, CA: Center for the Future of Children, The David and Lucile Packard Foundation.

<sup>18</sup> Shaw, K.M. & Replogle, E. (1996) *Challenges in Evaluating School-Linked Services: Toward a More Comprehensive Evaluation Framework*. Cambridge, MA: Harvard Family Research Project.

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*Executive Director*  
Laboratory at Brown University

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Mr. REINER. I was also involved with Governor Whitman in New Jersey of doing exactly the same thing in the west ward of Trenton where we do a one-stop shopping kind of thing, again, all family support services in one place.

Mr. KUCINICH. Thank you, Mr. Chairman, for your indulgence. I appreciate it very much.

Mr. SHAYS. Thank you. It is wonderful to have your participation. We are going to get to the next panel, but we would welcome any closing comment from any of you.

Governor ALMOND. I just thank you for the opportunity. It has been very enlightening for me, the questioning. We will be very, very happy to supply you with some more information. We thank you very, very much for having the hearing.

Mr. SHAYS. Thank you. Governor Almond, we are going to work with your staff and your Washington representative because we want to be sensitive. The last thing we want to do is punish a State that has taken an initiative. I want to say that one of the ways we look at the States is as 50 individual laboratories where intervention can happen.

Mr. Reiner, when you and I were talking, I was thinking three may be great, four in some States.

Mr. REINER. It has to be flexible.

Mr. SHAYS. We do need that flexibility.

Ms. Pearson, do you have any closing comment you would like to make?

Ms. PEARSON. Yes, one thing I would like to state, one thing about Healthy Families I liked and I didn't know about, when I met with the First Lady, Mrs. Clinton, she had mentioned to me that it would be best if I could go and check on my child from time to time. I told her that I thought about that, but I felt like I would be a little sneaky doing it. And then Lynn said, she is required—she can do that. When she told me that, I was like, really?

So that's a good thing, too. That Lynn went and checked on my son and that my care giver was, of course—I think she would take my son a little bit more seriously knowing that someone is coming into their home and that he has some love there and someone behind him, not just me, but outside people as well. I just wanted you to know that.

Mr. SHAYS. So the First Lady is your friend as well?

Ms. PEARSON. She came into my home. It was a wonderful day for me.

Mr. SHAYS. She is a wonderful woman. Her advice is very sound.

Mr. Reiner.

Mr. REINER. One last thing. If you don't think that early brain development is important, I want to do a little experiment. It has probably never been done in a hearing room before. Everybody who took a second language, studied a second language in high school, raise your hand, everybody in the room. Everybody.

OK, keep your hands raised if you can speak that language fluently.

The point is—

Mr. SHAYS. Let the record note that about 100 people raised their hand and about 4 left their hands up.

Mr. REINER. The point is, we know that early on is when the brain gets wired for a lifetime of learning. When you learn a language in the first, up until age 10. After age 10 it is very difficult to learn a language. Early childhood brain development is critical. There is no escaping that.

Mr. SHAYS. The one thing I would want to leave this hearing with, though, is to say that, for those of us who were under-achievers at an early age, there is still hope.

Mr. REINER. Absolutely. Absolutely.

Mr. SHAYS. I learned to speak Fijian in the Peace Corps because they started us at 6 a.m., and went until 9 p.m. And in 3 weeks I learned what college couldn't teach me in 3 years.

Mr. REINER. You can learn. Obviously you can learn after age 10. But the point I'm making is it is much more difficult after—it has to be done at the age-appropriate time.

Mr. SHAYS. I am almost tempted to invite you to ask the other witnesses questions and come up here, but I don't have that authority.

Mr. REINER. I understand that. I have to get elected. I understand that.

Mr. SHAYS. Thank you. You have been a wonderful panel, all three of you. Thank you so much.

We are going to call our next panel and welcome the second panel much as we have welcomed our first: Dr. Lynn Karoly, RAND Corp., Santa Monica, CA; Dr. Jane Knitzer, director of program and policy analysis, National Center for Children in Poverty, Columbia School of Public Health, New York City; Dr. David Olds, professor of pediatrics and preventive medicine, University of Colorado, Denver; then finally, Mr. Peter Burki, chief executive officer, Dependent Care Connection, Inc. And that is where?

Westport, CT, of course. There is no coincidence to the fact that I represent Westport.

We are going to start with Dr. Karoly, then Dr. Knitzer, then Dr. Olds, then Mr. Burki. If you would remain standing, because I will swear you in.

[Witnesses sworn.]

Mr. SHAYS. For the record, all four of our witnesses have responded in the affirmative.

Dr. Karoly, we are going to start with you. We really appreciate all three of you being here and appreciate the fact that you listened to our earlier panel. I might add that if you want to paraphrase your statement and comment on things you have heard, be our guest; we have your written testimony. But if you want to pursue your written testimony, that is fine as well. You are on.

**STATEMENTS OF LYNN A. KAROLY, RAND CORP.; JANE KNITZER, DIRECTOR OF PROGRAM AND POLICY ANALYSIS, NATIONAL CENTER FOR CHILDREN IN POVERTY, COLUMBIA SCHOOL OF PUBLIC HEALTH; DAVID OLDS, PROFESSOR OF PEDIATRICS AND PREVENTIVE MEDICINE, UNIVERSITY OF COLORADO; AND PETER G. BURKI, CHIEF EXECUTIVE OFFICER, DEPENDENT CARE CONNECTION, INC.**

Ms. KAROLY. Good morning. Thank you very much, Mr. Chairman and members of the subcommittee. I am delighted to be here

this morning to speak to you today about early childhood interventions.

Just for the record, I'm a senior economist and director of the labor and population program at RAND, a private nonprofit research organization based in Santa Monica, CA. The testimony I am presenting today draws on my own research experience and does not necessarily represent the position of RAND or RAND's sponsors.

I want to focus my remarks this morning, in an abbreviated format from my written testimony, on a study on the costs and benefits of early childhood intervention that I just completed with a group of colleagues at RAND. Our study is titled Investing In Our Children and was motivated by the body of evidence that you have heard referred to already today, focusing on the importance of the early years of childhood, not only from birth to age 3, but in the early years before school entry. We know that the research increasingly has identified the important factors that determine whether those early years are productive years that lead to individuals who are successful in school and later in life.

With funding from the California Wellness Foundation, RAND constructed an interdisciplinary team of researchers that examined the evidence regarding the benefits and costs of targeted early intervention programs, those programs that were designed to address stressors in early childhood such as impaired emotional relationships or reduced levels of cognitive stimulation or inadequate resources to meet basic needs. Our aim was to provide an objective assessment of what the research to date can tell us both about the benefits of early childhood intervention programs, their costs, and the perspective that one might care about as policymakers in terms of the returns for investing in those programs.

A book reporting on our findings, which I am going to summarize this morning is available from RAND both in hard copy and in electronic form. Let me just give you a brief overview of our findings.

Our study set out to address two questions that we thought were particularly important for policy. The first question is, can early intervention programs targeted at disadvantaged children benefit those children and their families? After carefully reviewing the literature on well-designed and evaluated early intervention programs, we find consistent evidence that early intervention programs can yield significant benefits both to participating children and to their families. These benefits accrue in several key domains, including the emotional and cognitive development of the children, the emotional and cognitive support of parents, educational achievement for both children and parents, economic outcomes for children and their families, and the health status of family members. While some improvements are shorter lived, many of these gains do persist well into later years of childhood and even into early adulthood.

Now, for some, these benefits, which I will say a little bit more about in a minute, would be enough to justify spending money on early childhood and, particularly, well-designed programs. For others, it is important to compare the costs of these programs with the benefits that they generate, particularly the savings to government.

Therefore, we asked a second key question: Are these programs justifiable on economic grounds?

For two programs that we reviewed, which were amenable to this type of cost/savings analysis, we find that early intervention programs can generate savings to government that exceed program costs by severalfold. We also provide evidence that there are added benefits to other members of society that exceed even these savings to government that further justify spending on these programs. In both cases, we estimate that our calculations are conservative because we are not able to put a monetary value on all of the benefits that are produced by the programs we review.

It is important to note that these hopeful conclusions rest, however, on a limited number of carefully evaluated programs in the literature. The number of scientifically sound studies is limited and therefore our ability to extend the conclusions that we draw based on these studies means that there may be many programs out there today being implemented on a smaller- or larger-scale basis for which these conclusions may or may not be relevant. Thus, we believe there are many important questions that remain to be addressed in this area, such as the ability to scale up model programs and have them be as successful as they were at a smaller scale; and the optimal mechanisms for targeting children at risk, identifying who will benefit most from the programs as they are designed. Therefore, we think it's important while we proceed that we do so with caution, drawing on the proven models, where those proven models have been shown to be effective; and at the same time, continuing to evaluate both programs that have been implemented on a small scale and which are implemented now on a larger scale, as well as evaluating new program models as they go into effect on smaller and larger scales.

Let me just provide a little bit more detail in the remaining time on our two key questions and the specific findings in each of those areas, first, turning to the benefits of early intervention programs.

Given the importance of these early years of childhood, a number of model programs have been implemented and carefully evaluated and published in the scientific literature. These programs are designed, as I mentioned earlier, to overcome many of these stressors in early childhood that can place certain limitations on the ability of children to grow to be healthy, productive members of society. Our research focused in particular on nine programs published in the literature. These programs were somewhat different from many others in that they had careful evaluations, evaluations that included both treatment in control groups, evaluations that also had in most cases long enough followup so that we would know what would happen to program participants compared to nonparticipants, not only at the time a program is implemented but years down the road.

The programs that we reviewed differ in many respects in terms of their design, the types of children and families who were targeted, and the period during childhood in which the intervention took place. They ranged from programs that began in the prenatal period and offered, for example, home visits to young mothers. They included programs that began later in childhood, for example,

at ages 3 and 4, and offered high quality preschool programs to disadvantaged children.

All of these programs, I should emphasize, did target disadvantaged children. So, much of what we know about early childhood intervention is specific to children who face disadvantages early in childhood. We know much less about the effect of these programs on children more broadly distributed across the population.

Despite the diversity of these programs in their design and their features, we did find a consistent result that the programs that were evaluated do show important gains to both children and their families. These include gains in emotional and cognitive development, substantial improvement in educational processes, increases in economic self-sufficiency measured by things like reductions in welfare participation, reduced levels of crime and juvenile delinquency, higher levels of employment and income in adulthood, as well as improvement in health outcomes.

Let me just give you a couple of examples. One study that we looked at, for example, showed that children who participated in the intervention experienced a 52 percent reduction in the use of special education services by age 15; this is compared to a group of children who did not participate in the program. Likewise, another study evaluating children who participated in a program by age 15 found a 73 percent reduction in measures of juvenile crime and delinquency.

One study that we examined which included the longest follow-up, measuring outcomes for children in adulthood, when they were age 27, showed that children who had participated in a high quality preschool program had earnings at age 27 that were 60 percent higher than nonparticipating individuals.

In another example, some of the benefits accrued to the parents who participated in the program. In this case, mothers of children in the intervention experienced a 33 percent reduction in welfare utilization by age 15 of the child, again compared with mothers who did not participate.

Let me say just a little bit more about the costs and benefits of these programs and, in particular, the savings to government. For some, the types of benefits that I have just mentioned might be enough to justify these programs. But we could also put them in economic terms.

In two cases of the nine programs we examined, it is possible to undertake a cost/savings analysis which we did to compare the program costs with the savings generated down the line. In particular, we took into account the savings to taxpayers as a result of early intervention programs in the form of higher taxes paid by program participants, both mothers during the time that their children were in the programs, or afterwards, as well as the children once they became adults, savings to taxpayers in terms of reductions in social welfare spending like welfare programs, and subsidized health care, reductions in the cost of criminal justice expenditures, as well as other special savings such as in education.

One example that I will highlight, which you will probably hear more about from Dr. David Olds, was the Elmira Prenatal/Early Infancy Project implemented in New York. In this case, children have been followed through age 15, and we were able to account

for the savings to government both by improvements in mothers' outcomes as well as in the children's outcomes. In this case, the program, which costs about \$6,000 per mother-child pair, generated savings that were about four times as large, roughly \$24,000. In this case total savings to government, therefore, exceeds expenditures by a ratio of about 4 to 1. Moreover, since the savings to government accrued largely due to changes in the mother's behavior, these were savings that were generated very early on, soon after the program ended, so that the program payback period was roughly 3 years; in other words, the savings generated paid back the costs within a 3-year timeframe.

In other cases, the savings to government will take longer to accumulate, particularly if the benefits accrue to participating children. Many of those benefits will not be realized until those children are in school, until we see the savings because of lower special education costs, reductions in crime and delinquency, as well as savings later on as those children become adults. In the Perry Preschool example, we estimated that the program costs, which were about \$12,000 per child, generated savings to government of about \$24,000 per child, a ratio of 2 to 1, but that those savings took longer to accrue, so that the payback period was closer to 20 years rather than the shorter period we saw for the Elmira program.

In addition to these savings to government, I mentioned as well that there are benefits to other members of society. Other members of society benefit from savings in terms of reduced levels of crime that benefit potential crime victims, as well as the increase in income to program participants.

I would like to emphasize that these studies do pertain to disadvantaged children, so that program targeting is a critical issue. The ability to target individuals who will benefit most from these programs is likely to generate the greatest amount of savings to government.

In conclusion, I think that we can identify proven models, programs that have been carefully evaluated, that have demonstrated successful track records in terms of the benefits to participating families and children, as well as in terms of savings to government. But also we have much yet to learn in this area, so that continued evaluation is critical as we implement new programs or take existing models and extend them on a larger scale. Only in this way can we make sure that these investments produce the greatest return for our dollar.

Thank you very much.

Mr. SHAYS. Thank you, Dr. Karoly, we are going to be asking a question or two about those studies. Thank you very much.

[The prepared statement of Dr. Karoly follows:]

## THE COSTS AND BENEFITS OF EARLY CHILDHOOD INTERVENTIONS

### PREPARED STATEMENT OF LYNN A. KAROLY

Around the beginning of 1997, RAND was approached by the "I Am Your Child" Early Childhood Public Engagement Campaign to conduct an independent, objective review of the scientific evidence available on early childhood interventions. "Early childhood interventions" were defined as attempts by government agencies or other organizations to improve child health and development, educational attainment, and economic well-being. The aim was to quantify the benefits of these programs to children, their parents, and society at large. Funding for the project was secured from The California Wellness Foundation.

My testimony today draws on the results of our study titled *Investing in Our Children: What We Know and Don't Know about the Costs and Benefits of Early Childhood Interventions*. The research was conducted by an interdisciplinary research team from RAND's Criminal Justice Program and Labor and Population Program including two economists, a criminologist, two mathematical modelers, and a developmental pediatrician.

#### Introduction

Over the last year or so, there has been a renewed interest in the influence of early childhood—especially the first 3 years of life—on child health and development, educational attainment, and economic well-being. Public attention has been stimulated by television shows and stories in national news magazines, and governors and legislators have been initiating programs to direct budgetary surpluses to services for young children. Much of this activity has been given impetus by research findings that the great majority of physical brain development occurs by the age of three. These findings have been interpreted to suggest that early childhood furnishes a window of opportunity for enriching input and a window of vulnerability to such social stressors as poverty and dysfunctional home environments. The response has been an attempt to promote healthy child development, particularly among disadvantaged children, with home visits by nurses, parent training, preschool, and other programs.

It is unclear what will happen to these programs once the media spotlight moves on and budgets tighten. Perhaps a public clamor over the next hot issue will draw funds away from early childhood programs; perhaps it should. The current period of relative largesse provides the opportunity not only to initiate programs but to undertake the kind of rational evaluation of those programs that will help clarify the choices that must eventually be made. In our recent study, *Investing in Our Children*, we assemble the evidence now available on early childhood interventions to try to answer two questions that will be of interest to policymakers who must allocate resources and to the public who provides those resources:

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\* Senior Economist and Director, Labor and Population Program, RAND, Santa Monica, California. This testimony is based on the RAND study: Lynn A. Karoly, Peter W. Greenwood, Susan S. Everingham, Jill Houbé, Rebecca Kilburn, C. Peter Rydell, Matthew Sanders and Jim Chiesa, *Investing in Our Children: What We Know and Don't Know about the Costs and Benefits of Early Childhood Interventions*, MR-898, Santa Monica, California: The RAND Corporation, 1998 (ISBN 0-8330-2530-9). Full text available at <http://www.rand.org/publications/MR/MR898/MR898.feature/>. The views presented here do not necessarily represent those of RAND or RAND's research sponsors.

- *Do early interventions targeted at disadvantaged children benefit participating children and their families?* After critically reviewing the literature and discounting claims that are not rigorously demonstrated, we conclude that these programs can provide significant benefits.
- *Might government funds invested early in the lives of some children result in compensating decreases in government expenditures?* Here, we examine the possibility that early interventions may save some children (and their parents) from placing burdens on the state in terms of welfare, criminal justice, and other costs. Again, after updating and refining earlier estimates, we find that, at least for some disadvantaged children and their families, the answer to this question is yes.

We use words like “can” and “might” deliberately. We cannot freely generalize these conclusions to all kinds of targeted early interventions, especially not to large-scale programs, because of various limitations in the evidence collected to date. We pay special attention in our analysis to these limitations, which have important implications for future initiatives. In particular, these limitations suggest that better evaluations of new and continuing intervention efforts would be of great value to future decisionmaking.

#### **What Are the Benefits?**

The term “early intervention” can be broadly applied. It can be used for services generally available to and needed by many children, such as immunizations and child care, and to programs not specifically aimed at children, such as Food Stamps and Medicaid. In *Investing in Our Children*, we restrict its application to programs targeted to overcome the cognitive, emotional, and resource limitations that may characterize the environments of disadvantaged children during the first several years of life.

Even the term “targeted early intervention” is a broad concept. It covers programs concerned with low-birthweight babies and those concerned with toddlers in low-income families; interventions targeting children as well as those targeting their mothers; services offered in homes and those offered in centers; programs aimed at improving educational achievement and those aimed at improving health; and services as diverse as parent skills training, child health screening, child-abuse recognition, and social-services referral.

This diversity makes it impossible to draw overall generalizations about “targeted early intervention” and limits us to inferences as to what some programs can do, depending on the characteristics of the program and the families it serves. Furthermore, given the shortcomings and limitations in the design of many early intervention evaluations and the measures omitted from them, what we don’t know about the effects of early childhood intervention may exceed what we know (more on this appears below). Nonetheless, our review supports the proposition that, in some situations, carefully targeted early childhood interventions can yield measurable benefits in the short run and that some of those benefits persist long after the program has ended.

We reached that conclusion after examining a set of nine programs in which evaluations had been performed that assessed developmental indicators, educational achievement, economic well-being, and health for program participants and compared them with the same measures for

matched controls. In most of the programs, controls were selected by random assignment at program outset. We also sought programs with participant and control groups large enough at program implementation and follow-up to ensure unbiased results, although resource limitations on these programs did not always permit that.

Figure 1 schematically summarizes the results of our review of the effects of these programs on participating children.<sup>1</sup> The filled squares show which of a number of developmental, educational, economic, and health indicators were measured for each program reviewed. Dark gray indicates a favorable (and statistically significant) result, and black indicates no statistically significant result; light gray denotes mixed findings.<sup>2</sup> As the figure shows, each program favorably affected at least one indicator, and most of them affected several (that is, participants had better outcomes on these indicators than did children in the control group).<sup>3</sup> Although many studies did not find favorable outcomes across the full range of effects they examined (especially in the long run), favorable effects dominate. A companion analysis of program effects on mothers also showed that measured results tended to be favorable, although the ratio of favorable to null results across all programs was not as high.

The programs thus led variously to the following advantages for program participants relative to those in the control group:

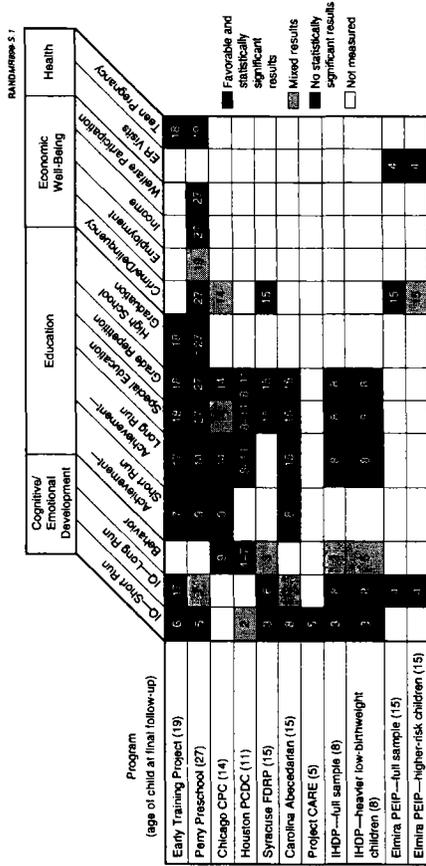
- Gains in emotional or cognitive development for the child, typically in the short run, or improved parent-child relationships.
- Improvements in educational process and outcomes for the child.
- Increased economic self-sufficiency, initially for the parent and later for the child, through greater labor force participation, higher income, and lower welfare usage.
- Reduced levels of criminal activity.
- Improvements in health-related indicators, such as child abuse, maternal reproductive health, and maternal substance abuse.

While many significant differences between participants and controls were found, a statistically significant difference is not necessarily an important one. The size of the difference also needs to be taken into account—and the size of many of the differences could be fairly characterized as substantial. For example, the Early Training Project, Perry Preschool, and the Infant Health and

<sup>1</sup> The nine programs are the Early Training Project, Perry Preschool, Chicago Child-Parent Center (CPC), Houston Parent-Child Development Center (PCDC), Syracuse Family Development Research Program (FDRP), Carolina Abecedarian, Project CARE (Carolina Approach to Responsive Education), Infant Health and Development Project (IHDP), and Elmira (New York) Prenatal/Early Infancy Project (PEIP). We also review Project Head Start, but results are not summarized in Figure 1 because there are multiple evaluations that cannot be readily summarized.

<sup>2</sup> A favorable result may be either an increase or decrease in an indicator among program participants relative to controls—depending on the indicator. For example, while a favorable result for IQ means that the IQ was higher for treatment children compared with controls, a favorable result for criminal behavior occurs when the incidence is lower for the treatment group.

<sup>3</sup> In addition, in most cases even when results were not statistically significant (black in the figure), the difference between treatment and control groups was in the expected direction for the program to produce beneficial results.



SOURCE: See Table 2.2 in *Investing in Our Children*.  
 NOTE: Number in box refers to age of child when measure was last taken. When results were mixed (light gray squares), the age refers to the last age when the effect was significant. See text note for full program names.

Figure 1—Effects of Selected Early Intervention Programs on Participating Children

Development Project (IHDP) found IQ differences between treatment participants and controls at the end of program implementation that approached or exceeded 10 points, a large effect by most standards. The difference in rates of special education and grade retention at age 15 in the Abecedarian project participants exceeded 20 percentage points. In the Elmira, New York, Prenatal/Early Infancy Project (PEIP), participating children experienced 33 percent fewer emergency room visits through age 4 than the controls, and their mothers were on welfare 33 percent less of the time. In the Perry Preschool program, children's earnings when they reached age 27 were 60 percent higher among program participants. Thus, we conclude that there is strong evidence to support the proposition that at least some early interventions can benefit participating children and their mothers.

It is also apparent from Figure 1, however, that for most programs, most indicators are not measured. This is even truer of the maternal analysis, where five of the nine evaluations paid no attention to possible effects on the mother other than parental development. Our analyses thus represent only a partial accounting of program benefits. Furthermore, most evaluations did not involve long-term follow-ups, and some benefits could take a number of years to accrue (some could also erode with the passage of time).

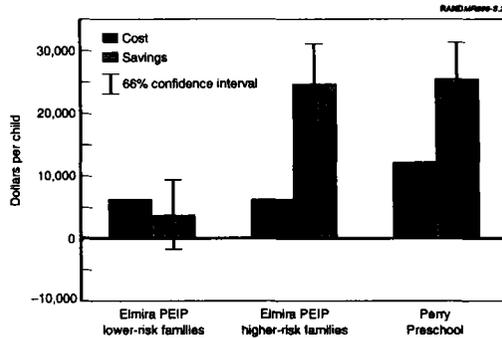
### **What Are the Savings?**

Some people may think that the benefits of targeted early intervention programs for participating families are enough to justify public expenditures on them. Others may appreciate the benefits to disadvantaged children but may be reluctant to raise tax burdens to accomplish such goals or may wish, at least, for broader favorable ramifications from an investment of public funds. One source of broader benefit is the potential savings the government (and thus taxpayers) realize when families participating in early interventions require lower public expenditures later in life. Participating children may spend less time in special-education programs. Parents and, as they become adults, children may spend less time on welfare or under the jurisdiction of the criminal justice system. They may also earn more income and thus pay more taxes.

In Figure 2, we compare program costs with eventual government savings for two of the nine programs—Perry Preschool and the Elmira PEIP. The Perry Preschool program enrolled 123 disadvantaged African American children in Ypsilanti, Michigan, in the mid-1960s. The program was a part-time preschool that included weekly home visits by the teacher and lasted for one or two school years. For the Elmira PEIP, 400 disadvantaged, primarily nonminority families received home visits by nurses trained in parent education, establishment of support networks for the mother, and linkage of the family to other health and human services. Mothers received an average of 32 visits from the fourth month of pregnancy through the child's second year. We chose these two interventions for three reasons:

- They were random trials that satisfied sample size and attrition criteria.
- They measured progress on developmental, educational, economic, criminal justice, and health measures that could be expressed in monetary terms.
- They followed the children long enough for benefits to accrue. The latest Elmira PEIP follow-up was at age 15 and Perry Preschool at age 27.

For the Elmira PEIP estimates, we followed the approach taken in the evaluation of that project, which was to split the results into two groups. One contained the higher-risk families (those with single mothers and low socioeconomic status) and the other the lower-risk families. Costs and savings for the two Elmira PEIP groups and for the Perry Preschool participants are shown in Figure 2.<sup>4</sup> Costs are known with a fair degree of certainty. The precision of the savings estimates, however, depend on the sample sizes, and the vertical lines indicate the 66 percent confidence band (that is, there is a 66 percent probability that the true benefit level falls along the vertical line). A vertical line of twice the length shown would indicate a 95 percent confidence band.



SOURCE: See Figure 3.5 in *Investing in Our Children*.

NOTE: All amounts are in 1996 dollars and are the net present value of amounts over time where future values are discounted to the birth of the participating child, using a 4 percent annual real discount rate.

Figure 2—Program Cost Versus Savings to Government (Taxpayers)

For the Perry Preschool and the higher-risk families of the Elmira PEIP, our best estimates of the savings to government are much higher than the costs (about \$25,000 versus \$12,000 for each participating Perry family; \$24,000 versus \$6,000 for Elmira). Although there is considerable uncertainty with respect to the benefit estimates, from a statistical point of view we can be more than 95 percent certain that the benefits exceed the costs.<sup>5</sup> It is worth pointing out, however, that while benefits exceed costs, the costs accrue immediately, while the benefits are realized only as the years pass and children transition through adolescence to adulthood.

In the case of the lower-risk participants of the Elmira PEIP, the savings to government are unlikely to exceed the costs. In fact, our best estimate of the net savings is that they are negative:

<sup>4</sup> Dollars shown have been converted to present value—i.e., future costs and savings have been discounted (at 4 percent per year) to recognize the standard assumption in economics that, even apart from inflation, people attach less value to future dollars than to current ones. "Present" here is the year of the child's birth. All amounts are in 1996 dollars.

<sup>5</sup> There are however, other uncertainties that are not related to sample size and that cannot be measured with statistical methods.

The government savings, while positive, are not enough to offset program costs. This result illustrates the importance of targeting programs to those who will benefit most if the hope is to realize government savings that exceed costs.

We emphasize, however, that while we included the full costs of the programs, we could not account for all benefits. The Elmira PEIP, which has followed participating children only to age 15 so far, provides no basis for calculating the amount these children may save the government in welfare costs, or the extra taxes they may pay as adults. We might expect such savings even for the lower-risk participants, although the longer-run savings may be less than those generated by children in the higher-risk families. The Perry savings may also be underestimated because benefits to mothers were not measured.

Furthermore, the programs generate additional benefits to society beyond the government. These include the tangible costs of the crimes that would eventually have been committed by participating children, had they not participated in the program. The benefits also include the extra income generated by participating families (not just the taxes on that income), which can be reckoned as a benefit to the overall economy. We estimated these two benefit sources combined as roughly \$3,000 per family in the case of the lower-risk Elmira participants, about \$6,000 per family for the higher-risk Elmira participants, and over \$24,000 per family in the Perry case.

While the net savings and other benefits from these programs appear promising, caution must be exercised for various reasons in drawing generalizations for public policy. We explain most of these reasons below, but two relate specifically to the cost-savings approach. First, because these are the only two programs whose evaluation characteristics permit estimates of long-term savings with any accuracy, we cannot say that different programs would also generate such savings (by the same token, we cannot say that they wouldn't). Second, because there was some variation between the two programs in the indicators of success measured, we cannot conclude from the different net savings numbers that one program is better than the other.

One final caveat: Cost-savings analysis is a useful tool because, when the results are positive, it provides strong support for program worth. That is, it shows that only a portion of the benefits—those easily monetizable—outweigh the program's entire cost.<sup>6</sup> However, because only some of the benefits are taken into account, a negative result does not indicate that a program shouldn't be funded. Policymakers must then decide whether the nonmonetizable benefits—e.g., gains in IQ, in parent-child relations, in high-school diplomas—are worth the net monetary cost to the government.

#### **What Remains Unknown and What Does It Mean for Policy?**

On the basis of research conducted to date, we know that some targeted early intervention programs have substantial favorable effects on child health and development, educational achievement, and economic well-being. We also know that some of these programs, if targeted to families who will benefit most, have generated savings to the government that exceed the costs of the programs. There is still much that we do not know about these programs, however, and this limits the degree to which these conclusions can be generalized to other early

<sup>6</sup> A decision as to whether to fund a program must, of course, also take into account budgetary constraints and other uses for the money.

intervention programs. One of the big unknowns is why successful programs work—and others don't. In particular, we do not know the following:

- *Whether there are optimal program designs.* There have not been enough controlled comparisons that can support choices between focusing on parents versus children (or both), intervening in infancy versus the preschool years, integrating interventions versus running them independently, or tailoring to individual needs versus treating children the same but treating a greater number.
- *How early interventions can best be targeted to those who would benefit most.* It is not yet known which eligibility criteria would generate the most positive benefit/cost ratios. In addition, whatever criteria are used will have dramatic implications for program cost and implementation.

There are other unknowns:

- *Whether the model programs evaluated to date will generate the same benefits and savings when implemented on a large scale.* The demonstrations have been undertaken in a more resource-intensive, focused environment with more highly trained staff than is likely to be achievable in full-scale programs.
- *What the full range of benefits is.* Typically, evaluations have focused on those aspects of development that the intervention was intended to influence. But we know from some studies that programs can have a broad array of effects beyond their principal objectives.
- *What the implications of the changing social safety net are.* Previous demonstrations were carried out under the now-superseded welfare system. To some extent, those interventions depended on that system for collateral support of families, and the savings generated were partly in terms of welfare costs that the government may not now be paying out anyway.

These unknowns will have to be resolved if wise decisions are to be made among early intervention alternatives and if the programs chosen are to be designed to fully realize their potential for promoting child development—and saving money. In particular, research is needed into why programs work. Otherwise, inferences cannot be drawn about new program designs, and every such design would be unproven until tested and evaluated.

The scope of further research should depend on the specific information sought or the scale of the program. New demonstrations are needed to answer questions that require variations in program design or that reflect the evolving society and economy, and broader testing of previous designs is required to answer questions of scale-up. However, on questions of targeting, benefits beyond objectives, and other issues, much could also be gained—and less expensively—by making the most of evaluations already under way—e.g., by further follow-ups and expansion of the set of benefits measured. Finally, where governments see fit to initiate large-scale public programs on the basis of current knowledge, careful evaluation should be a component. Then, when budgets tighten again and choices need to be made, the worth (or lack of worth) of these programs will be more firmly established.

The research required represents a substantial commitment of funds—most likely in the millions or even the tens of millions of dollars. However, the early intervention programs that may prove warranted (and that some people are already advocating) will represent a national investment in the hundreds of millions or billions of dollars. A modest if substantial expenditure initiated now could thus ensure that maximum benefits are achieved from a much larger expenditure over the long term.

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- May 1997, Sacramento, California, "The Costs and Benefits of Early Childhood Interventions," presentation for California state legislative and executive branch staff.
- July 1997, Las Vegas, NV, "The Costs and Benefits of Early Childhood Interventions," National Governor's Association Annual Meeting.
- July 1997, Washington, DC, "Retiree Health Benefits and Retirement Decisions," RAND/Department of Labor Conference on Health Benefits and the Workforce.
- May 1997, Sacramento, CA, "Growing Economic Disparities in the U.S.: Assessing the Problem and Policy Options," testimony before the California Assembly Select Committee on the California Middle Class.
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- October 1996, New York, NY. "Economic Inequality in the U.S.," RAND New York Policy Forum.
- October 1996, Short Hills, NJ. "Economic Inequality: Trends, Causes, and Policy Options," Committee on New American Realities, National Planning Association.
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- April 1998, Chicago, IL. "Health Insurance and Labor Market Transitions of Older Workers," presented at the annual meetings of the Population Association of America (with Jeannette A. Rogowski).
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- June 1994, Vancouver, BC. "Long Jobs *and* Lots of Jobs?," presented at annual meetings of the Western Economics Association (with Jacob Alex Klerman).
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- January 1994, Berkeley, CA. "The Effects of Rising Earnings Inequality on the Distribution of U.S. Income," Demography Seminar Series, University of California, Berkeley (with Gary Burtless).
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- April 1993, Cincinnati, OH. "Demographics, Sectoral Change and Changing Relative Wages: A Regional Approach," presented at annual meetings of the Population Association of America (with Jacob A. Klerman).
- February 1993, Santa Monica, CA. "Demographics, Sectoral Change, and Changing Relative Wages: A Regional Approach," presented at RAND Population, Aging and Development Seminar (with Jacob A. Klerman).
- January 1993, Anaheim, CA. "Demographics, Sectoral Change, and Changing Relative Wages: A Regional Approach," presented at annual meetings of the American Economics Association (with Jacob A. Klerman).

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July 1998

**LYNN A. KAROLY**

**LYNN A. KAROLY** is a RAND senior economist and director of the RAND Labor and Population Program. Dr. Karoly recently lead an interdisciplinary team of RAND researchers who investigated the costs and benefits of early childhood intervention programs. Other areas of Dr. Karoly's expertise include economic inequality in the U.S., youth labor markets, and retirement behavior. In addition to her research, Dr. Karoly is the training director for the RAND Postdoctoral Research Programs in the Study of Aging and in Population Research. She has been on the faculty of the RAND Graduate School of Policy Studies since 1989. In 1993, she was a visiting fellow in the Economics Studies Program at the Brookings Institution in Washington, D.C. She is currently a research associate with the Institute for Research on Poverty at the University of Wisconsin, Madison and is a co-editor of the *Journal of Human Resources*.

Dr. Karoly received a B.A. (*summa cum laude*, 1983) in Economics and Mathematics from Claremont McKenna College and an M.A. (1986) and Ph.D. (1988) in Economics from Yale University.

July 1998

## LYNN A. KAROLY

## FEDERAL CONTRACTS AND GRANTS SINCE OCTOBER 1, 1995

- U.S. Department of Labor, Pension and Welfare Benefits Administration, Contract No. J-9-P-7-0045, Co-Principal Investigator, "Retiree Health Benefits and Labor Force Transitions of Women," March 1998–February 1999. Total budget: \$150,000.
- National Institutes of Health, National Institute of Child Health and Human Development, Grant No. 2P01-HD28372, Principal Investigator, "Schooling Choices and Outcomes in Economic Development," March 1998–February 2003. Total budget: \$390,000 (direct).
- Social Security Administration, Office of Research Evaluation and Statistics, Contract No. 0600-96-27335, Co-Principal Investigator, "Policy Evaluation of the Effects of the 1996 Welfare Reform Legislation on SSI Benefits for Disabled Children" August 1997–July 1999. Total budget: \$620,000.
- National Institutes of Health, National Institute of Child Health and Human Development, Principal Investigator, Grant No. T32-HD-07329, "RAND Postdoctoral Training Program in Population Studies," May 1997–April 2002. Total budget: \$300,000.
- U.S. Department of Labor, Pension and Welfare Benefits Administration, Contract No. J-9-P-2-0017, Co-Principal Investigator, "Retiree Health Benefits and Labor Force Transitions," November 1996–October 1997. Total budget: \$125,000.
- U.S. Department of Labor, Pension and Welfare Benefits Administration, Contract No. J-9-P-2-0017, Co-Principal Investigator, "Retiree Health Benefits, Changes to Medicare, and Retirement," November 1995–April 1997. Total budget: \$150,000.
- National Institutes of Health, National Institute on Aging, Co-Principal Investigator, Grant No. 2P01-AG08291, "The Indonesian Family Life Survey of Aging Dynamics," October 1995–September 1998. Total budget: \$900,000.
- National Institutes of Health, National Institute of Child Health and Human Development, Co-Principal Investigator, Grant No. R01-HD33778, "The Indonesian Family Life Survey of Mothers and Children," July 1995–June 1998. Total budget: \$900,000.
- U.S. Department of Labor, Pension and Welfare Benefits Administration, Contract No. J-9-P-2-0017, Co-Principal Investigator, "Firm Decisionmaking and Retiree Health Benefits," April 1995–April 1997. Total budget: \$150,000.
- Agency for Health Care and Policy Research, Grant No. R01-HS07048, Co-Principal Investigator, "Health Insurance for Older Americans," April 1995–March 1998. Total budget: \$845,000.
- National Institutes of Health, National Institute on Aging, Principal Investigator, Grant No. T32-AG00244, "RAND Postdoctoral Training in the Study of Aging," September 1994–August 1999. Total budget: \$300,000.

July 1998

Mr. SHAYS. Dr. Knitzer.

Ms. KNITZER. Thank you. I am Jane Knitzer, the deputy director of the National Center for Children in Poverty which is part of the Columbia University School of Public Health. Our mission is to focus on issues affecting low-income children from zero to 6.

In my testimony today, what I would like to do is talk about a report that we recently released entitled, "Map and Track: State Initiatives for Young Children and Families, 1998 Edition," which asks the question, OK, we have this wonderful scientific and consistent set of data, empirical data. What are States actually doing? How are they investing in promoting positive outcomes for young children and families? I will talk a little about the key findings from that study, four challenges that the report raises and the implications for some Federal action.

Let me just say that the report really focuses on State investments; it does not say, what is a State doing with Federal dollars, with Federal programs like Head Start, et cetera. Nor did we track child care initiatives or health initiatives, because these are single-system initiatives. We were really focusing on what you are calling "early intervention" and what we called "comprehensive programs." It is what Representative Towns was talking about, programs that combine promoting healthy child development, help parents with family support and link parents and children to needed services.

Key finding No. 1: States increasingly are recognizing the importance of early intervention/ comprehensive programs for young children. How do we know this? In the 2 years since the first edition of the report was released, 26 States now report statewide support for programs for infants and toddlers; 26 do, 24 don't. Virginia, by the way, is one of the States that does not support a statewide program. The program that Ms. Pearson was in does not exist throughout Virginia.

Our framework in Map and Track, however, went beyond looking for programs for infants and toddlers, because we think the preschool years are important and we must not forget about those, so we also looked at what the States were doing for preschool age children. For preschoolers, what we saw was a deepening of existing programs. Thirty-four States in 1996 reported programs for preschoolers, 34 States in 1998; however, three States, including New York, Connecticut and New Jersey, have significantly deepened their preschool programs. New York may eventually have a universal program. This is the good news.

Not so good was the finding that there appears to be a disconnect between these comprehensive programs and the implementation of welfare reform, and this speaks exactly to the point that Mr. Towns was raising. We are very concerned about that. Only 10 States reported deliberate statewide strategies to link their comprehensive initiatives with the implementation of welfare reform. We are very concerned about that. Such integration, we believe is critical to ensure that as adults concentrate on moving into jobs, we do not forget the importance of giving their children real opportunities.

The second set of findings: The data suggests that there is growing recognition that a program-by-program strategy is not enough. This has basically been the strategy that we have used for years. How do we know this? In two ways. First, over half the States are

developing planning and community mobilization strategies that are seeds for public-private partnerships. Second, we have, as in Rhode Island, a small number of States mounting multistrategy initiatives that are weaving together multiple kinds of efforts, layers of efforts to raise the State's priority attention to young children and families.

Four challenges: One, although many of the States report initiatives on behalf of young children, the scope is broad but not deep. Often a relatively limited number of children have access and funding levels are low.

Second, the range of public-private partnerships that is emerging is very positive and does seem to bring new resources to the table. There has been no systematic evaluation of how can we grow these so that it's not just a commitment of the day.

Third, some issues reported by the field remain largely unaddressed in State initiatives. The one I wanted to talk about today is how we can help care givers support families with the kinds of levels of stress that we are actually seeing in the early childhood community, particularly related to substance abuse, mental health, domestic violence issues and the kind of depression that you heard about.

The second issue is that we can't forget about fathers in these early childhood programs. This is a wonderful point of outreach to young fathers, particularly through welfare reform.

The fourth issue: Although in many States the programs that are being implemented are modeled after national initiatives, some of which have proven track records, there is little evaluation of these State initiatives, and it is not clear whether the desired effects will be sustained in these State efforts, as we have seen in the carefully controlled research.

How can the Federal Government help? That was a question—

Mr. SHAYS. I am sorry, I am going to be walking out for about 5 minutes. I didn't want to show you any disrespect. I will be coming back. I just have to meet with someone.

Ms. KNITZER. Thank you.

This, I think, repeats a theme that was heard this morning earlier, ensure that Federal dollars can be used flexibly. States need to be able to mix and match funding streams. This, I know, is a new way of thinking for the Federal Government.

And also I think we need to build in—and the Federal Government has a major role—incentives for quality improvement. We are far beyond just thinking about health and safety licensing requirements. We need incentives for quality improvement. We need incentives to States to develop community mobilization planning and networking capacity on behalf of young children and families. We need incentives to States to promote positive outcomes for young children and families affected by welfare changes. The changes are significant.

Programs are hurting, family support programs, Healthy Families of America, families that have traditionally been visited during the day, are out at work. People are saying, the parenting piece is not important, just go get a job. There is a real need to underscore the importance of this.

Fourth, we need the Federal Government to help develop fiscal and programmatic consultation and other strategies to support those home visitors, for example, so that they can cope with the kinds of needs that families are bringing to them.

Fifth, we need to encourage the evaluation of statewide programs for young children and families so we know what we have gotten.

I will stop there and respond to any questions later.

Mr. TOWNS [presiding]. Thank you very much.

[The prepared statement of Ms. Knitzer follows:]

**Testimony of Jane Knitzer, Ed.D.  
Deputy Director  
National Center for Children in Poverty  
Columbia University School of Public Health  
New York, New York**

**Hearing on “Early Childhood Interventions: Public-Private Partnerships”  
Congress of the United States  
House of Representatives  
Committee on Government Reform and Oversight  
Subcommittee on Human Resources  
July 16, 1998**

My name is Jane Knitzer. I am the Deputy Director of the National Center for Children in Poverty (NCCP) and, on behalf of the Center, I very much appreciate the opportunity to testify before you on how states are seeking to enhance the well-being of infants and toddlers, preschoolers, and their families.

The National Center for Children in Poverty is a nonpartisan research organization that is part of the Columbia University School of Public Health. Our mission is to identify and promote strategies to reduce poverty and to improve the life chances of low-income young children (from birth to age six) and their families. NCCP conducts state-by-state demographic analyses of young child poverty rates (see Appendix A), and carries out research intended to improve policies and practices for young children and their families. For example, we are part of the team documenting the lessons learned from Starting Points, the initiative of the Carnegie Corporation to help states and communities focus attention on young children and families.

Every two years, NCCP also issues a report entitled *Map and Track: State Initiatives for Young Children and Families*. This report identifies existing state programs for young children, if individual states are encouraging community planning efforts on behalf of young children, and if states have made enhancing outcomes for young children a priority at the highest levels of government. The report also provides state-specific information on demographic indicators of young

child and family well-being and information about welfare decisions of special relevance to young children. All 50 states provide data and review the profiles before publication.

In my testimony today I would like to do four things: first, describe briefly the overall findings from the 1998 edition of *Map and Track*, second, highlight some of the states' major strategies, particularly giving examples of public-private partnerships; third, identify some of the critical issues the report raised; and fourth, talk about the implications for future state and federal policies.

### **The Overall Findings**

*There is growing recognition across the states about the importance of developing comprehensive programs for infants, toddlers, and preschoolers. These programs are comprehensive in the sense that they seek to enhance the young child's development, help parents meet the challenges of parenting and link both parents and children to other needed support services (See Appendix B for an overview map).*

- Almost half of the states (24) report supporting statewide comprehensive programs for infants and toddlers. Since 1996, ten states have started or added new programs. These new programs appear to be at least in part developed in response to the emerging information about the importance of early brain development in young children. Funding levels range from one or two million dollars to \$31 million.

Program strategies include: outreach to new parents (typically, these aim to be universal); comprehensive programs for high-risk infants and toddlers; parenting education and family support initiatives to provide basic information to families and to strengthen infant-parent relationships; and, initiatives to meet special needs (for example, programs to meet the needs of parents with mental illness or substance abuse).

- Thirty-four states report expanding or supplementing existing programs for pre-school age children. State expenditures for these programs range from \$300,000 to \$200 million.

Program strategies include comprehensive prekindergarten programs, state support for Head Start, parent education, family support and family literacy

efforts, and "enabling grants" to communities to design a mix of services tailored to community needs.

- Ten states report explicit, deliberate efforts to link these types of comprehensive programs with the implementation of welfare reform.

These states report three strategies: using TANF and/or state dollars to expand or target services to families with young children receiving or at risk of receiving welfare; explicitly encouraging parents to participate in parenting programs either in lieu of, or in tandem with, work requirements, and giving priority for enrollment in comprehensive programs to young children in families receiving or at risk of receiving public assistance.

*There is also recognition of the importance of looking beyond support for individual "programs" to supporting the development of systems of early care and education. Thus a growing number of states report efforts to engage community stakeholders in planning processes to better meet the needs of the young children and families in their communities. Most typically these efforts are linked to state-level planning and broader systems reform efforts.*

- Just over half (27) of the states report community mobilization strategies linked with state-level strategies to promote systemic change on behalf of children. Fourteen of these have a clear focus on young children and families.

The process by which states are implementing these new planning and systems varies. For example, Hawaii has developed Good Beginnings, a public-private partnership focusing on children that works through a state-level council with four counties to develop community-based partnerships as well. In Georgia, much of the planning and community mobilization takes place through the public/private state Family Policy Council, which works with community partnerships to achieve five designated results for children, including for the youngest, ensuring that they enter school ready to learn.

The extent and type of commitment to young children and families varies considerably from state to state. Some states report only programs, others program and community mobilization strategies. Only a handful of states report sustained, high-level comprehensive initiatives that encompass a variety of state-initiated strategies.

- In 1998, eight states, Colorado, Georgia, Minnesota, North Carolina, Ohio, Oregon, Vermont, and West Virginia, met our criteria for comprehensive initiatives – some combination of high-level leadership, integrated program and community mobilization strategies, continued commitment to increased funding, and a framework for state action. These were the same eight states identified in the 1996 edition of *Map and Track*.

### The Issues

The national picture that emerges then is mixed. The good news is that there is widespread recognition of the importance of developing supportive early learning experiences. More and more states appear to be recognizing that promoting the well-being of young children and families is everybody's business: parents, business leaders, community leaders, and services providers. There has been an increase in the number of programs for infants and toddlers and their families, and an expansion of support for preschoolers in most of the states that have already recognized the importance of early learning experiences for children.

A trend is also visible toward providing enabling funds to communities (or sometimes school districts) encouraging them to design services that are tailored to the particular needs of a community. Further, although overall levels of state investments in comprehensive programs for young children and families remain relatively low, the number of programs with increases in funding over a two-year period outweighs those with reduced funding.

At the same time, there are clear inequities across the states in access to comprehensive programs, in funding levels, and in leadership. There are still no statewide programs for infants and toddlers in 26 states, and none for preschoolers in 16 states. Most troubling, only 20% of the states report deliberate efforts to ensure a focus on young children in implementing welfare reform. Even fewer states report any efforts to respond to issues of great concern to practitioners – the level of stress in many families with young children, often related to domestic violence, substance abuse, and mental illness, as well as challenging behaviors in young children. A few states, such as Vermont, are partnering with mental health, substance abuse, and early intervention agencies to invent a secondary support system to help these most vulnerable families, but special national attention to this issue is required.

With respect to the use of public-private partnerships focused on the well-being of young children and families, states are taking a variety of approaches. In

some instances, the public-private partnership involves foundations and government either within the states or across multiple states. In other instances, such as Colorado Bright Beginnings, the business community is deeply engaged in the partnerships. In still other instances, the aim is to engage a broad variety of stakeholders at the community level – making sure that early childhood is everybody's business. For example, this is the strategy of the North Carolina Smart Start Partnership for North Carolina's Children. Smart Start, now in 55 of the state's counties, and soon to be statewide, joins local partners from the public sector, private sector, and families to improve access to health care and the quality of early childhood services for its young children. A statewide public-private partnership provides leadership, technical assistance, and resource development. In Florida, there has been a major effort to "partner" in a different way with key policy makers, providing them with information about early brain development.

The states providing the most leadership are using many different pathways to build a sustained commitment to young children and families over time. (See Appendix C for description of the initiatives in the eight states with the most comprehensive efforts..). For example, Colorado's First Impressions has four goals: (1) universal health care for children; (2) universal volunteer home visits and support for new parents; (3) improved quality, affordability, accessibility of child care; (4) and "child-oriented" communities. Colorado has used its Carnegie Corporation Starting Points grant to create the Warm Welcome program, and is involving the business community in paying for home visits as a benefit. Prior to that, Colorado invested in a prekindergarten program and developed a state-level management strategy to build a system of supports to young children and families, through a Children's Cabinet and a state-level management team. To strengthen the local infrastructure for early care and education the state has begun a pilot effort in 12 counties. It has also established a pilot mental health project for young children.

In West Virginia the approach is different. Starting Points Centers have been established as part of West Virginia's pre-existing community mobilization strategy, known as the Family Resource Network. These Centers in turn, are becoming the hubs for the delivery of a variety of services, including those related to welfare reform. The state has also funded a prekindergarten program. Leadership for the overall initiative is provided by the Early Childhood Implementation Commission which is a part of the Cabinet on Children and Families.

In Ohio, three basic goals drive the community mobilization and program development effort: ensuring access to early care and education for every family that wishes it, improving child health, and increasing family stability. The state began

with a state-level Family and Children First Council, then invited counties to develop their own councils. Initially in a few counties, such councils now exist in each of Ohio's 88 counties, with the state providing technical assistance and support. These councils are now beginning not to just plan, but also to manage resources. All have family members as part of them. The state has also invested significantly in a state-funded Head Start program, and most recently, in Early Start, an early intervention home visiting program for young children and families at risk by virtue of environmental and biological risk factors. (Particularly noteworthy is that the state has targeted TANF dollars for this program and made it available to those receiving or at risk of receiving welfare.)

The states providing the strongest leadership on behalf of young children and families share several characteristics. (1) The effort is bipartisan and involves leaders from both inside and outside the government. (2) Efforts to build community support co-exist with efforts to fund programs and increase resources for effective services. There is an interweaving of multiple, deliberate strategies. (3) In most instances, there is a clear framework for action, reflected in statements of basic goals for young children. (4) The states all started in different places, with different mixes of services and leadership, but the vision and the commitments have continued to evolve. (5) The need for more resources is critical; infrastructure development and community mobilization is necessary, but not sufficient. (6) New partnerships do bring new resources to the table.

#### **Implications and Recommendations**

Taken together, there are two central messages from *Map and Track*. First, states are making progress focusing on young children and families, but with some exemplary exceptions, neither state leadership nor state investment is deep enough across all the states. Second, *Map and Track* not only documents the current state of the art of early childhood initiatives but it also points to new directions that might be supported either by the states or the federal government or both, which are provided in detail below.

- Distinctions among different types of program approaches are blurring as states strive to create program approaches, whatever the age focus, to address parenting issues, child development issues and adult development issues, including literacy and employment skills.
- Flexibility in how dollars can be used, along with careful planning processes and accountability mechanisms, are critical. Program-by-program funding streams,

rigid eligibility, and funding criteria make developing supportive communities for young children more complex. States need to be able to mix and match dollars to help communities create the needed system of supports to young children and families that are tailored to community need.

- Building community support structures on behalf of young children and families takes time, technical assistance from the states or others, and seems to work best if there are clear objectives. Support for these activities can come from public or private funds, or some combination, but is crucial to the success of program efforts.
- Incentives to states to promote positive outcomes for young children and their families in the context of welfare reform is important, since so much of the effort to implement welfare reform is adult driven.
- Identifying and testing new strategies to help programs serving families with young children better meet the needs of the most troubled families would strengthen their efficacy.
- Investments are needed in evaluations of program, community mobilization or comprehensive state strategies on behalf of young children and families. Further, although states are setting outcome based goals, in many places, administrative data systems do not have the capacity to track these outcomes. The few evaluations that do exist, however, are encouraging.
- Sustaining systems-change efforts poses a challenge across the states. Efforts to expand understanding of the importance of investing in early childhood at all levels of government and with public-private partnerships may be key to ensuring that the efforts that are now underway will withstand changes in administrations.

Taken together this suggests ways in which federal initiatives might support state efforts; such an agenda might include ensuring that federal dollars can be used flexibly to enhance developmental outcomes for young children and families; providing incentives to states to develop comprehensive community mobilization, planning and networking capacity on behalf of young children and families; promoting positive outcomes for young children in families affected by welfare changes; developing consultation and other strategies to promote the well-being of young children at risk of poor learning and behavior disorder; and encouraging the

evaluation of statewide comprehensive programs for young children and families. Implementing such an agenda would go a long way to support the states in their efforts to ensure that the next generation does in fact, as the national goal calls for, enter school ready to learn.

Mr. TOWNS. Dr. Olds.

Dr. OLDS. Thank you for the opportunity to testify on this important topic. My name is David Olds. I am a professor of pediatrics and director of the prevention research center for family and child health at the University of Colorado Health Sciences Center. For over 20 years, my colleagues and I have been developing and studying a program of prenatal and early childhood home visitation by nurses that reduces child abuse and neglect, use of welfare, and crime in low-income families. The program serves low-income mothers who had no previous live births, many of whom are unmarried adolescents.

The nurses visit pregnant women in their homes during pregnancy and the first 2 years of children's lives. In those visits, they help women reduce prenatal cigarette smoking, the use of alcohol and drugs; they help women improve their diets and identify emerging complications of pregnancy that can be treated before they compromise the health of the mother and the fetus. They help parents provide more responsible care for their children, and they help parents develop a vision for their future and plan subsequent pregnancies, complete their educations and eventually find work.

The program has been developed, refined and tested over a 20-year period, so that today the nurses have structured, written protocols and intensive training to guide them in working with families who live in highly challenging and often dangerous situations.

Over the years we have been encouraged to disseminate this program, but we have waited to do so until now because we wanted to have sound scientific evidence of its effectiveness and thoroughly developed program protocols. In this way, we can now provide greater assurance to communities that programs replicating this model will reproduce the results achieved in the research.

We have examined the program in three separate, large-scale randomized trials. Randomized trials are the most scientifically credible method of determining the effectiveness of health, social service and medical interventions. The first study was carried out in Elmira, NY, with Caucasian families. The second was conducted in Memphis, TN, with African-American families. The third is being completed now in Denver with a large portion of Mexican-American families.

We have found that the program can reduce some of the most intractable health and social problems facing at-risk families in our society, and as you heard from Dr. Karoly, a recent report by the RAND Corp., shows that the program can more than pay for itself in reduced government expenditures, when it is focused on unmarried, low-income parents.

A recent report on the Elmira study shows that by the time the child reached 15, nurse-visited, low-income, unmarried mothers had 33 percent fewer subsequent births, 30 months greater spacing between the first and second births, 30 fewer months on welfare, 81 percent fewer arrests and convictions, and 79 percent fewer verified reports of child abuse and neglect.

Compared to their counterparts who have been assigned to comparison services, the 15-year-old children born to nurse-visited, low-income, unmarried mothers had 60 percent fewer instances of running away, 56 percent fewer arrests, 81 percent fewer convic-

tions and violations of probation and 56 percent fewer days of alcohol consumption. There were very few benefits for higher-income, married women and their children.

One of the hallmarks of good evidence is being able to reproduce it. The major findings from the Elmira trial in the early years of the child's life have now been reproduced in an urban replication conducted in Memphis. For example, by the children's second birthdays, compared to women and children randomly assigned to comparison services, those who were nurse-visited had 30 percent fewer hypertensive disorders of pregnancy, 50 percent more frequent breast feeding, 81 percent fewer days that children were hospitalized with injuries or ingestions, fewer conditions in the children's hospital records indicative of neglectful or abusive care, and 30 percent fewer subsequent births.

During the past decade, the findings from this program of research have been used to promote a wide variety of home visiting programs for pregnant women and parents of young children, but unless they share the essential elements of the program tested in these trials, those other programs are not likely to produce the same results.

Very few programs have been scientifically proven to improve high-risk parents' early care of their children. Brain development is rapid in the first 3 years. But the science of learning how to effectively improve at-risk parents' care of their own children is in its infancy. We need continued investments in research in this area. Even when communities choose to develop programs based on models with good scientific evidence, all too often the programs are watered down and compromised in the process of being scaled up.

We have begun to address this problem. We have been invited by the Justice Department to disseminate the program in high-crime neighborhoods in different parts of the country. We are using this initiative to learn more about what it will take in new communities to develop the program with fidelity to its essential elements. We have established the program in 14 communities and are studying what it will take to successfully develop the program on a much larger scale.

In this initiative, State and local governments are securing financial support for the program out of existing funds, such as TANF, Medicaid, child abuse and crime prevention dollars. The program itself requires no new appropriation. Communities are making these investments in part because the evidence indicates that expenditures in these budgets will be reduced later on. This means that the cost of the program, which in 1998 dollars is now \$7,000 per family for 2½ years of service, can be shared by a variety of government agencies. This reduces the strain on any one budget.

We have recently been invited by a major philanthropy to develop a system of regional replication centers based in schools of nursing and public health to develop this program on a national scale. We have estimated that it will take 20 additional years to develop this program for all low-income parents in our society, if we wish to preserve those elements of program quality that are necessary to reproduce the results I have just summarized on a national scale. This is because quality programming requires recruiting qualified staff, intensive training and excellent supervisors, ca-

pacities that require development over time. To do it well will eventually require Federal support of this system of replication centers.

In general, we believe that policies and practices for assisting young children and their families ought to be based on the best scientific evidence available. Public hope and confidence in the promise of such programs are scarce commodities that we dare not squander on approaches that are not likely to succeed. As health and social welfare policy is redesigned in the near future, I believe it makes sense to begin with programs that have been tested, replicated and found to work.

Thank you.

Mr. TOWNS. Thank you very much, Dr. Olds.

[The prepared statement of Dr. Olds follows:]

**Testimony to the House Committee on Government Reform and Oversight,  
Subcommittee on Human Resources**

**Hearing on  
“Early Childhood Interventions: Public-Private Partnerships”**

**Prevention of Child Abuse, Use of Welfare, and Crime with Preventive  
Interventions  
Early in the Life Cycle**

**July 16, 1998**

**David Olds, Ph.D.**

**Professor of Pediatrics, Psychiatry, and Preventive Medicine  
University of Colorado Health Sciences Center**

Mr. Chairman, members of the Committee, thank you for the opportunity to testify on this important topic.

For over 20 years, my colleagues and I have been developing and studying a program of prenatal and early childhood home visitation by nurses that reduces child abuse and neglect, use of welfare, and crime in low-income families. The program serves low-income mothers who have had no previous live births, many of whom are unmarried adolescents.

The nurses visit pregnant women in their homes during pregnancy and the first two years of children’s lives. In those visits:

- they help women reduce prenatal cigarette smoking, and use of alcohol and drugs;
- they help women improve their diets, and identify emerging complications of pregnancy that can be treated before they compromise the health of the mother and fetus;
- they help parents provide more responsible care for their children; and
- they help parents develop a vision for their future and plan subsequent pregnancies, complete their educations, and eventually find work.

The program has been developed, refined, and tested over a 20-year period so that today the nurses have structured written protocols and intensive training to guide them in working with families who live in highly challenging and often dangerous situations.

Over the years, we have been encouraged to disseminate the program model, but we have waited to do so until now because we wanted to have sound scientific evidence of its effectiveness and thoroughly developed program protocols. In this way, we can now provide greater assurance to communities that replicate this program will reproduce the results achieved in the research.

We have examined the program in three separate, large scale randomized trials. Randomized trials are the most scientifically credible method of determining the effectiveness of health, social service, and medical interventions.

The first study was carried out in Elmira, New York with Caucasian families.

The second was conducted in Memphis Tennessee, with African American families.

The third is being completed in Denver with a large portion of Mexican-American families.

We have found that the program can reduce some of the most intractable health and social problems facing at-risk families in our society and a recent report by the Rand Corporation shows that the program can more than pay for itself in reduced government expenditures, when it is focused on unmarried, low-income parents.

A recent report on the Elmira study shows that by the first child's 15th birthday, nurse-visited low-income unmarried mothers had:

- 33% fewer subsequent births;
- 30 months greater spacing between first and second births;
- 30 fewer months on welfare;
- 81% fewer arrests and convictions; and
- 79% fewer verified reports of child abuse and neglect;

Compared to their counterparts who had been assigned to comparison services, the 15-year old children born to nurse-visited, low-income, unmarried mothers had:

- 60% fewer instances of running away;
- 56% fewer arrests;
- 81% fewer convictions and violations of probation; and

- 56% fewer days of alcohol consumption.

There were very few benefits for higher income, married women and their children.

One of the hallmarks of good evidence is being able to reproduce it. The major findings from the Elmira trial in the early years of the child's life have now been reproduced in an urban replication conducted in Memphis.

For example, by the children's second birthdays, compared to women and children randomly assigned to comparison services, those who were nurse-visited had:

- 30% fewer hypertensive disorders of pregnancy;
- 50% more frequent breast feeding;
- 81% fewer days that children were hospitalized with injuries or ingestions;
- fewer conditions in the children's hospital records indicative of neglectful or abusive care;
- 30% fewer subsequent births.

During the past decade, the findings from this program of research have been used to promote a wide variety of home-visitation programs for pregnant women and parents of young children. Unless programs share the essential elements of the program tested in these trials, however, those other programs are not likely to produce the same results.

Even when communities choose to develop programs based on models with good scientific evidence, all too often the programs are watered down and compromised in the process of being scaled up. We have begun some work to address this problem.

We have been invited by the Justice Department to disseminate this program in high-crime neighborhoods in different parts of the country. We are using this initiative to learn more about what it will take, in new communities, to develop the program with fidelity to its essential elements. We have established the program in 14 communities and are studying what it will take to successfully develop the program on a much larger scale.

In this initiative, state and local governments are securing financial support for the program out of existing funds, such as TANF, Medicaid, child-abuse, and crime-prevention dollars. The program itself requires no new appropriation. Communities are making these investments in part because the evidence indicates that expenditures in these budgets will be reduced later on. This means that the cost of this program, which in 1998 dollars is about \$7,000 per family for two and a half years of service, can be shared by a variety of government agencies. This reduces the strain on any one budget.

We have recently been invited by a major philanthropy to develop a system of regional replication centers based in schools of nursing and public health to develop this program on a national scale. We have estimated that it will take 20 additional years to develop this program for all low-income women in our society, if we wish to preserve those elements of program quality necessary to reproduce the results I have just summarized on a national scale. This is because quality programming requires recruiting qualified staff, intensive training, and excellent supervisors – capacities that require development over time.

In general, we believe that policies and practices for assisting young children and their families ought to be based upon the best scientific evidence available. Given the recent emphasis on brain development in the first three years of life, there is a lot of enthusiasm these days about the promise of early preventive intervention.

We know that brain development is rapid during the first three years of life and that many neuronal pathways are established during this time. There are very few programs that have been scientifically proven to improve parents' care of their children, however, and I see almost no evidence that programs have been able to improve children's neurological development. At this point, we have lots of theory but not much proven to work.

The few well conducted studies of programs designed to promote early parental care should give us pause, given that almost all of those tested have failed to achieve the kinds of results we so desperately need.

I am particularly concerned about the expansion of Early Head Start before research on its effectiveness is completed. I am deeply concerned that the programs in place have not been sufficiently well developed clinically to produce meaningful results. I have similar concerns about the federal Healthy Start program.

To fund such programs before they have been developed clinically and carefully tested is likely to put in place a system of services for young families that is deficient and not reflective of what our evidence indicates that we, as a society, could achieve.

Public hope and confidence in the promise of such programs is a scarce commodity that we dare not squander on approaches that are not likely to succeed. As health and social welfare policy is redesigned in the near future, I believe that it makes sense to begin with programs that have been tested, replicated, and found to work.

In the next century, we have a unique opportunity to guide policies for children and families with solid scientific evidence. I hope we do not miss the opportunity.

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**IN PRESS - THE FUTURE OF CHILDREN**

**Prenatal and Infancy Home Visitation by Nurses:**

**Recent Findings**

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**Word Count: 10,057**

## I. INTRODUCTION

Many of the most pervasive and intractable problems faced by young children and parents in our society today can be traced to adverse maternal health-related behaviors during pregnancy, compromised care of the child, and stressful conditions in families' homes that interfere with parental and family functioning. These problems include infant mortality, pre-term delivery, low birthweight, and neurodevelopmental impairments in young children resulting from poor prenatal health;<sup>1,2,3</sup> child abuse and neglect, and accidental childhood injuries resulting from dysfunctional caregiving;<sup>4</sup> youth violence resulting from a combination of neurodevelopmental impairment and harsh and neglectful caregiving;<sup>5,6,7</sup> and diminished economic self-sufficiency of parents resulting from closely spaced pregnancy, educational failure, and sporadic workforce participation.<sup>8</sup>

Through 1993, we published a series of papers on a randomized trial of prenatal and infancy home visitation by nurses in Elmira, New York (N=400) that was designed to reduce these problems through the improvement of maternal health and behavior. The program was focused on women who were either unmarried, adolescents, or poor. Early results showed significant promise for the program, and were reviewed in an article on the effects of prenatal, infancy and early childhood home visitation published in 1993.<sup>9</sup>

At the time the 1993 review article was written, some of the program effects evaluated through the child's fourth year of life had been published. Compared to counterparts randomly assigned to receive comparison services, women who were nurse-visited experienced greater informal and formal social support, smoked fewer cigarettes, had better diets, and exhibited fewer kidney infections by the end of pregnancy. (There also was a non-significant decrease in the number of hypertensive disorders of pregnancy.) Babies born to nurse-visited women

identified as smokers were 75% less likely to be born prematurely, that is, before 37 weeks of gestation.<sup>10</sup>

From birth through the child's second birthday, nurse-visited children born to women with all three risk characteristics used for sample recruitment (poor, unmarried, or teen-aged) were 80% less likely to have been identified through state Child Protective Service Records as a victim of child abuse or neglect than were their counterparts in the comparison group. Moreover, nurse-visited children were seen in the emergency department 56% fewer times than were children in the comparison condition during the second year of their lives – that is, when children are more likely to be injured because of their increased mobility but immature motor development. These findings were corroborated by observations of the children's homes and parents' reports of their care of their children.<sup>11</sup>

During the first four years after delivery of the first child, nurse-visited women who were low-income and unmarried at registration were found to have 42% fewer subsequent pregnancies and 84% greater participation in the work force.<sup>12</sup> An economic evaluation of the program from the standpoint of savings to government showed that for low-income women the discounted cost savings to government exceeded the cost of the program before the children were four years of age.<sup>13</sup>

Given these encouraging results, beginning in the late 1980's many groups urged us to develop the program in new communities on a much wider scale. They reasoned that the program worked and that at-risk families in our society deserved the program. We chose not to replicate the program outside of research contexts, however, for three reasons.

First, we did not know whether the findings produced early in the life of the child would endure. Other preventive interventions had produced effects that washed out after the program

ended. We needed to see enduring benefit before we could justify a public investment in this service.

Second, we did not know whether the findings from the Elmira program were limited to the population studied (primarily whites living in a Central New York county) or whether they might apply to a wider range of communities and populations. In particular, we needed to be sure that this was a program that would work with minorities living in urban areas.

Third, we needed to develop the program protocols and methods of training nurse home visitors to the point that new programs based upon this model would reliably reproduce the essential elements of the program tested in the randomized trials. Many programs examined in research settings are subsequently altered or watered down in the process of being scaled up, often leading to reduced effectiveness. We wanted to avoid that fate for the current program and needed to be able to provide clear guidance for new communities about what, exactly, they should do to replicate the program.

In the meantime, several national groups used the findings from the Elmira trial to promote a variety of home-visitation models in spite of the fact that the promoted programs bore little resemblance to the program tested in Elmira. Some programs employed paraprofessional visitors who began during pregnancy but had little follow-up during infancy. Others began after delivery and employed paraprofessionals as home visitors. Rarely were such programs designed explicitly to promote maternal life course (plan future pregnancies, stay in school, find work, etc.). We did not discourage organizations using data from the Elmira trial to promote such a wide variety of program types because, for all we knew at the time, the Elmira findings might be reasonably applied to a many types of programs. We chose, instead, to focus our efforts on conducting a follow-up of the Elmira study to examine the durability of the early effects,

replicating the program in a major urban area (Memphis, Tennessee) and refining the program protocols and training. If the program were truly effective, we then could help new communities develop the program in accordance with the proven model so that they could be reasonably sure of achieving the effects observed in the randomized trials.

As the results of new randomized trials of other home visitation programs became available, however, we grew increasingly concerned that the findings from Elmira did not have broad applicability to all types of home visitation programs. Two reviews of randomized trials of prenatal and early childhood home visitation programs showed that such programs needed to adhere to certain standards to produce desired effects on maternal and child health.<sup>14,9</sup>

More recently, in light of the considerable proliferation of programs of home visitation by lay community health visitors, without solid evidence that such visitors could achieve the same results as has been found with nurses, we developed a third trial in Denver (N=735) in which nurse home visitors were contrasted with trained lay community health visitors when both visitor types were provided the same protocols developed in the Elmira and Memphis trials. This study was designed to determine the extent to which absence of effects for programs delivered by paraprofessionals is due to the background of the visitors or to the program protocols typically followed by paraprofessional visitors.

In this paper, we summarize findings from the Elmira trial that have been published since 1993 – the point at which we published the most recent review of this evidence<sup>9</sup> – and summarize findings from the Memphis replication study. Outcomes from the Denver trial are not yet available, although data on differences between the nurse and paraprofessional home visitors in implementation of the program are briefly summarized here. Before we summarize these findings, we outline the epidemiological and theoretical foundations of the program and its

content and methods. It is important to understand these features of the program in order to interpret its effects.

## II. DEVELOPMENTAL EPIDEMIOLOGY

The program tested in this series of randomized trials has been firmly grounded in epidemiology and theories of child development. Kellam has referred to the integration of these disciplines in guiding prevention science as *developmental epidemiology*.<sup>15</sup> In planning the original Elmira trial, we noted that although the problems identified above cut across all segments of U.S. society, they were more common among children born to poor, adolescent, and single parents. This observation led to our decision to focus recruitment on women bearing first children who were either adolescent, unmarried, or from low-income families. Any pregnant woman bearing a first child was accepted into the study, irrespective of her age, marital status or income, however, in order to avoid creating a program stigmatized because it served only the poor or people with problems. Given that the beneficial effects of the Elmira program (described below) were concentrated on women who were unmarried and from low-income families, we modified the sampling designs in Memphis and Denver to focus more exclusively on low-income women, the vast majority of whom were unmarried and adolescent.

All three of the trials focused on women who had no previous live births because we reasoned that offering them services during the transition to parenthood would increase their receptivity to offers of help. Moreover, from the standpoint of a public health strategy, this approach held the promise of improving the life chances of subsequent children because parents who received these services were hypothesized to have better skills for managing the demands of pregnancy and early care of subsequent children after they had been helped with their first child. In addition, to the extent that the rates of rapid successive births were reduced, parents would be

able to focus their caregiving resources on a smaller number of children. The program was directed toward improving the outcomes of pregnancy, parents' caregiving skills (and the corresponding health and development of the child), and the early life course of the mothers.

In designing the program, we reviewed the literature to determine behavioral and contextual conditions that were consistently and uniquely associated with the adverse maternal and child outcomes that we wished to affect. We analyzed the literature to determine the extent to which these risk factors were likely to be causally related to the outcomes of interest and which were simply markers for maladaptive functioning. Those thought to be causally related to the outcome of interest and that were potentially modifiable with social and behavioral interventions became the primary candidates for targeted interventions to reduce the adverse maternal and child outcomes identified for prevention. Theory played an important role in helping us integrate the epidemiologic data into a coherent developmental framework regarding the proximity of risk to adverse outcome, the developmental progression of maladaptive functioning, and how clinical interventions might be applied to reduce risk. It is important to note that the epidemiologic evidence indicated that some of the problems targeted for prevention early in the program were also risks for later antisocial behavior. This is best illustrated by reference to Figure 1.

#### **A. Modifiable Risks for Low Birthweight, Preterm Delivery, and Fetal Neurodevelopmental Impairment**

Epidemiologic evidence on risks for low birthweight indicates that prenatal exposure to tobacco, alcohol, and illegal drugs are established risks for compromised fetal growth<sup>1</sup> and, to a lesser extent, shortened length of gestation.<sup>1</sup> Similarly, prenatal exposure to these substances increases the likelihood of compromised neurodevelopmental impairment.<sup>2,3,16-21</sup> While the

evidence on these risks was not as coherent at the start of this series of trials 20 years ago as it is today, we chose to promote a reduction in use of all of these substances as a precaution.

Evidence also indicated that other prenatal behaviors, such as inadequate weight gain,<sup>22</sup> inadequate diet,<sup>22</sup> inadequate use of office-based prenatal care,<sup>23</sup> and unattended obstetric complications, such as genitourinary tract infections and hypertensive disorders<sup>23</sup> increased the risk for low birthweight, preterm delivery, and compromised neurologic development.

These observations guided the development of the content covered in the prenatal program protocols.

#### **B. Modifiable Risks for Child Abuse and Neglect and Injuries to Children**

We made an explicit inventory of risks for child abuse and neglect and organized them according to their levels of immediate proximity to parental behavior. At a proximal level, risk assessment focused on the mother's psychological immaturity and mental health problems that affect parents' competencies in caring for their infants.<sup>24,25</sup> At a more distal level, risks focused on those environmental conditions that create stressful conditions in the household that interfere with parents' care of their children, such as unemployment,<sup>26</sup> poor housing and household conditions,<sup>27</sup> marital discord,<sup>28</sup> and isolation from supportive family members and friends.<sup>29,30</sup> A history of punitive, rejecting, abusive, or neglectful caregiving on the parent's own part was considered a risk factor, especially if it occurred in the presence of other risks.<sup>31,4</sup>

#### **C. Modifiable Risks for Welfare Dependence and Compromised Maternal Life-Course Development**

One of the major risks for compromised maternal educational achievement and workforce participation is rapid, successive pregnancies, particularly among unmarried women. Proximal risks for rapid successive pregnancies include women's having limited visions for their futures in

the areas of education and work,<sup>8</sup> as well as a limited sense of control over their life circumstances and over contraceptive practices in particular.<sup>32,33,34</sup>

#### **D. Modifiable Risks for Early-Onset Antisocial Behavior**

More recently, we have analyzed risks for early-onset antisocial behavior<sup>7,35,36</sup> and determined that the impact of the program on maternal and child health early in the life cycle reduces risks for these problems. Children who exhibit early-onset antisocial behavior are more likely to develop violent behavior during adolescence and are hypothesized to become chronic offenders.<sup>5</sup> Figure 1 provides a framework for integrating our thinking about how these diverse influences converge in producing childhood-onset conduct disorder and how this program of prenatal and early childhood home visitation by nurses reduces its risks. Children who develop early-onset disorder are more likely to have subtle neurodevelopmental deficits (such as compromised intellectual or language functioning and attention deficit disorder) combined with harsh, punitive, and rejecting parenting.<sup>6,7</sup> Maternal life-course factors also predict the development of antisocial behavior, in that children with these behaviors are more likely to come from large families, with closely spaced children, where parents themselves are involved in substance abuse and criminal behavior.<sup>37</sup>

### **III. THEORETICAL FOUNDATIONS**

The program has been grounded in theories of human ecology,<sup>38,39</sup> self-efficacy,<sup>40</sup> and human attachment.<sup>41</sup> The earliest formulations of the program gave greatest emphasis to human ecology, but as the program has evolved, it has been grounded more explicitly in theories of self-efficacy and attachment.<sup>11</sup>

#### **A. Human Ecology Theory**

Human ecology theory emphasizes the importance of social contexts as influences on human development.<sup>38</sup> Parents' care of their infants, from this perspective, is influenced by characteristics of their families, social networks, neighborhoods, communities, and the interrelations among these structures. This theory focuses the home visitors' attention on the systematic evaluation and enhancement of the material and social environment of the family.

While this theory provides an elaborated conception of the environment, the original formulation of the theory tended to treat the immediate settings in which children and families find themselves as shaped by cultural and structural characteristics of the society, with little consideration given to the role that adults (in particular, parents) can play in selecting and shaping the settings in which they find themselves.<sup>39</sup> Consequently, self-efficacy and attachment theories were integrated into the model to provide a broader conception of the parent–setting relationship.

#### **B. Self-Efficacy Theory**

Self-efficacy theory provides a useful framework for understanding and promoting women's health-related behavior during pregnancy, their care of their children, and their own personal development. This theory distinguishes two cognitive influences on motivation: efficacy expectations and outcome expectations.<sup>40</sup> Outcome expectations are individuals' estimates that a given behavior will lead to a given outcome. Efficacy expectations are individuals' beliefs that they can successfully carry out the behavior required to produce the outcome. Individuals' perceptions of self-efficacy can influence their choice of activities and settings and can determine how much effort they put forth in the face of obstacles.

Self-efficacy theory influenced the design of the program by focusing the nurses' attention on both the mothers' beliefs about the consequences of their behavior and on building

their confidence for behavioral change. Much of the educational content of the program was focused on helping women understand what is known (or thought about) the influence of particular behaviors on the health and growth of the fetus, on women's own health, and on the subsequent health and development of the child. This represented an effort to bring women's outcome expectations into alignment with the best evidence available. Improvements in individuals' behavior depends upon their confidence in their ability to change. Because individuals gain confidence if they actually observe their accomplishments, the home visitors emphasize methods of enhancing self-efficacy that rely on women actually carrying out parts of the desired behavior. The visitors help parents establish realistic goals and small achievable objectives that, once accomplished, will increase parents' reservoir of successful experiences, and in turn will increase their confidence in taking on larger challenges.

While self-efficacy theory provides powerful insights into human motivation and behavior, it is limited in several respects. First, it is primarily a cognitive-behavioral theory. It attends to the emotional life of the mother and other family members only through the impact of behavior on women's beliefs or expectations, which, in turn, affect emotions. It also attends to environmental influences in only a cursory way. These shortcomings of self-efficacy theory have been addressed in the program with attachment and human ecology theories.

### **C. Attachment Theory**

Attachment theory posits that infants are biologically predisposed to seek proximity to specific caregivers in times of stress, illness, or fatigue in order to promote survival.<sup>41</sup> This organization of behavior directed toward the caregiver is called "attachment." Stated simply, a growing body of evidence indicates that children's trust in the world and their later capacity for empathy and responsiveness to their own children once they become parents can be traced to the

degree to which their needs were responded to sensitively and competently as they were growing up.<sup>42</sup>

Attachment theory has affected the design of the home-visitation programs in three fundamental ways. The first has to do with its emphasis on the visitors' developing an empathic relationship with the mother and other family members. The establishment of a relationship based on empathy and respect was expected to help women eventually trust others and to promote more sensitive, empathic care of their children. The second has to do with an emphasis in the program on helping mothers and other caregivers review their own childrearing histories and make decisions about how they wish to care for their children in light of the way they were cared for as children. And third, attachment theory has led to the explicit promotion of sensitive, responsive, and engaged caregiving in the early years of the child's life.<sup>43,44</sup>

While attachment theory provides a rich set of insights into the origins of dysfunctional caregiving and possible preventive interventions focused on parent-visitor and parent-child relationships, it gives scant attention to the role of infants' constitutional differences as independent influences on parental behavior, and it provides inadequate attention to issues of parental motivation for change in caregiving. It also minimizes the importance of the current social and material environment in which the family is functioning as influences on parents' capacities to care for their children. For more systematic treatments of these issues, we turned to self-efficacy and human ecology theories.

The nurses thus have been equipped with a set of theory-driven program protocols that guide their efforts to help women improve their health-related behaviors, their care of their children, their planning of subsequent pregnancies, the completion of their education, and participation in the work force.

#### IV. PROGRAM DESIGN

##### A. Frequency of Visitation

The frequency of home visits changes with the stages of pregnancy and can be adapted to the mother's needs. Mothers typically are enrolled through the end of the second trimester of pregnancy. Visits are scheduled once a week during the first month after enrollment, which assists the new mother and the home visitor to establish a trusting relationship. Thereafter, visits are scheduled every other week until the birth of the baby. Nurses again visit weekly for 6 weeks after the baby is born, helping the new mother and newborn adjust. From the child's 2nd to 21st postnatal month, visits are scheduled twice a week. From the 21st to 24th postnatal month, visits are scheduled once a month. In Elmira and Memphis the nurses completed an average of 9 (range 0-16) and 7 (range 0-18) visits during pregnancy respectively; and 23 (range 0-59) and 26 (range 0-71) visits from birth to the child's second birthday. In calculating these rates of completed visits, all cases assigned to the nurse-visited conditions were included in the denominator, irrespective of the families' dropping from the program for any reason. Each visit lasted approximately 75-90 minutes.

##### B. Nurses as Home Visitors

This program calls for nurses to be the home visitors. We have chosen nurses because of their formal training in women's and children's health and because of their competence in managing the complex clinical situations often presented by at-risk families. We have hypothesized that nurses' abilities to address effectively mothers' and family members' concerns about the complications of pregnancy, labor, and delivery, and the physical health of the infant provide nurses with increased credibility and persuasive power in the eyes of family members. Moreover, through their ability to teach mothers and other family members to identify emerging

health problems and to use the health-care system to address those problems, they enhance their clinical effect through the early detection and treatment of disorders. Each nurse carried a caseload of 20-25 families and received regular clinical supervision.

### **C. Program Content**

During the home visits, the nurses carry out three major activities. They promote adaptive change in women's behavior thought to affect the outcomes of pregnancy, the health and development of the child, and maternal life course; they help women build supportive relationships with family members and friends; and they link women and their family members with other health and human services. The nurses follow detailed visit-by-visit program protocols. The content of the protocols is organized developmentally to reflect challenges that women are likely to confront at different stages of pregnancy and during the first 2 years of the child's life. Specific assessments are made of maternal, child, and family functioning, and specific educational content and psychosocial interventions are prescribed, depending upon the nature and degree of vulnerability revealed in the assessments.

## **V. OVERVIEW OF RESEARCH DESIGNS, METHODS AND FINDINGS**

In each of the three studies of the program described above, women were randomized to receive either home visitation services during pregnancy and the first two years of the children's lives or comparison services. While the nature of the home-visitation services was essentially the same in each of the trials, the comparison services were slightly different. The designs and methods employed in each of the trials are outlined below.

### **A. Elmira Design and Methods**

The first study was conducted in a small, semi-rural county of approximately 100,000 residents in the Appalachian region of New York State. The program was conducted through

Comprehensive Interdisciplinary Developmental Services, Inc.

Pregnant women were actively recruited for the study through their sources of prenatal care if, at intake, they had no previous live births, they were at less than 26 weeks of gestation, and they had any one of the following characteristics that predispose to infant health and developmental problems: (i) young age (<19 years); (ii) single parent status; and (iii) low socioeconomic status. Any woman who asked to participate was enrolled, however, regardless of her age, marital status, or income, if she had no previous live birth. This approach avoided creating a program that was stigmatized as being exclusively for the poor and created sample heterogeneity, enabling us to determine if the effects of the program were greater for families at higher risk. Five hundred women were invited to participate and 400 enrolled, 85% of whom were either low-income, unmarried, or <19 years of age at registration; none had a previous live birth. Eighty-nine percent of the sample was Caucasian. There were no sociodemographic differences between those who enrolled and those who declined, although participation was higher among African-Americans. We stratified the sample on a number of demographic factors and then randomly assigned participating women to one of four treatment groups.

Families in Treatment 1 (n=94) were provided sensory and developmental screening for the child at 12 and 24 months of age. Based upon these screenings, the children were referred for further clinical evaluation and treatment when needed. Families in Treatment 2 (n=90) were provided the screening services offered those in Treatment 1 plus free transportation for prenatal and well-child care through the child's 2nd birthday. There were no differences between Treatments 1 and 2 in their use of prenatal and well-child care (both groups had a high rate of completed appointments). Therefore, these two groups were combined to form a single comparison group. Families in Treatment 3 (n=100) were provided the screening and

transportation services offered Treatment 2 but in addition were provided a nurse who visited them at home during pregnancy. Families in Treatment 4 ( $n=1116$ ) were provided the same services as those in Treatment 3, except that the nurse continued to visit through the child's 2nd birthday. For assessment of the prenatal phase of the program, Treatments 1 and 2 were combined and compared to the combination of Treatments 3 and 4.

Assessments of outcomes were made by interviews, observations of mother-child interaction, observations of conditions in the home, and reviews of medical and social service records by individuals who were not aware of the women's and children's treatment assignment. Details of the research design and methods can be found in our earlier reports.<sup>11,12,35</sup>

#### **B. Elmira Results**

At the stage of randomization, the treatment conditions were essentially equivalent on all background characteristics examined. Moreover, at the 15-year follow-up, assessments were completed on over 90% of the women and children originally randomized who did not die or where there was no adoption. Low attrition and no treatment-control differences in background characteristics on those assessed after enrollment means that the estimates of program effects were not biased by loss of families. All analyses of program effects were based upon an intention-to-treat approach, that is data were employed for outcome analyses irrespective of the degree of program participation.

It is important to note that we hypothesized that the effects of the program would be greater for families who experienced greater stress and had fewer resources to cope. We tested this hypothesis by focusing the analysis on low-income unmarried women.

**1. Caregiving and Child Development Results.** With few exceptions, the beneficial effects of the program on caregiving outcomes were not present for the sample overall. Nurse-

visited at-risk women and their children, on the other hand, consistently exhibited lower rates of adverse outcomes indicative of grossly deficient care of the child.

As noted in our earlier reports, nurse-visited children born to low-income, unmarried teens had 80% fewer verified cases of child abuse and neglect during the first two years of the child's life. Moreover nurse-visited children, irrespective of risk, were seen in the emergency department 56% fewer times for injuries during the second year of the child's life. As indicated in Figures 2 and 3, the effect of the program on child abuse and neglect and emergency-department encounters was greater among children whose mothers had little sense of control over their lives (measured at registration during pregnancy).

The impact of the program on health-care encounters for injuries endured during the two-year period after the end of the program: irrespective of risk, children of nurse-visited women were less likely to receive emergency room treatment (1.00 vs 1.53 visits,  $p < .001$ ) and to visit a physician (0.34 vs 0.57,  $p = .03$ ) for injuries and ingestions than were their comparison-group counterparts.<sup>44</sup> The impact of the program on state-verified cases of child abuse and neglect, on the other hand, was attenuated during the 2-year period following the end of the program.<sup>45</sup>

We hypothesized that this pattern of results was probably due to increased surveillance for child abuse and neglect in the nurse-visited group, given that nurses were mandated to report suspected maltreatment and that they linked families with needed community services -- where their parenting needs were likely to be more completely assessed by other service providers.<sup>45</sup>

An examination of the living conditions and emergency-department encounters for the "maltreated" children showed that nurse-visited "maltreated" children lived in homes that were more conducive to children's development, as indicated by higher HOME scores; their homes were substantially safer; and the children themselves had far fewer emergency-room encounters

and physician visits in which injuries were detected. We have interpreted these differences as a reflection of greater surveillance for child abuse and neglect, leading to more frequent identification of less serious forms of maltreatment in the nurse-visited condition.<sup>16</sup>

This interpretation has been reinforced with results from a 15-year follow-up of the Elmira sample<sup>32</sup> in that the program-control differences in rates of state-verified reports of child abuse and neglect grew between the children's fourth and fifteenth birthdays. Overall, during the 15-year period after delivery of their first child, in contrast to women in the comparison group, those visited by nurses during pregnancy and infancy were identified as perpetrators of child abuse and neglect in 0.21 versus 0.46 verified reports ( $p < .001$ ). This effect was greater for women who were unmarried and from low-SES households at registration ( $p < .001$ ).<sup>32</sup>

**2. Prenatal Tobacco Exposure, Prenatal Home Visitation, and Development in the First 4 Years of the Child's Life.** While there were no overall program effects on children's mental development, children born to women who smoked a moderate to heavy amount when they registered in the program during pregnancy and who received prenatal home visitation had significantly higher IQ scores at 3 and 4 years of age than did their counterparts in the comparison group.<sup>16,17</sup> As shown in Figure 4, control-group children born to women who smoked 10 or more cigarettes per day during pregnancy had mental development scores that declined over the first 4 years of the child's life, in contrast to their counterparts in the comparison group whose mothers did not smoke during pregnancy.<sup>16</sup> In the nurse-visited condition, children born to women who smoked 10 or more cigarettes at registration during pregnancy had mental development scores in infancy, toddlerhood, and the preschool period that were the same as those who did not smoke at all or who smoked only a few cigarettes per day.<sup>17</sup> These beneficial effects of prenatal home visitation held for the group visited only during

pregnancy and were not explained by differences in measured aspects of the postnatal environment.

In light of this, it is important to note that we reported earlier that control-group mothers reported that their six-month old infants were more irritable than did those visited by nurses.<sup>11</sup> We have now conducted analyses that show that these effects were concentrated exclusively in infants born to women who smoked during pregnancy and that the positive program effects held for children whose mothers were visited only during pregnancy, as well as those visited in pregnancy and infancy. These findings have led us to focus greater attention on the role that an improvement in prenatal health can play in reducing subtle neurodevelopmental impairment in children.

**3. Maternal Life Course 15 Years after Delivery of First Child.** During the 15-year period after delivery of their first child, unmarried women from low socioeconomic (SES) households showed a number of enduring benefits. In contrast to their counterparts in the comparison condition, those visited by nurses during pregnancy and infancy had 1.1 versus 1.6 subsequent births ( $p = .02$ ), 65 versus 37 months between the birth of their first and 2nd children ( $p = .001$ ), 60 versus 90 months on welfare ( $p = .005$ ), 0.41 versus 0.73 behavioral problems due to substance abuse ( $p = .03$ ), and 0.18 versus 0.58 arrests by self-report ( $p < .001$ ). New York State records revealed that they had 0.16 versus 0.90 arrests ( $p < .001$ ).<sup>35</sup>

**4. Antisocial Behavior Among the Fifteen-Year-Old Adolescents.** In contrast to adolescents born to poor, unmarried women in the comparison group, those visited by nurses during pregnancy and the first two years of the child's life reported fewer instances of running away (0.60 vs. 0.24,  $p = .003$ ), fewer arrests (0.45 vs. 0.20,  $p = .03$ ), fewer convictions/violations of probation (0.47 vs. 0.09,  $p < .001$ ), fewer life-time sex partners (2.48 vs. 0.92,  $p = .003$ ), fewer

cigarettes smoked per day (2.50 vs. 1.50,  $p=.10$ ), and fewer days having consumed alcohol in the last six months (2.49 vs. 1.09,  $p=.03$ ). Parents of nurse-visited children reported that their children had fewer behavioral problems related to use of drugs and alcohol (0.34 vs. 0.15,  $p=.08$ ). There were no program effects on other behavioral problems.

**5. Cost Analysis.** The Rand Corporation has recently conducted an economic evaluation of the program that extends the estimate of cost savings beyond those reported in our earlier report.<sup>5,47</sup> While there were no net savings to government or society for serving families in which mothers were married and of higher social class, as indicated in Figure 5, the savings to government and society for serving families in which the mother was low-income and unmarried at registration exceeded the cost of the program by a factor of 4 over the life of the child. This figure shows, moreover, that the return on the investment was realized well before the child's fourth birthday. The primary cost savings were found in reduced welfare and criminal-justice expenditures, and increases in tax revenues.

**6. Conclusion.** In general, as expected, the beneficial effects of the program were greater for families at greater risk as defined by women's being unmarried or from lower-SES households. These findings were encouraging, but by themselves insufficient to form a foundation for policy and practice. In order for scientific findings to serve as a guide in this regard, they must first be replicated. The scientific credibility of such findings increases if they can be reproduced with different populations living in different contexts and in different times.

### **C. Memphis Design and Methods**

The Memphis trial was designed to determine if the effects of the Elmira program could be replicated when it was conducted through an existing health department and when it served a large sample of low-income African-American women, children, and their families living in a

major urban area. We hypothesized that the effects of the program would be found in the same outcome domains as we observed in Elmira and that the same background variables would moderate the effect of the program. So, for example, we hypothesized explicitly that the effect of the program on birthweight and length of gestation would be greater for women who smoked cigarettes and were young teens (<16 years of age at registration). Even though the program effect on hypertensive disorders of pregnancy in Elmira was not statistically significant, we hypothesized that the program would reduce the rates of pregnancy-induced hypertension in Memphis, given high rates of this problem in African-American pregnant women bearing first children.

In planning this study, we conducted extensive pretest and pilot work in Memphis and learned, among other things, that the rate of state-verified cases of child abuse and neglect among low-income first-born children in Memphis was too low (3-4%) to serve as a viable outcome in this setting. We therefore chose not to hypothesize program effects on rates of state-verified cases of child abuse and neglect, but instead hypothesized that the program would produce effects on children's health-care encounters for injuries that would be like those observed in Elmira - i.e., greater for women with few psychological resources. In Memphis, we hypothesized that the effects would be greater for women with more mental-health symptoms and limited intellectual functioning in addition to limited sense of control, as observed in Elmira.<sup>48</sup> Finally, given that the effects of the Elmira program were greater for women who were unmarried and from low-income families, we focused recruitment in Memphis on this population.

The program was conducted through the Memphis/Shelby County Health Department. From June 1990 through August 1991, 1290 women were invited to participate and 1,139 enrolled through the obstetrical clinic at the Regional Medical Center in Memphis. Women were

recruited if they were less than 29 weeks of gestation, had no previous live births, no specific chronic illnesses thought to contribute to fetal growth retardation or preterm delivery, and at least two of the following sociodemographic risk conditions: (i) unmarried, (ii) less than 12 years of education, (iii) unemployed. There were no differences in the sociodemographic characteristics of those who enrolled and those who declined, except that African Americans were more likely to participate than were whites. At registration, 92% of the 1139 women registered were African-American, 98% were unmarried, 65% were aged 18 or younger, 85% came from households with incomes at or below the federal poverty guidelines, and 9% smoked cigarettes. The details of the research design and methods are described in greater detail in our original report.<sup>44</sup>

**1. Treatment Conditions.** After completion of informed consent and baseline interviews, identifying information on the participants was entered into a computer program that randomized women to one of four groups. Women in Treatment 1 (n = 166) were provided free transportation for scheduled prenatal care appointments; they did not receive any postpartum services or child development screenings. Women in Treatment 2 (n = 515) were provided the free transportation plus developmental screening and referral services for the child at 6, 12, and 24 months of age. Women in Treatment 3 (n = 230) were provided the free transportation and screening offered Treatment 2 plus intensive nurse home-visitation services during pregnancy, one postpartum visit in the hospital before discharge, and one postpartum visit in the home. Women in Treatment 4 (n = 228) were provided the same services as those in Treatment 3; in addition, they continued to be visited by nurses through the child's 2nd birthday.

For the evaluation of the prenatal phase of the program, Treatments 1 and 2 were combined to form a single comparison group, which was contrasted with combined Treatments 3

and 4 (nurse-visitation during pregnancy). For the postnatal phase of the study, Treatment 2 was contrasted with Treatment 4.

As in Elmira, outcome assessments were conducted by individuals who did not know the treatment assignment of the participating women and children. Data were derived from interviews, observations of mother-infant interaction, observations of conditions in the home, and reviews of mothers' and children's medical and social-service records.

In interpreting the findings from this trial, it is important to note that it was conducted during a nursing shortage, which led to fairly high rates of staff turn-over because nurses left their jobs with the health department to earn more in competing hospitals. Given that these kinds of factors are likely to buffet the program as it is administered in other community settings, the Memphis findings may provide a good estimate of what the program might be able to achieve if it were replicated on a large scale.

#### **D. Memphis Results**

At the stage of randomization, the nurse-visited and control groups were essentially equivalent on all background characteristics examined. For those individuals on whom subsequent assessments were conducted, these groups remained equivalent on background characteristics. Moreover, postnatal assessments were conducted on a large portion of the women originally assigned to Treatments 2 and 4. Office-based assessments were completed at 24 months postpartum, for example, on 96% of the cases for which there was no fetal or child death. Low attrition and no nurse-visited-control differences in background characteristics on those assessed after enrollment means that the analyses of program effects are not likely to have been biased by loss of participating families. All analyses of program effects were based upon an intention-to-treat approach, that is data were employed for outcome analyses irrespective of the

degree of program participation.

**1. Prenatal Findings.** There were no treatment main effects on birthweight, low birthweight, length of gestation, spontaneous preterm delivery, indicated preterm delivery, or Apgar scores. Nevertheless, by the 36th week of pregnancy, nurse-visited women were more likely to use other community services than were women in the control group ( $p = .01$ ). They also were more likely to be working ( $p = .06$ ), an effect that was particularly strong among women who were not in school when they were randomized (8% vs. 2%,  $p = .01$ ). There were no program effects on women's use of standard prenatal care or obstetrical emergency services after registration in the study, but nurse-visited women who were in school at the time of registration had twice as many pre-delivery hospitalizations as their counterparts in the comparison condition (0.18 versus 0.09,  $p = .003$ ). This difference was not explained by any coherent pattern of diagnoses associated with those hospitalizations.<sup>48</sup>

In contrast to women in the comparison group, nurse-visited women had fewer yeast infections after randomization and fewer instances of Pregnancy-Induced Hypertension (PIH) ( $p=.05$  and  $p=.02$ , respectively). Women with PIH who received a nurse home visitor had mean arterial blood pressures during labor that were 3.5 points lower ( $p=.05$ ) than those in the comparison group, an indication of less severe cases.<sup>48</sup>

**2. Dysfunctional Caregiving and Child Development.** During their first 2 years, nurse-visited children overall had fewer health-care encounters in which injuries and ingestions were detected than did children in the comparison condition ( $p = .05$ ), an effect that was accounted for primarily by a reduction in outpatient encounters ( $p = .02$ ). Nurse-visited children also were hospitalized for fewer days with injuries and/or ingestions than were children in the comparison condition ( $p < .001$ ). The program effects on both total health-care encounters and

number of days hospitalized with injuries and ingestions were greater for children born to women with few psychological resources (indicated by a combination of low intellectual functioning, high levels of mental-health symptoms, and limited sense of mastery/self efficacy). Figures 6 and 7 illustrate the concentration of positive program effects in women with few psychological resources. Note the similarity in pattern of results shown in these figures with the child-abuse-and-neglect and emergency-department visits findings in the Elmira study displayed in Figures 2 and 3.

An explanation for the difference in number of days children were hospitalized with injuries can be found in the nature of their problems. As can be seen in Table 1, nurse-visited children were hospitalized at older ages and for substantially less serious reasons. The three nurse-visited children who were hospitalized with injuries and ingestions were admitted when they were 12 months of age or older (and thus mobile), while six (43%) of the 14 comparison children were hospitalized when they were younger than 6 months of age (and thus immobile). Eight (57%) of the 14 comparison-group hospitalizations involved either fractures and/or head trauma, while none of the nurse-visited hospitalizations did. Two of the three nurse-visited children were hospitalized with ingestions. These profiles suggest that many of the comparison-group children were hospitalized for longer durations because of seriously deficient care. These differences in injuries were corroborated by maternal reports of breast-feeding and beliefs about caregiving, observations of the home environments, and the two-year olds' behavior towards their mothers.

Nurse-visited mothers reported that they attempted breast-feeding more frequently than did women in the comparison group ( $p = .006$ ), although there were no differences in duration of

breast-feeding. By the 24th month of the child's life, in contrast to their comparison-group counterparts, nurse-visited women held fewer beliefs about child-rearing associated with child abuse and neglect-lack of empathy, belief in physical punishment, unrealistic expectations for infants ( $p = .003$ ). Moreover, the homes of nurse-visited women were rated on the HOME scale as more conducive to children's development ( $p = .003$ ). There was no program effect on observed maternal teaching behavior, but children born to nurse-visited mothers with low levels of psychological resources were observed to be more communicative and responsive toward their mothers than were their comparison-group counterparts (17.9 versus 17.2;  $p = .03$ ). There were no program effects on the children's use of well-child care, immunization status, mental development, or reported behavioral problems.

**3. Maternal Life Course.** At the 24th month of the first child's life, nurse-visited women reported 23% fewer second pregnancies and 32% fewer subsequent live births than did women in the comparison group ( $p=.006$  and  $.01$ , respectively). Nurse-visited women and their first-born children relied upon welfare for slightly fewer months (.7) during the 2nd year of the child's life than did comparison-group women and their children ( $p=.07$ ). There were no program effects on reported educational achievement or length of employment.<sup>48</sup>

#### **E. Comment on Elmira and Memphis Results**

Many of the beneficial effects of the program found in the Elmira trial that were concentrated in higher risk groups, have been reproduced in the Memphis replication. Overall, these two trials indicate that the program has achieved two of its most important goals -- the reduction in dysfunctional care of children and the improvement of maternal life course. Its impact on the third goal -- the improvement of pregnancy outcomes (in particular, the reduction

of preterm delivery and low birthweight) -- was equivocal.

In the Elmira trial, the program produced the anticipated reduction in cigarette smoking, improvement in diet, and increases in women's use of needed social services and informal social support. There was an increase in the birthweight of infants born to women who were very young (i.e., less than 17 years of age at registration) and a reduction in the rates of preterm delivery from 10% to 2% among women identified as smokers (those who smoked five or more cigarettes per day at registration). It is important to note that 55% of the Caucasian women in the Elmira trial smoked cigarettes during pregnancy.

The program impact on preterm delivery and the birthweight of babies born to young adolescents and women identified as smokers in Elmira was not replicated in Memphis, although the program did produce the anticipated effects on women's use of other human services and on the rates of Pregnancy Induced Hypertension (PIH). The absence of corresponding effects on the rates of preterm delivery among smokers in Memphis is probably a reflection of the very low rates of cigarette smoking among African-Americans. Nine percent of the Memphis sample overall smoked cigarettes, and only 7% of the African-Americans smoked. Reproductive-tract infections (another major risk for preterm delivery), on the other hand, were much higher among African-Americans.<sup>48</sup>

This lack of correspondence between the results of the two trials emphasizes the importance of basing preventive interventions on sound epidemiologic evidence -- that is, a clear understanding of the modifiable risks for the disorder that one wishes to prevent. In this case, the pattern of risks was quite different for Caucasians in Central New York State than for African-Americans in Memphis. While the program can reduce cigarette smoking, it is more of a challenge to affect reproductive-tract infections, given that many infections begin prior to

pregnancy, are relatively asymptomatic, and are not easily detected outside of office-based medical settings after pregnancy has already progressed.<sup>49</sup>

The impact of the program on the rates of dysfunctional caregiving among higher risk families found in Elmira was substantially replicated in Memphis where the population served was at much higher risk overall. Recall that the beneficial effects of the program in Elmira on dysfunctional care during the child's first two years of life (reflected in rates of state-verified cases of child abuse and neglect and on emergency-department encounters) were concentrated on women who were unmarried and from low-SES households. In Memphis, (where 98% of the sample was unmarried, all were from low-SES families) we found corresponding effects for health-care encounters in which injuries were detected, for observations of the home environments, and for parents' reports of caregiving and childrearing beliefs. The beneficial effects of the program on caregiving-related outcomes, while strong enough to emerge as program "main effects," were concentrated among women with lower levels of psychological resources at the time of registration. The effect of the program on health-care encounters in which injuries were detected and on the number of days that children were hospitalized with injuries, for example, was limited to children born to women with few psychological resources.

Moreover, in contrast to children in the comparison group, children of nurse-visited mothers in Memphis who had few psychological resources were observed to be more responsive and communicative toward their mothers. Infant-attachment research suggests that toddlers' behavior toward their mothers reveals the extent to which their mothers are sensitive and responsive rather than hostile, intrusive, or neglectful toward them, with toddlers' behavior being a better indication of the quality of the parent-child relationship over time than currently observed behaviors of parents.<sup>50,51</sup>

The Elmira program produced important effects on a host of maternal life-course outcomes from the birth of the first child to that child's 15th birthday. Among women who were unmarried and from low-SES households at registration, those who were visited by nurses during pregnancy and infancy had fewer subsequent children, fewer months on welfare, fewer behavioral impairments from use of alcohol and drugs, fewer arrests and convictions, and fewer days jailed during the 15-year period after birth of their first child.

In Memphis, the program reproduced the most important outcome with respect to maternal life-course -- a reduction in the rate of subsequent pregnancy. This is important given that future maternal life course effects depend heavily upon the prevention of subsequent pregnancy and an increase in the interval of subsequent pregnancies. In the Elmira trial, the beneficial effects of the program on life-course outcomes for teens were not reflected in increased rates of employment, greater educational achievements, or in reduced welfare dependence while the program was in operation (i.e., 2 years postpartum). It was reflected instead in the reduced rate of subsequent pregnancy, which positioned the teen mothers to eventually find work,<sup>12</sup> become economically self-sufficient, and eventually avoid substance abuse and criminal behavior.<sup>35</sup>

There is some indication in the Elmira trial that the program reduced the rates of neurodevelopmental impairment associated with cigarette smoking during pregnancy.<sup>2,16,17</sup> Given the simultaneous impact of the program on the rates of dysfunctional care and compromised maternal life-course (major risks for early-onset conduct disorder),<sup>32,52,53,54</sup> it is not all that surprising that the 15-year-old children born to women who were unmarried and low SES exhibited fewer arrests and convictions, and lower rates of cigarette smoking, alcohol use, and promiscuous sexual activity.

## VI. PROGRAM IMPLEMENTATION IN DENVER TRIAL

The Denver trial was designed to gain insight into the reasons that previous trials of home-visitation programs that employed paraprofessionals either failed or produced very modest effects.<sup>9,55</sup> In the Denver trial, the paraprofessionals hired as home visitors were required to have a high school education, but no advanced training in the helping professions. We set this requirement because many programs employ paraprofessionals who come from the communities they serve on the premise that shared backgrounds and experiences will increase the visitors' ability to form effective relationships and promote adaptive functioning among the visited families. To further enhance the test of this theory, all of the paraprofessional visitors in Denver were required to be parents themselves. The nurses, on the other hand, all had bachelors degrees in nursing and were not required to be parents, although many were. Both groups were provided essentially the same training and program protocols, although, as one would expect, the nurses were provided more in-depth training regarding physical health and were expected to deal with health issues more extensively.<sup>55</sup>

### **Denver Design and Methods**

From March, 1994 through June, 1995, 1178 consecutive low-income pregnant women with no previous live births were invited to participate from 21 antepartum clinics in the Denver metropolitan area. Low-income status was operationalized by the women's having no private insurance or their qualifying for Medicaid. Medicaid status as the time extended to women at or below 133% of the federal poverty guidelines.

Compared to women who either actively refused (n=244) or were invited but not contacted before delivery (n=199), those who accepted (n=735) were more likely to be of Mexican-American descent and were less likely to smoke cigarettes. These groups were

equivalent on other major sociodemographic characteristics, such as maternal age, language preference (English versus Spanish), and marital status. The rates of acceptance into the research was lower than in Elmira and Memphis, probably because of the large number of prenatal clinics involved, which meant that many women were invited in writing but did not have the study explained to them in a face-to-face interview, where their questions about the study might be answered.

84% of those enrolled were unmarried, 45% Mexican American, 34% Anglo non-Mexican American, 16% African-American, and 5% American Indian/Asian. 87% of the women enrolled were unmarried. The average age at registration was 19.8 years. The women were randomly assigned to treatment and control conditions using a computer program that stratified women by sociodemographic characteristics prior to allocation.

Women in Treatment 1 (n = 255) were provided developmental screening and referral services for the child at 6, 12 and 24 months of age. Those in Treatment 2 (n = 236) were provided the free screening services offered Treatment 1 plus intensive nurse home-visitation during pregnancy and the first two years of the child's life. Women in Treatment 3 (n = 244) were provided the free screening services offered Treatments 1 and 2 plus intensive home-visitation during pregnancy and the first two years of the child's life delivered by well-trained and supervised paraprofessionals.

Both groups of visitors were provided extensive pre-service and on-going training in the program model and were provided updated visit-by-visit protocols previously tested in Elmira and Memphis. They also were provided excellent clinical supervision, with the 10 nurses having a single full-time supervisor (a 1:10 supervisor to staff ratio) and the paraprofessionals having two full-time licensed clinical social workers as supervisors (for a

1:5 ratio).

Although outcome data on the mothers and children are not yet available, differences between nurses and paraprofessionals in the nature and quantity of program implementation have been reported. Data on program implementation were derived from encounter forms that the nurses and paraprofessionals completed after every home visit, and from administrative records.<sup>55</sup>

#### **Differences between Nurses and Paraprofessionals in Program Implementation**

Nurses and paraprofessionals completed essentially the same number of visits during pregnancy (approximately 6.5 visits), but the nurses completed an average of 5 more visits from birth to the child's second birthday (22 versus 17). This may be accounted for by a higher rate of staff turn over among the paraprofessionals (17 paraprofessional visitors hired over the life of the study), compared to no staff turn-over among the 10 nurses. The average visit by the paraprofessionals was about 7 minutes longer (81 minutes compared to 74 minutes,  $p < .001$ ). The nurses spent a slightly larger portion of their time during the visits addressing the mothers' and children's physical health (23% versus 20%,  $p < .001$ ) while the paraprofessionals spent more time on the mothers' life course development (18% versus, 16%,  $p < .001$ ), their friend and family relationships (19% versus 15%,  $p < .001$ ), and on the health and safety of the environment (15% versus 8%,  $p < .001$ ). We did not expect to find that the nurses would spend more time on promoting parents' care of their children, but they did (39% versus 28%,  $p < .001$ ).<sup>55</sup>

We expect that these differences in program implementation will affect the visitors' influence on maternal and child functioning, which will be the subject of additional reports in the near future.

## VII. POLICY IMPLICATIONS AND PROGRAM REPLICATION

One of the clearest messages that has emerged from this program of research is that the functional and economic benefits of the nurse-home-visitation program are greatest for families at greater risk. In the Elmira study, it was evident that most married women and those from higher socioeconomic households managed the care of their children without serious problems and that they were able to avoid lives of welfare dependence, substance abuse and crime without the assistance of the nurse home-visitors. Similarly, their children on average avoided encounters with the criminal justice system, the use of cigarettes and alcohol and promiscuous sexual activity. Low-income, unmarried women and their children in the comparison group, on the other hand, were at substantial risk for these problems and the program of prenatal and infancy home visitation was able to avert many of these untoward outcomes for this at-risk population. This led to substantial cost-savings to government when the program was focused on this higher risk group. Among families at lower risk, on the other hand, the financial investment in the service was a loss. This suggests that this program will produce its greatest effects when it is focused on those in greatest need. This pattern of results challenges the position that these kinds of programs ought to be made available on a universal basis. Not only is the universal approach likely to be wasteful from an economic standpoint, but it may lead to a dilution of services for those families who need them the most, because of insufficient resources to serve everyone well.

During the past five years, new studies have been reported that have led us to doubt the effectiveness of home-visitation programs that do not adhere to the elements of the model studied in these trials, including the hiring of nurses.<sup>56</sup> These results should give policy makers and practitioners pause as they consider investments in home visitation programs without careful

consideration of program structure, content, and methods. With the increased focus on brain development in the first three years of life,<sup>37</sup> there is increased pressure to fund programs at this stage in the life cycle. It would be a mistake to do so, however, without solid scientific evidence that the particular model promoted is able to achieve its intended effects, given the failure of most programs that have been carefully tested.

It is increasingly clear that the evidence from the Elmira and Memphis studies cannot be generalized to programs that do not conform to the model tested in those trials. Even if the results of the Denver trial show benefits for the paraprofessionals, the beneficial effects must be understood in the context of the thoroughly developed program protocols and excellent clinical supervision they were provided. The difficulties faced by other home visiting programs tested in the past may be due to the particular program models tested or to the background of the visitors employed (or both). The outcomes of the Denver trial and randomized trials of other model programs (e.g., Parents as Teachers, Healthy Families America, Comprehensive Child Development Program summarized in this issue) as well as the Early Head Start program currently under investigation in the Head Start Bureau should provide additional guidance to policy makers in the near future. Even when communities choose to develop programs based on models with good scientific evidence, all too often the programs are watered down and compromised in the process of being scaled up. We have recently begun work that addresses this problem.

In 1995, we were invited by the US Department of Justice to develop the program studied in Elmira and Memphis in several high-crime neighborhoods around the country. We accepted the invitation because the results from the Memphis replication study and the Elmira follow-up were promising. We intend to use the Justice Department initiative to learn more about what is

required to develop the program in new communities with fidelity to its essential elements.

Under the Justice Department initiative we are establishing the program in six communities in the country, including Los Angeles, Fresno, and Oakland California; Oklahoma City, Oklahoma; St. Louis, Missouri; and Clearwater, Florida.

In this program-replication phase (which will soon expand to include 15-20 additional sites beyond the Justice Department initiative), state and local governments are securing financial support for the program out of existing sources of funds, such as TANF (Temporary Assistance to Needy Families), Medicaid, Maternal and Child Health Block-Grant, child-abuse, and crime-prevention dollars. They are making this investment in part because the evidence indicates that the program will reduce future expenditures. This means that the cost of this program, which in 1998 dollars is about \$7,000 per family for 2½ years of service, can be shared by a variety of government agencies. This, in turn, reduces the strain on any one agency's budget.

We wish to emphasize that we do not believe we can replicate this program on a large scale in a short period of time without compromising its effectiveness. We believe that it makes sense to develop a larger number of demonstration sites only after we have learned from our first group of sites how to develop the program successfully in a variety of new contexts. In the next phase of this work, we are building in provisions for learning about new implementation efforts so that we can develop the program in an even larger number of sites as quickly as is possible without losing program effectiveness.

## Acknowledgments

The work reported here was made possible by support from many different sources. These include the Administration for Children and Families (90PD0215/01 and 90PJ0003), Biomedical Research Support (PHS S7RR05403-25), Bureau of Community Health Services, Maternal and Child Health Research Grants Division (MCR-360403-07-0), Carnegie Corporation (B-5492), Colorado Trust (93059), Commonwealth Fund (10443), David and Lucille Packard Foundation (95-1842), Ford Foundation (840-0545, 845-0031, and 875-0559), Maternal and Child Health, Department of Health and Human Services (MCJ-363378-01-0), National Center for Nursing Research (NR01-01691-05), National Institute of Mental Health (1-K05-MH01382-01 and 1-R01-MH49381-01A1), Pew Charitable Trusts (88-0211-000), Robert Wood Johnson Foundation (179-34, 5263, 6729, and 9677), US Department of Justice (95-DD-BX-0181), and the W. T. Grant Foundation (80072380, 84072380, 86108086, and 88124688).

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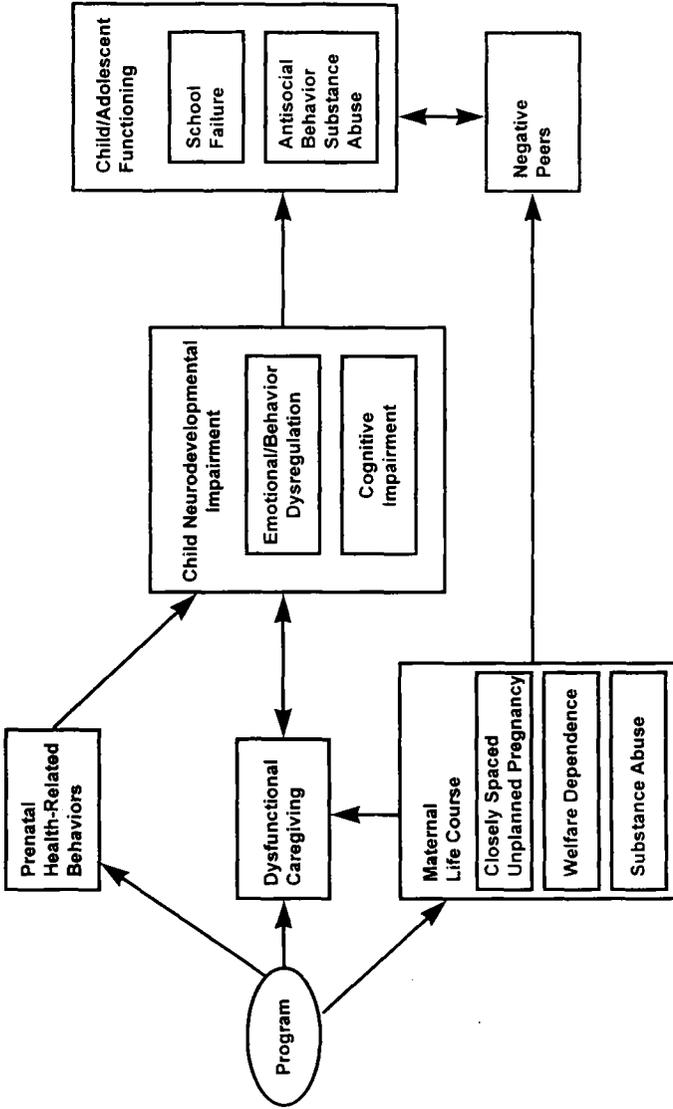


Figure 1. Conceptual model of risk domains to be affected by prenatal and infancy home visitation and influence on child and adolescent health and development

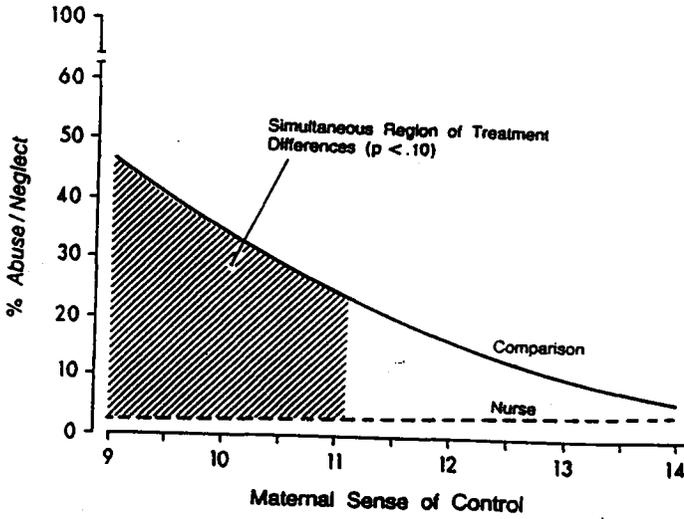


Figure 2. Estimated nurse-comparison differences in the rates of child abuse and neglect as a function of maternal sense of control - Elmira. (Reprinted with permission from Olds, D.L., Henderson, C.R., Chamberlin, R., Tatelbaum, R. Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics*. 1986;78(1):65-78.)

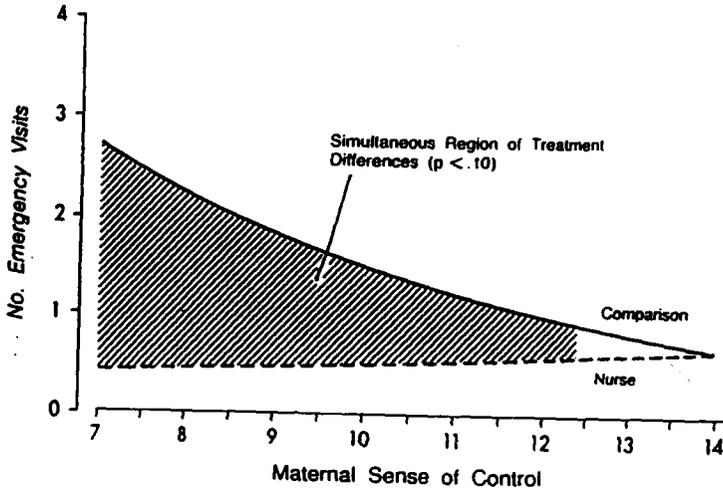


Figure 3. Estimated nurse-comparison differences in the number of children's emergency department visits during second year of child's life as a function of maternal sense of control - Elmira. (Reprinted with permission from Olds, D.L., Henderson, C.R., Chamberlin, R., Tatelbaum, R. Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics*. 1986;78(1):65-78.)

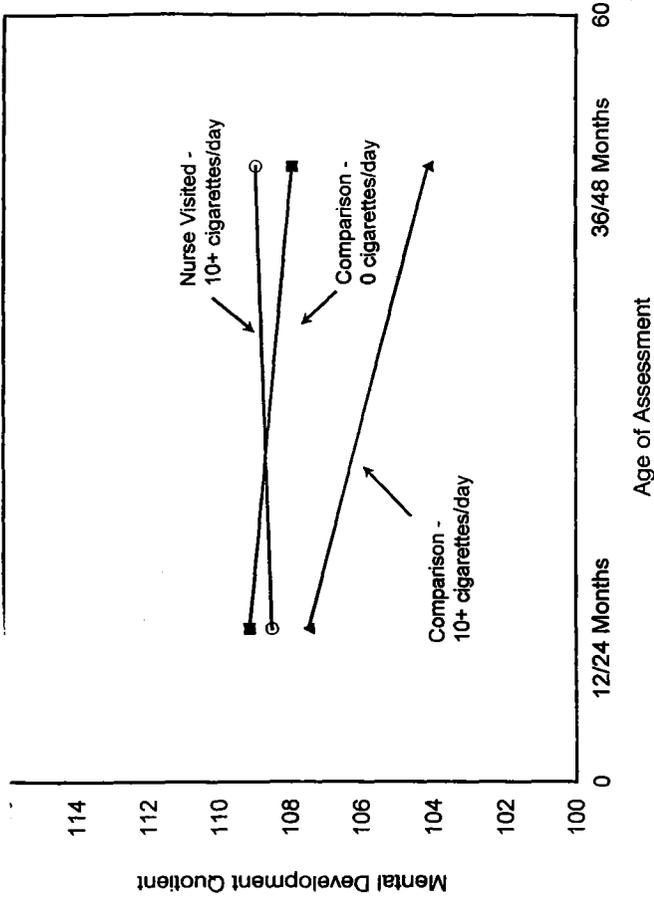


Figure 4. Mental development during first four years of life among children whose mothers smoked 10 or more cigarettes per day at registration during pregnancy and those whose mothers did not smoke

## Cumulative Cost Savings: Elmira Home Visits (High-Risk Families)

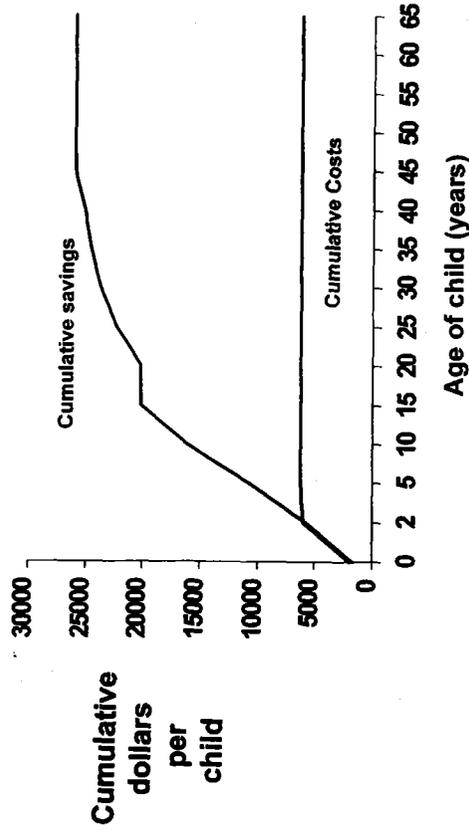


Figure 5. Cumulative costs and savings by age of child - high-risk families (headed by women who were low-income and unmarried at registration) - Elmira. (Reprinted with permission from Karoly, L.A., Greenwood, P.W., Everingham, S. S., Hoube, J., Kilburn, M.R., Rydell, C.F., Sanders, M., & Chitesa, J. *Investing in our Children. What We Know and Don't Know about the Costs and Benefits of Early Childhood Interventions*. 1998. Santa Monica, CA:RAND.)

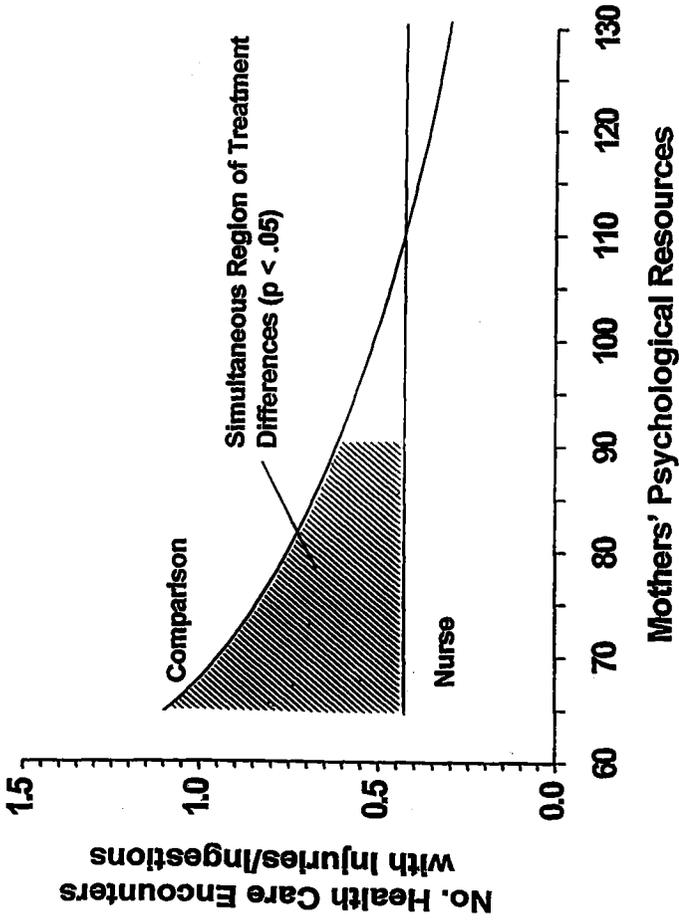
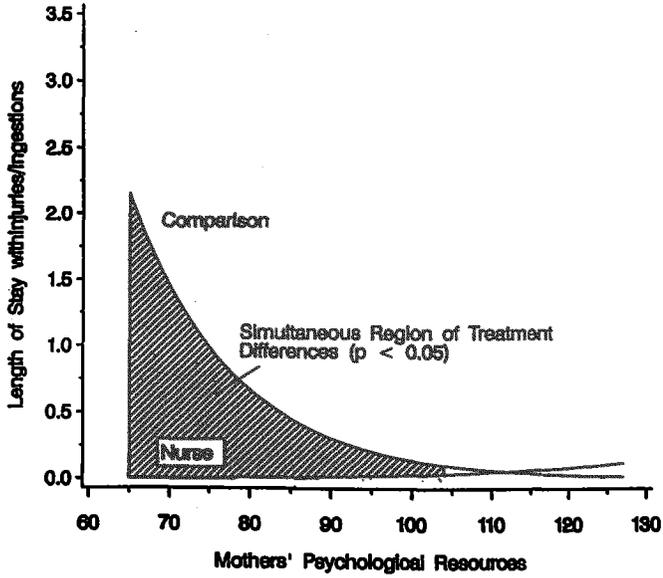


Figure 6. Estimated nurse-comparison differences in number of children's health-care encounters with injuries/ingestions as a function of maternal psychological resources - Memphis.



**Figure 7.** Estimated nurse-comparison differences in number of days children were hospitalized with injuries/ingestions as a function of maternal psychological resources - Memphis.

Mr. TOWNS. Mr. Burki.

Mr. BURKI. Thank you, Mr. Towns. I am Peter Burki, chief executive officer of DCC, Inc., a leading global provider of critical workplace services that increase productivity and efficiency and reduce absenteeism, turnover and stress. I am pleased to have been invited to appear before you today to discuss what we believe to be one of the day's most important issues.

The subject of this hearing corresponds with DCC's ongoing efforts to provide early childhood intervention services to working parents, to raise awareness of the connection between these resources and a child's cognitive, emotional and physical development, and to demonstrate how children, parents and all organizations can profit from these services.

In the past several years, businesses have had to adjust to a rapidly changing social landscape which will continue to change as we approach and prepare for the 21st century.

Mr. BURKI. Consider the facts, and I know you have heard some of these already, 78 percent of working parents live in dual-income households, compared to 64 percent 20 years ago. In 1994, 10.3 million preschoolers had mothers who worked. Almost 30 percent of preschoolers and over 18 percent of children under the age of 1 are in organized care. Today, one out of every five parents is single. That's 20 percent. Since 1970, the number of single families has increased by 133 percent, from 5.5 million to 12.8 million. Single male families have grown by 213 percent, from 1.2 million to 3.8 million.

These trends highlight the critical issues that we in the public and private sectors must address in order to promote a healthier, better prepared and more productive work force for today and for the future.

The daily challenges for employers and employees are becoming all too familiar: A young mother needs to find affordable child care and transportation so she can make the transition from welfare to work. A single dad needs critical early intervention services to address his daughter's developmental needs. A young family needs to find the best child care options for their 6-month-old son. They need information to help them understand and evaluate those choices and how they impact on their child's future development.

To make matters more complicated, as we all know, employees are working more hours, workloads are increasing, leaving dependent care responsibilities hanging in the balance.

Companies like DCC address these issues by providing critical tools to working parents that they need to balance work and family and provide their children with a healthy start. These services offer counseling on issues like identifying high-quality child care; education on topics such as prenatal care, child development and parenting; and referrals to community and nationwide resources that can help with any work/life need. As a result, expectant parents obtain proper prenatal care to ensure fewer complications at birth. New mothers can breast-feed when they return to work so their infants are healthier; and, in turn, health care costs are reduced. Welfare recipients can successfully transition from welfare to work, and parents can find quality care for their young children and re-

ceive educational materials they need to understand their child's developmental needs during the critical early years.

These types of services are a necessity, not a luxury for parents today. Without said services, parents cannot effectively work.

Research continues to provide clear evidence that what happens in the first few years of a child's life really does matter and has an enormous effect on a child's ability to learn, relate to others and function in the world for the rest of his or her life.

We have learned that young children are far from passive vessels, that they actively interact with their environments and in fact influence the behavior of those around them. We now know that what young children see, hear, smell, touch, and do shapes not only what they know but how they learn. For good or for ill, what happens to young children in the first years of life is critical to their—and our—futures.

As Mr. Reiner mentioned earlier, the human brain achieves 90 percent of its total growth before the age of 3. The brain of a newborn baby has about 100 billion nerve cells, more, actually, than an adult. The difference is babies' nerve cells aren't wired up at that time. It's kind of like a stereo or a computer without the wires being hooked up. You won't get much out of it until you connect the wires. In babies, the wiring is connected with experience, interaction, and nurturing.

Neural connections are formed when impulses trigger the release of brain chemicals. Every time a baby's brain is stimulated by a hug or a smile or a song or the taste of milk or the smell of flowers or the feel of a toy, new connections are formed. With repeated experience, those connections are strengthened.

In fact, by the time a baby is 3 years old, the little brain has formed more than 1,000 trillion connections among its nerve cells. These connections allow the baby to learn, grow and develop cognitively, socially, emotionally and physically. These connections help determine what kind of person that baby will become. Without appropriate stimulation, a baby's brain won't develop properly. With optimal stimulation, it will develop better than it might have otherwise.

In light of these discoveries, child care becomes more than a holding place for children while their parents are at work. Child care has an enormous impact on the future of our children's physical and emotional well-being and their social and intellectual potential.

As these scientific findings have been made public, parents, educators, legislators and others who share a concern for the future and well-being of our Nation's children have come to see that we need to pay a lot more attention to what is happening to our children. Since early experience is so critical to future development, we must consider what kind of experiences we are giving our youngest children. We must think more about who cares for them and how. We must teach parents and other caregivers that what they do and how they do it really matters. And, most importantly, we must help our little ones get the very best care possible by educating their parents, by helping the parents find quality care and by making it easier for parents and caregivers to find the information and services they need.

Today, the concept of early childhood intervention, once reserved for families at risk, has been extended to all children and parents as a means of providing the best possible start. When you consider all the learning and development that takes place during the first 3 years of life—cognitive and motor skills, language, learning, emotional control, social interaction—it's no wonder that we want more than ever before to ensure that our children get the care they need to flourish.

Toward this end, both private and public sectors are acting in their own enlightened self-interest by providing their employees with the types of services that DCC and other companies provide. By helping parents find the resources they need to raise a healthy child, organizations like Chesebrough Ponds, American Home Products, American Electric Power, the Coca-Cola Co., the Department of Justice, the Centers for Disease Control, Hughes Electronics, TRW, the Home Depot and other corporations and governmental organizations have reaped measurable benefits. Workplace stress, turnover and absenteeism has decreased. Recruitment, retention and productivity have soared. These organizations have discovered helping employees provide for their loved ones helps the bottom line.

Private and public organizations must continue to work together to ensure that working parents get the resources they need to encourage their children's growth during these critical years. Early intervention that focuses on improving the lives of parents and children will help today's work force be more productive and tomorrow's work force better prepared for the challenges that lie ahead.

In closing, I would like to thank you, Mr. Chairman, and members of this committee; and I would be pleased to answer any questions you may have.

[The prepared statement of Mr. Burki follows:]



Mr. Chairman and Honorable Members of this Subcommittee:

I am Peter Burki, Chief Executive Officer of DCC Inc., a leading global provider of critical workplace services that increase productivity and efficiency, and reduce absenteeism, turnover and stress. I am pleased to have been invited to appear before you today to discuss what we believe to be one of the day's most important issues. The subject of this hearing corresponds with DCC's ongoing efforts to:

1. Provide early childhood intervention services to working parents
2. Raise awareness of the connection between these resources and a child's cognitive, emotional, and physical development; and
3. Demonstrate how children, parents and all organizations can profit from these services.

In the past several years, businesses have had to adjust to a rapidly changing social landscape, which will continue to change as we approach and prepare for the 21<sup>st</sup> century.

Consider the facts:

- 78% percent of working parents live in dual income households, compared to 64% twenty years ago.<sup>i</sup>
- In 1994, 10.3 million preschoolers had mothers who worked. Almost 30% of preschoolers and over 18% of children under one were in organized child care.<sup>ii</sup>
- Today, one out of every five employed parents is single. Since 1970, the number of single female families has increased by 133%, from 5.5 million to 12.8 million. Single male families grew by 213%, from 1.2 million to 3.8 million.<sup>iii</sup>

These trends highlight critical issues that we in the public and private sectors must address in order to promote a healthier, better-prepared, and more productive workforce... for today and the future.

The daily challenges for employees are becoming all too familiar:

- A young mother needs to find affordable child care and transportation so she can make the transition from welfare to work.
- A single dad needs critical early intervention services to address his daughter's developmental delays.

- A young family needs to find the best child care options for their six-month-old son. They need information to help them understand and evaluate those choices and how they impact their child's future development.

To make matters more complicated, employee hours and workloads are increasing, leaving dependent care responsibilities hanging in the balance.

Companies like DCC address these issues by providing the critical tools working parents need to balance work and family and provide their children with a healthy start.

These services offer counseling on issues like identifying high-quality child care, education on topics such as prenatal care, child development, and parenting, and referrals to community and nationwide resources that can help with any work/life need. As a result...

- Expectant parents obtain proper prenatal care to ensure fewer complications at birth.
- New mothers can continue breastfeeding when they return to work, so their infants are healthier and in turn, health care costs are reduced.
- Welfare recipients can successfully transition to work.
- Parents can find quality care for their young children and receive the educational materials they need to understand their child's developmental needs during the critical early years.

These types of services are a necessity, not a luxury, for parents today. Without such services, parents cannot effectively work.

Research continues to provide clear evidence that what happens in the first few years of a child's life does matter, and has an enormous effect on a child's ability to learn, relate to others, and function in the world, for the rest of his or her life.

We have learned that young children are far from passive vessels, that they actively interact with their environments and in fact influence the behavior of those around them. We now know that what young children see, hear, smell, touch, and do shapes not only what they know, but how they learn. For good or for ill, what happens to young children in the first years of life is critical to their—and our—futures.

The human brain achieves 90% of its total growth before the age of three. The brain of a newborn baby has about 100 billion nerve cells—more, actually, than an adult! The difference is, babies' nerve cells aren't wired up yet. They're kind of like a new stereo or computer system without its cables—

won't get much out of it until you connect the wires. In babies, the wiring is connected with experience, interaction, and nurturing.

Neural connections are formed when impulses trigger the release of brain chemicals. Every time a baby's brain is stimulated, by a hug, or a smile, or a song, by the taste of milk, or the smell of flowers, or the feel of a toy, new connections are formed. With repeated experience, those connections are strengthened.

In fact, by the time a baby is three years old, that little brain will have formed about 1,000 trillion connections among its nerve cells. These connections allow the baby to learn and grow, to develop cognitively, socially, emotionally, and physically.

These connections help determine what kind of person that baby will become.

Without appropriate stimulation, a baby's brain won't develop properly. With optimal stimulation, it will develop better than it might have otherwise.

In light of these discoveries, child care becomes more than a holding place for children while their parents are at work. Child care has an enormous impact on the future of our children's physical and emotional well-being, and their social and intellectual potential.

As these scientific findings have been made public, parents, educators, and others who share a concern for the future and well-being of our nation's children, have come to see that we need to pay a lot more attention to what's happening to our children.

Since early experience is so critical to future development, we must consider what kind of experiences we're giving our youngest children. We must think more about who cares for them and how. We must teach parents and other caregivers that what they do and how they do it really matters. And most importantly, we must help our little ones get the very best care possible, by educating their parents, by helping those parents find quality care, and by making it easier for parents to find the information and services they need.

Today, the concept of early childhood intervention, once reserved for families at risk, has been extended to all children and parents as a means of providing the best possible start. When you consider all the learning and development that takes place during the first three years of life: cognitive and

motor skills, language learning, emotional control, social interaction—it's no wonder that we want more than ever before to ensure that our children get the care they need to flourish.

Toward this end, both the public and private sectors are acting in their own enlightened self-interest by providing their employees with the types of services that DCC and other companies provide. By helping parents find the resources they need to raise healthy children, organizations like Chesebrough Ponds, American Home Products, American Electric Power, The Cocoa-Cola Company, The Department of Justice, The Centers for Disease Control, Hughes Electronics, TRW, The Home Depot and other corporations and government organizations, have reaped measurable benefits. Workplace stress, turnover, and absenteeism have decreased. Recruitment, retention, and productivity have soared. These organizations have discovered that helping employees provide for their loved ones, helps the bottom line.

Private and public organizations must continue to work together to ensure that working parents get the resources they need to encourage their children's growth during these critical years. Early intervention that focuses on improving the lives of parents and their children will help make today's workforce more productive... and tomorrow's workforce better prepared for the challenges that lie ahead.

In close, I would like to thank you, Mr. Chairman and Honorable Members of this Subcommittee. I would be pleased to answer any questions you may have.

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<sup>1</sup> Families and Work Institute, *The 1997 National Study of the Changing Workforce*, 1997.

<sup>2</sup> Census Bureau, *Current Population Reports P70-62*, November 1997.

<sup>3</sup> Census Bureau, *Current Population Reports P20-509*, April 1998.

LifeCare® Services  
Overview for  
COMPANY

**DCC/The Dependent Care Connection<sup>®</sup> Inc.**

**This LifeCare® Overview is to be treated by COMPANY in the same manner as it treats its own highly confidential information. COMPANY shall not disclose the existence of any such information to any third party without the prior written consent of DCC.**

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### Introduction and Industry Experience

Founded in 1984, DCC/The Dependent Care Connection Inc., has over thirteen years of experience in providing work/life services to employees nationwide and around the world. DCC offers counseling, education and referral services that can accommodate the diverse needs of any employee population. DCC not only serves employees with dependent care needs, but can also provide assistance to employees without any caregiving responsibilities who may need help locating a support group or balancing their work and personal lives.

DCC has created an organization of exceptional quality and strength, offering its clients innovation, expertise, personalization, choice and value. Historically, DCC has been a leader in proactively responding to emerging work/life issues. Proof of this lies in our:

- Unique team of experienced and caring professionals, *available to clients 24 hours a day, 365 days per year*
- Pioneering of online, real-time work/life solutions with LifeCare Net 3.0
- National dependent care database of over 2.5 million providers—America's largest
- Development of a "single-source" case management approach
- Exceptional capital allocation for research, development and technology

DCC's LifeCare services benefit both employers and employees by:

- Reducing stress
- Decreasing work absenteeism and interruptions
- Minimizing employee turnover
- Creating a more efficient and effective workforce
- Boosting employee morale
- Cultivating recruitment
- Increasing productivity

The major components of the DCC LifeCare counseling and referral service are:

- Child care counseling, education and referral services
- Adult care counseling, education and referral services
- Specialty counseling, education and referral services
- Customized management reporting and ROI analyses
- Quality assurance—guaranteed customer service and satisfaction
- Promotional and account management services
- EAP and work/life benefits integration

LifeCare® Net™ 2.0 was launched in fall 1997—the industry's first online, real-time work/life tool, connecting its users with providers and services in any community, both nationally and internationally. LifeCare Net offers virtually the same overall benefits to employees and employers as our traditional telephone service.

DCC has never lost a corporate client to a competing dependent care counseling and referral service due to poor performance. We back our ability to deliver the highest quality service by offering an unprecedented quality assurance guarantee. DCC currently provides LifeCare services to over 300 employers in both the public and private sectors, covering more than two million lives.

### DCC Single Source Model

DCC pioneered the single source, complete case management model which assesses and handles each calling employee's specific needs and concerns in an individualized and compassionate manner. The DCC single source approach—no subcontractors are used—eliminates the frustrations and inconsistencies of the calling employee having to rely on several different counseling and referral groups to complete his or her case. DCC's centralized model delivers a more consistent, streamlined and reliable service in a faster turnaround time.

With DCC, calling employees work with only one counselor throughout the entire case process, including all case-specific research. A single toll-free call to DCC connects the COMPANY employee to a counselor—trained and employed by DCC—who immediately conducts a comprehensive needs assessment for the employee's specific case and offers the appropriate counseling. As the case progresses, the employee works exclusively with his/her designated counselor to ensure quality, consistency and familiarity.

DCC's single source approach provides the following advantages:

- Complete case management
- Continuity and consistency
- Total quality assurance
- Customized, comprehensive management reporting
- Cost effectiveness and value
- Innovative technology
- DCC's highly experienced, trained and compassionate staff

### Counselor Qualifications

All DCC counselors have a minimum of a bachelor's degree with many having or pursuing their master's degrees. All DCC counselors have educational and professional expertise in the areas they provide counseling. DCC counselors have backgrounds in:

- |                             |                          |
|-----------------------------|--------------------------|
| • School-age programs       | • Nursing                |
| • Special education         | • Rehabilitative therapy |
| • Higher education          | • Social work            |
| • Early childhood education | • Human services         |
| • Elementary education      | • Counseling             |
| • Child care                | • Adult care             |
| • Adoption                  | • Gerontology            |

DCC has an extensive and comprehensive training program for all new counselors. The training program covers all aspects of the DCC program and lasts approximately six to ten weeks. DCC also maintains a continuing education fund to expand and enhance our counselors' educational and professional experience. In addition, all counselors and other personnel are required to participate in ongoing in-service training and awareness programs.

### Case Management Process

All of DCC's counselors and LifeCare services are available to client employees 24 hours a day, 365 days a year, through one toll-free number. DCC also has a second toll-free number for the hearing impaired. With DCC's extensive single-source, in-house database, counselors can access service providers specific to a client's needs at anytime.

COMPANY employees go through these steps with DCC counselors during the case process:

<i>Day</i>	<i>Step</i>	<i>Description of Activity</i>
Day 1	Step 1	Toll-free telephone call or contact via LifeCare® Net <sup>sm</sup>
	Step 2	LifeCare needs assessment
	Step 3	LifeCare education and counseling
Days 2-5	Step 4	Referral research
	Step 5	Referrals are phoned, faxed or e-mailed to employee
	Step 6	Referrals, educational materials and quality assurance questionnaire are mailed to employee
Days 6-24	Step 7	DCC counselor follow-up (employee designates timetable)
Days 31 +	Step 8	Compilation of case information for COMPANY management reporting

Each step outlined in the above chart is explained below.

#### **Step One:**

A COMPANY employee makes a toll-free call to a DCC triage counselor. Based on the calling employee's needs, he or she is immediately forwarded to a DCC LifeCare counselor who will work with the employee throughout the entire case process (this includes performing case-specific research). COMPANY employees may also e-mail their caregiving requests from the Internet or LifeCare Net.

#### **Step Two:**

The LifeCare counselor then conducts an intake and needs assessment with the calling employee, which lasts an average of 25 to 30 minutes. During this time, the DCC counselor assesses the employee's LifeCare needs. A dialog of questions and answers, informative descriptions and definitions helps the employee to determine the most appropriate care type.

#### **Step Three:**

At this point, the DCC counselor advises the employee on dependent care selection and evaluation. The counselor is available to answer questions and address all concerns.

#### **Step Four:**

The DCC counselor uses our comprehensive database of over 2.5 million providers to identify appropriate dependent care in the employee's geographic area. The counselor calls each licensed provider to find a match for the employee's needs. When the counselor has found the most appropriate care providers for the case, he or she generates referrals which detail the program and all case-specific information.

**A note on referrals**

DCC only refers providers who comply with their states' respective licensing and registration requirements. All DCC referrals are accurate and up-to-date, and our counselors pre-screen and pre-qualify each and every one by phone for every client. At a client's request, DCC will also provide referrals to Internet Web sites that would be helpful to his or her care needs. DCC monitors all referred sites for quality and appropriateness of information.

**Step Five:**

After pre-screening and pre-qualifying local providers, the DCC counselor calls the employee with the information on those providers who meet the employee's specific LifeCare needs. Counselors will also fax referrals and send additional information directly from the provider at the employee's request.

**Step Six:**

The same day that we relay the referrals by phone, we also send hard copies of our referrals via First Class mail. Each referral packet consists of:

- A personal letter from the DCC counselor describing the enclosures
- *At least* six referrals whenever possible
- Printed educational materials relating to the type of care requested
- A quality assurance questionnaire which asks the employee to rate DCC's services

The COMPANY employee will receive a customized information and referral package within **three to five** business days after his/her initial call to DCC. In emergency situations, an employee can receive his/her packet on the next business day.

**Step Seven:**

The DCC counselor follows-up with the employee at a pre-arranged date and time to check on his/her progress and to offer any additional assistance. COMPANY employees are encouraged to call DCC counselors as often as needed throughout the entire case process. (The average number of interactions between a DCC counselor and calling employee is six.)

**Step Eight:**

COMPANY management will receive quarterly utilization reports that track the program usage for the reporting period. These reports include a tabulation of all quality assurance questionnaires returned by COMPANY employees during the reporting period and copies of the actual questionnaires coded to ensure confidentiality.

### LifeCare Services

DCC's comprehensive and extensive LifeCare services are designed to educate employees and their families on any number of dependent care and work/life issues, as well as locate the resources and providers to meet their specific needs. DCC strives to create an interactive relationship with employee clients when they access our LifeCare services throughout their lives.

DCC's LifeCare services include:

- Prenatal
- Adoption
- Child Care
- Parenting
- Summer Care
- ShareCare™
- Special Needs
- At-Risk/High-Risk Adolescents
- Academic Services
- Emergency/Temporary Care
- Grandparents As Parents
- Adult Care
- Disaster Relief
- Financial Services
- Legal Services
- Health and Wellness
- Personal Services
  - Balancing Work/Life
  - Pet Care
  - Convenience Services

Each of these services are described in detail on the following pages.

#### *Prenatal*

To help expectant mothers receive the proper care and nutrition for themselves and their unborn child, DCC counselors can provide information and referrals on:

- Birthing method alternatives
- Parent education classes
- Nutrition, exercise and diet
- Child care options
- Support groups
- Child care pre-planning

#### *Prenatal Kit*

A recipient of *Human Resource Executive* magazine's 1995 Product of the Year award, DCC's unique, enhanced prenatal program educates expectant parents on proper prenatal and child care. DCC's combined educational information and products are designed to help reduce the number of premature births and other complications during pregnancy, motivate expectant parents to proactively and responsibly manage prenatal and postnatal care and minimize employers' health care costs.

The LifeCare prenatal kit contains the following:

**Educational Resources**

- "What to Expect..." book series by Workman Publishing
  - What to Expect when You're Expecting*
  - What to Expect the First Year*
  - What to Expect the Toddler Years*
- "What to Expect..." Pregnancy Organizer
- *Lamaze Parent Magazine*
- DCC LifeCare Digests
  - Birthing Method Options
  - Breast-Feeding and Formula Feeding
  - Child Care Options
- Nursery Safety information
- Fire Safety information
- SIDS educational materials
- CPR/choking poster

**Products**

- Diaper bag
- Bib screened w/DCC icon and logo
- One-piece undergarment screened w/DCC icon and logo
- Magnet with newborn's immunization schedule

**Adoption**

DCC's specially-trained adoption counselors offer prospective parents counseling, education and support and can walk them through the legal, financial and customary guidelines of domestic, international, public and private adoptions. DCC counselors furnish clients with educational materials which cover a variety of adoption topics and up-to-the-minute issues. DCC directly links clients to the appropriate resources and referrals, such as:

- |                                   |                             |
|-----------------------------------|-----------------------------|
| ● Adoption medical issues         | ● Public adoption           |
| ● State adoption specialists      | ● Private adoption          |
| ● Adoption agency overviews       | ● International adoption    |
| ● Adoption support groups         | ● Post-adoption information |
| ● National adoption organizations | ● Issues in adoption        |

### Child Care

DCC offers an extensive program to help working parents find care for their children. DCC child care counselors explain the range of options available to parents and can locate the following programs:

- Child care centers
- Family child care
- In-home care
- Baby-sitting agencies and options
- Nanny agencies and options
- Au Pair agencies and options
- Preschools/nursery schools
- Before and after-school programs
- Summer programs
- Emergency/temporary care
- Special needs programs

### Parenting

DCC can provide clients with resources that address a wide range of parenting issues, including:

- Child development
- Parenting education classes
- Sibling rivalry
- Separation anxiety
- Child safety
- Discipline
- Raising adolescents
- Parental guilt and jealousy

### Summer Care

Summertime can pose a difficult problem for working parents whose care arrangements only apply during the school year. DCC counselors can help parents find the following types of programs:

- Sleep-away options
- Daytime options
- Traditional programs
- Specialized programs
- Sports
- Academic
- Computer literacy
- Travel, outdoor and nature
- Fine arts

### ShareCare®

Flexible scheduling and telecommuting are a part of today's workplace. However, finding part-time care can be a challenge. ShareCare matches parents who live near each other and have similar child care needs. By sharing a provider, many care options become affordable and feasible for parents. ShareCare offers solutions for parents who need:

- In-home care
- Baby-sitters
- Child care centers
- Emergency/temporary care
- Family child care providers
- Before and after-school care

### Special Needs

DCC counselors can provide a full-range of assistance for children with physical, cognitive and emotional impairments or conditions, as well as for those who have exceptional abilities.

Counselors can also provide information and referrals on services for other family members.

Special needs services can pertain to and include:

- Allergies
- Asthma
- Cerebral Palsy
- Diabetes
- Seizure disorders
- Traumatic brain injury
- Blind/visual impairments
- Physical/orthopedic impairments
- Medically fragile/high-risk infants
- Injuries
- Common childhood illnesses
- Terminally/chronically ill
- Genetic disorders
- Down Syndrome
- Obesity
- Multi-handicapped
- Developmental delays
- Deaf/hearing impairments
- Autism
- Attention Deficit Disorder (ADD/ADHD)
- Mentally challenged
- Learning disabilities
- Dyslexia
- Speech/language impairments
- English as a Second Language (ESL)
- Assistive devices
- Mentally ill
- Social/emotional disturbances
- Behavioral difficulties
- Physician/specialist referral lines
- Parenting education classes
- Support and advocacy
- Laws and legislation
- Funding and financial guidance
- Child, respite and hospice care
- Early intervention services
- Day treatment centers
- Therapeutic programs
- Recreational, residential and educational programs
- Gifted and talented programs
- Testing/assessment information

### **At-Risk/High-Risk Adolescents**

Raising adolescents today can be challenging and overwhelming. Due to many factors, including peer pressure, low self-esteem, underachievement, runaway tendencies, violence and behavioral issues, depression and suicidal tendencies, substance abuse and gangs, many adolescents and their families need help. DCC counselors can provide guidance and locate the following supportive options to improve their well-being and the quality of their lives:

- Transitional living programs
- Peer/group support groups
- Family support groups
- Residential placements
- Day and residential treatment facilities
- Positive after-school alternatives
- Community volunteer programs
- Mentoring programs
- Alternative schools
- Boarding schools
- Independent schools
- Military schools
- EAP referrals
- Peer counseling
- Group counseling
- Family counseling
- Recreational day programs
- Parenting classes
- Positive social clubs/activities
- Summer opportunities
- Awareness programs
- Clinical services
- Out-patient services
- In-patient services
- Social services

### **Academic Services**

DCC can provide COMPANY employees with information and referrals on all types of schools and learning programs for children and adults:

#### ***Primary and Secondary Programs***

Whether clients are relocating to a new community or looking for new educational opportunities for their school-aged children, DCC counselors can provide information on a variety of academic programs from kindergarten to high school:

- Kindergarten programs
- Before- and after-school programs
- Enrichment programs
- Tutoring programs
- Day and residential programs
- Public schools
- Parochial schools
- Independent schools
- Montessori schools
- Magnet schools
- Alternative schools
- Vocational schools
- Technical schools
- Military schools
- School district profiles

### *Colleges and Universities*

Finding the right college can be a time-consuming process. DCC college counselors can help both traditional and nontraditional students find the programs and financing that meet their needs. DCC provides clients with information on:

- Two-year and four-year undergraduate programs
- Graduate programs
- Vocational programs
- Specific degree programs
- Programs for transfer students
- Programs for nontraditional students
- Distance learning/correspondence courses
- Continuing education programs
- Athletic programs
- Academic planning strategies
- Admissions testing and procedures
- Testing preparation courses
- Financial aid options and strategies
- Scholarships

### *Emergency/Temporary Care—Child and Adult Options*

When a dependent becomes ill or a caregiver is suddenly unavailable, many employees must stay home to care for their loved ones. DCC can alleviate these kinds of work absences by helping clients pre-plan for an emergency or by accommodating a last-minute situation. DCC services include:

- Home health care agencies
- Community resources
- Nanny and baby-sitting agencies
- Discharge planning
- Sick and drop-in care providers

### *Access Backup Care (ABC)<sup>SM</sup> Program*

The ABC program is for employers who choose to subsidize backup care for their employees. Backup care subsidies keep employees from having to use sick/vacation days to stay home to care for loved ones, or from missing work because the cost of care exceeds their compensation.

DCC's ABC program seamlessly administers an employer's subsidy program and provides valuable education and counseling to employees. DCC's ABC packet contains everything an employee will need:

- An introductory letter explaining the program
- Backup Care Registration Form
- Backup Care Reimbursement Form
- Information on how to contact a DCC counselor
- Emergency Contact Information—A worksheet for documenting critical information for backup caregivers.
- Medical Release Form—A form employees can use to give backup caregivers permission to administer, arrange and/or call for emergency care in their absence.
- *A LifeCare® Guide To Backup Child Care Options*
- *A LifeCare® Guide To Child Care Options*
- *A LifeCare® Guide To Visiting and Interviewing Potential Providers*
- *A LifeCare® Digest On Helping Children Adjust To New Caregivers*
- *A LifeCare® Digest On Backup Care Options For Adult Loved Ones*

Using the ABC program is easy. Employees simply follow four easy steps:

1. Call a DCC counselor at 800-873-4636 to request an ABC kit and have a counselor assess their situation and refer qualified backup care providers who meet their specific needs. Complete the Backup Care Registration Form (found in their ABC kit) and send it to DCC to pre-qualify for the ABC subsidy from their employer.
2. Evaluate potential providers by using their ABC kit as a guide. (The ABC Kit contains valuable information on types of providers—as well as interviewing techniques to help them properly evaluate candidates.)
3. Select providers and post their names and telephone numbers in a convenient location so they can access them when the need for backup care arises.
4. When backup care is used, employees simply complete their Backup Reimbursement Form (including provider's signature) and return it to DCC for reimbursement according to the specifics of their employer's program.

DCC account managers can help COMPANY customize the ABC program according to the dollar amount, hours and/or days COMPANY subsidizes for backup care.

### Grandparents As Parents

DCC's Grandparents As Parents program provides grandparents with the information and resources to help them take on the challenges of parenting a second time around. The program provides education and referrals on:

- Establishing or finding support groups
- Child care
- School issues
- The child welfare system
- The Department of Social Services
- Legislation
- Legal issues
- Court-appointed special advocates
- Financial assistance/Medicaid
- Health and nutrition

### Adult Care

Today it is not uncommon for working people to care for their parents or elderly loved ones.

DCC can assist with:

- Nursing homes
- Assisted living facilities
- Continuing care retirement communities
- Home health care
- Long distance caregiving
- Emergency care
- Respite care
- Hospice
- Discharge planning
- Adult care assessments
- Independent housing
- Senior centers
- Residential care
- Adult day care
- Transportation services
- Home-delivered meal programs
- Medicare and Medicaid
- Long-term care insurance
- Supplemental insurance
- Financial issues
- Legal issues
- Volunteer programs
- Support groups

***Adult Care Kit***

As a valuable supplement to DCC's adult care counseling, education and referral services, DCC can provide COMPANY employees with an adult care kit. This kit of educational materials and products, with instruction sheet, is tailored to benefit both the caregiver and care recipient by including:

**Educational Resources**

- *How To Care for Aging Parents* book by Workman Publishing
- *DCC Eldercare Education Series*
- *DCC's LifeCare Digest On Home Safety*
- Health Insurance for People with Medicare
- Social Security Information
- Disaster Preparedness
- Emergency Preparedness Checklist
- *Using Your Medicines Wisely*

**Products**

- Daily record keeper
- Wipe-off emergency board
- Bookmark magnifier
- Flashlight
- Sensor night light
- Pill organizer
- Jar/bottle gripper

### Disaster Relief

When natural disasters occur (earthquakes, tornadoes, fires, floods, etc.), DCC counselors can help employees put their lives back together by locating the following assistance:

- Temporary care
- Safety inspectors
- Emergency shelters
- Home visits
- Food and clothing assistance
- Home-delivered meals
- Counseling services
- Alternate housing
- Support groups
- Outreach programs
- FEMA assistance
- Hotline numbers

### Financial Services

DCC can provide employees with extensive personal and financial planning services that are tailored to their income levels, needs and goals. Trained specialists gear educational materials, referrals and seminars to the options and strategies that employees wish to pursue. While choosing a personal and financial plan is ultimately the employee's responsibility, DCC's financial planning services can help with the following:

- Financial planners
- Budgeting
- Investing
- College savings
- Debt consolidation
- Credit issues
- Insurance
- Buying vs. leasing a car
- Saving and investing
- Estate planning
- Mortgage and home
- Retirement planning
- Tax services
- Financial institutions

DCC can additionally offer employees a wealth of financial information and services online via its private Web site. DCC's LifeCare Net houses financial educational digests and accompanying calculators on college savings, estate planning, insurance, home mortgages, retirement planning, savings and investing, and taxes.

### Legal Services

For clients in need of legal advice or services, DCC can provide local referrals to specialized attorneys. DCC offers COMPANY employees a nationwide network of attorneys who average 15 years of experience. Attorneys provide expertise and assistance in any number of areas, including:

- Accident and health insurance law
- Automobile accident law
- Bankruptcy/debtor-creditor relations
- Business law
- Civil rights and discrimination
- Collection law
- Commercial law
- Condominium law
- Consumer claims and protection
- Corporate law
- Criminal law
- Disability law
- Divorce and family law
- Education law
- Elder law
- Immigration and naturalization
- International law
- Investment fraud
- Landlord and tenant law
- Litigation
- Malpractice
- Mortgage law
- Negligence law
- Personal injury law
- Products liability law
- Real estate law
- Taxation law
- Wills, estate planning and probate

Clients are entitled to free telephone advice and/or office consultations by a local attorney on any personal legal matter that does not pertain to employment or business-related issues. In addition, they can receive written fee agreements for services beyond the initial consultations.

### *Discount Health Club Memberships*

DCC has teamed up with a network of 3,000 fitness clubs in all 50 states and over 60 countries, to offer special membership rates and many other fitness benefits to DCC clients. DCC counselors can provide detailed referral information on fitness clubs that meet any client's personal, location and budgetary requirements. Affiliated clubs meet the highest industry standards in the areas of health, safety and ethics as set by the American College of Sports Medicine. The network has a portable benefit, giving members reciprocity at clubs when traveling.

### Personal Services

Even employees without caregiving responsibilities need help managing their work and personal lives. DCC has not forgotten these clients and provides them with education and resources on a variety of personal issues, including:

**Health and Wellness**

Physical and mental well-being plays an integral role in successfully balancing work, family and personal obligations. DCC can provide education and information on:

- Physician referrals
- Dentist referrals
- Health clubs
- Holistic services
- Complementary therapy
- Diet and nutrition
- Fitness
- Health food stores

**Balancing Work/Life**

- Stress management
- Overtime and business travel
- Time management
- Organizational strategies
- Easing commuting stress
- Career development
- Planning a leave and return
- Relocation
- Shift/schedule changes

**Pet Care**

- Veterinarians
- Insurance
- Pet sitting resources
- Obedience training
- Boarding and grooming
- Pet supplies
- Breeders
- Membership associations
- Pet bereavement services
- Animal welfare

**Convenience Services**

- Indoor/outdoor home services
- Chore services
- Transportation/travel services
- Automobile services
- Moving/relocation services
- Entertainment services
- Restaurants/food services
- Security specialists
- Emergency services

**LifeCare Educational Resources**

DCC believes educated consumers make better personal choices and caregiving decisions for themselves and their families. DCC provides a wide range of educational materials which employees will find useful in evaluating their work/life options, making LifeCare decisions and monitoring their caregiver's performance. Online, COMPANY employees can peruse LifeCare Net's library of over 700 educational resources; hard copies are also available and may be

### Welfare To Work Initiatives

DCC's LifeCare services play a significant role in the welfare to work effort by helping people on public assistance obtain jobs in the private sector. According to welfare to work organizers, "Lack of child care and transportation are two of the challenges making it tough for recipients to stay in the job market." Recognizing these needs, DCC responds to those specific obstacles and helps employees balance work and personal responsibilities through our combination of Welfare to Work and LifeCare services.

DCC can work in conjunction with employers, government agencies and job training specialists—or with an employee directly—to help locate convenient and affordable transportation services and child care providers in an employee's area. DCC's advanced technology, customized mapping software and database of over 2.5 million providers, enable counselors to provide a customized map detailing convenient transportation routes between an employee's home and office. Counselors can also refer an employee to prescreened child care providers on or near the employee's transportation route, complete with door-to-door directions.

A DCC counselor responds to the specific needs of an employee by referring only those providers who meet the employee's budgetary, location, care, and other personal requirements. Whenever possible, counselors provide information on subsidized or other programs offering discounts, sliding fees, sibling packages and various forms of financial assistance. DCC also offers educational materials on child care options as well as licensing and regulation requirements in the state the employee lives. After sending referrals, maps, directions and educational materials, the counselor can follow up by phone call to address any questions and concerns, and to encourage the employee to call as often as needed.

DCC's Welfare to Work initiatives are just another way DCC can help employees balance work/life responsibilities—and increase overall productivity at your company.

### Quality Assurance Program

DCC has an unprecedented and comprehensive quality assurance program which consists of the following five components:

#### *I. Counseling Follow-up and Feedback*

DCC counselors call COMPANY employees on a continuing basis throughout the counseling and referral process to check and monitor their progress. If further assistance with educational information or additional referrals are required, the DCC counselor responds immediately.

#### *II. Evaluating Counselor Performance*

DCC counselors are evaluated both internally by DCC management and externally by clients. Quality assurance questionnaires are sent to all clients with their case information and referrals. The questionnaire asks clients to rate the overall DCC service, their counselor and the DCC-referred providers, and to provide additional comments. Internal counselor evaluations consist of an annual performance appraisal in which performance and salary increase go hand in hand.

On a weekly basis, counselors' cases are evaluated by department managers to ensure that the needs of the clients are being met. The research process, quality and number of referrals, personal notes and internal procedures are monitored for compliance.

On a monthly basis, counselors undergo evaluations where their intake and needs assessments with clients are monitored. Intakes must combine professionalism and attention to detail along with strong empathetic skills. Managers also evaluate counselors qualifying providers to judge their ability to professionally screen providers to meet clients' specific needs.

On a quarterly basis, professionals from various fields perform in-servicing for our counselors to keep them current with the trends and knowledgeable in their discipline. Recent examples include prenatal and Medicare seminars, handling grief and loss and adult care legal issues.

### ***III. Provider Reviews***

DCC will only refer COMPANY employees to providers who comply with their respective state regulations. If a complaint is lodged against a provider, our counseling staff will refer the COMPANY employee to the appropriate governmental authority. DCC will also personally investigate the complaint. DCC, at its discretion, reserves the right to suspend or terminate providers from our database. If we receive a complaint, DCC will suspend referrals to the provider until a thorough investigation by the appropriate governmental authority and a satisfactory resolution of the complaint warrants reinstatement to referral status. DCC does not monitor providers as a licensing or registering authority.

### ***IV. Client Review***

Your DCC account manager will meet with you semi-annually or quarterly to review COMPANY utilization and the results of the quality assurance questionnaires. Any issues or concerns that have been raised by your staff and employees will be reviewed during this meeting and plans for future quality reviews will be established. DCC utilizes the feedback from our quality assurance program in the following ways:

- To continually monitor and improve DCC's counseling, education and referral services
- To measure, review, and evaluate the effectiveness of DCC counselors
- To measure client employees' overall satisfaction with DCC services
- To measure and monitor the overall quality of the DCC-referred service providers

DCC's quality assurance department reviews every returned client quality assurance questionnaire. In the event of a problem or grievance, although rare, the quality assurance department instantly addresses the situation with the appropriate department manager. The department manager and the case counselor then immediately review the entire case. Every effort is made to rectify the situation and to prevent its future occurrence.

### ***V. Quality Assurance Guarantee***

To back its quality claims, DCC introduced quality assurance guarantees which are unparalleled in the industry. DCC guarantees in writing that the average rating for its "overall service" will be at least 90 percent "good," "very good" or "excellent." If it is not, DCC will discount the total annual fees by one percent for each percentage point below 90. For example, if 85 percent of the returned quality assurance questionnaires rated DCC services "excellent" to "good," DCC would refund COMPANY five percent (90-85=5) of its total annual fee.

DCC links its quality assurance guarantee directly to the results of clients' returned questionnaires, now averaging a 25 percent return rate. DCC has a quality assurance team dedicated to maximizing return rates by following up with clients who have not responded to the initial questionnaire mailing.

### **LifeCare® Net™**

LifeCare®Net™ is the powerful online version of DCC's LifeCare services. LifeCare Net uses Internet technology to deliver services to employees struggling to balance their work and personal lives. As with our traditional counselor services, LifeCare Net is designed to educate employees and their families on a multitude of dependent care and work/life issues, and to locate the resources and providers to meet their specific needs.

Used as a stand-alone or in conjunction with DCC's comprehensive counseling, education and referral services, LifeCare Net offers the most innovative work/life benefits package available today.

With LifeCare Net, COMPANY can:

- Provide an affordable work/life benefit to all employees
- Add value to its work/life initiatives
- Eliminate productivity barriers
- Increase utilization of all COMPANY benefits with total benefits integration online
- Enjoy access to DCC's LifeCare services and work/life information 24 hours a day, seven days a week—all from the convenience of home or office.

### **Implementing and Accessing LifeCare Net**

DCC's team of LifeCare Net consultants work closely with COMPANY human resources and information systems staff to smoothly implement and customize LifeCare Net to COMPANY specifications and goals. DCC handles all administrative and technical matters surrounding implementation, and provides the necessary promotional materials to herald LifeCare Net's launch within the company. COMPANY human resources staff will be able to easily customize the "Forums" and "My Benefits" areas of LifeCare Net; the latter may be changed at any time as benefits are added, removed or changed.

COMPANY employees will have seamless access to LifeCare Net via their World Wide Web browsers, from either their home or office. Accessing LifeCare Net outside the office is easy with a DCC-assigned username and password. LifeCare Net's URL is <http://www.life-care.net>.

### **Welcome Page**

Each time a user logs on to LifeCare Net, a Welcome Page appears with the user's name, the date, and targeted information and links. COMPANY can also deliver its own work/life news and updates to its employees via LifeCare Net. From the Welcome Page, users can access all of LifeCare Net's features: select a community, locate resources, use the search feature, or provide feedback regarding LifeCare Net to DCC.

Employees using LifeCare Net can personalize the service by completing a *confidential and optional* online profile. By entering information about themselves and their loved ones who may require care, LifeCare Net can deliver timely information and news that address their specific situation. For example, the parent of a newborn baby would receive different news than the caregiver of a parent with Alzheimer's Disease. Because LifeCare Net automatically tracks the development of the user's child(ren), users do not have to update their profiles unless there are family changes, such as a new addition!

### ***LifeCare Net Communities***

LifeCare Net is comprised of eleven communities. As this service continues to expand, DCC will add new communities to LifeCare Net. COMPANY will receive each new community upgrade automatically and at no extra charge.

The current LifeCare Communities are:

- Prenatal
- Adoption
- Child Care
- Schools
- Special Needs
- Colleges/Universities
- Adult Care
- Financial Services
- Health and Wellness
- Parenting
- Balancing Work/Life

Within each community, users can view or order educational materials, locate providers, obtain referrals, participate in a special interest forum, or view COMPANY benefits that relate to a specific community.

### **LifeCare Net Community Features**

#### ***LifeCare Net Library***

LifeCare Net's online Library provides instant access to 4,000 pages of educational content in over 700 articles on a wide range of LifeCare topics. User-friendly search engines make it easy to find information quickly and efficiently. All titles are organized by category, making it simple to find exactly the subject you'd like to read about. At the end of each article, four additional resources related to the topic at-hand are suggested: where applicable, an electronic link will instantly take you to the resource.

#### ***Ask the Experts***

Have a question? Our LifeCare experts have an answer:

- "What are the licensing requirements for child care centers in my state?"
- "How do I get my child to stop biting?"
- "What do I need to know when looking for a nursing home for my mom?"
- "How do I know if my child has Attention Deficit Disorder?"

Users of LifeCare Net can pose these and any other caregiving questions to professional DCC LifeCare counselors, who will respond quickly and privately via e-mail. Users may also browse archives of answers to frequently-asked LifeCare questions.

#### ***LifeCare Forums***

COMPANY employees will enjoy access to forums addressing a wide range of LifeCare issues. Forums provide a true sense of "community" as LifeCare Net subscribers nationwide and worldwide interact with each other about the work/life topics most important to them.

#### ***Message Boards***

The forum has message boards in which users can post or peruse messages with tips, advice, support, and experiences.

LifeCare Net offers clients the flexibility to customize message boards:

- Create unlimited message boards on topics appropriate for COMPANY
- Develop private message boards exclusive to employees and/or public message boards linking users to other LifeCare Net clients
- Link directly to pre-existing message boards on COMPANY intranet

#### ***Chat Rooms***

LifeCare Net users can also engage in real-time chat sessions within each LifeCare community. Noted experts will periodically be invited to host a real-time discussion on a particular topic within a community.

#### ***My Benefits***

LifeCare Net integrates your company's complete benefits information online. While visiting a LifeCare Net community, employees can click on "My Benefits" to quickly access information about COMPANY programs and policies that pertain to that community: insurance, Employee Assistance Programs, tuition reimbursement, etc. This feature allows employees to understand the range of benefits available for their immediate needs, and provides them with the contact names and numbers of benefits administrators to facilitate program use and awareness. For example, the Prenatal Community's "My Benefits" area might outline information on your company's family leave policies, New Baby Gift program, seminars, and hospital and other health-related coverage.

COMPANY benefits administrator(s) will have special access rights to LifeCare Net, enabling them to add, delete or edit benefits at any time.

#### ***Events***

LifeCare Net can save employees valuable time by providing the key information they need when encountering a significant life event. LifeCare Net features executive summaries on life's major milestones: birth, beginning school, graduation, marriage, retirement, etc. Links take users directly to applicable educational materials. This section of LifeCare Net also encourages employees to explore "My Benefits" to find COMPANY benefits relevant to the event.

### ***Locate Resources***

COMPANY employees can use LifeCare Net to request referrals for providers in the areas of prenatal care, child care, adoption, colleges and universities, special needs, and adult care. Options include conducting a quick search of providers, locating associations and networks in a subject area, ordering educational resources germane to the employee's LifeCare needs, specifying a provider for DCC to research, or submitting information for a complete assessment by a DCC counselor.

With access to DCC's provider database, the largest and most comprehensive of its kind, LifeCare Net users can:

- Access over 2.5 million service and care providers.
- Obtain real-time listings of local dependent care providers via the Internet, or receive pre-qualified, pre-screened referrals via first-class mail.
- Retrieve tailored directions from the user's home to service providers.

DCC's innovative mapping software allows LifeCare Net users to access detailed computerized maps of any local community; our database of nearly 2.5 million providers is overlaid to this mapping software. This cutting-edge technology matches each LifeCare Net client with the most appropriate care providers in his or her specified location, presents a geographic overview of providers in a particular area, and gives turn-by-turn directions from the employee's home or office to the provider's location.

### ***LifeCare Net Quality Assurance***

DCC monitors the quality of the LifeCare Net service via a voluntary system called "Feedback." Employees may use the Feedback feature to send DCC quick comments about the LifeCare Net service. There are also two online quality assurance surveys: a short version (seven questions) and a long version (21 questions). Each comment and survey is reviewed by our quality assurance team, and client feedback will be taken into consideration when designing future versions of LifeCare Net.

### ***LifeCare Net Is Easy To Use!***

LifeCare Net offers a search feature as well as an area for feedback and comments, and a complete online help function makes navigating the site trouble-free. From book-marking to printing, users have total online support with the click of a button. And DCC's LifeCare Net help desk is always available toll-free at 888-604-9565 or via e-mail ([lcn\\_help@life-care.net](mailto:lcn_help@life-care.net)).

### ***Technical Support***

LifeCare Net technical support is available to subscribers at all times. In addition to an online quick help feature, users can call our toll-free number for technical support 24 hours a day at (888) 604-9565 or contact support staff via e-mail at [lcn\\_help@life-care.net](mailto:lcn_help@life-care.net).

## Communication and Promotional Services

DCC's communication goal is to continually promote its services so that COMPANY employees remain aware of their DCC benefits and know how to contact us when necessary. By following our recommendations, COMPANY will effectively keep employees abreast of our specific programs and maintain and increase utilization. DCC's promotional strategy encompasses the following mediums:

### *Direct Mail*

We recommend that COMPANY management send a letter, along with a four-color generic or company-customized DCC brochure and wallet card, to employees and their families introducing the DCC service. Even after implementation of the DCC service, this formality should be performed for all new COMPANY employees.

### *On-Site Introductory Seminars—Live Or Videotaped*

To help COMPANY employees understand, appreciate and use DCC's services to the full extent, DCC will provide at all locations live or videotaped introductory seminars which cover:

- Purpose and benefits of the services
- Nature and scope of available services and benefits
- Program confidentiality
- How to access the program and eligibility requirements
- What COMPANY employees can expect from the DCC service

Live introductory seminars are generally 45-60 minutes long and are followed by a question-and-answer session. The videotaped seminar runs approximately 25 minutes long and can be followed by a teleconferenced question-and-answer session with a DCC representative. Employees' family members are also welcome to attend.

### *On-Site Communications—Posters, Flyers and Videotapes*

In addition to direct mail and implementation seminar initiatives, DCC also provides posters, flyers and videotapes for COMPANY management to distribute throughout their work sites.

### *DCC's Ongoing Strategy For Communicating Our LifeCare Services*

Following implementation, it is necessary to provide ongoing promotions in order to effectively communicate to COMPANY employees the nature and timely aspects of DCC's services. DCC provides all clients with a monthly promotional schedule consisting of program flyers. According to COMPANY's preferences, DCC can also e-mail teasers to employees, encouraging use of LifeCare Net to explore monthly themes.

The monthly promotions include the following, but can be customized to meet the specific creative and program needs and timetable of COMPANY:

- (JAN) Prenatal Services
- (FEB) Tutoring Services
- (MAR) Summer Camp Services
- (APR) Child Care Services
- (MAY) School Services
- (JUN) Special Needs Services
- (JUL) Back to School Services
- (AUG) Adult Care Services
- (SEP) Emergency Child Care Services
- (SEP) Colleges and Universities
- (OCT) Preparing for Future/Adult Care
- (NOV) Adoption Services
- (DEC) In-Home Adult Care Services

### ***Internet Initiatives***

For added ease and convenience, DCC promotes and offers its services online via our public Internet address at <http://www.dcclifecare.com>. Clients may request a call from a DCC counselor and order a variety of educational materials from the public site.

DCC's online forums house counselors' monthly tips on all of our LifeCare services. Obtain valuable information, hints and help on many dependent care and work/life topics. Our forums also allow clients and users to network with one another to share caregiving experiences and advice. Clients and users can post messages to groups at-large or individuals to resolve their LifeCare issues and concerns.

Clients may also check out DCC's library which contains position papers, press releases and research studies on work/life issues and trends. Other library contents include a consultants' directory and a return-on-investment calculator, enabling users to see first-hand the cost savings that the DCC service can bring to their organizations.

### **EAP and Work/Life Benefits Integration**

#### ***EAP Coordination***

DCC has extensive experience in working with client EAPs. Prior to implementation, DCC will meet/discuss with COMPANY management and/or EAP administrators to integrate and coordinate the services provided by both DCC and the EAP. These discussions outline the clearly-defined roles of DCC and the EAP, as well as the protocols to be followed.

DCC develops and maintains a customized data file of all pertinent information about each client's EAP. It includes the toll-free number, the name of the EAP account representative(s) and a description of services. With this online information, all DCC counselors can immediately refer COMPANY employees to their EAP under the appropriate circumstances.

### ***Work/Life Coordination***

Prior to COMPANY's implementation date of the LifeCare services, DCC requests information regarding COMPANY benefits programs. This measure enables DCC to become familiar with all of COMPANY's work and family benefits. Counselors will then be able to immediately assist COMPANY employees and refer them to the appropriate contacts, phone numbers and information they may need outside of the DCC service. DCC's database can provide key information on the following benefits programs that COMPANY may offer to its employees:

- Employee assistance program
- Sick/emergency care program
- Prenatal program
- Adoption benefits
- Adult care benefits
- Dependent care reimbursement account
- Dependent care financial subsidy program
- Company discount with franchise/provider
- Tuition Assistance/Reimbursement or Scholarship
- Student loan program
- Long-term elder care insurance plan
- Family leave
- On-site day care center

### **Management Reporting**

Within forty-five days after the close of each quarter, DCC sends COMPANY comprehensive utilization reports which track the program usage for the reporting period and provide cumulative totals to date. These reports include both a tabulation of all quality assurance questionnaires returned to DCC by COMPANY employees during the respective reporting period and copies of the actual questionnaires coded to ensure confidentiality. An annual report is provided at the end of the year. Given DCC's sophisticated technology and key company information, DCC can customize the nature and frequency of reports to COMPANY specifications. DCC's client utilization reports are broken down by the following components:

#### ***I. Return On Investment Results***

As part of management reporting, DCC sends all clients their return on investment (ROI) results from the DCC service. ROI calculations are based on the number of employees covered, capitated rate per employee, employee salary, utilization and the average time we save an employee. This time saved is based on the feedback we receive directly from clients when they send us their quality assurance questionnaires. DCC clients have the opportunity to conduct their own ROI analyses on our web site (<http://www.declifecare.com/roi.html>) by completing our interactive, online ROI worksheet. DCC clients can immediately calculate and obtain the cost-savings results that our services are providing their company.

## ***II. Case Management Analysis***

- Total number and average number per case of providers qualified
- Total number, average number per case and annual utilization percentage of referrals
- Total number, average number per case and annual utilization percentage of counseling and education sessions
- Total number and annual utilization percentage of cases

Case management analysis is also illustrated in bar-graph form.

## ***III. Case Type Analysis***

- Total number and percentage of adoption cases
- Total number and percentage of prenatal cases
- Total number and percentage of child care cases
- Total number and percentage of special needs cases
- Total number and percentage of college and university cases
- Total number and percentage of adult care cases

Case type analysis is also illustrated in pie-chart form.

## ***IV. Calling Clients***

- Total number and percentage of female clients
- Total number and percentage of male clients

Calling clients is also illustrated in pie-chart form.

## ***V. Geographical Breakout***

- Total number of calling clients by state
- Percentage of calling clients by state
- Requested area of assistance (total number by state)

## ***VI. Department, Diversity Code and Division Totals***

According to COMPANY's request and the information it provides to DCC, DCC can provide utilization data based on, for example, a division, department or subsidiary of the company. DCC can customize this aspect and any other of management reporting to best suit COMPANY needs.

***VII. Dependent Care Referrals***

This section includes:

- Total number of referrals by LifeCare service (adult care, child care, etc.)
- Total number of referrals by care type within each LifeCare service category (i.e. nursing home, home care)
- Percentages of referrals for each care type based on the total number of each service category
- Total number of educational referrals
- Total number of referrals

***VIII. Total Client Employee Quality Assurance Results***

This information is based on the total number of client employees who have returned their quality assurance questionnaires to DCC.

## Client References

Barbara Roos  
Work/Life Manager  
Fleet Financial Services  
(401) 278-3165

Denise Allen  
Employee Relations Coordinator  
Colgate-Palmolive Company  
(212) 310-2839

Tom Roberts  
Director, Personnel & Administration  
Chesebrough-Pond's  
(860)664-2494

Anne Serra  
Work & Life Strategies  
Hughes Electronics  
(520) 794-4541

Mary Lackides  
Health Services Manager  
TRW Space and Electronics Group  
(310) 813-1791

*Additional client references will be gladly furnished upon request.*

### A Final Note

Neither DCC counselor assistance nor LifeCare Net are intended to provide any user with specific authority, advice or recommendations. The information obtained through counselor assistance or LifeCare Net is for informational purposes only. While DCC makes every effort to ensure the accuracy of the information provided, accuracy and appropriateness of information cannot be guaranteed. Likewise, DCC does not endorse, sponsor or guarantee any service or product mentioned on LifeCare Net or through counselor assistance. In all instances, users should verify all information received. All final decisions on the appropriateness of information, the quality of a product, or the qualifications of a service provider must be made by the user.

Mr. SHAYS. I have committed a great sin, given that, Mr. Burki, you are from Westport, CT, that I wasn't here for your entire testimony, so I do apologize. We are working on campaign finance reform and we have 3 weeks left, and we are hard pressed to know how we can finish it, and we just needed to deal with the issue, and I am back.

You have the floor, Mr. Towns.

Mr. TOWNS. Thank you very much, Mr. Chairman. I want you to know that being as I was the chairman at one point, I was able to just carry on in grand style, practicing for the next session.

Mr. SHAYS. The record will note that the gavel was pressed against the ranking member's head.

Mr. TOWNS. Thank you, Mr. Chairman.

On a serious note, though—

Mr. SHAYS. Excuse me, sir. Your time is up. I'm sorry.

Mr. TOWNS. I don't want to put you on the spot, Dr. Knitzer, but I noticed that your report tracks child well-being, which is important, so I am not going to put it where you would be responding to HHS. I don't want to do that. I don't want to take that away from you. But I want to say that the Department of Health and Human Services cannot seem to determine ways to track child well-being under welfare reform. For some reason, they can't do that. So I am not going to ask you to respond directly to that. I don't want to create that kind of problem.

However, I do want to ask you, what do you think that HHS should consider as indicators of child well-being? I do want to ask that.

Ms. KNITZER. Let me tell you what indicators we used in Map and Track, which we used because we wanted to have indicators from each State. The truth is we have a major problem with young children because, basically, we can talk about poverty rates, family structure. We can talk about health care to pregnant women, the timing of it, the not timeliness of it. We can talk about low birth weight and immunization. Then there is a huge gap. Then the kids hit school. So we need to develop some indicators about school readiness that we can really use across this country.

I think it's a shared problem. It is not just HHS. I think conceptually, the researchers, the entire community concerned with outcomes for young children has to figure out how to track that. We all want school readiness. What does that really mean?

In terms of the welfare connection, what we did is we conceptualized, we tried to think about, the key decisions that States could make that have implications for young children and families. So we asked a series of questions of the States. Now these only indirectly measure young child well-being, but, certainly, Medicaid eligibility levels has significant impact on child well-being. And, in fact, while States in general are raising Medicaid eligibility rates for infants, they are not raising them for children from 1 to 6.

We are at a position of really describing the options that States are choosing in their welfare implementation that we think have special implications for young children before we can even get to outcome on a large scale. Now that doesn't mean I think we need some very detailed studies, community by community, of what is really happening to young children. Are we seeing more hunger,

are we seeing children leaving Head Start so they can go into informal care as reported in newspaper articles in New York. I think those are all issues. And we really need some support for local tracking as well as the large-scale studies that particularly look at the young children issue.

Mr. TOWNS. All right. Thank you very much.

You know, what we have heard this morning, over and over again is the fact that we can save money if we really move forward. And, at the same time some have pointed to the fade-out effects as a reason not to fund preschool programs. The fade-out effects, can it be attributed to poor schools and a lack of elementary school enrichment activities and the transferring of teachers and all of that, in terms of the area, especially where the poverty index is very high?

Ms. KNITZER. Yes. We talk about school readiness on the part of the young children. I think the question is, also, are the schools ready for the children? And we need to be focusing on that question as well. There is no one quick fix at any age time, but I think it is very clear that the interest and recognition of the importance of the relationship building during the earliest years and sustaining that with stimulating quality, early care and education experiences, at least, if we do that, we will be in a position to see what the results are.

Mr. TOWNS. You know, France has created zones, and I think that—and what it really means is that in these areas where there might be problems because of, you know, poverty or whatever, that they will give additional resources in the course and special incentives to keep teachers in these areas. Because what happens a lot of times is that experienced teachers, you know, transfer out of the areas, and you basically have a lot of inexperienced teachers coming in, and I think, you know, that can be a problem as well.

What do you think about having zones? I am not just picking on you, but anybody? Because recognizing that there is a problem and something occurs after they go into the system, something happens.

Dr. OLDS. Congressman, would you repeat the first part of your question for me? I'm sorry.

Mr. TOWNS. France has what we call, for lack of a better word, educational zones, wherein that, as a result of the problems, they give additional resources into these zones, like I guess it would be zip codes, you know, sort of, in our case. And then if you have a percentage of low-income families and at-risk children, what they will do is they will give additional resources, they will give special incentives to keep the qualified teachers in these areas, rather than have them all transfer out, to have all new teachers coming in and it creates all kinds of problems.

Dr. OLDS. I think that is very sensible, and what I particularly like about it is it doesn't single out particular families as being at high risk but, rather, says there are whole communities where the resources are deficient to support adequate development of children in the early stages of life. And that, in fact, is the very kind of strategy that we are promoting as a way of identifying how the particular program we have studied might be allocated around the country. We think we need to identify communities where there are high needs, and that these kinds of services ought to be allocated

in those particular communities, so I fully endorse the approach that you have just outlined.

Mr. TOWNS. Thank you.

Ms. KNITZER. I would concur with what Dr. Olds said about the community and focusing on that, and short of—I don't know what they are doing in France, but we do have enterprise zones and empowerment zones here, as well as some other community initiatives, and we are, in fact, hoping to do a study of this. It is our sense that, except for defining the need for child care, there has been very little attention to what community assets and resources are or should be in those empowerment zones, and there is an opportunity to make a connection there that I think hasn't yet been made.

Mr. TOWNS. One more question, Mr. Chairman.

You know, you indicated, and I just want to get clarification, you said it would take 20 years, Dr. Olds. Why 20 years?

Mr. SHAYS. Do you know how old we will be in 20 years?

Mr. TOWNS. That's the point I was trying to make. Mr. Shays will no longer be in Congress.

Dr. OLDS. Would you like me to talk in the middle of the bells? I will wait.

Mr. TOWNS. OK.

Dr. OLDS. It has taken us 20 years to get to the point where we have what we think is a program that has thoroughly developed science and thoroughly developed clinical methods. And what we have seen in many instances is programs have been put together and rushed into service before they have had adequate infrastructure built to provide—to recruit qualified people to service people, to provide adequate training and supervision. We think that one has to build from the strong clinical and scientific base, and in order to do that—our calculations show that, in order to do it and to have confidence that we can reproduce the kinds of effects we have seen in the research, it will take us, unfortunately, 20 years.

But, you know, for a long time, I was going to invoke the Japanese experience and their economic—in their solving economic problems, and that is probably the wrong analogy today, but I think we need to take the long view. These are not problems that we as a society can solve overnight. It will require very careful linkage between science, clinical work and program design. We need to build capacity.

If we are going to build a business, for example, you can't do it overnight. And we have actually run numbers to look at the numbers of low-income women bearing children in our society, the numbers of available nurses, the numbers of places where this kind of clinical capacity is currently operating. And we have chosen not—for example, many programs choose to use a model to train the trainers, where people go out and train others to do the program model, even if they themselves have not had sufficient clinical experience in conducting the program themselves. We don't support that. Because we think, without the level of deep clinical experience in conducting the program, the essential elements of how you can bring about—successfully bring about change on the part of parents during pregnancy and during the care of their children, it

will be compromised. And the kind of results I have testified about here today, we think are much, much less likely to be reproduced.

Mr. SHAYS. I need to interrupt you here because we are going to have a series of votes so we are going to finish the panel.

I just want to state for the record, and I want you to correct me if I am not hearing right, Dr. Karoly, the bottom line is you gave a number of studies that would illustrate almost unbelievable success in early intervention. But your testimony, it seems to me, is we don't have enough of these studies. Is that—and I need short answers—is that accurate?

Ms. KAROLY. It's both the number of studies and the number of models that have been carefully evaluated and whether those studies have been implemented on a smaller or larger scale. So, for example, consistent with what Dr. Olds is saying, we may know it worked in this community with this population. Will it work in other populations in other communities?

Mr. SHAYS. But what I am struck with is the studies you did describe were quite impressive in their outcome.

Ms. KAROLY. I think that's right, and that's the very good news. There is proof of the principle that programs can work.

Mr. SHAYS. What I hear from you, Dr. Knitzer, you have given us a pretty good description that some States are headed in the right direction and some are not involved at all; and, in fact, most are not involved at all. You described 10 States that seemed to have some real activity, and by not involved at all—well, why don't you respond?

Ms. KNITZER. I think the 10 States were the ones that hinged welfare reform with the comprehensive initiatives. I actually think States are increasingly involved in program development for young children and families, for infants and toddlers and preschoolers. The point of connections with welfare reform is the issue about the 10 States.

Mr. SHAYS. I appreciate you making that point.

I would make this observation, that if welfare reform fails, and it could, it will be the fault of Congress and the White House. Because we can make it work. That is my view. And, Mr. Burki and Dr. Olds, you were citing three areas, three various programs around the country.

Dr. OLDS. Yes, three studies we have conducted so far, yes.

Mr. SHAYS. But the bottom line on what I am hearing is this process could take longer. What I am hearing—we have 5 minutes until we have a vote, and that is why I am talking fast. What I am taking from this, though, is that we need to measure outcomes and we need to have science design the program, which is really the way you started, Dr. Karoly, so we make sure we don't just have a day-care-plus kind of program, that we really make sure that these programs—in other words, I am going to leave this hearing with the strong feeling and conviction that early Head Start intervention is going to be very helpful, but I am left with the fact we need to make sure that science designs the program and that we don't just have a feel good program. But I want to just make a comment to Mr. Burki.

Do you want to make a comment?

Ms. KNITZER. Or that we at least evaluate what States are doing, because States are not going to stop and wait for the 20 years. So we need to build in, I think, a two-track strategy.

Mr. SHAYS. Fair enough. We are going to write a report on this, my hope and intention is, before we adjourn. And we haven't written many reports this year, but this would be one we would like to, so it's going to be a close involvement.

Mr. Burki, I am going to get up to Westport, given it's only 20 minutes away, to see your program, and I will bring one of my staff members with me so we can incorporate that. But given that I missed your testimony, one of your points, when I was reading your testimony was, I focused on welfare reform, the need to make that work, and I think what you are saying to us is we need to make sure that business—that we don't just think of this as a welfare reform kind of program, that it's got to involve a lot more than that.

Mr. BURKI. Exactly. It's a change in society and a change in the work force and its corporations and organizations and governmental agencies all being proactive in addressing these changes and realizing that, with the change in the social fabric and the work force and the families in this society of ours, that we have to take different approaches. And that is what I think is so important about this meeting today, is the private and the public sectors coming together and coming up with creative solutions for these types of issues.

Mr. TOWNS. Mr. Chairman, I know we don't have time for an answer—

Mr. SHAYS. You have 3 minutes.

Mr. TOWNS. I don't want an answer now, but if you would be kind enough to send us material on things we might say to people who argue the point in terms of fade out as a result, I would appreciate it.

Thank you very much. Your testimony has been helpful.

Mr. SHAYS. I am sorry. We are adjourning about 20 minutes before we should, but we have a series of votes, and we are not going to keep you waiting. Thank you very much.

[Whereupon, at 12 noon, the subcommittee was adjourned.]

