

Using Home Visits for Multiple Purposes: The Comprehensive Child Development Program

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Abstract

The Comprehensive Child Development Program (CCDP) was a two-generation program that employed case management and home visiting to assure low-income children and their parents of a range of educational, health, and social services. Designed to meet the complex needs of disadvantaged families, CCDP was predicted by its planners to generate positive short- and long-term effects across a variety of child and parent well-being indicators. This article describes the CCDP program and reviews the results of the program evaluation.

The evaluation of 21 project sites and 4,410 families followed for five years found no statistically significant impact of CCDP on program families when they were compared with control families in any of the assessed domains: early childhood education, child and family health, parenting education, family economic self-sufficiency, or maternal life course. The authors conclude that the results of this evaluation do not support home visiting as an effective means of social service delivery and parenting education for low-income families.

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During the past 25 to 30 years, federal, state, and local governments, private foundations, and private industry have funded hundreds of interventions to address the problems associated with poverty. For the most part, these interventions have focused either on children (for example, the Head Start program) or on parents (for example, adult education and job training) but not on both simultaneously. In the past decade, programs for disadvantaged families have been broadened to include multiple family members and to provide or coordinate many social services. Known as “two-generation” or “integrated services” programs, these broader approaches are designed to serve both children and parents at the same time, with cognitive development services for children and parenting skills

training and other educational opportunities for parents.¹ Generally, two-generation programs rely on case management delivered through home visits as a primary intervention strategy.

In recent years, two-generation programs have received a great deal of attention and a substantial amount of funding. The Comprehensive Child Development Program (CCDP), a \$240 million five-year demonstration project funded by the Administration on Children, Youth and Families (ACYF) within the U.S. Department of Health and Human Services, was the largest and most visible of these programs.²

CCDP's goals were to enhance the physical, social, emotional, and intellectual development of children in low-income families from birth to age five; provide support to their parents and other family members; and assist families in becoming economically self-sufficient. Eligible families included those with incomes below the federal poverty level, and with unborn children or children under age one. (These children were designated as the "focus" children, with one focus child in each family, for evaluation purposes.) In addition, each family was required to agree to participate in CCDP activities for five years.

ACYF made grants to operate CCDP projects through a competitive process that emphasized the selection of the most qualified bidders with the strongest staffs and the best track records of providing comprehensive services. Twenty-four sites in 22 states received grants in 1989 and 1990.³ The sites were in inner-city and other urban areas and in rural areas. The local administrative agencies for CCDP grants included family service agencies, Head Start grantees, and health agencies.

CCDP was a closely monitored program in which variation among projects was minimized to provide a strong test of a single, coherent model. Federal staff at ACYF negotiated with prospective grantees at the proposal stage to ensure that each potential project's model met ACYF's standards and specifications. Once the projects were in operation, the activities of each project were governed by a set of federal compliance standards and enforced through a series of monitoring mechanisms implemented by ACYF and its technical assistance contractor, CSR, Inc.

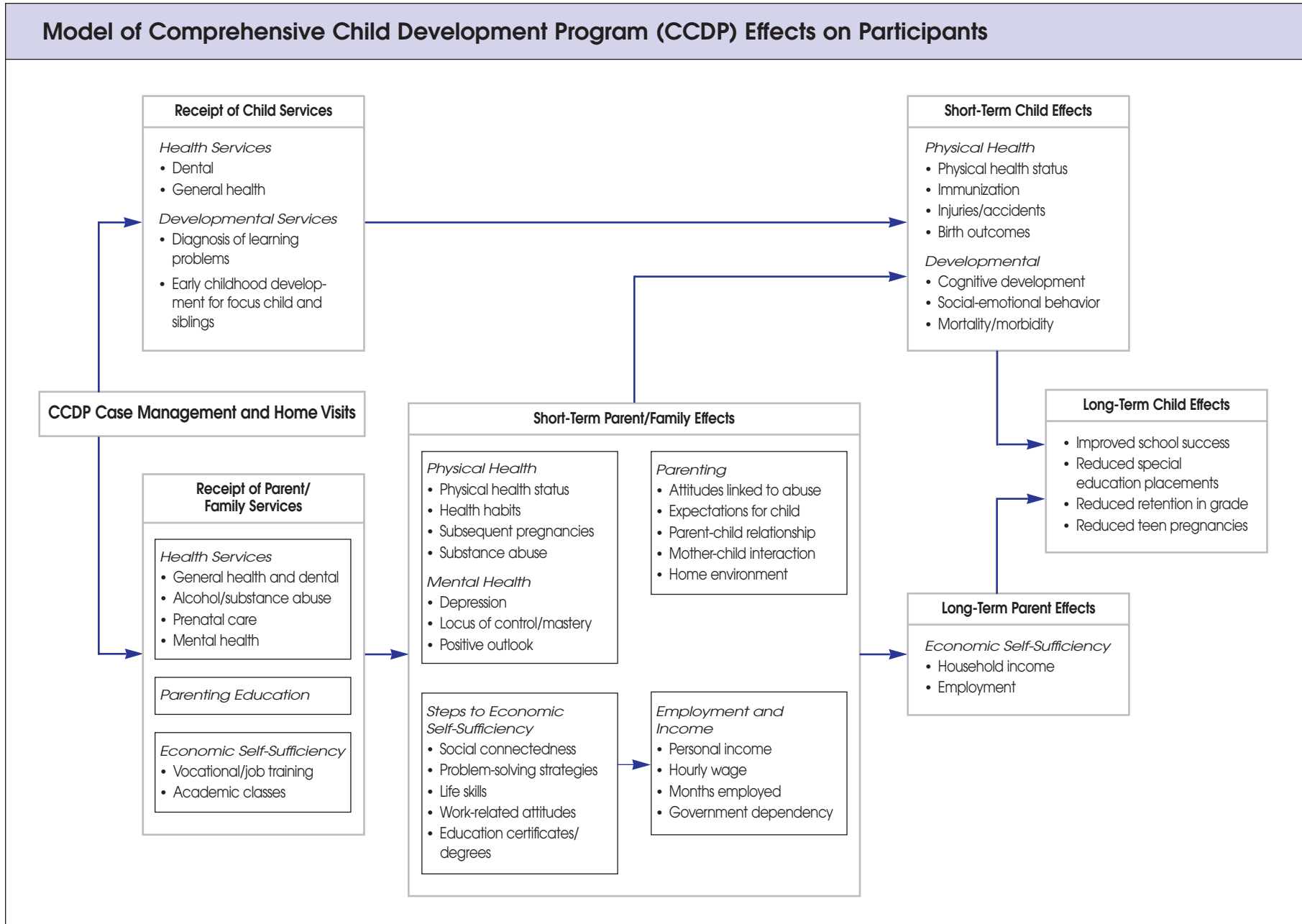
The CCDP Model and Implementation

The conceptual model for CCDP was based on the ecological theory of human development,² that is, that children's development is

influenced by the families and communities in which they live. (See the articles by Olds and colleagues, by Duggan and colleagues, and by Wagner and Clayton in this journal issue for other programs developed within an ecological framework.) The CCDP



Figure 1



Source: St.Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997, p. 2.17.

model, illustrated in Figure 1, envisioned short-term and long-term program effects for children and parents through the delivery of educational, health, and social services tailored to each family. Some program effects were expected to result directly from the delivery of services intended to deal with specific issues or problems; for example, mental health counseling was provided with the intent of decreasing maternal depression. Other effects were expected to occur indirectly; for example, parenting education was provided to mothers to promote children's cognitive development.

Assumptions underlying the design of CCDP were that all low-income families have a complicated set of needs and that CCDP programs should ensure that all of those needs are met. The CCDP intervention was to begin as early as possible in children's lives; involve the entire family; ensure the delivery of comprehensive social services designed to address children's intellectual, social, and physical needs; ensure services to enhance parents' ability to contribute to the overall development of their children and achieve economic self-sufficiency; and ensure continuous services for children and adults until the children entered elementary school at the kindergarten or first-grade level.

CCDP projects were mandated to build on existing educational, social, and health services in their communities to avoid duplication of effort. However, CCDP projects also were supposed to create new services when necessary to meet the needs of families or to ensure the provision of high-quality services. CCDP's goals were to be met by delivering two key services to families: case management and early childhood education.

Home Visiting in CCDP

Though it was not conceived as a home visiting program, CCDP used home visits as the primary means of delivering both case management and early childhood education. The CCDP model called for visits to begin during each focus child's first year of life and continue until the child entered school. Visits were to occur approximately twice a month, and each visit was intended to be one hour long. In practice, visits were conducted two to four times per month, and the

length of visits varied from 30 to 90 minutes, depending on the family's needs. CCDP projects chose one of two models for delivering the two key program services: (1) in many projects, the staff member responsible for case management also delivered early childhood education during a single home visit; (2) in other projects, the case manager and another staff member without case management responsibilities but with training in early childhood education visited the home on alternating weeks.

Case Management

Each family that enrolled in CCDP was assigned a case manager, initially a paraprofessional from the local community.⁴ These were individuals with life experiences similar to those of the program families. They usually

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had some familiarity with parenting but very limited post-high school education. Paraprofessionals were provided with extensive in-service training in areas such as conducting needs assessments, accessing services, and maintaining confidentiality.

Caseloads usually were fewer than 20 families,⁵ and case managers were expected to conduct home visits to each family at least twice per month. Their responsibilities included working with each family to assess the goals and service needs of individual family members and of the family as a whole, developing a service plan, referring the family to services in the community, monitoring and recording the family's receipt of services, and providing counseling and support to family members, especially mothers.

A formal family needs assessment was conducted for each family within three months of its enrollment in CCDP and every six months thereafter. The needs assessment formed the basis for a service-delivery plan, developed jointly by the case manager and family members, which specified goals, needed resources, actions to be taken by family members and program staff, and a



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schedule. The goals most commonly specified by families were obtaining better housing, improving parenting skills, accessing child care and health care, obtaining transportation, increasing income, and accessing community resources. The plan was updated every three months and included an assessments of the extent to which goals were achieved.

To respond to the identified needs, program sites attempted to provide access to a range of services for parents (parenting education, adult education, job training and placement, prenatal and other health care, mental health care, substance-abuse treatment, housing referrals, and transportation) and for children (developmental screening and assessment, health care, child care, early intervention for children with special needs, and Head Start). Some CCDP sites also provided other services such as programs for teen parents, legal assistance, and loan funds. CCDP case managers were expected to document the actual delivery of services as much as possible, relying upon information from service providers as well as family members.

In the first year of CCDP, case managers' ability to engage families in the orderly, long-term planning required for the program was hindered by the need to resolve frequent family crises. Inadequate and unstable housing arrangements, lack of food or heat, substance abuse, and legal problems all made it difficult for adult family members to assert

control over their lives. In many cases, paraprofessional case managers found it difficult to move beyond crisis intervention to help families develop and work toward more long-term goals.

CCDP project directors responded by offering more training to the paraprofessional staff and by having the professional staff, who typically were experienced in providing social services to families in poverty, take a larger role in negotiating services for participants. In addition, as paraprofessional case managers left, their replacements were required to have associate's degrees or some other form of post-high school training. CCDP case managers reviewed each of their cases weekly with supervisors and received additional, specialized assistance from multidisciplinary program staff, including health and mental health coordinators; employment, adult education, and early childhood specialists; and a male-involvement coordinator. These professional staff members then negotiated services for families and worked with staff in other community agencies to develop services. Although CCDP case managers were the program's main point of contact with families, each of the professional staff members also met with families or individual family members to address specific issues as needed. For example, although case managers might remind families to take children for immunizations and preventive health care, the health coordinator was responsible for maintaining immunization records, working with families

whose immunizations were not up to date, and ensuring that mothers-to-be received prenatal care on schedule.

Early Childhood Education

CCDP projects were mandated to deliver or arrange for early childhood education for children from birth through age three, as well as for four- and five-year-olds. Services for the younger group of children were provided through home visits that focused on parenting education, either by the family's case manager or by a program staff member with prior training in early childhood education. By four or five years of age, at least half of the children in CCDP had enrolled in center-based early childhood education, while the remainder continued to receive early childhood education by means of parenting education.⁶

Each project's early childhood coordinator selected or developed a curriculum for the early childhood part of the home visits and trained home visitors to deliver it. This portion of the home visit focused on educating parents in infant and child development and in parenting skills rather than working directly with children. In a typical session, the home visitor would suggest an activity to the parent, the parent would engage the child in the activity, and the home visitor would comment and perhaps suggest alternative strategies and additional activities. If the parent was hesitant, the home visitor might demonstrate the activity with the child. These biweekly sessions usually lasted about 30 minutes. This means that a parent who was present for every session received a maximum of 13 hours of parenting education in a year (26 sessions at 30 minutes per session), beyond what that parent might have received in other settings such as schools or hospitals.

The CCDP National Evaluation

The legislation that created CCDP called for an evaluation of the impact of the funded projects. Given this charge,ACYF devised a two-pronged evaluation strategy. Under one contract, CSR, Inc., was given responsibility for providing programmatic training and technical assistance to grantees in implementing the CCDP model; designing and implementing a management information

system for program data collection; and designing and implementing a process evaluation to describe the families that participated in CCDP, the services offered and received, the way in which each project was implemented, and the costs of CCDP.⁷ Under a second contract, Abt Associates, Inc., was given responsibility for designing and implementing an independent evaluation of the impact of the CCDP projects to find out what difference participation in CCDP made in the lives of children and their parents.⁶

Abt's impact evaluation was conducted in 21 of the original 24 CCDP project sites.⁸ Families were recruited by CCDP projects during 1990 and were randomly assigned to program, control, or replacement groups.⁹ Grantees in urban areas recruited 360 eligible

The total evaluation sample across the 21 projects consisted of 4,410 families, with 2,213 families assigned to CCDP and 2,197 families assigned to the control group.

families at the start of the program (120 each for the program, control, and replacement groups), while grantees in rural areas recruited 180 families (60 for each of the three groups). Families included in the evaluation were those eligible during the first year of recruitment (1990–91) for the five-year CCDP demonstration project. The total evaluation sample across the 21 projects consisted of 4,410 families, with 2,213 families assigned to CCDP and 2,197 families assigned to the control group.

Projects began to deliver services during 1990, and data collection for the impact evaluation started in the fall of 1991. Data were collected annually during a five-year period for each mother and focus child on the child's second, third, fourth, and fifth birthdays. Smaller amounts of data were obtained when the child was 18 and 30 months of age, as well as from the father, and about children born after the focus child. Each program and control family therefore had up to six assessments. Data were collected from 89% of the families at least once during the life of the evaluation, with 74% of the CCDP families and 78% of the control group

families participating in the final data collection when children were five years of age. Data were collected by trained staff who lived in each of the 21 sites.

Outcome Measures

Figure 1, presented earlier, depicts the theorized short- and long-term effects of CCDP, which include improvements in parents' economic self-sufficiency and parenting skills and in children's health and development. More than 100 mediating and outcome measures were included in the study. Descriptions of selected outcome measures used in this evaluation are presented in the article by Gomby on pages 27–43 in this journal issue. Measurements of child development and health were made through direct assessment of the focus children and through parent reports, while data on birth

similar initially. Overall characteristics of the sample were as follows (combining CCDP and control group families and pooling across all sites):

- *Race/ethnicity:* Forty-three percent of the children in the sample were African American, 26% were Hispanic, 26% were white, 3% were Native American, and 1% were Asian/Pacific Islander.

- *First language:* Eighty-four percent of the children in the sample used English as their primary language, 14% used Spanish, and 2% used some other primary language.

- *Teenage mothers:* More than one-third (35%) of the mothers in the sample were teenagers (under age 18) when they gave birth to the focus child.

- *Education level:* More than half (51%) of the mothers in the sample had not graduated from high school when recruited for CCDP.

- *Household income:* Forty-four percent of households in the sample had total incomes of less than \$5,000, and 85% had total incomes of less than \$10,000 at the time of recruitment.

Table 1 provides more detailed information about each group's characteristics and shows that there were no CCDP/control group differences at the start of the evaluation. Analyses comparing the CCDP and control groups were done using seven baseline variables for each of the 21 evaluation sites. The data presented in the national evaluation report show no consistent CCDP/control group differences in any site.⁶ Any small differences were controlled for statistically in the subsequent impact analyses.

Results: Program Impacts and Costs

CCDP did not produce any important positive effects on participating families when compared with control group families for either parents or children.

Effects on parents. Five years after the program began, CCDP had no statistically significant impacts on the economic self-

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outcomes were collected through parent reports on children born subsequent to the focus children. Most of the data on parental outcomes were obtained through maternal reports, the exception being an observation of a mother-child teaching interaction. Data on services received by program and control families were collected through maternal reports. The CCDP management information system (MIS) developed by CSR, Inc., provided detailed information on services received but only for program families, because it was designed to monitor the nature and amount of services received by families participating in each of the CCDP projects. Hence, in spite of the richness of these data, the MIS could not be used to examine differences in services received by CCDP and control families.

Summary of Sample Characteristics

In 1990, the year during which most of the recruiting for the CCDP evaluation took place, data were collected on demographic and other characteristics of the families participating in the CCDP and control groups. Results indicated that the groups were very

Table 1

Baseline Characteristics of Comprehensive Child Development Program (CCDP) Participants and Control Group			
Characteristics	Percentages		p value
	CCDP	Control Group	
Ethnicity			
African American	43.0	41.3	.36
Hispanic	26.7	28.1	
White	26.7	26.1	
Native American	2.4	3.0	
Asian/Pacific Islander	1.2	1.6	
Dominant Language			
English	83.4	83.9	.21
Spanish	14.2	14.2	
Other	2.4	1.9	
Teenage Mother	36.6	35.3	.39
Mother with High School Degree	46.4	49.4	.07
Mother Employed	16.0	14.3	.13
Father/Partner in Home	39.4	37.7	.24
Focus Child Birth Weight Under 2,500 Grams	10.4	9.2	.20
Annual Household Income			
Less than \$5,000	46.3	42.6	.06
\$5,000 to \$9,999	39.8	42.5	
\$10,000 or more	13.9	14.9	
Note: Percentages may not total 100% due to rounding.			

Source: St.Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997, p. 3.6.

sufficiency of participating mothers, nor on their parenting skills (Tables 2 and 3). Mothers in the control group performed as well on these measures as CCDP mothers.

Effects on children. Five years after the program began, CCDP had no meaningful impacts on the cognitive or social-emotional development of participating children (Table 4).¹⁰ CCDP had no impacts on children's health or on birth outcomes for children born subsequent to the focus children (Table 5).

CCDP had no important differential effects on nine subgroups of participants (for example, teenage mothers versus older mothers, mothers who entered CCDP with high school diplomas versus mothers who

entered without high school diplomas, mothers living with partners versus mothers living without partners, male versus female children, and depressed versus not depressed mothers), given that there were fewer statistically significant differences than would be expected by chance alone.

Though the program produced no overall impact on families, changes nevertheless occurred in the lives of CCDP families. For example, there were increases in CCDP children's vocabulary and achievement scores, in the percentage of CCDP mothers in the labor force, and in the average income of CCDP mothers. Additionally, there were decreases over time in the percentage of CCDP families relying on Aid to Families with Dependent Children (AFDC) and food

Table 2

Economic Self-Sufficiency Outcomes for Comprehensive Child Development Program (CCDP) Participants and Control Group				
Outcome Measure	CCDP		Control Group	
	n	Mean	n	Mean
Employment				
Percentage of mothers employed (last interview)	1,979	40%	1,977	41%
Percentage of mothers or husbands/partners employed (last interview)	1,971	57%	1,968	58%
Number of hours per week worked (last interview, working mothers)	779	35	794	34.9
Percentage of time mother employed (over life of study)	1,333	33%	1,519	31%
Percentage of time mother or husband/partner employed (over life of study)	1,229	50%	1,441	48%
Income				
Total household income (last interview)	1,812	\$12,005	1,810	\$11,614
Mother's weekly wage (last interview, working mothers)	730	\$ 245	756	\$ 239
Dependence on Public Assistance				
Percentage of families on AFDC (last interview)	1,963	53%	1,969	50%
Percentage of families on AFDC continuously (over life of study)	1,341	26%	1,525	24%
Percentage of families receiving food stamps (last interview)	1,332	68%	1,513	68%
Steps to Employment				
Percentage of mothers enrolled in academic, vocational, or job training program (last interview)	1,911	26%	1,929	22%
Percentage of mothers with a high school diploma, vocational certificate, or GED (last interview)	1,916	71%	1,930	69%
Percentage of mothers with some college (last interview)	1,916	22%	1,932	20%

Source: St.Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997, p. 4.17.

stamps, and in the percentage of CCDP mothers who were depressed.

However, the same changes observed in CCDP families occurred in control group families. Vocabulary and achievement scores increased for children in the control group, just as they did for children in CCDP. Also, mothers in the control group found employment and earned more money, the percentage of control group families receiving AFDC and food stamps decreased, and fewer control group mothers were depressed. In general, mothers and children in the evaluation were not as well off as their more advantaged peers from higher-income families (for example, CCDP and control group children did not score at the same levels on the Peabody Picture Vocabulary Test or the Kaufman Assessment Battery for Children as children in the norm groups for those mea-

asures), but still, the data showed that the lives of low-income families did change over time, and typically in a positive direction.

These findings demonstrate the value of a randomly assigned control group. Data collected only about CCDP families would have given the misleading impression that the observed improvements in the lives of low-income families were attributable to participation in the program. The presence of improvements in the control group suggests instead that these are normal changes in the lives of families—changes that should not be attributed to CCDP.

Length of Enrollment

The length of enrollment in CCDP did not make an important difference to outcomes. One assumption made by CCDP's developers was that it would require several years

Table 3

Parenting Outcomes for Comprehensive Child Development Program (CCDP) Participants and Control Group						
Outcome Measure	3 Years of Age		4 Years of Age		5 Years of Age	
	CCDP	Control Group	CCDP	Control Group	CCDP	Control Group
Adult-Adolescent Parenting Inventory (AAPI) Parenting Attitudes and Beliefs Score	(n=1,443)	(n=1,432)	(n=1,291)	(n=1,287)	(n=1,507)	(n=1,544)
Inappropriate expectations for child	22.5	22.5	23.1	23.1	23.5	23.4
Lack of empathy for child's needs	30.2	29.9	30.4	30.3	30.9	30.5
Belief in value of corporal punishment	34.6	34.1	34.7	34.2	34.9	34.2
Role reversal	29.3	29.3	29.7	29.9	30.6	30.3
Home Observation for Measurement of the Environment (HOME) Score	NA	NA	32.6 (n=1,321)	33.0 (n=1,423)	NA	NA
Parent-Child Interaction (Nursing Child Assessment Satellite Training (NCAST) Teaching Scale) Score	(n=1,369)	(n=1,430)				
Total for mother	40.2	40.3	NA	NA	NA	NA
Total for child	14.7	14.7	NA	NA	NA	NA

Source: St.Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997, p. 4.29.

(from birth until entry into school) to ensure that children would be ready for school and that parents would become economically self-sufficient. The length of time that a family was enrolled in CCDP is a crude measure of a family's overall level of participation in the program.

An analysis of participation patterns of CCDP families showed that 58% of families participated in the program for three or more years, 48% of families were enrolled for four or more years, and 33% of families were in the program for five years. On average, families were enrolled in CCDP for 3.3 years.⁶

Analyses were conducted to compare CCDP's impacts using the full sample of CCDP families, as well as the subset of CCDP families that participated for three or more years and the subset that participated for four or more years. The results of these analyses suggested that the length of time that a family was enrolled in CCDP was sometimes associated with a statistically significant difference in the outcomes achieved by that family but that these differences were so small that they were unlikely to produce meaningful changes in children's lives. For example, CCDP children in families that

were enrolled for three to five years scored about 1.5 points higher than control group children on the Peabody Picture Vocabulary Test, the Kaufman Assessment Battery for Children Achievement Scale, and the Kaufman Assessment Battery for Children Mental Processing Scale. While a 1.5-point difference on these measures is statistically significant, it represents only about 0.10 standard deviation units, far smaller than the 0.25 or more standard deviation units typical of educationally meaningful differences.

One CCDP Project Had Important Positive Effects

The aforementioned results summarize the average effects of CCDP across all 21 sites. Additional analyses were conducted to examine the effects of CCDP in each of the sites that participated in the evaluation. Because there were no overall effects, it is no surprise that almost all of the CCDP projects had no positive (or negative) effects on any of more than 30 outcome variables. However, one of the 21 sites (Brattleboro, Vermont) had statistically significant and moderately large positive effects in several outcome domains: children's cognitive development; families' employment, income,

Table 4

Cognitive and Social-Emotional Development Outcomes for Comprehensive Child Development Program (CCDP) Participant and Control Group Children						
Outcome Measure	3 Years of Age		4 Years of Age		5 Years of Age	
	CCDP	Control Group	CCDP	Control Group	CCDP	Control Group
Cognitive Development: Focus Child						
Peabody Picture Vocabulary Test-Revised (PPVT-R) Standardized Total Score	82.1	81.6	77.5	77.3	81.1	81.0
Kaufman Achievement Scale Score	86.0	85.9	85.3	84.3	87.2	86.8
Kaufman Mental Processing Scale Score	92.2	91.0	91.1	90.2	95.3	94.8
Social-Emotional Development: Focus Child						
Child Behavioral Checklist Normalized Total Score	53.7	53.7	52.5	52.9	50.6	50.8
Child Behavioral Checklist Normalized Externalizing Score	53.1	53.4	53.3	53.9	51.4	51.5
Child Behavioral Checklist Normalized Internalizing Score	53.6	53.0	48.7	48.9	47.5	48.0
Adaptive Social Behavior Inventory: Total Score	41.9	42.0	43.2	43.0	NA	NA
Developmental Checklist: Total Score	NA	NA	NA	NA	57.9 ^a	57.5

^a Statistically significant difference of $p < .05$.

Source: St-Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997, pp. 5.19-5.25.

and use of federal benefits; and parenting attitudes.

There are several possible explanations for why CCDP appeared to be effective in Brattleboro but ineffective in other sites, which shared many of the same characteristics. The population served in Brattleboro was somewhat less at risk than the populations served in many (but not all) other sites. Brattleboro is in a state that provides a relatively high level of support to low-income families, and it also benefitted from the combination of being a small city in a rural area where program families were not seen as inferior to or different from program staff. In addition, with a school district as the grantee, the Brattleboro program had a clear focus on children and their education. Brattleboro also had a particularly strong project director and senior staff, all of whom stayed with the project for many years, and the staff appear to have done an especially good job of collaborating with local agencies, attributable in part to support for these activities at the state level and from the

project's executive director. None of these factors can be singled out as the reason why CCDP was effective in one site and not in any others. The circumstances and context of Brattleboro were probably unique, and certainly acted in concert to produce positive effects.

CCDP Is a Costly Intervention

By any yardstick, CCDP is an expensive program. The total cost of CCDP (excluding the cost of externally provided services and the cost of participating in mandated research and evaluation activities) averaged \$10,849 per family per year in 1994 dollars, or about \$35,800 for each family in the evaluation, given an average length of participation of 3.3 years.¹¹ Forty-three percent of CCDP's personnel costs were attributable to direct intervention services such as home visits and case management, while 57% were attributable to program support services such as management and administration, coordination with other programs, recruitment and training, and MIS operations.

Table 5

Health Outcomes, Pregnancy Behaviors, and Birth Outcomes for Comprehensive Child Development Program (CCDP) Participants and Control Group		
Outcome Measure	CCDP	Control Group
Health Outcomes: Focus Child	(n=1,847)	(n=1,846)
Number of preventive medical visits per year	1.8	1.8
Number of dental visits per year	0.6	0.6
Percentage of child deaths over five years	1.1%	0.9%
Pregnancy Behaviors: Mother		
Percentage of mothers who received late prenatal care	25% (n=1,084)	25% (n=1,106)
Percentage of mothers who smoked cigarettes	28% (n=1,080)	29% (n=1,112)
Percentage of mothers who used alcohol	13% (n=861)	15% (n=887)
Percentage of mothers who used illegal drugs	3% (n=839)	3% (n=858)
Birth Outcomes: Younger Siblings	(n=1,076)	(n=1,108)
Percentage of low birth weight children (less than 2,500 grams)	10.2%	10.3%
Percentage of premature births (less than 37 weeks)	9.8%	11.1%
Percentage of children receiving any care in special care nursery	16.9%	20.4%
Number of nights in special care nursery	2.3	2.4

Source: St.Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997, pp. 4.30, 5.26-5.27.

As a way to judge the magnitude of these costs, consider the per-family per-year costs of a few related programs: Head Start (\$4,500 per family per year),¹² the Infant Health and Development Program (\$10,000 per family per year),¹³ the Even Start Family Literacy Program (\$2,700 per family per year),¹⁴ David Olds' Nurse Home Visiting Program in Elmira, New York (\$2,300 per family per year),¹⁵ Child Survival/Fair Start (\$1,600 to \$2,800 per family per year),¹⁶ and New Chance (\$8,300 per family per year),¹⁷ all in 1994 dollars.

Cost comparisons are difficult to make because the dollars allocated to social programs are often used to buy very different sets of services, and these examples are not intended to provide an exhaustive comparison of the costs incurred by similar social and educational programs. Nevertheless, CCDP's annual cost per family is relatively high when compared with other social programs that have similar aims.

Some researchers might suggest that positive program effects and associated cost savings could be realized in the future. This hypothesis comes from evaluations that have found that the most important benefits of early childhood programs did not become

apparent until many years after the programs had been completed and children had been followed into the public schools and beyond (most notably, this was found in the Perry Preschool study).¹⁸ Several reviews supporting the contention that long-term effects of early childhood programs exist have appeared in the recent literature.^{19,20} However, these reviews summarized studies that followed children who had participated in intensive early childhood programs and who had first derived large short-term cognitive benefits from those programs. The most impressive long-term effects are associated with programs that also demonstrated short-term effects, both on children's cognitive development and on mothers' parenting skills and behaviors.¹⁹

Neither improved short-term cognitive outcomes for children nor improved parenting behaviors for mothers were found for CCDP families. CCDP's early childhood education services were not intensive, coming first in the form of biweekly, 30-minute in-home parenting education programs when children were less than three years of age, and moving to Head Start or other center-based or home-based child development programs for children four and five years of age. CCDP children received an average of

28 hours per month of center-based care from birth to age three, and 45 hours per month from ages three to five. This is substantially less than the 80 to 180 hours per month received by children in high-intensity programs such as the IHDP. Given the lack of an intensive early childhood program and the lack of short-term or medium-term effects in CCDP, there is no reason to hypothesize long-term positive effects for children who participated in CCDP.

But what about the possibility of long-term effects on mothers? There is scant research in this area, and no obvious literature pointing

What the CCDP case managers could not do was obtain needed services that did not exist or were in short supply. They could not produce adequate housing, jobs that paid a living wage, or outpatient mental health services in communities that did not have them.

to the existence of long-term effects of antipoverty programs on mothers similar to those found for children who participated in intensive early childhood programs.

If long-term effects of CCDP exist at all, perhaps they would become evident for children born subsequent to the focus children. Perhaps CCDP's approach of providing child development services through parenting training was unlikely to succeed with the focus children because most of them were born prior to the beginning of parenting training, and focus children had to pass through many developmental stages before parenting skills had a chance of improving. Children born after the parenting training was provided had a better chance of benefiting from any improved parenting skills. Unfortunately for this line of reasoning, this evaluation showed no improvements in the parenting skills of CCDP mothers.

Why Were There No Program Impacts?

The results reported above—almost no positive impacts for parents or children on any measure or in any site—are disappointing.

This section posits some possible explanations of these disappointing findings, focusing on the definition and implementation of the program, its underlying strategy and theory, and the quality of services provided.

Definition and Implementation

Past programs have foundered when they were poorly defined or poorly implemented, but that does not appear to have been the case with CCDP. ACYF clearly and carefully defined the CCDP program so that it could be understood and implemented by staff at the local level. ACYF provided a detailed definition of the program, strong centralized management and oversight, and associated programmatic regulations and guidance. A management information system was put in place to help monitor service provision and to identify technical assistance needs. Project monitoring included monthly telephone calls, grantee meetings three times a year, quarterly progress reports, and annual week-long site visits conducted by staff from ACYF and CSR, Inc., to assess compliance and provide technical assistance. Compared with other demonstration projects and other federal programs, there is little question that the CCDP model was well defined at the federal level, clearly communicated to local grantees in a variety of settings, and closely monitored.

Given a well-defined program, it is still possible that local grantees were unable to do a high-quality job of implementing the program. However, as reported in the CCDP process evaluation, CCDP served the families that it was intended to serve, worked with thousands of service agencies nationwide, and delivered or obtained a wide range of services for a high proportion of participating families. CCDP intended to provide up to five years of continuous service to low-income families, and families recruited for the CCDP demonstration and evaluation participated for an average of more than three years. Compared with other demonstration programs, which often have annual dropout rates of 50% or more,⁶ CCDP was relatively successful in retaining substantial numbers of families from a traditionally difficult-to-serve segment of the population.

Did CCDP Choose the Right Intervention Strategy?

If the program was clearly defined and fairly well implemented, perhaps its poor results



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were due to a more fundamental problem. Perhaps the underlying assumptions about appropriate intervention strategies (that is, case management as the means to serve parents and changing parent behavior as the means to promote children's development) were incorrect.

CCDP chose to provide case management as the primary intervention with parents, assuming that what poor families need most is a guide and negotiator as they navigate the web of services in the community. It is probably true that many CCDP families came to rely on the help and advice they received from their case managers, and during the first two years of the program, larger percentages of CCDP families than control group families reported that they received most services.²¹ However, in most cases the differences were not large—certainly not as large as might be expected for a program that spent about \$11,000 per family per year to ensure that services were delivered. More importantly, by the end of the study, there were no important differences between CCDP and control group families in terms of the amount of services received,⁶ suggesting either that families in the control group found similar guides and negotiators at one or more of the service providers they used, or that most families, even poor ones, know what services they need and how to find them. What the CCDP case managers could not do, even with the help of specialist staff, was obtain

needed services that did not exist or were in short supply. They could not, for example, produce adequate housing, jobs that paid a living wage, or outpatient mental health services in communities that did not have them.

The case management model has been tried in other fields, with similar outcomes. For example, the Fort Bragg Child and Adolescent Mental Health Demonstration project, funded by the U.S. Army, was an \$80 million program that delivered mental health and substance-abuse services using a coordinated case management approach to involve various service agencies. An evaluation of this program reached many of the same conclusions as the current study—the demonstration had a systematic and comprehensive approach to planning treatments, more parental involvement, strong case management, more individualized services, fewer treatment dropouts, a greater range of service, enhanced continuity of care, more services in less restrictive environments, and a better match between services and needs.²² Despite these positive implementation findings, no positive effects were found on a wide range of child-level outcome measures. Comparison group children who participated in a less expensive, fragmented system of care without case management did as well clinically as children in the demonstration. This pattern of findings—good implementation of an integrated case management service-delivery system, followed by no effects on program participants—has been seen in other recent

studies of child and adolescent mental health services.^{23–25} (See the article by Wagner and Clayton in this journal issue for a discussion of case management for adolescent parents.)

CCDP chose to focus its early childhood component on parents, seeing them as the conduits of children's developmental experiences. This approach reflects the views of many developmental psychologists and is a strategy common to many programs that seek to intervene with very young children. However, literature about the effects of parenting education on child development casts doubt on the efficacy of this approach.^{26,27} At the same time, there is substantial research evidence that the best way to achieve large effects on children is to provide intensive services directly to children for an extended period.^{19,20} This research does not dismiss the importance of the parents' role in child development. In fact,

What is not available is evidence about what parenting education should consist of, how it should be delivered, who should provide it, and what kinds of parents are likely to benefit from it.

there is widespread agreement that competent parenting is related to positive child development. What is not available, as Alison Clarke-Stewart pointed out in her review of a decade of research about parenting education, is evidence about what parenting education should consist of, how it should be delivered, who should provide it, what kinds of parents are likely to benefit from it, what effects on parents might be expected from a widely used intervention rather than a small research study, and what the timing of such interventions must be if they are to have any hope of influencing children's outcomes.²⁸ In the absence of such evidence, intervention programs have little guidance when they choose parenting education as a strategy.

There are several reasons why parenting education as implemented in CCDP might have been ineffective. First, as noted earlier, parents who were present for every possible

early childhood education home visit received only 13 hours of instruction in the course of a year. This is unlikely to be a sufficient amount of exposure to new ideas. Second, the parenting curriculum was often delivered by case managers who may not have internalized or agreed with the ideas they were communicating. Many parents had older children and may have already formulated their own parenting and teaching strategies; their day-to-day interactions with children may have been influenced little, if at all, by the home visitors. Finally, parenting education simply may not be a very effective way of enhancing children's development.

Service Quality

CCDP was developed under the assumptions that (1) most of the services needed by low-income families already existed in most communities, and (2) these services were of adequate quality to address the needs of low-income families. It is possible that these assumptions were incorrect and that the problem lay with the services obtained by CCDP—perhaps local services were of poor quality, or maybe they were not the services needed by participating families, or maybe they were not sufficiently intensive.

While there is no information about the quality of services provided through CCDP, there are data on the extent to which parents reported that services allowed them to meet the goals that they and CCDP staff set for themselves. Although CCDP families set many different goals, only a small percentage of parents reported that they attained those goals. For example, 37% reported that they obtained adequate housing, 11% reported that they improved their parenting skills, 24% reported that they obtained health care, 13% reported that they obtained social support, 17% reported that they furthered their education, 14% reported that their children had enhanced cognitive and social development, and so on.⁷ This suggests that the great majority of participating parents did not think that CCDP helped them achieve the goals they set for themselves. These perceptions of program noneffectiveness on the part of CCDP parents are especially striking given the high satisfaction with which participants view most social programs.²⁹

Conclusion

There is no evidence that providing case management by means of home visits is an effective way to improve social, educational, or health outcomes for adults or children. Much of the case management for CCDP was done through home visits. Given the results of this study and other research, it appears that social programs will be more effective if they focus on direct service provision rather than on the organization of existing services.³⁰

Nor is there evidence that parenting education through home visits is an effective method to improve child development. Parents are the most important influences in their children's lives, but little is known about how to intervene effectively with parents to enhance child development. Many parents who enrolled in CCDP had been teenage mothers, had never completed high school, were poor readers or illiterate, and had poor parenting role models. The results of this study suggest that a program that provides parenting education through home visits every two weeks cannot, in a couple of years, ameliorate these problems and create competent parents who would enhance their children's development by age five. If children are developing faster than their parents can learn and use new strategies, it

may be impossible for parenting education to be effective unless it is initiated very early—for example, through mandatory child development courses delivered in the middle school years.

Creating exemplary parents is a daunting challenge for any program. So too is creating the kinds of parents who can combat the damaging effects of unsafe neighborhoods, unsafe and unsanitary housing, and lack of financial resources. Researchers simply do not know which aspects of parenting skills are the most decisive influences in children's lives, or whether parent literacy, labor force attachment, or a solid understanding of child development is the most important determinant of children's development. Clearly, a better understanding is needed of the ways in which different parenting behaviors contribute to child development. Until then, a large body of research suggests that if the aim is to enhance the development of children from low-income families, then it is important to provide high-quality, center-based early education services for children. Although parenting education delivered through home visits is a popular and appealing approach, there is no high-quality research showing that this approach leads to positive effects on children.

1. For a discussion of a broader range of two-generation programs, see St.Pierre, R.G., Layzer, J.I., and Barnes, H.V. Two-generation programs: Design, cost, and short-term effectiveness. *The Future of Children* (Winter 1995) 5,3:76–93.
2. Administration on Children, Youth and Families. *Comprehensive Child Development Program: A national family support demonstration. Interim report to Congress*. Washington, DC: U.S. Department of Health and Human Services, 1994. CCDP had an annual budget of \$25 million from Fiscal Years (FY) 1988 to 1991, \$44.4 million in FY 1992, \$46.8 million in FY 1993, and \$50 million in FY 1994.
3. The 24 Cohort 1 CCDP sites were Albuquerque, NM; Baltimore, MD; Boston, MA; Brattleboro, VT; Brooklyn, NY; Denver, CO; Fort Totten, ND; Fort Worth, TX; Glenwood City, WI; Grand Rapids, MI; Kansas City, KS; Las Cruces, NM; Lexington, KY; Little Rock, AR; Logan, UT; Marshalltown, IA; Miami, FL; Nashville, TN; Phoenix, AZ; Pittsburgh, PA; San Antonio, TX; Seattle, WA; Venice, CA; and Washington, DC. Ten additional Cohort 2 CCDP grantees were funded in FY 1992 and FY 1993. Although the Cohort 2 sites were not included in the evaluation discussed in this article, they are participating in an evaluation, which is due to be completed in September 1999.
4. See note no. 2, Administration on Children, Youth and Families, pp. 2.10 and 2.15. ACYF reports that after the first year of service delivery, all CCDP projects began to use a combination of paraprofessionals and professional case managers. This change was made because of the tensions that developed “between the beliefs and practices of [the paraprofessional staff] and the requirements of specialized training for dealing with multiproblem families.” Consequently, the definition of “professional” included “the ability to develop caring relationships and an interest in continuing to learn; an interest in moving families out of the welfare system (as opposed to ‘working the welfare system’); experience working with families in poverty and domestic violence situations; the ability to view problems as a challenge; a back-

ground in chemical dependency; cultural sensitivity; and the ability not to use personal values to judge a family's situation."

5. Administration on Children, Youth and Families. *Comprehensive Child Development Program: A national family support demonstration. First annual report*. Washington, DC: U.S. Department of Health and Human Services, December 1991.
6. St.Pierre, R.G., Layzer, J.I., Goodson, B.D., and Bernstein, L.S. *National impact evaluation of the Comprehensive Child Development Program: Final report*. Cambridge, MA: Abt Associates, June 1997.
7. CSR, Inc. *Process evaluation of the Comprehensive Child Development Program*. Washington, DC: CSR, Inc., 1997.
8. Fort Totten, ND, and Washington, DC, were excluded from the evaluation because of an inability to follow study protocols for random assignment and maintenance of records; Miami, FL, was excluded because the site received funding a year later than the other sites in the evaluation.
9. See note no. 2, Administration on Children, Youth and Families, p. 9.11. ACYF reports that CCDP grantees used replacement families to replace program families that became inactive (through dropping out, moving, and so forth) to maintain their service levels. In general, replacement families were not used in the impact evaluation.
10. CCDP children did score significantly higher than control children on the Developmental Checklist. However, the difference on this untested measure of social and emotional development was so small (0.4 points, or about one-fifteenth of a standard deviation) that it was extremely unlikely to produce any change in children's lives. This is an example in which the very large sample size of the evaluation permitted detection of a statistically significant effect that was educationally meaningless.
11. See note no. 7, CSR, Inc., p. 5.5, which reports that external services were those provided to CCDP participants at no cost to the CCDP program—for example, medical and health services donated by private providers. When the value of these donated services was included, the total cost of CCDP averaged \$15,768 per family per year in 1994 dollars, or about \$47,000 for each family in the evaluation, given an average length of participation of 3.3 years.
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