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R e s e a r c h i n B r i e f

Jeremy Travis, Director

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Issues and Findings

Discussed in this Brief: The evaluation of the Children at Risk (CAR) drug and delinquency prevention program for high-risk adolescents 11 to 13 years of age living in narrowly defined, severely distressed neighborhoods in Austin, Texas; Bridgeport, Connecticut; Memphis, Tennessee; Savannah, Georgia; and Seattle, Washington.

Key issues: The CAR experimental demonstrations tested the feasibility and impact of integrated delivery of a broad range of services to the 338 participating youths and all members of their households. Case managers collaborated closely with staff from criminal justice agencies, schools, and other community organizations to provide comprehensive, individualized services that targeted neighborhood, peer group, family, and individual risk factors.

The evaluation focused on three primary questions:

- Did CAR youths and families participate in more services and prosocial activities during the program than youths and families in the control (333 youths) and comparison (203 youths) groups?
- Did CAR youths and caregivers have fewer risk factors and/or more protective factors than youths and caregivers in the control and comparison groups 1 year after the program ended?

Evaluation of the Children at Risk Program: Results 1 Year After the End of the Program

By Adele Harrell, Shannon Cavanagh, and Sanjeev Sridharan

Children at Risk (CAR) was a drug and delinquency prevention program for high-risk adolescents 11 to 13 years of age who lived in narrowly defined, severely distressed neighborhoods. CAR delivered integrated services to the youths and all members of their households. Case managers collaborated closely with staff from criminal justice agencies, schools, and other community organizations to provide comprehensive, individualized services that targeted neighborhood, peer group, family, and individual risk factors.

The Office of Juvenile Justice and Delinquency Prevention, other Federal agencies, and private foundations funded experimental demonstrations from 1992 to 1996 in five cities—Austin, Texas; Bridgeport, Connecticut; Memphis, Tennessee; Savannah, Georgia; and Seattle, Washington—to test the feasibility and impact of integrated delivery of a broad range of services involving the close collaboration of police, school administrators, case managers, and other service providers (see “Children at Risk Funding Agencies”). The evaluation of the CAR program in these cities was funded by the National Institute of Justice, the National Institute on Drug Abuse, and private

foundations. The findings of that study are summarized in this Research in Brief.

Results from CAR were mostly encouraging. Youths in the treatment group, compared with youths in the control and comparison groups, participated in significantly more social and educational activities, exhibited less antisocial behavior, committed fewer violent crimes, and used and sold fewer drugs in the year after the program ended. They also were more likely to report attending a drug or alcohol prevention program.

Because drug use and delinquency are often part of a pattern that includes other problem behaviors, the evaluation looked for “spillover effects”—reductions in problem behaviors not specifically targeted by the program. However, no significant reductions in sexual activity, running away, dropping out of school, early pregnancy or parenthood, or gang membership were found.

CAR households used comparatively more services and participated in more kinds of positive activities than other households in the study. However, the majority of CAR families did not report receiving the full range of core program

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Issues and Findings

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- Were CAR youths less likely to exhibit problem behaviors in the year following the end of the program than high-risk youths in the control group who did not receive CAR services?

Key findings: Some of the findings of the CAR evaluation were:

- Compared with youths in the control and comparison groups, CAR youths participated in a significantly higher number of positive activities, such as sports, school clubs, religious groups, and community-organized programs, during the program period. They also were more likely to report attending drug and alcohol abuse programs.
- Compared with control group households, CAR households used more services. However, the majority of CAR families did not report getting most core program services.
- Compared with control group youths, CAR youths received more positive peer group support, associated less frequently with delinquent peers, felt less peer pressure, and were pressured less often by peers to behave in anti-social ways.
- Compared with control group youths, CAR youths were significantly less likely to have used gateway and serious drugs, sold drugs, or committed violent crimes in the year after the program ended.

Target audience: Local and State law enforcement officials, juvenile justice officials, social welfare professionals, local and State government officials, educational administrators, community organizers, researchers, and drug treatment practitioners.

services. Although CAR participation nearly doubled the youths' chances of participating in mentoring and tutoring programs and substantially increased their participation in other services, fewer than half of the CAR families reported receiving these services.

Family risk factors examined in the evaluation included family conflict and violence, lack of parental supervision and disciplinary practices, low levels of parental attachment and support, low family cohesion and organization, and problem behaviors among parents and older siblings. There was no indication of lower family risk among CAR youths either before or after participation. The process evaluation documented substantial problems in engaging these multiproblem families in services.

Targeted prevention

The evaluation of CAR's impact on the participating youths was guided by three primary questions:

- Did CAR youths and families participate in more services and prosocial activities during the program than youths and families in the control and comparison groups?

- Did CAR youths and caregivers have fewer risk factors and/or more protective factors than youths and caregivers in the control and comparison groups 1 year after the program ended?
- Were CAR youths less likely to exhibit problem behaviors in the year following the end of the program than high-risk youths in the control group who did not receive CAR services?

The youths chosen for intensive interventions lived in severely distressed neighborhoods and were selected because they already had exhibited problems associated with predictors of drug activity in later life. The programs targeted small geographical areas with the highest rates of crime, drug use, and poverty in each city (see "Evaluation Methodology"):

- In Austin, the target neighborhood was about 60 percent Hispanic and 30 percent black. It was characterized by extreme poverty, a high proportion of households headed by single mothers, and a high incidence of substance abuse and drug trafficking. Twenty-nine percent of the households had annual incomes of less than \$7,500 in 1992.

Children at Risk Funding Agencies

CAR was developed, funded, and monitored by the National Center on Addiction and Substance Abuse (CASA) at Columbia University with financial support from the National Institute of Justice, the Bureau of Justice Assistance, and the Office of Juvenile Justice and Delinquency Prevention in the U.S. Department of Justice's Office of Justice Programs. Additional support was provided by the Annie E. Casey Foundation, the Ford Foundation, the Prudential Foundation, the Rockefeller Foundation, the American Express Foundation, the Pew Charitable Trusts,

Ronald McDonald Children's Charities, and United Technologies.

At the local level, partnerships with private and volunteer organizations, including business organizations, local colleges, and churches, provided support for CAR activities. The impact evaluation was conducted by the Urban Institute with funds provided by the National Institute of Justice, CASA, and the National Institute on Drug Abuse of the U.S. Department of Health and Human Services.

T Evaluation Methodology

The five cities that participated in the evaluation were competitively selected to demonstrate the Children at Risk program following an extensive planning phase during which candidate cities developed proposals to implement the model. Each city received funds for at least 3 years. The impact evaluation used experimental and quasi-experimental comparisons. CAR participants were compared with a randomly assigned control group within target neighborhoods and a quasi-experimental group selected from matched high-risk neighborhoods in four of the five cities (no quasi-experimental group was selected in Seattle because the program stopped operating after 2 years).

The sample consisted of 338 CAR participants (the treatment group), 333 youths in the control group, and a quasi-experimental comparison group of 203 youths. The average age of the participating youths was 12.4 years at the time they entered the sample. Slightly more than half (52 percent) were male. Fifty-eight percent were black, 34 percent were Hispanic, and the remaining 8 percent were white or Asian. The primary caregiver was usually the mother (80 percent). In general, caregiver educational levels were low, and family dependence

on public support was widespread. More than half of the caregivers had not graduated from high school, fewer than half were employed when they joined the study, and most received some form of public assistance.

Data for the evaluation were collected from multiple sources:

- **Surveys of youths and caregivers.**

Inperson interviews were conducted in the home at baseline (between recruitment and the start of services) and at the end of the program period. (Each city created two cohorts of students and provided services for 2 years to each cohort.) A followup survey with the youths was conducted 1 year after the end of the program.

- **Data on officially recorded criminal activity.** Once each year, records were collected from the police and courts in participating cities on the youths' officially recorded contacts with the criminal justice system, including the date of contact, charges, and case outcomes. The records were coded to achieve consistent offense categories across sites and to exclude child abuse, neglect, and dependency actions.

- **Data on school performance and attendance.**

Records were collected from the schools on grades, promotions, and the percentage of scheduled days youths attended. Two data elements that were initially requested had to be dropped: standardized test results, which were missing for a large portion of the sample, and records of disciplinary action because they were maintained in different ways by participating schools and school systems. These data were limited to public schools in the participating cities and were not available for youths who moved or attended private or parochial schools.

The survey response rates for youths by group ranged from 98 percent at baseline to 77 percent at the end of the program and to 76 percent in the followup survey 1 year after the end of the program, with no significant differences by group or city. Caregiver response rates by group ranged from 96 to 100 percent at baseline and from 80 to 86 percent at the end of the program. An extensive analysis of attrition showed no differential response rates by group; city; demographic characteristics; or baseline risk factors, including drug involvement.

- In Bridgeport, the target neighborhood was about 40 percent Hispanic, 40 percent black, 14 percent white, and a small percentage was Southeast Asians. The large majority of the population lived at or below the poverty level.
 - In Memphis, the target area contained three of the city's largest public housing units. In this area, 94 percent of the residents were black, and 88 percent of the youths lived in poverty.
 - In Savannah, the target area led the city in juvenile delinquency, crime, and urban blight based on a 1991 study. Income was low for more than 66 percent of the households, and more than 70 percent of the households with children were headed by a single parent.
 - In Seattle, the student body at the targeted school was about 40 percent white, 25 percent black, 20 percent Asian or Pacific Islander, 4 percent American Indian, and 10 percent other.
- Staff from the schools, courts, and CAR programs, following clearly defined guidelines, identified eligible 11- to 13-year-old youths who attended the sixth or seventh grade, lived in the target neighborhood, and exhibited risk in one of three domains: school, family, or personal factors (see "Case Studies"):
- School risk was defined by exhibiting three of the seven following indicators: special education, grade retention, poor academic

performance, truancy, tardiness, out-of-school suspension, or disruptive behavior in school.

- Family risk was defined as having a history of family violence or having a gang member, a drug user or dealer, or a convicted offender in the home.
- Personal risk was defined by use or sale of drugs, juvenile court contact, delinquency or mental illness, association with gang members or delinquent peers, a history of abuse or neglect, or parenthood or pregnancy.

The CAR program

CAR's developers envisioned an intervention strategy that would prevent drug use and delinquency in at-risk youths by reducing the number

of risk factors to which they were exposed. The programs were required to provide eight service components that targeted neighborhood, peer group, family, and individual risk factors. These service components were locally planned and directed to fit the values and cultural background of the neighborhoods and varied across programs in design and content. Core services included case management, family services, afterschool and summer activities, mentoring, education services, incentives, community policing and enhanced enforcement, and criminal and juvenile justice intervention.¹

Case management. Case managers were the linchpin of the CAR strategy for service integration. They assessed the service needs of the participating youths and their families and devel-

oped and implemented plans to meet those needs. To ensure that this role was effectively performed, CAR caseloads were kept small—15 to 18 families. The CAR case managers' role included both traditional and nontraditional case management functions—recruitment, assessment, treatment, planning, linkage, and monitoring. They also planned, led, and mentored activities and provided transportation for the youths and their families. In some CAR programs, case managers developed strong individual relationships with families. In others, they focused more on the youth participants. In most CAR programs, far more time was spent on crisis intervention, and less on ongoing case management, than originally anticipated.

Case managers also played a central role in coordinating service delivery for youths and their families; they built relationships with staff in other agencies, including criminal and juvenile justice authorities, the recreation department, the housing department, and mental health agencies.

Family services. Case managers were charged with working with all family members to address a wide variety of problems that could affect the home environment and support for the youth. Family services included a wide range of therapeutic services and skills training to help families and adult caregivers function better. Case managers also reminded families about and provided transportation to appointments; acted as family advocates with other agencies; and assisted or substituted for parents by checking the participant youth's school attendance, homework, and behavior. Extreme examples of family assistance provided by a case manager included retrieving a runaway from another

M Case Studies

Many Children at Risk youths were vulnerable in more than one area and faced substantial problems, as the following two case profiles illustrate.

Joel was 13 years old when he was recruited for CAR. He had a history of fighting with other students and teachers and was on probation for possessing a gun. His stepfather, who had lived with the family, had died 4 years earlier. His mother, who was functionally illiterate and terminally ill, required home care and frequent visits to the doctor. Joel, the oldest male in the family, felt responsible for protecting his mother and siblings—a sense of responsibility, case managers felt, that often was behind why he got into trouble. Joel was released from CAR because he shot a man who made unwanted sexual advances to his 15-year-old sister and was processed through the adult court system. Because he was incar-

cerated and no longer lived in the community, CAR could no longer provide services to him.

Lisa had a history of fighting in school when she was not truant. While still very young, she turned to prostitution, apparently under pressure from her mother, who needed extra money to support a drug habit. At one point, Lisa walked into the bathroom at home and discovered her mother and a boyfriend having sex. Her mother encouraged her to stay so she could "learn the ropes." When the mother "reformed," she pulled Lisa out of prostitution. But 14-year-old Lisa missed the extra money and began working in a local strip club. The mother found out only after a police raid caught Lisa working there. Case managers say Lisa did not realize she was doing anything wrong.

town and testifying in court on behalf of a family.

Initially, case managers were to work intensely with the families over several months at the beginning of the program to address their most pressing needs. Then, once the family situation stabilized, the case manager would make less frequent home visits and would monitor services. Instead, case managers found that families of CAR participants had such serious and multiple needs that their whole lives were bound up with dealing with one crisis after another, making it impossible in many cases to establish anything that could be called a regular pattern of services.

Programs also found that, although parents willingly enrolled their children in CAR, engaging the parents themselves in sponsored activities was one of the most difficult aspects of the program to implement successfully. Although CAR caregivers were significantly more likely to report participation in a parenting class or group than caregivers in the control and comparison groups, most did not participate in these activities, which were one of the core components of the CAR model. At all sites, it was common for parents not to follow through on referrals for mental health services or substance abuse treatment, even when they were reminded about appointments. Despite problems in getting parental participation, CAR families were significantly more likely to participate in individual, group, or family counseling and drug or alcohol treatment than control and comparison group families.

CAR strategies for reducing family risks faced by youths included encouraging family members, particularly caregivers, to take part in organized

activities to help them become better parents and a positive influence in their community. These activities ranged from community cleanups to organizing safe houses for students after school.

Afterschool and summer activities. CAR addressed problems related to the interaction of participant youths with their peers by requiring programs to implement afterschool and summer activities. These activities were made available to participating youths both by increasing access to existing local programs and by developing special CAR-sponsored activities. The activities varied widely in intensity, frequency, duration, and content, but all offered the youths alternatives to hanging out without adult supervision in neighborhoods rife with gangs and drug dealers. Recreational activities included sports, games, arts, crafts, theater, and music. Peer group activities to enhance the youths' personal social development included self-esteem and life skills workshops; structured discussions about issues such as sex, grooming, and social problems; and special events to foster cultural identity and pride. The Savannah program was particularly outstanding in the last category because it centered on black culture and commitment to the principle that "it takes a village to raise a child." Activities there included Harambee Circles and Rites of Passage for youths and 4-day PRAISE (Parents Reclaiming African Information for Spiritual Enlightenment) workshops for parents.

Mentoring. CAR originally intended to match any youth participant who had no caretaking adult in the household with a volunteer mentor. Only Austin's program provided this one-to-one relationship because Big Brothers/

Big Sisters (BB/BS) of Austin was one of CAR's partner agencies. BB/BS operated a large, highly structured, and closely supervised mentoring program. It made room for CAR participants, even though they were older and had more problems than the other children it served.

Other sites shifted to group mentoring, in which a group of youths participated in activities led by a smaller group of mentors. Memphis, for example, turned to the Family Life and Revised Real Men Experience, a program at LeMoyne-Owen College. Girls and boys met with college student mentors, along with parents and other adult volunteers, on Saturdays during the school year and for 5 weeks during the summer. The sessions focused on self-esteem, conflict resolution, and decisionmaking, as well as on education and field trips. In addition, mentors were required to telephone their protégés/protégées at least twice a week and to talk with parents as well.

Education services. CAR programs offered tutoring and homework assistance to all participating youths and referrals to other services as needed, including educational testing and special education classes. Getting youths to use tutoring and homework assistance proved extremely difficult. Only one program got more than 50 percent of its youth participants to use afterschool tutoring assistance by offering tutoring in the form of a computer lab, games led by local college students, or individual help.

Some programs offered work preparation opportunities—a potentially significant factor in helping youths succeed—under this core component. These programs offered the youths modest stipends for activities such as

assisting at the local library, working up to 10 hours a week in local businesses, or participating in vocational exploration programs. Austin, for example, offered six job preparation choices that youths could sign up for at a job fair. A particularly noteworthy option was a 5-week summer camp offering science and technology training. It paid \$60 a week and was sponsored jointly by CAR, the school system, and the Austin Interfaith Council.

Incentives. CAR specified that case managers and organizers of program activities were to build in immediate small rewards for good behavior. Program incentives were incorporated to reward both participant youths and family members who cooperated with CAR program activities and objectives. To reward youth participants, the programs used both monetary and nonmonetary incentives. Monetary awards included paying participants \$10 stipends at the end of each week if they attended afterschool activities and wrote in their journals each day and stipends for community service performed during summer months. Nonmonetary rewards included trips to sporting events and vouchers for pizza, sports shops, and movies. One program found that involving participants in decisions about incentives effectively maintained their interest in the program. Family incentives that were particularly effective included providing food for events in which these extremely poor families were expected to participate.

Community policing and enhanced enforcement. CAR programs included the direct participation of police officers, in particular, increased police presence in and around school grounds and on major

routes to school. In addition, depending on the site, community police officers worked with residents on crime prevention activities, such as establishing safe houses and drug-free school zones, attending community meetings on safety issues, and giving presentations at CAR family events. Community police officers also worked directly with youths, serving as role models and mentors in the course of teaching Drug Abuse Resistance Education (D.A.R.E.[®]), participating in recreational programs and special events, working with case managers on problems with specific youths, and occasionally making home visits.

The closest collaboration between CAR and police occurred in cities in which there was high-level police support for community policing, the police department devoted special attention and resources to the target neighborhood and the program, and individual officers considered involvement in planning program activities for the CAR neighborhood part of their responsibilities. Although ratings of neighborhood safety or quality at the end of the program were not higher in CAR areas than in the comparison neighborhoods, youths or their caregivers in several CAR areas knew more police officers by name and reported more kinds of positive contacts with police.

Criminal and juvenile justice intervention. Case managers worked with criminal and juvenile justice authorities when CAR youths became involved with the courts. The particular intent was to ensure enhanced supervision and to provide community service opportunities as a constructive learning experience for youths in the criminal justice system. Depending on the site, case managers worked

collaboratively with the juvenile probation department, shared information about individual youths, and undertook joint service planning.

CAR outcomes

Did CAR increase participation in services and prosocial activities?

Compared with youths in the control and comparison groups, CAR youths participated in a significantly higher number of positive activities, such as sports, school clubs, religious groups, and community-organized programs, during the program period. They also were more likely to report attending a drug or alcohol prevention program.

Compared with the control group households, CAR households used more services, including tutoring; mentoring; treatment for drug and alcohol abuse; parenting education; and individual, group, or family counseling. Overall, CAR households used an average of 3.4 services, compared with 2.5 for the control group. CAR caregivers also participated in more kinds of positive activities, such as religious, community, and recreational activities, than did control group caregivers.

However, the majority of CAR families did not report receiving the eight core program services. Although CAR nearly doubled the youths' chances of participating in mentoring and tutoring programs and substantially increased their participation in other services, fewer than half of the CAR families reported receiving these services. These results from the survey of caregivers were consistent with process evaluation reports of the difficulties encountered in getting youths to participate voluntarily in tutoring programs and establishing stable

mentoring relationships. Case management and the recreational and after-school activities were the most widely used CAR services.

Did CAR reduce risk factors or enhance protective factors?

The evaluation examined risk factors in four domains: individual, peer group, family, and neighborhood. The program achieved reductions in CAR youths' peer risk (measured in several ways) compared with the randomly assigned control group (but not compared with the comparison group of youths from other neighborhoods). One year after the program ended, CAR youths:

- Had more positive peer support than youths in the control group.
- Associated less often with delinquent peers than youths in the control group.
- Felt less peer pressure to engage in delinquent behaviors than youths in the control group.
- Were less frequently urged by peers to behave in antisocial ways than youths in the control group.

The evaluation examined individual risks in two areas: personal characteristics and factors related to school performance. No significant differences in self-esteem, alienation, or risk taking were found between CAR youths and youths in the other groups. CAR youths did not report fewer or less severe personal problems on questions about feeling sad and lonely, getting into trouble at school, or dealing with serious issues.

CAR youths showed one potentially important gain in the area of educational risk. They were, in the 3 years since entering CAR, more likely to be promoted in school than youths in the

control group. This may lead to higher graduation rates. However, on other measures of educational risk—attachment to school, school attendance, grades, educational and job expectations, and perceptions of discrepancies between aspirations and expectations—the CAR youths resembled their peers who did not receive CAR services.

Family risk factors examined in the evaluation included family conflict and violence, lack of parental supervision and disciplinary practices, low levels of parental attachment and support, low family cohesion and organization, and problem behaviors among parents and older siblings. There was no indication of lower family risk among CAR youths either before or after participation. The process evaluation documented substantial problems in engaging these multiproblem families in services.

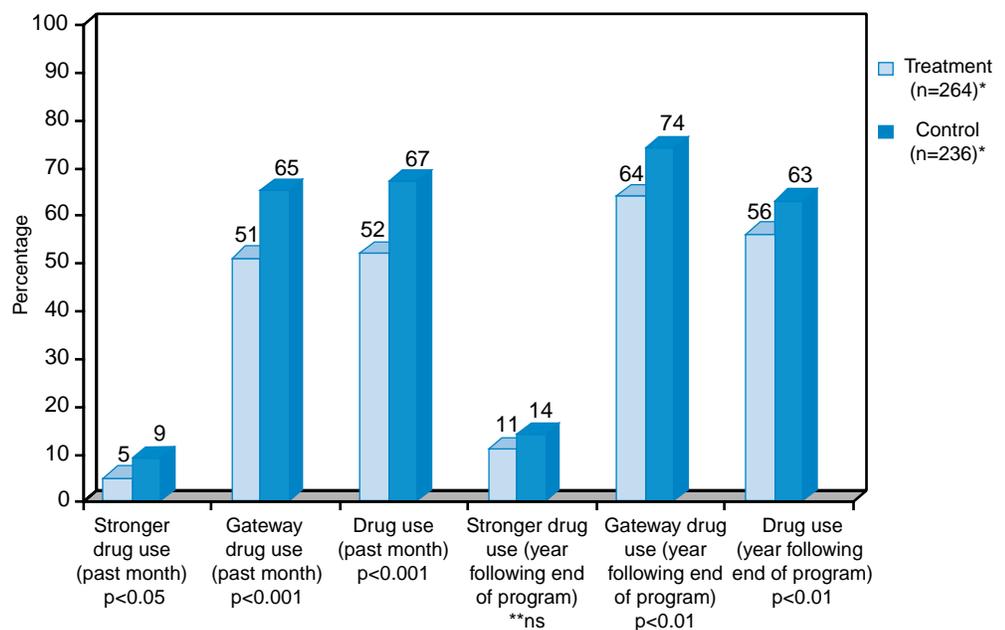
There were few differences between four CAR neighborhoods and comparison areas in the same city in youth or caregiver reports of safety, policing, drug problems, appearance or quality of life, and other measures designed to reflect improvements in the environment. The exception was that CAR caregivers were far more likely to know police officers by name, suggesting the community policing component did indeed result in additional contacts with the families.

Did CAR reduce or prevent problem behaviors?

The primary goal of CAR was to reduce drug use and delinquency, and there were several indicators of success on these critical outcomes. Compared with youths in the control group 1 year after the end of the program, CAR youths:²

- Were significantly less likely to have used drugs in the past month, including gateway drugs

Exhibit 1. Percentage of CAR and control youths reporting drug use: Five cities



* Based on cases with available data; not all children in CAR could be tracked.
 ** ns= nonsignificant

(marijuana, alcohol, inhalants, or cigarettes) and stronger drugs (psychedelics, crack, other cocaine, heroin, or nonmedical prescription drugs). (See exhibit 1.)

- Were significantly less likely to use gateway drugs in the year following the end of the program but no less likely to use stronger drugs in that year. (See exhibit 1.)
- Were significantly less likely to have sold drugs, both in the past month and at any time, controlling for use prior to program entry. (See exhibit 2.)
- Committed significantly fewer violent crimes in the year following the end of the program but did not commit significantly fewer property crimes. (See exhibit 3.)

The official records from the police and courts did not reflect a significantly lower likelihood of contact with these agencies, lower numbers of contacts, or differences in patterns of officially detected criminal activity. However, it was not clear whether the absence of significant differences in

official detection of delinquents resulted from greater surveillance of CAR youths, generally low rates of detection, measurement errors in the records, or an actual lack of differences between the two groups.

Because drug use and delinquency often are part of a pattern that includes other problem behaviors, the evaluation looked for “spillover effects”—reductions in problem behaviors not specifically targeted by the program. However, no significant reductions in sexual activity, running away, dropping out of school, early pregnancy or parenthood, or gang membership were found.

Lessons on program implementation

The central operational goal of CAR was to implement a highly collaborative program to address problems at the youth, family, peer group, and neighborhood levels simultaneously. What lessons do they have for communities seeking to set up their own CAR-like programs for at-risk youths?

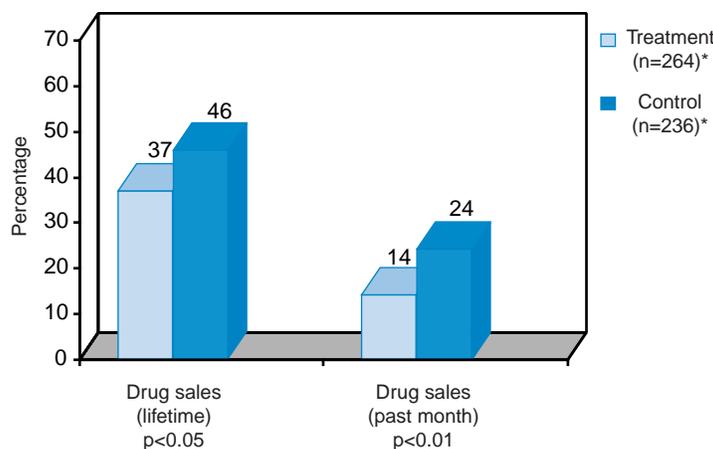
Implementation works best when the lead agency is already part of a wider agency network. The lead agency in more successful sites had well-established collaborative relationships with other agencies prior to the start of the demonstration. CAR benefited from a communitywide service network already in place because agency staff were accustomed to sharing ideas, plans, and, in some cases, resources.

Agency collaboration works best when the program is horizontally and vertically integrated. Horizontal integration involves coordination of services across traditional agency boundaries. Four primary forms of horizontal integration were prominent in successful sites: integrated case management, in which the staff of multiple agencies worked together; physical co-location; community organization; and a culturally grounded shared vision.

Vertical integration involves explicit lines of communication up and down the chain of authority—frontline staff, middle management, and executive staff—around issues of policy, funding, and service delivery. Such a structure allowed project staff to identify concerns and bring them to key decisionmakers and allowed issues decided at the top to be transmitted effectively to line staff for implementation.

The demonstration found no evidence that some staffing patterns work better than others. The crucial ingredients for operational success are that the lead agency needs to have a clear collaborative mission and that the program should have clear channels of communication across agencies and up and down the chain

Exhibit 2. Percentage of drug sales for CAR and control youths: Five cities



* Based on cases with available data; not all children in CAR could be tracked.

of authority. The particular staffing pattern does not appear to make much difference as long as these two ingredients are present. A program can be successful no matter which combination of direct staff, contracted staff, and inkind donated services it chooses. These decisions are probably best governed by the characteristics of the particular community and program environment.

The costs of CAR

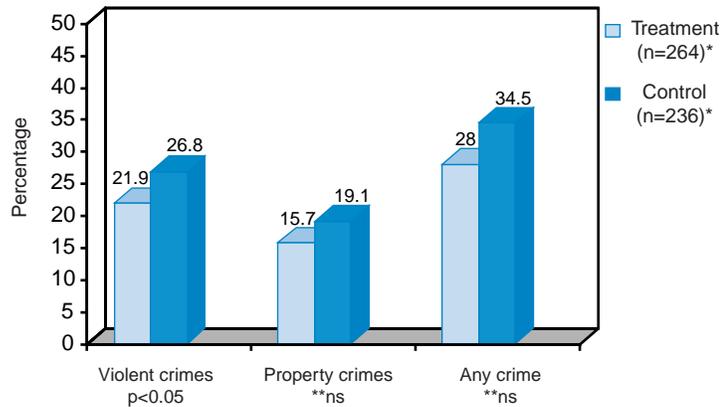
The average CAR program, when operating at full strength, served 90 participants and a similar number of family members (83) per year at a cost of \$420,000. This amounts to slightly less than \$4,700 a year per youth participant. When family members are included, the cost per individual served falls to \$2,400. As programs gain experience, these costs may be reduced.

Seventy-nine percent of the total was cash outlays. Personnel costs and contractual costs together accounted for 70 percent of the total. The relative importance of the two varied among sites, depending on what proportion of services was delivered by CAR program staff and what proportion was contracted out. Other cash costs averaged only 8 percent of the total, ranging from 4 percent in Austin to 13 percent in Memphis. The rest represented inkind services from CAR partnership organizations. The relative shares of cash and inkind resources differed substantially by program, depending on local program partnership arrangements.

Implications for program development

One of the most revealing findings from the CAR evaluation was that the

Exhibit 3. Percentage of criminal activity in the year following the end of the program for CAR and control youths: Five cities



* Based on cases with available data; not all children in CAR could be tracked.
** ns=nonsignificant

positive effects of the program on drug use, crime, and risk factors were not, for the most part, observed at the end of the program. CAR services often were intensified following crises in the lives of the youths—school suspension, arrest, or observed drug use. As a result, CAR youths who used the most services were often those who reported the most significant problem behaviors on the program survey. The lesson seems to be that CAR was actually implemented as a secondary prevention program, intervening when youths with few family or other social resources got into trouble. CAR provided assistance to offset, rather than remediate, underlying risk factors. This differs from the original vision of CAR as a primary prevention program for a group of high-risk youths. However, it does suggest that a structured capacity for responding to problems immediately—used in combination with services such as afterschool and summer programs that enhance positive peer group activities—may enable some high-risk youths to deal with crises during the crucial developmen-

tal stage of early adolescence. The answer to whether the substantial investment in this effort pays long-term dividends must await followup. If, as some studies suggest, increased rates of school promotion, reduced involvement in drug use during early adolescence, and positive peer influence result in higher rates of high school graduation and reduced involvement in the adult criminal justice system, then the investment may have long-term benefits that outweigh the short-term costs.

Notes

1. The descriptions are based on the documentation study reports in Hirota, J.M., *Children at Risk: Profiles of a Program at One Year*, New York: National Center on Addiction and Substance Abuse at Columbia University, 1994a; Hirota, J.M., *Children at Risk: The Second Year*, New York: National Center on Addiction and Substance Abuse at Columbia University, 1994b; and Tapper, D., *Children at Risk: Final Report on the Demonstration Program*, New York: National Center on Addiction and Substance Abuse at Columbia University, 1996.
2. This analysis of self-reported delinquency included the score on a social desirability scale to control for the tendency to underreport deviant behaviors.

Adele Harrell, Ph.D., is director of the Program on Law and Behavior at the Urban Institute. At the time this evaluation was conducted, Shannon Cavanagh was a research associate at the Urban Institute; she presently is pursuing her doctorate in sociology at the University of North Carolina at Chapel Hill; and Sanjeev Sridharan was a research associate at the Urban Institute. This research was conducted under cooperative agreement 92-DD-CX-0031 with the National Institute of Justice, with matching funds from the National Center on Addiction and Substance Abuse, and grant RO1-08583-02 from the National Institute on Drug Abuse.

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DeGraffenreaid of Memphis Youth Services; Dr. Otis Johnson, Jacqueline Elmore, and Ernest Daily from the Savannah CAR program; and Mary Ball of the Seattle Department of Youth Services.

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Findings and conclusions of the research reported here are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

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Selected National Institute of Justice (NIJ) and Office of Juvenile Justice and Delinquency Prevention (OJJDP) Publications About Issues Relating to Children at Risk

Listed on pages 11–12 are selected NIJ and OJJDP media products related to the topic addressed by this Research in Brief. Most of the media products may be obtained free, except as indicated, from the National Criminal Justice Reference Service (NCJRS): phone 800–851–3420; e-mail askncjrs@ncjrs.org; or write Box 6000, Rockville, MD 20849–6000. When free publications are out of stock, photocopies are available for a minimal fee or through interlibrary loan. Many of the publications also can be downloaded from either the National Institute of Justice Web site (www.ojp.usdoj.gov/nij) or the NCJRS Web site (www.ncjrs.org).

Altschuler, David M., *Reintegrating Juvenile Offenders Into the Community: OJJDP's Intensive Community-Based Aftercare Demonstration Program*, NIJ Research in Progress Preview, 1998, FS 000234.

Andrews, Chyrl, *Tribal Youth Program*, OJJDP Fact Sheet, 1999, FS–99108.

Browning, Katharine, and David Huizinga, *Highlights of Findings From the Denver Youth Survey*, OJJDP Fact Sheet, 1999, FS–99106.

Browning, Katharine, David Huizinga, Rolf Loeber, and Terence P. Thornberry, *Causes and Correlates of Delinquency Program*, OJJDP Fact Sheet, 1999, FS–99100.

Browning, Katharine, and Rolf Loeber, *Highlights of Findings From the Pittsburgh Youth Study*, OJJDP Fact Sheet, 1999, FS–9995.

Browning, Katharine, Terence P. Thornberry, and Pamela K. Porter, *Highlights of Findings From the Rochester Youth Development Study*, OJJDP Fact Sheet, 1999, FS–99103.

Burch, Jim, and Candice Kane, *Implementing the OJJDP Comprehensive Gang Model*, OJJDP Fact Sheet, 1999, FS–99112.

Chaiken, Marcia R., *Kids, COPS, and Communities*, NIJ Issues and Practices, 1998, NCJ 169599.

Chaiken, Marcia, *Youth Afterschool Programs and Law Enforcement*, NIJ Research in Progress Preview, 1997, FS 000169.

Chamberlain, Patricia, *Treatment Foster Care*, OJJDP Bulletin, 1998, NCJ 173421.

Cross-Age Teaching, OJJDP Youth in Action Bulletin, 1999, NCJ 171688.

Devine, Patricia, Kathleen Coolbaugh, and Susan Jenkins, *Disproportionate Minority Confinement: Lessons Learned From Five States*, OJJDP Bulletin, 1998, NCJ 173420.

Evans, Monte, II, *Teens, Crime, and the Community*, OJJDP Youth in Action Fact Sheet, 1999, YFS–9904.

Fagan, Jeffrey, *Adolescent Violence: A View From the Street*, NIJ Research in Progress Preview, 1998, FS 000189.

Forming a Multidisciplinary Team To Investigate Child Abuse, OJJDP Portable Guide, 1998, NCJ 170020.

Greene, Peters, and Associates, in collaboration with the Northwest Regional Educational Laboratory, *Guiding Principles for Promising Female Programming: An Inventory of Best Practices*, OJJDP Report, 1998, NCJ 173415.

Griffin, Patrick, *Developing and Administering Accountability-Based Sanctions for Juveniles*, OJJDP/Juvenile Accountability Incentive Block Grants Bulletin, 1999, NCJ 177612.

Hsia, Heidi M., *Allegheny County, PA: Mobilizing To Reduce Juvenile Crime*, OJJDP Bulletin, 1997, NCJ 165693.

Hsia, Heidi M., and Donna Bownes, *Title V: Community Prevention Grants Program*, OJJDP Fact Sheet, 1998, FS–9889.

Huff, C. Ronald, *Criminal Behavior of Gang Members and At-Risk Youths*, NIJ Research in Progress Preview, 1998, FS 000190.

Huff, C. Ronald, *Comparing the Criminal Behavior of Youth Gangs and At-Risk Youths*, NIJ Research in Brief, 1998, NCJ 172852.

Ingersoll, Sarah, *Investing in Youth for a Safer Future*, OJJDP Fact Sheet, 1999, FS–9998.

Juvenile Justice Journal (December 1998), OJJDP Journal, 1998, NCJ 173425.

Kennedy, David M., *Juvenile Gun Violence and Gun Markets in Boston*, NIJ Research in Progress Preview, 1997, FS 000160.

Kenney, Dennis, *Crime in the Schools: A Problem-Solving Approach*, NIJ Research in Progress Preview, 1998, FS 000224.

Kenney, Dennis Jay, and Steuart Watson, *Crime in the Schools: Reducing Conflict With Student Problem Solving*, NIJ Research in Brief, 1999, NCJ 177618.

Kilpatrick, Dean, and Benjamin Saunders, *The Prevalence and Consequences of Child Victimization*, NIJ Research in Progress Preview, 1997, FS 000179.

Kumpfer, Karol L., and Rose Alvarado, *Effective Family Strengthening Interventions*, OJJDP Bulletin, 1998, NCJ 171121.

Lasley, James, *“Designing Out” Gang Homicides and Street Assaults*, NIJ Research in Brief, 1998, NCJ 173398.

Lockwood, Daniel, *Violence Among Middle School and High School Students: Analysis and Implications for Prevention*, NIJ Research in Brief, 1997, NCJ 166363.

MacKenzie, Lynn Ryan, *Residential Placement of Adjudicated Youth, 1987–1996*, OJJDP Fact Sheet, 1999, FS–99117.

MacKenzie, Lynn Ryan, *Detention in Delinquency Cases, 1987–1996*, OJJDP Fact Sheet, 1999, FS–99115.

Make a Friend—Be a Peer Mentor, OJJDP Youth in Action Bulletin, 1999, NCJ 171691.

McDonald, Lynn, and Deborah Howard, *Families and Schools Together*, OJJDP Fact Sheet, 1998, FS–9888.

Mentaberry, Mary, *Model Courts Serve Abused and Neglected Children*, OJJDP Fact Sheet, 1999, FS–9990.

Moore, John P., and Craig P. Terrett, *Highlights of the 1997 National Youth Gang Survey*, OJJDP Fact Sheet, 1999, FS–9997.

1998 Annual Report on School Safety, OJJDP Report, 1998, NCJ 173934.

1998 Report to Congress: Juvenile Mentoring Program (JUMP), Program Report, 1998, NCJ 173424.

Obeidallah, Dawn A., and Felton J. Earls, *Adolescent Girls: The Role of Depression in the Development of Delinquency*, NIJ Research Preview, 1999, FS 000244.

OJJDP Research: Making a Difference for Juveniles, OJJDP Report, 1999, NCJ 177602.

Oldenettel, Debra, and Madeline Wordes, *Community Assessment Centers*, OJJDP Fact Sheet, 1999, FS-99111.

Olds, David, Peggy Hill, and Elissa Rumsey, *Prenatal and Early Childhood Nurse Home Visitation*, OJJDP Bulletin, 1998, NCJ 172875.

Pete, Shannon, *Hands Without Guns*, OJJDP Youth in Action Fact Sheet, 1999, YFS-9903.

Pfeiffer, Christian, *Trends in Juvenile Violence in European Countries*, NIJ Research in Progress Preview, 1998, FS 000202.

Riley, Pam, and Joanne McDaniel, *Youth Out of the Education Mainstream: A North Carolina Profile*, OJJDP Bulletin, 1999, NCJ 176343.

Roth, Jeffrey, *The Detroit Handgun Intervention Program: A Court-Based Program for Youthful Handgun Offenders*, NIJ Research in Progress Preview, 1998, FS 000231.

Sampson, Robert J., Stephen W. Raudenbush, and Felton J. Earls, *Neighborhood Collective Efficacy—Does It Help Reduce Violence?* NIJ Research Preview, 1998, FS 000203.

Shelden, Randall G., *Detention Diversion Advocacy: An Evaluation*, OJJDP Bulletin, 1999, NCJ 171155.

Sheley, Joseph F., and James D. Wright, *High School Youths, Weapons, and Violence: A National Survey*, NIJ Research in Brief, 1998, NCJ 172857.

Snyder, Howard N., *Juvenile Arrests 1997*, OJJDP Bulletin, 1998, NCJ 173938.

Snyder, Howard N., and Melissa Sickmund, *Juvenile Offenders and Victims: 1999 National Report*, OJJDP Report, 1999, NCJ 178257.

Stahl, Anne L., *Delinquency Cases in Juvenile Courts, 1996*, OJJDP Fact Sheet, 1999, FS-99109.

Stahl, Anne L., *Juvenile Court Processing of Delinquency Cases, 1987-1996*, OJJDP Fact Sheet, 1999, FS-99104.

Stahl, Anne L., *Juvenile Vandalism, 1996*, OJJDP Fact Sheet, 1998, FS-9885.

Stand Up and Start a School Crime Watch! OJJDP Youth in Action Bulletin, 1998, NCJ 171123.

Thornberry, Terence P., Carolyn A. Smith, Craig Rivera, David Huizinga, and Magda Stouthamer-Loeber, *Family Disruption and Delinquency*, OJJDP Bulletin, 1999, NCJ 178285.

Torbet, Patricia, and Linda Szymanski, *State Legislative Responses to Violent*

Juvenile Crime: 1996-97 Update, OJJDP Bulletin, 1998, NCJ 172835.

Youth Preventing Drug Abuse, OJJDP Youth in Action Bulletin, 1998, NCJ 171124.

Selected NIJ Media Products

Altschuler, David M., *Reintegrating Juvenile Offenders Into the Community: OJJDP's Intensive Community-Based Aftercare Demonstration Program*, VHS videotape, 1998, NCJ 170033, U.S. \$19, Canada and other foreign countries \$24.

Dunworth, Terry, *Tailoring Law Enforcement Responses to Youth Firearm Violence*, VHS videotape, 1998, NCJ 173958, U.S. \$19, Canada and other foreign countries \$24.

Gottfredson, Gary, and Denise Gottfredson, *School-Based Prevention of Problem Behavior: What's Being Done, Where, and How Well*, VHS videotape, 1999, NCJ 176982, U.S. \$19, Canada and other foreign countries \$24.

Kenney, Dennis, *Crime in the Schools: A Problem-Solving Approach*, VHS videotape, 1997, NCJ 167882, U.S. \$19, Canada and other foreign countries \$24.

Pfeiffer, Christian, *Trends in Juvenile Violence in European Countries*, VHS videotape, 1997, NCJ 167029, U.S. \$19, Canada and other foreign countries \$24.

Roth, Jeffrey, *The Detroit Handgun Intervention Program: A Court-Based Program for Youthful Handgun Offenders*, VHS videotape, 1998, NCJ 171126, U.S. \$19, Canada and other foreign countries \$24.

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