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**FAMILIES AS A RESOURCE IN  
RECOVERY FROM DRUG ABUSE:**  
An Evaluation of La Bodega  
de la Familia

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Requests for additional information about the research described in this report should be directed to Eileen Sullivan, Research Director, at the above address or at email: [esullivan@vera.org](mailto:esullivan@vera.org).

## Executive Summary

Since 1996, an experimental program in New York City has tried to show that by engaging and helping the families of drug users, the criminal justice system can overcome the limitations of its present focus on punishment and treatment of users alone. The program, La Bodega de la Familia, engages both substance abusers and their family members in family case management and other services as a supplement to probation, parole, or pre-trial supervision. By providing support to the families of drug users in the criminal justice system, Bodega aims to increase the success of drug treatment, reduce the use of incarceration to punish relapse, and reduce the harms addiction causes within families.

To evaluate Bodega's impact, researchers at the Vera Institute of Justice compared outcomes for a sample of Bodega participants with outcomes for a comparison group of drug users and their family members. Researchers used standardized interview instruments that measure physical and mental health, family functioning, and social support, when study members entered the research and again six months later. The researchers obtained official arrest and conviction data on each drug user in the study and conducted more detailed, ethnographic interviews with a sub-sample of both the Bodega participants and the comparison group.

The research sheds new light on the family dynamics that accompany drug abuse in poor, drug-filled neighborhoods. The average age at which study group members first used a drug other than marijuana was 15. Drug use and dealing were frequently taught by one generation to the next, and often put family members in physical danger. Arrest and incarceration had become so routine among users in the study that almost two-thirds considered their present legal problems to be "not at all important."

Even in these conditions, the researchers found that Bodega's family case management made a difference. Family members participating in the program obtained medical and social services they said they needed at significantly higher rates than those in the comparison group, and they showed a significantly stronger sense of being supported emotionally and materially in their social relationships. At the same time, the percentage of Bodega substance abusers using any illegal drug declined from 80 percent to 42 percent, significantly more than in the comparison group. Arrests and convictions were also lower among drug users participating in Bodega over six months. The reduction in drug use was not produced, as originally anticipated, by greater use of drug treatment among Bodega participants, but instead appears to be a direct result of pressure and support from Bodega case managers and family members themselves.

The results of the research suggest that Bodega's family case management can be an effective supplement to more traditional criminal justice responses to drug addiction.

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This research relied on official criminal justice data provided by the New York State Division of Criminal Justice Services, and we are grateful for that agency's cooperation. We also thank Frank Sergi, Director of Planning at the New York City Criminal Justice Agency, for providing us with data on recidivism among study participants. We thank the New York State Division of Parole, the Betances Health Unit medical clinic, and the Lower East Side Service Center's methadone clinic for their help in recruiting study participants.

We also want to thank our reviewers at the National Institute of Justice for their valuable feedback. As well, we appreciated comments from Vera's external review panel: Richard Curtis, Ph.D., Professor of Anthropology at John Jay College of Criminal Justice, City University of New York; Ernest Drucker, Ph.D., Head of Public Health and Policy Research and Professor of Epidemiology and Social Medicine, Montefiore Medical Center; and Judith Ross Smith, Ph.D., Associate Professor, Graduate School of Social Service, Fordham University.

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## Introduction

For good or ill, the criminal justice system has long served as the primary instrument of United States drug policy. In the last decade, however, the relative emphasis on treatment and punishment within the criminal justice system has shifted. Because policies focused exclusively on punishment have proved prohibitively expensive and possibly ineffective, criminal justice practitioners today promote more balanced policies: searching for ways to take advantage of the justice system's penetrating hold on drug users, to bring them to treatment and break their connections to drugs and crime. This new hybrid of treatment and punishment can be seen in treatment programs based in state prisons, diversion programs operated by prosecutors' offices, and specialized drug courts that supervise and discipline offenders as they participate in treatment. At the same time, treatment professionals have been working to improve the quality of treatment available, increasingly emphasizing cognitive-behavioral treatment techniques that have been shown to produce higher rates of recovery among offenders.<sup>1</sup>

Still, even a criminal justice system that acknowledges offenders' drug problems and mixes treatment with punishment is limited in what it can do about substance abuse. First, it is limited in its reach into the lives of addicted offenders in their own communities. While better bridges between the criminal justice system and treatment programs may help offenders while they are in prison or under strict surveillance, the value of that coerced treatment erodes quickly when ex-offenders return to relative freedom. Second, the system is limited in its ability to repair the damage that addiction does to those around the substance abuser. Recovery from addiction is a painful process, and the criminal justice system has, until now, done relatively little to address the harm addiction causes to the families, neighbors, and friends of drug abusers, all of whom are real victims of drug abuse. Indeed, anchoring treatment in the justice system risks solidifying a substance abuser's link with that system, further damaging the substance abuser's social network and family. Already victimized by the substance abuser—often harmed by abuse, neglect, or theft—families can be doubly harmed by the criminal justice response to substance abuse.

In 1995, New York City and New York State funded a demonstration program to show that the criminal justice system could overcome these limitations by working directly with families. Planners at the Vera Institute of Justice in New York City designed the program and launched it on Manhattan's Lower East Side, a neighborhood where substance abuse is endemic. Located on the site of a former drug-dealing Bodega (grocery), La Bodega de la Familia operates with a staff of about a dozen people. Bodega provides a range of services to drug abusers involved with the criminal justice or family

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<sup>1</sup> See, for example, Sherman et al., "Preventing Crime: What Works, What Doesn't, What's Promising," *Social Forces* 75 no. 3 (1997): 769-798.



court systems and their families, including walk-in services, 24-hour crisis intervention, and family case management.<sup>2</sup>

Although there has been greater recognition in recent years of the importance of family involvement, La Bodega de la Familia is, to our knowledge, the first program funded by criminal justice dollars that is devoted to building support *around* the offender. In part, this support is directed at improving the offender's chances of staying in mandated outpatient treatment, and reducing the probability of his or her return to jail or prison for relapse. Equally important, however, is support to the family for its own sake—to mend the intrafamilial harms caused by substance abuse, to improve the health and well-being of all family members, and to reduce their risk of becoming involved in drugs and crime.

In the five years since its launch, Bodega's integrative approach to treating crime-involved drug users and their families has drawn national attention.<sup>3</sup> National advocacy and policy organizations such as Join Together and Drug Strategies have featured the program in issue papers. Until now, however, Bodega's contribution to drug and criminal justice policy has been largely rhetorical. Both practitioners and policymakers need to know whether Bodega's approach can result in tangible reductions in drug abuse and real improvements in families. In particular, some observers have been concerned that the program's broad brush approach—dividing the attention of its small staff among drug users, family members, and officials based in multiple government bureaucracies—has the effect of diluting the program's impact on a single client or family unit. Other observers have been concerned that Bodega's emphasis on keeping drug users united with family members might result in additional harm to those family members who do not use drugs.

### **Defining the Risk to Families**

Substance abuse by any family member can wreak havoc on the entire family. Clearly, drug abuse can lead to family violence. A recent examination of epidemiological data suggests that family members who do not use drugs but who live with a substance user are 11 times as likely to die a violent death at home as those who live in a drug-free

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<sup>2</sup> La Bodega received funding from the New York City Mayor's Office of the Criminal Justice Coordinator and New York City's Department of Mental Health, Mental Retardation and Alcoholism Services. At the state level, the program received funding from the Division of Probation and Correctional Alternatives, the Division of Criminal Justice Services, the Division of Parole, and the Office of Children and Family Services. At the federal level, the program received funding from the Office of Justice Programs, the Bureau of Justice Assistance, the Substance Abuse, Mental Health Service Administration (SAMHSA), and the U.S. Department of Housing and Urban Development. Additional funding for the program and for research on the program has been provided by the National Institute of Justice and private foundations; the Drug Policy Foundation granted support for planning the demonstration.

<sup>3</sup> Christopher Wren, "Drug Program Helps Forgotten Victims: On the Lower East Side, Families of Addicts Receive Needed Relief." *New York Times*, September 25, 1997: B2.

home.<sup>4</sup>

Conversely, violence within a family also operates as a risk factor for future substance abuse. The psychological distress that children experience from either witnessing family violence or being the victim of that violence places them at risk for substance abuse later in life.<sup>5</sup> Family violence, more specifically a male partner's abuse of a female partner, predicts substance use in women.<sup>6</sup>

Children are largely ignored in the loud and rancorous debate over drug policy in the United States, but they lead any list of the victims of substance abuse. Just as Bodega was being planned, experts estimated that 22 million children had a substance abusing parent.<sup>7</sup> Indeed, a growing body of research supports the consensus view that familial substance abuse places children at risk of "failing to succeed in life."<sup>8</sup> Abuse and neglect are the most obvious risks for children of substance abusers. Poor nurturing, monitoring, and discipline characterize the neglect. Basic needs for food and health care often go unmet in families afflicted with substance abuse. In this context, poor mental and physical health in children are seen as correlates of parental substance use.<sup>9</sup>

The transmission of substance abuse across generations, with both behavioral and genetic components, is another risk for children. Compared to children of social drinkers, for example, children of problem drinkers are more likely to develop alcohol problems and substance abuse problems by adolescence.<sup>10</sup> Similarly, other research indicates that fetuses exposed to drugs inside their mothers develop into children with a higher risk of substance abuse later in life than those that were not exposed.<sup>11</sup>

Children are not necessarily doomed if family substance abuse forms the backdrop to their development. Families have the potential to operate as a protective factor rather than a risk factor in children's lives. Family cohesion can buffer the effects of a substance

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<sup>4</sup> F.P. Rivara, B.A. Mueller, G. Somes, et al., "Alcohol and Illicit Drug Abuse and the Risk of Violent Death in the Home." *JAMA* 276 no. 7 (1997): 569-575.

<sup>5</sup> E.F. Pribor and S.H. Dinwiddie, "Psychiatric Correlates of Incest in Children," *American Journal of Psychiatry* 149 (1992): 52-56.

<sup>6</sup> M.E. Goldberg, "Substance-Abusing Women: False Stereotypes and Real Needs," *Social Work* 40 (1995): 789-798. See also B.A. Miller, W. R. Downs, and D.M. Gondoh, "Spousal Violence among Alcoholic Women as Compared to a Random Household Sample of Women," *Journal of Studies on Alcohol* 50 (1989): 533-540.

<sup>7</sup> J.E. McGaha and E.L. Leoni, "Family Violence, Abuse, and Related Family Issues of Incarcerated Delinquents with Alcoholic Parents Compared to Those with Nonalcoholic Parents." *Adolescence* 30 (1995): 73-82.

<sup>8</sup> C.F. Rak & L.E. Patterson, "Promoting Resilience in At Risk Children." *Journal of Counseling and Development* 74 (1996): 368-373.

<sup>9</sup> L. Azzi-Lessing and L. Olsen, "Project Connect: What We've Learned from Serving Substance Abuse Afflicted Families," *Common Ground* 11 (1994): 3. See also M.W. Roosa, J.Y. Tein, N. Groppenbacher et al., "Mothers' Parenting Behavior and Child Mental Health in Families with a Problem Drinking Parent." *Journal of Marriage and the Family* 55 (1993): 107-118.

<sup>10</sup> M. Windle, "Effects of Parental Drinking on Adolescents." *Alcohol, Health, and Research World* 20 no. 3 (1996): 181-184.

<sup>11</sup> P.K. Jaudes, E. Ekwo, and J. Van Voorhis, "Association of Drug Abuse and Child Abuse." *Child Abuse and Neglect* 19, no. 9 (1995): 1065-75.

using parent, thereby reducing the psychological and behavioral consequences we might otherwise expect. A cohesive family can also operate as a check on the adoption of negative health behaviors. Awareness of this potential shows us the need to restore the family as a whole, in addition to tending to the needs of the individual substance abuser.<sup>12</sup>

The way substance abuse affects families also depends on the socioeconomic quality of the neighborhoods in which families live. Poor neighborhoods tend to generate poor social and health outcomes. Social conditions such as unemployment, crime, discrimination, and school failures undermine family stability and parenting.<sup>13</sup> Moreover, these conditions may impede access to social and health services. The facts are particularly striking in Latino communities. Studies consistently document that Latinos are less likely than other groups to be linked with a regular source of health care. Substance abuse and its attendant shame—keenly felt in Latino communities—only weaken an already tenuous link with health care and social services.<sup>14</sup>

### Our Study

Bodega's primary tool to reduce the risks of substance abuse within families is family case management. Family case management and various supplemental services aim to mitigate the effects of substance abuse in at least two ways: by strengthening all family members and the family as a unit; and by keeping substance abusers in treatment longer, thereby reducing their substance abuse and criminal involvement.

To evaluate the impact of Bodega's family case management, we studied both a sample of Bodega participants and a group of comparable families who did not participate in the program.<sup>15</sup> The sample of Bodega participants served as our experimental group and the sample of similar families comprised the comparison group. We administered a battery of standardized psycho-social tests to the families in both samples upon entry to the study and again after six months. The composite instrument allowed us to assess the change in the two groups of people six months after intake on individual-level and family-level outcomes of health and functioning. In addition to interview data, we also gathered data on the criminal histories of substance users from the

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<sup>12</sup> M. P. Farrell, G.M. Barnes, and S. Banerjee, "Family Cohesion as a Buffer Against the Effects of Problem-Drinking Fathers on Psychological Distress, Deviant Behavior and Heavy Drinking in Adolescents." *Journal of Health and Social Behavior* 36 (1995): 377-385. Also, D. Umberson, "Family Status and Health Behaviors: Social Control as a Dimension of Social Interaction." *Journal of Health and Social Behavior* 28 (1987): 306-319.

<sup>13</sup> The classic formulation of this thesis is advanced by William Julius Wilson. See, for example, W.J. Wilson, "Studying Inner-City Social Dislocations: The Challenge of Public Agenda Research." *American Sociology Review* 56 (1991): 1-14. See also, G.L. Bowen, L.M. Desimone, and J.K. McKay, "Poverty and the Single Mother Family: A Macroeconomic Perspective." *Marriage and Family Review* 20 (1995): 115-142.

<sup>14</sup> For example, see C.W. Molina and M. Aguirre-Molina, eds. *Latino Health in the US: A Growing Challenge*. Washington, D.C.: American Public Health Association, 1994.

<sup>15</sup> This quasi-experimental design was necessary because Bodega had no waiting list of families who might have presented us with an opportunity to conduct a true experiment with random assignment.

New York State Division of Criminal Justice Services.

We used a comparison group, rather than merely comparing the lives of Bodega participants before participation with their lives after participation, for two reasons. First, compared to simple pre-post designs, a two-group design greatly enhances our ability to conclude that the outcomes experienced by the Bodega participants are actually the result of the intervention—family case management—and not alternative explanatory factors. Equally important in this particular study, using a comparison group allowed us to document the multiplicity of problems that plague this community. By tracking a comparison group, we hoped to be able to test the assertion that the kinds of families targeted by Bodega do get worse—that is, they become more involved in delinquency, crime, and drugs, are poorer parents, or get sicker—without the benefit of this intervention.

The use of standardized interview instruments and the collection of criminal justice data allowed us to measure the impact of Bodega quantitatively, but we also sought to understand the impact of the intervention in human terms. By closely following a subset of our experimental and comparison group members, interviewing them twice, we hoped to learn more about the nature of Bodega's intervention and how the intervention responds to the unique needs of the families.

Researchers and practitioners understand relatively little about the dynamics of family cohesion in poor families with a substance-abusing member. In some cases, it is clear that an abusing member puts great strains on other members. It is also true that some, perhaps most, abusing members also make positive contributions through providing income, child care, or emotional support. Poor families are subject to a wide variety of stresses apart from those directly related to substance abuse, and the interaction of abuse with these other stresses, such as difficulties with employment, health, and housing, needs to be better understood. Our deeper study of a subset of families in both the experimental and comparison groups provided a wealth of qualitative data on these issues, which we present alongside the quantitative results of our study throughout this report.

This is, in short, a multi-method study, and we have therefore collected different amounts of information about different groups of subjects. Throughout this report, the *original study intake group* refers to all of the people whom we invited to join the study and who formally consented to do so. This includes the drug users and their family members, and it includes those enrolled in Bodega and those in our comparison group. We have information about this large group of subjects from the standardized instruments they completed at intake and from their criminal justice histories.

The *full study group* refers to the smaller number of people who completed a follow-up interview six months after their initial interview. For this group we also have information about members' drug use, health, and experience with drug treatment over the six months of the study. Again, the *full study group* includes drug users and family members, both enrolled in Bodega and recruited into our comparison group. Within this

full study group are some *consistent family units*, that is, families in which both the user and the family member completed both interviews. Finally, we also interviewed a small subset of the full study group in-depth at intake and after six months to improve our understanding of the conditions of their lives and, for the Bodega group, our understanding of any ways the program affected them.

This report is divided into four chapters. The first describes the problem of drug abuse in Bodega's neighborhood, drawing on publicly available demographic data as well as the result of our quantitative and qualitative interviews with members of the original study intake group. The second chapter describes the services offered by Bodega, drawing on our observation of the program, its own data, and our in-depth interviews with users and families participating in Bodega's program. The third chapter describes the methods we used to measure the impact of Bodega, focusing in particular on the composition of the study group, the instruments we used to measure change, and some of the problems we encountered. The fourth chapter describes the impact that Bodega made, drawing principally on the quantitative and qualitative data we collected from the study group.

Field research on nonresidential drug treatment is notoriously difficult. Participants in the treatment vary widely in their histories and current problems, they drop out of treatment, they get arrested, and they resume treatment. In this case, these difficulties were multiplied by the need to incorporate the family members of drug users in addition to the users themselves. We encountered many problems, but in the end the results are encouraging about the real contributions a program like Bodega can make.

## Chapter 1: The Problem

Drug abuse affects the people who use drugs, their family members, and their communities. The harm that drug abuse causes to individuals, relationships, and neighborhoods is familiar enough. Other effects are harder to see, including the ways in which drug abuse is multiplied through families and across generations.

Our interviews with the study group members when they entered the research—every drug user and family member who had an initial interview, whether they remained in the study or not—produced a fresh and sometimes surprising picture of the problem of drug abuse on the Lower East Side of Manhattan in the mid-1990s. Through the responses these drug users and their family members gave to standardized interview questions we gathered information about their physical and mental health, their past and present drug use, their experience with drug treatment, their criminal justice involvement, and the nature of their family relationships. Through the longer narratives we collected from a subgroup of users and family members, we can see how and when users began abusing and dealing drugs, how they began to mix drugs and crime, the limited opportunities they have had to receive drug treatment, and the ways their drug use affects their families.

### Neighborhood Overview

All of our study participants lived on the Lower East Side of Manhattan. Long known as a vibrant neighborhood that has been home to waves of immigrants, the area has also become known for its economic and social ills. The neighborhood was selected as the site for La Bodega because it met several important criteria: Substance abuse is prevalent among residents; there is tangible evidence of the harmful effects of drug use on families; the area is a major consumer of criminal justice resources, and drug-related health problems are common. At the same time, the area has strengths. There are locally based programs and services for substance abusers and their families, particularly those in trouble with the law; and the Lower East Side is a community of residents—not transients—who see the area as a diverse but relatively stable neighborhood.

Thirty-one percent of the Lower East Side's residents are Hispanic (largely Puerto Rican), 30 percent are white non-Hispanic, 28 percent are Asian, and nine percent are African-American.<sup>16</sup> The residents are relatively poor. In 1999 one quarter of the neighborhood's households had an income of less than \$10,000, compared to 17 percent

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<sup>16</sup> Calculated from Bureau of the Census 2000 household data accessed through the Infoshare database. <http://www.infoshare.org>. The statistics in the text reflect the most recent information available on the Lower East Side neighborhood.

of all households in the city.<sup>17</sup> Eighty-four percent of public elementary school students received free or reduced lunches, compared to 77 percent citywide.<sup>18</sup>

AIDS and HIV infection have been prevalent in the neighborhood. In 1998 the Lower East Side/Union Square area ranked in the top five percent among neighborhoods in New York's total adult and child AIDS cases.<sup>19</sup> The area also had a high rate of crime, particularly domestic violence and theft. In 1998 the neighborhood had 59 arrests per 1,000 residents, compared to a citywide average of 50 per 1000.<sup>20</sup>

These statistics aggregate the entire Lower East Side neighborhood, much of which was undergoing gentrification during the 1990s.<sup>21</sup> The eastern half of the Lower East Side, where virtually all study participants resided, was probably even worse off than these statistics suggest.

Still, the Lower East Side is not unique. Its strengths and problems can be found in other New York City neighborhoods and in communities throughout the country where illegal drug activity and crime thrive alongside families struggling to improve their daily lives.

### **Drug Use and Drug Dealing**

The drug users we interviewed in-depth told us that drugs were so ubiquitous in the neighborhood that it was virtually impossible not to be affected by them. Drug use typically began at an early age, led to dealing, and became a way of life. One member of this group began using drugs at age five, another at age nine. The average age of first use was 13, and the drug first used was almost always marijuana. The average age for first use of a drug other than marijuana was 15. The users generally ingested hard drugs nasally at first, although some described intravenous use of heroin in their pre-teen and early teenage years.

Among all the users who entered our study, the drugs of choice were heroin, marijuana, cocaine, and crack. The users experimented with a broad range of other drugs such as amphetamines, barbiturates, and hallucinogens, but these drugs were not prominent in their histories.<sup>22</sup> The users we interviewed in-depth told us they usually used heroin and cocaine simultaneously through intravenous injection, called speedballing.

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<sup>17</sup> Citizens' Committee for Children of New York. *Keeping Track of New York City's Children, 2000*. New York: CCC, 2000. Calculated from 1999 New York City Housing Vacancy Survey data.

<sup>18</sup> New York State Educational Department, *New York, the State of Learning: Statistical Profiles of Public School Districts, 1999*. Rate is for kindergarten through grade six students in October 1997.

<sup>19</sup> Community Studies of New York Inc., *City of Contrasts, 2000*. Based on the total number of AIDS cases in City Council District 2.

<sup>20</sup> *Keeping Track of New York City's Children, 2000*.

<sup>21</sup> For example, in 1996, the year Bodega began, the Lower East Side residents were slightly more likely to be Hispanic, and to have incomes under \$10,000.

<sup>22</sup> See Appendix A for the characteristics of the users and family members in the original study intake group.

These users also reported changing their drug of choice from powder or crack cocaine, a stimulant, to heroin, a depressant.

Drug use and dealing were frequently taught by one generation to the next. Among the users we interviewed in-depth, more than half grew up in a household where at least one parent or sibling was a user. Some reported that they first experimented with drugs at a parent's or step-parent's urging. Anthony, for example, a 26-year-old recovering heroin user, was first introduced to cocaine by his father when he was a small child. Anthony's father, in order to demonstrate to his wife that the cocaine they purchased was low quality, placed a taste of it, a "freeze," on his son's tongue. As Anthony tells it:

I know he smoked weed, and he did cocaine. When I was about five years [old], he was pouring out some garbage, and he was saying, "It don't even get your tongue numb!" And he was trying to get my mom to see, so he could prove it, and he ended up giving me a little freeze.

By their own example, parents and older siblings showed children that using and selling drugs was a normal part of life. Gus, a 38-year-old user, recalled the drug use in his home when he was growing up:

My mother...hung out with a lot of musicians and there was always a lot of pot and alcohol. And she always kept pot around the house and I started stealing pot and taking it to school... My mother and my father both were addicts. They were both hardcore heroin users...So I was always around drugs, no matter what.

Similarly, the older siblings of Leo, a 41-year-old recovering heroin user, were actively involved in selling drugs. As Leo explains, not everyone in the house approved:

When I was growing up my older brothers and sisters were selling drugs. There was a time when I was young and people used to come to the house and my grandmother used to get mad and....then I used to look out the window and I used to see people nodding out, and I knew these people were getting high on something....I was like seven years old or eight.

The drug users we interviewed in-depth told us that as their drug use escalated, they became unable to maintain school and work schedules. Two-thirds of all the users who entered the study reported significant periods when they regularly used more than one drug every day. They had finished an average of only ten years of education and, when we met them in the late 1990s, three-fourths of them were unemployed.<sup>23</sup> Drug dealing, however, offered a ready supply of drugs, a source of income, and a peer group of fellow

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<sup>23</sup> See Appendix A for the characteristics of users and family members in the original study intake group.



users. The users we interviewed at length told us that eventually, they reached a point when their only remaining friends were other users and dealers.

Drug dealing is the only steady work some of the study members have ever known. For example, Matt, a 32-year-old user and lifelong neighborhood resident, first used cocaine when he was nine and was an experienced dealer by the age of 13.

My best friend's brother lives in what is now a crack house and I spent a lot of time there. My best friend was also nine. I was around it, I was learning about it by watching...people sniffing stuff...I used to ask "Yo what is that?"...it's cocaine...we grew up around it. One day I saw it on the table and tried it...I liked it. It made me fast, hyper, so I kept doing it... I was little, so I thought I could be a drug dealer too. I was selling it for a dollar, two dollars, three dollars, I was just giving it out. My friend's brother came out of prison four years later. I was 13—I already knew the ins and outs of selling drugs. I was selling my own drugs at the time.

In many ways, dealing drugs in the Lower East Side resembled a normal business with opportunities for advancement and entrepreneurship. Tommy, a 40-year-old user, recalled his promotion in one drug dealing organization.

I became a manager. I was not selling in the street, I was giving the work out to people and collecting the money and bringing it to the other guy.

Reginald, a 37-year-old user, created his own brand, or "stamp," of heroin, and recalls proudly the profit he made on his stamp prior to going to prison.

All I paid for that brand was a dollar for the inepad and \$8.00 for the stamp. Do you know how much I sold that stamp for? One thousand dollars cash and an ounce of coke he gave me for that stamp. Because the name was worth so much money on the street...You could say I just sold him the rights.

If their families were in precarious financial situations, children sometimes saw dealing as the quickest and most profitable way to become self-sufficient. For example, Felipe began dealing to make money for personal items while in early adolescence. A few years later his mother, a heroin user, was arrested for her own dealing:

She couldn't afford having two teenagers—me and my other younger brother—and we started selling drugs to get our clothes and things that we liked.

In conversation, users in our study distinguished between using and dealing, condemning drug use but accepting dealing as a legitimate livelihood. In practice,

however, this line rarely held; all those who first sold drugs became users soon afterwards. Reginald, a former operator of several crack houses on the Lower East Side and now a recovering user, explains this difference between what people say and what they do:

Even when I started selling drugs, my mom used to help me bag up and I was making a couple thousand dollars a day so she like—she didn't really mind. She would tell me don't use this...but she'd smoke a little marijuana once in a while too and she didn't really mind because I was making money.

The constant presence of drugs forces the neighborhood's young adolescents to make fundamental, life-course decisions very early. Matt described his options as "either you're going to sell it or you're going to do it." Ramon, a 14-year-old user, characterized drug dealing as being as prominent in the late 1990s among his peers as it was for study members a generation older. Because drugs were constantly available, users told us, the people who resist the lure of fast money from selling or who opt out of using do so through conscious and deliberate efforts to stay focused and "strong." But even those who reject drugs can become victims of drug-related crimes. Johnny, a 34-year-old former heroin user who grew up on the Lower East Side and still lives there, supported his drug use by robbing local people at knifepoint as part of a gang.

We didn't care. We were so high—you'd get so high that sometimes we'd need money and we'd choose which one we didn't like in the neighborhood.

### **Arrests, Incarceration, and Drug Treatment**

This level of drug use and drug dealing, not to mention robbery, ensure a multitude of interactions with the criminal justice system. Among the subgroup of users we interviewed at length, having a first arrest during middle adolescence was common. Nearly ninety percent of the drug users in the original study intake group had been arrested for drug charges and more than sixty percent for parole or probation violations before our study began. The drug users we spoke to at length said that as they progressed to harder drug use and to drug dealing as their primary source of income, they began to be arrested for more serious crimes, such as robbery and assault.

The drug users in the original study intake group had spent an average of more than six years incarcerated, with 58 percent of the most recent jail or prison stays stemming from drug charges and another 22 percent from parole violations. Arrest and incarceration had become so routine for them that almost two-thirds considered their current legal problems to be "not at all important."

The great majority of the drug users who entered our study had received some form of drug treatment over the course of their lives, whether voluntary or mandated. The most

common forms of treatment in the six months before they entered the study were self-help groups (37 percent), outpatient treatment (28 percent), drug detoxification (24 percent), and methadone maintenance (23 percent).

Despite this broad experience with treatment, our in-depth interviews revealed a substantial gap between the age of first drug use and the age of first treatment. The pattern was for users to enter treatment only after their habit had progressed significantly over the course of several years. The users we spoke with in-depth typically first used drugs at age 14, but first received drug treatment at age 22. More than half of this group reported receiving no drug treatment at all before their first incarceration.

Long term withdrawal from drug use and dealing have been particularly difficult in this neighborhood. The same temptations to use and sell drugs that study members encountered during their early teenage years reappeared when users returned from incarceration or residential treatment, and many users succumbed again.

### **Harms to Family Members**

Despite this long involvement with drugs and crime, and a cycle of arrest, incarceration, treatment, and relapse, the members of the original study intake group reported strong family ties. The family members participating in the study were generally the mothers, partners or spouses of the users and they had only very limited histories of drug abuse or criminal justice involvement. Moreover, both the users and their family members acknowledged the harms drug use had caused to them as individuals and to the family as a unit.

Just over half of the drug users in the original study intake group lived with members of their family, and two-thirds said they spent most of their free time with family. Correspondingly, the users reported high levels of social support compared with national norms—a high level of support meaning there are people in their lives they can rely on for understanding, advice, material aid, company, and affection.

Family relationships may have been close, but they were not always tranquil. About one in four drug users in the original study intake group reported recent serious problems with relationships in the family. More than a quarter said they had been physically hurt by a family member during their lifetimes and 37 percent said they had been emotionally abused in their lifetimes.

Many of the families were very poor. Half of the family members who entered our study survived on a household income of less than \$10,000 per year, and three in four were unemployed. Most relied on public assistance, pension benefits, or social security. In this context, the user's addiction often resulted in family members neglecting their own needs while giving scarce resources and time to the user. The mental and physical health of many family members suffered in the process. The in-depth interviews revealed that some lost money, some suffered physical abuse, and some were evicted from their

public housing.<sup>24</sup>

The family members whom we interviewed in-depth described vividly the way withdrawal from drugs could easily lead to violence. For example, Jodie describes how her marriage to Cesar became increasingly violent with his alternating drug use and withdrawal:

We were living in my mom's house. Our relationship was O.K. I moved out with him. That was before he got busted for selling drugs this time. I went through abuse, physical abuse. I went through him being sick because he didn't have no drugs in his system. It was because he was using dope. I went through depression because he was never home. He'd come home at five o'clock in the morning after selling. I lost a baby. I was afraid for my life and my daughter's life to be very honest. If he didn't have the drugs in his system he was very violent. He'd threaten to kill me. I kept one of those long fork knives you use for the turkey in the spare bedroom and lock the door. Then he kept writing notes for me to open the door. When he got inside he told me that if I ever tried to leave him he'd kill me. He's not like that when he's sober. ... I'm afraid for my daughter's life and regret moving out of my mother's house. I used to cry every day because I wanted to go back home. I experienced life being alone with my child and the man that I love. I never thought that the experience I went through was the one I really wanted to go through. I couldn't sleep. That's when he got busted again.

In addition, other users, dealers, and customers often put families in danger. Pam, the 38-year-old wife of a user, describes a walk in the park with her husband and an ensuing fight:

One day he almost got killed because I'm walking into a park and some guy accused him of being with [working for] another person. I was pregnant and they beat him up with a bat. That scared me a lot. So I talked to him to try to get him to stop going to these places. Sometimes, they don't listen and they'll do it behind your back. What can you do?

Users sometimes stash guns or drugs in their apartments, exposing family members, especially children, to potential tragedy. Jodie recalls the time she learned that Cesar had hidden a gun in their home.

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<sup>24</sup> The family members' average scores on standard measures that assess physical functioning, bodily pain, the ability to perform physical activities, and general health showed physical health below the national norm. Nearly sixty percent of them scored as depressed on the standardized measure. Their scores on a scale measuring vitality, social functioning, mental health, and emotional control were all below the national norms. See Table 3-5 in Chapter 3 and Appendix B, Table B-2.

I spoke with his friend about two weeks ago. He asked if Cesar still had the gun in our house. I asked him what he was talking about. He thought we had the gun in the house.... I was pissed off. I called the program and said I needed to speak with Cesar immediately. I asked him about the gun and he said he took it out of our room. I said I didn't want any drugs or weapons in my house because of the baby.

Drug use has a particularly strong impact on children in these families. Kimberly, the daughter of one user, recalled life with her mother during years of crack use, at one point residing with her parents in a hotel infamous for drug use among its residents:

I remember sometimes I'd be looking out the window and they'd tell me not to turn around because they were right there smoking crack. Because the room was so small, like a bed and a table and a window.... so, I was really...I tried not to pay attention...

She then recalls how she and her sister went with her mother, Latifa, to buy crack:

Maybe like one, two o'clock in the morning and she had like this big stroller and so me and Tanya got in it—and she would push it, and that was fun for me cause I was with my sister. I had a carriage. I was happy cause I didn't have to walk. So she would push us over there... There's like a train station with like a big church and then like around the corner's like a little store...the guy would be standing there and I'd be in the carriage and she told me to get out and call her if I see anybody. I would just call...because I didn't know...I would just call.

Like that of many addicted parents, Latifa's drug use peaked and waned. When addicted parents are unable to care for their children for periods of time, the children are passed along to various family members, usually grandmothers, and then back again to their parents. Latifa recalls her own indifference as it became clear that her mother and a social worker would be taking Kimberly and Tanya away from her:

The school social worker called me. Once I told the social worker what drug I was using I knew... I knew I could forget it now. They set up an appointment for me that week. I didn't make it. I couldn't function that early in the morning. If I was up that early it would be to take care of my baby. She called to tell me that she and my mom were coming on Saturday to take my children and that I needed to pack their things because they'd be staying with my mom. ... I was glad because then I could get high all the time. That was my thinking and I knew my mom would let me see them whenever I wanted to. I didn't really worry about it. I got high right before they got there...I didn't feel anything when my babies were hysterical. I was numb. I stayed high.

Kimberly and her younger sister spent several years living with their grandmother, followed by multiple placements in foster care.

No single intervention or social policy could hope to solve all of these problems. Drugs have had devastating consequences on these families, physically and emotionally, individually and collectively. Nevertheless, by supporting these families and helping them through repeated crises, La Bodega de la Familia set out to improve the results of the treatment that was available to the drug users of the Lower East Side.

## Chapter 2: The Response

La Bodega de La Familia sought to help not only drug users, but entire families affected by drug abuse. La Bodega is not a drug treatment program, but rather a service for families who are trying to support a drug user through treatment and recovery.

La Bodega's focus on families is a source of potential strength. Its services could be offered to families in communities across the United States regardless of the particular array of formal treatment programs available in each community. Moreover, the focus on families brings political support that might not be available to drug treatment programs that focus solely on drug users. For example, the Lower East Side community board voted to approve the Vera Institute's application to base La Bodega in the neighborhood at its first hearing on the subject, in contrast to its usual practice with services for drug users.

At the same time, the focus on families brings its own challenges. For example, in the early years the daily practice of family case management proved more difficult than La Bodega's planners had expected. Several clinical staff members, experienced in more traditional counseling, found it hard to treat the entire family unit, rather than the drug user, as their client. The managers of La Bodega gradually revised the specific clinical techniques throughout the demonstration period, and also gradually expanded eligibility criteria, recruitment techniques, and government partnerships.

By strengthening the family support available to drug users, La Bodega set out to achieve three specific goals: (1) to improve the success of outpatient drug treatment, (2) to reduce the use of incarceration to punish relapse, and (3) to reduce the harm that drug users inflict on their families.<sup>25</sup> In the eyes of program managers, these three ambitions were interdependent. For example, by supporting family members, whose own needs for health services, housing assistance, and other social services often go unmet, the program would strengthen their efforts to help substance abusers refrain from drug use. Similarly, by working with local parole and probation officers, the program would foster positive relationships between these officers and the families of their supervisees that would both protect the family and reduce the officers' use of incarceration in responses to drug relapse.

### Reaching Drug Users and Their Families

To recruit clients, La Bodega's staff developed relationships with the local police, parole, and probation departments, tenant associations, the public housing authority, health providers, and other groups. For example, field staff accompanied domestic violence

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<sup>25</sup> Some research shows that addicts supported by caring family and friends do better in outpatient treatment. See Elliot Currie, *Reckoning: Drugs, the Cities and the American Future*. New York: Hill and Wang, 1993: 239; see also Marc Galanter, M.D., *Network Therapy for Alcohol and Drug Abuse: A New Approach in Practice*. New York: Basic Books, 1993: 16.

police officers on their home visits to tell families about Bodega. Many families were referred to the program after contact with another government agency; some heard about it from neighbors or friends. The program originally served a 24-block area of the Lower East Side, but that area was expanded so that as of January 1, 1999, the program served a 56-block area.

Based on their own intake tracking, program staff estimate that over the course of five years, about one-quarter of La Bodega's clients came to the storefront on their own, another quarter were referred by friends, family, schools, public housing authorities, and community-based organizations, and half were referred by criminal justice agencies. As the program built relationships with parole, probation, and police, criminal justice referrals increased, and community referrals declined. By 2000, about two-thirds of participants were referred from criminal justice agencies.

Those who came to the storefront on their own often came for help finding other social services and learned of the program's work with the families of substance abusers. For example, the girlfriend of one user in the study first came to the storefront to seek assistance with public housing after learning about the program from a friend. She returned a few months later when needing help with her boyfriend's drug use.

#### **La Bodega's Services**

Ramon, 15, came to Bodega after an older friend suggested that the program could help him with his drinking and marijuana use. As Ramon recalled:

So he was like, 'you want a place that can hook you up with jobs and all that? That can set you straight?'...Bodega this and that...

"Bodega this and that" captures the wide variety of services quite well. In fact, during the years of our study, La Bodega offered two sets of services. First, a large array of workshops, referral resources, and support groups were available to anyone who walked in. These are relatively low cost services, many staffed by volunteers with staff supervision, that serve a wide range of people involved with La Bodega. Second, Bodega provided much more intense family case management, advocacy, and crisis intervention services to families. Those receiving these more intensive services also frequently participated in one or more of the walk-in services.

*Walk-in services, workshops and support groups.* The topics ranged from the practical, such as relapse prevention and job readiness, to the expressive—creative writing, dance, and poetry. One group offered during the study period allowed the non-using friends and family members of drug users to share their frustrations and successes. A weekly group called Breaking the Chains used peer support to help newly released offenders manage



the transition from incarceration to their home neighborhood. Another group provided information, resources, and peer support to victims of domestic violence.

Staff also made referrals to other agencies. During the study period, Bodega referred families to legal services, parenting skills groups, health care and mental health facilities, shelters, and job readiness programs.

*Family Case Management.* When staff encountered families eligible for family case management, La Bodega's clinical director assessed the family's needs and assigned a case manager to lead the group through counseling sessions.

In these counseling sessions, which usually took place at La Bodega, the case manager worked with the family to develop an action plan that identified the issues members as individuals and the family as a group needed to address. To inform the plan, the case manager and family used two mapping tools.

The family and case manager together created an *ecomap*, which showed the public and community agencies on which the family relied. It might show that family members used a particular health clinic, attended a local school, and relied on wages from a specific employer. It might also show that the family lived in public housing, had a member in a drug treatment program, another under parole supervision, and another receiving services from the city child welfare agency. The ecomaps are intended to reveal conflicts between services and highlight areas where coordination would be useful. When the ecomap is completed, the case manager should be able to see the family's formal sources of support and begin to coordinate services in the family's best interest.

Case managers also helped families create *genograms*. This tool allows the drug user and other family members who first come to La Bodega to identify potential sources of additional family support for the drug user. The genograms also map out substance abuse, criminal justice supervision, and other issues in their family's past and present. A mother's drug use, father's arrests and jail time, aunt's HIV-related death, and son's domestic violence are all part of the genogram. Genograms also help the case manager and family identify positive patterns, such as steady employment across generations, educational attainment, skill development, good parenting, and lives free from drugs or crime. Case managers work with the family to identify the strong traits on which they might build, and the supportive people on whom they might lean.

With the knowledge gained from the two mapping exercises, each family's action plan should list immediate and future obstacles and goals. The case managers were expected to review the plan with the family periodically and modify it to reflect changing circumstances. The drug user's parole or probation officer might also review the plan and offer suggestions, usually focusing on the user's need to complete drug treatment and follow any other terms of supervision.

One family's action plan, for example, might state that the user and his wife, mother, and son will participate in La Bodega's family counseling sessions. At the same time, the

user will join a job training program, his wife and mother will join a support group for non-using family members, and his son, who is getting into fights and falling behind in school, will seek extra attention from his teachers and get involved with a positive physical activity like Bodega's aikido youth group. The family's plan might also devise ways to get the user's daughter, who excels academically, the attention she needs to find challenging courses, although she is not in the group attending sessions at La Bodega.

During our study, families beginning the program were asked to attend counseling sessions every week. Case managers led both individual and group sessions, often bringing together estranged family members to talk about anger, resentment, and other issues that had gone unresolved during years of drug use.

In the course of family sessions, for example, Reginald, a 37-year-old recovering crack and heroin user, learned from his partner, Dawn, that he was responsible for introducing her to cocaine. The couple had a ten-year-old daughter and Reginald had only intermittent contact with her because of repeated drug-related incarcerations. Their daughter was being raised apart from both parents, with an aunt in upstate New York. Reginald, recently released from prison, recalled the sessions he and Dawn had at La Bodega:

...this program has helped a lot because feelings have flown, boy—it helps it a lot—because now I know how she feels. We talk a lot after we come here. It's not over, it's not over here, we talk a lot about it at home and then the next time we come back maybe some more feelings will come out and they do—sometimes.

*Advocacy for families.* Bodega staff negotiated with myriad social service agencies to help families obtain housing, medical care, and places in drug treatment programs, and then continued to serve as advocates for families in their dealings with these agencies. Staff made phone calls on the family's behalf and accompanied family members at court appearances. Program staff also acted as advocates with lawyers and judges. A staff member might accompany family members to a significant court hearing, or might write a letter informing prosecutors of the family's circumstances and progress in the program.

*Crisis intervention.* When crises arose for participants in family case management—such as an arrest, a relapse, or a potential eviction—the family could call staff on a 24-hour hotline. Staff on duty provided support and mediation, stabilized the situation, and advocated for services such as drug treatment or temporary housing. In one case in our study, a staff member simply accompanied a participant with outstanding warrants who wanted to turn himself in to the police. In another, a Bodega family was facing eviction because of a family member's relapse and arrest. A Bodega field staff member met with a housing officer and a housing court judge who agreed to delay the eviction until the user could complete a drug treatment program and the family could find a new place to live.

Having access to the 24-hour crisis hotline meant that family members did not have to

handle highly stressful situations on their own. Remembering that the program had encouraged her to call in times of crisis, Jodie called her case manager immediately after learning that her husband, Cesar, had relapsed.

One time he came home all messed up. He took his beeper out and placed it on the table and it had a white bag with it that was empty. I asked him and he said he only smoked a little bit of weed. I said "okay, no problem." I'm sitting in my room wondering how to approach him. I went into the kitchen with the bag in my hand and called Bodega. I asked her what to do...

At moments of crisis, Bodega's clinical staff could make immediate referrals to detox facilities, inpatient drug programs, and other health services for both drug users and family members.

### **Role of the Family Case Manager**

In some respects, family case managers play roles quite similar to traditional case managers in negotiating health services, drug treatment, and public benefits for drug users. As Gus, a Bodega participant, recalled:

She [his case manager] helped me get Medicaid so that I could go to an inpatient program. Through some intensive research they found that the most amount of time that I had clean was 11 months in a place called [names treatment facility] and they got me back into this program with a pending Medicaid—which is almost impossible—but they got me in there.

At the same time, the relationship between each family and its case manager can be unusually personal. Family members may discuss intimate subjects and private aspects of their lives, sometimes for the first time, during sessions with their case manager. For some families in our study, their case managers seemed to be the first to have encouraged them to talk about how drug use had affected their lives or to have helped them focus on their own needs.

From the perspective of these family members, their relationship was with the case manager, not the program. In discussing his experience at La Bodega, Cesar noted, "Frankly, it's not what Bodega taught me. It's what Karen taught."

Although the strong relationship between families and individual case managers was a source of strength for many, it was a problem when some family case managers left for other jobs. A case manager's departure could be the equivalent to the program shutting its doors. Drug user Latoya stopped coming to La Bodega soon after her family's case manager left:

So I haven't spent a lot of time over here, especially now that Judy's gone. That was a negative for me. I really enjoyed working with her...and I felt comfortable

with her. Since she's been gone, it's been hard to get back with anyone over here, because I don't know any of the people.

Family members shared this frustration. Nancy, Ramon's mother, noted that her son stopped participating in La Bodega's sessions after two of their case managers left:

He wanted to see Jamie but they told me that he left. When I told him he got mad. He said "What? Not another one. First Frank left and now another one too?" He said he didn't want anybody else.

Following our study period, La Bodega's management has continued to test strategies to retain the allegiance of families when case managers change.

### **Partnership with Parole**

In order to reduce the use of incarceration to punish relapse, the second of La Bodega's three goals, case managers try to present alternatives to incarceration to parole officers when drug users violate their parole conditions through a drug relapse. During the course of our study, the New York State Division of Parole assigned a small number of officers to work exclusively with parolees with family in La Bodega's service area. The officers were volunteers, and so were particularly open to Bodega's approach. The officers brought Bodega staff with them on visits they made shortly before an offender's release from prison. During these visits, Bodega staff introduced the program, left a calling card, and let family members know that help was available. If the family enrolled at La Bodega, the case manager let the parole officer know the family was working with the program. La Bodega's clinical staff met with the parole officers as a group every month to discuss the partnership in general, and in addition, case managers met individually with the officers who supervised drug users on their caseloads.

Case managers sometimes included parole officers in family counseling sessions, although the drug users in the families might resist this. For example, referring to such a suggestion from his case manager, Cesar commented:

Me and the counselor sat down and we debated about it... We debate that I want him [parole officer] in my sessions. That I didn't trust him. She [case manager] made me see that he wasn't against me, that he was there to help me. We tried it ...the first time was a success for me. ... I laugh, I joke with him now. Before that meeting I didn't do that, and now he's always willing to listen to me when I go see him. Before it used to be, you gotta go into the program, you gotta do this, you gotta do that... Before I couldn't stand him, I judged him, because he was a parole officer. Now I go in his office, he comes in my house, and we talk... before we never did that. I never did that with anyone. Before [case manager] put us together. Now we can sit down and talk better than what we did before.

Similarly, Gus saw the program's partnership with parole as providing him with the structure he needed and, as with Cesar, it was important for him to be able to tell the parole officer about his situation as he saw it—so that “the system” would understand “how personal a disease like this is.”

During our study period, the partnership with the Division of Parole appeared to work for parole officers as well. For example, one of the officers we interviewed said that he was able to fulfill the function of “helping the parolee” rather than focusing wholly on enforcement. He welcomed the changes despite the fact that his work became more demanding. “It was so simple before: two dirty urines, send the parolee to a program and if he relapsed send him back to jail. Getting a warrant on somebody—that’s easy. With La Bodega there is more meat involved in the decision making.” The officer added that Bodega makes it harder for the parolee: “Bodega gives another chance. The chance is not free. They have to work harder at their addictions. The parolees have to expose the use of drugs to their families. Most parolees try to hide it. Now they are in the open.”

## Chapter 3: The Research

To evaluate La Bodega's impact, we compared outcomes for Bodega participants—substance abusers and family members—with outcomes for a comparison group of users and family members who did not participate in the program. We interviewed subjects upon entry into the study and after six months to assess changes over the period that could be ascribed to program participation.

*Recruiting the Study Group.* We recruited participants into the treatment group from January 1999 through July 2000. An on-site research assistant arranged to meet with families and enroll them in the study upon learning that they had engaged with La Bodega's family case management. The major recruitment source for the comparison group was the New York State Division of Parole; more than three-fourths of the comparison group users and family members came from this source. A local methadone center and health clinic were each the source of five percent of the comparison group families, and six percent came from an alternative to incarceration program. In addition, some users and family members in the comparison group heard about the study from a friend or other organization and volunteered to be part of it, and two percent were recruited from the New York State Division of Probation.<sup>26</sup>

*Types of Data.* We interviewed users and family members as they entered the study and six months later, using a standardized instrument that assessed self-reported physical and mental health, family functioning, and social support. The battery of questions forming the composite instrument was drawn from six standardized instruments. We included four of the instruments in their entirety and selected subscales and specific items from the other two. Table 3-1 lists the instruments and areas (domains) measured. We used the same instrument at the six-month follow-up, but added questions about use of services during the previous six months and used an abridged section on demographic characteristics (See Appendix B for a description of the instruments). Contrary to our initial expectations, we did not encounter many young children in the families engaged with Bodega, so we abandoned plans to include children as a special subgroup in the study.

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<sup>26</sup> We originally intended to recruit the comparison group sample from a pool of individuals who applied for participation in Bodega and were found eligible except that they lived outside the program's catchment area. However, beginning in 1998, La Bodega began to expand its catchment area to include most of the blocks that would supply comparison families. All comparison group members lived in the Lower East Side neighborhood, but the majority were recruited from a parole precinct outside of the program's catchment area.

Table 3-1 Standardized Instruments Used in the Research

<b>Instrument Name</b>	<b>Domain Measured</b>
SF-36 Health Survey	Physical and mental health measured on eight scales and two summary scales
Center for Epidemiological Studies Depression Scale (CES-D)	Incidence and level of depression
Addiction Severity Index (ASI) (selected items)	Recent and lifetime drug use, drug treatment, and criminal justice involvement; also quality of family and social relationships
Hispanic Health and Nutrition Examination Survey (HHANES) (selected items)	Sections on service use and incidence of chronic health problems
Family Environmental Scale (FES) Form R	Social environment of families on ten subscales
Medical Outcomes Study (MOS) Social Support Survey	Type and level of social support on four subscales and one summary scale

We obtained the criminal histories of the users in our study from the New York State Division of Criminal Justice Services. We analyzed data on all arrests and on arrests that led to conviction for the six months following the first interview and for the six months after that. We also obtained data from the New York City Criminal Justice Agency on post-arraignment detention for the study's users; these data showed whether users arrested and arraigned during the six-month study period were also detained, and if so, for how long.

Finally, we conducted in-depth, narrative interviews with a subgroup of study participants at the beginning of the study and six months later, which allowed us to explore their perceptions of the program and of any changes in their lives over the period.

*Attrition Between First and Second Interviews.* We completed a first standardized interview with 71 Bodega family members and with 90 Bodega participant-users. For the comparison group, we completed a first interview with 48 family members and 94 users. We attempted to conduct the six-month follow up interview with everyone who participated in the first interview, using the detailed contact information we collected. We telephoned and mailed letters to members of the original study intake group

approximately one month before the follow-up interview date. When necessary, we repeated these procedures several times and recorded all follow-up efforts on our tracking database. We also attempted to contact Bodega participants through their case managers and to retrieve updated contact information from program files.

We were able to conduct follow-up interviews with 61 percent of the original study intake group (Table 3-2).<sup>27</sup> While we were hoping to conduct follow-up interviews with at least 75 percent of the original study intake group, the full study group—those with a first and a second interview—proved large enough to support most of the statistical analyses we needed to conduct.

Table 3-2 Number of First and Second Interviews Completed

	Interviews Completed	Valid Interviews	Reason Not Valid
<b>Bodega Users</b>			
First interview	90	88	Answers inconsistent
Second interview	50 (56%)	50	
<b>Comparison Group Users</b>			
First interview	94	91	Answers inconsistent
Second interview	57 (61%)	56	Answers inconsistent
<b>Bodega Family Members</b>			
First interview	71	69	Interviews with adolescents
Second interview	46 (65%)	44	Interviews with adolescents
<b>Comparison Group Family</b>			
First interview	48	47	Interviews with adolescents
Second interview	33 (69%)	31	Interviews with adolescents
<b>Total first interviews</b>	<b>303</b>	<b>295</b>	
<b>Total second interviews</b>	<b>186 (61%)</b>	<b>181</b>	

For some purposes, we confined our analysis to consistent family units. These are families in which the drug user and family member pair (for example, a husband and wife pair, or a son and mother pair) both had a first interview and both had a second interview six months later. In other words, we were able to reach both people after six months and were able to compare both of their outcomes then with their scores when they entered the study. Our full study group of 181 people contained 51 consistent family units (a total of 102 people): 29 in the Bodega group and 22 in the comparison group.

As for the in-depth interviews, we completed a first narrative interview with six

<sup>27</sup> As Table 3-2 indicates, some of the interviews we conducted with users were subsequently disqualified because the answers were inconsistent. As noted above, we eliminated adolescent family members from the study because there were so few of them.



Bodega users and five family members and a follow-up interview with all six of the users and four of the family members. For the comparison group, we completed a first interview with six users and four family members, and a second interview with five of the users and all four family members.

*How Attrition Affected the Characteristics of Study Participants.* The attrition in our study group appears to have made the sample more disadvantaged. Those who remained in the study by completing a second interview seem to be those who at intake reported more problems and fewer sources of support. (See Appendix C for the differences between those who completed only one interview and those who completed both.) The users and family members who completed both interviews were significantly older than those who dropped out of the original intake group.

For family members, the only other statistically significant effect of attrition was that the Bodega family members who completed both interviews had fewer sources of social support than those who completed only one interview. In addition, while not a statistically significant difference ( $p > .10$ ), the Bodega family members who remained in the study reported poorer physical health than those who dropped out.

The Bodega users who remained in the study were significantly more likely to have abused cocaine, crack, and more than one drug a day in their lifetimes and to have abused crack recently than those who dropped out. They also had lower scores on measures of physical health. The comparison group users who remained in the study had lower scores on measures of social support and mental health than those who dropped out, and were also more likely to report that physical health problems interfered with their daily activities.<sup>28</sup> And while these were not statistically significant differences ( $p > .10$ ), the Bodega users who remained in the study were also more likely to be Hispanic and female, and the comparison group users had spent more months incarcerated, on average, than those who dropped out.

### **Comparability of Participant and Comparison Groups**

Since only people who completed two valid interviews—the full study group—were included in the analysis of program effect, we analyzed their characteristics to determine whether the comparison group family members and users were in fact comparable to their Bodega counterparts.

Tables 3-3 through 3-6 compare the Bodega and comparison groups used in the analysis of program effect on the basis of their responses at the first interview. We found that as a result of attrition, the Bodega and comparison groups became more similar to each other—there were fewer statistically significant differences between the groups

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<sup>28</sup> Those who remained in the study also had lower scores, on average, on the summary mental health measure than those who dropped out, but had somewhat better scores on the depression scale.

completing both interviews than between the groups who completed a first interview.<sup>29</sup>

Among family members, the Bodega group was significantly older, more female, and more likely to be Hispanic rather than African-American than the comparison group family members (Table 3-3). While there were no differences between the groups in their current drug use or criminal justice history, the comparison group family members were significantly more likely, over their lifetime, to have abused marijuana and more than one drug a day (Table 3-4).<sup>30</sup> The Bodega family members were also significantly more likely to be mothers of the users and higher proportions of them spent most of their free time with family (Table 3-6). As we will see in Chapter 4, very few of these differences were associated with the outcomes we measured.

There were no statistically significant differences between the Bodega and comparison group users in their demographic characteristics (Table 3-3), drug and criminal justice histories (Table 3-4), or scores on the standardized instruments (Table 3-5). The only statistically significant difference was that higher proportions of the Bodega users spent most of their free time with family rather than with friends—80 percent for the Bodega group and 55 percent for the comparison group (Table 3-6).<sup>31</sup>

Table 3-3 Bodega and Comparison Groups Used in Analysis of Program Effect: Demographic and Socio-Economic Characteristics

	Bodega Users	Comparison Users	Bodega Family Members	Comparison Family Members
	(n = 50)	(n = 56)	(n = 44)	(n = 31)
Average Age	36	39	45	38*
Male	70%	79%	11%	33%*
Hispanic	81%	67%	80%	55%**
African-American	8%	21%	5%	32%**
White	4%	4%	2%	7%
Other	6%	7%	14%	7%
Highest grade completed	10	11	11	11
Married/common law	39%	31%	42%	37%
Satisfied with marital status	63%	67%	73%	81%
Received public assistance 30 days before interview	23%	38%	37%	48%

<sup>29</sup> See Appendix D for a summary of the statistically significant differences between the Bodega and comparison groups at intake.

<sup>30</sup> Among the total group of family members completing a first interview, the Bodega and comparison groups also differed significantly on age, gender, and relationship to the user. In addition, they differed in their current criminal justice involvement. See Appendix D.

<sup>31</sup> Among the total group of users completing a first interview, the Bodega and comparison groups differed significantly on the variables of ethnicity, age, household income, recent and lifetime use of some drugs, and periods of serious problems getting along with family. See Appendix D.

Table 3-3 Bodega and Comparison Groups Used in Analysis of Program Effect:  
Demographic and Socio-Economic Characteristics, continued

	Bodega Users	Comparison Users	Bodega Family Members	Comparison Family Members
Satisfied with living arrangements	57%	67%	57%	63%
Unemployed	79%	79%	75%	68%
Annual Household income < \$5,000	36%	23%	32%	25%

\* p < .05; \*\* p < .01

Table 3-4 Bodega and Comparison Groups Used in Analysis of Program Effect:  
Drug Use and Criminal Justice History

	Bodega Users	Comparison Users	Bodega Family Members	Comparison Family Members
	(n = 50)	(n = 56)	(n = 44)	(n = 31)
Drug use, lifetime				
<i>Alcohol to intoxication</i>	35%	46%	21%	26%
<i>Heroin</i>	66%	70%	16%	26%
<i>Cocaine</i>	74%	61%	23%	27%
<i>Marijuana</i>	76%	72%	18%	55%**
<i>Crack</i>	47%	35%	9%	23%
<i>More than 1 drug per day</i>	75%	71%	14%	43%**
Drug Use in past 30 days				
<i>Alcohol to intoxication</i>	30%	22%	7%	7%
<i>Heroin</i>	40%	35%	5%	10%
<i>Cocaine</i>	42%	27%	11%	13%
<i>Marijuana</i>	36%	20%	11%	29%
<i>Crack</i>	20%	16%	7%	--
<i>More than 1 drug per day</i>	52%	46%	7%	10%
<i>Methadone</i>	33%	22%	5%	16%
Criminal Justice				
<i>Average # convictions, lifetime</i>	4	4	1	1
<i>Average # months incarcerated, lifetime</i>	76	86	6	16
Currently on: Parole	80%	80%	7%	13%
<i>Probation</i>	10%	7%	2%	10%

\* p < .05; \*\* p < .01

Table 3-5 Bodega and Comparison Groups Used in Analysis of Program Effect:  
Mental and Physical Health

	Bodega Users	Comparison Users	Bodega Family Members	Comparison Family Members	U.S. Normative Scores
	(n = 50)	(n = 56)	(n = 44)	(n = 31)	
Depression (CES-D)					
Indicates depression (>16)	58%	59%	57%	63%	
Average score	19	22	21	24	17
Social Support (MOS)					
<i>Emotional/Informational</i>	72	70	67	77	70
<i>Tangible Support</i>	74	72	65	75	70
<i>Affectionate Support</i>	80	77	80	86	74
<i>Positive Social Interaction</i>	74	71	70	79	70
<i>Summary Support</i>	74	72	69	78	70
Mental and Physical Health (SF 36)					
<i>Physical Functioning</i>	80	82	61	71	84
<i>Bodily Pain</i>	66	70	58	68	75
<i>General Health</i>	60	60	46	56	72
<i>Vitality</i>	60	59	52	56	61
<i>Social Functioning</i>	72	67	63	67	83
<i>Role-Emotional</i>	63	53	58	48	81
<i>Mental Health</i>	60	59	60	65	75
<i>Role-Physical</i>	61	59	45	54	81
<i>Physical Health Summary</i>	47	48	39	45	50
<i>Mental Health Summary</i>	44	41	44	43	50

\* p < .05; \*\* p < .01

Table 3-6 Bodega and Comparison Groups Used in Analysis of Program Effect: Relationships with Family

	Bodega Users	Comparison Users	Bodega Family Members	Comparison Family Members
	(n = 50)	(n = 56)	(n = 44)	(n = 31)
Relationship to User	NA	NA		
<i>Mother</i>			48%	7%**
<i>Father</i>			2%	--
<i>Partner/Spouse</i>			26%	42%
<i>Brother/Sister</i>			14%	13%
<i>Son/daughter</i>			--	7%
<i>Friend</i>			2%	23%
<i>Other</i>			7%	10%
Relationships with Family				
<i>Recent serious problems with family</i>	24%	18%	23%	19%
<i>Spend most free time with</i>				
<i>Family</i>	80%	55%**	80%	57%*
<i>Friends</i>	6%	25%*	9%	20%
<i>Alone</i>	14%	21%	11%	23%

\* p < .05; \*\* p < .01

*Analysis.* We conducted separate analyses for the family members and users, comparing data from the individuals' first and second interviews. The first step in identifying program effects was identifying patterns in the data. At this stage we were interested in statistically significant changes between the first and second interviews and also in the direction, magnitude, and consistency of other changes even if they did not reach the level of statistical significance. In keeping with the logic of experimental design, we looked for changes that applied primarily to Bodega participants, whether these relationships were in the expected direction or not. We conducted independent samples t tests to compare mean scores between the first and second interviews for both the family member and user groups. For example, we used this test to evaluate the changes in depression, social support and physical health scores. We used Pearson chi-square tests to examine changes that did not involve the calculation of means, such as study members' satisfaction with their living arrangements and ways of spending free time.

We used logistic regression analysis to look more closely at each potential program

effect.<sup>32</sup> The logistic regression analyses helped us to determine (1) whether or not participation in the Bodega program made a statistically significant difference to outcome even after possible confounding factors had been taken into account and (2) how much of a difference participation in the Bodega program made. Specifically, we looked for control factors that might explain away the apparent effect of participation in the Bodega program because of their relationship with both study group membership (as shown in the tables presented earlier) and the outcome in question. For example, we examined whether a given outcome, such as reduced drug use or greater sense of social support, was associated with age or gender rather than with program participation. Although our tables identified a small number of systematic differences between the Bodega and comparison study groups, very few of these factors also were associated with the outcomes we examined. The logistic regression equations, therefore, controlled for a small number of characteristics, as Appendix Tables E-1 and E-2 show.

### **Characteristics of Family Members in the Analysis**

*Demographic and Socio-Economic Characteristics (Table 3-3).* The family members in the study group were primarily women in their late thirties and forties. The Bodega group were older and more likely to be women and mothers of the users. The majority of both the Bodega and comparison groups were Hispanic but, as we will see with the users, the comparison group had a higher proportion of African-Americans. The educational levels of the two groups were about the same; they had completed 11 years of education on average. Most of the family members were not employed. As a group, their most common sources of income were public assistance, pension benefits, and social security.

*Drug Use and Criminal Justice History (Table 3-4).* Our survey instrument revealed that the family members had moderate histories of drug use. More than half of the comparison group family members had abused marijuana and a fourth had used heroin, cocaine, and crack; about 20 percent of the Bodega group had used cocaine or marijuana. The great majority of both the Bodega and comparison group family members had not used drugs recently. Most had no current criminal justice involvement and most had never been incarcerated.

*Mental and Physical Health (Table 3-5).* The family members' scores on the measures of physical health were below national norms and below the users' scores. On the measures of mental health the family members also scored below national norms. About sixty percent had scores indicating depression (a score of 16 or above), similar to the results we

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<sup>32</sup> We used logistic regression because the outcome measures that we subjected to multivariate analysis were dichotomous. Partly because logistic regression makes fewer assumptions about the underlying distribution of the data, it is a more appropriate technique to use under these circumstances than OLS regression would be.

will see for the users. However, the family members' scores on the measures of social support were high, relative to national norms.

*Relationship to Family (Table 3-6).* Family members reported strong ties to their families. Two-thirds of them said they spent most of their free time with family (80% for the Bodega group and 57% for the comparison group) and more than half had a close relationship with their sibling, partner, spouse, children or close friend. The family members also reported difficulties with family relationships, however. About twenty percent reported recent serious problems with family and, in addition, more than one quarter said they had been physically hurt by a partner in their lifetime.

### **Characteristics of Users in the Analysis**

*Demographic and Socio-Economic Characteristics (Table 3-3).* The users were predominantly unmarried men in their mid to late thirties. The great majority were Hispanic, but just over 20 percent of the comparison group were African-American, compared to eight percent of the Bodega group. They had completed 10 to 11 years of education, on average, and about 80 percent were unemployed at the first interview.

*Drug Use and Criminal Justice History (Table 3-4).* Our survey instrument showed that about half of the users had abused more than one substance a day in the month before the interview and about three-fourths had done so at some point in their lives.<sup>33</sup> About forty percent of the Bodega users and thirty percent of the comparison group had used heroin or cocaine in the month before the first interview. The great majority of the users were on parole when they entered the study. On average, they had four previous convictions, and had spent from about six and a half to seven years incarcerated.

*Mental and Physical Health (Table 3-5).* The users' average scores on the measures of physical and mental health were generally below national norms. However their scores for measures of social support equaled or exceeded the national norms—meaning there were people in their lives on whom they could rely for understanding, advice, material aid, company, and affection.

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<sup>33</sup> Research shows that when people self-report drug use, they also tend to under-report, particularly in a criminal justice environment. [See Julia Yun Soo Kim, Michael Fendrich, and Joseph S. Wislar, "The Validity of Juvenile Arrestees' Drug Use Reporting: A Gender Comparison," *Journal of Research in Crime and Delinquency* 37, no. 4 (2000): 419-434; also Josine Junger-Tas and Ineke Haen Marshall, "The Self-Report Methodology in Crime Research," in *Crime and Justice: A Review of Research* edited by Michael Tonry, vol. 25 (Chicago: University of Chicago Press, 1999), and also Thomas Mieczkowski, "The Prevalence of Drug Use in the United States," in *Crime and Justice: A Review of Research*, vol. 20 (1996).] Since the drug users in both the Bodega and comparison groups were involved in the criminal justice system, our study members may be under-reporting their drug use. However, we were interested in the change in their levels of drug use rather than the levels themselves.

*Relationship to Family (Table 3-6).* The users in both the Bodega and comparison groups were very involved with their families. At the time of the first interview, the majority lived with parents, partners/spouses, or other family members, and about sixty percent said they spent most of their free time with family members (80% of the Bodega group and 55% of the comparison group). In addition, the majority reported that in the month before the interview they had a close relationship with their mothers, partners, and children, and three-fourths reported a close relationship with siblings. The users also reported relatively similar levels of serious problems with these family relationships over their lifetimes. In addition, about a quarter reported that they had problems with partners or spouses during the month before the first interview, and nearly one-fifth reported problems with parents, siblings, and other family members. Also, more than one-fourth said they had been physically hurt by a family member during their lifetimes.



## Chapter 4: The Results

The original design for La Bodega called on program staff to strengthen families so that these families, in turn, could support the drug users during treatment. Family support, the designers hoped, would lead more drug users to succeed in treatment, avoid incarceration, and reciprocate by treating their families better.

The results of our study show that La Bodega did indeed improve the lives of the family members with whom it worked. But strengthening those families had a much more complicated effect on the lives of the drug users than the program's designers originally imagined. Most important, drug use declined and the decline in use is significantly associated with La Bodega, but it did not necessarily decline for the reasons the designers had thought it might.

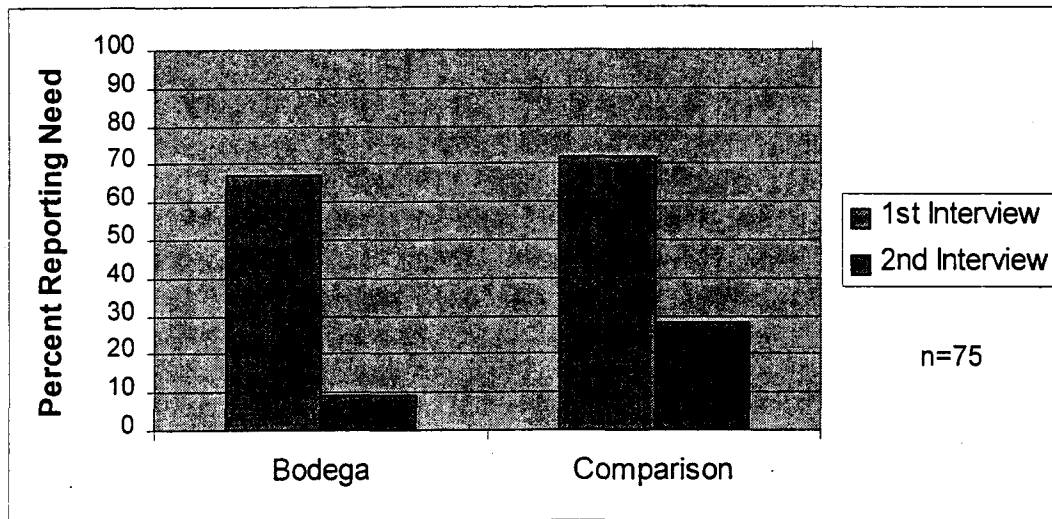
### Improvements for Family Members

After six months, the family members in our full study group who participated in Bodega showed substantial improvements in two areas, relative to family members in the comparison group. A higher proportion of the Bodega family members had obtained the medical and social services they said they needed when they entered the study, and they reported some corresponding improvements in their physical health. The family members involved at La Bodega also had a stronger sense of being supported, both emotionally and materially, in their social relationships.

*Basic Needs.* We examined changes in the service needs of family members in two ways. First, we analyzed the proportion of family members reporting service needs at their first and second interviews. Second, we analyzed whether those specific family members who reported a need during their first interview had resolved that need six months later.

Bodega family members were significantly more likely than the comparison family members to have their basic needs met over the study period (Figure 4-1). When they entered the study, about two-thirds of *all* family members expressed a need for at least one type of service or benefit—67 percent of the family members enrolled at La Bodega, and 72 percent of those in the comparison group. Six months later, nine percent of the Bodega group reported a need for services compared to 28 percent of the comparison family members.

Figure 4-1: Meeting Service Needs of Family Members



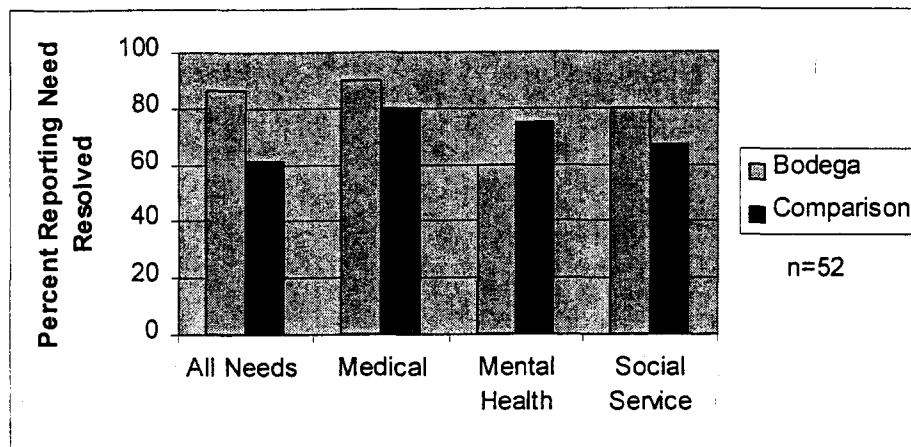
If we confine our analysis to those family members who expressed a service need at their first interview, Bodega family members were significantly more likely to have resolved the service need six months later (Figure 4-2). Eighty-six percent of Bodega family members who reported a need at their first interview had resolved that need six months later, compared with 61% of family members in the comparison group.

This resolution of need among Bodega family members appears to have resulted from their success in obtaining medical services and social services such as housing, food, and vocational training. Ninety percent of the Bodega family members who expressed a need for medical services at the first interview had resolved that need by the second interview, compared to eighty percent of the comparison group family members.<sup>34</sup> With respect to social services, eighty percent of the Bodega family members had their needs met by the second interview, versus 67 percent of the comparison group. Mental health is the only area in which unmet needs lingered for a substantial percentage of Bodega family members.

The figures show that families in the comparison group were also often able to resolve their service needs. Based on our interviews with family members and conversations with Bodega case managers and staff at other programs, we believe that the experience of the comparison group family members indicates the range and strength of services available in the Lower East Side community.

<sup>34</sup> Medical services include dental, outpatient, emergency room, inpatient, HIV-related, and pregnancy/prenatal care. Mental health services include inpatient, outpatient, and family counseling.

Figure 4-2: Resolving Needs of Family Members, By Type of Need



We conducted a logistic regression analysis to test the strength and stability of the Bodega program’s effect in resolving all the service needs of family members. The final logistic regression included three control variables: the family member’s gender, relationship to the user, and current involvement with the criminal justice system.<sup>35</sup> The regression analysis showed that family members who were involved with the criminal justice system when they entered the study or who were related to the users as parent, spouse, or partner were less likely to have all service needs resolved than the family members who were not criminally involved or who had another relationship to the user—usually sibling or more distant relative. Even taking these into account, however, the regression analysis showed that the family members’ participation in the Bodega program remained a statistically significant influence on the reduction of needs (see Appendix E, Table E-1).

These changes in the proportion of family members reporting basic needs after six months with La Bodega are reflected in their reports of improvements in some aspects of their lives. The Bodega family members improved on indicators of physical health—they reported less bodily pain, improved general health, and a greater ability to participate in daily activities without interference from physical problems (referred to in the instrument as “Role-Physical”). The family members in the comparison group reported either deterioration or smaller improvements in these areas.<sup>36</sup> Although none of the differences on these measures reached statistical significance on its own, the pattern across the measurements suggests that La Bodega was having some effect here. The pattern of improvements in physical health for the Bodega family members is somewhat stronger if

<sup>35</sup> Other control variables were considered but ultimately dropped either because they were unrelated to the resolution of unmet needs or because they were redundant with other variables. These other potential control variables included physical and mental health scores, measures of social support, and perceived changes in health status during the six months preceding the first interview. The final logistic regression equation is shown in Appendix E, Table E-1.

<sup>36</sup> The Bodega family members did not report greater improvements than the comparison family members on the measure of physical functioning, where both groups improved slightly, or on the measure of vitality, where both declined slightly.

we consider only those in the “consistent family unit” subgroup of our study sample. These users and their family members remained in the study for the six-month period and the Bodega participants would have received the most consistent service from the program (Table 4-1).

Family members who received services from La Bodega also showed some improvement in mental health, while those in the comparison group showed deterioration on some measures. Overall, however, mental health outcomes were mixed for the Bodega family members. About half of the family members in both groups remained depressed, and at the end of six months in the program, Bodega family members reported that emotional problems interfered with their daily activities more than they had at the outset, while comparison group family members saw a small improvement on this score (referred to in Table 4-1 as “Role-Emotional”). These unexpected results may point to the emotional burdens that La Bodega placed on the families and drug users with whom it worked.

Table 4-1 Six-Month Changes in Family Members’ Average Scores on Measures of Physical, Mental, and Emotional Health

Health Measures	Full Study Group		Consistent Family Unit Subgroup	
	<i>Bodega</i> (n = 44)	<i>Comparison</i> (n = 31)	<i>Bodega</i> (n = 29)	<i>Comparison</i> (n = 22)
Physical functioning	+3.1	+3.4	-0.1	+5.0
Role-Physical	+14	+10.4	+20.7	+12.5
Bodily pain	+ 3.8	-3.3	+3.3	-7.2
General health	+2.0	-1.0	+3.2	-1.6
Vitality	-1.5	-1.6	+0.5	-3.6
Social functioning	+4.6	+3.5	+9.9	-.6
Role-Emotional	-1.6	+7.3	+11.5	+3.1
Mental health	+3.0	-2.9	+4.5	-4.2
Depression Scale	-0.1	-1.5	-1.7	-0.1
% Scoring as depressed				
First interview	56%	66%	59%	64%
Second interview	51%	55%	41%	62%

\*p ≤ .05; \*\*p ≤ .01

### Supportive Relationships

The family members who participated at La Bodega showed a pattern of modest improvements in their sense of social support—having people in their lives who provided information, emotional and tangible support, positive interactions, and affection. In

contrast, the family members in the comparison group experienced deterioration on all of these measures, especially in having relationships that provided positive interactions. For the consistent family unit subgroup in our study, where specific family members and drug users remained engaged with each other throughout the six months of the study, the contrast between the Bodega and comparison groups was most clear, with differences on three of the five individual measures statistically significant (Table 4-2).

Table 4-2 Six-Month Changes in Family Members' Average Scores on Measures of Social Support

	Full Study Group		Consistent Family Unit Subgroup	
	<i>Bodega</i> ( <i>n</i> = 44)	<i>Comparison</i> ( <i>n</i> = 31)	<i>Bodega</i> ( <i>n</i> = 29)	<i>Comparison</i> ( <i>n</i> = 22)
Social support				
Overall support index	+2.1	-3.8	+3.9	-10.1*
Types of support				
Emotional/informational	+1.6	-3.8	+3.5	-6.8
Tangible	+6.4	-2.1	+9.7	-12.8*
Positive interaction	+0.8	-9.2	+1.4	-16.7*
Affection	+0.6	-0.6	+2.3	-7.9

\* $p \leq .05$ ; \*\* $p \leq .01$

Where did Bodega family members get their increased social support? Our in-depth interviews with some participants suggest that it may have come from their relationship with the Bodega family case managers and the availability of program staff. For example, Jodie, who participated in Bodega as the support for her husband Cesar, described to a researcher when she entered the program how Cesar would beg her to keep him from going out to get high, and she would just cry. In a subsequent interview with a member of our research team, after several months working with Bodega, she again told how Cesar would ask her for help, but now, instead of crying, she was giving him straightforward advice about how to get treatment. She explained that she knew what to say because of her Bodega case manager:

She helped me a lot because she listened to me. She came out with positive thoughts and ways to help me avoid thinking negative about myself...Do you understand? She gives me options.

Anne, a 60-year-old musician and recovering heroin user, engaged in Bodega as the support for her son Gus, whose biological father and stepfather had also been substance abusers. Anne assumed custody of Gus's daughter, now five, during his years of crack use and incarceration. At her second interview, Anne spoke of the importance of Bodega's hotline and the availability of support when she needed it.

And when I came in contact with La Bodega, there was a relief because it wasn't a program that was set up for just you alone because it said family... this is a lot of support, that at any time, night or day, there is someone you can press buttons and say 'hey, I've got a crisis going on.' I've been in a lot of programs but I've never been anywhere I can call somebody that doesn't even know me, never saw me, and stay on the phone with me one hour, because that was that kind of support. That was the kind of program I need.

### Effects on Drug Users

La Bodega was designed on the theory that family members who were better supported would be able to help their relatives persist in a course of outpatient drug treatment. And longer stays in treatment, the theory held, would produce less drug use.

La Bodega appears to have achieved the first step in this logic chain—better support for family members. But those family members do not appear to have helped drug users obtain more treatment than they would otherwise have received.

*Drug Treatment.* When they entered the full study group, almost all of the drug users reported that they had received some form of drug treatment over their lifetimes and nearly two-thirds reported receiving treatment in the previous six months. The most common forms of recent treatment for both the Bodega and comparison group users were self-help groups, followed by methadone maintenance for the Bodega users and outpatient treatment for the comparison group (Table 4-3).

Table 4-3 Percentage of Users Receiving Drug Treatment in the Six Months Before Each Interview

Substance Abuse Services (in descending order of prevalence among Bodega users)*	<i>Bodega (n = 50)</i>		<i>Comparison Group (n = 56)</i>	
	<i>First Interview</i>	<i>Second Interview</i>	<i>First Interview</i>	<i>Second Interview</i>
Self-help group	30%	28%	42%	39%
Methadone maintenance (outpatient)	28%	20%	22%	32%
Outpatient treatment	24%	34%	38%	43%
Drug detox treatment unit	22%	16%	26%	12%
Prison/jail-based treatment	6%	0	20%	2%
Drug-free residential treatment	6%	8%	9%	11%
Short-term inpatient	4%	6%	6%	2%
Alcohol-only treatment	2%	2%	7%	7%
Other treatment	2%	6%	4%	2%
No drug treatment services	36%	38%	23%	21%

\* $p \leq .05$ ; \*\* $p \leq .01$

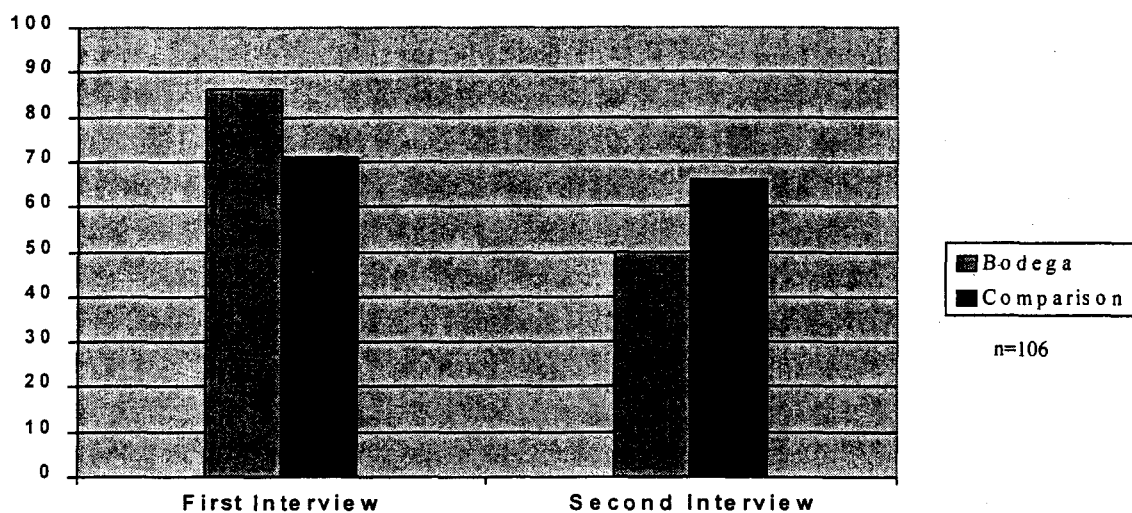
\*Note: Each person may have had more than one form of treatment, or none at all.

Six months later, there was little change in the proportions of Bodega and comparison group users who had received drug treatment during those intervening months or in the amount of time they had spent in treatment.<sup>37</sup> The Bodega group was still less likely than the comparison group to have received most forms of treatment or to have received any drug treatment at all. The only substantial increase for the Bodega users was in outpatient treatment. This is the form of treatment La Bodega originally hoped to encourage, but the increase in participation was only modest, from a quarter of the users before entering Bodega, up to one-third during the first six months with Bodega. The percentage of users in the comparison group receiving outpatient treatment also rose during these months, and it remained higher than that for the Bodega users.

In short, there is no evidence from our study that providing social and emotional support to the families of drug users will lead to increases in the amount of treatment that drug users involved with the criminal justice system would otherwise receive.

*Substance Abuse.* Surprisingly, despite the failure to increase treatment, family participation with La Bodega did appear to bring a decline in drug use. At the time they entered the study and their families began participation in the program, 86 percent of the users in Bodega had used at least one substance over the previous month. Substance use is defined as use of illegal drugs, methadone, drinking alcohol to intoxication, or abuse of amphetamines, sedatives, or barbiturates. This declined to 50 percent after six months of participation ( $p = .01$ ). This is a significantly greater reduction than among users in the comparison group, whose substance use declined from 71 percent at the start of the study to 66 percent six months later (Figure 4-3).

Figure 4-3: Reduction in Substance Abuse, All Substances

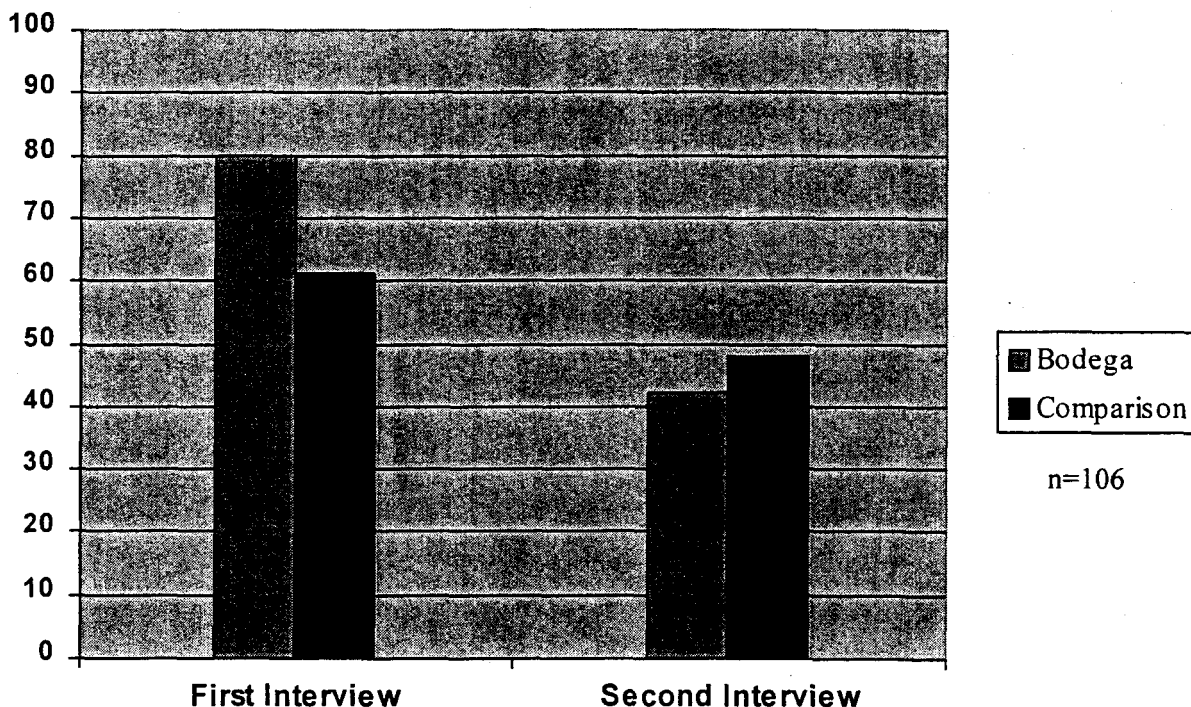


<sup>37</sup> See Appendix F for results on time in treatment.

Not only did the Bodega users reduce their substance use more than the comparison group, but they did it with far less reliance on methadone. Nearly 60 percent of the Bodega users who were using methadone at the start of the study had stopped using it six months later, and only 10 percent had begun or resumed use. Among the comparison group members, only 16 percent of those who reported using methadone at the first interview had stopped by the second interview and more than a third had begun or resumed use.<sup>38</sup>

If we confine the analysis to use of illegal substances—heroin, cocaine, crack, marijuana, and hallucinogens, the Bodega group’s use declined significantly and even more dramatically, from 80 percent upon entering the study to 42 percent six months later (p .05), while use by the comparison group declined only modestly from 61 percent to 48 percent (Figure 4-4).

Figure 4-4: Reduction in Substance Abuse, Illegal Substances



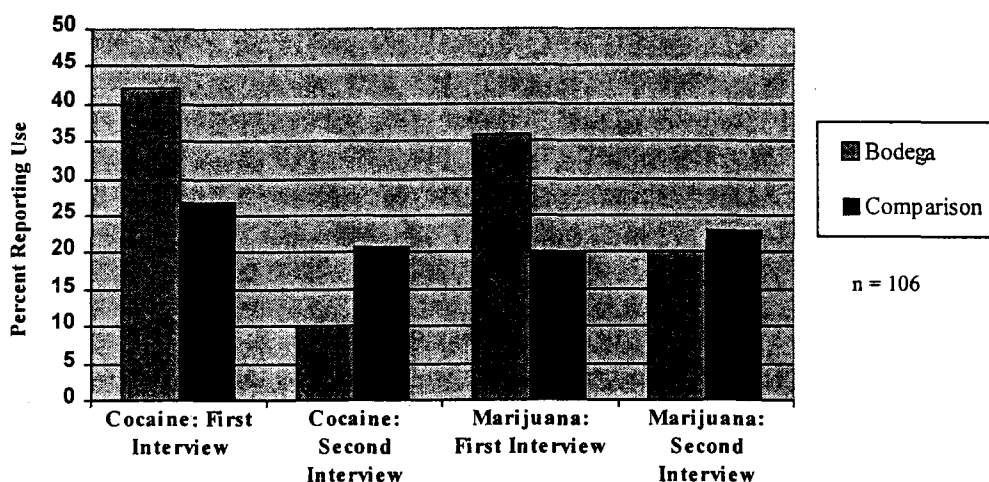
The Bodega group reduced its use of every illegal substance covered by the research, but the reductions in cocaine and marijuana use were especially marked and statistically significant. Forty-two percent of the users in the Bodega group had used cocaine in the month before entering the study, but this dropped to ten percent after six months (p .01). The corresponding decline in cocaine use among

<sup>38</sup> Five users in the comparison group were recruited from a methadone clinic.



the comparison group was from 27 to 21 percent. Similarly, abuse of marijuana declined from 36 percent to 20 percent among the Bodega users (p .05), but increased slightly from 20 percent to 23 percent among the comparison users (Figure 4-5).

Figure 4-5: Reduction in Substance Abuse, Cocaine and Marijuana



To evaluate the strength and stability of the Bodega program's impact on the users' substance abuse, we tested our findings through logistic regression analyses. We limited our analyses to whether or not the users discontinued the abuse of *any* substance other than methadone. These analyses were designed to discover if differences between the Bodega and comparison group, other than their participation in Bodega, might explain the overall decline in substance abuse.

None of the characteristics on which the Bodega and comparison group users differed exhibited any relationship, positive or negative, to changes in substance abuse, with two exceptions. Women were more likely than men to have stopped abusing at least one substance. Similarly, users who lived with someone participating in a self-help group were more likely than others to have stopped abusing some substance.<sup>39</sup> When these control variables were included in the logistic regression equation, however, only participation in the Bodega program maintained its statistically significant effect on substance abuse (see Appendix E, Table E-2).

*Physical, Mental, and Emotional Health.* The relative physical, mental, and emotional well-being of the drug users in the Bodega group, compared with the well-being of the

<sup>39</sup> Other factors we considered included data from the first interview on depression, health, and social support scores; the perceived importance "to you now" of drug treatment, age, and income. The scale scores were unrelated to discontinued drug use. Although both age and income were associated with discontinued drug use at the bivariate level, we ultimately excluded both variables from the logistic regression analysis. Age was redundant with gender; the overwhelming majority of older users (upwards of 90%) were women. In a regression analysis, the effect of income became statistically insignificant. Another reason for excluding income is that many respondents would not or did not answer the income question; retaining income in the regression analysis would have reduced the number of valid cases from 89 to 55.

users in the comparison group, is consistent with their greater desistance from substance abuse. The differences between the Bodega and comparison group users on these measures are not individually statistically significant, but they are all in a direction consistent with reduced reliance on drugs.

By the end of the six-month study period, the Bodega users were less likely than they were at intake to report that physical problems interfered with their daily activities; the comparison users were more likely to report these problems (the Bodega group's average score on the Role-Physical measure increased by five percentage points, while the comparison users' score declined.) On most other health measures, the average scores for the Bodega users remained unchanged or declined slightly, but overall they seem to have maintained their health to a greater degree than the comparison users. The pattern of greater improvements and lesser declines for the Bodega users is more pronounced in the "consistent family unit" subgroup of the study sample. In addition to being much less likely than users in the comparison group to score as depressed, the Bodega users in this subgroup were less likely than at their first interview to report that emotional problems interfered with their daily activities, while the comparison group became slightly more likely to report emotional problems (Table 4-5).

Table 4-5 Six-Month Changes in Users' Scores on Measures of Physical, Mental, and Emotional Health

Health Measures	Full Study Group		Consistent Family Unit Subgroup	
	<i>Bodega</i> ( <i>n</i> = 50)	<i>Comparison</i> ( <i>n</i> = 56)	<i>Bodega</i> ( <i>n</i> = 29)	<i>Comparison</i> ( <i>n</i> = 22)
Physical functioning	-2.3	-7.2	-2.6	-14.1
Role—Physical	+5.0	-3.1	+1.6	-9.1
Bodily pain	-4.9	-5.8	-0.9	-8.2
General health	-0.4	-2.5	+3.9	-2.9
Social functioning	-1.8	-0.4	+0.4	+4.0
Vitality	-3.5	-4.5	-3.5	-7.7
Role—Emotional	-2.0	-3.0	+4.3	-1.5
Mental health	+0.7	-1.6	+1.7	-1.4
Depression Scale Score	+0.6	+2.3	-1.2	-.05
% Scoring as depressed:				
1 <sup>st</sup> Interview	58%	59%	61%	64%
2 <sup>nd</sup> Interview	55%	70%	48%	68%

\* $p \leq .05$ ; \*\* $p \leq .01$

## **How Bodega Reduced Substance Abuse—Perspectives of Users and Family Members**

If Bodega's family support did not lead to greater participation in treatment by these drug users, then how did Bodega produce significant declines in substance abuse? The quantitative research we conducted was not designed to answer this question, but the in-depth interviews we conducted with users and their family members provide some clues. The users, like their family members, spoke of the importance of their relationship with the Bodega family case manager and of the availability of help through the program's hotline.

Perhaps more important, the users also spoke at length and in detail about the ways their family members were able to help them maintain sobriety. Users spoke of their desire to retain the good opinion of their families and of their family members' statements that they would end the relationship if the users resumed or continued to abuse drugs. Users and family members also pointed to the ways family members acted during difficult periods to prevent drug use or to minimize periods of relapse. Finally, family members who had previously encouraged drug use were able to become the users' supports in abstinence.

### **The Family Case Manager and the Hotline**

Users spoke of the role of the case manager in helping them understand their addiction, improve communications with the people closest to them, deal with difficult situations without resorting to drugs, and minimize the severity of any relapses. Cesar, the husband of Jodie, had been in and out of prison since 1982 for various drug-related offenses. He and Jodie began family case management with La Bodega shortly after his release from prison and he and Jodie met with the Bodega case manager weekly. Cesar described how the case manager helped him confront his own use.

I didn't know I was an addict. I was brainwashed, as an addict was an individual who was homeless. Individuals that walk around, street-wise, always messed-up. Dope fiend, you know. But I was the type of guy, ain't nothing wrong with me. I get high, I maintain, I look decent, presentable, that's it. But it's not like that. And I never knew that, until I came to her [case manager].

Anne's son, Gus, served 11 years in prison for manslaughter and was returned to prison twice for drug-related parole violations. After he and Anne had been working for several months with a family case manager at Bodega, he described to a member of the research team an incident in which his better understanding of his own addiction helped him to cope with a stressful event. He also described

how a technique he learned at Bodega kept him from using drugs when he was tempted.

...my sister was in a car accident. One of her children was injured... But there's a thing called HALT, which is that if you're hungry and lonely and tired, it's a bad space to be in. So if I get too lonely, or if I don't have enough for my plate, then I know it's time for me to be contemplating that there are other things I should be thinking about...I've called [Bodega's hotline] on occasion. Sometimes I go to meetings, and it's not enough.... This disease is conniving, it's insidious, really tricky. I'm starting to take a look at the patterns of why I relapse, and one of the reasons was I didn't stay connected to a support system.

Users also said that the Bodega case managers had helped them to see other possibilities for themselves and to consider the consequences of their actions. Matt, 32, began dealing drugs at the age of eleven and has relied on it since to earn a living. After several months with La Bodega, he recalled the way La Bodega helped him break away from two decades of drug dealing and use.

...they gave me a sense of direction. They was guiding me on the right path... That's what I know how to do. Get high. Sell drugs and make money. And now they showed me that I could do something else with my life.

Similarly, Gus, considering his experiences with the program after several months, concluded:

They [Bodega's case managers] ...said that if you wanted self-esteem, you had to do esteeming things— had to figure out what things made me feel good about my life, to give me incentive ... La Bodega is just there to help you to think about the consequences and the rewards.

Cesar made a similar point, singling out the case manager's role in helping him see that his abusive behavior towards his wife would have consequences for his relationship with her.

She [case manager] ....taught me that by me fighting with my wife, it draws her away from me. And by constantly going in jail, that who's going to be there for me? She's not going to tolerate it all the time. Taught me how to be responsible for my ways and actions.

Users also spoke of the role of the family case manager in limiting the severity of a period of relapse. Latifa, the mother of three daughters, began her substance abuse with crack and later adopted heroin. She maintained her link with her case manager by telephone, and identified this link as having prevented the progression of her drug use.

Well, I was working with ... [case manager], you know, ...my addiction was really getting to me, so I wasn't working as closely with her as I normally would. It was more phone conversations, I would call her, and just needed to get something off my chest, and she was always there for me, and always took the time to talk to me and to invite me in, to talk about what I was going through. Regardless of whether I wanted anything...and I was the kind of client that would just call unexpectedly, and need her on the spot right now! ...it was a really crucial time in my life, and if she wouldn't have been there for me, it could have gotten really ugly for me.

Gus spoke of the importance of the hotline and, in his case, the role his Bodega case manager played in securing drug detoxification treatment for him during a relapse:

Now I know there's a hotline I can talk to, and that the people genuinely care... one call to Bodega even after you've used (can) prevent further use and possibly aggressive behavior...the hotline also gives me a sense of security, because even though I don't want to relapse, it's good to know that it's there if I do.

### **Family Pressure**

Several users said they were motivated to stay off drugs to maintain their families' trust in them, particularly the willingness of family members to trust them with money and valuable property. According to Cesar:

The reason I have any type of jewelry right now is that I don't get high. I would present myself like nothing. And my face is not sucked in anymore. I have things now. Now I could just say to my mother, 'oh, can I borrow your car?' and I can get the keys. Before I couldn't do that.

Family members also motivated the users by telling them they would not tolerate their behavior, telling users in effect that they must choose either the relationship or the drugs. Matt, a user and La Bodega participant, described his girlfriend's ultimatum as the reason that he made one more attempt to stop using crack. Matt's girlfriend has two children from a previous relationship and was pregnant with his child at the time of the interview.

My girlfriend worries about me. She doesn't want to lose me...the time that I'm not high I'm a totally different person...she likes the other person so she's giving me the opportunity.... She also told me that she would leave me if I continue to get high. She has children and other responsibilities to think about.

My family gave me an ultimatum. Either you fix yourself or we don't want to deal with you anymore. So I really thought about what was going on, and I wanted to fix myself...

Some family members also made themselves a constant presence to support drug users in recovery. Jodie helped Cesar maintain his sobriety by keeping him away from situations where he might be tempted. As she explained: "Although he wants to do things alone, I won't let him until I feel that he's responsible enough to deal with the dangers of the street."

### **Family Communication and Emotional Attachment**

For Bodega case managers, the first step in dealing with the family unit often consisted of efforts to improve family members' ability to communicate with one another. Some of the users described breakthroughs in this kind of communication as transforming their lives. Reginald, a recovering crack and heroin user and Bodega participant, had a 10-year-old daughter with his partner Dawn. Reginald had only intermittent contact with his daughter, who was raised by an aunt in upstate New York, because of his repeated incarcerations.

After several months in the program Reginald told a researcher that his relationship with Dawn had improved and that both of them were now better able to communicate their frustrations in a less angry way. Their case manager had also arranged a family session with their daughter, which allowed the three of them to confront and express their feelings about Reginald's drug use and incarceration, and their ensuing separation. According to Reginald, his daughter's anger at him was palpable, and reconciliation after a lifetime's estrangement came in incremental steps. This was the first time he and his daughter had ever addressed his absence, his drug use, and her anger.

..she's opened up to me a lot. She calls me daddy every once in a blue moon...but if she wants to talk to me she'll come around me and talk to me...she'll come to the room I'm in cause she won't call me Reginald; she knows enough to respect me and not call me Reginald. The first time she called me daddy I was messed up—I was crying and everything.

Similarly, after several months working with a family case manager at La Bodega, Cesar spoke of the way his greater ability to communicate with Jodie kept him from resorting to drugs after arguments.

I'm doing a lot of things differently. ..She [case manager] told me that maybe if I show more respect towards my wife, things would be better. And I've been doing that. We have our little arguments, but we don't get into the fistfights like we used to. Me going out there, when we argue I might put on my jacket and go downstairs, and she wind up running right

behind me, because that was my thing I used to do, when we'd argue I'd put on my jacket and go out and get high, but now she runs behind me, and we start talking and go out for a little walk. Her mother watches the kids, and we talk, and we settle it out.

Families can, of course, also contribute—directly and indirectly—to the users' reliance on drugs. All of the users in the study group had close family who were also substance abusers and these relationships were instrumental in their beginning and continuing to use drugs. In these situations, too, family case managers at La Bodega tried to encourage communication and build emotional attachment to reverse these patterns, so that the family member becomes a supporter of abstinence. For example, as a child, Gus had witnessed his mother shooting up heroin, and their family counseling sessions at La Bodega allowed them to talk about this history. As he explained to a member of the research team:

Part of what's driving you to whatever you're going to do is largely due to whatever's going on in the home... They [at La Bodega] helped my mother to deal with me and with her own history of substance abuse. The meetings helped to heal some of the relationship problems between us.

Gus's mother, for her part, credited her sessions at La Bodega for her new ability to support Gus in his commitment to stay sober. As she explained:

My past is a drug life, a past that should not have been subjected to any child... I don't want to feel guilt about being the one who makes him fall. I would like to see him stand on his feet. Not that I'm all of his strength but I know that I'm a positive influence on his life—and it's been since we've been at La Bodega.

### **Family Influences on Drug Use in the Comparison Group**

Some users in the comparison group, like their counterparts in the Bodega group, enjoyed close relations with their families. However, the relationships they described did not appear to offer the same support for sobriety evident among the participants in La Bodega. Aggie, a woman in the comparison group, began using heroin at the age of 11 and had spent ten years in prison. Like Cesar, she spoke of the connection between her periods of abstinence and her family's trust in her.

When I'm clean, my mother is close to me. My sister and mother call me, they come over with my aunt and we go gambling. There was money all over. They leave their pocketbooks and jewelry around and don't follow me around. It was a good feeling.

Similarly, Leo, a recovering heroin user in the comparison group, had the ongoing support of his wife and two daughters. Time previously spent using and dealing drugs he

now spent with his family. But when he talks about his family, it is not as a source of pressure to stay sober. Instead, he says it is the threat of the long prison sentence he would face if he violates parole that keeps him with his family:

It's been helpful to concentrate on my family. I stay home with them...Before all I did was hang out with my friends outside. I don't want to go over there now. If I did, I'd get arrested for anything and be a narcotic violator.

Cathy, a family member in the comparison group, had herself been a user. Like Gus's mother in the Bodega group, Cathy had stopped using and was hoping to help her partner of six years, Felipe, do the same. When she entered the study, Cathy pointed to her own withdrawal from drug use as evidence that her partner Felipe could also withdraw if he wanted to. Six months later, however, Cathy had ended her relationship with Felipe and predicted that his addiction and criminal behavior would eventually lead to one of three things: "either [he] becomes a bum in the street begging for money...he's in jail doing life, or he's dead." As she explained to a member of the research team, despite her deep affection for Felipe and her desire that he succeed in recovery, she had sold small quantities of drugs with him during the study period and, on one occasion, had been arrested with him.

### **Criminal Justice Involvement**

The goals for La Bodega did not include reducing the criminal justice involvement of the drug users whose families used its services. All of the drug users enrolled in family case management were, as a matter of eligibility, involved with the criminal justice system, and they were likely to remain involved as a result of parole or probation supervision. Still, the goals for the program did include a reduction in the use of incarceration to respond to relapse. Moreover, if the drug users in the program were reducing their drug use, it might be reasonable to hope that they would also be less likely to be arrested.

Because the number of users who were arrested during the study period is small, we cannot draw conclusions about whether the Bodega participants were less likely than the comparison users to be detained after arrest and arraignment. Nevertheless, the data suggest that Bodega may have had some effect here. Of the five Bodega users who were arrested during the study period, none was detained; of the 12 comparison group users who were arrested, four were detained. Our in-depth interviews also suggest that La Bodega was able to persuade various authorities to deal with relapse as part of the process of recovery. Relapse was common for the Bodega users we interviewed, but several of the participants described the ways family members acted to minimize the severity of the relapse. Cesar relapsed shortly after he entered the program—smoking marijuana, drinking, and even using heroin. Jodie, his wife, after describing to the researcher the emotional support she received from her family case manager during this relapse, said that she encouraged her husband to call the case manager also. "I told him to



be honest because it's confidential...he told her that he uses every week and that he asked for my help." According to Cesar's family case manager, when Cesar called he requested a meeting with her and his parole officer: "Cesar wanted his parole officer to understand him, his situation."

While few users in the full study group—those completing both interviews—were arrested or convicted, the arrest and conviction rates for the Bodega users were lower than the rates for the comparison users. The Bodega users were about half as likely to be arrested and convicted of a new offense as comparison users, both during the study period and in the following six months. Their recidivism seems to have been reduced along with their substance abuse (Table 4-6). Less than 20 percent of the convictions for the full study group were for felonies.

Table 4-6 Arrests Among Drug Users in the Full Study Group

	Bodega Users (n = 44)	Comparison Users (n = 56)	All Users (n = 100)
<i>Arrests During Study Period</i>			
Arrest Leading to Conviction	9%	16%	13%
Any Arrest	11%	21%	17%
<i>Arrests in Six Months Following Study Period</i>			
Arrest Leading to Conviction	9%	16%	13%
Any Arrest	11%	18%	15%

\*p ≤ .05; \*\*p ≤ .01

It is intriguing that the arrest rate among Bodega users rises above the comparison group if we enlarge our examination to all the users in the original study intake group, that is, all of those who completed a first interview. These are the users who were originally enrolled in the study, including 35 Bodega users and 39 comparison users who were not available for a second interview and, for the Bodega users among them, not actively using the program's services (Table 4-7).

Table 4-7 Arrests Among Drug Users in the Original Study Intake Group

	Bodega Users (n = 79)	Comparison Users (n = 95)	All Users (n = 174)
<b>Arrests During Study Period</b>			
Arrest Leading to Conviction	18%	13%	15%
Any Arrest	24%	21%	22%
<b>Arrests in Six Months Following Study Period</b>			
Arrest Leading to Conviction	9%	10%	9%
Any Arrest	10%	13%	11%

\*p ≤ .05; \*\*p ≤ .01

The lower recidivism of the Bodega users in the full study group, who stayed in the program long enough to have a six-month follow-up interview, might be the result of their continued participation in Bodega services. Alternatively, some might argue that those in the full study group were simply the more stable among the original intake group, and their stability—not their participation in Bodega—produced the lower recidivism. The results for the comparison group, however, suggest otherwise. The comparison users in the full study group also had enough stability to allow the research team to locate them at the end of six months; but despite this stability, the comparison users did not display recidivism rates much different from those of the original study intake group. In short, there is some evidence that the lower recidivism among the Bodega users in the full study group was the result of their participation at La Bodega.

### Family Relationships

La Bodega's planners imagined that family support would ease the relationships between drug users and their families. This did not prove to be the case.

Perhaps as a consequence of having the issues surrounding drug abuse out on the table and having to deal with them openly, the Bodega users and their family members experienced increased conflict in their relationships. Over the short term, patterns in the data suggest, it was not uncommon for Bodega users to experience more disruption than healing in some of their personal relationships. The users' perceptions of the social support available to them illustrate this pattern the most clearly (Table 4-8).

For Bodega users, the average overall support index score *dropped* by 3.1 points during the six-month study, whereas this same score *increased* by 2.6 points for users in the comparison group. The largest difference between the two groups was in positive interaction: relative to the comparison group, the Bodega group declined by 8.4 points. Even the users in the "consistent family unit" subgroup deteriorated in four of the five measures of social support.

Table 4-8 Six-Month Changes in Users' Average Scores on Measures of Social Support

	Full Study Group		Consistent Family Unit Subgroup	
	<i>Bodega</i> (n = 50)	<i>Comparison</i> (n = 56)	<i>Bodega</i> (n = 29)	<i>Comparison</i> (n = 22)
Social support				
Overall support index	-3.1	2.6	-0.9	-1.6
Types of support				
Emotional/informational	-2.2	3.5	+0.8	+0.1
Tangible	-3.1	0.3	-3.7	-5.4
Positive interaction	-4.5	3.9	-1.7	+2.2
Affection	-3.0	2.1	-0.1	-0.7

\*p ≤ .05; \*\*p ≤ .01

Possibly because of this decline in perceived support, Bodega users' satisfaction with their living arrangements, which started out lower than that of comparison users (57% vs. 67%) declined further, so that only 46 percent of Bodega users were satisfied with their living situations at the end of six months. The percentage of comparison users who were satisfied with their living arrangements remained unchanged over the six months of the study (67% vs. 68%). At the end of six months, the difference in the percentage of Bodega and comparison users who were satisfied with their living arrangements was statistically significant (46% vs. 68%,  $p = <.05$ ; not shown).

The pattern of decline in perceived social support and satisfaction with current living arrangements may reflect a short-term consequence of serious efforts to overcome drug addiction, whether those efforts occur within the context of the Bodega program or not. Previous research has pointed to the adjustments that users and families must make in the course of the user's recovery. A study of the use of family therapy in drug treatment noted that when the drug-dependent person stops using drugs, other family problems, previously obscured by the drug use, may surface.<sup>40</sup> A study of a community-based program designed to support and strengthen families fighting addiction also found that conflict with significant others can be expected to increase as users and their families attempt to change relationships.<sup>41</sup> Research on other social programs has also found increased stress among program participants with otherwise positive outcomes, for example in programs that promote job training and employment.<sup>42</sup>

<sup>40</sup> Edward Kaufman, M.D. "Family Therapy in Substance Abuse Treatment" as cited in *Synopsis of Treatments of Psychiatric Disorders*; Glen Gabbard, M.D. and Sarah Atkinson, M.D. American Psychiatric Press, 1996: 371-372.

<sup>41</sup> Leonore J. Olsen, Ph.D. "Services for Substance Abuse-Affected Families: The Project Connect Experience," *Child and Adolescent Social Work Journal* 12 no. 3 (June 1995).

<sup>42</sup> Hans Bos, Aletha Huston, et al, *New Hope for People with Low Incomes: Two-Year Results of a Program to Reduce Poverty and Reform Welfare*, Manpower Demonstration Research Corporation, April 1999.

Family members' efforts to help the user or to state their own needs may *feel* like lack of support to the user. Among the users we interviewed in-depth, for example, Reginald had to deal with his daughter's anger for the first time and Matt had to acknowledge his partner's ultimatum that he choose between her and the drugs. In sum, Bodega succeeded in providing meaningful support to the family members of drug users, and that support appears to have produced a decline in drug use. The decline in drug use was not a result of an increase in treatment, but may instead have been the result of the combined assistance and pressure brought to bear by the family case manager and the family itself. The same combination of assistance and pressure appears to have reduced the incidence of re-arrest and re-incarceration; but it also seems to have produced its own discomfort among the drug users in the study. Overcoming drug addiction, even with family support, is still difficult and painful.

## Discussion

### Interpreting the Results

The research literature acknowledges that family plays a critical role in achieving sobriety for drug users and in their successful rehabilitation. Yet few drug treatment programs incorporate families into everyday clinical practice, and the literature provides even fewer evaluations of such programs. La Bodega de la Familia's uncommon approach to treating crime-involved drug users *and* their families challenges the prevailing practice of removing individuals from a negative environment so that they can focus on themselves and change their habits. La Bodega sees the drug user in the context of a family and sees that family as a key strength to draw upon in promoting recovery.

This report set out to assess whether the Bodega approach would lead to a reduction in drug use on the part of the offender and improved conditions for families overall. Some of the results met our expectations; others were quite unexpected. And some aspects of the program were clearly valuable from the start while others were modified and strengthened along the way. But it is clear that La Bodega led to real improvements in the lives of drug users and their family members. Illegal drug use among Bodega participants declined significantly, from 80 percent to 42 percent. The drop in cocaine use was dramatic—from 42 percent in the month before they entered the study to ten percent six months later. The data also suggest that with their reduced reliance on drugs, Bodega participants also were less likely to be arrested and convicted of a new offense.

We had anticipated that the declines in substance abuse and criminal involvement would coincide with additional time spent in drug treatment. That was not the case. In fact, our research provides no evidence that supporting the families of drug users helps the users stay in outpatient treatment or get more treatment than they would have without such a program. Then how does La Bodega help users reduce their reliance on drugs if not through treatment?

Our in-depth interviews reveal that a combination of pressure, encouragement, and assistance from family members and program staff led to users' reduced reliance on drugs. Family members exerted direct and indirect pressure on the users to stay sober. Some gave ultimatums; others extended their trust and gave positive feedback only when users were sober. Family members and drug users also relied on La Bodega, where family case managers and 24-hour hotline staff were available to listen, review options, and facilitate access to needed services.

Family members of drug users benefited from the program in tangible ways. They received needed medical and social services, housing, food, and job training. Their physical health improved, and they felt more strongly supported. But despite some improvements, mental health needs lingered for a substantial percentage of family members. About half of them remained depressed.

We had anticipated that support services combined with family case management would contribute to a reduction in family tensions. Yet after six months the Bodega family members reported that emotional problems interfered with their daily lives even more than they had before. Drug users in the Bodega group also showed signs of strain at the end of six months. They were significantly less satisfied with their living arrangements than users in the comparison group. Bodega users also perceived that less social support was available to them; their average support scores dropped over the six months in the program while users in the comparison group perceived that they had more support.

These findings suggest that tensions arose when users tried to reduce their reliance on drugs or stop using altogether. As they confronted their drug use, they may have had to confront other family issues that had long been dormant. As they struggled against the pull of drugs, they sometimes also struggled against the family member they had enlisted as a support in recovery. Anyone who has tried to quit smoking knows the feelings of irritability, frustration, and impatience that accompany the struggle to break a physical and psychological habit. Our study members were breaking sometimes decades-long addictions to heroin, cocaine, and crack as well as breaking from the lifestyle of addiction. Some had never held a job other than selling drugs.

### **The Lessons of La Bodega**

La Bodega is in now its sixth year of delivering services to drug users and their families. In 2001 it became part of Family Justice, an independent nonprofit that trains government and nonprofits in how to involve families in their work. Family Justice operates Bodega, which continues to provide direct assistance to families. The parent organization also conducts research on families involved in the justice system.

Bodega's years of experience offer valuable lessons. What does it take to provide support services to families? How can programs bring local government agencies on board as partners? This section highlights what La Bodega did, how the program changed over time, and what program managers have learned.

*Building on Strengths.* Neighborhood services have been integral to the Bodega program from inception. New programs are often based on neighborhood needs, but Bodega's planners also chose the Lower East Side because of its strengths—the broad range of support services already offered in the community. Before moving into its neighborhood in 1996, Bodega's planners talked with local substance abuse clinics, child welfare agencies, churches, and other community organizations, as well as police and probation, to ensure that the neighborhood offered a strong network of local organizations to support troubled families.

To get local government partners involved, it was important for the program to show the parole and probation departments how they could benefit from tapping into what

families have to offer. Bodega staff showed them that family members—broadly defined to include partners and close friends as well—exert tremendous influence over parolees and probationers and can act as surrogate monitors.

Of course, not every family member or friend will support a user's goal to stop using drugs. And even a family member who supports recovery most of the time may occasionally fail. Bodega family case managers use mapping tools to help the substance user identify the people and organizations that will be both supportive and stable, as well as people and places to avoid.

*Learning What Families Need.* The program has learned more about the families it serves—for example, that they have more mental and physical health problems than planners imagined they would. Also, most of the people who come to La Bodega are now referred from government agencies. This usually means they meet Bodega's eligibility criteria. In response to both of these facts, program staff have modified and streamlined their intake assessment to spend less time on eligibility and more time querying specific needs, including questions about HIV/AIDS and cancer. The program also has learned that its families are more comfortable receiving services in their own homes than at the storefront and now conducts many more home-based visits.

*Changes in Program and Government Practices.* Bodega's program is fundamentally unchanged after six years, but some of its practices have been modified and strengthened. The program's 24-hour hotline proved crucial from the beginning, both to families and to law enforcement agencies. If a family member or a drug user calls Bodega about a relapse at any time, the program can set a response in motion that can prevent the drug user from using more drugs or committing crimes that may lead to a possible return to prison.

Bodega now has training curricula for its staff, for example; when it began, employees learned on the job. When Bodega began its partnership with local parole officers, responses to relapse were decided on a case by case basis; Bodega now has a formal partnership with parole, and together they have created a procedure that details how parole officers should proceed.

Bodega and parole have also created protocols for "community prep" visits—home visits prior to a family member's return from prison. Parole and Bodega managers meet monthly to discuss program policy; family case managers and parole officers meet monthly on individual cases.

Bodega's partners in government—police, parole officers, and probation officers—have made other changes to their procedures and protocols since working with La Bodega. The forms parole officers fill out now include information about parolees' family members and what they can contribute. Police officers who respond to domestic violence calls have requested that a Bodega staff member accompany them each time

they visit families to follow up on an initial call for assistance. And police have asked Bodega to create a protocol to guide officers in how to engage families when they arrest juveniles.

The families Bodega works with are involved in multiple government systems that place overlapping and conflicting demands on them—child welfare, public housing, and welfare, in addition to parole and probation. Bodega coordinates the requirements of these agencies on behalf of the family. If a family is involved with the child welfare system, for example, a parent might be able to see his child only during designated visiting hours. But his parole officer may require him to attend an outpatient drug treatment group during the same hours. Bodega tries to identify and avoid potential conflicts by helping families map their involvement with the various agencies. If necessary, the program will call one or both agencies to try to solve the problem. When such stresses are alleviated, the program believes, family members are better able to support their loved ones who are struggling with addiction, and drug users are better able to meet the requirements of justice supervision.

### **Questions Remaining**

Our research did not succeed in all of its aims. For example, we had hoped to examine the impact of Bodega on the children in the households of participants. In the end, our research sample did not include children and adolescents, so we are unable to assess how the recovery process affected them. We suggest that future research assess the impact of family case management on young participants, as well as their influence on those in recovery from drug abuse. Our understanding of the family dynamics of recovery would also benefit from a closer look at those family members who help. If future research can identify character traits or actions of these family members, programs like Bodega should be better able to identify the people who can best support users through recovery.

We did not set out to examine the occurrence of mental illness among drug abusers involved in the criminal justice system, but the presence of depression and other mental health issues among the members of our sample reminds us of the need to find practical ways of treating it. Our research points to lingering mental health needs for both users and family members, needs that are beyond the ability of family case management to meet directly. Family Justice, Bodega's new parent organization, plans a research effort to understand the extent and nature of mental illness among people under parole and probation supervision and to develop more targeted interventions to help them cope with life outside of jail and prison. This work will enhance the organization's ability to serve both dually diagnosed substance abusers and their non-drug using family members who suffer from a mental illness.

These questions and others are important because the demand for drug treatment for people in the criminal justice system is certain to grow. We will need to find cost-effective treatments to meet that demand, and the results of this research suggest that



families may be able to play a big part in those treatments. As with any successful demonstration project, Bodega shows the potential in a new way of dealing with a longstanding problem, but it does not tell us what will work in every situation. The design of family case management may have to change to accommodate the needs of different populations in different community settings. Indeed, the attention that Bodega paid to the culture of its community may be part of the reason for its success. As variations on Bodega's service are tested in other communities, future research will tell us more about what is transferable in Bodega's design. Still, the results of this research show that the effort is worth making. Facing extraordinarily daunting problems of long-term substance abuse in a community where such problems are common, Bodega made a difference.

## Appendix A: Selected Characteristics of Users and Family Members in the Original Intake Study Group

Table A-1 Users and Family Members in Original Intake Group: Demographic and Socio-Economic Characteristics

	Users N= 179	Family Members N= 116
Average age	35	42
Male	80%	20%
Hispanic	70%	67%
African-American	16%	15%
White	2%	6%
Other	11%	12%
Highest grade completed	10	11
Unemployed	79%	75%
Annual household income <\$5,000	31%	30%

Table A-2 Users and Family Members in Original Intake Group: Drug Use, Drug Treatment, and Criminal Justice History

	Users N = 179	Family Members N = 116
<i>Regular Drug Use in Lifetime</i> <sup>43</sup>		
Alcohol to intoxication	40%	22%
Heroin	63%	18%
Cocaine	62%	22%
Marijuana	73%	31%
Crack	30%	12%
More than 1 drug per day	66%	22%
<i>Regular Drug Use in Past 30 days</i>		
Alcohol to intoxication	24%	7%
Heroin	35%	4%
Cocaine	32%	8%
Marijuana	32%	14%
Crack	14%	3%
Methadone	25%	7%
<i>Drug Treatment in Past Six Months</i>		
Self-help group	37%	11%
Outpatient	28%	3%
Drug detox	24%	2%
Methadone maintenance, outpatient	23%	7%
Prison/jail based program	14%	2%
Residential	8%	2%
Short-term inpatient	4%	0
Alcohol only	4%	1%
Currently on: Parole	78%	6%
Probation	9%	5%
See current legal problems as "not at all" serious	64%	93%
Average number of convictions, lifetime	4	1
Average months incarcerated, lifetime	76	8

<sup>43</sup> Regular use is defined as three or more times a week on average for at least six months.

Table A-3 Users and Family Members in Original Intake Group:  
Physical and Mental Health

	Users N = 179	Family Members N = 116
<i>Depression (CES-D)</i>		
Score indicates depression (>16)	54%	57%
Average depression score	19	21
<i>Social Support (MOS)<sup>44</sup> average scores</i>		
Tangible support	74	72
Affectionate support	80	85
Positive interaction	75	78
Emotional/informational support	71	75
Summary	74	77
<i>General Health (SF-36) average scores</i>		
Physical functioning	83	67
Bodily pain	70	60
General health	64	54
Vitality	62	54
Social functioning	72	66
Role- Emotional	61	57
Mental health	64	62
Role- Physical	67	53
Summary-Physical Health	49	43
Summary-Mental Health	44	44

<sup>44</sup> Scores for normative sample: Tangible 70; Affectionate 74; Positive Interaction 70; Emotional/Informational 70; Summary 70.

Table A-4 Users and Family Members in Original Intake Group: Relationships with Family and Others

	Users N = 179	Family Members N = 116
<i>Relationship to user</i>		
Mother		30%
Father		3%
Spouse/partner		34%
Sibling		11%
Child		3%
Friend		13%
Other (e.g., niece, nephew)		6%
<i>Spends most free time with:</i>		
Family	63%	67%
Friends	19%	14%
Alone	18%	19%
Serious conflict with family, past 30 days	20%	17%
Emotionally abused by family member, lifetime	35%	37%
Physically hurt by family member, lifetime	26%	19%

## Appendix B Standardized Instruments Used in the Research

### **Addiction Severity Index (ASI)**

A widely used instrument in drug treatment research to assess drug use, drug treatment, legal status and demographic characteristics.

References: A.T. McLellan, H. Kushner, D. Metzger et al., "Addiction Severity Index" (fifth edition), *Journal of Substance Abuse Treatment* 9 (1992):199-213; National Institute on Drug Abuse, *Clinical report series: Mental Health Assessment and Diagnosis of Substance Abusers*. Washington D.C.: U.S. Department of Health and Human Services, 1994.

### **Center for Epidemiological Studies Depression Scale (CES-D)**

One of the best known instruments for assessing depressive symptoms. Its application extends across age and socio-demographic groups, with favorable reliability and validity findings.

References: L.S. Radloff, "The CES-D Scale: A Self Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1 (1977): 385-401; D. Hann, K. Winter, and P. Jacobsen, "Measurement of Depressive Symptoms in Cancer Patients: Evaluation of the Center for Epidemiological Studies Depression Scale (CES-D)." *Journal of Psychosomatic Research* 46 (1999): 437-443.

### **Family Environment Scale (FES), Form R**

Composed of ten subscales that measure family functioning in domains such as cohesion, expressiveness, and conflict.

Reference: R. Moos and B.H. Moos, *Family Environment Scale* (3<sup>rd</sup> Edition). Palo Alto, CA: Consulting Psychologists Press, 1994

### **Hispanic Health and Nutrition Examination Survey**

Assesses health condition and impairment as well as utilization of health care.

References: *Vital and Health Statistics*, Series 1, No. 19; Series 11, Nos. 239 and 240; and Series 2, No. 111.

## **Medical Outcomes Study (MOS) Social Support Survey**

Consists of four social support subscales and an overall functional social support. In each case, a high score indicates a high level of the support.

Emotional Support – the expression of positive affect, empathetic understanding, and the encouragement of expressions of feelings.

Informational Support – the offering of advice, information, guidance, or feedback.

Tangible Support – the provision of material aid or behavioral assistance.

Positive Social Interaction – other people's availability to do fun things with you.

Affectionate Support – involving expressions of love and affection.

References: C.D. Sherbourne and A.L. Stewart. The MOS Social Support Survey, *Social Science in Medicine* 32, no. 6 (1991): 705-714.

## **SF-36 Health Survey**

Assesses physical and mental health on eight scales and two summary scales. In each case, a high score indicates better health.

Bodily Pain Score - measures a person's intensity, duration and frequency of bodily pain and limitations in usual activities due to pain, such as hip or knee pain. A low score shows considerable pain, while a high score shows the person feels no or very little pain.

Vitality Score - reflects a person's feelings regarding energy, fatigue and tiredness. A low score reveals the person feels tired and worn out much of the time, while a high score shows the person has a lot of energy.

Social Functioning Score - measures the ability to develop and maintain social relationships. A low score shows frequent interference with normal social activities, while a high score indicates very little interference.

Role Physical Score - determines the degree to which an individual performs or has the capacity to perform physical activities. A low score reveals considerable physical problems while working and performing other daily activities while a high score shows few problems.

Role Emotional Score - measures the extent to which emotional problems interfere with work and daily activities. A low score means the individual encounters emotional problems, while a high score reveals no or very few problems.

Physical Functioning Score - determines the performance of physical activities such as self-care, walking, climbing stairs and vigorous activities. A low score reveals that the patient is quite limited in performing physical activities, while a high score indicates that the patient can perform all or most physical activities, including the most vigorous.

Mental Health Score - determines a person's emotional, cognitive and intellectual status. A low score reveals that the person experiences feelings of nervousness and depression, while a high score shows the person feels peaceful, happy and calm all or most of the time.

General Health Score - evaluates a person's overall health, including current and prior health, health outlook and resistance to illness. A low score suggests that a patient's personal health is poor and the patient believes it is likely to get worse. A high score indicates that a patient perceives his or her health as excellent or very good.

Physical Component Summary Score - This is a general summary score of a person's physical status. The scale scores that contribute most to this score are the Physical Functioning, Role Physical and Bodily Pain scores. Very low scores usually indicate that the person has substantial limitations in self-care, physical, social and role activities. It may also mean that the patient has severe bodily pain and is frequently tired. A high score shows that the individual has no or few physical limitations, disabilities or obstacles to well-being.

Mental Component Summary Score - This is a general summary score of a person's mental status. The scores that contribute most to this score are the Mental Health, Role Emotional and Social Functioning. A low score can indicate frequent psychological distress or substantial social and role disability due to emotional problems. A high score generally indicates frequent positive feelings, absence of psychological distress and very few limitations in usual social/role activities due to emotional problems.

References: J.E. Ware, K.K. Snow, and M. Kosinski, *SF-36 Health Survey: Manual and Interpretation Guide*. Lincoln, R.I.: QualityMetric Incorporated (1993, 2000). J.E. Ware, M. Kosinski, and S.D. Keller, *SF-36 Physical and Mental Health Summary Scales: A User's Manual*. Boston, MA: Health Assessment Lab, 1994. Health Institute, *SF-36 Health Survey Update: July 1993*, New England Medical Center Hospitals, 1993. I. McDowell and C. Newell, *Measuring Health: A Guide to Rating Scales and Questionnaires*. New York: Oxford University Press, 1996.



Table B-1: Average Scores of Users in Full Study Group

Instrument	Bodega First Interview (n=50)	Bodega Second Interview (n=50)	Comparison First Interview (n=56)	Comparison Second Interview (n=56)	U.S. Normative Scores
<i>Depression (CES-D) average score</i>	19 (S.D. 13)	19 (S.D. 13)	22 (S.D. 13)	24 (S.D. 14)	17 (S.D. 11)
<b>Social Support (MOS)</b>					
<i>Summary Support</i>	74 (S.D. 21)	71 (S.D. 23)	72 (S.D. 21)	75 (S.D. 18)	70 (S.D. 24)
<i>Emotional/informational</i>	72 (S.D. 24)	69 (S.D. 26)	70 (S.D. 23)	74 (S.D. 20)	70 (S.D. 26)
<i>Tangible</i>	74 (S.D. 22)	71 (S.D. 25)	72 (S.D. 23)	72 (S.D. 25)	70 (S.D. 29)
<i>Positive interaction</i>	74 (S.D. 23)	69 (S.D. 27)	71 (S.D. 26)	75 (S.D. 22)	70 (S.D. 26)
<i>Affection</i>	80 (S.D. 24)	77 (S.D. 28)	77 (S.D. 23)	79 (S.D. 24)	74 (S.D. 28)
<b>Mental and Physical Health (SF-36)</b>					
<i>Physical functioning</i>	80 (S.D. 24)	78 (S.D. 27)	82 (S.D. 19)	74 (S.D. 24)	84 (S.D. 23)
<i>Bodily pain</i>	66 (S.D. 28)	61 (S.D. 33)	70 (S.D. 28)	64 (S.D. 26)	75 (S.D. 24)
<i>General health</i>	60 (S.D. 26)	60 (S.D. 29)	60 (S.D. 25)	58 (S.D. 24)	72 (S.D. 20)
<i>Vitality</i>	60 (S.D. 24)	57 (S.D. 26)	59 (S.D. 22)	54 (S.D. 21)	61 (S.D. 21)
<i>Social functioning</i>	72 (S.D. 26)	70 (S.D. 30)	67 (S.D. 28)	66 (S.D. 29)	83 (S.D. 23)
<i>Role-Emotional</i>	63 (S.D. 44)	61 (S.D. 45)	53 (S.D. 44)	51 (S.D. 44)	81 (S.D. 33)
<i>Mental health</i>	60 (S.D. 23)	61 (S.D. 25)	59 (S.D. 24)	57 (S.D. 24)	75 (S.D. 18)
<i>Role-Physical</i>	61 (S.D. 42)	66 (S.D. 44)	59 (S.D. 40)	56 (S.D. 42)	81 (S.D. 34)

\*p ≤ .05; \*\*p ≤ .01

Table B-2: Average Scores of Family Members in Full Study Group

<b>Instrument</b>	<b>Bodega First Interview (n = 44)</b>	<b>Bodega Second Interview (n = 44)</b>	<b>Comparison First Interview (n = 31)</b>	<b>Comparison Second Interview (n = 31)</b>	<b>U.S. Normative Scores</b>
<i>Depression (CES-D) average score</i>	21 (S.D. 16)	20 (S.D. 15)	24 (S.D. 13)	23 (S.D. 15)	17 (S.D. 11)
<b>Social Support (MOS)</b>					
<b>Summary Support</b>	69 (S.D. 22)	71 (S.D. 24)	78 (S.D. 20)	74 (S.D. 22)	70 (S.D. 24)
<i>Emotional/informational</i>	67 (S.D. 28)	69 (S.D. 27)	77 (S.D. 23)	73 (S.D. 23)	70 (S.D. 26)
<i>Tangible</i>	65 (S.D. 27)	71 (S.D. 25)	75 (S.D. 23)	72 (S.D. 25)	70 (S.D. 29)
<i>Positive interaction</i>	70 (S.D. 27)	71 (S.D. 29)	79 (S.D. 22)	69 (S.D. 29)	70 (S.D. 26)
<i>Affection</i>	80 (S.D. 19)	81 (S.D. 24)	86 (S.D. 18)	85 (S.D. 21)	74 (S.D. 28)
<b>Mental and Physical Health (SF-36)</b>					
<i>Physical Functioning</i>	61 (S.D. 30)	63 (S.D. 33)	71 (S.D. 32)	75 (S.D. 24)	84 (S.D. 23)
<i>Bodily Pain</i>	58 (S.D. 35)	62 (S.D. 36)	68 (S.D. 31)	64 (S.D. 33)	75 (S.D. 24)
<i>General Health</i>	46 (S.D. 30)	49 (S.D. 31)	56 (S.D. 28)	54 (S.D. 29)	72 (S.D. 20)
<i>Vitality</i>	52 (S.D. 28)	51 (S.D. 25)	56 (S.D. 22)	55 (S.D. 23)	61 (S.D. 21)
<i>Social Functioning</i>	63 (S.D. 34)	67 (S.D. 34)	67 (S.D. 32)	71 (S.D. 29)	83 (S.D. 23)
<i>Role-Emotional</i>	58 (S.D. 43)	57 (S.D. 48)	48 (S.D. 42)	56 (S.D. 47)	81 (S.D. 33)
<i>Mental Health</i>	60 (S.D. 28)	63 (S.D. 28)	65 (S.D. 22)	62 (S.D. 24)	75 (S.D. 18)
<i>Role-Physical</i>	44 (S.D. 43)	57 (S.D. 44)	54 (S.D. 43)	65 (S.D. 41)	81 (S.D. 34)

\*p ≤ .05; \*\*p ≤ .01

## Appendix C: Effect of Attrition on the Research Sample

Table C-1 Users With First Interview Only and with Both Interviews

	Bodega Users		Comparison Group Users	
	Dropped Out After First Interview (n = 38)	With Both Interviews (n=50)	Dropped Out After First Interview (n =35)	With Both Interviews (n = 56)
<b>Demographic and Socio-Economic Characteristics</b>				
Average Age	32	36**	33	39**
Male	87%	70%	86%	79%
Hispanic	71%	81%	57%	67%
African-American	5%	8%	31%	21%
White	--	4%	--	4%
Other	24%	6%	11%	7%
Highest grade completed	10	10	10	11
Married/common law	24%	39%	24%	31%
Satisfied with current marital status	68%	63%	62%	67%
Received public assistance 30 days before interview	24%	23%	35%	38%
Satisfied with living arrangements	60%	57%	65%	67%
Unemployed	81%	79%	74%	79%
Annual HH income < \$5,000	47%	36%	27%	23%

\*p ≤ .05; \*\*p ≤ .01

Table C-1 Users With First Interview Only and with Both Interviews, continued

Drug Use and Criminal Justice History	Bodega Users		Comparison Group Users	
	Dropped Out After First Interview (n = 38)	With Both Interviews (n=50)	Dropped Out After First Interview (n = 35)	With Both Interviews (n = 56)
<b>Drug Use, lifetime</b>				
<i>Alcohol to intoxication</i>	27%	35%	49%	46%
<i>Heroin</i>	58%	66%	54%	70%
<i>Cocaine</i>	50%	74%*	57%	61%
<i>Marijuana</i>	74%	76%	69%	72%
<i>Crack</i>	11%	47%**	23%	35%
<i>More than 1 drug per day</i>	50%	75%**	64%	71%
<b>Drug Use, Past 30 Days</b>				
<i>Alcohol to intoxication</i>	18%	30%	29%	22%
<i>Heroin</i>	41%	40%	20%	35%
<i>Cocaine</i>	28%	42%	29%	27%
<i>Marijuana</i>	39%	36%	34%	20%
<i>Crack</i>	5%	20%*	11%	16%
<i>More than 1 drug a day</i>	34%	52%	49%	46%
<i>Methadone</i>	23%	33%	20%	22%
<b>Currently on: Parole</b>	74%	80%	77%	80%
<b>Probation</b>	8%	10%	11%	7%
<b>Average # convictions, lifetime</b>	4	4	4	4
<b>Average months incarcerated, Lifetime</b>	72	76	65	86

\*p ≤ .05; \*\*p ≤ .01

Table C-1 Users With First Interview Only and with Both Interviews, continued

Mental and Physical Health	Bodega Users		Comparison Group Users	
	Dropped Out After First Interview (n = 38)	With Both Interviews (n=50)	Dropped Out After First Interview (n =35)	With Both Interviews (n = 56)
Depression (CES-D) Score indicates depression (>16)	55%	58%	37%	59%*
Average depression score	20	19	15	22**
Social Support avg. Score (MOS)				
<i>Tangible Support</i>	73	74	81	72*
<i>Affectionate Support</i>	75	80	88	77**
<i>Positive Social Interaction</i>	76	74	85	71**
<i>Emotional/Informational</i>	67	72	76	70
<i>Summary</i>	70	74	80	72
General Health avg. score (SF-36)				
<i>Physical Functioning</i>	92	80**	81	82
<i>Bodily Pain</i>	77	66*	70	70
<i>General Health</i>	72	60*	69	60
<i>Vitality</i>	67	60	65	59
<i>Social Functioning</i>	72	72	78	67
<i>Role- Emotional</i>	66	63	63	53
<i>Mental Health</i>	64	60	75	59**
<i>Role – Physical</i>	78	61	76	59*
Summary, Physical Health	53	47**	49	48
Summary, Mental Health	44	44	48	41*

\*p ≤ .05 ; \*\*p ≤ .01

Table C-1 Users With First Interview Only and with Both Interviews, continued

Relationships with Family	Bodega Users		Comparison Group Users	
	Dropped Out After First Interview (n = 38)	With Both Interviews (n=50)	Dropped Out After First Interview (n = 35)	With Both Interviews (n = 56)
Recent serious conflict with family	26%	24%	26%	18%
Spends most free time with:				
<i>Family</i>	54%	80%	63%	55%
<i>Friends</i>	22%	6%	25%	25%
<i>Alone</i>	24%	14%	13%	21%

\*p ≤ .05; \*\*p ≤ .01

Table C-2 Family Members with First Interview Only and with Both Interviews

Demographic and Socio-Economic Characteristics	Bodega Family Members		Comparison Group Family Members	
	Dropped Out After First Interview (n =25 )	With Both Interviews (n=44)	Dropped Out After First Interview (n =16)	With Both Interviews (n =31 )
Average Age	45	45	37	38
Male	12%	11%	33%	33%
Hispanic	64%	80%	56%	55%
African-American	8%	5%	25%	32%
White	12%	2%	7%	7%
Other	16%	14%	13%	7%
Highest grade completed	10	11	11	11
Married/common law	32%	42%	40%	37%
Satisfied with marital status	72%	73%	40%	81%
Received public assistance 30 days before interview	40%	37%	44%	48%
Satisfied with living arrangements	64%	57%	40%	63%
Annual HH income < \$5,000	46%	32%	17%	25%
Unemployed	84%	75%	71%	68%

\*p ≤ .05 \*\*p ≤ .01

Table C-2 Family Members with First Interview Only and with Both Interviews, continued

Drug Use and Criminal Justice History	Bodega Family Members		Comparison Group Family Members	
	Dropped Out After First Interview (n = 25)	With Both Interviews (n = 44)	Dropped Out After First Interview (n = 16)	With Both Interviews (n = 31)
Drug Use, Lifetime				
<i>Alcohol to intoxication</i>	12%	21%	36%	26%
<i>Heroin</i>	4%	16%	29%	26%
<i>Cocaine</i>	12%	23%	27%	27%
<i>Marijuana</i>	16%	18%	47%	55%
<i>Crack</i>	--	9%	13%	23%
<i>More than 1 drug a day</i>	12%	14%	20%	43%
Drug Use, Past 30 Days				
<i>Alcohol to intoxication</i>	4%	7%	13%	7%
<i>Heroin</i>	--	5%	--	10%
<i>Cocaine</i>	--	11%	--	13%
<i>Marijuana</i>	--	11%	13%	29%
<i>Crack</i>	--	7%	--	--
<i>More than 1 drug a day</i>	--	7%	7%	10%
<i>Methadone</i>	--	5%	7%	16%
Currently on: Parole	--	7%	--	13%
Probation	--	2%	13%	10%
Average # convictions, lifetime	--	1	--	1
Average months Incarcerated, lifetime	--	6	--	16

\* $p \leq .05$  ; \*\* $p \leq .01$



Table C-2 Family Members with First Interview Only and with Both Interviews, continued

Mental and Physical Health	Bodega Family Members		Comparison Group Family Members	
	Dropped Out After First Interview (n = 25)	With Both Interviews (n = 44)	Dropped Out After First Interview (n = 16)	With Both Interviews (n = 31)
Avg. depression score (CES-D)	17	21	21	24
Score indicates depression (>16)	48%	57%	63%	63%
Social Support avg. score (MOS)				
<i>Tangible Support</i>	78	65*	80	75
<i>Affectionate Support</i>	91	80*	86	86
<i>Positive Social Interaction</i>	88	70**	83	79
<i>Emotional/Informational</i>	84	67**	80	77
<i>Summary</i>	85	69**	82	78
General Health avg. score (SF-36)				
<i>Physical Functioning</i>	72	61	74	71
<i>Bodily Pain</i>	61	58	54	68
<i>General Health</i>	59	46	66	56
<i>Vitality</i>	52	52	59	56
<i>Social Functioning</i>	68	63	71	67
<i>Role- Emotional</i>	69	58	54	48
<i>Mental Health</i>	62	60	66	65
<i>Role Physical</i>	61	44	59	54
Summary, Physical Health	44	39	45	45
Summary, Mental Health	45	44	45	43

\* $p \leq .05$  \*\* $p \leq .01$

Table C-2 Family Members with First Interview Only and with Both Interviews, continued

Relationships with Family	Bodega Family Members		Comparison Group Family Members	
	Dropped Out After First Interview (n = 25)	With Both Interviews (n = 44)	Dropped Out After First Interview (n = 16)	With Both Interviews (n = 31)
Relationships to user				
<i>Mother</i>	42%	48%	13%	7%
<i>Father</i>	4%	2%	7%	--
<i>Partner/spouse</i>	29%	26%	40%	42%
<i>Brother/sister</i>	8%	14%	--	13%
<i>Son/daughter</i>	--	--	7%	7%
<i>Friend</i>	13%	2%	33%	23%
<i>Other</i>	4%	7%	--	10%
Recent serious conflict with family	8%	23%	13%	19%
Spends most free time with:				
<i>Family</i>	63%	80%	60%	57%
<i>Friends</i>	17%	9%	13%	20%
<i>Alone</i>	21%	11%	27%	23%

\* $p \leq .05$ ; \*\* $p \leq .01$

## Appendix D Bodega and Comparison Groups at Intake

Table D-1 Summary of Statistically Significant Differences:  
Bodega and Comparison Groups at Intake

Areas of Difference	Bodega Users (n = 88)	Comp. Group Users (n = 91)	Bodega Family Members (n = 69 )	Comp. Group Family Members (n = 47 )
<b>Demographic and Socio-Economic Characteristics</b>				
Hispanic	77%	64%**		
African-American	7%	25%		
Age (mean)	34%	37%*	45	37**
Sex: Female			88%	67%**
Total annual HH income < \$5,000	40%	25%**		
1 or > dependents (for food & shelter)	56%	43%*		
<b>Drug Use and Criminal Justice History</b>				
Drug use, lifetime:				
<i>Alcohol to intoxication</i>	32%	47%*		
Mean # years of use:				
More than 1 drug a day	10%	13%*		
<i>Cocaine</i>	9%	12%*		
Drug used past 30 days:				
<i>Opiates/analgesics</i>	5%	0%*		
<i>Barbiturates</i>	3%	11%*		
Current criminal justice involvement			6%	23%**

\*p ≤ .05; \*\*p ≤ .01

Table D-1 Summary of Statistically Significant Differences:  
Bodega and Comparison Groups at Intake, continued

Areas of Difference	Bodega Users (n = 88)	Comp. Users (n = 91)	Bodega Family Members (n = 69)	Comp. Family Members (n = 47)
<b>Service Utilization</b> (in past six months)				
Had a place to go when sick or in need of health advice	44%	67%**		
<b>Relationships with Family</b>				
Relationship to ISU: Mother Experience, lifetime	NA		45%	9%**
<i>Periods of serious problems getting along w/other family member</i>	13%	19%**		
Experience, past 30 days				
<i>Periods of serious problems getting along w/ close friends</i>	11	18*		
<i>Lives with someone who regularly attends self help meeting</i>	20	8*		

\*  $p \leq .05$ ; \*\*  $p \leq .01$

## Appendix E: Summaries of Logistic Regression Analyses

Table E-1 Relationship Between Bodega Participation and the Resolution of All Service Needs of Family Members

Control variables	B	SE	Odds Ratio	Wald Statistic	95% Confidence Interval for O.R.	
					Lower	Upper
Sex = female	0.67	1.12	1.95	0.36	0.22	17.52
Relationship to ISU = parent, spouse, or partner	-2.22	1.05	0.11	4.46*	0.01	0.85
Current involvement with the criminal justice system	-1.81	1.11	0.16	2.66	0.02	1.44
Bodega participant	2.24	0.97	9.36	5.35*	1.41	62.26

\* $p \leq .05$ ; \*\* $p \leq .01$

Percentage of cases correctly predicted as:	
Having all service needs met:	92%
Having one or more persisting unmet needs:	36%
Total:	79%

Table E-2 Relationship Between Bodega Participation and Discontinued Use of Any Substance<sup>45</sup>

Control variables	B	SE	Odds Ratio	Wald Statistic	95% Confidence Interval for O.R.	
					Lower	Upper
Sex = female	0.90	0.63	2.47	2.04	0.71	8.56
Lives with a self-help group participant	1.17	0.83	3.22	2.00	0.64	16.30
Bodega participant	1.03	0.49	2.82	4.43*	1.07	7.39

\* $p \leq .05$ ; \*\* $p \leq .01$

Percentage of cases correctly predicted as:	
Discontinuing abuse of at least one substance:	80%
Relapsing or persisting in use:	64%
Total:	75%

<sup>45</sup> Methadone is not included in this analysis.

## Appendix F: Changes in Amount of Time in Drug Treatment

Table F-1 Change in Mean Number of Weeks Users Spent in Drug Treatment in Past Six Months

Treatment Types	Mean Weeks for Users Who Received Treatment					
	Bodega			Comparison Group		
	First Interview	Second Interview	Diff.	First Interview	Second Interview	Diff.
Inpatient						
Prison/jail-based treatment	19.3	NA	NA	11.7	NA	NA
Drug detox treatment unit	4.2	2.9	-1.3	6.9	4.4	-2.5
Drug-free residential treatment	8.0	8.0	0	17.4	18.0	-0.6
Short-term inpatient	18.0	12.0	-6.0	3.0	NA	NA
Outpatient and Self-help						
Self-help	14.9	16.8	1.9	14.8	14.4	-0.4
Methadone maintenance	16.8	17.1	0.3	22.4	19.4	-3.0
Other outpatient treatment	13.5	16.4	2.9	14.1	16.8	2.7

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