



*Maryland Alcohol and Drug
Abuse Administration
Department of Health and Mental Hygiene*

Outlook and Outcomes

2002 Annual Report

*Robert L. Ehrlich, Jr., Governor
Nelson J. Sabatini, Secretary
Peter F. Luongo, Ph.D., Director*

Outlook and Outcomes in Maryland Alcohol and Drug Abuse Treatment is an annual publication of the Alcohol and Drug Abuse Administration (ADAA). Formerly two publications (*Trends and Patterns* and *The Annual Report*), it presents data from the Substance Abuse Management Information System (SAMIS) to which all Maryland Department of Health and Mental Hygiene (DHMH) certified or Joint Committee on Accreditation of Healthcare Organizations (JCAHO) accredited alcohol and drug abuse treatment programs are required to report.

While many of the persons in the community who are abusing alcohol and drugs will not come into contact with the treatment system, treatment data are the best source of information on the substance abuse problem because they are based on a substantial number of identified abusers from a variety of voluntary and non-voluntary sources.

These accumulated data on treatment episodes provide a rich repository of information on activity and treatment outcomes in the Statewide treatment network, and are an essential indicator of trends and patterns of alcohol and other drug use and abuse throughout the State.

Interpretation of the data reported in this publication is facilitated by an understanding of the following concepts:

A **treatment type** is the primary treatment approach or modality. This publication presents these types in 11 categories. Treatment types used in this report are: Intermediate Care Facility (ICF), Halfway House, Non-Hospital Detox, Other Residential, Hospital Detox, Outpatient, Intensive Outpatient (IOP), Correctional, Methadone Maintenance, Methadone Detox and Ambulatory Detox. A more detailed explanation of these treatment types appears in Appendix I at the end of this publication.

A **drug or alcohol problem** is defined as the use of a substance to the extent that it has contributed to the patient's physical, mental, or social dysfunction. A **mention** is a report of a substance as a problem on a SAMIS admission or discharge form. Up to three substances may be reported for each admission and each discharge; thus, the number of mentions exceeds the numbers of admissions and discharges.

Additional copies of this report can be obtained on the ADAA Web site at www.maryland-adaa.org.

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In his 2003 inauguration speech, Maryland Governor Robert L. Ehrlich, Jr. addressed the substance abuse epidemic as one of the most important issues facing Maryland. Governor Ehrlich said, "We must reverse the trend of simply giving up on so many young people trapped by drug abuse and despair ... we can close the revolving door of recidivism and forever open the door of hope and opportunity for all of our people."

It is estimated that alcohol and drug abuse cost Maryland citizens about \$5.6 billion annually. These expenses are incurred through crime, medical care, lost wages, and dependence on social welfare programs. Treatment significantly reduces these costs. In fact, studies have revealed that \$4 to \$7 is saved for every dollar spent on treatment. The Maryland data support what research has demonstrated for years: treatment reduces drug use, decreases crime, and increases employment.

ADAA is committed to ensuring that quality treatment and prevention services are available to all Maryland citizens. We believe that substance abuse is a chronic, treatable, and preventable disease and that patients who attend treatment can be healthy and productive members of our community.

The data presented in this report are derived from patient treatment admissions and discharges as reported by 374 public and private sector substance abuse treatment programs.

This report also contains data from the Maryland Treatment Outcomes Performance Pilot Studies (TOPPS II). The study was performed with the Center for Substance Research (CESAR) under contract UR1TI11639 from the Center for Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA). The study matched ADAA treatment data with databases from the Departments of Labor, Licensing and Regulation, and Public Safety and Correctional Services, and the Division of Health Statistics.

State of Maryland
Department of Health and Mental Hygiene
Alcohol and Drug Abuse Administration

OUTLOOK AND OUTCOMES

*In Maryland Substance Abuse
Treatment*

Fiscal Year 2002

*Robert L. Ehrlich, Jr., Governor
Nelson J. Sabatini, Secretary, DHMH
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The services and facilities of the Maryland State Department of Health and Mental Hygiene (DHMH) are operated on a non-discriminatory basis. This policy prohibits discrimination on the granting of advantages, privileges and accommodations. The Department, in compliance with the Americans With Disabilities Act, ensures that qualified individuals with disabilities are given an opportunity to participate in and benefit from DHMH services, programs, benefits, and employment opportunities.

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POSITIVE OUTLOOK

This first publication of *Outlook and Outcomes in Maryland Alcohol and Drug Abuse Treatment* is the beginning of a good story, worth telling.

In this issue you will become familiar with the ADAA's understanding that data have

meaning only when theory-driven. If addiction is a primary, chronic, progressive disorder with biological, psychological and social manifestations, then measurement in those dimensions is a fair expectation. If there is a relationship between time in treatment and good outcome, time in treatment should be measured and interpreted with that understanding. If there is an optimal time in treatment to achieve the desired benefit, then that time should be the benchmark. If the literature demonstrates that participation in treatment decreases substance use, decreases criminality, and increases employment, then these, too, should be measured and understood in the context of addiction. Data should be driven by theory.

The story of Maryland in these pages meets this standard. Reported here are results consistent with the research literature. Treatment in Maryland reduces substance use, increases employment, decreases criminality and decreases homelessness. The longer the individual remains in treatment the better the outcome—confirming again the importance of engaging and retaining patients in treatment.

The results are long-term. In the TOPPS II study, secondary data are used to follow patients after leaving treatment programs. One year posttreatment, arrests decline and employment increases. Earnings are also significantly higher for treatment completers. Again, time in treatment is an important variable, as treatment completers spent more time in treatment than treatment non-completers.

The information in this document provides a better outlook for the future. It is one based on outcomes.

ALCOHOL AND DRUG ABUSE ADMINISTRATION LEADERSHIP 2003

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Tobacco Compliance

ADAA STRUCTURE

The Alcohol and Drug Abuse Administration is the single State agency responsible for the provision, coordination, and regulation of the Statewide network of substance abuse services. It serves as the initial point of contact for technical assistance and regulatory interpretation for all ADAA–funded prevention and treatment programs. It comprises five divisions and 14 subdivisions.

OFFICE OF THE DIRECTOR

Consisting of the Director, Deputy Director, Medical Director, and the Research Office, this office provides the leadership and guidance to achieve the Administration's mission and vision. By investigating current research studies and working with local, State, and national data, the Research Office helps ADAA plan and manage the network of substance abuse services.

MANAGEMENT SERVICES DIVISION

This division is responsible for preparation of the agency budget and for development of the annual federal block grant application. The Management Services Division processes and monitors grant awards, tracks agency expenditures, and offers fiscal assistance to local jurisdictions. This division also provides procurement, contract management, personnel, and general fiscal services to the Administration.

PREVENTION AND TREATMENT DIVISION

This division serves as the liaison to local prevention and treatment service providers in Maryland. Regional Treatment Systems Administrators and Prevention Coordinators work with local jurisdictions to coordinate substance abuse services. The division is responsible for developing services to specific population subgroups including adolescents, pregnant women, and women with infants and children. The justice services section acts as a liaison between the judicial systems and the substance abuse service network.

QUALITY ASSURANCE DIVISION

This division evaluates the quality and effectiveness of the services that ADAA funds. The Tobacco Compliance Office provides oversight and monitors compliance of tobacco retailers. The Office of Education and Training for Addiction Services (OETAS) develops and provides treatment and prevention training for practitioners. The Legislation and Regulations Ser-

vices Office reviews bills pending before Maryland's General Assembly that may affect addiction services. The Compliance Office investigates regulatory violations in treatment programs and recommends corrective and/or punitive actions to protect the health and safety of consumers. This division is also responsible for the promulgation and updating the Code of Maryland Regulations (COMAR) regarding the provision of addiction services.

INFORMATION SERVICES DIVISION

The Information Services Division collects, processes, maintains, and reports statistical information related to alcohol and drug abuse treatment and prevention programs. Through e–Government Services, the division is transitioning the Administration's information services from a static, print medium to an interactive, Internet–based system. The division maintains ADAA's comprehensive Web site and publishes the Administration's many reports and newsletters. ✂

ADAA is an agency committed to providing all Maryland citizens access to quality substance abuse prevention and treatment services.

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*State of Maryland
Alcohol and Drug Abuse Administration
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ACCOMPLISHMENTS

Alcohol and drug abuse remains the nation's leading public health problem—costing the State billions of dollars each year. Accessing the latest research data and trends helps ADAA meet the changing needs of Maryland citizens. Prior to FY 2002, ADAA completed an internal evaluation and arrived at some areas for growth. Among numerous accomplishments this year are a significant decline in youth access to tobacco through retailers, implementation and distribution of an electronic data reporting system, and an improved grants process that bases awards on justifiable need and performance. Additional ADAA accomplishments for FY 2002 are listed below.

INITIATED LOCAL-LEVEL INVOLVEMENT

- Hosted a management conference to encourage local jurisdictions to participate in planning
- Reorganized ADAA's grant award process to allow jurisdictions to identify specific area needs
- Initiated eSAMIS data system to generate real-time data for state and local planning

ASSURED QUALITY

- Developed a Compliance Division to monitor all State substance abuse programs for compliance with State and federal regulations.

- Validated 10 percent of programs to ensure compliance with SAMIS reporting requirements
- Provided SAMIS training to 83 programs
- Provided HATS training and support to 30 eSAMIS pilot programs
- Performed on-site compliance reviews of half of all State-certified DWI education programs
- Nearly 800 inspections of tobacco retailers show a 90 percent compliance rate with the State law forbidding sales to minors

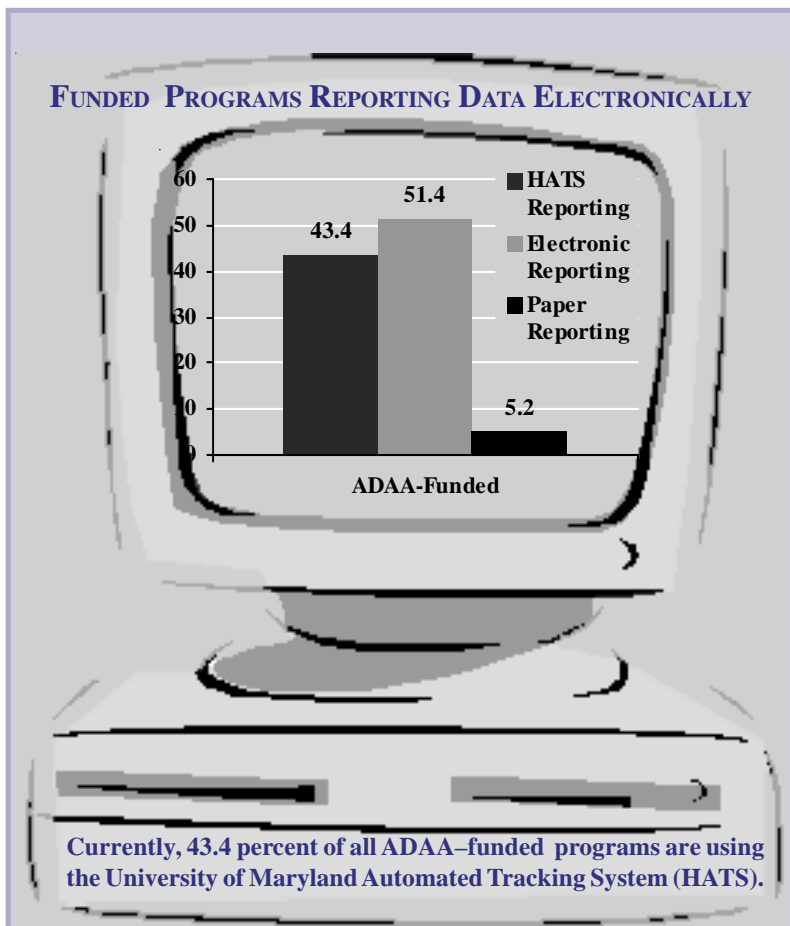
IMPROVED SERVICES

- Reorganized the Administration to promote more efficient service delivery
- Reorganized the Criminal Justice Section to provide specialized services
- Promoted the conversion to a science-based model for Statewide prevention programs
- Provided ten OETAS courses based on expressed needs of the treatment community

ESTIMATED NEED FOR SERVICES

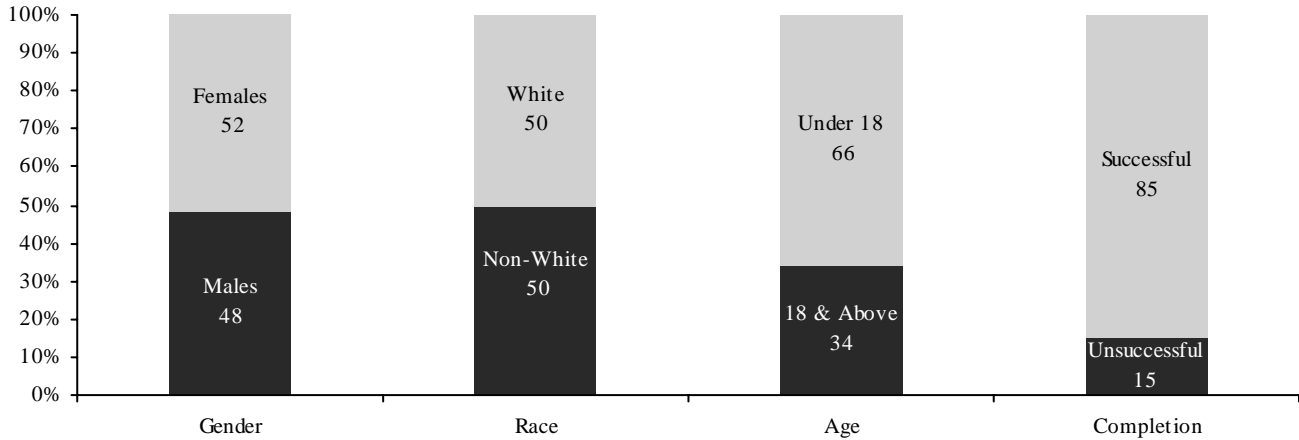
With CESAR, and with funding from CSAT, SAMHSA under contract #270-96-0010, completed the following studies:

- A Pilot Study to Identify the Need for Alcohol and Other Drug Treatment among DUI/DWI Offenders in Montgomery County
- Statewide Adult Substance Abuse Need for Treatment among Arrestees (SANTA) in Maryland
- Estimating the Need for Substance Abuse Treatment in Maryland: An Update of Reuter et. al. (1998), which resulted in a total estimate of adult need of 285,994



A complete list of acronyms is located at the end of this publication.

PREVENTION



Note: 17,172 individuals participated in 610 programs

Characteristics of Participants in Recurring Prevention Programs in Maryland FY 2002

Prevention is the promotion of constructive lifestyles and norms that discourage drug use. A recent study by NIDA estimated that every dollar spent on prevention saves from \$ 4 to \$5 on future substance use.* Prevention eliminates the need for future treatment. It is achieved through the application of multiple strategies.

From the process of evidence-based prevention, a set of effective principles, strategies, and model programs can be derived to guide prevention efforts. This process is sometimes referred to as research or science-based.

The ADAA Prevention Section has adopted a community development model of the mechanisms for its prevention/intervention system. The model focuses on developing comprehensive programs that give participants a positive identity and the skills, opportunities, relationships, and experiences to develop a drug-free lifestyle.

ADAA-funded prevention programs are developed in cooperation with communities and are designed and implemented for all age groups with a special emphasis on evidence-based youth programming. Research shows that youth who receive early intervention are less

likely to need treatment later in life.

In support of this process, ADAA has established a county prevention coordinator networking system, an established, successful and recognized strategy to plan, deliver, coordinate, and monitor prevention services that meet the varying needs of each local subdivision.

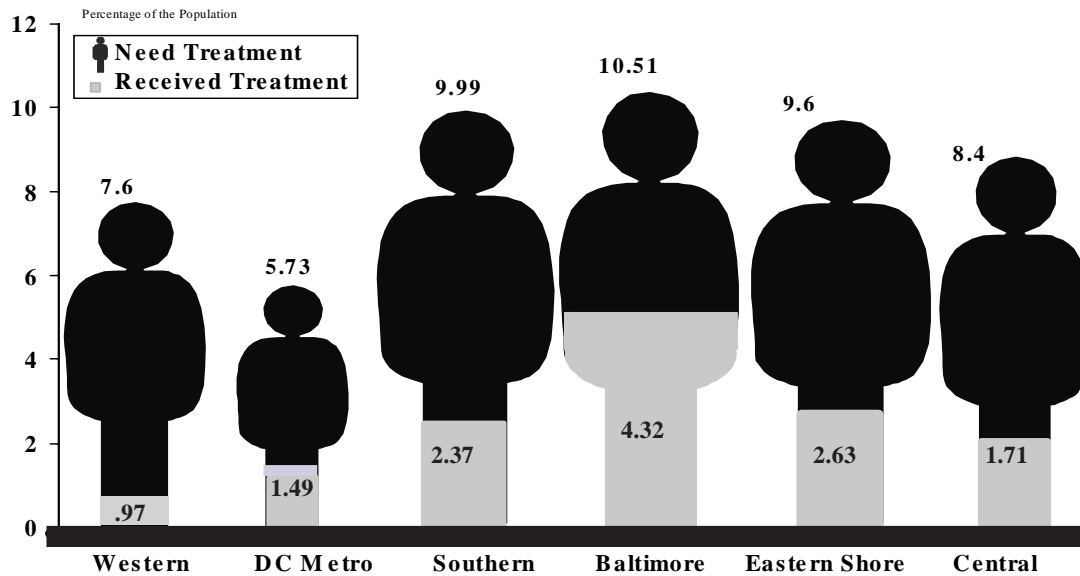
Prevention Coordinators communicate with and serve as resources for the community. There is one designated Prevention Coordinator in each of Maryland's 24 subdivisions. Prevention Coordinators work closely with all elements of the community to identify needs, develop substance abuse projects and obtain funding.

During FY 2002, the ADAA Prevention Section supported 610 recurring programs across the State, in which 17,172 persons actively participated. The figure above displays some of the characteristics of these attendees. In addition, 2,209 single events were offered Statewide, with 74,172 participants. Given that the actual number of attendees at prevention events cannot always be determined, it is estimated an additional 272,042 persons attended or received prevention services during FY 2002. ✨

* NIDA. *Preventing Drug Use Among Children and Adolescents: A Research-Based Guide*. 1997. Washington DC: NIDA Publication No. 97-4212.

ESTIMATING TREATMENT NEED

Regional Estimates of Adult Substance Abuse Treatment Need and Adults Treated in Maryland FY 2002



Note: Western MD includes Allegany, Garrett & Washington; DC Metro includes Frederick, Montgomery & Prince George's; Southern MD includes Calvert, Charles & St. Mary's; Eastern Shore includes Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico & Worcester; Baltimore includes Baltimore City and Central includes Anne Arundel, Baltimore, Carroll, Harford & Howard counties.

It is estimated that 8 percent of Maryland adults require substance abuse treatment. During 2002, with funds granted to ADAA by the Center for Substance Abuse Treatment (CSAT), CESAR estimated that 285,994 Maryland adults were in need of treatment.*

These figures and regional estimates were based on a modeling approach using data from the Substance Abuse Need for Treatment among Arrestees (SANTA) Project in conjunction with the telephone survey of alcohol and drug dependence among the adult household population in Maryland, conducted by CESAR in 1995.

The above figure shows the percentage of the adult population in each region estimated to be in need of treatment. These range from under

6 percent of the population in the Washington D.C. metropolitan area to over 10 percent in Baltimore City.

Also shown are the percentages of unduplicated individual adult residents of each region who received treatment during FY 2002, according to SAMIS.

About 17 percent of the estimated persons in need in the D. C. area received treatment, 20 percent in Western and Central Maryland, 24 percent in Southern Maryland, 27 percent on the Eastern Shore, and 41 percent in Baltimore City. State-wide, 24 percent of the estimated population in need of treatment received treatment during FY 2002. ✂

* Contract # 270-96-0010 from CSAT, SAMHSA through the State Treatment Needs Assessment and Resource Allocation Project (STNAP).

COMPARING THE COSTS

Alcohol and drug abuse costs Maryland billions of dollars each year. CESAR estimates \$3.4 billion is attributed to alcohol and \$2.2 billion to illicit drugs.

Over half the societal costs of drug abuse stem from crime and the associated costs of criminal justice. Two-thirds of the alcohol abuse costs are attributable to lost productivity and earnings.

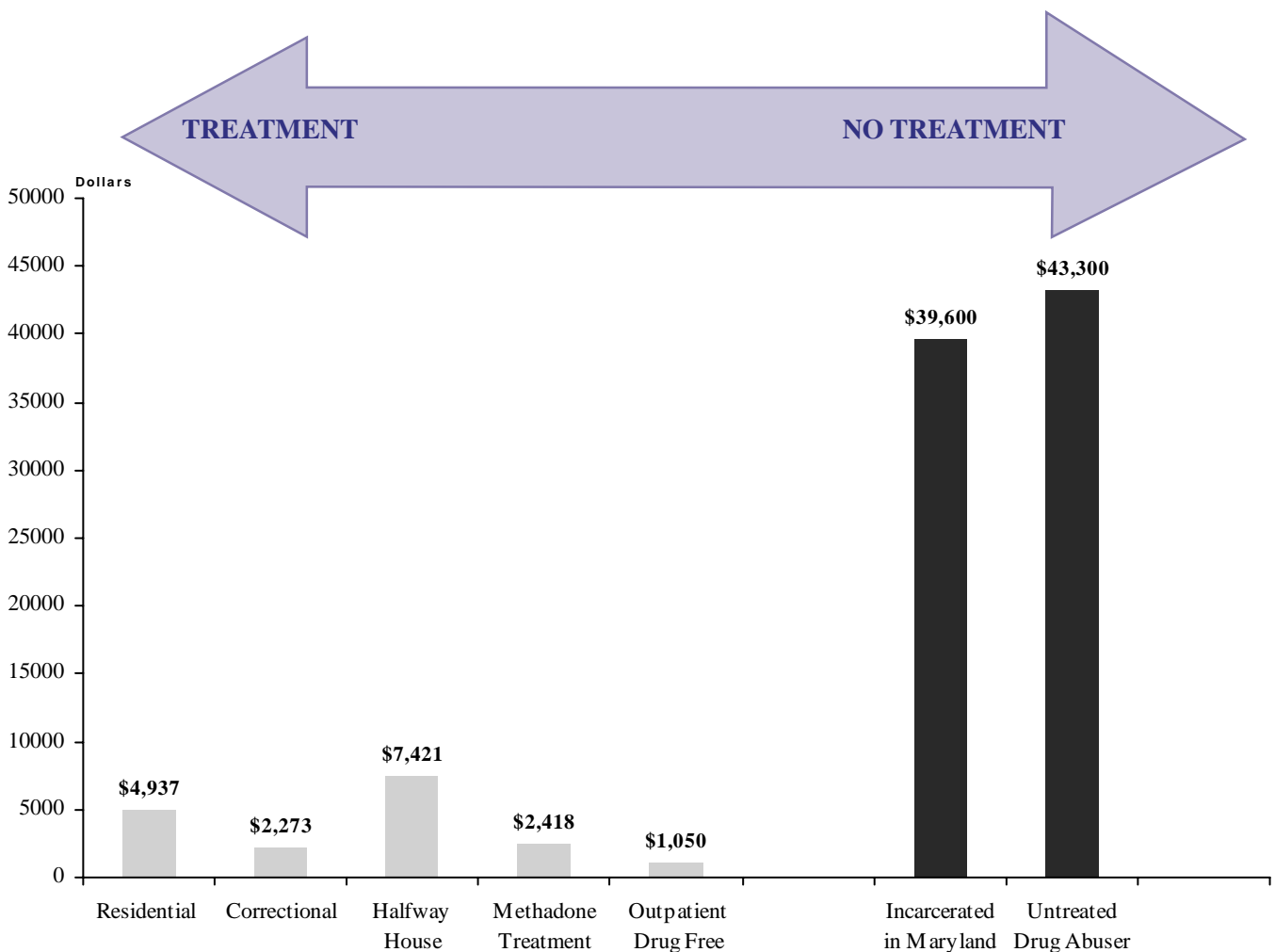
Other costs are related to medical emergencies, chronic illness, traffic crashes, other accidents, and a wide range of other problems. In the case of both alcohol and drugs, treatment makes up about 3 percent of the costs.

Numerous studies have established that the dollars in-

vested in alcohol and drug abuse treatment are well spent. For every dollar spent on treatment approximately \$7 are saved in associated costs of crime, health care, lost productivity, etc.

The figure below, developed by CESAR, compares the costs of treating a patient with the estimated costs of an untreated and an incarcerated drug abuser.

Other research presented in this report suggests that treatment saves money and promotes healthy living. Patients who attend treatment are more likely to be employed in the year following treatment. In addition, they are less likely to commit crimes or remain homeless. ✂



ADAA TREATMENT DATA

The Substance Abuse Management Information System (SAMIS) is a vital component of the ADAA mission. SAMIS data are used to administer resources effectively so that all of Maryland's citizens have access to quality treatment and prevention services. As a condition of State certification and funding, treatment programs in Maryland are required to report SAMIS data.

The parent agencies of ADAA began collecting data on patients abusing drugs in 1976, followed by data collection on alcohol abusers two years later. In the beginning, there were fewer than 50 drug treatment programs and about 70 alcohol treatment centers submitting data. The present data collection system, with participation by 374 substance abuse treatment clinics, is the result of many modifications. Changes to the data collection set were based upon the needs of ADAA and treatment providers, as well as federal reporting requirements of the Office of Applied Studies of SAMHSA.

Information on patients in treatment is routinely gathered and analyzed by the ADAA Management Information Services Section. Each occurrence of an admission or a discharge is documented in a report submitted to SAMIS.

Interpretation of the data reported to SAMIS is facilitated by an understanding of several concepts. The number of days a patient is in treatment refers to the time between

admission and discharge. The number of treatment sessions that occurred during the treatment episode may differ by program type and patient need. A patient must be seen in a face-to-face treatment contact at least once in 30 days, or be discharged as of the date of last direct contact.

The number of programs reporting to SAMIS differs over the years due to the opening or closing of some programs. Table totals may differ slightly due to patient non-response. Due to rounding, percentages may not always total 100. Since a patient may have more than one treatment episode, each admission may not represent a unique individual.

The 60,446 FY 2000 admissions reflect 46,910 unique individuals, the 64,872 FY 2001 admissions reflect 49,825 unique individuals, and in FY 2002 the figures are 69,443 and 52,924 respectively. In each year, 78 to 79 percent of the individuals had one admission and 21 percent had two or more.

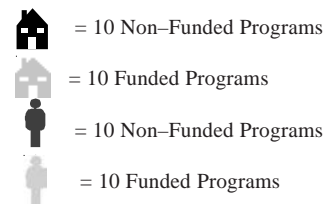
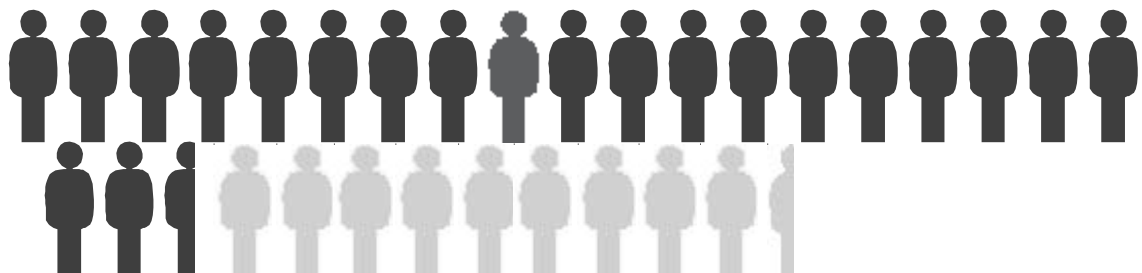
Approximately 2 percent of the admissions during FY 1999 – 2002 did not have substance abuse problems but underwent treatment. These were high-risk youth or family members of primary patients. They are included in all tables and figures except those involving substance mentions.✘

HOW TREATMENT IS DELIVERED IN MARYLAND*

RESIDENTIAL
SETTING



OUTPATIENT
SETTING



* For a more detailed explanation of the various treatment types, please refer to Appendix I at the end of this report.

2002 TREATMENT HIGHLIGHTS

ADMISSIONS

Total admissions increased by 7 percent during FY 2002 and 15 percent since FY 2000, reversing a gradual decline since FY 1996. Non-hospital and hospital detox admissions increased substantially, while methadone detox and residential treatment admissions declined. Outpatient admissions increased by about 14 percent, making up about 45 percent of the FY 2002 total. Methadone maintenance admissions increased 9 percent. Forty-five percent of the total were first-time treatment admissions.

DEMOGRAPHICS

The average age of patients admitted during FY 2002 was about 33.5, and about 35 percent of patients admitted during FY 1999 – 2002 were in their 30s. About 10 percent were adolescents. Both black and white females increased about 20 percent from FY 1999 to FY 2002. Overall, 33 percent of the patients admitted during FY 2002 were female; 44 percent were black.

SOCIAL SITUATION

Over two-thirds of adult patients admitted to treatment during FY 2002 were graduates of high school and beyond. Less than 45 percent of those adults admitted were employed, and over half of all patients lacked health insurance. About 17 percent had HealthChoice Medicaid, other Medicaid or other public health insurance.

About 55 percent of FY 2002 patients admitted were living independently; about 5 percent were homeless. Nearly 20 percent were married, and 46 percent had dependent children.

SOURCE OF REFERRAL

About 44 percent of the FY 2002 patients admitted to treatment were referred by some component of the criminal justice system — primarily related to DWI and probation status. The largest categories of voluntary referrals were self-referrals and referrals from other treatment providers. Referrals from the Department of Social Services tripled from FY 1999 to 2002, but still made up less than 3 percent of total patient admissions.

CRIMINAL JUSTICE

DWI and probation offenders accounted for over half of criminal justice referrals. Juvenile services referrals ac-

counted for over 10 percent of admissions and over 60 percent of all patient admissions had at least one arrest in the two years prior to admission.

MENTAL HEALTH

During FY 2002, 22 percent of patients admitted had mental health problems according to counselor appraisals.

ALCOHOL AND MARIJUANA

Sixty percent of all patients admitted during FY 2002 used alcohol. Alcohol-related admissions increased slightly during FY 2001 and 2002, but declined as a percentage of all admissions. Marijuana-related admissions increased slightly but also dropped as a percentage of the total during FY 2002.

Over 40 percent of patients using both alcohol and marijuana at admission were white males; nearly a fourth of those using marijuana were adolescents. About 70 percent of patients using alcohol at admission were first intoxicated before turning 18 and over 80 percent of marijuana abusers first used the drug during adolescence.

Marijuana was a secondary substance problem in 23 percent of the cases in which alcohol was primary. Alcohol was secondary in 55 percent of primary marijuana cases.

COCAINE AND HEROIN

Crack use increased by 15 percent during FY 2002 and comprised about 60 percent of the FY 2002 cocaine cases. Heroin-related cases continued to climb, reaching 35 percent of total FY 2002 admissions.

About 46 percent of crack and 42 percent of heroin mentions during FY 2002 involved females. Half of patients using crack at admission were in their 30s, and about 70 percent of all patients using heroin at admission were over 30.

Two-thirds of FY 2002 patients using heroin at admission were daily users, and about half of the admitted patients inhaled the drug. Heroin-users

who were white were more likely to inject the drug, and black patients were more likely to inhale. Among patients admitted, there is clear evidence of a new generation of heroin abusers in their early 20s, white, living in suburban and rural areas, who primarily inject the drug.

OTHER DRUGS

Patients admitted with other opiates and synthetics problems increased by 140 percent from FY 1999 to FY 2002, reflecting increased abuse of the prescription painkiller, OxyContin, and increased popularity of oxycodone. Hallucinogen mentions decreased in FY 2002 after a substantial FY 2001 increase. PCP and benzodiazepine admissions continued to increase.

TREATMENT COMPLETION

About half of the patients discharged during FY 2002 completed treatment. ADAA-funded patients were less likely than non-funded patients to be transferred after completion of a treatment plan phase. The treatment categories with highest proportions of successful discharges were non-hospital detox, intermediate care, residential, and correctional. During FY 2002, 47 percent of outpatient and 43 percent of intensive outpatient discharges were successful. This compares favorably to the national rate of 41 percent for outpatient treatment, based on data from 18 states participating in the Treatment Episode Data Set (TEDS) discharge data reporting system in 2000.

Patients with alcohol problems tended to have the highest completion rate (57 percent); marijuana patients and crack patients had rates of about 50 percent, and about 42 percent of heroin patients completed treatment.

TREATMENT REDUCES SUBSTANCE USE

Patients discharged from ADAA-funded programs, particularly those that completed treatment, reported substantially lower substance use than at admission. When comparing the month preceding admission to the month preceding discharge at ADAA-funded programs, reduction in the monthly days of substance use was significant. The percentages of ADAA-funded patients using at discharge were substantially lower than the percentages using at admission — especially for treatment completers. Reductions in the monthly days of use were even more dramatic. There is a substantially lower volume of substance use during the month preceding discharge than during the month preceding admission. Both completion of treatment and

length of time spent in treatment were important correlates of reduced use of substances.

TREATMENT AIDS EMPLOYMENT

ADAA-funded halfway houses and other types of long-term residential programs were most effective in getting patients employed, but employment increased in outpatient, intensive outpatient and methadone maintenance treatment as well. Completion of treatment and length of time spent in treatment were associated with increased rates of patient employment.

Patients treated in ADAA-funded Baltimore City programs who were tracked post-treatment through secondary data were more likely to be employed during the year following treatment than during the year before entering treatment. Completers had a 25 percent greater likelihood of becoming employed, and significantly higher adjusted mean wages than non-completers.

TREATMENT REDUCES CRIME

Arrest rates during treatment were substantially lower than arrest rates during the two years preceding treatment, and completion of treatment was associated with the greatest reductions in arrest rates. For those patients tracked before and after treatment through secondary data, the percentages arrested were significantly lower after treatment than before, and the probability of arrest in the year following treatment was substantially lower for treatment completers.

TREATMENT AND HOMELESSNESS

Homelessness was substantially reduced during treatment and independent living was increased. Family relationship treatment plan objectives were achieved or improved for most patients, especially in residential-type treatment.

TREATMENT SERVICES DELIVERED

Outpatients and methadone maintenance patients averaged two individual counseling sessions per month during their treatment episodes. Intensive outpatients averaged three individual sessions per month, and patients in residential treatment averaged five or more.

Daily or more frequent group counseling sessions were delivered in residential treatment. Intensive

HOW MARYLAND COMPARES TO THE NATION

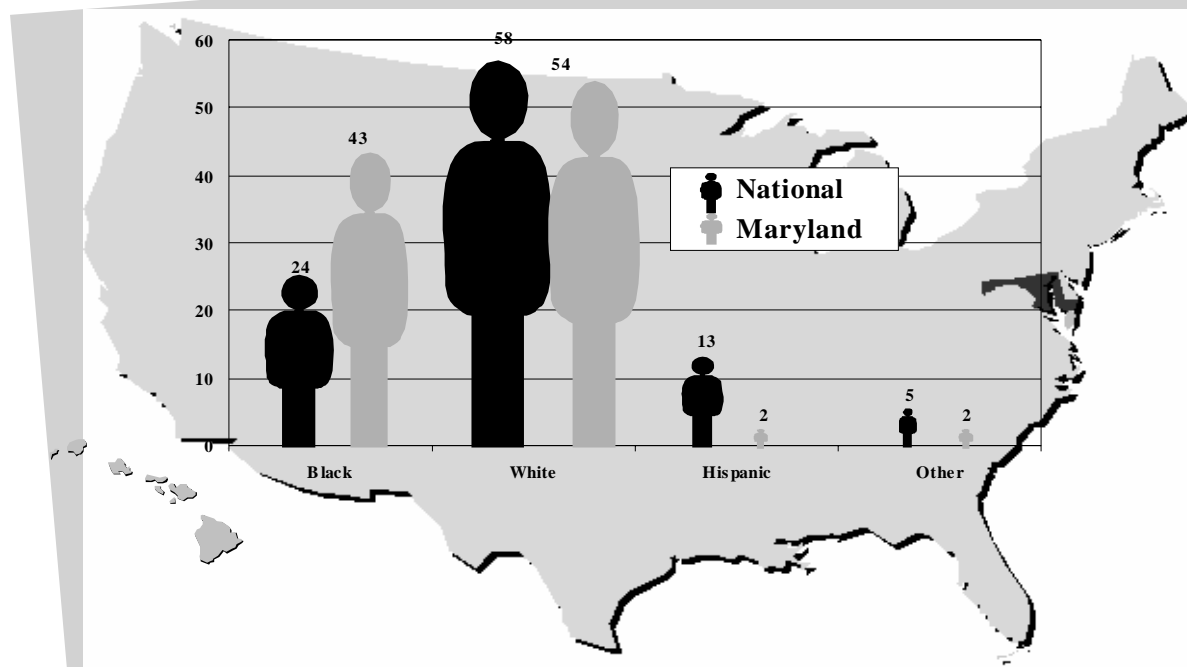
Maryland admissions show some striking differences and similarities to the national picture. Maryland's 60,671 calendar year 2001 admissions data submitted to the federal Treatment Episode Data Set (TEDS) were compared with the total 1,724,281 admissions submitted by participating states.

While 73 percent of Maryland admissions are to outpatient or intensive outpatient treatment, only 57 percent of national admissions were in those categories. Maryland referrals are more likely to come from the criminal justice system (45 vs. 33 percent), more likely to be abusers of heroin (33 vs. 19 percent), and more likely to be receiving methadone (10 vs.

6 percent). Maryland treatment seekers are also significantly more likely to be black (43 vs. 25 percent). They are also more likely to be employed (40 vs. 28 percent), as compared to the national treatment figures.

Conversely, Maryland admissions are four times less likely to receive residential detox treatment, six times less likely to be Hispanic. About half are likely to be out of the labor force. Virtually no patients admitted in Maryland reported methamphetamine use, as compared to 8 percent nationally. Distributions of age, sex, prior admissions, education, alcohol, marijuana and cocaine-related admissions are similar to national figures.

Race and Ethnicity of Substance Abuse Treatment Admissions How Maryland Compares to the Nation FY 2001



outpatients and correctional patients attended group therapy sessions every other day on average. Family counseling recipients averaged 4.5 sessions per month in ICF and 1.4 in outpatient programs.

Regarding urinalysis services, patients who completed their treatment represented an average of 10 percent posi-

tive test results as compared to non-completers who averaged over 40 percent positive.

More than half of the patients discharged who were assessed as having mental health problems at admission received mental health treatment during their substance abuse treatment episodes. ✨

CHARACTERISTICS OF ADMISSIONS

Increased funding for treatment in Maryland from the Cigarette Restitution Funds and other sources has produced a pattern of growth in numbers of admissions and individuals treated.

Admissions to certified public and private alcohol and drug abuse treatment programs in Maryland totaled 69,443 during FY 2002, representing a 7 percent increase over the previous year and a 15 percent increase over the FY 2000 level. This reverses a gradual decrease in total admissions that began in FY 1996.

There was a gradual increasing trend in admissions in the eight years preceding FY 1995, a slight downward trend in the four subsequent years, a leveling off in FY 1999 and 2000 and increases in FY 2001 and 2002 (Figure 1). Just under half of FY 1999 – 2002 admissions were to programs funded by ADAA (Figure 2).

ADMISSIONS BY TREATMENT TYPE

Admissions to non-hospital detox increased 77 percent between FY 1999–2002 and hospital detox admissions experienced a 17-fold increase. Outpatient admissions went up by 14 percent from FY 2000 to 2002, while

intensive outpatient admissions rose 21 percent. Methadone maintenance admissions increased by 9 percent during FY 2002, but methadone detox fell by 18 percent —continuing a decline of over 50 percent since FY 1999. There was a steady 20 percent decrease in residential admissions during the same period.

About 45 percent of FY 2000 to 2002 admissions were to drug-free outpatient programs and 13 percent were to intensive outpatient programs. During FY 2002, about 10 percent of admissions were to methadone programs and 22 percent of admissions were to forms of residential or inpatient treatment. Table 1 in Appendix II distributes FY 1999 – 2002 admissions by treatment type.

PRIOR TREATMENT

Forty-five percent of patients admitted during FY 2002 had never received substance abuse treatment (Figure 3). A quarter of the admissions had one previous treatment experience and 9 percent had four or more.

Figure 1
Admissions to Maryland Alcohol and Drug Treatment Programs FY 1988–2002

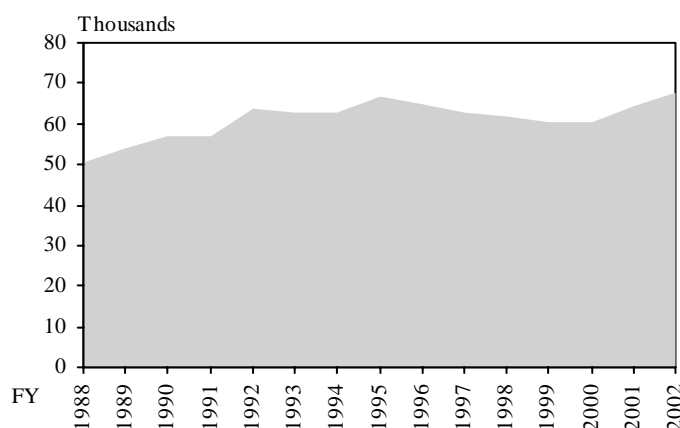
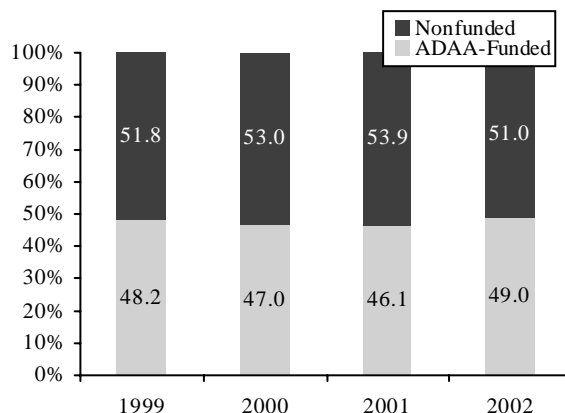


Figure 2
Admissions by Funding FY 1999–2002



Patients' numbers of prior admissions varied considerably by treatment type. Multiple prior admissions were most prevalent among halfway house and methadone maintenance admissions. Patients admitted to outpatient, intensive outpatient, ambulatory detox, and correctional programs were least likely to have had prior treatment.

AGE

Just over one-third of FY 2002 admissions were in their 30s (Figure 4). Ten percent of FY 2001 and 2002 admissions were under the age of 18. Patients admitted to non-hospital detox, methadone treatment, ambulatory detox, and hospitals tended to be older. The average age of patients admitted increased about two years from FY 1995 to FY 2002, to 33.5.

GENDER AND RACE

White males made up 36 percent of FY 2002 admissions and black males made up 29 percent. One-third of admissions were females, about evenly split between whites and non-whites.

The number of admissions of black males has increased about 16 percent since FY 1999 while white male admissions have increased at less than half that rate. Both black and white female patient admissions increased by over 20 percent from FY 1999 to 2002 while male admissions in the "other" category increased 54 percent. Females who describe their race as "other" increased by 41 percent. Gender and race data are displayed in Figure 5.

Some gains are being made in service delivery to a growing Statewide Hispanic population, but much remains to be accomplished. In both FY 2001 and 2002, 44 percent of patients admitted were black; while 3 percent were Hispanic.

The ratio of males to females was 1.9-to-1 among blacks and about 2.2-to-1 among whites.

During FY 2002, 70 percent of patients admitted to methadone detox were black, while black patients admitted to methadone maintenance were only 47 percent. The majority of ambulatory detox, correctional and intensive outpatient admissions were black. Over 55 percent of halfway house, ICF and outpatient admissions and 60 percent of non-hospital detox admissions were white.

Figure 3
Number of Prior Treatment Admissions FY 2002

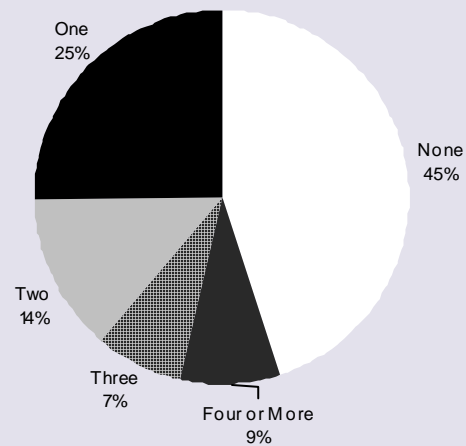


Figure 4
Age at Admission FY 2002

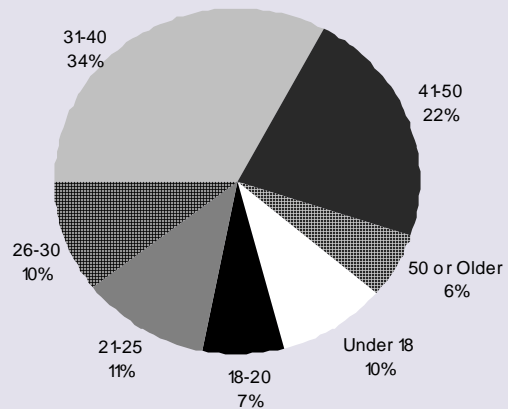
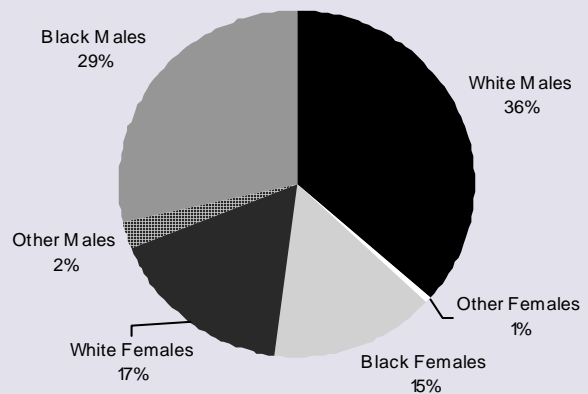


Figure 5
Gender and Race at Admission FY 2002



EDUCATION

About 68 percent of the Maryland FY 2002 patients admitted were over age 17 and had at least a high school education (Table 2, Appendix II). Adjusted National Census Estimates for 2000 indicate that about 84 percent of the general population over age 17 possess at least a high school education. For those with at least a bachelor’s degree, the national percentage is 23 and the Maryland population percentage is 29, while less than 7 percent of FY 2002 patients admitted over the age of 18 had at least a bachelor’s degree.

EMPLOYMENT

As a likely corollary of the national rise in unemployment and the slumping US economy, employment figures decreased in FY 2002. About 42 percent of FY 2002 patients admitted over the age of 17 were employed either part or full time, a decrease of three percentage points from the previous two years (see Table 3, Appendix II).

About 16 percent of all patients admitted were seeking employment, up from 14 percent during FY 2001. Patients admitted who were unemployed and not seeking employment remained level at about 25 percent.

According to the US Census 2000 Profile for Maryland, 64 percent of the civilian population over age 15 was employed. Clearly, patients admitted to Maryland treatment programs are disadvantaged in education and employment in comparison to the national and State averages for the general population.

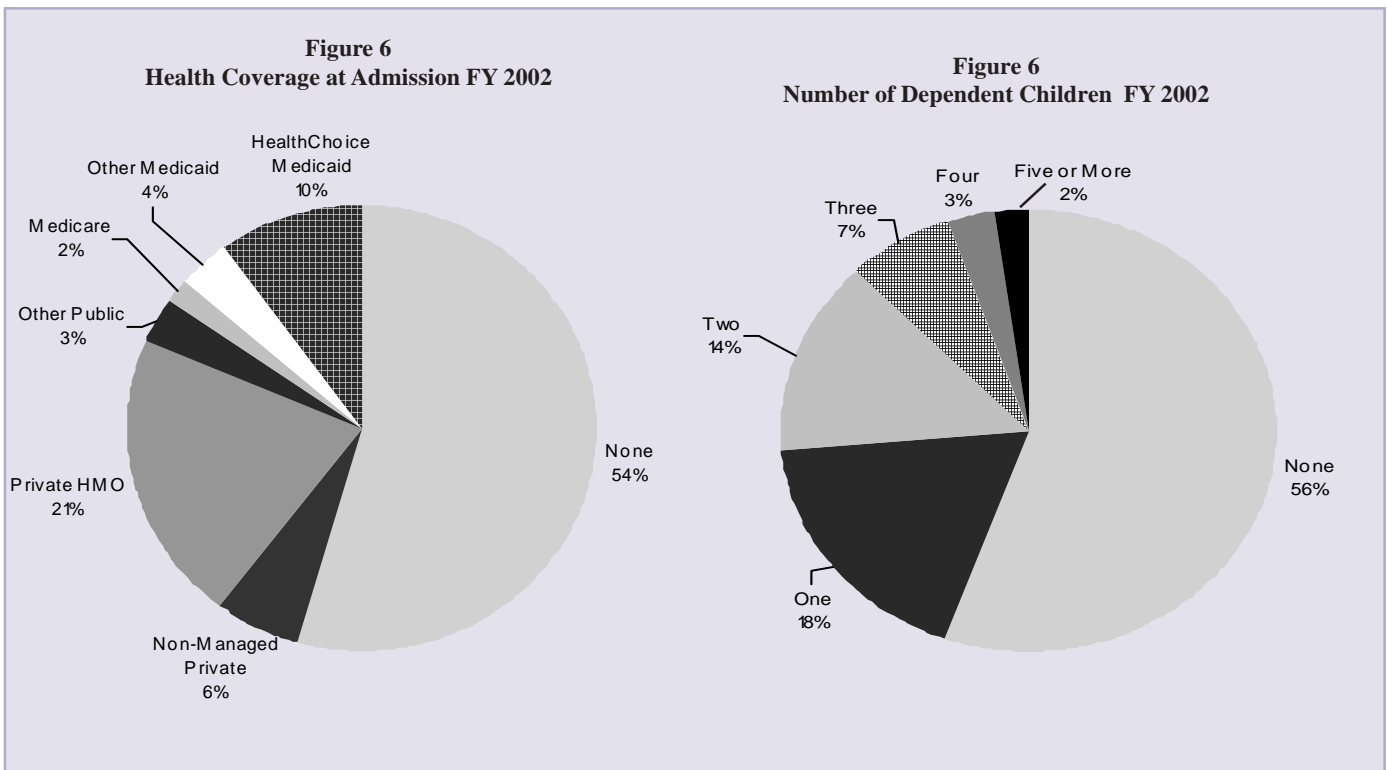
HEALTH COVERAGE

The percentage of patients admitted without health insurance of any kind has been stable at about 54 percent for the past four years. HealthChoice Medicaid admissions increased steadily from 6.4 percent during FY 1999 to 10 percent in FY 2002.

Patients admitted with managed private insurance increased to 21 percent, while those with traditional private insurance decreased to about 6 percent. Patients’ health coverage at admission is shown in Figure 6.

LIVING SITUATION

Halfway house and non-hospital detox programs had the highest percentages of homeless admissions, while hospital detox, methadone treatment and non-hospital



tal detox programs had the highest percentages of independent admissions. Nearly two-thirds of outpatients admitted were living independently during FY 2002, up from about 55 percent in FY 2000 and 59 percent in 2001.

The percentage of patients with dependent children increased from 40 percent in FY 1999 to 46 percent during FY 2002 (Figure 7). About 61 percent of FY 2002 patients admitted were never married, while 18 percent were married at the time of admission. Twelve percent described themselves as divorced, six percent were separated and one percent were widowed.

TREATMENT REFERRALS

The largest categories of voluntary referrals were individual or self-referrals (44 percent) and referrals from other alcohol and drug abuse treatment or other health care providers (40 percent), as shown in Figure 8. Referrals from the Department of Social Services have more than tripled since FY 1999, but still constitute only three percent of all referrals.

About 44 percent of treatment referrals originated in some component of the criminal justice system during

FY 2002. Criminal justice referral sources are shown in Figure 9. Referrals from DWI and from probation services predominated, making up about 55 percent of criminal justice referrals. Juvenile Services referrals continued to climb, reaching 12 percent of all criminal justice referrals.

ARRESTS

Over 60 percent of admissions had at least one arrest during the two years preceding treatment, as shown in Figure 10. Ten percent had three or more arrests. The admissions most likely to have been arrested were those in correctional, outpatient and residential treatment.

MENTAL HEALTH

Overall, 22 percent of FY 2002 admissions had mental health problems, and the percentage has risen in each of the last two years. Figure 11 distributes counselor assessments of whether or not patients had mental health problems in addition to substance abuse problems at admission.

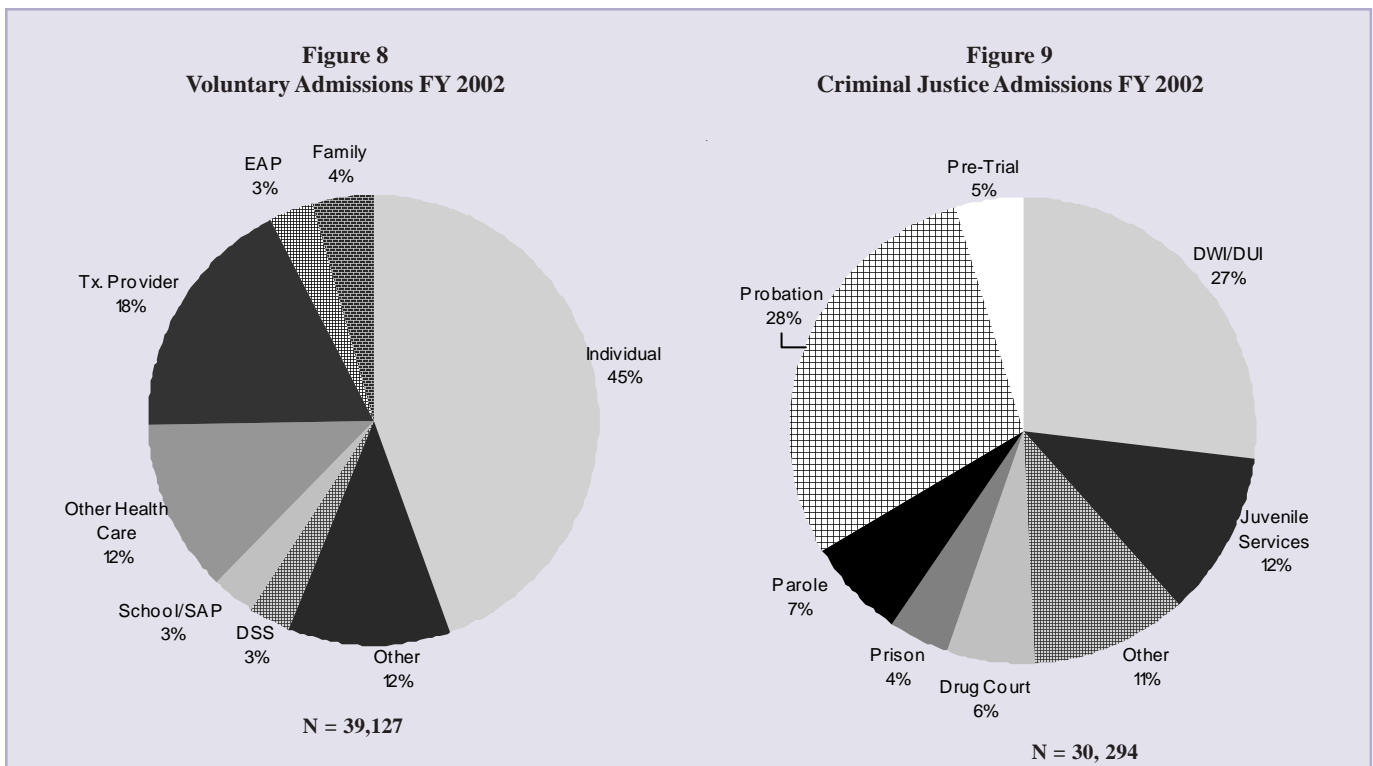


Figure 10
Number of Arrests FY 2002

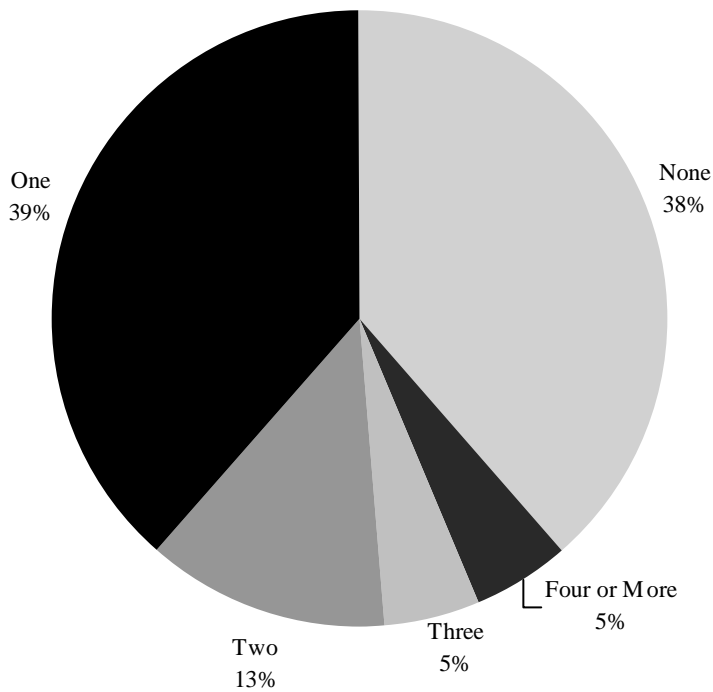
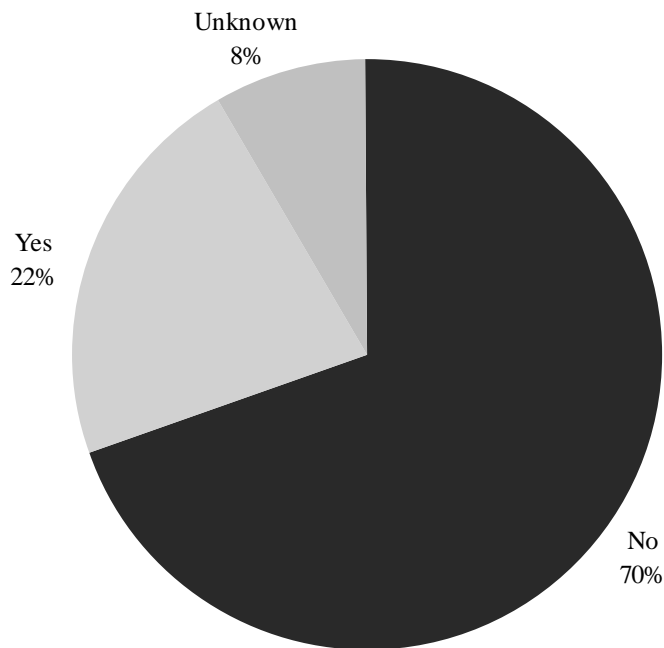


Figure 11
Mental Health Problems FY 2002



RESIDENCE

Substantial increases in admissions over the past four years are noted in Southern Maryland – St. Mary’s (47 percent), Calvert (36 percent), and Charles counties (31 percent). Table 1 Appendix III shows that there was also a 31 percent increase in admissions among residents of Washington County, and out-of-state residents went up by 32 percent, comparing 5 percent of FY 2002 admissions to Maryland treatment programs.

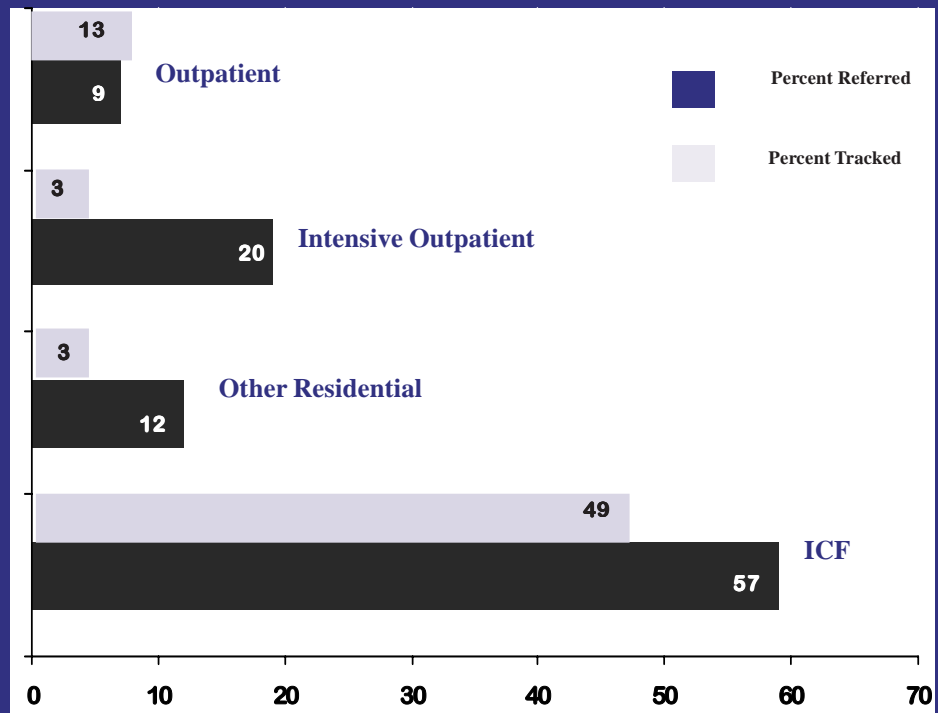
The only subdivisions exhibiting FY 2002 declines in admissions were Anne Arundel (1 percent), Carroll (4 percent), Howard (7 percent), Queen Anne’s (5 percent), and Somerset (22 percent).

Baltimore City resident admissions increased 19 percent over the past four years; about 32 percent of FY 2002 admissions lived in Baltimore City and nearly 60 percent lived in the Baltimore metropolitan area. ✂

**THIRTY TWO PERCENT OF
 FY 2002 PATIENTS ADMITTED
 LIVED IN BALTIMORE CITY
 AND NEARLY 60 PERCENT
 LIVED IN THE BALTIMORE
 METROPOLITAN AREA.**

CONTINUUM OF CARE

LEAVING NON-HOSPITAL DETOX



Non-hospital detox, ICF, and intensive outpatient are treatment types that provide a focus on preparing patients for a subsequent level of care. The odds of successful recovery for many patients are enhanced when they move through the continuum, completing treatment plans at each level.

With a unique identifier consisting of the last four digits of the Social Security number and the full birth date, it is possible to track patients as they move through the treatment network.

When patients complete non-hospital detox, the expectation is that they will move on to ICF or some less restrictive level of care. In fact, during FY 2002, 57 percent of the patients completing detox were referred to an ICF, 12 percent to other residential, 20 percent to intensive outpatient programs and 9 percent to non-intensive outpatient, for a total of 98 percent.

About 31 percent of these discharged patients could not be tracked into subsequent treatment; however, 49 percent moved into ICF, 3 percent into other residential, 3 percent into intensive outpatient and 13 percent into outpatient programs.

There are a number of possibilities for those who could not be tracked, including incorrect entry of information, admission to a program outside the Maryland treatment network, and late submission of SAMIS admission data. And of course, the patient may not have followed through with the referral.

Completion of ICF treatment resulted in referral for 94 percent of the discharges. Fifty-seven percent were referred to outpatient, 16 percent to intensive outpatient, 16 percent to halfway house, and 5 percent to residential programs. About half of the patients could be tracked to a subsequent treatment level, including 29 percent to outpatient, 5 percent to intensive outpatient, 10 percent to halfway house and 4 percent to residential programs.

About 44 percent of the patients completing intensive outpatient were tracked into subsequent outpatient treatment; however, about half had not been referred and could not be tracked. One of the objectives of increased automation and intensified data validation efforts will be to reinforce the connection between intensive and outpatient and reporting of that transition in patient care.

Table 1
Admissions by Substance Mentions
FY 1999-2002

As the least restrictive treatment type, outpatient captured more patients than were referred there. Patients often chose outpatient as an alternative to a residential placement or more restrictive treatment environment.

In addition, outpatients were tracked for at least nine months to determine the rates at which they return to treatment. Thirty-seven percent of those discharged for noncompliance with program rules or for leaving against clinical advice returned to outpatient treatment, whereas less than 10 percent of completers appeared in subsequent admissions.

These results are encouraging given the current status of Maryland data collection in this area. The system is only partially automated, slowing data collection and processing. In the coming year, training that focusses on the reporting of changes in service and referral will be increased; the intensive outpatient step-down to non-intensive outpatient will be reinforced, and feedback to providers on their patients' movement through the continuum of care will continue. ✨

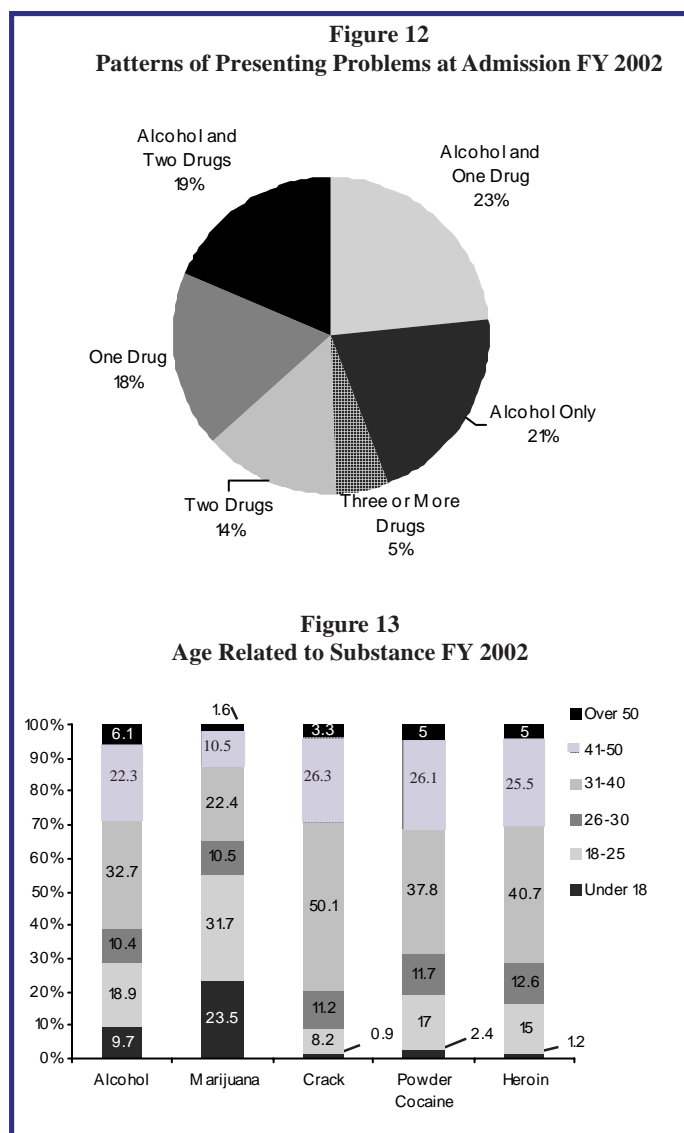
For a more detailed explanation of the various treatment types, please refer to Appendix I at the end of this report.

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Heroin	19695	33.5	20443	34.5	21298	33.4	24158	35.3
Non-RX Methadone	327	0.6	292	0.5	231	0.4	309	0.5
Other Opiates and Synthetics	1469	2.5	1675	2.8	2574	4.0	3525	5.1
Alcohol	38353	65.2	38222	64.5	40772	63.9	43171	63.0
Barbiturates	193	0.3	186	0.3	161	0.3	153	0.2
Other Sedatives and Hypnotics	330	0.6	336	0.6	374	0.6	519	0.8
Hallucinogens	701	1.2	792	1.3	1154	1.8	1022	1.5
Crack	13825	23.5	13763	23.2	13878	21.7	15906	23.2
Powder Cocaine	10707	18.2	9987	16.9	10369	16.2	10964	16.0
Marijuana/ Hashish	19572	33.3	20238	34.2	22377	35.1	23554	34.4
Methamphetamines	171	0.3	165	0.3	202	0.3	229	0.3
Other Amphetamines	172	0.3	183	0.3	238	0.4	272	0.4
Inhalants	136	0.2	135	0.2	118	0.2	110	0.2
PCP	444	0.8	506	0.9	662	1.0	823	1.2
Other Stimulants	97	0.2	65	0.1	70	0.1	85	0.1
Benzodiazepines	767	1.3	846	1.4	997	1.6	1144	1.7
Other Tranquilizers	91	0.2	69	0.1	95	0.1	55	0.1
Over the Counter	36	0.1	31	0.1	34	0.1	60	0.1
Steroids	196	0.3	68	0.1	41	0.1	34	0.1
Other	87	0.1	121	0.2	104	1.4	136	1.0
Total Respondents	58813	-	59243	-	63815	-	68506	-

ALCOHOL AND OTHER DRUGS

ALCOHOL

Alcohol was involved in 63 percent of FY 2002 admissions, as evident from Figure 12. Over 60 percent were multiple substance abusers and 24 percent were abusing three or more substances. Forty-two percent were dual abusers of alcohol and other drugs. These percentages are essentially unchanged from FY 1999 to FY 2002.



HEROIN AND OTHER OPIATES

Heroin presents the most serious drug threat to Maryland, according to the National Drug Intelligence Center (NDIC)

of the Department of Justice. According to NDIC, Baltimore has one of the most serious heroin addiction problems in the country. Maryland heroin-related admissions continued to climb, 23 percent since FY 1999 and 13 percent in the last year (Table 1).

Patients admitted using other opiates and synthetics went up by 37 percent during FY 2002 and 140 percent since FY 1999. This probably reflects illicit trade in OxyContin, a prescription painkiller reported to be on the rise as an abused substance from Maine to Alabama, as well as the increasing popularity of oxycodone. The Drug Enforcement Administration (DEA) confirms that OxyContin has become the drug of choice among Maryland prescription addicts.

CRACK, PCP, BENZODIAZEPINES

Crack-related admissions, which had been stable from FY 1999 to FY 2001, jumped 15 percent in FY 2002. PCP and benzodiazepine-related admissions continued steady increases, while hallucinogen mentions leveled off.

AGE RELATED TO DRUGS

A profile of patients admitted during FY 2002 who reported having alcohol, marijuana, crack, powder cocaine or heroin problems is presented in Figures 13–17. With respect to age, marijuana-related admissions tend to be significantly younger than others (Figure 13). Fifty-five percent of marijuana mentions were from admissions younger than 26, and 24 percent were adolescents.

The age distributions for crack, powder cocaine and heroin are similar, with crack having more admissions in the 31–40 age range or fully half of all crack-related admissions. Only 9 percent of crack and 16 percent of heroin-related admissions were under the age of 26.

Thirty or more percent of alcohol, crack, powder cocaine and heroin admissions were over the age of 40. Just over 10 percent of FY 2002 alcohol-related admissions were adolescents.

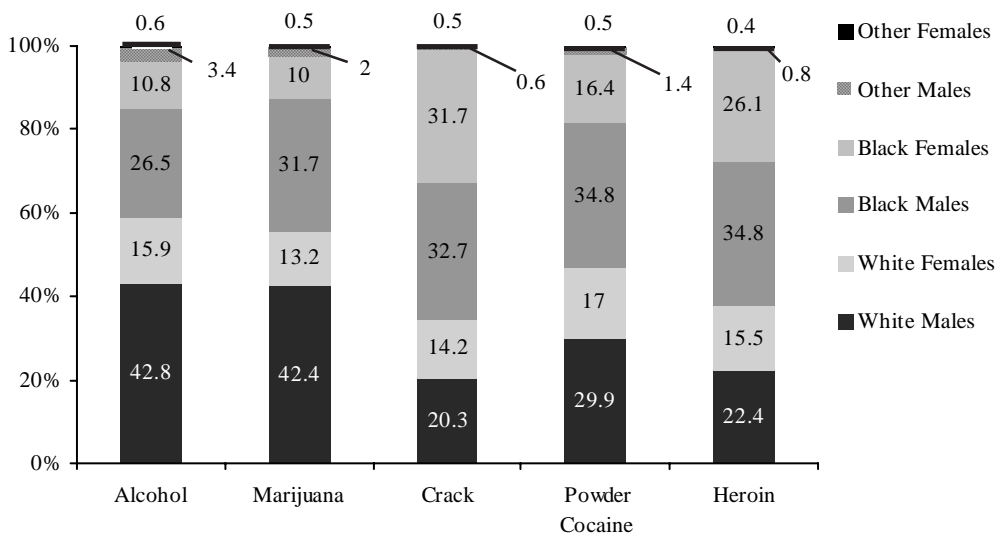


Figure 14
Race and Gender
FY 2002

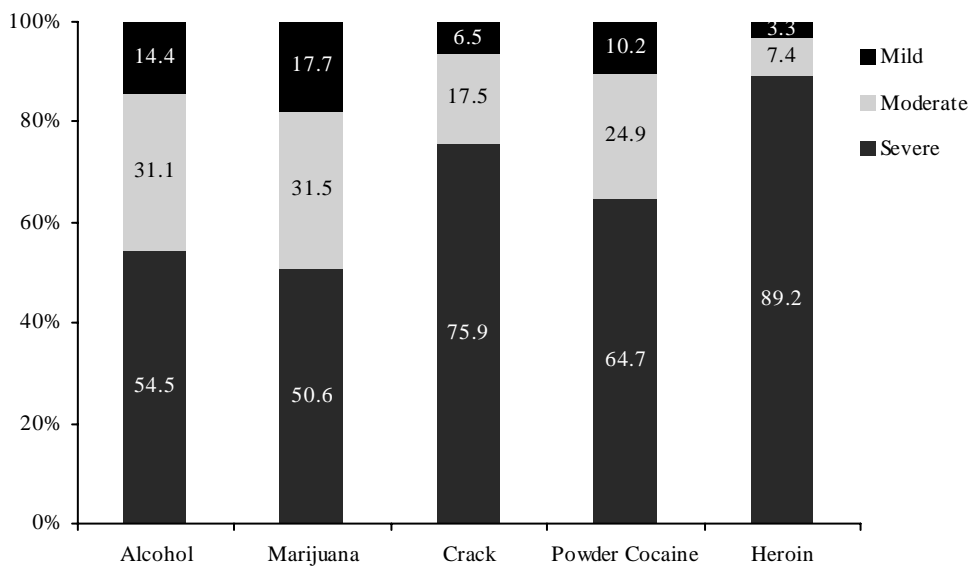


Figure 15
Severity of Problem
FY 2002

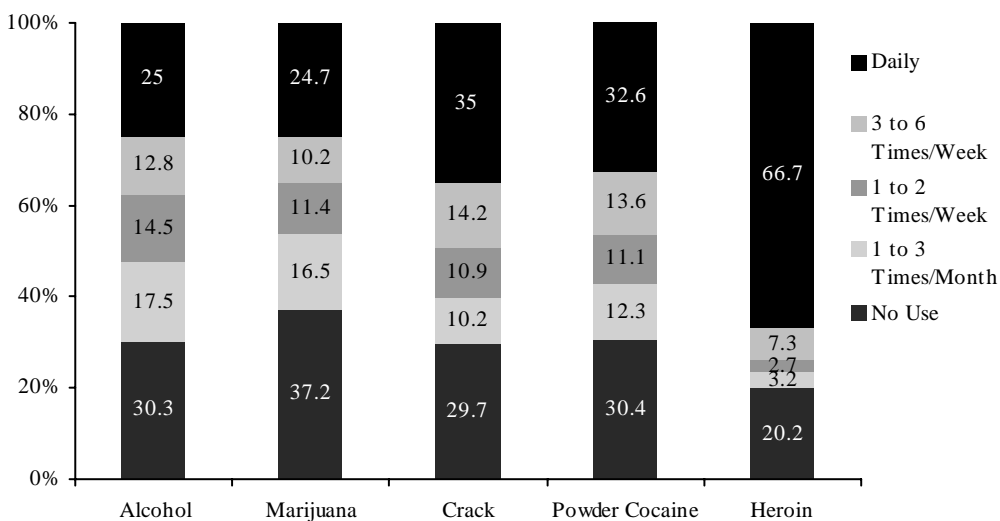


Figure 16
Frequency of Use
FY 2002

USE BY RACE AND GENDER

About 43 percent of the alcohol and marijuana-related admissions were white males, although the percentage of white males declined over the past four years in every substance group (Figure 14). Black and white females, on the other hand, showed increasing mentions for every substance. About 35 percent of crack and heroin-related admissions and a third of powder cocaine-related admissions were black males.

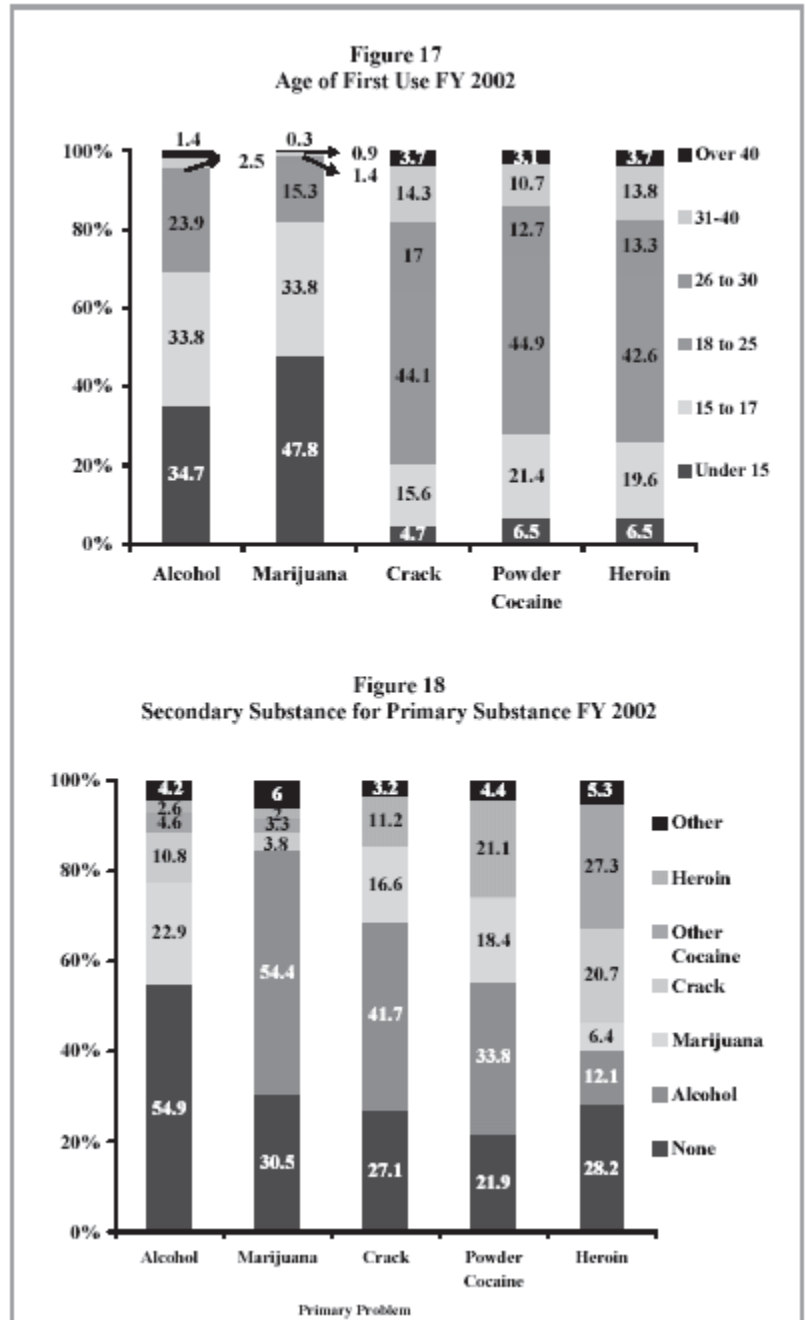
Crack and heroin-related admissions were substantially more likely than others to involve females. About 46 percent of crack and 42 percent of heroin admissions were females during FY 2002. Black patients made up 64 percent of crack-related admissions but just over half of powder cocaine-related admissions.

SEVERITY AND FREQUENCY

Figure 15 distributes substance mentions by the assessment of the severity of the contribution to patients' dysfunction at admission. With respect to alcohol, about 54 percent of the associated problems were rated severe. Marijuana severity was slightly above half, 65 percent for powder cocaine, 76 percent for crack and 89 percent for heroin. These ratings have been fairly consistent over the years.

Similarly, reported frequency of use of these substances, shown in Figure 16 for FY 2002, is consistent from year to year. Two-thirds of heroin-related admissions were using the drug on a daily basis in the 30 days preceding treatment. It is important to note that the great majority of those admissions with no substance use during the 30 days prior to treatment had been in a controlled environment such as jail or a residential treatment program.

Marijuana was the substance least likely to have been used by admissions in the 30 days preceding entry into treatment, and heroin was most likely to have been used.



AGE OF FIRST USE

One of the most striking aspects of the profile of four major substances of abuse, illustrated in Figure 17, is the age at which patients reported first using the drugs. Given the somewhat unique status of alcohol in our society and the common experience of most persons of having tasted alcoholic beverages at a very young age, the measure for alcohol applies to the age of reported first intoxication rather than age of first use.

Figure 19
Route of Administration of Cocaine
FY 1993- 2002

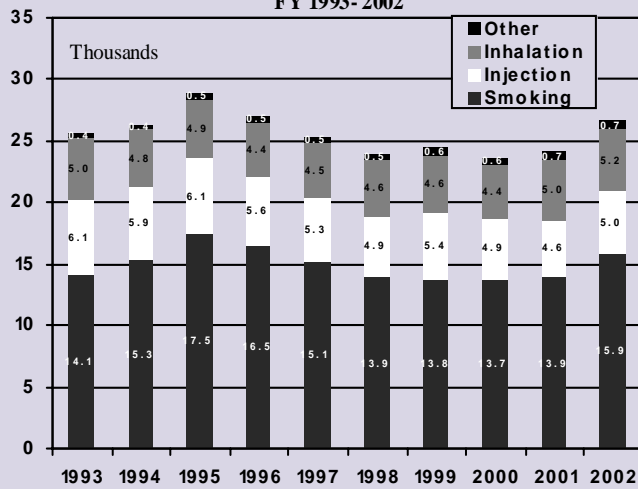
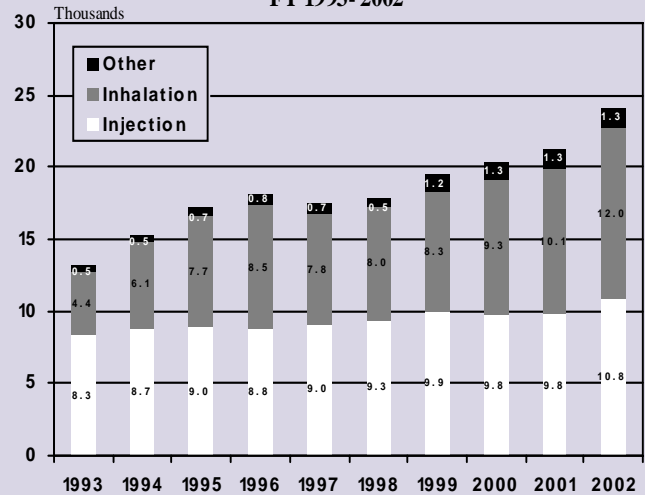


Figure 20
Route of Administration of Heroin
FY 1993- 2002



Sixty-nine percent of alcohol-related admissions had experienced their first intoxication before turning 18, and 35 percent before turning 15. Nearly half of the persons admitted with marijuana problems first used the drug before the age of 15, and the trend is toward greater likelihood of first use at an early age. Over 80 percent first used marijuana before turning 18 years of age.

With respect to crack, powder cocaine and heroin, the peak years of first use are 18–25, with between 43 and 45 percent falling into that category. For both heroin and cocaine, increasing percentages of patients are first using the drugs after the age of 30; however, 20 percent of crack mentions, 28 percent of powder cocaine mentions and 26 percent of heroin mentions involved first use of the drugs during adolescence or before.

CROSS ADDICTION

Alcohol was more likely than other substances to be reported as the only substance problem. Fifty-five percent of alcohol-related cases were classified as alcohol-only admissions (Figure 18). However, marijuana was a secondary problem in 23 percent and crack in 11 percent of primary alcohol cases.

On the other hand, alcohol was the secondary problem in 55 percent of marijuana primary problem cases during FY 2002. Heroin was infrequently reported as a secondary problem, appearing as such in about 21 percent of powder cocaine primary problem cases and 11 percent of crack primary problem cases. Nearly 21 percent and 27 percent

of the heroin primary problem cases had secondary problems of crack and powder cocaine respectively.

ROUTE OF ADMINISTRATION

Crack was the driving force in the rise in cocaine-related admissions that peaked in FY 1995, as well as the subsequent decline and the 11 percent increase during FY 2002.

During FY 2002, nearly 60 percent of patients admitted with cocaine problems smoked the drug (Figure 21). Fifteen years ago crack-addicted patients made up less than a quarter of patients admitted with cocaine problems.

Figure 20 distributes admissions that were heroin-related during FY 1993–2002 by the primary route of administration. FY 2001 was the first year during which more patients primarily inhaled rather than injected heroin at admission. Forty-eight percent of heroin-related admissions involved inhalation.

One year later, fully half of heroin abusing admissions involved inhalation of the drug. While numbers of injectors decreased slightly during FY 2000 and 2001, they increased by 10 percent during FY 2002. Meanwhile, admissions involving inhaling increased 11 percent during FY 2000, 9 percent during 2001, and 18 percent during 2002.

Figure 21
Number of Heroin Inhalation Admissions by Age and Race
FY 2002

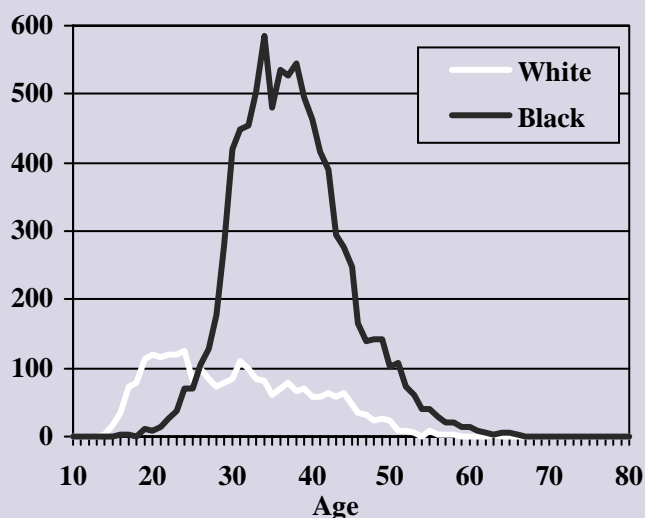
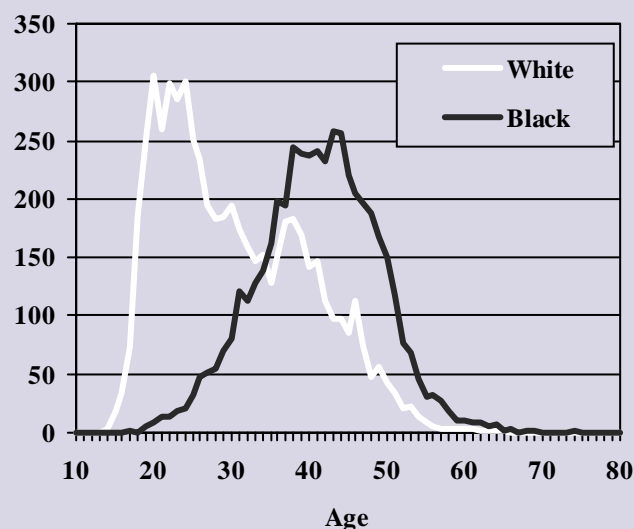


Figure 22
Number of Heroin Injection Admission by Age and Race
FY 2002



Further analysis shows that residents of Baltimore City admitted for heroin problems during FY 2000–2002 were less likely than others to be primarily injecting the drug, and the trend in Baltimore is toward more inhalation and less injection. The percentage of injectors among Baltimore City residents admitted with heroin problems decreased from 42 percent in FY 2000 to 40 percent in 2001 and 39 percent during 2002.

Many suburban and rural counties show large percentages of heroin patients injecting the drug. Calvert, Carroll, Cecil, Dorchester, Frederick, Montgomery and Talbot counties had at least 60 percent of patients administering heroin by injection during FY 2002. In addition, Allegany, Harford, Howard, Somerset, Washington, Wicomico and Worcester had between 55 and 60 percent of users injecting the drug.

In line with these findings, black patients admitted with heroin problems are becoming less likely to be primarily injecting the drug. From FY 2000 to 2002, black male injectors went from 42 to 38 to 36 percent, and black females from 32 to 31 to 28 percent. White male and female injectors were relatively stable at about 65 and 63 percent respectively.

According to the National Drug Intelligence Center (NDIC) of the Department of Justice, heroin purity levels reached 96 percent in Baltimore during FY 2001.

This helps to explain the prevalence of inhalation among City resident admissions, as inhalation is a more effectual mode of heroin administration when purity is high.

Age is also an important factor in the inhalation/injection differences. During FY 2002, about 64 percent of the heroin-related admissions between 18 and 25 years old were injectors, while 37 percent of those between 26 and 40 were injectors.

For patients admitted over the age of 40, the percentage of injectors rises again to about half. Figures 21 and 22 depict these findings. They distribute FY 2002 heroin-related admissions by race and age for those primarily inhaling and those primarily injecting the drug. Black patients in their 30s and early 40s predominate among inhaling admissions (Figure 21). The peak ages for white patients inhaling heroin at admission are 18 to 24.

A very different picture is revealed in Figure 22 for injection admissions. The peak ages for white patients injecting heroin at admission are the same as for those white patients inhaling, but the peak is much higher. For blacks, the most common ages for injection admission are 35 to 48. This suggests a new generation of largely white heroin users and an older group of black long-time users may prefer injection. ✨

TREATMENT OUTCOMES

DISCHARGES BY TREATMENT TYPE

The outpatient setting remained the treatment of choice for most patients. This modality comprised 45 percent of total discharges in FY 2002 and has done so consistently since FY 1999 (Appendix II Table 4). Patients discharged from methadone maintenance increased by 18 percent in FY 2002 but methadone detox discharges underwent a sharp 57 percent decline. Non-hospital detox discharges rose by 67 percent and hospital and ambulatory detox discharges rose dramatically as well. Discharges from correctional programs increased by 27 percent. The only treatment type to experience a decline in FY 2002 was intensive outpatient, with a 9 percent drop.

REASON FOR DISCHARGE

More than half of all patients discharged from non-funded treatment completed treatment successfully, while 47 percent of patients from funded programs did so (Figures 23–24). Non-funded patients were much more likely than funded patients to be referred or transferred after completion of a treatment plan (change in service) – 38.4 percent vs. 20.5 percent. Funded patients were more likely to be referred with incomplete treatment plans, or discharged for non-compliance, leaving treatment, incarceration or death. This is likely a result of the population treated in

each setting, with funded programs enrolling more special-needs patients.

The patients most likely to complete treatment successfully without transfer or referral were those discharged from halfway houses and traditional outpatient programs (Table 2). Transfer or referral after completed treatment occurred most frequently in non-hospital detox (typically to ICF), other residential, correctional, ambulatory detox, intensive outpatient (typically to outpatient), and methadone detox modalities (typically to maintenance).

Discharges for leaving treatment or non-compliance with program rules were most common in methadone maintenance programs. It should be noted that recidivism, or multiple treatment episodes, is common among opiate addicts, and most of the successful cases are those that remain in maintenance treatment for extended periods of time.

DISCHARGE BY SUBSTANCE

Among the four major substances of abuse, patients with alcohol problems had the highest completion

Table 2
Reason for Discharge by Treatment Type
FY 2002

	Success		Success/Referred		Referred		Noncompliant/Left		Incarcerated/Death	
	#	%	#	%	#	%	#	%	#	%
Halfway House	270	37.9	44	6.2	32	4.5	351	49.2	16	2.2
ICF	48	0.5	6968	74.7	462	5.0	1835	19.7	14	0.2
Outpatient	10960	39.7	1972	7.1	1959	7.1	11854	42.9	871	3.2
Non-Hospital Detox	51	1.6	2401	74.8	205	6.4	548	17.1	5	0.2
Hospital Detox	46	16.9	52	19.1	56	20.6	118	43.4	0	0.0
Corrections	815	18.5	2329	53.0	294	6.7	875	19.9	84	1.9
Methadone	193	3.8	320	6.3	606	11.9	3500	68.5	493	9.6
Residential	140	13.7	502	49.1	55	5.4	316	30.9	10	1.0
Intensive Outpatient	1081	12.9	2342	29.6	809	10.2	3569	45.1	173	2.2
Methadone Detox	30	7.8	154	39.8	17	4.4	173	44.7	13	3.4
Ambulatory Detox	212	12.4	854	49.9	103	6.0	540	31.5	4	0.2
Total	13783	22.3	17938	29.1	4598	7.5	23679	38.4	1683	2.7

Figure 23
Reason for Discharge
ADAA–Funded Programs FY 2002

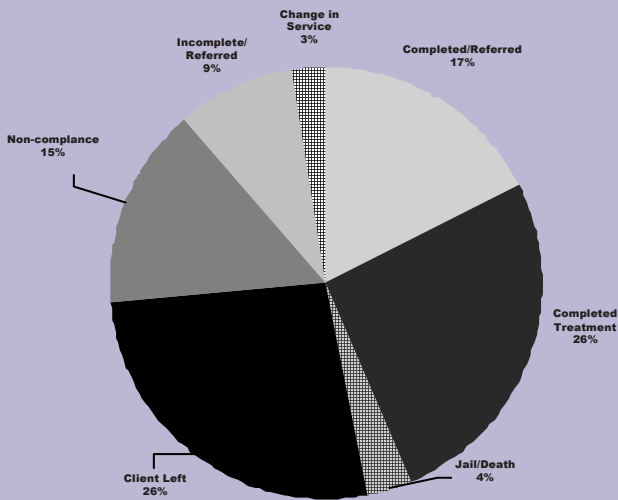


Figure 24
Reason for Discharge
Non–Funded Programs FY 2002

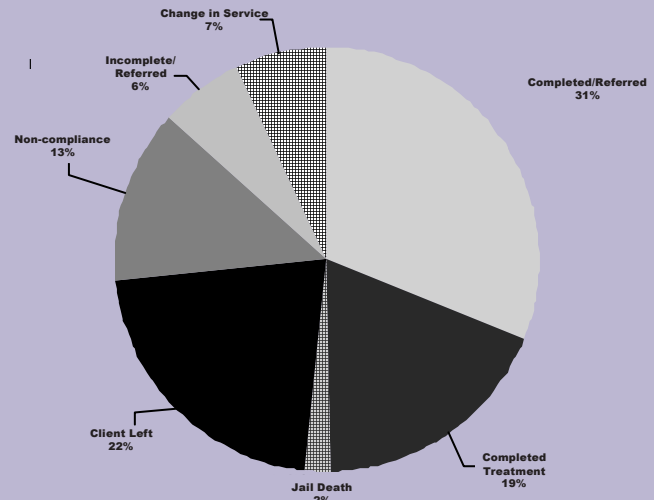


Figure 25
Reason for Discharge by Drug
FY 2002

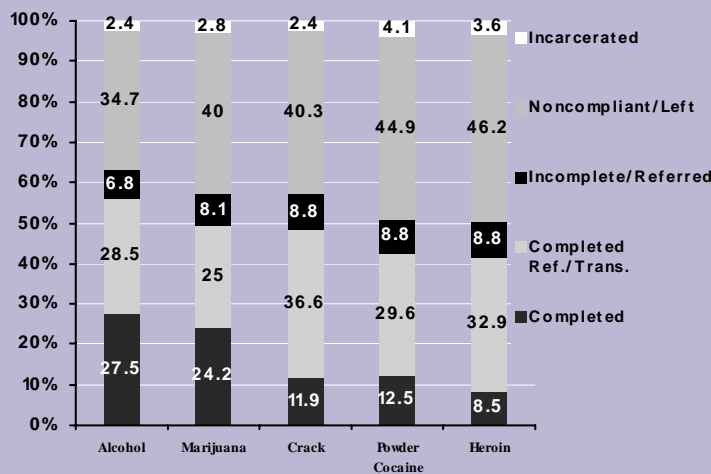
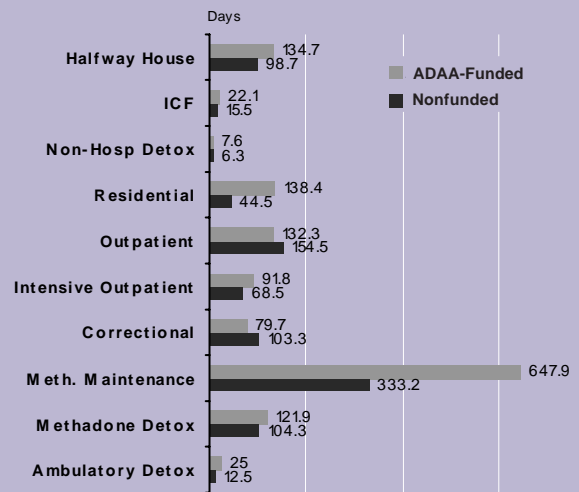


Figure 26
Average Length of Stay by Treatment Type
FY 2002



rates. About 57 percent of all patients abusing alcohol alone or in combination with other substances successfully completed treatment (Figure 25). Marijuana and crack both had treatment completion rates around 50 percent, but in the case of crack the discharges were more likely to involve a transfer or referral. The completion rate for heroin abusers was 42 percent, up from 33 percent in FY 1998, albeit with referrals in most cases.

AVERAGE LENGTH OF STAY

The average length of stay was longer for ADAA–funded patients in every treatment type except traditional outpatient and correctional. Funded FY 2002 discharged maintenance patients remained in treatment 22 months on average. The average length of stay is shown for the ADAA–funded and non–funded treatment types in Figure 26. ❀

TREATMENT SERVICES FOR ADAA-FUNDED PATIENTS

INDIVIDUAL COUNSELING

Outpatients and methadone maintenance patients averaged two individual sessions per month during their episodes; intensive outpatient treatment involved three sessions per month and residential at least five. In all treatment types except intensive outpatient and ambulatory detox, non-completers averaged more individual sessions than completers. This may be related to the need for more intensive treatment among those patients. Departures before stepping down to group counseling also contribute to higher monthly averages for non-completers.

GROUP COUNSELING

Overall, nearly 85 percent of outpatients discharged received group counseling. Daily or more frequent group sessions were delivered in ICF, non-hospital detox and residential treatment. Intensive outpatient and correctional patients attended group sessions every other day on average.

FAMILY COUNSELING

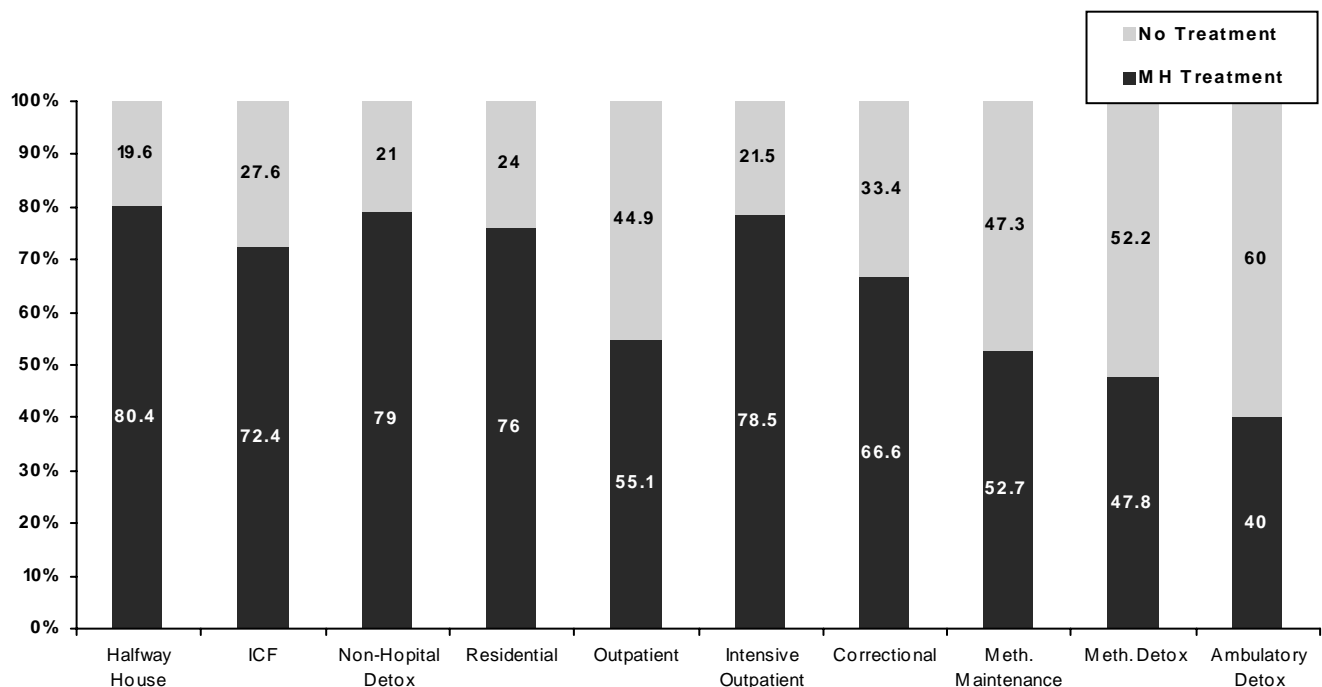
Only about 10 percent of outpatient discharges received family counseling. The treatment types most likely to involve family counseling were residential and ICF. Family counseling recipients averaged 4.5 sessions per month in

ICF and 1.4 in outpatient. Table 5 (Appendix II) displays average monthly individual, group and family treatment services delivered to ADAA-funded patients discharged during FY 2002 by treatment type.

DUAL DIAGNOSIS TREATMENT

More than half of those patients discharged with mental health problem assessments received mental health treatment in every treatment type except methadone detox and ambulatory detox. More than three-quarters of the patients assessed with mental health problems at admission received mental health treatment during halfway house, non-hospital detox, residential and intensive outpatient treatment. Figure 27 pertains to patients with mental health problems at admission and displays the percentages of those who received mental health treatment services either within or outside the substance abuse treatment program during the immediate treatment episode. The residential treatment types, intensive outpatient and ambulatory detox were most likely to involve discharged patients with mental health problems at admission. ✨

Figure 27
Mental Health Treatment During Episode for Discharges with Mental Health Problems at Admissions
ADAA-Funded Treatment FY 2002



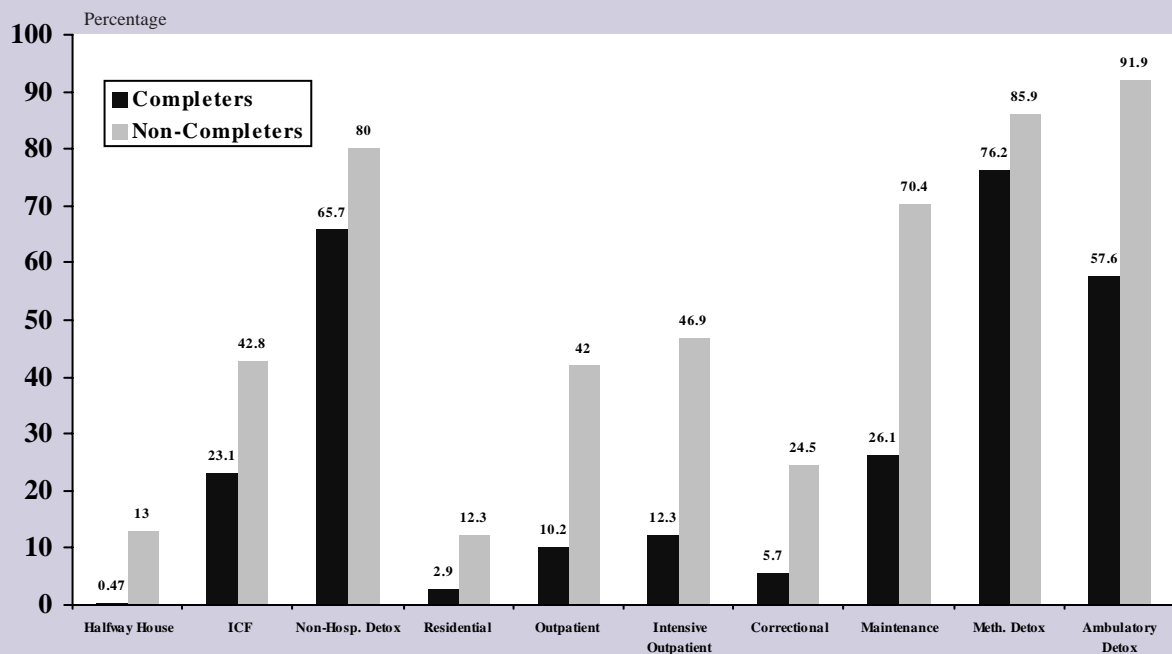
URINALYSIS IS ASSOCIATED WITH TREATMENT COMPLETION

Programs that perform urinalysis have higher treatment completion rates. Sixty-three percent of outpatient discharges participated in urinalysis in FY 2002. Among the outpatients whose treatment involved urinalysis, 47 percent completed treatment, whereas only 36 percent of other outpatients completed treatment. In halfway house treatment, where 69 percent of the discharged patients had urinalysis, participation was associated with an 18 percentage point higher completion rate.

Not surprisingly, among those participating in urinalysis, the average percentage of positive urinalysis tests was significantly higher for non-completers of treatment. In outpatient settings the average positive test results for completers was 10 percent. Non-completers averaged 42 percent. Similar percentages were obtained for intensive outpatient. In methadone maintenance treatment, 70 percent of the tests conducted with non-completers were positive. In halfway house and residential, less than 10 percent of all urinalysis tests were positive.

About 55 percent of ADAA-funded patients discharged underwent urinalysis during their treatment episodes. During FY 2002, the treatment types most likely to provide urinalysis were methadone maintenance (95 percent), residential (90 percent), methadone detox (84 percent), ambulatory detox (80 percent) and intensive outpatient (76 percent). ❀

Average Percentage of Positive Urinalysis Tests by Treatment Type
ADAA-Funded Treatment FY 2002



TREATMENT REDUCES DRUG USE

Patients using the four major substances had substantially lower rates of use at discharge than at admission. Figure 28 shows that for all ADAA-funded patients discharged, for the primary substance and alcohol, marijuana, powder cocaine, crack, and heroin, the percentage using the substances at discharge was lower than the percentage using at admission. For alcohol and crack mentions, the reduction was over 40 percent.

Figure 29 also compares use of these substances at admission and discharge, but the comparison is based on total monthly person-days of use. Looking at the amount of use rather than dichotomous use/no use yields more dramatic overall reductions. For the primary substance the decrease in days of use is 71 percent; for alcohol and crack it is nearly 80 percent. Clearly, for all patients, there is a substantially lower volume of substance use during the month preceding discharge than during the month preceding admission.

Not surprisingly, completion of treatment was a critical factor in determining whether patients were using at discharge. Higher percentages of non-completers of treatment were reported to be using drugs at discharge than at admission for the primary substance and for all major substances except heroin (Figure 30). This probably reflects the tendency for use at admission to be

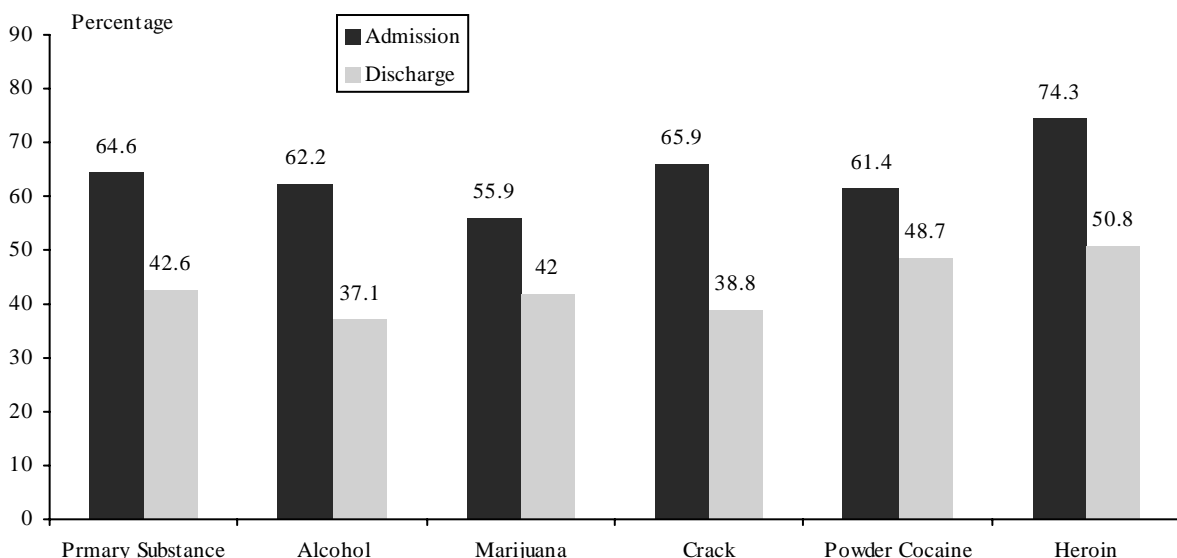
underreported due to patient concealment and referral from controlled environments.

For completers of treatment, the levels of use at discharge are extremely low – less than 10 percent for all but powder cocaine and heroin. For both completers and non-completers, the number of monthly drug using days was significantly reduced during treatment (Figure 31). For example, the amount of use of the primary substance was reduced by 93 percent for completers and 46 percent for those who failed to complete treatment. For non-completers, days of use were more than halved for alcohol, crack and heroin. For completers, the reductions were 95 percent for alcohol, marijuana and crack, 93 percent for powder cocaine and 90 percent for heroin.

TIME IN TREATMENT REDUCES USE

Time spent in treatment is also an important factor in reducing substance use. Figure 32 focuses on the primary problem substance and shows that the longer patients stayed in treatment, the greater the reduction in percentages of users from admission to discharge. In this figure, and for alcohol and marijuana mentions overall, the reduction in percentage of patients using is not evident for episodes lasting less than 90 days. For heroin mentions and for crack and powder cocaine mentions as well, the reduction in percentage using does not appear for episodes lasting less than 180 days. ✂

Figure 28
Treatment Reduces Drug Use
Percentages Using Substances at Admission and Discharge
ADAA-Funded Treatment FY 2002



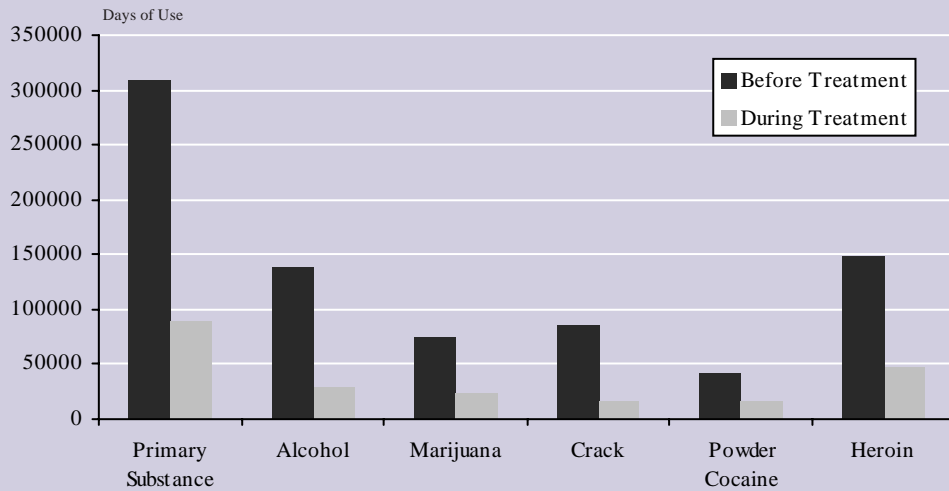


Figure 29
Treatment
Reduces Days of
Drug Use

Reduction in
Total Monthly
Days of Sub-
stance Use From
Admission to
Discharge

ADAA-Funded
Treatment
FY 2002

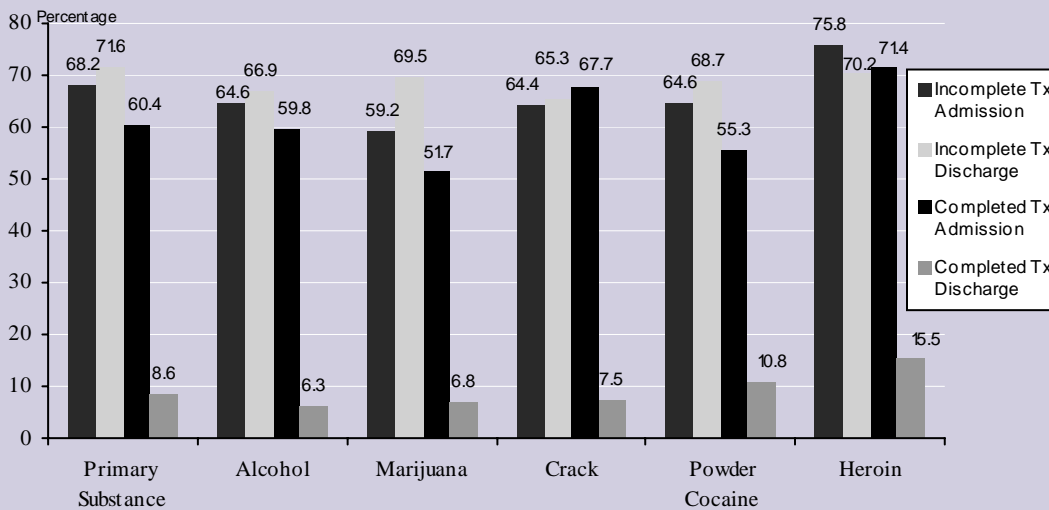


Figure 30
Completion of
Treatment
Reduces Drug
Use

Changes in Drug
Use From
Admission to
Discharge

ADAA-Funded
Treatment
FY 2002

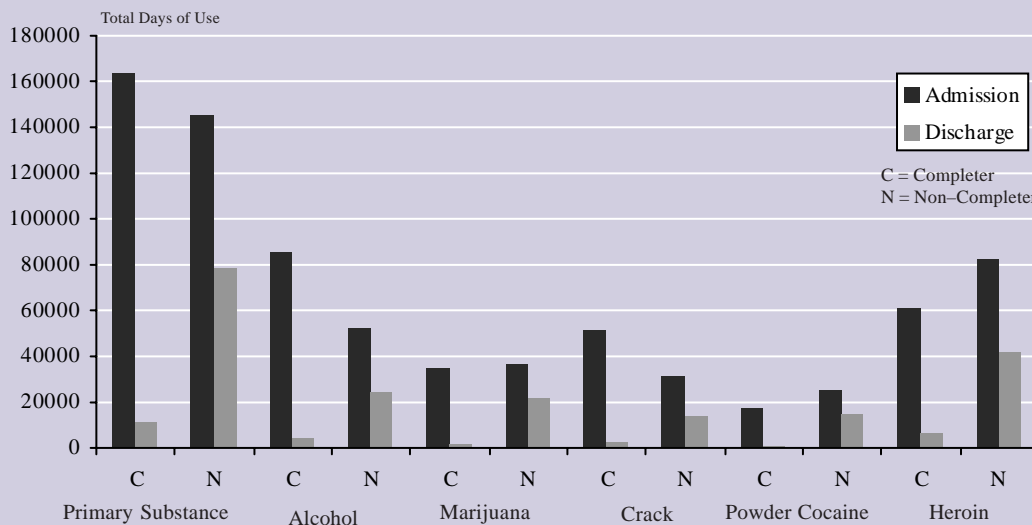


Figure 31
Completion of
Treatment Reduces
Days of Drug Use

Reduction in
Monthly Days of
Drug Use From
Admission to
Discharge

ADAA-Funded
Treatment
FY 2002

TREATMENT PLAN OBJECTIVES

Treatment plan objectives for substance use are one of a set of items that assess patients' completion of important components of their treatment plans. Other objectives will be discussed later. They include employment, education, legal, and family issues.

For FY 2002 patients discharged, substance problem objectives were achieved most often in non-hospital detox, ICF and halfway house treatment. Treatment plan substance abuse objectives were achieved or improved in 54 percent of outpatient discharges and 42 percent of methadone maintenance discharges (figure 33). ✂

Figure 32
Time in Treatment Reduces Drug Use
Changes in Use of the Primary Problem Substance
ADAA-Funded Treatment FY 2002

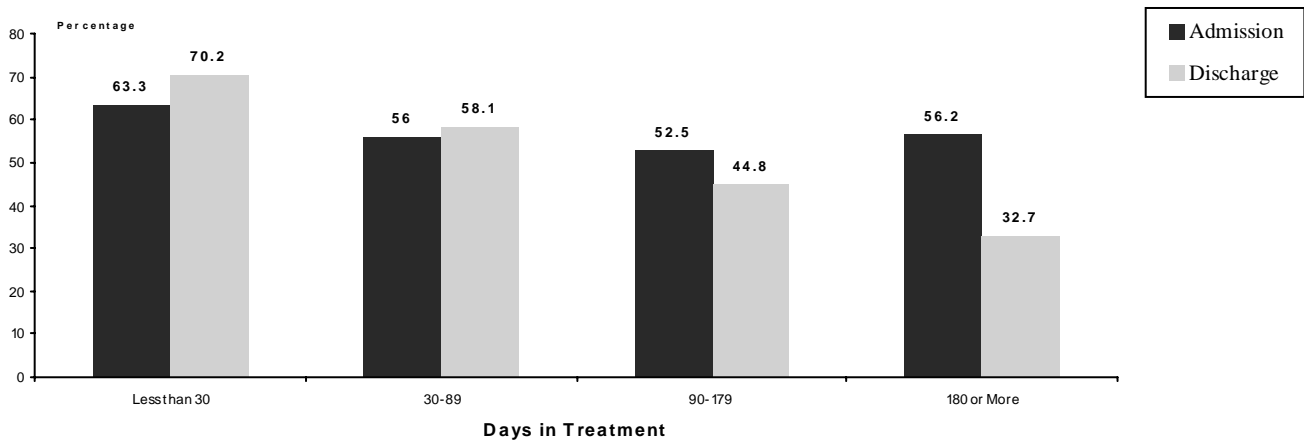
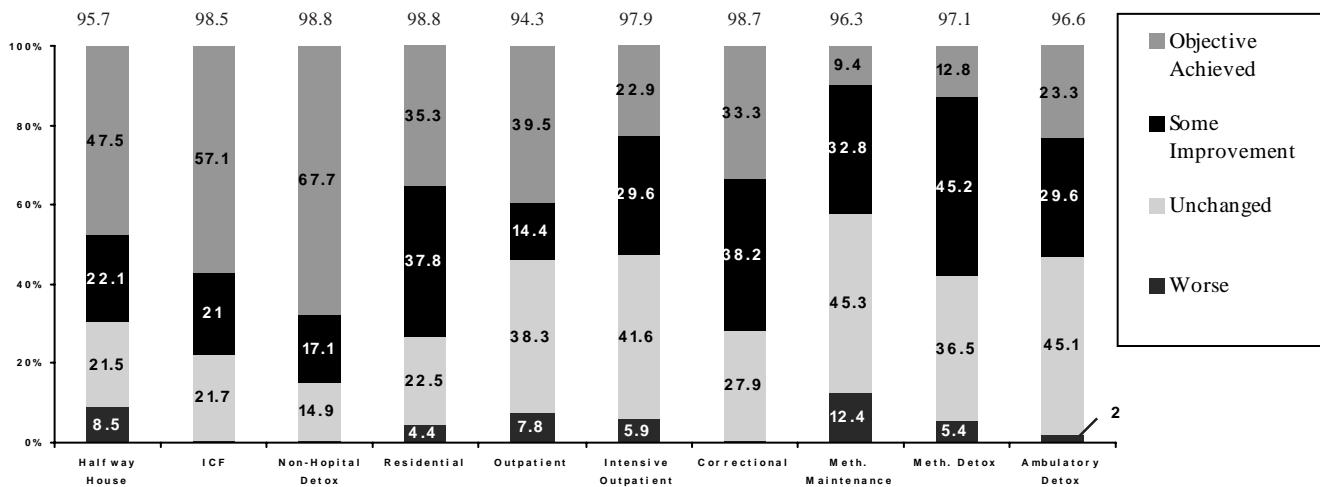


Figure 33
Substance Problem Objectives at Discharge by Treatment Type
ADAA-Funded Treatment FY 2002



Numbers on the top of the bars represent the percentages of patients with this objective.

PROFILE OF A TREATMENT COMPLETER

Age, race and employment are some of the factors associated with treatment completion for ADAAs-funded outpatient programs. During FY 2002, 54 percent of ADAAs-funded discharges were from outpatient treatment. Typically outpatient treatment is the end of the continuum of care, from which there is no transfer or referral to a less intensive type of treatment. Forty-two percent of patients discharged from treatment completed treatment successfully during FY 2002, and it is instructive to examine how these cases differed from those who failed to complete treatment successfully. High-risk youth and non-primary patients were excluded from the analysis.

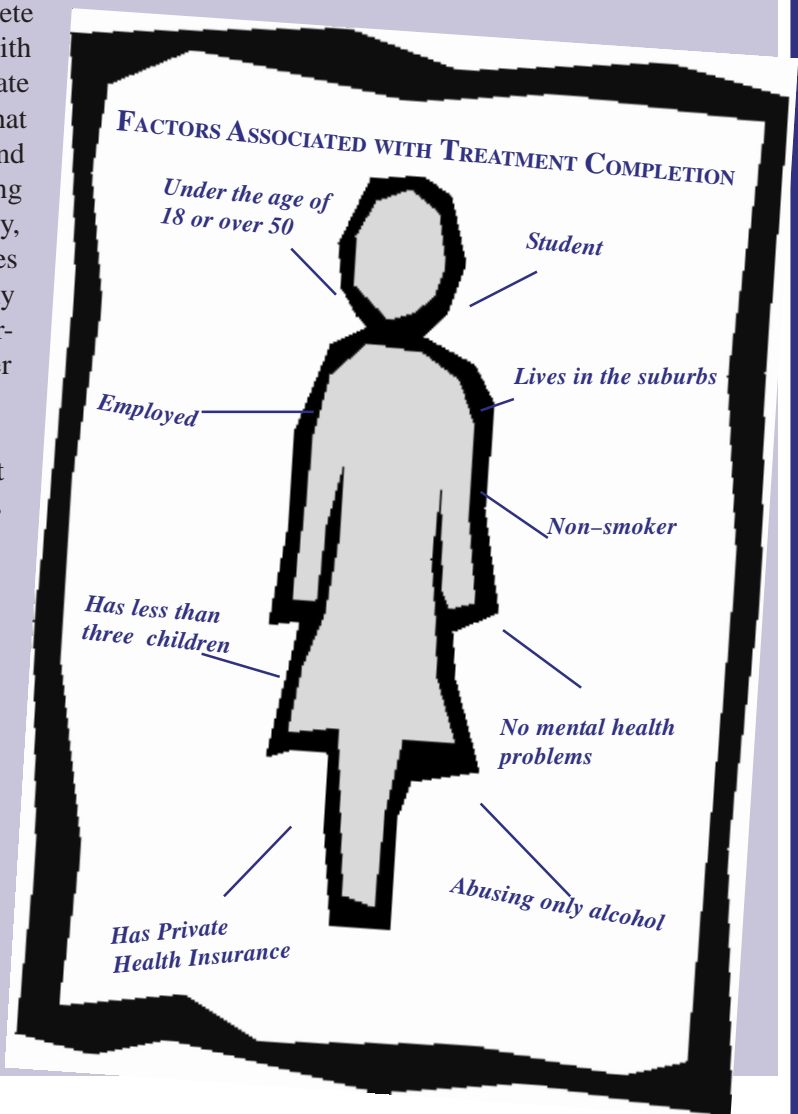
Patients under 18 or over 50 at admission were significantly more likely to complete treatment than those in the middle. As with all of the measures in this simple bivariate analysis, there may well be other factors that are not measured (such as the severity and type of substance problem) that go a long way toward explaining this factor. Notably, patients reported as being enrolled in grades K through 12 were significantly more likely than others to be treatment completers. Perhaps the important factor for those under 18 is parental or scholastic involvement.

Illustrative of this point is the finding that 49 percent of white and Hispanic patients completed treatment while less than a third of black patients did so. Environmental, social and economic factors are probably key here. Cultural issues in treatment programs may also play a role.

Those who entered outpatient treatment as transfers from another treatment type had a higher success rate. A number of factors are relevant here, including the importance of the unbroken continuum of care and patient commitment to treatment. Of some concern is the finding that a very small percentage of admissions were transfers from other types

of treatment. DWI-related referrals were significantly more likely to complete treatment. Here the relevant variable may not be patient commitment but legal compulsion. The average number of arrests prior to treatment was just slightly lower for completers than non-completers.

Maryland patients were categorized according to their residence in a rural, suburban or urban subdivision (Baltimore City). Residents of rural subdivisions had the highest completion rate (48 percent), and Baltimore City residents had the lowest (29 percent). Suburban residents were right on the statewide completion percentage.



Unemployment was associated with failure to complete treatment. The completion rate for patients who were unemployed at admission was only 29 percent. Likewise, only a third of patients whose primary source of income was public assistance/TCA or unemployment compensation completed treatment.

Less than a third of homeless patients completed treatment. Those who had no health insurance or HealthChoice Medicaid were significantly less likely to complete treatment. When the primary source of payment for the immediate treatment episode was reported as HealthChoice Medicaid, other Medicaid, or other public funds, only a third of patients completed treatment.

Only 35 percent of patients assessed as having mental health problems, or reported as unknown for that measure, completed treatment. Only 35 percent of patients with three or more dependent children completed.

Smokers were less likely to complete treatment. Some research suggests a physical component that makes abstinence from drugs more difficult for smokers. It would be interesting to review philosophies and policies of treatment programs with regard to smoking to further investigate this finding.

Patients who had not used their primary substance in the month before admission were significantly more likely to complete treatment than those who had. Only 27 percent of patients whose primary substance problem was heroin, other opiates or cocaine completed treatment.

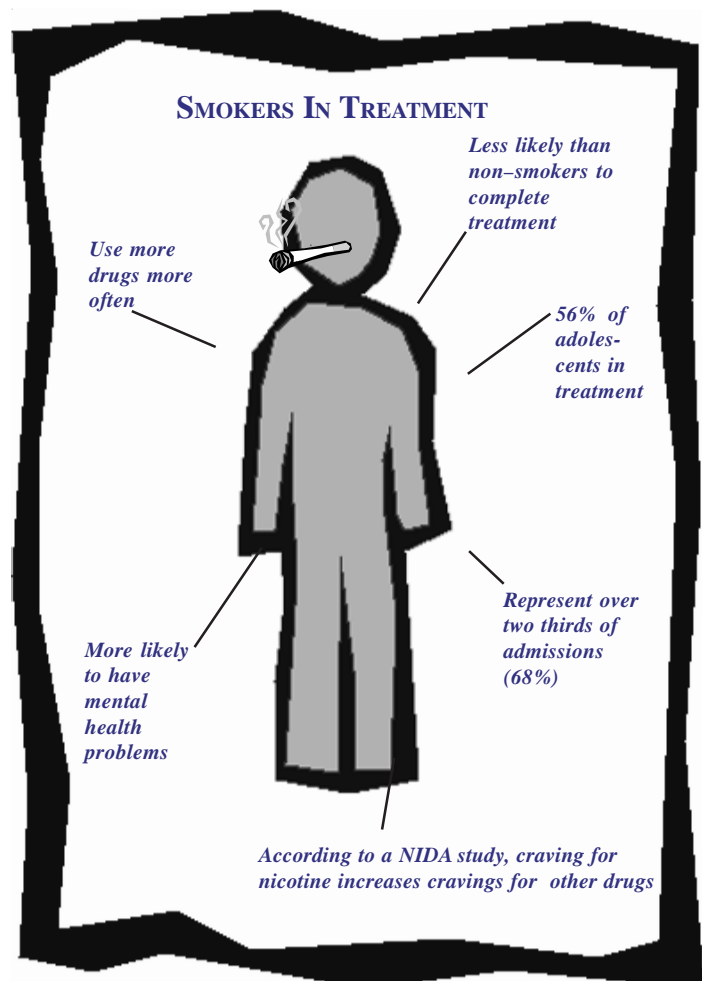
Participation in urinalysis was associated with treatment completion. Of patients who participated in urinalysis, patients completing treatment averaged 10 percent positive test results, while patients not completing treatment averaged 42 percent positive results. Just over a third of patients who did not undergo urinalysis were completers.

Sixty percent of patients whose only substance problem was alcohol completed treatment. Only 31 percent

of those with two or more drug problems completed treatment; whether they had an alcohol problem in addition to two drug problems does not appear to make a difference.

There were clear correlations of primary substance problem severity and frequency of use with treatment completion. Fifty-six percent of patients whose primary problem was reported as “mild” completed treatment. Forty-eight percent of those with “moderate” and 34 percent of those with “severe” problems completed. Completion ranged in a straight line from 50 percent for those with no use during the month prior to treatment to 21 percent of daily users.

Treatment completers averaged 134 days in treatment; non-completers averaged 89. Additional ADA research shows that time in treatment plays a significant role in all important outcome measures.



TREATMENT INCREASES EMPLOYMENT

Percentages of patients employed at admission versus percentages employed at discharge are displayed in Figure 34. Clearly, halfway houses and other types of long-term residential treatment programs are extremely effective in helping patients gain employment during treatment. In outpatient treatment, where half of the admissions are already employed, the percentage employed increased by 5 points during treatment.

Increases in percentages of patients employed during treatment are greatest among those who complete treatment, as shown in Figure 35. It is also apparent that employment at admission is associated with completion of treatment in every treatment type shown except correctional.

TIME IN TREATMENT INCREASES EMPLOYMENT

Time in treatment is associated with increased employment in intensive outpatient and residential treatment (Figures 36–37). The longer patients remained in treatment, the greater the increase in employment. Similar results were obtained for correctional and methadone treatment types as well.

TREATMENT PLAN OBJECTIVES

As expected, treatment plan objectives were improved or achieved in 74 percent and 63 percent of halfway house and residential treatment types respectively (Figure 38).

These programs and ICF, methadone detox and methadone maintenance discharges were those most likely to have objectives related to employment in patient treatment plans.

POST-DISCHARGE IMPROVEMENT

ADAA and CESAR completed work on Treatment Outcomes Performance Pilot Studies Enhancement (TOPPS II) in April 2003.

Maryland’s project focused on the use of administrative data and linking methodologies to measure long-term outcomes on patients receiving substance abuse treatment. The basic research question was whether completion of an episode of treatment was related to mortality, employment, or arrests.

The TOPPS II project followed 3,441 patients treated in Baltimore City programs for twelve months after discharge. In general, employment rates were higher in the year following treatment than in the year before treatment. Further, those patients who completed treatment had a 25 percent increased likelihood of employment in the year following discharge as compared to non-completers. Figure 39 shows graphically the significant difference in adjusted mean wages of treatment completers and non-completers in the year following treatment. ✨

Figure 34
Treatment Increases Employment
Change in Percentage Employed from Admission to Discharge
ADAA-Funded Treatment FY 2002

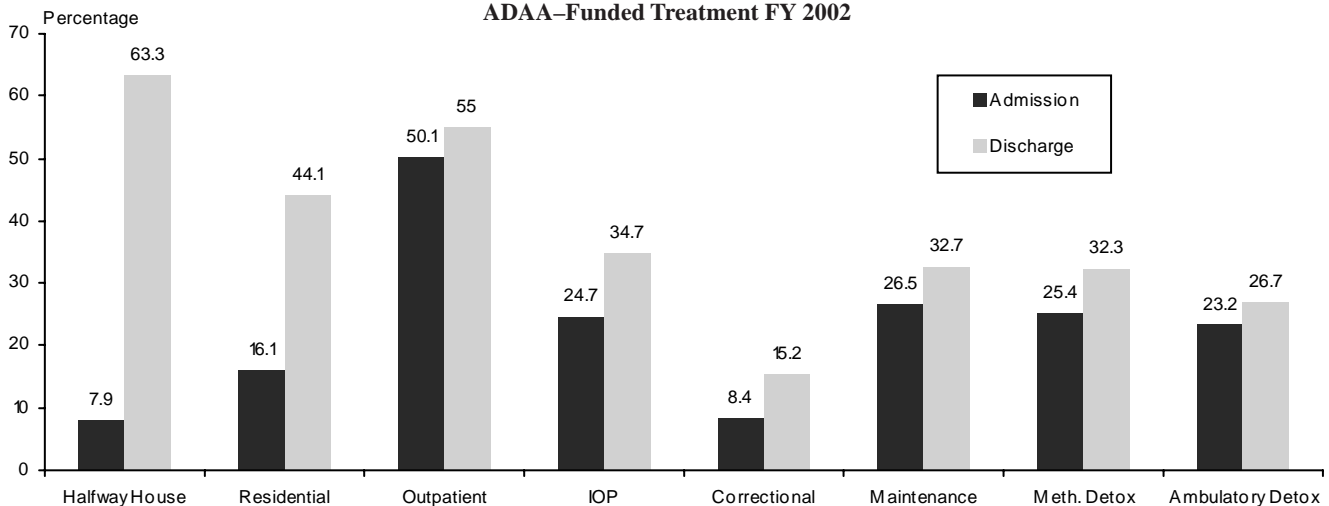


Figure 35
Completion of Treatment Increases Employment
Changes in Percentages Employed from Admission to Discharge
ADAA-Funded Treatment FY 2002

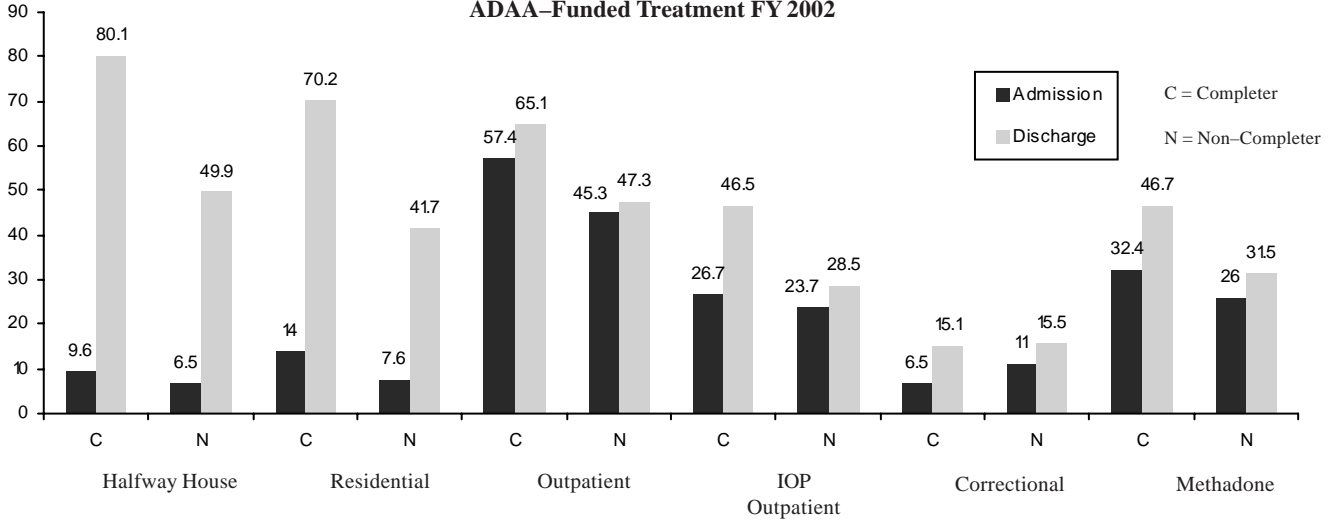


Figure 36
Time in Treatment Increases Employment
Changes in Percentage Employed at Admission to and Discharge from Intensive Outpatient Treatment
ADAA-Funded Treatment FY 2002

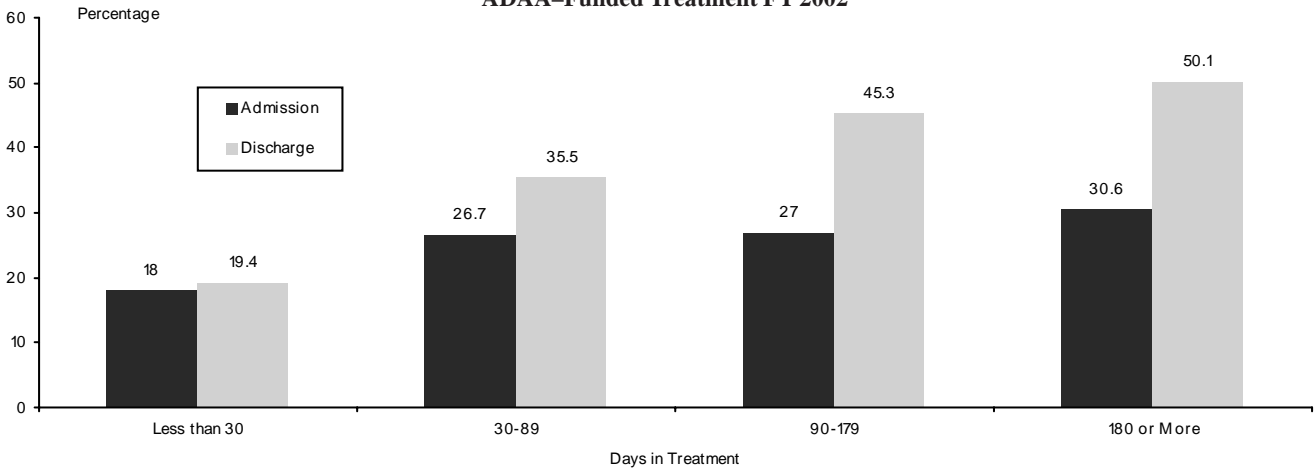
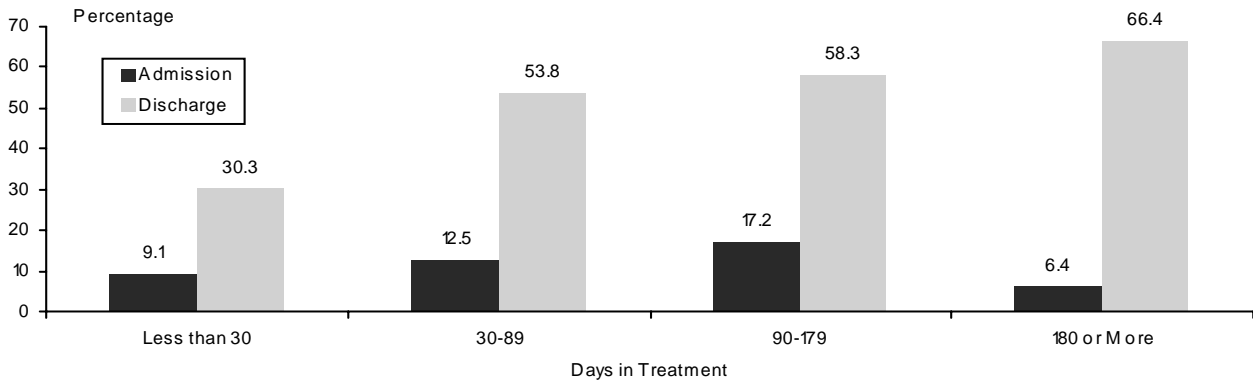


Figure 37
Time in Treatment Increases Employment
Changes in Percentage Employed at Admission to and Discharge from Residential Treatment
ADAA-Funded Treatment FY 2002



TOPPS II HIGHLIGHTS

- Administrative datasets, such as wage and arrest records from State agencies, contain valuable information that can be utilized to develop performance outcome measures.
- Among patients attending drug treatment in Baltimore City, injection drug users were almost five times more likely to die following treatment compared to non-injection drug users, after controlling for types of drugs used and an array of individual characteristics.
- In Baltimore City, after adjustment for individual characteristics, treatment completion was associated with both increased wages following treatment and a 28 percent increase in the likelihood of becoming employed post-discharge.
- Among patients attending treatment across Maryland, 8.6 percent were arrested in the year following discharge, compared to 10 percent who were arrested in the year prior to admission.
- After adjustment for individual characteristics, among a sample of patients attending treatment in Baltimore City, treatment completion was associated with a 54 percent decrease in the likelihood of being arrested post-discharge.
- Among a sample of patients attending treatment in Baltimore City, failure to complete treatment was associated with a 55 percent increased likelihood of arrest for acquisitive or income-generating crimes.
- Forty percent of patients admitted to treatment in Maryland during FY 1996 were readmitted to treatment at some point during a six-year follow-up period, half of them within the first 200 days. Only 3.3 percent of the sample were readmitted more than once. Patients who completed treatment had a reduced chance of readmission.

- Maryland patients presenting with only alcohol problems who attended programs with two-thirds or more alcohol-only patients had a greater chance of treatment completion as compared to patients attending programs with less than a third having alcohol-only problems. ✨

SHORTER TRAVEL DISTANCES PRODUCE BETTER OUTCOMES

Holding a wide variety of factors constant, traveling less than a mile to outpatient treatment in Baltimore City was associated with a 50 percent greater likelihood of treatment completion.

These findings demonstrate that limited access to public transportation may be a substantial barrier to successful treatment completion.

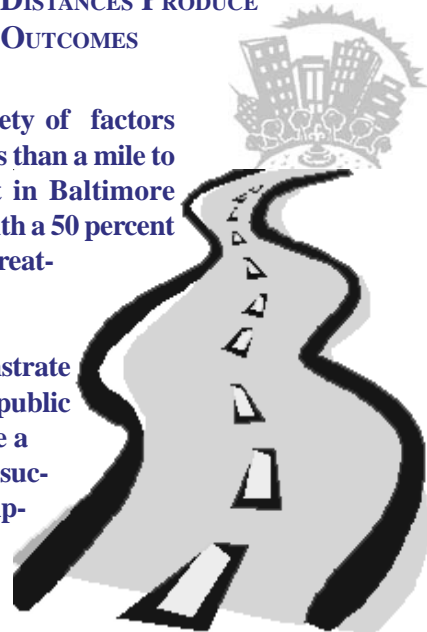


Figure 38
Employment Objectives at Discharge by Treatment Type
ADAA-Funded Treatment FY 2002

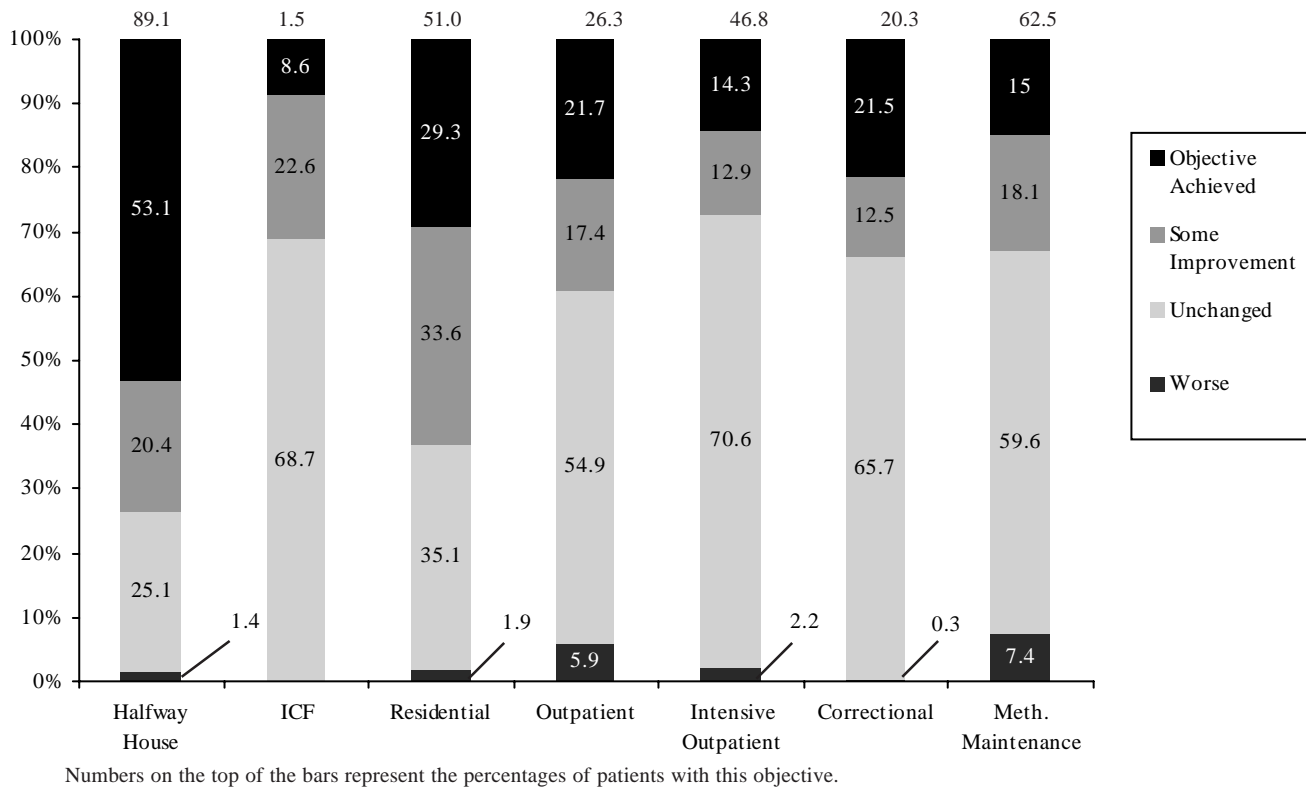
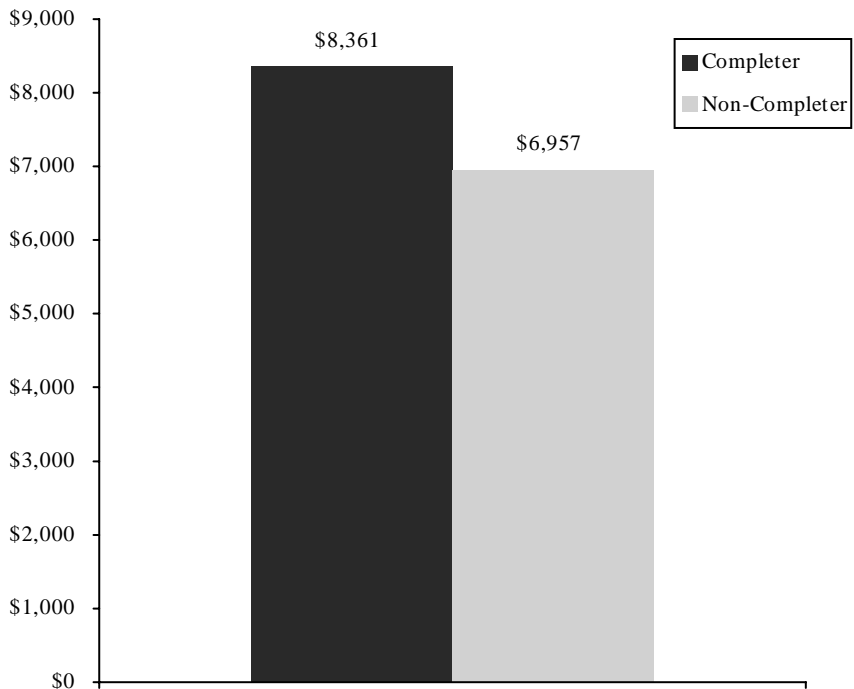


Figure 39
Adjusted Mean Wages in the Year After Treatment
Baltimore City Programs TOPPS II CY 1998



TOPPS II followed Baltimore City residents discharged in 1998 and found that people who completed treatment, not only had higher wages, but also had a 28 percent increase in the likelihood of being employed.

TREATMENT REDUCES CRIME

Patients receiving substance abuse treatment are less likely to be arrested. Figure 40 compares patient arrest rates during the two years preceding admission and during treatment. Clearly, arrest rates are substantially reduced, especially in residential and custodial types of treatment. In traditional outpatient and methadone maintenance modalities, pre-treatment arrest rates are cut approximately in half during treatment. Not surprisingly, completion of treatment is associated with the greatest reductions in arrest rates, as shown in Figure 41.

TREATMENT PLAN OBJECTIVES

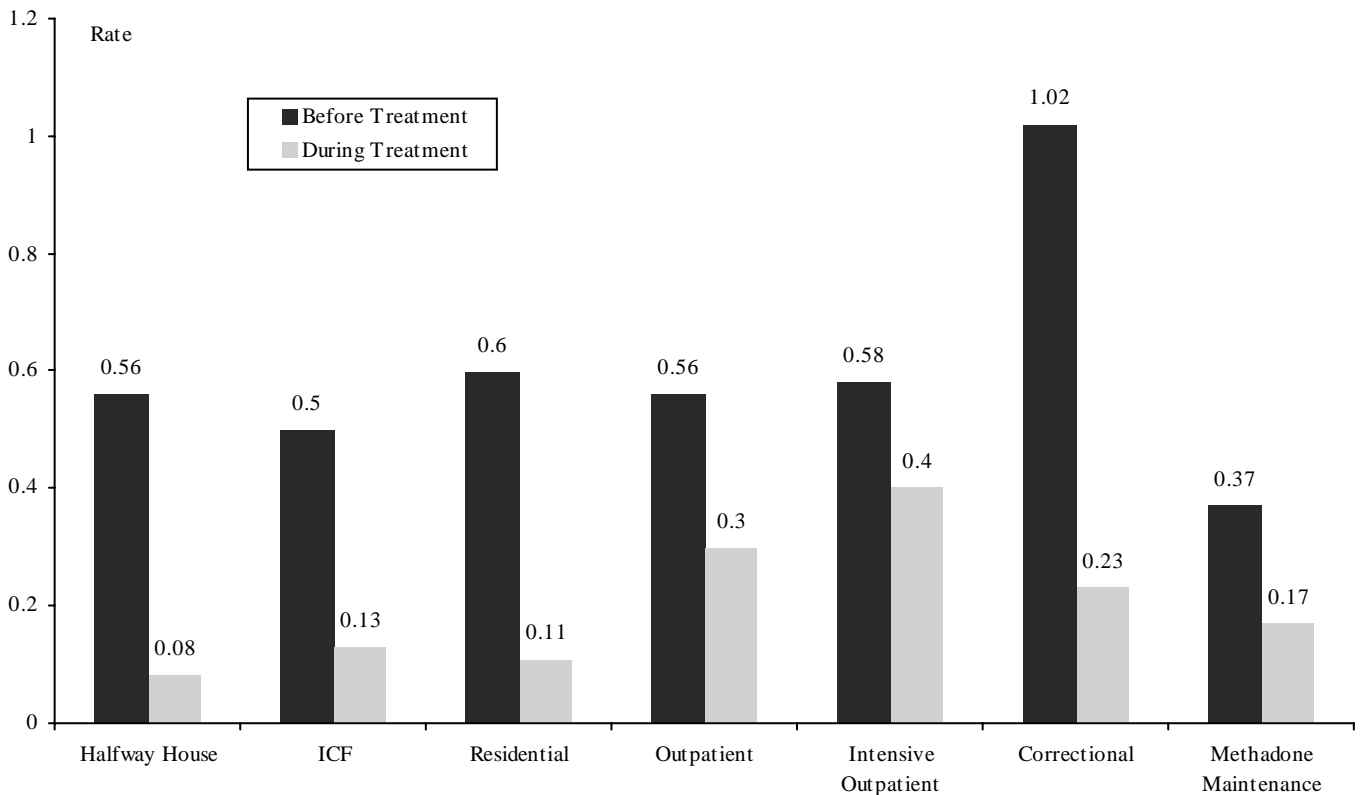
Over 60 percent of patients discharged from halfway house, ICF, residential, outpatient, intensive outpatient and correctional treatment types dealt with legal issues in their treatment plans (Figure 42). Legal objectives were achieved most frequently in residential, outpatient and correctional treatment. A disturbing finding is that

although less than half of methadone maintenance patients had legal treatment plan objectives, situations deteriorated in more cases than they improved.

CRIME REDUCTION AFTER TREATMENT

The percentage of patients arrested in the year after treatment was significantly lower than the percentage arrested in the year before treatment, according to the TOPPS II findings. The predictive probability of arrest in the year following treatment was substantially lower for patients who completed treatment. Baltimore City arrests for acquisitive crimes such as theft, burglary, fraud and robbery were examined in the two-year period following discharge from substance abuse treatment. Figure 43 displays the results of this analysis; treatment completers were 55 percent less likely than non-completers to be arrested for acquisitive crimes in the two years following treatment. ✨

Figure 40
Treatment Reduces Crime
Change in Arrest Rates Prior to and During Treatment
ADAA-Funded Treatment FY 2002



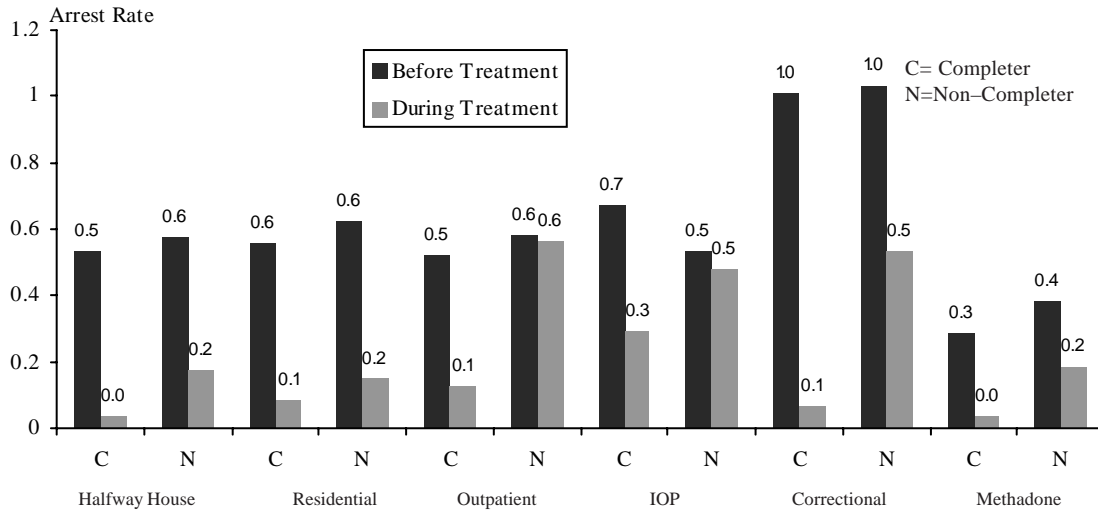


Figure 41
Completion of Treatment Reduces Crime
Changes in Arrest Rates Prior to and During Treatment
ADAA-Funded Treatment FY 2002

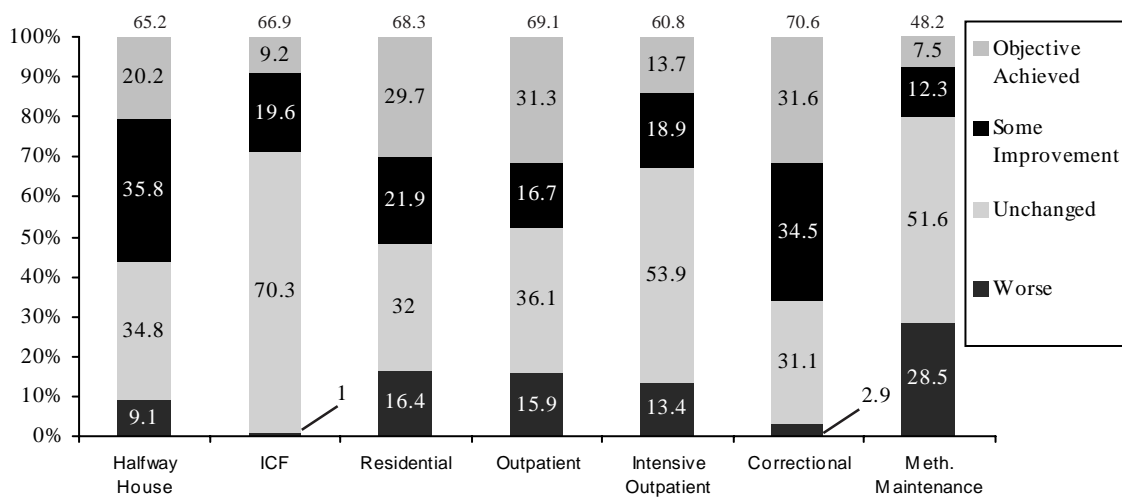


Figure 42
Legal Objectives at Discharge by Treatment Type
ADAA-Funded Treatment FY 2002

Numbers on the top of the bars represent the percentages of patients with this objective.

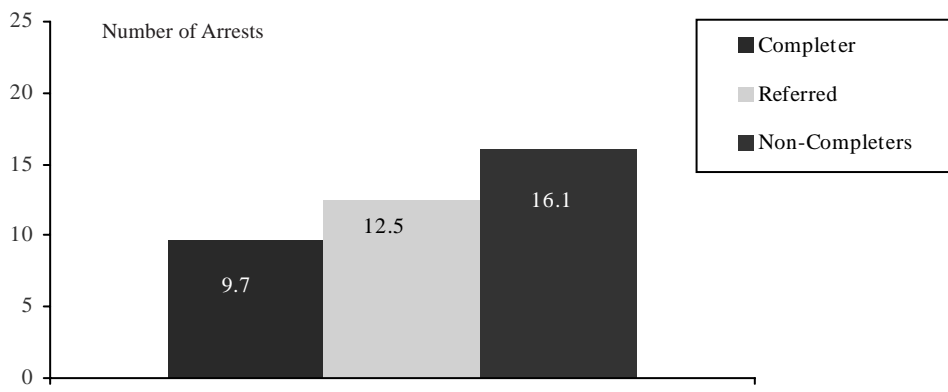


Figure 43
Arrests Following Drug Treatment Baltimore City Programs
TOPPS II CY 1998

TREATMENT IMPROVES LIVES

TREATMENT REDUCES HOMELESSNESS

Treatment correlates with decreased homelessness and increased independent living in all modalities. Figure 44 compares percentages of homeless patients at admission and discharge for various types of treatment. Nearly half of the patients discharged from ADAA-funded halfway houses were homeless at the time of admission, but only 15 percent were homeless at discharge. The percentage of homeless patients was reduced by half during intensive outpatient treatment.

Gains were also made in terms of independent living in most treatment types, as shown in Figure 45. The percentage of patients living independently went from 12 to 35 percent in halfway houses, from 37 to 51 percent in residential treatment, and from 61 to 75 percent in methadone maintenance treatment.

TREATMENT IMPROVES RELATIONSHIPS

Seventy-eight percent of halfway house and ICF discharges and 60 percent of residential discharges had family issues to work on in their treatment plans. The treatment types with the highest rates of positive results in this area were halfway house, residential, methadone detox, ICF and out-

patient. As noted previously, family counseling occurred most often in residential, ICF and halfway house treatment. Figure 46 presents treatment plan objective information with respect to family relationships. ❀

OUTCOMES CONCLUSIONS

When one considers the areas of functioning and social control that substance abuse treatment is intended to influence – drug use, employment, crime, homelessness, and social adjustment – the evidence that Maryland ADAA-funded treatment programs are effective in addressing these issues is overwhelming.

Clearly, not every episode of substance abuse treatment is successful, but given the growing body of research establishing treatment as the most effective response to substance abuse, it is more amazing that up to three quarters of the citizens who need treatment don't get it. The challenge for ADAA, in the face of shrinking budgets in the coming months, will be to ensure that quality treatment remains available and that programs will continue to be held accountable for their results. In FY 2002, treatment works. ❀

Figure 44
Treatment Decreases Homelessness
Change in Homelessness from Admission to Discharge
ADAA-Funded Treatment FY 2002

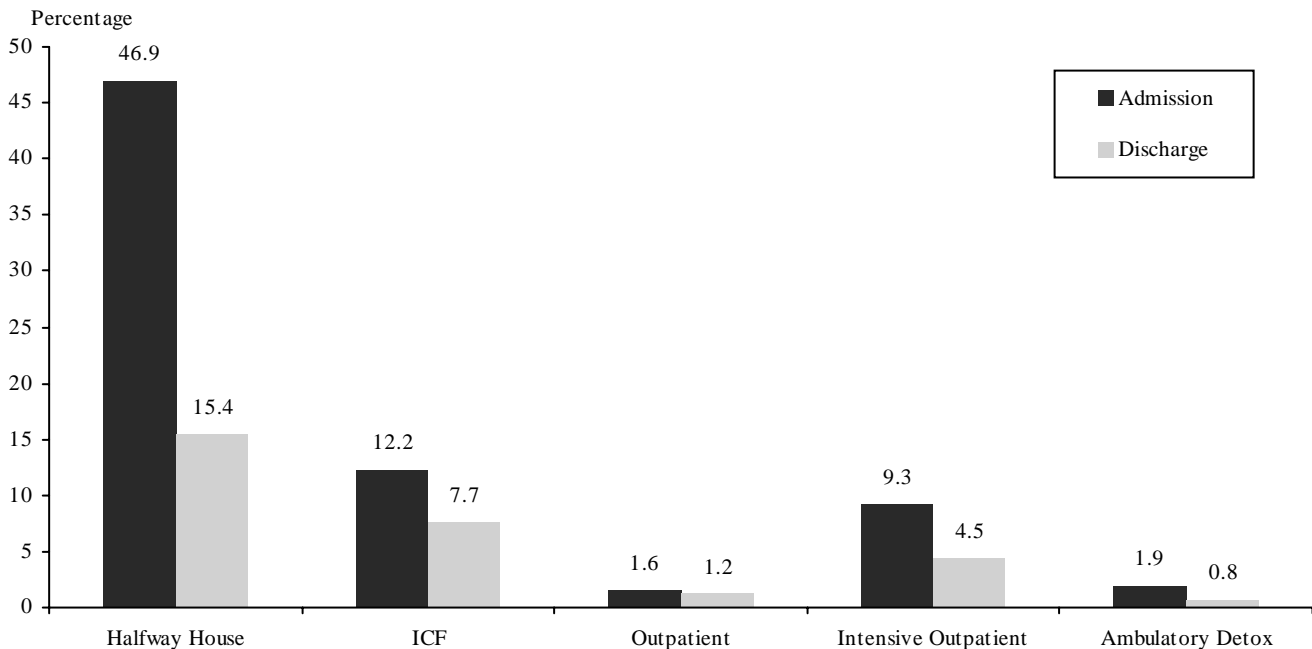


Figure 45
Treatment Increases Independent Living
Change in Percentages Living Independently from Admission to Discharge
ADAA-Funded Treatment FY 2002

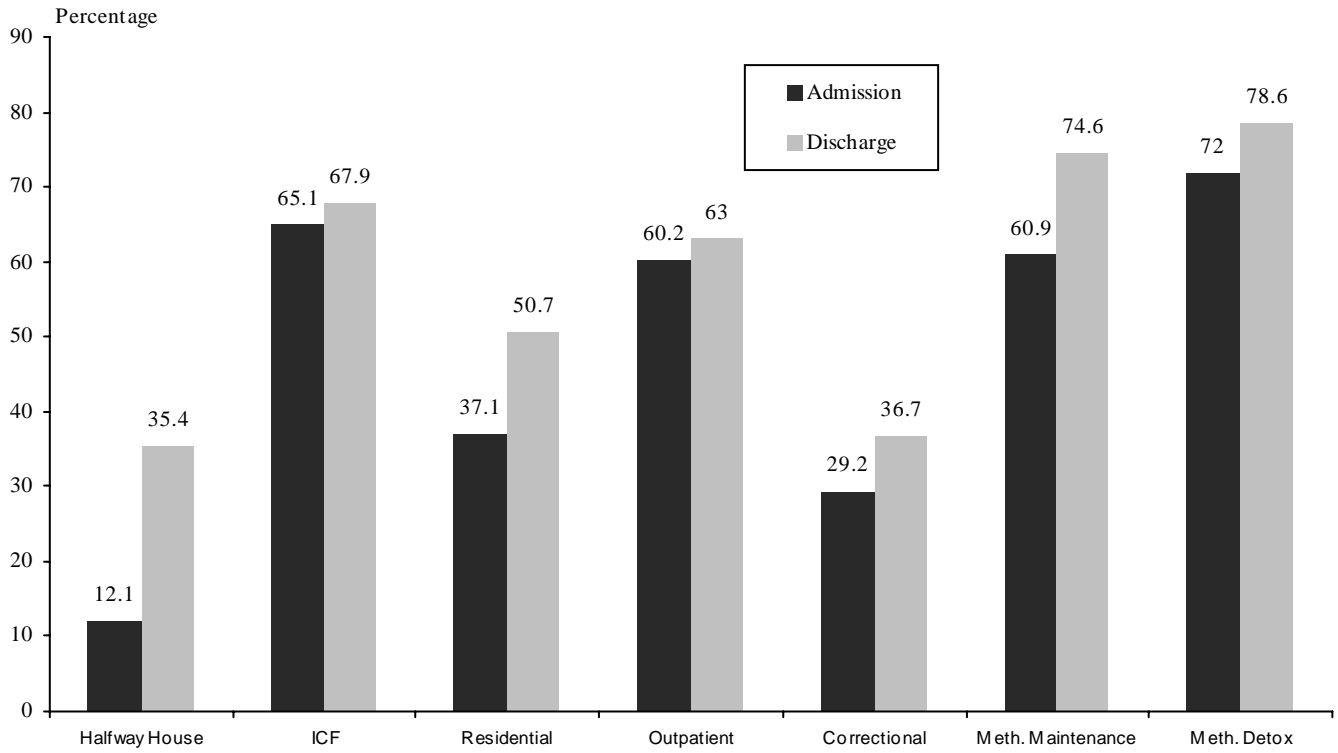
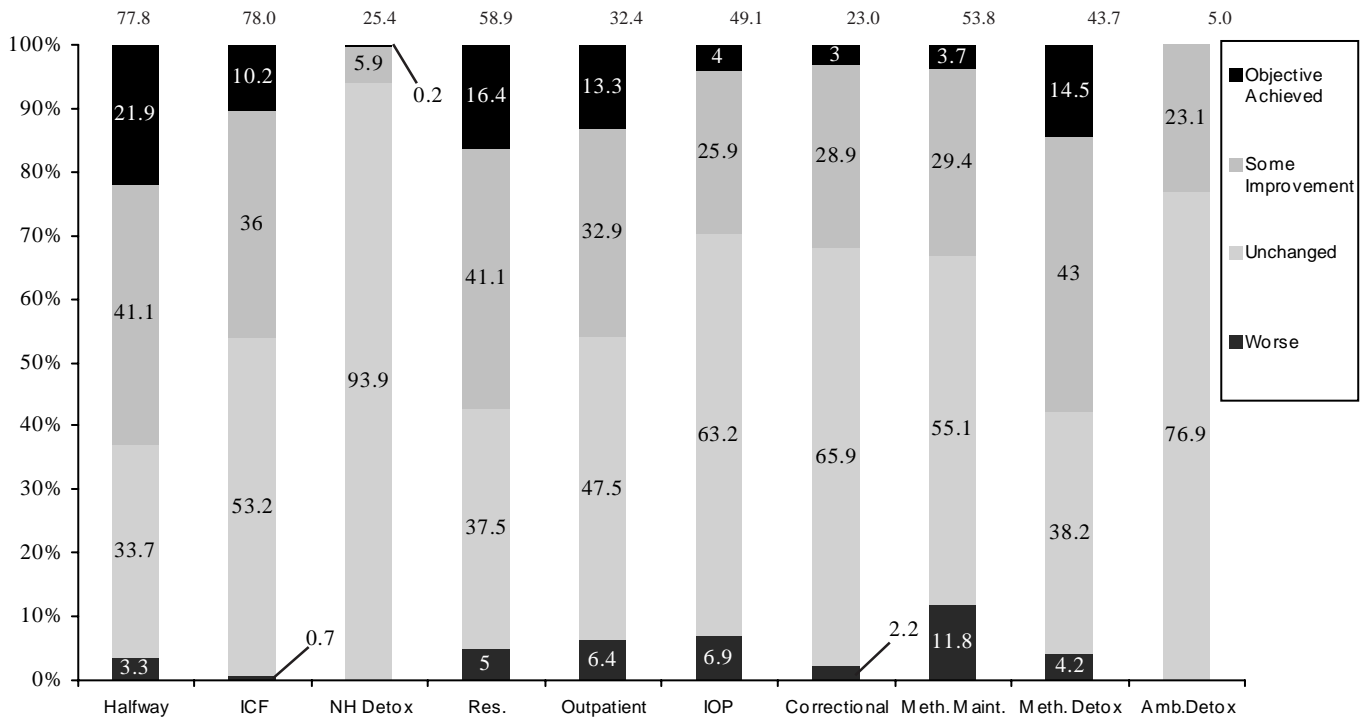


Figure 46
Family Objectives at Discharge by Treatment Type
ADAA-Funded Treatment FY 2002



Numbers on the top of the bars represent the percentages of patients with this objective.

APPENDICES

APPENDIX I

Types of Treatment

APPENDIX II

Tables

APPENDIX III

Subdivision–Level Data

APPENDIX IV

Maps

TYPES OF TREATMENT

A treatment type is the primary treatment approach or modality. The categories of treatment type used in this report are defined below.

Ambulatory Detoxification (Amb Detox) Medically managed outpatient treatment aimed at systematically reducing toxins in the patient's body.

Correctional (CORR) The patient is incarcerated in a federal, State, or county prison or detention center and participates in an alcohol and drug abuse treatment program within the institution.

Halfway House (HWH) A transitional residential care facility providing time-limited services to alcohol and drug abuse patients who have received prior evaluation or treatment for their addiction. These patients are expected to move into a position of personal and economic self-sufficiency.

Hospital Detoxification (HOSP Detox) Detoxification treatment in an inpatient hospital setting.

Intensive Outpatient (IOP) A non-residential program that provides highly structured treatment services using a step down model of intensity for a minimum of nine hours per week.

Intermediate Care Facility (ICF) A residential treatment facility that provides a short-term intensive regimen of individual and group therapy as well as other activities aimed at the physical, psychological and social recovery of patients.

Methadone Maintenance (MAIN) Treatment including the medically supervised administration of methadone, LAAM, buprenorphine or other medication for patients addicted to heroin or other opiates.

Methadone Detoxification (Meth Detox) Treatment including the medically supervised administration of methadone, LAAM, buprenorphine or other medication for patients addicted to heroin or other opiates with the objective of systematically reducing toxins in the patient's body.

Non-Hospital Detoxification (NH Detox) Treatment that provides 24 hour supervised medical care in a residential setting. The focus of this treatment is to systematically reduce toxins in the patient's body, manage withdrawal symptoms and, once detoxified, refer the patient for additional treatment.

Residential (Other) or (RES) Non-chemotherapeutic treatment provided to alcohol and drug abusers in a group living environment for an extended period of time.

Outpatient (OP) A non-residential program that provides diagnosis, treatment and rehabilitation for alcohol and drug abuse patients and their families generally less than nine hours per week. The patients' physical and emotional status allow functioning with support in their usual environments.

APPENDIX II

TABLES

**TABLE 1
DISTRIBUTION OF ADMISSIONS BY TREATMENT TYPE
FY'S 1999-2002**

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Halfway House	774	1.3	725	1.2	717	1.1	786	1.1
ICF	9329	15.4	8788	14.5	9453	14.6	9913	14.7
Outpatient	26905	44.9	26824	44.4	29569	45.6	30555	44.0
Non-Hospital Detox	1946	3.2	1934	3.2	2509	3.9	3437	4.9
Hospital Detox	22	0.0	7	0.0	231	0.4	383	0.6
Corrections	3774	6.2	5100	8.4	4622	7.1	5056	7.3
Methadone	5921	9.8	6119	10.0	5841	9.0	6381	9.2
Residential	1414	2.3	1356	2.2	1322	2.0	1138	1.6
Intensive Outpatient	9235	15.3	7854	13.0	8095	12.5	9504	13.7
Methadone Detox	883	1.5	860	1.4	521	0.8	428	0.6
Ambulatory Detox	237	0.4	879	1.5	1992	3.1	1862	2.7
Total	60440	100.0	60446	100.0	64872	100.0	69443	100.0

**TABLE 2
HIGHEST GRADE COMPLETED FY 2002**

	Under 18		18-20		21-25		26-30		31-40		41-50		Over 50		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Less than 12th	6466	96.5	2229	44.4	2610	32.7	2539	35.9	7205	31.7	4241	27.4	1169	27.4	26508	100.0
High School Grad.	235	3.5	2254	44.9	3814	47.9	3296	45.6	11170	49.1	7233	46.7	1645	38.6	29647	100.0
Some College	4	0.1	526	10.5	1276	16.0	964	13.3	3104	13.7	2584	16.7	719	16.9	9177	100.0
College Graduate	0	0.0	3	.1	236	3.0	308	4.3	899	4.0	994	6.4	423	9.9	2863	100.0
Beyond College	0	0.0	3	0.2	38	0.5	68	0.9	359	1.6	434	2.8	311	7.3	1220	100.0
Total	6705	9.7	5022	7.2	7969	11.5	7229	10.4	22737	32.8	15486	22.3	4267	6.1	69415	100.0

**TABLE 3
EMPLOYMENT STATUS FY 2002**

	Under 18		18-20		21-25		26-30		31-40		41-50		Over 50		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Incarcerated	598	8.9	319	6.4	693	8.7	622	8.6	1660	7.3	666	7.3	112	2.6	4670	100.0
Work Release	16	0.2	22	0.4	57	0.7	42	0.6	112	0.5	62	0.4	11	0.3	322	100.0
Homemaker	2	0.0	14	0.3	60	.8	72	1.0	266	1.2	134	0.9	45	1.1	593	100.0
Retired/Disabled	6	0.1	15	0.3	53	0.6	118	1.6	773	3.4	1105	7.1	912	21.4	2982	100.0
Unemployed (School)	3889	58.0	500	10.0	174	2.2	85	1.2	215	0.9	133	0.9	28	0.7	5024	100.0
Unemployed (Seeking)	347	5.2	955	19.0	1540	19.3	1262	17.5	4108	18.1	2461	15.9	464	10.9	11137	100.0
Unemployed (Other)	818	12.2	1015	20.2	1653	20.7	2006	27.8	6893	30.3	4261	27.5	813	19.1	17459	100.0
Employed Part-time	810	21.1	596	11.9	599	7.5	411	5.7	1081	4.8	793	5.1	211	4.9	4501	100.0
Employed Fulltime	217	3.2	1584	31.6	3139	39.4	2608	36.1	7627	33.5	5870	37.9	1671	39.2	22716	100.0
Total	6702	9.7	5020	7.2	7968	11.5	7226	10.4	22735	32.8	15485	22.3	4267	6.1	69404	100.0

**TABLE 4
DISCHARGES BY TREATMENT TYPE
ADAA-FUNDED PROGRAMS FY 2002**

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Halfway House	774	1.3	725	1.2	717	1.1	786	1.1
ICF	9329	15.4	8788	14.5	9453	14.6	9913	14.7
Outpatient	26905	44.9	26824	44.4	29569	45.6	30555	44.0
Non-Hospital Detox	1946	3.2	1934	3.2	2509	3.9	3437	4.9
Hospital Detox	22	0.0	7	0.0	231	0.4	383	0.6
Corrections	3774	6.2	5100	8.4	4622	7.1	5056	7.3
Methadone	5921	9.8	6119	10.0	5841	9.0	6381	9.2
Residential	1414	2.3	1356	2.2	1322	2.0	1138	1.6
Intensive Outpatient	9235	15.3	7854	13.0	8095	12.5	9504	13.7
Methadone Detox	883	1.5	860	1.4	521	0.8	428	0.6
Ambulatory Detox	237	0.4	879	1.5	1992	3.1	1862	2.7
Total	60440	100.0	60446	100.0	64872	100.0	69443	100.0

**TABLE 5
MONTHLY AVERAGE COUNSELING SESSIONS
ATTENDED BY PARTICIPANTS BY TREATMENT TYPE
ADAA-FUNDED PROGRAMS FY 2002**

	Individual		Group		Family	
	% Participating	Average	% Participating	Average	% Participating	Average
Halfway House	98.6	5.4	97.0	9.3	10.8	0.8
ICF	96.1	12.1	95.6	84.3	20.1	4.6
Outpatient	86.1	2.0	80.7	3.9	9.6	1.4
Non-Hospital Detox	90.0	16.7	90.6	95.6	3.2	17.5
Corrections	84.1	2.6	94.4	16.7	1.4	7.0
Methadone	93.0	2.1	68.2	3.2	8.6	0.5
Residential	97.3	6.0	96.7	37.7	22.8	0.9
Intensive Outpatient	84.8	3.2	92.7	12.5	7.6	1.5
Methadone Detox	93.7	2.3	65.6	2.7	1.6	0.8
Ambulatory Detox	91.9	11.2	86.1	24.2	2.3	5.8

APPENDIX III

SUBDIVISION-LEVEL DATA

**Table 1
Admissions by Residence
FY 1999 - 2002**

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Allegany	796	1.3	743	1.2	689	1.1	730	1.1
Anne Arundel	5266	8.7	4821	8.0	5863	9.0	5809	8.4
Baltimore City	18564	30.8	18891	31.3	19489	30.1	21996	31.7
Baltimore Co.	6874	11.4	6860	11.4	7007	10.8	7689	11.1
Calvert	904	1.5	923	1.5	1034	1.6	1232	1.8
Caroline	455	0.8	426	0.7	469	0.7	490	0.7
Carroll	1654	2.7	1646	2.7	1684	2.6	1610	2.3
Cecil	960	1.6	966	1.6	1137	1.8	1285	1.9
Charles	1047	1.7	1171	1.9	1261	1.9	1370	2.0
Dorchester	555	0.9	564	0.9	591	0.9	629	0.9
Frederick	1810	3.0	1998	3.3	2126	3.3	2159	3.1
Garrett	278	0.5	309	0.5	273	0.4	295	0.4
Harford	1954	3.2	1947	3.2	1884	2.9	2177	3.1
Howard	1454	2.4	1633	2.7	1599	2.5	1493	2.2
Kent	368	0.6	351	0.6	395	0.6	425	0.6
Montgomery	4804	8.0	4489	7.4	5101	7.9	5292	7.6
Prince George's	3547	5.9	3568	5.9	4016	6.2	4054	5.8
Queen Anne's	553	0.9	608	1.0	555	0.9	528	0.8
St. Mary's	845	1.4	858	1.4	1130	1.7	1241	1.8
Somerset	408	0.7	463	0.8	609	0.9	474	0.7
Talbot	695	1.2	694	1.2	630	1.0	632	0.9
Washington	1346	2.2	1513	2.5	1676	2.6	1764	2.5
Wicomico	1724	2.9	1587	2.6	1656	2.6	1782	2.6
Worcester	953	1.6	907	1.5	1013	1.6	1069	1.5
Out of State	2415	4.0	2456	4.1	2957	4.6	3194	4.6
Total	60229	100.0	60392	100.0	64844	100.0	69419	100.0

**Table 1
Distributions of Alcohol Mentions by
Residence FY 1999 - 2002**

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Allegany	676	1.8	586	1.5	520	1.3	547	1.3
Anne Arundel	3712	9.7	3335	8.8	4030	9.9	3855	8.9
Baltimore City	7613	19.9	7602	19.9	7880	19.3	9304	21.6
Baltimore Co.	4119	10.8	4138	10.8	4174	10.2	4531	10.5
Calvert	761	2.0	808	2.1	900	2.2	1049	2.4
Caroline	373	1.0	354	0.9	364	0.9	385	0.9
Carroll	1041	2.7	1056	2.8	1061	2.6	976	2.3
Cecil	723	1.9	674	1.8	744	1.8	821	1.9
Charles	879	2.3	970	2.5	1064	2.6	1158	2.7
Dorchester	421	1.1	424	1.1	425	1.0	470	1.1
Frederick	1459	3.8	1683	4.4	1729	4.2	1677	3.9
Garrett	223	0.6	253	0.7	238	0.6	268	0.6
Harford	1534	4.0	1481	3.9	1355	3.3	1524	3.5
Howard	992	2.6	1095	2.9	1063	2.6	981	2.3
Kent	304	0.8	276	0.7	310	0.8	310	0.7
Montgomery	3821	10.0	3513	9.2	3921	9.6	4104	9.5
Prince George's	2480	6.5	2642	6.9	2909	7.1	2992	6.9
Queen Anne's	459	1.2	482	1.3	468	1.1	403	0.9
St. Mary's	601	1.6	670	1.8	886	2.2	1024	2.4
Somerset	326	0.9	402	1.1	483	1.2	389	0.9
Talbot	552	1.4	552	1.4	517	1.3	480	1.1
Washington	1084	2.8	1239	3.2	1342	3.3	1442	3.3
Wicomico	1433	3.7	1297	3.4	1322	3.2	1398	3.2
Worcester	813	2.1	781	2.0	847	2.1	899	2.1
Out of State	1835	4.8	1833	4.8	2174	5.3	2149	5.0
Total	38233	100.0	38164	100.0	40726	100.0	43136	100.0

Table 3
Distribution of Marijuana Mentions by
Residence 1999-2002

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Allegany	376	1.9	380	1.9	362	1.6	354	1.5
Anne Arundel	2004	10.3	1902	9.4	2297	10.3	2138	9.1
Baltimore City	3960	20.3	4078	20.2	4329	19.4	4773	20.3
Baltimore Co.	1971	10.1	2117	10.5	2281	10.2	2500	10.6
Calvert	405	2.1	422	2.1	494	2.2	580	2.5
Caroline	214	1.1	199	1.0	244	1.1	252	1.1
Carroll	680	3.5	703	3.5	740	3.3	652	2.8
Cecil	387	2.0	351	1.7	411	1.8	462	2.0
Charles	422	2.2	432	2.1	486	2.2	614	2.6
Dorchester	231	1.2	270	1.3	322	1.4	377	1.6
Frederick	776	4.0	905	4.5	961	4.3	934	4.0
Garrett	127	0.7	144	0.7	166	0.7	160	0.7
Harford	770	3.9	857	4.2	766	3.4	841	3.6
Howard	535	2.7	590	2.9	547	2.5	536	2.3
Kent	157	0.8	179	0.9	206	0.9	248	1.1
Montgomery	1621	8.3	1611	8.0	1706	7.5	1934	8.2
Prince George's	1283	6.6	1401	6.9	1634	7.3	1652	7.0
Queen Anne's	278	1.4	315	1.6	263	1.2	245	1.0
St. Mary's	294	1.5	313	1.5	506	2.3	589	2.5
Somerset	209	1.1	212	1.0	299	1.3	258	1.1
Talbot	301	1.5	303	1.5	278	1.2	285	1.2
Washington	664	3.4	763	3.8	888	4.0	843	3.6
Wicomico	899	4.6	806	4.0	869	3.9	948	4.0
Worcester	411	2.1	442	2.2	473	2.1	470	2.0
Out of State	540	2.8	523	2.6	827	3.7	894	3.8
Total	19515	100.0	20218	100.0	22355	100.0	23539	100.0

Table 4
Distribution of Crack Mentions by
Residence 1999-2002

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Allegany	74	0.5	71	0.5	60	0.4	75	0.5
Anne Arundel	1169	8.5	950	6.9	986	7.1	1007	6.3
Baltimore City	4614	33.5	4961	36.1	5058	36.5	6618	41.6
Baltimore Co.	1142	8.3	1051	7.6	994	7.2	1229	7.7
Calvert	117	0.9	107	0.8	118	0.9	130	0.8
Caroline	82	0.6	72	0.5	99	0.7	84	0.5
Carroll	272	2.0	231	1.7	185	1.3	214	1.3
Cecil	174	1.3	146	1.1	164	1.2	186	1.2
Charles	209	1.5	229	1.7	212	1.5	276	1.7
Dorchester	203	1.5	215	1.6	227	1.6	201	1.3
Frederick	331	2.4	370	2.7	382	2.8	375	2.4
Garrett	6	0.0	9	0.1	9	0.1	15	0.1
Harford	312	2.3	259	1.9	230	1.7	270	1.7
Howard	237	1.7	276	2.0	239	1.7	235	1.5
Kent	105	0.8	116	0.8	109	0.8	127	0.8
Montgomery	1514	11.0	1370	10.0	1423	10.3	1170	7.4
Prince George's	1024	7.5	1115	8.1	1264	9.1	1358	8.5
Queen Anne's	116	0.8	118	0.9	107	0.8	108	0.7
St. Mary's	125	0.9	122	0.9	173	1.2	227	1.4
Somerset	96	0.7	123	0.9	158	1.1	105	0.7
Talbot	177	1.3	193	1.4	148	1.1	131	0.8
Washington	389	2.8	441	3.2	394	2.8	383	2.4
Wicomico	536	3.9	517	3.8	416	3.0	537	3.4
Worcester	214	1.6	213	1.5	199	1.4	257	1.6
Out of State	516	3.8	474	3.4	514	3.7	579	3.6
Total	13754	100.0	13749	100.0	13868	100.0	15897	100.0

Table 5
Distribution of Powder Cocaine
Mentions by Residence 1999-2002

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Allegany	55	0.5	45	0.5	45	0.4	46	0.4
Anne Arundel	650	6.1	543	5.4	687	6.6	710	6.5
Baltimore City	5626	52.9	5349	53.6	5099	49.2	5429	49.5
Baltimore Co.	1260	11.8	1151	11.5	1179	11.4	1331	12.1
Calvert	155	1.5	120	1.2	131	1.3	165	1.5
Caroline	43	0.4	47	0.5	73	0.7	60	0.5
Carroll	209	2.0	203	2.0	240	2.3	198	1.8
Cecil	145	1.4	123	1.2	104	1.0	144	1.3
Charles	78	0.7	87	0.9	119	1.1	139	1.3
Dorchester	68	0.6	73	0.7	65	0.6	109	1.0
Frederick	191	1.8	217	2.2	199	1.9	223	2.0
Garrett	24	0.2	22	0.2	26	0.3	15	0.1
Harford	246	2.3	227	2.3	218	2.1	256	2.3
Howard	149	1.4	166	1.7	181	1.7	164	1.5
Kent	43	0.4	31	0.3	24	0.2	26	0.2
Montgomery	417	3.9	343	3.4	411	4.0	466	4.3
Prince George's	324	3.0	239	2.4	307	3.0	295	2.7
Queen Anne's	69	0.7	80	0.8	62	0.6	55	0.5
St. Mary's	74	0.7	58	0.6	132	1.3	138	1.3
Somerset	69	0.7	64	0.6	96	0.9	60	0.6
Talbot	70	0.7	87	0.9	84	0.8	86	0.8
Washington	112	1.1	134	1.3	147	1.4	147	1.3
Wicomico	200	1.9	208	2.1	262	2.5	219	2.0
Worcester	88	0.8	105	1.1	123	1.2	125	1.1
Out of State	274	2.6	254	2.5	347	3.3	353	3.2
Total	10639	100.0	9976	100.0	10361	100.0	10959	100.0

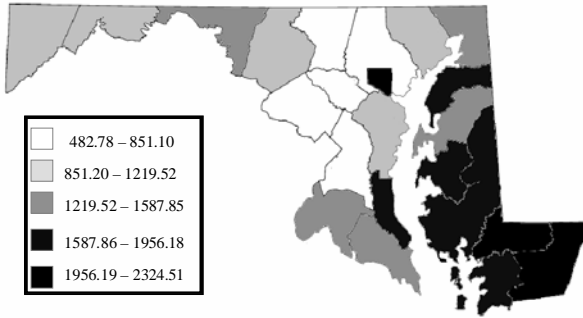
Table 6
Distribution of Heroin Mentions by
Residence 1999-2002

	1999		2000		2001		2002	
	#	%	#	%	#	%	#	%
Allegany	51	0.3	51	0.3	62	0.3	88	0.4
Anne Arundel	1217	6.2	1132	5.5	1410	6.6	1473	6.1
Baltimore City	12372	63.2	13252	65.0	13472	63.3	15227	63.2
Baltimore Co.	2469	12.6	2378	11.7	2420	11.4	2893	12.0
Calvert	77	0.4	38	0.2	45	0.2	79	0.3
Caroline	14	0.1	20	0.1	37	0.2	30	0.1
Carroll	445	2.3	452	2.2	446	2.1	450	1.9
Cecil	134	0.7	208	1.0	192	0.9	284	1.0
Charles	63	0.3	65	0.3	56	0.3	74	0.3
Dorchester	17	0.1	25	0.1	26	0.1	26	0.1
Frederick	161	0.8	164	0.8	195	0.9	270	1.1
Garrett	6	0.0	10	0.0	12	0.1	10	0.0
Harford	307	1.6	401	2.0	389	1.8	560	2.3
Howard	376	1.9	433	2.1	411	1.9	348	1.4
Kent	14	0.1	20	0.1	18	0.1	25	0.1
Montgomery	577	2.9	530	2.6	551	2.6	530	2.2
Prince George's	549	2.8	479	2.3	506	2.4	487	2.0
Queen Anne's	17	0.1	25	0.1	43	0.2	65	0.3
St. Mary's	15	0.1	25	0.1	44	0.2	53	0.2
Somerset	62	0.3	39	0.2	62	0.3	59	0.2
Talbot	43	0.2	48	0.2	50	0.2	62	0.3
Washington	59	0.3	107	0.5	100	0.5	120	0.5
Wicomico	110	0.6	85	0.4	119	0.6	116	0.5
Worcester	39	0.2	45	0.2	56	0.3	60	0.2
Out of State	384	2.0	369	1.8	537	2.5	713	3.0
Total	19578	100.0	20401	100.0	21259	100.0	24102	100.0

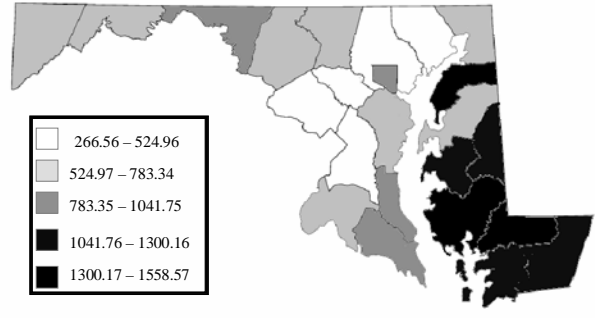
APPENDIX IV

MAPS

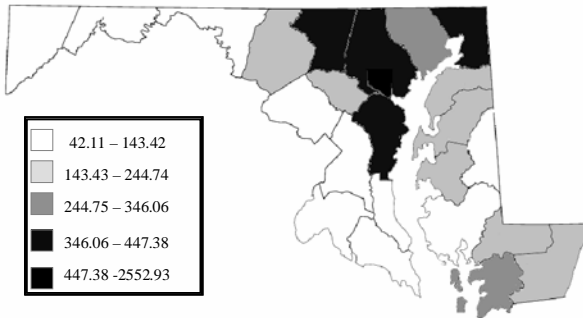
Total Alcohol Related Admission Rates by County of Residence FY 2002



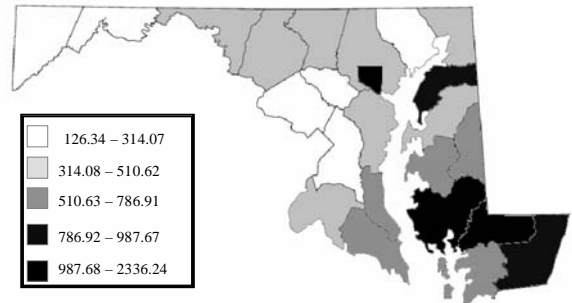
Total Marijuana Related Admission Rates by County of Residence FY 2002



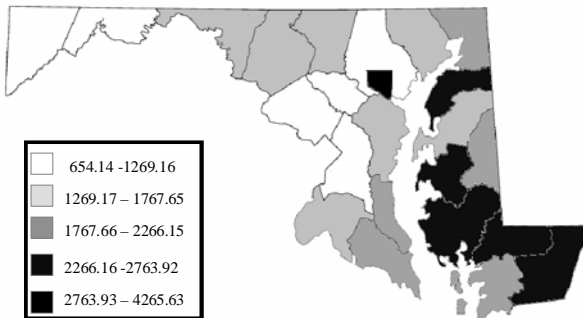
Total Heroin Related Admission Rates by County of Residence FY 2002



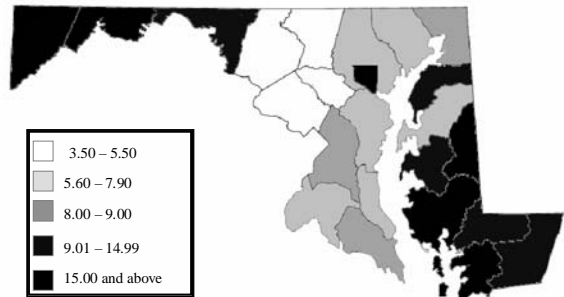
Total Cocaine Related Admission Rates by County of Residence FY 2002



Total Admission Rates by County of Residence FY 2002



Poverty Rates by County of Residence FY 2002



Source: US Census Bureau, 2000

ACRONYMS AND ABBREVIATIONS

ADAA	Maryland Alcohol and Drug Abuse Administration
BGR	University of Maryland Bureau of Governmental Research
CESAR	University of Maryland Center for Substance Abuse Research
COMAR	Code of Maryland Regulations
CSAT	National Center for Substance Abuse Treatment
CY	Calendar Year
DEA	Drug Enforcement Administration
DHMH	Maryland Department of Health and Mental Hygiene
DWI	Driving While Impaired
ESAMIS	Electronic SAMIS
FY	Fiscal Year
HATS	University of Maryland Automated Tracking System
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
NDIC	National Drug Intelligence Center of the Department of Justice
NIDA	National Institute on Drug Abuse
OETAS	Office of Education and Training for Addiction Services
SANTA	Substance Abuse Need for Treatment Among Arrestees
SAMHSA	Substance Abuse and Mental Health Services Administration
SAMIS	Maryland Substance Abuse Management Information System
STNAP	State Needs Assessment Project
TCA	Temporary Cash Assistance
TEDS	Federal Treatment Episode Data Set
TOPPS II	Maryland Treatment Outcomes Performance Pilot Study

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