

CHESAPEAKE BAY ASAP PROGRAM EVALUATION

AN OUTCOME EVALUATION FOR
CALENDAR YEAR 2002

SUBMITTED TO CHESAPEAKE BAY ASAP
FEBRUARY 23, 2007

BY

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2002 PROGRAM EVALUATION

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INTRODUCTION

This report contains a program evaluation for the Chesapeake Bay Alcohol Safety Action Program (CBASAP). The information contained in this report is intended to assist in the continued successful administration of the program. CBASAP was founded in 1975 and serves the cities of Virginia Beach and Norfolk, and the counties of Accomack and Northampton. CBASAP has served Virginia Beach and Norfolk since its inception. In 1993 CBASAP, formerly Tidewater ASAP, merged with Eastern Shore ASAP and has since served the counties of Accomack and Northampton.

CBASAP provides a wide variety of services including, but not limited to, Standard VASAP, Abuse and Lose, Driver Improvement, Habitual Offender Evaluation, Intervention and Monitoring, and Young Offender. Offenders are referred for services primarily from Norfolk and Virginia Beach courts but are also received from Accomack and Northampton Counties, other ASAP programs through transfer, and from out of state.

This report contains the results of a program evaluation for CBASAP. The evaluation includes offenders managed in both the main office in Virginia Beach and the satellite office on the Eastern Shore. Offenders included in the analysis were referred in calendar year 2002 for Standard VASAP, Abuse and Lose, and Young Offender, who had an intake completed (n=3,046). An intake is scheduled when an offender is referred for any of the three services listed above. If an offender appears for an intake and the intake is completed, they are classified into one of three levels of primary intervention services- Education, Intensive Education, or Treatment. If an offender fails to appear for an intake the case is returned to the original referral source. Only offenders who had an intake completed were included in this evaluation.

The evaluation was completed by analyzing data contained in the Inferno2 database application which is utilized by CBASAP to manage offender cases. The evaluation consists of three parts:

Descriptive Statistics – Information regarding the court referral, offender characteristics, and offender performance in the program.

Bivariate Statistics – A variety of bivariate statistics were used to identify significant differences in success rates dependent upon offender characteristics and other factors.

Multivariate Statistics – The multivariate technique of Binary Logistic Regression was used to identify the most important factors that are related to success and failure in the CBASAP program.

Summary and Discussion – A summary and discussion of the significant findings are provided.

DESCRIPTIVE STATISTICS

Of the offenders referred to Chesapeake Bay ASAP in 2002 – 3,046 had an intake completed (2,886 Virginia Beach office and 160 Eastern Shore office). These cases were used to complete the analyses contained in this report. The results below are for both offices combined; however, any significant differences between the two offices are noted in the appropriate sections.

REFERRALS

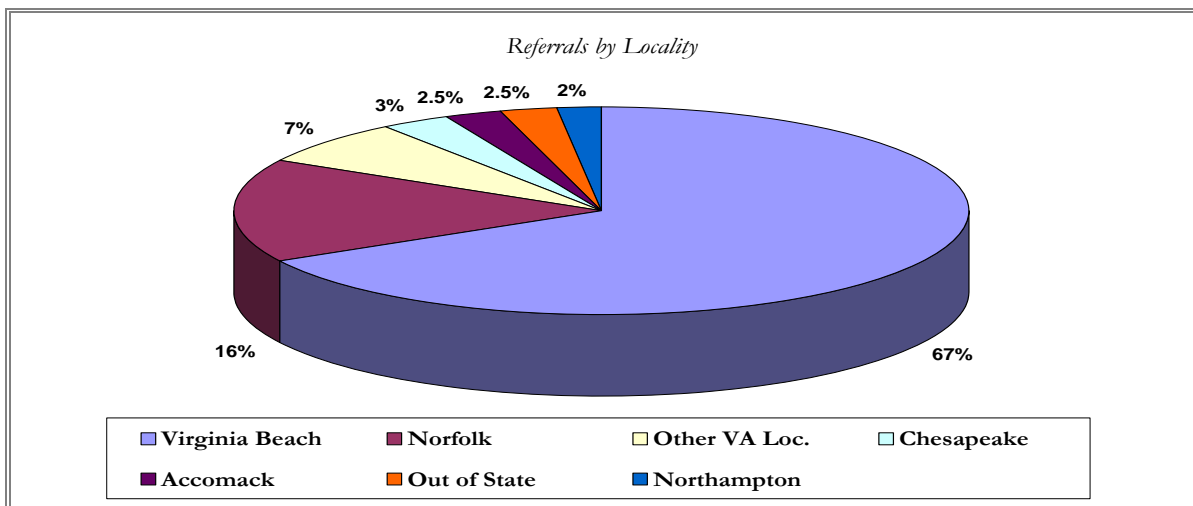
Referral Type

Approximately 84% of all offenders were referred for Standard VASAP services as the result of a DUI conviction. Twelve and a half percent (12.5%) of the offenders were referred for Abuse and Lose services while approximately 3.5% were referred for Young Offender.

REFERRAL TYPE	VIRGINIA BEACH	EASTERN SHORE
Standard VASAP	84.3%	78.8%
Abuse and Lose	12.2%	18.1%
Young Offender	3.5%	3.1%
Total	100%	100%

Referring Locality

Approximately 2/3rds (67%) of all offenders were referred from Virginia Beach while 16% were referred from Norfolk. The remainder of referrals came from Chesapeake (3%), Accomack County (2.5%), Northampton County (2%), other Virginia localities (7%), or from out of state (2.5%).



Transfers

Ten and a half (10.5%) of the 3,046 cases analyzed were transferred out to another ASAP for case management as follows:

RECEIVING ASAP	CASES
Southeastern ASAP	4%
Peninsula ASAP	3%
Another ASAP	2%
Out of State	1.5%

In addition, 10% of all cases originated in another program and were transferred in for management by CBASAP staff as follows:

ORIGINATING ASAP	CASES
Southeastern ASAP	4%
Peninsula ASAP	3%
Another ASAP	2.5%
Out of State	0.5%

BAC

For offenders who submitted to an alcohol test, the average BAC was .144 percent while the most common BAC was .13 percent. BAC results ranged from .01 to .33 percent.

BAC	VIRGINIA BEACH	EASTERN SHORE
Mean (average)	.143	.158
Mode (most common)	.14	.13
Median (middle)	.14	.16
Range	.01 to .33	.07 to .30

OFFENDER CHARACTERISTICS

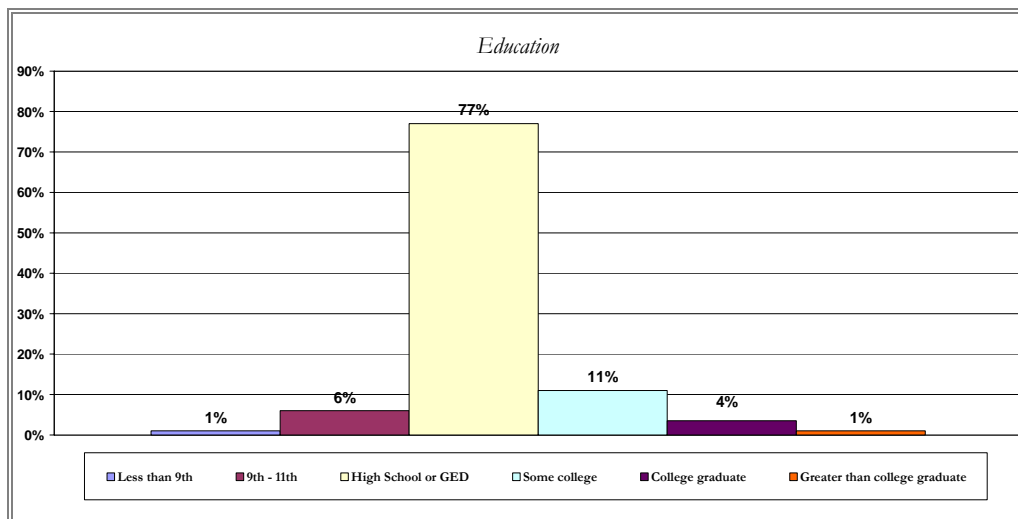
Sex, Race/Ethnicity, Age

Men constituted 82% of the population. The racial distribution of offenders was as follows: 72% were white, 21% were black, 4% were hispanic and 3% were of another race/ethnicity. The age of offenders ranged from 17 to 72 years old, with the average age being 32 years old.

	VIRGINIA BEACH	EASTERN SHORE
Sex		
Male	81.5%	86%
Female	18.5%	14%
Race		
White	72%	65%
Black	21%	24%
Hispanic	3%	11%
Other	4%	0%
Age		
Range	17 to 72	18 to 72
Average	31.7	35.5

Education

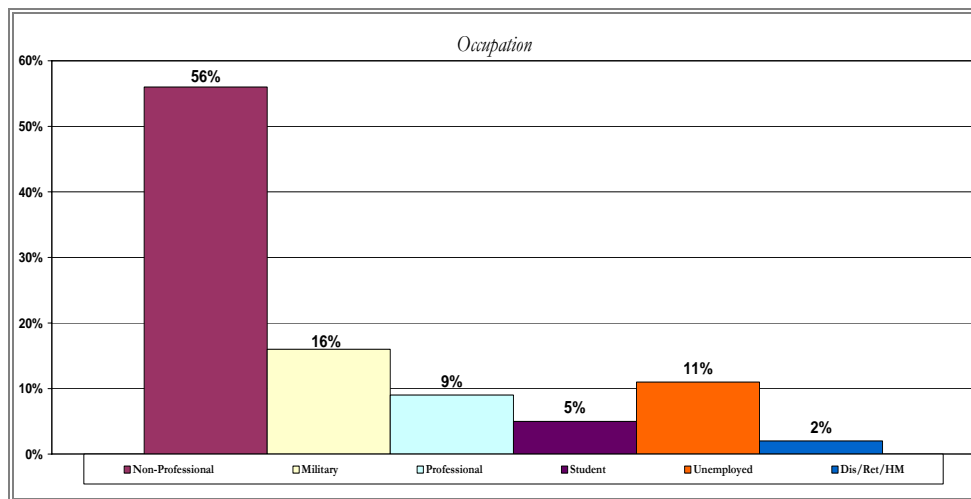
Approximately 3/4ths of all program participants had a high school diploma or GED. Seven (7%) of the offenders had less than a high school education while 4.5% had at least a college degree.



EDUCATION	VIRGINIA BEACH	EASTERN SHORE
Less than 9 th Grade	1%	10%
9 th – 11 th Grade	5.5%	26%
High School of GED	79%	40%
Some College	10%	16%
College Graduate	3.5%	4%
Greater than College Graduate	1%	4%

Occupation

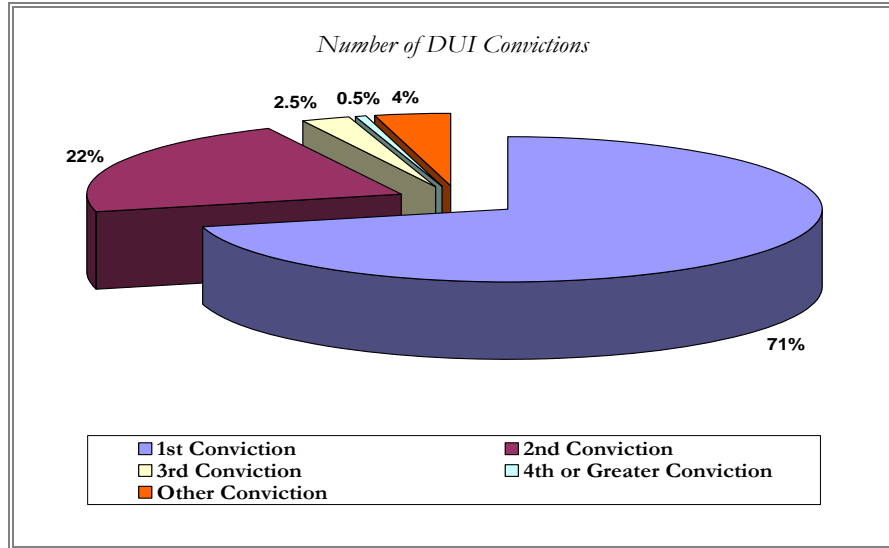
Of the offenders referred, 86.5% reported being gainfully employed at the time of intake. Sixteen percent of all offenders were employed by the military, 5% were students, and 2% were disable, retired, or homemakers.



OCCUPATION	VIRGINIA BEACH	EASTERN SHORE
Non-Professional	56%	65%
Military	17%	1%
Professional	9%	5%
Student	5%	8%
Unemployed	11%	16%
Retired/Disabled/Homemaker	2%	5%

Number of DUI Convictions

The current DUI conviction was the first for 71% of all offenders referred for Standard VASAP. For 22% of offenders the current DUI conviction was their second. Nearly three percent of offenders were referred for a 3rd or greater DUI conviction. Of the offenders referred to CBASAP for Standard VASAP, 4% were convicted of a charge other than DUI (i.e., reckless driving) for the current referral.

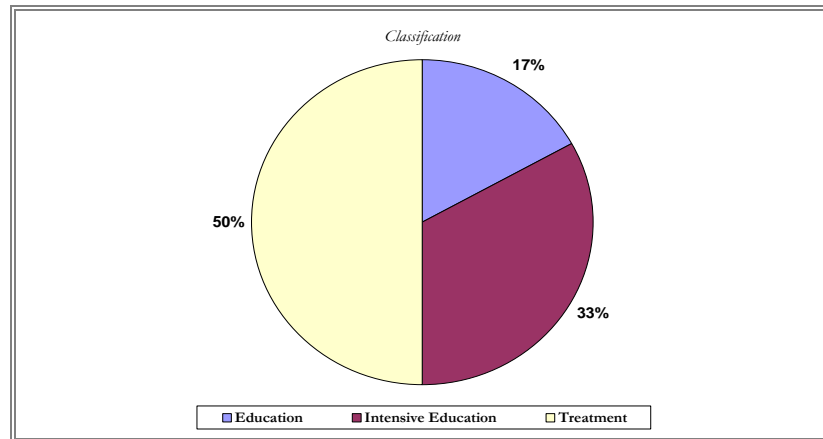


NUMBER OF DUI CONVICTIONS	VIRGINIA BEACH	EASTERN SHORE
Convicted of other than DUI	4.5%	4%
1 st Conviction	71.5%	57%
2 nd Conviction	22%	26%
3 rd Conviction	2%	10%
4 th or Greater Conviction	<1%	3%

OFFENDER AND PROGRAM PERFORMANCE

Classification

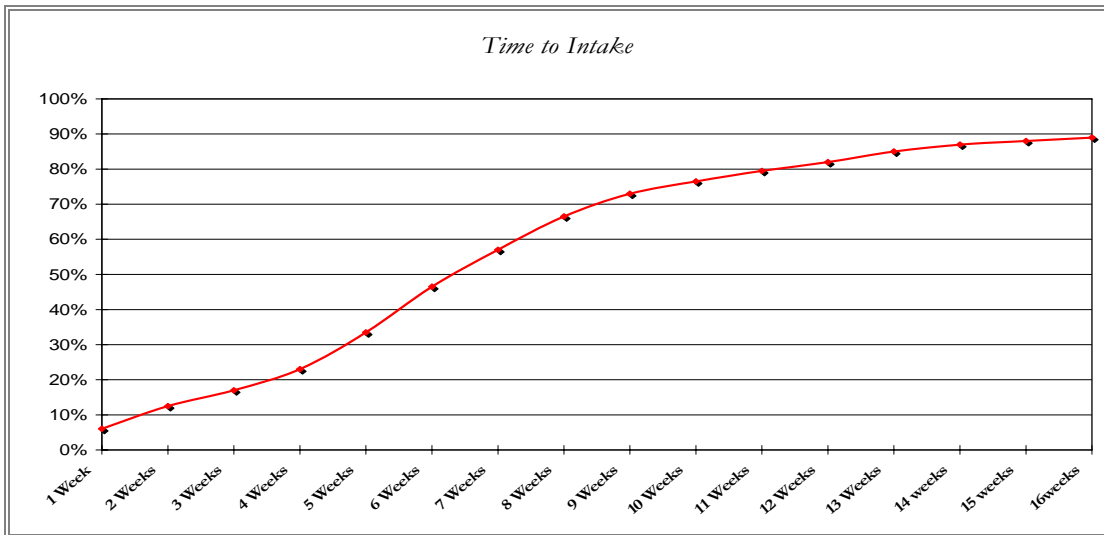
Offenders were classified into three levels of primary intervention service (Education, Intensive Education, and Treatment) as shown in the chart below.



CLASSIFICATION	VIRGINIA BEACH	EASTERN SHORE
Education	17%	7%
Intensive Education	33%	31%
Treatment	50%	62%

Referral and Intake

The time line that follows shows the amount of time that elapsed between court referral and ASAP intake. Six percent (6%) of all offenders had intakes completed within one week of court referral or program transfer. In addition, 23% of all intakes were completed within one month from the time the court referred the case to CBASAP. Sixty-six and a half percent (66.5%) of all referrals were seen for intake within two months while 82% of all offenders had an intake completed within three months of court referral.



TIME BETWEEN REFERRAL AND INTAKE	VIRGINIA BEACH % COMPLETED	EASTERN SHORE % COMPLETED
1 Week	6%	10%
2 Weeks	12%	28%
3 Weeks	16%	44%
4 Weeks	21%	58%
5 Weeks	32%	66%
6 Weeks	45%	74%
7 Weeks	56%	80%
8 Weeks	66%	84%
9 Weeks	72%	89%
10 Weeks	76%	92%
11 Weeks	79%	93%
12 Weeks	81%	93%
13 Weeks	84%	93%
14 Weeks	86%	93%
15 Weeks	88%	93%
16 Weeks	89%	94%

Case Management

An average of 9.5 program staff members provided case management services to the 3,046 offenders supervised in 2002. The case managers conducted intakes for an average of 321 offender cases.

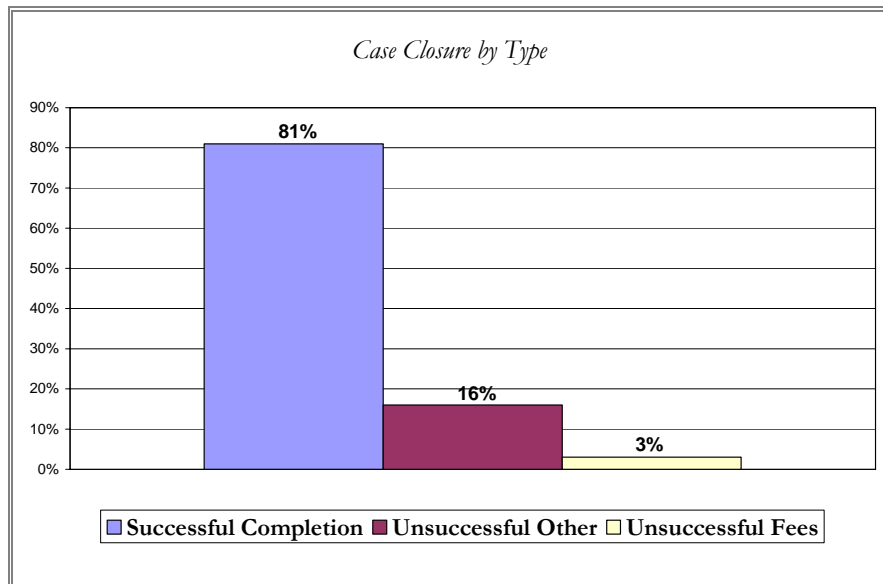
Intake and Intervention Closure

As of the writing of this report, only 2.5% of all offenders referred in 2002 remain active or the closure type is unknown; therefore, their cases have not been closed. The table below demonstrates the time elapsed between intake and case closure (successful or unsuccessful completion of the primary intervention service). It should be noted that cases closed successfully continue to be monitored for the duration of the license restriction.

TIME	COMBINED PERCENT CLOSED	VIRGINIA BEACH PERCENT CLOSED	EASTERN SHORE PERCENT CLOSED
6 months	18.5%	19%	14%
1 year	72%	73%	46.5%
1.5 years	82.5%	83%	72%
2 years	87%	87%	83%
2.5 years	90%	90%	88.5%
3 years	97%	97%	92%

Case Outcome

Ninety-seven and a half percent (97.5%) of all cases were closed by November 30, 2006. Of those closed cases, 81% were closed successfully, 3% were closed unsuccessfully due to failure to pay fees only, and 16% were closed unsuccessfully for other reasons.



CASE CLOSURE TYPE	VIRGINIA BEACH	EASTERN SHORE
Successful	81.5%	69%
Unsuccessful	15.5%	28.5%
Unsuccessful Fees Only	3%	2.5%

In addition, offenders referred for Standard VASAP had an 82.5% success rate, Abuse and Lose a 69% success rate and Young Offender an 87% success rate.

SERVICE TYPE	VIRGINIA BEACH	EASTERN SHORE
Standard VASAP	83%	71%
Abuse and Lose	70%	59%
Young Offender	87.5%	80%

BIVARIATE STATISTICS

A variety of bivariate statistics including Chi square, t-test and Mann Whitney U were used to identify relationships between variables contained in the first section of this report and the final program outcome (successful or unsuccessful closure). The findings are presented below along with the statistical test utilized, the results, the number of valid cases, and whether or not the difference identified was found to be statistically significant at the $p < .05$ level. It should be noted that the bivariate analysis was completed using data from both Virginia Beach and the Eastern Shore.

Certain interpretations of the information presented should be made with caution. Variables, such as demographic variables, that show a significant difference between groups may be due to another factor related to that variable, and not necessarily indicative of a direct relationship. This phenomenon, known as multicollinearity, is a factor to be considered in research of this nature. For this reason, differences found in demographic variables should be interpreted with caution.

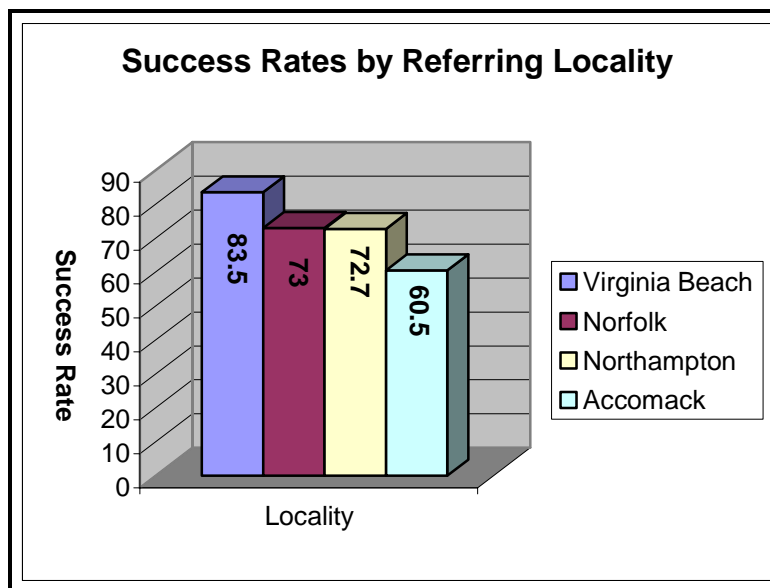
REFERRALS

Referral Type

There was a significant difference in success rates of offenders based on their specific referral type. Offenders referred for Young Offender were the most successful at 87%, followed by Standard VASAP at 82.5% and Abuse and Lose at 69%. Chi-Square $p = .000$ $n = 2918$

Referring Locality

There was a statistically significant difference in success rates between referrals from courts (83.5% Virginia Beach, 73% Norfolk, 72.7% Northampton, and 60.5% Accomack). Chi-Square $p = .000$ $n = 2594$



BAC

There was a significant difference in success rates for offenders based on their BAC level. Offenders who were successful had an average BAC of .143 while offenders who were unsuccessful averaged a BAC of .15. t-test $p=.016$ $n=1704$

Note: It should be noted that prior evaluations did not identify a statistically significant difference in BAC between successful and unsuccessful offenders. It is not clear whether or not the difference identified in 2002 is substantively significant or even the beginning of a trend. Future evaluations should focus on this factor and shed more light as to the true impact, if any, of BAC on program outcome.

OFFENDER CHARACTERISTICS

Sex

Women were 10% more likely to successfully complete the program than were men (89% vs. 79% success rate). This difference was found to be statistically significant. Chi-Square $p=.000$ $n=2918$

Race/Ethnicity

There was a statistically significant difference in success rates between offenders who were white, black, hispanic or another race/ethnicity. Chi-Square $p=.000$ $n=2884$

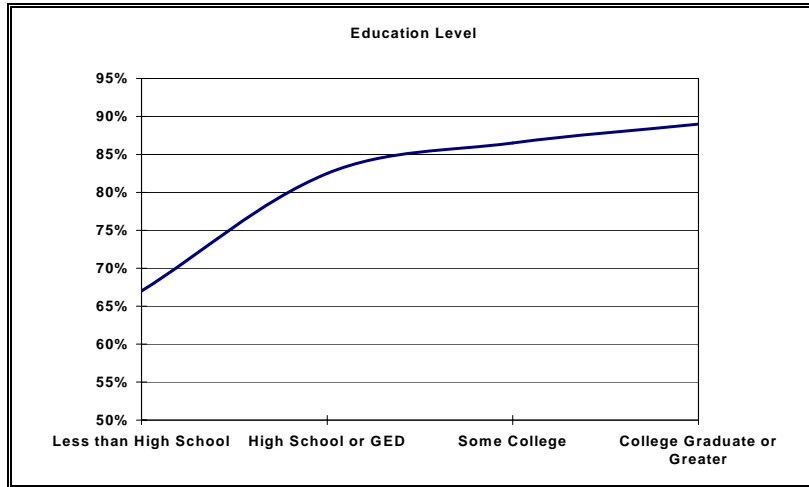
RACE/ETHNICITY	SUCCESSFUL
White	83%
Black	73%
Hispanic	79.5%
Other	84%

Age

Offenders who successfully completed the program were, on average, 2 years older than offenders who unsuccessfully completed the program (32 and 30 years old respectively). This difference was found to be statistically significant but not necessarily substantively significant. t-test $p=.000$ $n=2906$

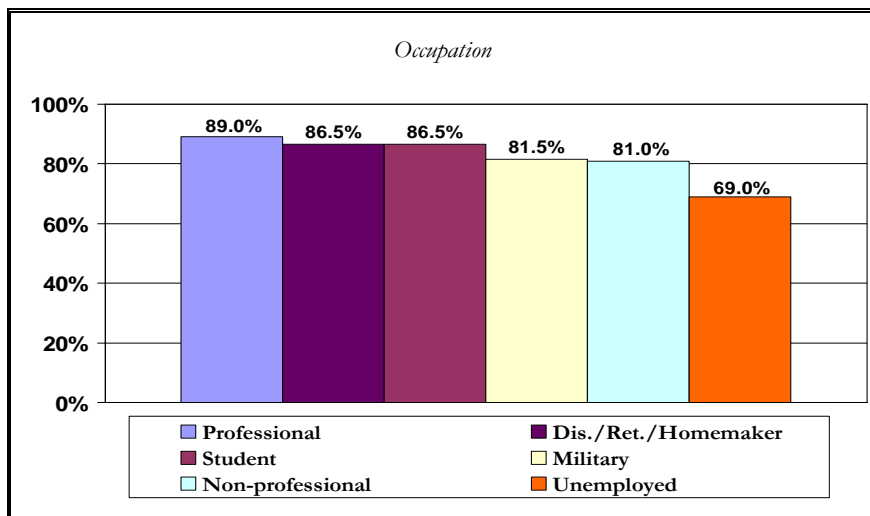
Education

There was a positive relationship between education level and program success rate. The greater the education level, the greater the chance of successful program completion. Mann-Whitney U $p=.000$ $n=2512$



Occupation

Offenders who were unemployed at the time of intake were substantially more likely to fail in the program than offenders who were employed, attending school, or who were disabled. Chi-Square $p=.000$ $n=2918$



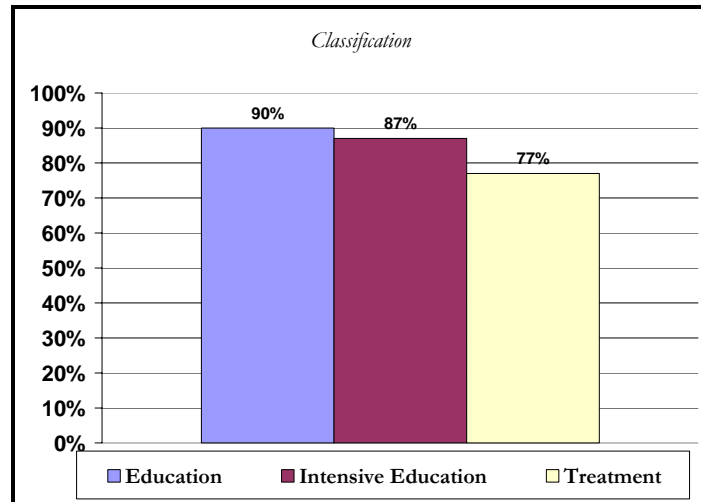
Number of DUI Convictions

There was a negative relationship between the number of DUI convictions and successful program completion rate. The average success rates for offenders were as follows: 84.5% for one DUI conviction, 78% for two DUI convictions, and 68% for three or more DUI convictions. This difference was found to be statistically significant. Mann-Whitney U $p=.000$ $n=2245$

OFFENDER AND PROGRAM PERFORMANCE

Classification

There was a statistically significant difference in success rates based on the classification level determined at intake. The higher the level of classification the less likely an offender was to complete the program successfully. Chi-Square $p=.000$ $n=2649$



Referral and Intake

There was a statistically significant difference in the average number of days between referral and intake between those offenders who successfully and unsuccessfully completed the program. Offenders closed successfully waited an average of 60 days between referral and intake; conversely, unsuccessful offenders waited an average of 75 days between referral and intake. t-test $p=.000$ $n=2799$

Intake and Closure

Offenders who completed the program successfully averaged 379 days between intake and case closure. Offenders who completed the program unsuccessfully averaged 454 days between intake and case closure. This difference was found to be statistically significant. t-test $p=.000$ $n=2891$

MULTIVARIATE STATISTICS

Binary Logistic Regression was used to identify the factors that were related to case outcome (program success or failure) and the relative importance of these factors. This technique identifies whether the factor is a significant predictor of case outcome and the likelihood an offender will fail dependent upon the specified factor. The identification of the variables that are indicators that a person is a high risk to fail is useful when determining appropriate levels of supervision or case management practices. All relevant factors excluding offender demographics found to be related to case outcome were examined, the results are discussed below.

Current DUI Conviction

Offenders referred for a second DUI were one and a half times more likely to be unsuccessful while offenders referred for a third or greater DUI were more than two and a half times more likely to be unsuccessful when compared to offenders referred for a first DUI.

Classification Level

Offenders who were classified for Education services were the most successful. Offenders classified for Intensive Education services were nearly 1.4 times more likely to fail when compared to offenders classified for Education services ($p=.088$). Offenders classified for Treatment services were more than two and a half times more likely to fail when compared to offenders classified for Education services ($p=.088$).

Referral Type

Offenders who were referred to the program for Abuse and Lose were twice as likely to fail when compared to offenders referred for Standard VASAP.

Length of Time to Intake

The length of time between court referral and an intake completion was a statistically significant predictor of case outcome. The longer the period of time between referral and intake the less likely an offender was to complete successfully.

Unemployment

Offenders who were unemployed were twice as likely to be unsuccessful when compared to those who were either employed, a student, retired, disabled, or a homemaker.

Summary

There were five primary factors related to case outcome. The strongest predictors of failure on the program were the number of DUI convictions, a classification for Treatment services, a referral type of Abuse and Lose, and a status of unemployed. The length of time between referral and intake was also found to be related to failure in the program. It should be noted that when these factors are taken into consideration the factor of race is not a statistically significant predictor of program success. Conversely, even after considering the five factors above – women are still nearly twice as likely to complete the program successfully when compared to men. Finally, after consideration of the 5 best predictors of pretrial outcome, offenders in the Eastern Shore office were over twice as likely to be unsuccessful when compared to offenders supervised in the Virginia Beach office.

SUMMARY AND DISCUSSION

In 2002 there were 3,046 offenders referred to CBASAP with a completed intake for Standard VASAP, Abuse and Lose, and Young Offender services. Referrals were received primarily from Norfolk and Virginia Beach courts but were also received from Accomack, Northampton, other ASAP programs through transfer or from out of state.

As of the writing of this report, 97.5% of all cases were closed. Based on the closed cases, offenders referred to CBASAP had an overall successful completion rate of 81%. Offenders receiving Standard VASAP services were substantially more successful in completing the program when compared to offenders receiving Abuse and Lose services. This variation in success rates may be generally related to whether or not the underlying arrest for the referral was drug or alcohol related.

Offenders at the greatest risk of failure were those who were referred due to a second or greater DUI conviction, offenders referred for Abuse and Lose services, offenders who were classified for Treatment services, and offenders who were unemployed. Although these factors cannot be changed, the identification of offenders who are at high-risk of program failure can be beneficial. In an attempt to increase success rates, high-risk offenders may be targeted for closer supervision while in the program and may receive additional support and interventions to mitigate the risk. In 2005 a new case management approach was implemented to target these offenders. The results of the new case management practices can be evaluated beginning with cases referred in the 2nd half of 2005.

Virginia Beach (VB) and Eastern Shore (ES) Offices

Significant differences were found between the two offices. The ES office referrals constituted 79% Standard VASAP and 18% Abuse and Lose while the VB office referrals constituted 84% Standard VASAP and 12% Abuse and Lose. The average BAC was higher at the Eastern Shore (.158% v. .143%). The offenders referred to the ES office were more likely to be male (86% v. 81.5%) and Hispanic (11% v. 3%). Thirty-six percent of all offenders at the ES office had less than a 12th grade education compared to 6.5% at the VB office. Offenders at the ES office were 5% more likely to be unemployed compared to offenders at the VB office.

Seventy-one percent of the offenders in the VB office were referred for a first DUI compared to only 57% at the ES office. Offenders in the Eastern Shore were 12% more likely to be classified into treatment (62% ES v. 50% VB). Intakes are completed in less time in the ES office. 58% of offenders had an intake completed at the ES office within 4 weeks compared to 21% in the VB office.

2002 Evaluation Compared to the 2000 and 2001 Evaluation

Offenders in 2002 had a 2% higher success rate when compared to 2001 & 2002 offenders (81% v. 79%). Offenders participating in Abuse and Lose had a 5% higher success rate in 2002 (69% v. 64%). While success rates for offenders whose race was white remained constant at 83%, offenders whose race was black demonstrated an increase in success rate of 6% (67% in 2000/01 v. 73% in 2002). The success rates for Education services were constant across the years at 90%. Offenders classified as Intensive Education had a 4% higher success rate and offenders classified as Treatment had a 3% higher success rate in 2002 compared to 2000/01. Program performance has continued to improve since the first evaluation done for the years 1996-1998 with gradual and marked improvements in all primary outcome measures.