



San Francisco Department of Human Services
County Adult Assistance Programs
Personal Assisted Employment Services Program

**Profile of PAES Recipients
and
Factors That Influence PAES Outcomes**
Analysis of PAES Recipients Enrolled Jan 99 - Jun 00

Presented to

Dorothy Enisman, Program Director
County Adult Assistance Programs – Department of Human Services

Barbara A. Garcia, MPA, Deputy Director of Health
Community Programs – Department of Public Health

January 31, 2003

Presented by the

PAES Analysis Team

Randy Reiter, Ph.D., MPH, Department of Public Health
Maria X. Martinez, Department of Public Health
Thomas Neill, Ph.D., Department of Human Services
Carol Chapman, M.A., Department of Public Health
Saumitra Sengupta, Ph.D., Department of Public Health

PAES Analysis Team

Randy Reiter, Ph.D., MPH

Senior Health Planner and Epidemiologist, Population Health Assessment
San Francisco Department of Public Health

Maria X. Martinez

Deputy Director, Community Programs
San Francisco Department of Public Health

Thomas Neill, Ph.D.

Manager of Behavioral Health Services, County Adult Assistance Program
San Francisco Department of Human Services

Carol Chapman, M.A.

Program Analyst, Community Substance Abuse Services
San Francisco Department of Public Health

Saumitra Sengupta, Ph.D.

Research Psychologist, Community Mental Health Services
San Francisco Department of Public Health

With assistance from:

Po Yee Lindahl

PAES Program Analyst
San Francisco Department of Public Health

Ann S. Santos

Epidemiologist I, Community Substance Abuse Services
San Francisco Department of Public Health

Annette Goldman-Mosqueda

Consultant (Focus Groups)

Dan Najjar

Consultant (Programmer Analyst)

Appendix 1 – Methodology
~
Psycho-Social Disability Index

Purpose

To assess the joint effects of problems facing PAES recipients, the Team constructed an index combining the three available factors of greatest concern: mental health disorders, substance abuse, and homelessness. The Team used the measures available that best captured severity, as shown below.

Construction of Scale

1. Mental Health

This component came from the Global Assessment of Functioning (GAF) score for the last CMHS episode. The GAF is a rating scale used by trained mental health clinicians to indicate a client's general level of functioning. The GAF is widely used in clinical practice as well as in many research studies. The GAF is described in DSM IV, the standard psychiatric diagnostic manual, and is included as AXIS V in psychiatric diagnosis. Scores range from 1 to 100, which represent the hypothetically lowest functioning person to the hypothetically highest functioning person. Scale 0 indicates that the clinician had inadequate information with which to rate the client. PAES participants without known mental health treatment histories were also given a 0 score.

For the purpose of this study, the Team classified the GAF scores into five levels of impairment as follows:

GAF Score	Impairment Level Assigned
1-20	4 = Severe Impairment
21-40.....	3 = Major Impairment
41-60.....	2 = Moderate Impairment
61-80.....	1 = Mild Impairment
81-100.....	0 = None or Minimal Impairment
None	0 = unknown

2. Substances

The Team determined that the number of substances was associated with rate of participants getting a job. Thus the Disability Index substance component is based on the number of substances (alcohol or drugs) identified as problems for the participant in the CSAS or CMHS records. Participants were scored 0 (for no substance), 1 (for 1 substance), 2 (for 2 substances), or 3 (for 3 or more substances). PAES participants without known substance abuse histories were given a 0 score. (See Appendix 2, Page 7 for data source.)

3. Housing

This component is based upon last known living situation identified in the DHS record. Participants were scored either 0 points (not homeless) or 3 points (homeless). Those participants who entered homeless, but then received a housing subsidy were assigned 0 points. (See Appendix 2, Page 3 for data source.)

Appendix 1 – Psycho-Social Disability Index

Scoring of Components of the Psycho-Social Disability Index

Component 1 – Mental Health		Component 2 - Substances		Component 3 - Housing	
If GAF Impairment Level equaled:	Then, Disability Points were scored as:	If # of Substances Noted equaled:	Then, Disability Points were scored as:	If Housing Status equaled:	Then, Disability Points were scored as:
Unknown	0	Unknown	0	~	~
None or Minimal	0	No drugs	0	Housed	0
Mild	1	1	1	~	~
Moderate	2	2	2	~	~
Major	3	3+	3	Homeless	3
Severe	4	~	~	~	~

Each individual received a total score. Scores were classified into four disability levels as follows:

Psycho-Social Disability Index	
Combined Disability Points Scored	Disability Level Assigned
0	No Known Psycho-Social Disability
1-3	Minimal
4-6	Moderate
7-10	Severe

Note that to be classified as severe, an individual would have to have highest disability scores for substance abuse and mental health, or be homeless and either severely mentally ill or dually diagnosed.

Appendix 2 – Methodology
~
Data

Cohort and Time Frame

The PAES Analysis Cohort included participants who were enrolled with and began seeing a PAES Employment Specialist during the 18-month period from January 1999 through June 2000. There were 2,930 participants in the cohort. Data collection on the PAES status of this cohort extended for another 6 months to include the 24-month period from January 1999 through December 2000. Participants who became inactive or ineligible during this period were kept in the cohort, retaining their last recorded PAES status up through December 2000.

Overview of Data Sources

Department of Human Services Client Data System (CDS)

Core PAES participant data came from the CDS. The CDS is designed to record the current status of PAES benefits, so status and eligibility codes are overwritten as changes occur. To follow status of clients over time, the Team used monthly CDS archives. Each participant's records were linked across the months from their entry in the cohort through December 2000 to provide a chronology of monthly status.

Department of Public Health Billing and Information Systems (BIS)

DPH has two independent behavioral health data systems: one for providers of Community Mental Health Services (CMHS) and the other for providers of Community Substance Abuse Services (CSAS). A PAES participant may have records in one, both, or neither system. Both BIS databases contain client/patient demographics and episode/services records. Although the BIS databases were designed for billing, not clinical, program planning, or evaluation purposes, they still contained enough information to determine each PAES participant's diagnostic and treatment history, if any existed during the nine and one-half year period July 1991 through December 2000.

Dental and Optical Services

Some PAES clients received DHS-subsidized dental screening and treatment. The dental treatment data, maintained by the dentist under contract, were available on an Excel spreadsheet and were merged with the CDS/BIS data by name and social security number. Only clients who received treatment were counted. Data regarding those participants who received optical benefits through the PAES program were not available.

CAAP Demographic Data

Comparative CAAP demographic data was taken from the DHS website for June 2000. Per DHS administrative request, data excludes CALM and includes GA, PAES and SSIP clients.

Census Data

Population comparisons with San Francisco are based on the 2000 census.

Data - Demographic and PAES Data in CDS

The Client Data System (CDS) was designed to hold information to document benefits eligibility, not track employment development over time. Every change of status entry overwrites the previous entry to give most current eligibility/benefit status; thus no continuous record was available. To overcome this limitation, the archived snapshot data files that existed for each month were used. Monthly “snapshots” of the CDS data for the 24-month period January 1999 through December 2000 were obtained from DHS.

CDS – Demographic and PAES Data

The following characteristics were obtained from CDS and were limited to those fields:

1. Sex
2. Race/Ethnicity
3. Preferred Language
4. Age
5. Housing Status
6. Part-time Employment
7. Length of Stay in PAES
8. Status in the Program

Note: Sexual orientation data were available in the DPH systems but not in the DHS system, thus it could be retrieved for only half the cohort. Transgender information was also not available.

CDS – Housing Status

Housing status, which included the categories of “not homeless,” “homelessness” and “receiving a housing subsidy,” was determined on the basis of the code in the CDS file as of December 2000. Homeless persons were defined as those whose last known housing status (i.e., in December 2000) was “homeless”. In addition, when studying homeless persons as a subset of the whole cohort, those “receiving a housing subsidy” were included since these were persons who had been homeless earlier during the period of study of the cohort.

CDS – Part-time Employment

Current employment was known from data fields noting whether or not the individual was receiving wages concurrently with their enrollment in PAES. Any wages in any month that was less than the income standard was classified as “part-time employment.”

CDS – Status in the Program

Each participant’s status in PAES was determined monthly from several CDS data fields: the aid code, the PEC Code, the Worker Number, the special Character Box B, and the “negative action code” and whether the participant was in the active or inactive CDS file. “Negative action codes” were categorized as favorable, neutral, or unfavorable as shown on Page 5.

CDS – Length of Stay in PAES

“Number of months of time in PAES” was derived by counting the months the participant had an active status. The first month of PAES cohort history for each participant was defined as “the first month the participant was seen by a PAES Employment Specialist.” Previous months, when the participant may have been engaged in appraisal activities were excluded from the participant’s progress picture. Once participants entered into the cohort, their status continued to appear in the PAES monthly snapshots through December 2000 (even after their cases were closed). However, once they no longer received benefits for whatever reason (e.g., reached income standard,

transferred, or was sanctioned), subsequent months were no longer counted as “in PAES” unless their status changed and they reappeared as receiving benefits.

CDS – Determining Outcomes

A participant’s “Monthly PAES Status” was determined in several ways:

1. Clients who left the program were coded as status X1, X2, or X3 (favorable, unfavorable, or neutral). Whether the dropping out was favorable, unfavorable, or neutral was determined on the basis of the CDS Negative Action Code associated with the first month of dropping out. Clients who had transferred to another CAAP program were shown to have an “AID” code reflecting that program (a CAAP coding manual was used to identify the other programs by AID code). Clients initially open in that other program may have eventually become closed without necessarily returning to PAES – that is, they could have dropped out of the other program eventually as well.
2. Participants “Still in PAES” were those who were still assigned to a PAES employment specialist and had not yet reached the DHS income standard. Clients at the stages A1-A3, B, C, D, E1-E2, F, G, or I were considered “Still in PAES”. Stages A1 through D reflect participants who had reached an Employment Specialist, dropped out of PAES, and returned but were still in the appraisal period.
3. For clients who had ambiguous status as of December 2000, the most recent unambiguous coding was used where possible. Ambiguous coding typically resulted when a status change was in progress, but not completed, at the time the CDS data snapshot was taken; hence the combination of coded CDS data fields alluded to above did not make sense.

CDS – Determining Outcomes continued

Categorization of Negative Action Codes by Type of Outcome		
Category	Code #	DHS Negative Action Code Description
Favorable	14	eligible for CalWORKs
	19	receipt of other public assistance
	20	uib/dib or other unearned income over limit
	21	on ssi/ssp exceeds grant
	22	contribution over limit
	26	value of nonexempt personal property too great
Neutral	1	death
	2	moved out of city and county
	3	client's request
	4	institutionalized
	6	transportation out of sf
	15	ineligible student
	50	client's request for expedited program change
Unfavorable NonCompliance	7	other does not meet eligibility requirements and/or refuses to comply
	10	whereabouts unknown/returned mail
	11	has not/cannot establish residence
	12	lacks permanent identification
	13	returned unclaimed warrants
	16	failed to report essential facts
	17	failure to keep reinvestigation appointment
	24	failed to keep employability appointment
	27	failed homeless appt
	28	residence unsubstantiated after cash grant
	30	failed to meet J/S requirement per J/S unit
	33	failed to attend scheduled evaluation session
	37	failure to conduct adequate job search
	40	failed group employment session
	41	failure to carry out treatment plan
	46	failure to report to scheduled work assignment
51	failed paes employment plan	
52	failed paes conciliation plan	
Unfavorable Fraud	47	fleeing felon
	67	30 day sanction fraud/fleeing felon
	70	30 day sanction fraud/cashed check after claiming non-receipt
	71	30 day sanction unreported income
	73	30 day sanction/IEVS report
	75	30 day sanction fraud/false documentation on residency
	77	30 day sanction failed to report all facts necessary for a correct determination
	78	30 day sanction fraud/other
	81	120 days sanction fraud/unreported income
	90	150 day sanction fraud/cashed check after claiming non-receipt
	5	quit job without good cause
	31	refused employment without good cause
	55	lost job
	132	failed to attend scheduled orientation session
900	denial and disc.	

Data – Matching DHS and DPH Data

CDS enabled a cross-match to DPH’s two Business Information System (BIS) databases that track behavioral health treatment: one for providers of Community Mental Health Services (CMHS) and the other for providers of Community Substance Abuse Services (CSAS).

The 2,930 participants in the cohort were cross-matched with clients in the CMHS and CSAS BIS (during the 9 and a one-half years period, July 1, 1991 through December 31, 2000) on the basis of five data fields: first name, last name, date of birth, Social Security Number, and gender. CDS indicated alternative first and last names, so matching against DPH data was performed with all possible names. No specialized matching software was utilized. Partial matches (in which some but not all five data fields matched) had to be manually reviewed for acceptance or rejection.

Matching with CDS was conducted separately for each BIS system, that is, between CDS-CMHS and CDS-CSAS. Matches yielded the client’s BIS Identification Number, which then enabled the call up of all related records. Because client registration data are shared between the two BIS databases, usually individuals had the same BIS number in both systems and finding one BIS identifier sufficed for both systems. BIS numbers could vary if an individual used an alias at any point in either system so ultimately all possible matches were established, all possible links identified.

Data – Behavioral Health History Data in BIS

The CMHS system contains mental health diagnostic codes and Global Assessment of Functioning scores (GAF) based on the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM IIIR or IV). The CSAS BIS contains only those DSM codes that apply to substance abuse. Client demographics fields differ slightly in the two databases because they were designed to respond to different state regulatory bodies with varying requirements.

The following set of characteristics were chosen by the Team based on available data fields and abstracted from the two BIS systems:

1. Types of disorders (Mental Health, Substance Abuse or both)
2. Types of Mental Health diagnoses
3. Types and number of substances abused
4. Modalities of treatment received
5. Number of treatment episodes
6. Intensity of treatment

BIS – Time Periods

The following naming conventions were established relating to time of DPH behavioral health treatment history (that is, treatment was received or diagnoses were assigned):

#	Historical Convention	Refers to Time Period
1	“Any” – “Ever”	Between 7-1-91 and 12-31-00 (9 1/2 years) This was chosen because 7-1-91 was the oldest episode opening date for which <u>both</u> CMHS and CSAS episode data were available.
2	“Recent”	Between one year <u>prior</u> to entry to PAES and 12-31-00
3	“Concurrent”	Between entry to PAES and 12-31-00
4	“Most Recent” – “Last”	Last known between 7-1-91 and 12-31-00

BIS – Types of Behavioral Health Disorders

Participants were classified as having mental health and/or substance abuse disorders based first on their presence or absence in the separate CMHS and CSAS databases and, secondly, on the presence or absence of a substance abuse DSM code in the primary/secondary diagnosis fields of the treatment episode – at any time during the period July 1991 through December 2000. The types of behavioral health disorder were designated as follows:

1. “Mental Health Only” – the participant appeared in the CMHS database, but not in the CSAS database and the CMHS file did not list a diagnostic code for a substance abuse disorder. (Diagnosis fields in CMHS permit both mental health and substance abuse codes.)
2. “Substance Abuse Only” – the participant appeared in the CSAS database, but not in the CMHS. (Fields in CSAS permit only substance abuse codes.)
3. “Dual Disordered” or “Both” – the participant appeared in both CMHS and CSAS systems and/or the participant’s CMHS record included both mental health and substance abuse-related diagnoses

BIS – Types of Mental Health Disorders

Mental health disorders were taken from the fields Primary Diagnosis field from the most recently opened CMHS episode during the period July 1991 through December 2000. (Codes from DSM-IIIR or DSM-IV depending on the year of the episode.) Diagnoses were categorized into schizophrenic / psychotic, mood disorder, anxiety disorder, adjustment disorder, or other (see Appendix 8). Each participant was associated with only one diagnostic category.

BIS – Severity of Mental Health Problem – GAF

This component came from the Global Assessment of Functioning (GAF) score for the last CMHS episode. The GAF is a rating scale used by trained mental health clinicians to indicate a client’s general level of functioning. The GAF is widely used in clinical practice as well as in many research studies. The GAF is described in DSM IV, the standard psychiatric diagnostic manual, and is included as AXIS V in psychiatric diagnosis. Scores range from 1 to 100, which represent the hypothetically lowest functioning person to the hypothetically highest functioning person. Scale 0 indicates that the clinician had inadequate information with which to rate the client. PAES participants without known mental health treatment histories were also given a 0 score.

BIS – Types of Problem Substances

Types of substance abuse problems were taken and totaled from either the CSAS or CMHS database over the period July 1991 through December 2000. In substance abuse, the fields used were “Substance Problems at Admission: Primary, Secondary, and Tertiary.” In mental health, the information was taken from the fields “primary or secondary diagnoses.” In CMHS the substances could be identified only if the DSM diagnosis was clearly substance-specific. Specific substance categories used were: alcohol, heroin, cocaine, amphetamine, and marijuana (See Appendix 9).

BIS – Number of Problem Substances

For number of substances abused, the participant was assigned a code equal to the number of problem substances he/she had been diagnosed with since 1991 in either the CSAS or CMHS database.

BIS – Number of Treatment Episodes

An episode is defined by DPH and determined by markers in the BIS data systems to delineate the period of time between when the client enters treatment with a presenting problem and is discharged (with resolution or when the client drops out). A treatment episode can be as short as one visit and as long as years of ongoing treatment; however when the client changes modalities, a new BIS episode is opened. The “Total Number of Episodes”, regardless of modality or length of the episode, was counted over the period July 1991 through December 2000.

BIS – Intensity of Behavioral Health Treatment

It did not prove to be possible to rank order treatment by intensity. The possible proxies for intensity were total number of services received, or treatment modality of the services. Clinical staff could not rank the modalities utilized by the PAES cohort along a continuum. Total number of services also could not be meaningfully rank-ordered, since this involved calculating numbers of services across treatment modalities. For example, is a person’s 3-day stay in a detoxification unit sick from drug withdrawal more or less intense than a 3-month episode of weekly outpatient counseling? Still, a review of modalities was conducted.

1. In substance abuse, treatment modality histories were pulled from the CSAS database and participants were categorized in a modality if they had “ever” accessed that modality and by the “most recent” CSAS treatment episode. This “last” episode could have occurred at any time between 7-1-91 and 12-31-00. In both cases, the participant is categorized into only one modality.
2. In mental health, treatment modality histories were pulled from the CMHS database between 7-1-91 and 12-31-00. Participants were counted in each modality they had “ever” accessed (as opposed to categorizing the participant into one modality, e.g., by the last or most severe episode). Thus a participant could fall into more than one modality category.

Limitations to Data Elements and Data Collection

The analysis was limited to data available in the three data systems, and from the onset it was known there were reporting flaws:

1. Under-reporting of number of PAES clients with behavioral health problems
Substance abuse and/or mental health treatment histories were tracked only for PAES participants who sought help from San Francisco’s Department of Public Health, and only under their real name. For participants with behavioral health issues who may have recently moved to San Francisco or received treatment from non-DPH providers, we had no records of their substance abuse or mental health diagnoses or treatment. Using an alias is permissible in DPH programs as it is a tenet of public healthcare to treat health disorders early regardless of citizenship or criminal background, two of the most frequent reasons for using aliases. If a PAES participant used a complete alias when seeking help from DPH (name, DOB, and SSN), their record could not be matched to their record in DHS.
2. Under-reporting of employment / Over-reporting of unfavorable outcomes
Outcome measures were dependent on using information supplied by the participant during the last recorded encounter with DHS. If a participant became employed and left PAES abruptly without disclosing that he or she had found employment, the lack of attendance

would eventually trigger a discontinuance code categorized as “unfavorable outcome for non-compliance” rather than a more appropriate “favorable outcome through employment.”

3. Lack of follow-up data on maintaining employment / Over-reporting of last known status
Duration of employment is one of the outcome variables being studied. However, these data were not available or were of unknown reliability for the majority of PAES recipients. Measuring months of employment is dependent of having accurate codes in the CDS Monthly Status Report. This information could only be received two ways. First through the Retention Services program, a service designed to help participants keep their jobs, but not implemented until 2000, a full year after the startup of PAES. Also, Retention Services are voluntary. Therefore, participants finding full-time employment during 1999 or who chose not to participate in Retention Services were lost to follow-up. Their last known employment status continued in their CDS record, and thus was recorded monthly, even though it was not observed. Hence, it was impossible to know for how many months these earlier participants actually maintained employment. Beginning in 2000, employed participants who received Retention Services were not lost to follow-up, and it became possible to ascertain how many months they remained employed. The second means of follow-up was by spotting enrollment (an active record) in another CAAP division, an event signifying loss of employment.
4. Over-counting of mental health treatment / Under-counting of substance abuse treatment
Services were categorized as mental health or substance abuse services based upon the system in which the service was recorded (CMHS or CSAS BIS). There were 322 clients in the both databases (making them dual disorder), but there were 100 additional clients in the CMHS database with only a substance abuse diagnosis. As regards to the types and frequency of treatment episodes, services rendered to those 100 clients were counted as mental health, not substance abuse.
5. Certain data were not available
Some potential sources of desirable information were not accessible for this analysis. These included PAES case files and several data systems: Invision (the DPH repository for medical histories and current health conditions), Social Security (for wage/benefits history), SF County Assistance (for county benefits history), and California Department of Corrections (CDC) jail/prison records (time kept out of the work force). No reliable employment history or employment readiness data existed in any of the three available data systems, though some such information was noted in PAES' written case files.

Ultimately, lack of staffing resources for the Analysis Team made it impossible to review 2,930 charts or even a significant sampling to quantify the amount of under or over counting in the most of the above categories.

Data Sources for Outcome Measures and Factors That Influence Outcomes

The following table shows outcome measures and factors outlined in the “Recommendations for Ongoing Assessment” section and their data sources (if available). Obtaining information in cells with no source will require enhancement to existing databases or development of new databases. The DHS PAES Chart is available but will require data entry for analysis.

Outcome Measures and Factors That Influence Outcomes and Where They Can Be Found								
#	Outcome Measures	DHS GIS database	DHS CDS database	DHS PAES Case File	DPH MH BIS	DPH SA BIS	DPH LCR	Other Data Sources
1	Employed – Income is Less than DHS Threshold		If known	If known				
2	Employed – Income meets DHS Threshold		If known	If known				
3	Employed – Income meets Livable Wage							
6	Employed – Advancement of Career and/or Income above Livable Wage							
7	Not Employed – Other Income		X	X				
8	Not Employed – Neutrally Discharged			If known				
8	Not Employed – Unfavorably Discharged			If known				
#	Factors That Influence Outcomes	DHS GIS database	DHS CDS database	DHS PAES Case File	DPH MH BIS	DPH SA BIS	DPH LCR	Other Data Sources
1-V	Education/Training History (Pre-PAES)			X				
2-V	Employment History			X				
3-V	Income History			limited				
4-V	Literacy Assessment	CASAS		CASAS				
5-V	Vocational Assessment	PESCO		PESCO				
6-V	Work Readiness (Self-assessment)			X				
7-F	Disability: Learning			X				
8-F	Disability: Mental Health (GAF and type of diagnosis)				X			
9-F	Disability: Physical Health (Presence of chronic disease)			limited			X	
10-F	Disability: Substance Abuse (# and type of problem drugs)			Problem? y/n	X	X		
11-F	Treatment: Mental Health – Current and Historical	X		limited	X			
12-F	Treatment: Physical Health – Current and Historical			limited			X	
13-F	Treatment: Substance Abuse – Current and Historical	X		limited	X	X		
14-C	Domestic Violence and Other Trauma – Current and Historical			X				
15-C	Housing Status – Current and Historical		Last known	X				
16-C	Social Support and Isolation			limited				
17-L	Legal Situation: Current and Historical			X				Jail System
18-P	CAAP History		Last known	X				
19-P	Education/Training while in PAES	X		X				
20-P	Time active in PAES			X				

Categories: P=PAES V=Vocational F=Functional C=Contextual L=Legal

Cox Regression Modeling Variables

Following the sections with descriptive tables is a section regarding the results of the statistical technique Cox Regression Modeling. When dealing with data involving several variables that can contribute to the outcomes observed, multivariate modeling is often used to determine which variables seem to significantly affect the outcomes, while statistically “controlling for” the effects of the other variables.

Outcomes modeled included:

1. Participants who achieved a Favorable Outcome Through Employment
 - a. Those who ever attained
 - b. Those who ever attained and maintained status as of December 2000
2. Participants who were discontinued with an Unfavorable Outcome as of December 2000

Since the Team had time-based data (months in PAES before reaching an outcome), Cox regression was the closest readily available statistical technique to apply to the data. The Team applied this method to the whole cohort, and, to see if certain variables affected the outcomes for PAES recipients with behavioral health and homeless histories, to the following subsets of the cohort:

1. Whole Cohort
2. Participants who were homeless (those classified at the end of the cohort period as being homeless, plus those receiving housing subsidies, who thus had been homeless at some point while in PAES)
3. Participants with only mental health disorders (history of DPH service Jul 91 to Dec 00)
4. Participants with only substance abuse disorders (as above)
5. Participants with both substance abuse and mental health disorders (as above)
6. Participants with no known behavioral health history (as above)

However, these data still violate some of the assumptions required for the technique, so the results presented here should be seen as *suggestive and supplementary* to the results shown in the descriptive tables throughout this report. Ideally the Cox regression results could be used to identify variables to include in a more tailored modeling approach, e.g., a Markov counting approach, which does not depend on the assumptions of the Cox method.

As used here, the Cox regression models regressed the following specified participant characteristics on outcome measures, to show which factors were significantly associated with a greater or lesser likelihood of a favorable or unfavorable outcome:

1) Demographic Characteristics

- a) Age as of Dec 2000 (4 variables): <30, 30-39 (default), 40-49, 50-59, 60+
- b) Race/Ethnicity (5 variables): White (default), Hispanic, Asian, Russian, African-American, Other
- c) Gender (2 variables): Male (default), Female
- d) Housing Status as of Dec 2000 (2 variables):
 - i) Homeless, Other/Housing Subsidy (default) Housing Subsidy,
 - ii) Other (default)

Note: The “Homeless” cohort component analysis included those characterized as homeless and those characterized as receiving housing subsidies as of 12/00.

- e) Part-Time Employed (2 variables):

- i) As of 1st month in PAES
- ii) During some month past 1st month in PAES (and not part-time employed during 1st month in PAES)

2) Behavioral Health Characteristics

- a) Existence of Mental Health Disorder (Concurrent with PAES or pre-PAES since July 1991)
 - i) Diagnosis, primary or secondary
- b) Category of Mental Health Disorder (Most Recent Primary Mental Health Diagnosis, whether concurrent with or pre-PAES)
 - i) Schizophrenic/Psychotic; Mood Disorder; Anxiety Disorder; Adjustment Disorder; other mental health diagnosis
- c) Severity of Mental Health Disorder (Most Recent Primary Mental Health Global Assessment Functioning score)
 - i) Actual GAF score, continuous (100-0 possible range)
 - ii) Fifth of GAF scores, reversed (0-5 possible range)
- d) Existence of Substance Abuse Problem (Concurrent with or pre-PAES, since Jul 1991)
 - i) Primary or secondary in CMHS, and/or
 - ii) Primary, secondary or tertiary problem at admission in CSAS
- e) Number of Substances (Concurrent or pre-PAES since Jul 1991)
 - i) Either as problem at admission in CMHS or as part of problem in CSAS (scored as: single=1, 2 drugs=2, 3+ drugs=3)
- f) Type of Substances
 - i) Alcohol, concurrent or pre-PAES
 - ii) Heroin, concurrent or pre-PAES
 - iii) Cocaine, concurrent or pre-PAES
 - iv) Marijuana, concurrent or pre-PAES
 - v) Amphetamines, concurrent or pre-PAES

3) Psycho-Social Disability Index (Sum of 3 components; possible range 0-10)

- a) Reverse GAF: GAF: 81-100 or blank=0; 61-80=1; 41-60=2; 21-40=3; 1-20=4. GAF reversed so that higher values denote greater disability; and hence higher scores denote greater disability.
- b) # Substances (see above)
- c) Homeless (as of 12/00): no=0; yes=3

4) Treatment and Other Interventions

- a) Number of active months in PAES
- b) Total Concurrent BIS Unique Service Days (CMHS + CSAS)
- c) While Person is in Retention (for modeling retention only)
- d) Number of Months of PAES Vocational Training
- e) Substance Abuse Treatment Modality Intensity (Most Recently Opened Treatment Modality) ranked as: drop-in resource centers=1; outpatient=2; detox=3; residential=4; methadone maintenance=5
- f) Methadone Maintenance Treatment
- g) PAES Dental Treatment
- h) PAES Housing Subsidy (as of Dec 2000)

Appendix 3 – Methodology

~

Focus Groups

Focus Groups

The qualitative component of this study was designed to augment or enhance the analysis of the electronic data files. Focus Groups enabled the Team to explore the subjective experience of participants (and of those who work with them) to provide context for the quantitative analysis.

Members

Focus Group members were recruited and asked to identify the personal strengths of participants, barriers to employment, and interventions that they believed would lead participants to more successful transitions to self-sufficiency. In all, 79 individuals participated:

- PAES Employment Specialists (n=32),
- PAES Counseling Service Clinicians (n= 8),
- Vocational Assessors and Job Placement Specialists (n=2)
- Community treatment providers (mental health n=4, substance abuse n=9)
- Community vocational training programs (n= 7)
- Client Advocates (n=8)
- PAES Clients (n=9)

A total of twelve focus groups were held:

- Seven were comprised of PAES program staff including employment specialists, vocational trainers, vocational assessors and job placement specialists. Each of these staff is an employee of the Department of Human Services. The Evaluation Team added PAES Counseling Service clinicians to these focus groups because they work closely with DHS staff and it was hoped that the grouping would encourage diversity of opinion, serve as a means to facilitate networking and enable staff in different roles to better understand the work of their colleagues in the PAES Program. Managers and supervisors were excluded from the focus groups to ensure that the input was from staff that had direct contact with the participants and to promote uncensored sharing. These groups included a mixture of men and women, of culturally diverse backgrounds and job experiences. Some of the members had also been eligibility workers in the GA program prior to the initiation of the PAES program.
- Four focus groups were dedicated to providing a forum to enable community members to share their views. Separate focus groups were dedicated to advocates, vocational providers, mental health providers, and substance abuse providers. Treatment providers were targeted based upon an analysis of data identifying the top nine DPH providers serving PAES recipients.
- Two focus groups were dedicated to PAES participants. A flyer was developed to recruit current PAES participants for the PAES office waiting room and Employment Specialists did individual outreach. Another focus group for previous participants was unsuccessful in attracting participation. Two attempts were made to recruit previous PAES participants. First, 211 GA participants were identified as former PAES participants, with only 47 of them having a mailing address. A flyer was mailed to each of the recipients with addresses. Secondly, flyers were distributed by GA eligibility workers to GA clients. Unfortunately, the two efforts were unsuccessful.

Focus Group Design

Three and a half hours was allotted to each focus group with the exception of the substance abuse providers. Due to scheduling and staffing constraints the substance abuse group was limited to two hours. Each focus group was initiated with introductions and an overview of the PAES evaluation project was presented. Focus group members were informed of their rights to confidentiality and anonymity through verbal informed consent. Participants' responses were documented on flipchart paper and posted for reference. Worksheets were provided so that participants could document barriers and interventions and rank their responses in order of priority. All but one of the focus groups was conducted in a classroom at the PAES office. The substance abuse providers' focus group took place at a community-based program.

Members in the focus groups were asked to respond to three questions and to rank their responses to the second question:

1. What personal strengths help participants get and keep a job?
2. What barriers hinder their ability to get and keep a job?
3. What would you recommend DHS and DPH change to improve their chances?

Focus group responses and rankings were compared across groups to identify general categories, areas of agreement, and common themes.