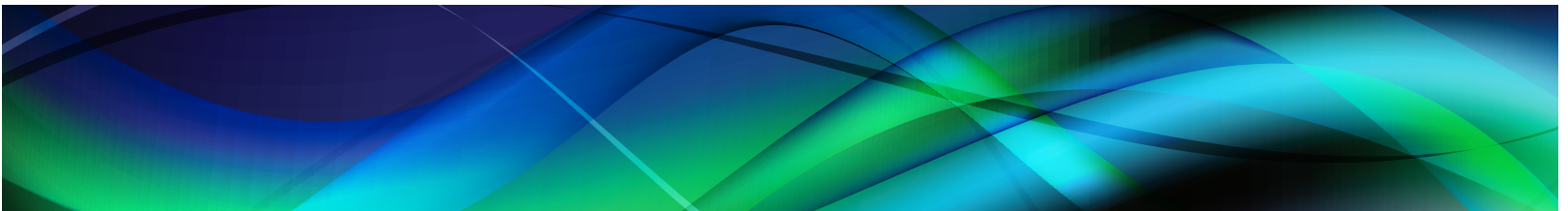


Mental Health Treatment Study

Appendices
July 2011



Prepared for:
Social Security Administration
7111 Security Boulevard
Baltimore, MD 21244
Contract: SS00-05-60072

Prepared by:
Westat
1600 Research Boulevard
Rockville, Maryland



Mental Health Treatment Study
Sponsored by the Social Security Administration



Appendices

Table of Contents

<u>Appendix</u>	<u>Page</u>
2A SF-12 Questionnaire and Scoring Algorithm.....	A-2A-1
2B Imputation Procedures.....	A-2B-1
3A Variable Definitions for Enrollment and Participation Analyses	A-3A-1
3B Descriptive Statistics for Participation Analysis Test and Validation Samples	A-3B-1
3C Probabilities of Enrollment for Test and Validation Samples.....	A-3C-1
4A Percent Obtained Employment (Any Job) by Site.....	A-4A-1
4B Subgroup Comparisons for Employment Outcomes.....	A-4B-1
4C Subgroup Comparisons for Earnings and Income Outcomes.....	A-4C-1
4D Regression Estimates for Formal Earnings.....	A-4D-1
4E Regression Estimates for Formal and Informal Earnings.....	A-4E-1
4F Regression Estimates for Income Variables.....	A-4F-1
4G Subgroup Comparisons for Health and Quality of Life Outcomes	A-4G-1
5A IPS Fidelity Scale	A-5A-1
6A Listing of Medications and the Corresponding Physical Condition.....	A-6A-1
6B SCID Diagnostic Frequencies	A-6B-1
6C SMM QM Summary.....	A-6C-1
6D NCC Survey Results.....	A-6D-1
6E NCC Survey Administrator Version Results.....	A-6E-1
6F SMM Implementation Findings by Site	A-6F-1
6G SMM QA Findings by Site.....	A-6G-1

Table of Contents (continued)

<u>Appendix</u>	<u>Page</u>
7A Health Insurance Questionnaire	A-7A-1
7B MHTS Monthly Encounter Form	A-7B-1
7C Original and New Supported Employment and Related Services Payment Schedules.....	A-7C-1

Appendix 2A:
SF-12 Questionnaire and Scoring Algorithm

SF-12 (VERSION 2)

The next few questions ask about your health and how well you are able to do your usual activities. First I will ask about your health now. Please try to answer the question as accurately as you can.

HS-1. In general, would you say your health is...

- Excellent, 1
- Very good,..... 2
- Good, 3
- Fair, or 4
- Poor? 5

Now, I'm going to ask about activities that you might do during a typical day. As I read each item, please tell me if your health now limits you a lot, limits you a little, or does not limit you at all in these activities.

HS-2. Does your health now limit you in moderate activities such as moving a table, pushing a vacuum cleaner, bowling, or playing golf? Does it limit you...

- A lot, 1
- A little, or 2
- Not at all?..... 3

HS-3. Does your health now limit you in climbing several flights of stairs? Does it limit you...

- A lot, 1
- A little, or 2
- Not at all?..... 3

The next two questions ask about your physical health and your daily activities.

HS-4. During the past 4 weeks, how much of the time have you accomplished less than you would have liked to as a result of your physical health? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time,..... 3
- A little of the time, or 4
- None of the time?..... 5

HS-5. During the past 4 weeks, how much of the time were you limited in the kind of work or other regular daily activities you do as a result of your physical health? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time? 5

Now I will ask about any emotional problems and your daily activities.

HS-6. During the past 4 weeks, how much of the time have you accomplished less than you would have liked to as a result of any emotional problems, such as feeling depressed or anxious? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time? 5

HS-7. During the past 4 weeks, how much of the time did you not do work or other activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time? 5

HS-8. During the past 4 weeks, how much did pain interfere with your normal work, including both work outside the home and housework? Did it interfere.

- Not at all, 1
- A little bit, 2
- Moderately, 3
- Quite a bit, or 4
- Extremely? 5

These next questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give me the one answer that comes closest to the way you have been feeling.

HS-9. During the past 4 weeks, how much of the time have you felt calm and peaceful? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time?..... 5

HS-10. During the past 4 weeks, how much of the time did you have a lot of energy? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time?..... 5

HS-11. During the past 4 weeks, how much of the time have you felt downhearted and depressed? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time?..... 5

HS-12. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities, like visiting with friends or relatives? Would you say...

[INTERVIEWER: SHOW HS CARD.]

- All of the time, 1
- Most of the time, 2
- Some of the time, 3
- A little of the time, or 4
- None of the time?..... 5

Creating SF-12v2 Summary PCS and MCS Scores

Step 1. Item Recoding

If HS-1 = 1, then HS_1R = 5.0.

If HS-1 = 2, then HS_1R = 4.4.

If HS-1 = 3, then HS_1R = 3.4.

If HS-1 = 4, then HS_1R = 2.0.

If HS-1 = 5, then HS_1R = 1.0.

Else, HS_1R = missing.

If HS-2 = 1, 2, or 3, then HS_2aR = HS-2.

Else HS_2aR = missing.

If HS-3 = 1, 2, or 3, then HS_2bR = HS-3.

Else HS_2bR = missing.

If HS-4 = 1, 2, 3, 4, or 5, then HS_3aR = HS-4.

Else HS_3aR = missing.

If HS-5 = 1, 2, 3, 4, or 5, then HS_3bR = HS-5.

Else HS_3bR = missing.

If HS-6 = 1, 2, 3, 4, or 5, then HS_4aR = HS-6.

Else HS_4aR = missing.

If HS-7 = 1, 2, 3, 4, or 5, then HS_4bR = HS-7.

Else HS_4bR = missing.

If HS-8 = 1, then HS_5R = 5.

If HS-8 = 2, then HS_5R = 4.

If HS-8 = 3, then HS_5R = 3.

If HS-8 = 4, then HS_5R = 2.

If HS-8 = 5, then HS_5R = 1.

Else, HS_5R = missing.

If HS-9 = 1, then HS_6aR = 5.

If HS-9 = 2, then HS_6aR = 4.

If HS-9 = 3, then HS_6aR = 3.

If HS-9 = 4, then HS_6aR = 2.

If HS-9 = 5, then HS_6aR = 1.

Else, HS_6aR = missing.

If HS-10 = 1, then HS_6bR = 5.

If HS-10 = 2, then HS_6bR = 4.

If HS-10 = 3, then HS_6bR = 3.

If HS-10 = 4, then HS_6bR = 2.
If HS-10 = 5, then HS_6bR = 1.
Else, HS_6bR = missing.

If HS-11 = 1, 2, 3, 4, or 5 then HS_6cR = HS-11.
Else HS_6cR = missing.

If HS-12 = 1, 2, 3, 4, or 5 then HS_7R = HS-12.
Else HS_7R = missing.

If a beneficiary has a missing value for HS_1R, HS_2aR, HS_2bR, HS_3aR, HS_3bR, HS_4aR, HS_4bR, HS_5R, HS_6aR, HS_6bR, HS_6cR, or HS_7R, set any remaining derived variables equal to missing. Do **NOT** perform calculations below if any recoded values have been set to missing. (Missing values will be imputed later. Scale scores and corresponding transformed and standardized scores cannot be calculated for missing data.)

Step 2. Creating Scale Scores

$$PF = HS_2aR + HS_2bR$$

$$RP = HS_3aR + HS_3bR$$

$$BP = HS_5R$$

$$GH = HS_1R$$

$$VT = HS_6bR$$

$$SF = HS_7R$$

$$RE = HS_4aR + HS_4bR$$

$$MH = HS_6aR + HS_6cR$$

Step 3. Transformation of Scale Scores

$$PF_Trans = [(PF - 2) / 4] * 100$$

$$RP_Trans = [(RP - 2) / 8] * 100$$

$$BP_Trans = [(BP - 1) / 4] * 100$$

$$GH_Trans = [(GH - 1) / 4] * 100$$

$$VT_Trans = [(VT - 1) / 4] * 100$$

$$SF_Trans = [(SF - 1) / 4] * 100$$

$$RE_Trans = [(RE - 2) / 8] * 100$$

$$MH_Trans = [(MH - 2) / 8] * 100$$

Step 4. Standardization of Scale Scores

$$PF_Z = (PF_Trans - 81.18122) / 29.10558$$

$$RP_Z = (RP_Trans - 80.52856) / 27.13526$$

$$BP_Z = (BP_Trans - 81.74015) / 24.53019$$

$$GH_Z = (GH_Trans - 72.19795) / 23.19041$$

$$VT_Z = (VT_Trans - 55.59090) / 24.84380$$

$$SF_Z = (SF_Trans - 83.73973) / 24.75775$$

$$RE_Z = (RE_Trans - 86.41051) / 22.35543$$

$$MH_Z = (MH_Trans - 70.18217) / 20.50597$$

Step 5. Aggregation of Scale Scores

$$AGG_PHYS = (PF_Z * 0.42402) + (RP_Z * 0.35119) + (BP_Z * 0.31754) + (GH_Z * 0.24954) \\ + (VT_Z * 0.02877) + (SF_Z * -0.00753) + (RE_Z * -0.19206) + (MH_Z * -0.22069)$$

$$AGG_MENT = (PF_Z * -0.22999) + (RP_Z * -0.12329) + (BP_Z * -0.09731) + (GH_Z * - \\ 0.01571) + (VT_Z * 0.23534) + (SF_Z * 0.26876) + (RE_Z * 0.43407) + (MH_Z * 0.48581)$$

Step 6. Transformation of Summary Scores

$$PCS = 50 + (AGG_PHYS * 10)$$

$$MCS = 50 + (AGG_MENT * 10)$$

Appendix 2B:
Imputation Procedures

Appendix 2B Imputation

This appendix covers imputation of missing data for the MHTS and has two sections. The first section is on methodology. The second section is on quality evaluation. Westat statisticians performed imputation for the full MHTS sample inclusive of the treatment and comparison samples, excluding deceased beneficiaries.

2A.1 Methods

The statistical staff imputed most missing data using AutoImpute, proprietary Westat software, designed to impute entire questionnaires with a minimum of human intervention. Metadata files, which provide information about each variable, require human intervention in advance of data imputation. The information supplied by the metadata files include such items as special codes which indicate nonresponse and reason for nonresponse, what other items in the questionnaire control skipping of the variable, item order within the questionnaire and the nature of the measurement captured by the variable (unordered, ordered or unbounded interval-valued). Investigators manually review large output files prior to imputation. If they detect any problems that would compromise the imputed data, then staff make the necessary revisions and rerun the program.

The reader can access a description of the software along with an example application and some quality measures in Krenzke and Judkins (2008). Judkins (1997) provides the theoretical foundation for the software's use. Recent research has established favorable properties for the software (Judkins et al. 2007).

Very briefly, the software copies data from respondents over to non-respondents, filling in isolated blanks or even whole questionnaires. The method is semi-parametric in the sense that parametric statistical models are created for each variable, but statisticians generally do not use the predicted values generated by the models directly as imputed values as they are in fully parametric imputation procedures. Instead, statistical staff use predicted values generated by the parametric models to

group similar respondents and non-respondents together. Within these homogenous groups, AutoImpute then randomly matches respondents to non-respondents and copies the data. The primary advantage of the semi-parametric operation (relative to a fully parametric operation) is that the models do not need to be correct to be useful. This robustness to model misspecification comes at the price of some reduced ability to preserve regular relationships for variables with long tails. An example of this is income by source, where the data are thin. However, given the nature of the questions in the MHTS instruments, constructing even approximately correct models for the many variables (outcomes and covariates) would have been a daunting task.

This section does not repeat information about AutoImpute already published. Rather, it addresses some of the challenges that arose in applying the program to MHTS data. These challenges are divided into seven areas: metadata assembly, outlier handling, data reshaping, special constraints on donors, new features for variable selection, additive constraints, and imputation flags. One important note is that staff always filled in the missing responses from records where the subject had the same experimental status. Filling in the missing responses avoided the dilution of MHTS impacts through cross-status data mixing.

Metadata Assembly

Imputation is largely an automated process, but this process must have a statistician to tell it a few things about each variable on the database first. It needs to know which variables are ID variables, which are to be imputed, which are to be used as covariates to predict the variables to be imputed, and something about the measurement scale for each variable that is either to be imputed or to serve as a covariate. Measurement scales that it recognizes include ordinal, unordered categorical, and unbounded continuous. All binary variables are treated the same as ordinal variables. It needs to know about special codes used to indicate inapplicability, missed wave, item refusal, and respondent replies of “don’t know” (DK).

It also needs to know about logical relationships among the variables, which variables are gatekeepers to questions (only asked of some respondents), and which values on gatekeeper variables lead to unique skip patterns through the questionnaire.

The user must decide how to treat DK responses for each variable. The program has three options for this: (1) to treat DK responses the same as any other missing response and impute them, (2) to center DK responses at the median value among persons who were eligible for the question and answered it more definitively, and (3) to leave them alone. For the MHTS, the general rule for DK responses was to treat DK values as missing values and impute it. However, statisticians treated DK responses to state of mind questions for which the DK response had a meaningful interpretation differently. For example, the statisticians treated a DK response to the question about frequency of drinking to the point of drunkenness over the past 30 days as a missing response and imputed that data. On the other hand the statisticians “centered” DK responses to questions deemed meaningful, (such as the self-assessed general health question) by replacing the special value code assigned to them during the interview with the median response to the variable. Continuing with the example on self-assessed general health, the median response was 3 (“good”) on a five-point scale, so everyone who responded DK on general health had their response changed to “good.”

Outlier Handling

There were a number of highly implausible values reported for income, hourly wages, and weekly hours. Investigators developed procedures to identify outliers. Statistical staff then reset these values to missing and imputed along with other missing values. Some outliers were easy to detect. The easiest outliers to identify were a result of the coding scheme used in the computer-assisted personal interviews (CAPI) software for DK responses. The interviewer was supposed to enter a string of ten 9s. In a few instances, the interviewer lost count and entered a string of eight or nine 9s. This was clearly a computation error and so these were set to missing and imputed.

The statistical team used two other methods to identify outliers. One method was to set absolute limits for various variables based on general subject matter knowledge. Table 2B-1 illustrates these limits. Values, smaller or larger than the minimum or maximum threshold, respectively, were set to missing and imputed. For hourly wages, these rules classified 56 values as outliers, ranging from \$50.00 per hour to \$65,000 per hour. For weekly hours, these rules classified 42 values as outliers, ranging from 63 hours per week to 140 hours per week.

Table 2B-1. Outlier Threshold Values

Variable	Minimum	Maximum
Hourly wages	\$2.30	\$50
Weekly hours	None	60
Past month SSI	None	\$2,200
Past month general assistance	None	\$2,200
Past month TANF	None	\$2,200
Past month unemployment compensation	None	\$2,200
Past month earnings	None	\$8,000
Past month SSDI	None	\$8,000
Past month SS retirement or survivors benefits	None	\$8,000
Past month vocational programs	None	\$8,000
Past month retirement or pension income (other than SS)	None	\$8,000
Past month alimony	None	\$8,000
Past month household income	None	\$15,000
Past month family assistance	None	\$15,000
Past month other income	None	\$15,000
Past month VA or other armed services benefits	None	\$15,000

The last method of outlier identification involved modeling income amounts by source and identifying values with large standardized residuals in those models. (This approach exempted hourly wages or weekly hours.) Two types of models were fit for each income amount from a specific source. One model was a longitudinal model with reported amounts of income from the same source in other waves. The other model was a cross-sectional model with reported amounts of income from other sources in the same month. Statistical staff removed outliers in two phases of this process. In the first phase, the statistical staff defined outliers as having a standardized residual from either model of 4 or more. After the first phase, the staff refit the models on the dataset that passed the first phase. For the second phase, the statistical staff defined outliers as having a standardized residual from either model of 3 or more. (In both phases, statisticians removed only upper outliers.)

Because the statisticians ran these data prior to imputation, any case with a missing quarter would not have a standardized residual from the longitudinal model. Therefore, there could be hidden outliers among missing values. Similarly, any case with missing data on other income amounts would not have a standardized residual from the cross-sectional model. Again, there could be hidden outliers caused by the missing data. That is why the statistical group developed both models. However, some cases with outlying values had both missing longitudinal and missing cross-sectional

standardized residuals. For them, the only outlier checks were a total of five or more 9s in the amount or an exceedance of the limits in Table 4A1.

In all, the statisticians classified 148 values for income amounts as outliers. This figure crossed the nine waves of interviewing. The smallest outliers by source were \$472 (TANF), \$564 (SSI), \$650 (SSDI), \$800 (other income), \$2025 (household income), \$3000 (non-SSA retirement), \$3000 (family assistance), and \$4000 (earned income). The staff tagged these smaller levels because they did not fit either the longitudinal or the cross-sectional pattern of income amounts for the person. Of the 148 income outliers, 35 were values of \$15,000 or more in a single month.

Data Reshaping

The Blaise database was the data source for much of the event specific data. AutoImpute could not work directly with such records. The statistical team transformed these records into either person-quarter variables or person-month variables. For example, demonstration site staff documented event specific information about services received such as a psychiatric crisis center visit or a competitive job status and hourly wage in two parallel reporting systems. In the reshaping process, the statistical staff transformed this information into variables such as the number of provider visits at psychiatric crisis centers during a specific quarter where the person received medication management services or a count of competitive jobs held during a specific month of the study reference period. The decision whether to create a person-quarter or person-month recode for an attribute depended primarily on the reference period used in the questionnaire and the method for collecting date information, if any.

The statistical staff created and sequentially imputed four main files, named “passes.” The first, second and fourth pass files were person-quarter files. The third pass was a person-month file. The imputation order drew on the results of imputation from prior passes and ignored information in future passes.

The *first pass* file consisted mainly of baseline demographics, education, and living arrangements and variables from all rounds about health, limitations on activities of daily life, and substance abuse. These variables ignored all information about employment and health care utilization. After that

imputation, the statistical staff condensed most of the variables other than demographics into scales. The four scales were Mental Component Score (MCS) which measures mental health and functioning, Physical Component Score (PCS) which measures physical health and functioning), Addiction Severity Index (ASI)-Alcohol (measure of alcohol dependence), and ASI-Drug (measure of dependence on illicit substances). The second pass carried into it the baseline demographics and the aforementioned four scales of health and functioning.

The *second pass* file consisted mainly of updates to education and living arrangements (treatment sample only), utilization of outpatient counseling services (all rounds – including by service received and type of facility providing the services), utilization of emergency room services (all rounds – but not by reason), utilization of inpatient services (all rounds – but not by reason), income (all rounds), quality of life (baseline and followup only), beliefs about consequences of employment for SSDI recipients (baseline and followup only), employment (all rounds), and conditions of employment at main job (if applicable) (all rounds). The total number of variables on the file was 582. The number of persons in the sample was 2060. This very high ratio of variables to cases caused a variety of challenges in the imputation. Below, under New Features for Variable Selection, is a discussion of these challenges.

The MHTS used a nine variable format resting on a person record sometimes referred to as ‘*the strung-out format*’. This format enabled statisticians to experience better success at incorporating the longitudinal data. An alternative format would have been to stack the repeated observations of the same trait into quarterly records for each person. Since there were 60 longitudinal series and 53 other variables requiring repetition on every record of a stacked-format dataset, this would have resulted in a dataset with 113 variables and 18,540 records. The statistical experts rejected using the stacked-format because AutoImpute would then have made the imputations based strictly on cross-sectional models. This would not have been useful since there was very little item nonresponse, but substantial wave nonresponse.

Reshaping event data into quarterly data was a complex and difficult task to achieve. A primary issue was the fact that the reference period extended back to the last prior interview for persons who skipped quarterly updates, but for which the question about an event only asked for month and year. Another issue was that baseline induction into the study extended over a considerable period.

Additional challenges were due to late followup interviews and the lack of a respondent’s identification of a main job for each quarter when reporting for multiple quarters.

Consider the hospital stay information described in Table 4B-2. What should the distribution of 91 nights be across Q5, Q6, and Q7? In that same table, consider the employment status for Q1. Should the brief job in March of 2007 count for Q1 or Q2? These posed challenging questions requiring resolution prior to the imputation of the data.

Table 2B-2. Hypothetical data to illustrate reshaping for quarterly file

Planned Interview	Target Interview dates	Interview dates	Hospital stay start	Number nights in stay	Main job span	Other job1 span	Other job2 span
Baseline	12/28/06	12/28/06					
Q1	3/28/07	missed					
Q2	6/28/07	7/4/07			4/07- “95”	3/07- 3/07	
Q3	9/28/07	10/7/07					
Q4	12/28/07	missed					
Q5	3/28/08	missed					
Q6	6/28/08	missed					
Q7	9/28/08	missed					
Followup	12/28/08	2/3/09	3/08	91	3/08- 7/08	12/08- 12/08	12/08- “95”

Note: A job-end date of “95” indicated that the job was ongoing at the date of interview.

Investigators in consultation with the statistical staff decided to declare the month prior to the baseline interview to be month zero and to align each subsequent trio of months with the sequential quarterly updates. As another simplifying convention, investigators decided to treat all hospital stays as starting on the 15th of the month. With these conventions, the 91-night hospital stay that started in March of 2008 translates into 16 nights in Q5 and 75 days in Q6. Accordingly, the conditions of the March 2008 job correspond to the conditions of the main job for Q5, Q6, and Q7, while the conditions for the main job at followup are left missing to be imputed.

Although it would have been possible and in many ways simpler to delay the imputation of all jobs data until the third pass, there were several strong advantages to imputing some of the jobs data in the second pass. First, interviewers asked about the conditions of employment for only one job per

interview. Second, by imputing quarterly employment in the same pass as income, there was better preservation of the relationship between employment and income.

Reshaping data for the *third pass* was more difficult. The third pass dataset contained monthly data for each person. The total number of reference months for each person was 26; running from 0 to 25, where month 0 was the month prior to the baseline interview and month 25 contained the 2-year anniversary of study induction. Month 25 was also the most common month for the followup interview. There were 16 series of interest. Six of these concerned counts of hospital events by services received during the events. The other 10 concerned employment, job counts by competitive status, job counts by occupation (a high-level 5-class taxonomy), and highest wage by competitive status.

A 16 series imputation, a 60 series of previously imputed data for use as predictors, and 26 months of interest, meant that using a strung-out format required a minimum of 1976 variables. This was an overly large number of variables given the sample size of 2060. AutoImpute employs simple stepwise searches to build the imputation models. Experience as well as general knowledge of the field suggested that this might result in seriously overfit models with consequences that were hard to foresee. As explained above in connection with the second-pass reshaping, a simple stacked format with 76 variables per person-month was also unacceptable because it would have prevented the formation of longitudinal models. In order to facilitate both longitudinal and cross-sectional prediction while keeping the number of variables manageable, the statisticians invented a new format called the semi-stacked format. With this format, there was one record per person month as in a simple stacked file, but for each of the 16 series requiring imputation, each person-month record had a trio of datapoints from the series. Namely, it had the previous month, the current month, and the next month. In addition, it had the value for the quarter containing the month for 45 of the 60 series imputed at the quarterly level in the second pass. Examples included recent employment, conditions of recent employment, income, hospital nights, and utilization of outpatient counseling services. (There was no updated quarterly data for the 15 omitted series on the full sample.) The semi-stacked format also contained the baseline and followup values not updated on the full sample on a quarterly basis. This included questions about demographics, education, living arrangements, health and functioning, quality of life, and substance abuse.

Once the statisticians decided to use a semi-stacked format, the next challenge was to use the event-level data to construct person-month data in a way that was useful and largely consistent with the person-quarter data (from the second pass). It was not possible to align the person-month data perfectly with person-quarter data given the variable timing of the quarterly interviews and the lack of day-specific dating of events. Special efforts to construct the person-month data in such a way that study-period summaries of the person-month employment data would agree perfectly with study-period summaries of the person-quarter employment data proved successful.

The statisticians accumulated counts for emergency room (ER) visits, ER admissions, and other hospital admissions, into months 1 through 25 without regard to the quarter reported. If the followup interview was in month 26 (or later), any hospital utilization event associated with months past month 25 was dropped. They also dropped hospital utilization events associated with month 1 but reported in the baseline interview. When followup interviews occurred at month 24, those counts were set to missing and imputed at month 25. Because most respondents reported on only partial month periods for months 1 and 25, the expectation was that hospital utilization event counts would be slightly smaller.

The statisticians handled job count calculations (including those by competitive status and occupational grouping) for months that were only reportable from a single interview in a similar manner. Inconsistencies in the recording of start and ending months for job posed additional problems. Table 2B-3 illustrates some of these complexities using a hypothetical respondent. In this scenario, the respondent reported a new ongoing competitive job in his July 2007 interview, but failed to mention it in the October 2007 interview. In a situation like this, the competitive job count for month 8 was set to one. Month 16 (March 2008) is difficult for this respondent. In the Q5 interview, the respondent started and stopped a job during the earlier part of the interview month. In the Q6 interview in July 2008 they also reported starting a job in March and ending it in April. Is this the same job or a different job? In this situation, investigators decided that there was probably a duplication in the reporting and the competitive job count for month 16 was set to one.

Table 2B-3. Hypothetical data to illustrate reshaping for monthly file

Planned Interview	Target Interview dates	Interview dates	Comp Job1 span	Comp Job2 span	Non-Comp Job1 span	Non-Comp Job2 span
Baseline	12/28/06	12/28/06	11/06- “95”			
Q1	3/28/07	3/26/07	11/06- 12/06		12/06- 12/06	
Q2	6/28/07	7/4/07	7/07- “95”			
Q3	9/28/07	10/7/07			9/07- 9/07	9/07- 9/07
Q4	12/28/07	1/02/08	1/08- “95”			
Q5	3/28/08	3/28/08	1/08- 1/08	3/08- 3/08		
Q6	6/28/08	7/5/08	3/08- 4/08			
Q7	9/28/08	missed				
Followup	12/28/08	2/3/09				

Note: A job-end date of “95” indicated that the job was ongoing at the date of interview.

Most difficult was the creation of the monthly employed status indicator. The concept was to have a value of 0 for no job during the month, a value of 0.5 for a month with some employment and a period of non-employment, and a value of 1 for a month with no non-employment. With a lack of day-specific start and end dates for jobs, it was not possible to implement this concept exactly. One simplification was to assign only values of 0 and 0.5 to months 1 and 25. In the example from Table 2B-3, the person’s employment possibly was the whole of month 1, but input as a 0.5 employment status for the month, because the job started prior to the baseline interview. Month 8 (July 2007) was also given an employment status of 0.5 because though the person reported an ongoing job on July 4 with no end date, the failure to mention employment during Q3, led to the assumption that the job was less than one month in duration. Month 14 (January 2008), on the other hand, was given an employment status of 1 despite clearly only starting the job that month because the person was credited with 0.5 for month 14 from the Q4 interview and with another 0.5 for the same month from the Q5 interview. Also, month 10 (September 2007) was given an employment status of 1 because two jobs were reported for the month, even though both were of short duration.

A special problem arose for respondents who reported employment during the early part of the interview month for the last interview conducted. In such cases, it was impossible to know whether it was better to give employed a value of .5 or 1 for the interview month. Using the imputed status for *RecentlyHadJob* for the next scheduled interview provided resolution for that problem. If this variable imputation was yes, then Employed was set to 1 for the last interview month. On the other hand, if this variable imputation was no, then Employed was set to 0.5 for the last interview month. Missing data resulted if at the last interview, the respondent reported no job for the interview month. Staff imputed this missing data.

Creating the employment status indicator allowed for the alignment of the concept of “ever employed” over the entire course of the study from the monthly file with that obtained from the quarterly file. By summing the employment status indicator across months 1 through 25 from the monthly file, the statistician was able to derive the concept about ever employed. If the sum was greater than zero, then the person had some employment during the study period. From the quarterly file, the concept was to sum the quarterly indicators for recently having had a job. Again, if the sum was greater than zero, then the person had some employment during the study period. For persons who responded to the followup interview, the statistical staff verified the utility of the employment status indicator as the agreement in the alignment if the concept was perfect prior to imputation. The statisticians made special efforts in the imputation of the employment status for the missing months to ensure that the agreement between the two methods of calculating ever employed remained perfect.

The *fourth pass* involved quarterly data on job application history. The imputation of this data occurred in a separate final pass from the other quarterly data because of the need to have a complete history of job holding before starting work on job applications. The posing of the interviewers questions about job application mandated a sequential process. Questions about job application occurred only for respondents without employment since the prior interview. This created very complex missing data issues for catch-up interviews occurring after missed quarterly interviews. Persons missing the previous quarter interview and reporting having a job in one of the two quarters begged the question about job application data not asked for the jobless quarter. If the respondent missed the previous quarterly interview and later reported not having a job in either of the two quarters, the question about job application occurred only once. For respondents indicating

that they applied for a job, no information was available for which quarter or quarters the application occurred. In these cases, staff imputed answers for both quarters but with the restriction that at least one of the quarterly job application indicators be positive. A different missing value code triggered the need for special imputation procedures in these instances. These special procedures imputed these runs as vectors rather than as individual responses.

Special Constraints on Donors

As mentioned previously, there was no donation across study arms. Every imputed indicator, count, and amount in the treatment arm came from a similar case in the treatment arm, and every imputed indicator, count, and amount in the control arm came from a similar case in the control arm. For this first pass, statistical staff accomplished this by running two entirely separate imputation jobs, one for each arm. However, the models were prepared on the joint sample for the second and third passes. At first, staff attempted to run separate jobs for second pass imputation for the two arms, but with 582 variables, this was led to serious overfitting problems. It was much better to have a sample size of 2000+ rather than 1000+ when building models with stepwise procedures on so many variables. There was evidence, which seemed to suggest that use of a unified model for imputation led to more consistent treatment-outcome relationships on imputed and reported datasets than imputations achieved with separate models.

Using unified models for treatment and control cases had a disadvantage concerning the imputation of followup responses to updated quarterly items for the treatment sample but not for the control sample, such as educational attainment. The disadvantage was that with the use of separate models, it was possible to model the followup responses as a function of the quarterly updates on the treatment sample, but with a unified model, only the baseline responses entered the models for the followup responses. In retrospect, it would have been better to impute all the variables subject to differential updating procedures across the arms in the first pass. As it stands now, there is probably more state jumping than is desirable when comparing things in the treatment arm like educational attainment at quarter 7 to educational attainment at followup.

Statisticians added another restriction to donors for binary variables in the second pass like *RecentlyHadJob*. The statistical staff noted that if someone had a long string of quarters of no employment and then stopped responding to the survey, AutoImpute was initially tending to impute

more sudden job gainers than made sense. The problem was that AutoImpute only uses main effects in the models it builds and a string of 5 quarters without employment is a deep interaction. The statistical staff counteracted this problem by treating the value of the variable from the preceding wave like a skip controller. Therefore, when they imputed *RecentlyHadJob* at Q7 for example, the only eligible donors were those with the same value of *RecentlyHadJob* at Q6. This added restriction fixed the initial problem with too many imputed job gains among the long-term unemployed who dropped out of the survey late in the study.

Another type of special constraint concerned runs of quarters for which it was known that the respondent was never employed and that the respondent applied for at least one job during the run of quarters, but it was unknown whether multiple job applications were made and, if so, in which quarters. To impute these runs of job-application status where at least one quarter must contain a positive response, the statistical staff designed a special procedure that did not involve AutoImpute. For these runs, a special hot-deck procedure was used where the units were neither persons nor person-quarters but person-runs. Statistical staff randomly matched all runs for imputation to donor runs within strata defined by treatment status, run length, starting quarter of the run, and an *ad-hoc* scale of baseline attitudes about the consequences of job application. Prior to the matching, statistical staff screened the donor runs for those of consecutive quarters without employment but with at least one job application.

New Features for Variable Selection

The high ratio of variables to cases in the second pass presented persistent problems with overfitting. Rare responses of distal variables entered models with hugely significant parameters. Human review of these parameters could not imagine reasonable causal pathways that would support the parameters. The statisticians feared that these odd terms in overfit models were crowding out variables that were more causally plausible.

To resolve this issue, the statisticians introduced a new variable selection method into AutoImpute. Variable identification could be part of a longitudinal series. When building an imputation model for a variable that was part of a series, the only allowed predictor variables were those from the same series, those from other series measured at the same quarter, and those from other series that either lagged or preceded the quarter by exactly one quarter. The statistical staff excluded all variables

from other series that were more mismatched on time from the predictor space. This reduction in the dimension of the prediction space seemed to lead to models that were more plausible. (It was not feasible to conduct a manual review on all the models, so this assessment encompassed a sample of critical models where the staff previously identified overfitting problems.)

High dimensionality was not a problem in the third pass thanks to the semi-stacked format, but a different problem arose in initial runs that required a change in variable selection methods in AutoImpute. The context for this initial problem was that AutoImpute is an iterative program that starts from a crude but feasible solution and progresses to a better solution. There are circumstances however, under which it can get stuck near the initial feasible solution. This can happen in particular, when there is a set of highly correlated variables whose use can be to predict each other. For example, if A predicts B very well and B predicts A very well, then AutoImpute might get stuck at the initial solution for A and B . This appeared to be happening in the third pass with the trio of previous, current, and next variables for each series. The statisticians added an option to the software of excluding a list of variables from being eligible predictors for a target variable in order to break this sort of unfortunate loop. Moreover, this allowed the list to vary across the variables.

This process allowed previous values to predict current and next values, and allowed current values to predict next values, but disallowed current values from predicting prior values and next values from predicting either prior or current values. In a different application, this might have caused loss of information but because the variables in the third pass only had monotone nonresponse patterns (after application of data from catch-up interviews, the only imputations items remaining in the third pass were those after the last interview), there was no loss of information in this application. Because some of the series were highly correlated with each other, the statisticians added the ban on backward prediction across series as well as within series.

There was a reduction for most of the indicators of stuck loops in the third pass after banning backward predictions.

Additive Constraints

Several of the series collected consisted of event counts of various sorts, such as getting a job and spending a night in a hospital. When there was a breakdown of these event counts by some other condition or status such as whether an ER visit was for mental health reasons or for other reasons, it would obviously be desirable to have the total event count agree with the sum of event counts by reason (or other status variable). Also, if the event counts are split by different statuses (such as job attainment by competitive status of job and job attainment by occupation of job), it would be desirable to have the sums from the respective splits agree.

Although this may sound easy to achieve, it is actually quite difficult. Statisticians call data with additive constraints of this sort compositional data. The application for use for compositional data was not part of the AutoImpute design.

The primary approach used for the MHTS to address additive constraints was to impute only the summands, and then to calculate the sum of the summands post-imputation. The statistical staff accomplished this in the second pass imputation of counts of outpatient visits by service received, and the third pass imputation of ER visits and hospital admissions by reason. The staff imputed outpatient visit counts by service first, and then calculated total outpatient visits after the imputation of all other variables in the second pass. The staff handled imputation for hospital events similarly, by reason first, then by calculating total hospital events after the imputation of all other variables in the third pass. This approach could have led to inconsistencies or wasted sample if there had been very many respondents who could provide total counts but not counts by service or reason. In the case of these variables, almost all of the nonresponse was due to survey dropout, so this approach worked well.

The split out by two dimensions for the third pass for job counts created a more difficult issue. They were first split on a monthly basis between competitive and noncompetitive and secondly between five occupational groupings. No attempt was made to force the monthly (or even study-long) job count based on the competitive and noncompetitive job counts to agree with the job count based on summing across the five occupational groupings. Nonetheless, the two sums were nearly always the same. For 98.8 percent of person months, the two sums were identical. Where they

differed, the first sum was most often greater than the second sum. The difference was usually ± 1 but is occasionally ± 2 .

One strictly enforced type of consistency was that if the employed indicator was positive, then the sum of competitive and noncompetitive jobs for the month was also positive, and vice versa. The statistical staff accomplished this by using a temporary binary split of Employed as a skip controller for *CompetitiveJobCount* and then using temporary binary splits of both Employed and *CompetitiveJobCount* as skip controllers for *NonCompetitiveJobCount*. To stress— this consistency existed at the person-month level.

Another type of desired consistency was that the binary flag for any employment over the study period derived from the quarterly file be the same as the binary flag for any employment over the study period derived from the monthly file. This was very difficult to attain and required several actions. The first action included the use of two versions of the quarterly indicator for recently having had a job as skip controllers for Employed. The statisticians merged the quarterly indicator for employment onto the person-month file by merging Q1 status onto months 1, 2, and 3, merging Q2 status onto months 4, 5, and 6, and so on, with F status merged onto months 22, 23, and 24. The secondary action was that the statistical staff merged the quarterly indicator for employment onto the person-month file by merging Q1 status onto months 1, 2, and 3, and 4, merging Q2 status onto months 5, 6, and 7, merging Q3 status onto months 8, 9, and 10, and so on, with F status merged onto months 23 and 24. This meant that for the same months that were partially in the reference periods for two different quarterly interviews, the Employed status imputed for the month was consistent with both quarterly reports. Finally, the statistical staff used a study-long indicator for ever having had a job according to the imputed quarterly reports as a skip controller for the imputation of employed status by month.

Imputation Flags

In order to give flexibility to analysts, the software created an imputation flag for every variable with any imputed values. A blank flag value indicated that the respondent reported the value. A value of 1 indicated the value was imputed and that an internal metric for the quality of the imputation was set high. A value of 2 indicated the value was imputed and that an internal metric for the quality of

the imputation was set low. A value of 3 indicated the original response of DK was replaced by the median response among definitive eligible respondents. A value of 5 indicated that the original response was an outlier.

D.2 Quality Evaluation

It is difficult to evaluate the quality of a specific set of imputations. It is difficult to agree on quality standards. Some authors measure quality in terms of whether marginal distributions are similar across reported and imputed cases. This does not apply here. This population had a rather high rate of hospital utilization. Hospitalization naturally interferes with the data collection process. Among persons who completed the followup survey (and for whom thanks to the catch-up procedures, no imputation of hospital utilization was required), the number of hospital nights over the course of the study was twice as large for those who missed one or more of the quarterly interviews than for those who completed every interview. In the former group, the unweighted average number of nights was 10.4 compared to 4.8 in the later group. The difference is highly significant. Therefore, people who missed waves were sicker than those who completed every wave. It makes sense then that reported plus imputed nights for those who did not complete the followup interview should be greater than reported nights for those who did complete the followup interview. This is what AutoImpute did (7.8 versus 6.6 nights) although the difference was not statistically significant. Based on these differences in health, one might also expect different labor participation outcomes.

Our primary approach to quality assurance was to inspect the model-fit statistics in the imputation models generated by AutoImpute to look for signs of overfitting. As previously mentioned, overfitting was a concern because of the potential for it to cause the neglect of important variables or for it to be an indicator of a failure of the algorithm to converge to a global optimum.

Beyond that, the statisticians created an indicator that classified respondents into three groups: always respondent, attritor, and followup respondent with gaps. Analysts repeated causal analyses separately on three groups. To the extent analysts found differences, it indicated a sensitivity of the results to the imputation procedures. One of these comparative analyses did raise some concerns. As a result, staff conducted deeper research to try to understand why the imputed cases gave

different intervention effects. These findings are discussed further in the following section. Staff found no need to conduct similar exploration for other outcomes.

Detailed investigation into imputation of months employed

Among persons who were not attritors, the unweighted effect of treatment on number of months employed was 2.4 months and highly significant. Among attritors, the effect of treatment on number of months employed was 1.6 months and not significant. Part of the loss of significance was no doubt due to the smaller sample size (1884 non-attritors versus 171 attritors). On the combined sample, the estimate is 2.3 months and even more significant due to the larger sample size. But the nontrivial diminution of the effect raised initial concerns about whether the imputation should somehow be washing treatment effects out.

To investigate this possibility, an analysis was set up to focus on treatment effect on employment as of the last available report before imputation. More specifically, the analysis focused on the “Employed” variable (0, 0.5, or 1 as explained earlier) at the penultimate reported month. For example, if a person dropped out after the Q6 interview, the penultimate reported month would usually be month 18, where as noted earlier, the month containing the baseline interview was considered to be month 1. In addition, if a person completed the followup interview, then the penultimate reported month would usually be month 24. Table 2B-4 shows separate treatment effects on Employed for attritors and non-attritors.

Table 2B-4. Effects of treatment on the variable “employed” as of the last report by attrition status (prior to imputation)

Attrition Group	Treatment Arm	Control Arm	Treatment Effect
Attritors (at last report)	0.189	0.125	0.064 (0.055)
Non-attritors (at end of study)	0.294	0.148	0.145 (0.018)
Difference	-0.105	-0.023	-0.082 (0.058)
Overall	0.283	0.147	0.136 (0.017)

Note that although the standard errors were too large to tell if this was a definite bias, the estimated treatment effect was much larger among non-attritors than among attritors. This is all reported data with no imputation. Perhaps if staff followed the attritors through the end of the study, the effect of treatment on them might have grown, but it appears likely that people without success at finding

a job were more likely to drop out of the survey. There was a similar phenomenon in the control arm, but it was weaker.

To try to separate time from attrition status, Table 2B-5 looks at results at months 16 and 24. Month 16 is interesting because that was the average last month of good data for attritors. At this month, there seems to be good comparability of treatment effects between attritors and non-attritors. Comparability still looks good at month 24 (at which time all the data on attritors are imputed), so perhaps the difference in total number of months employed is noise or something that accumulates slowly over the months.

Table 2B-5. Effects of treatment on the variable “employed” as of months 16 and 24 by attrition status (with imputed data for attritors)

Attrition Group and Month	Treatment Arm	Control Arm	Treatment Effect
Attritors at month 16 (half imputed)	0.291	0.154	0.137 (0.062)
Non-attritors at month 16 (all reported)	0.291	0.150	0.141 (0.018)
Difference at month 16	0.000	0.004	-0.004 (0.065)
Overall at month 16	0.291	0.150	0.141 (0.018)
Attritors at month 24 (all imputed)	0.218	0.103	0.116 (0.056)
Non-attritors at month 24 (all reported)	0.294	0.149	0.145 (0.018)
Difference at month 24	-0.076	-0.046	-0.030 (0.059)
Overall at month 24	0.286	0.146	0.140 (0.017)

Turning to accumulation over months, Table 2B-6 shows treatment effects on the proportion of reported months 1 through 24 where the respondent indicated that they had a job by attrition status. Like Table 2B-4, this table uses only reported data. The difference in effects of 4.2 percent of months is not statistically significant, but if this difference were to hold up for 24 months, it would come to a difference in effects of 1 month. Investigators observed this phenomenon for the most part (1.6 months on attritors using both reported and imputed data versus 2.4 months on non-attritors using only reported data). This supports the explanation for the apparent weakening of effect through imputation that it is not really a weakening at all. Instead, imputation merely

extended the trend that was already apparent on attritors as of the end of their period of survey cooperation. For whatever reason, it appears that treatment cases who were not finding jobs were slightly more likely to drop out of the survey. Therefore, there is a good chance that imputation reduced bias in the estimated effect of the intervention.

Table 2B-6. Effects of treatment on employed proportion of reported months by attrition status (prior to imputation)

Attrition Group	Treatment Arm	Control Arm	Treatment Effect
Attritors (at last report)	0.169	0.115	0.054 (0.038)
Non-attritors (at end of study)	0.227	0.132	0.096 (0.012)
Difference	-0.058	-0.017	-0.042 (0.040)
Overall	0.221	0.130	0.091 (0.012)

Appendix 3A:
Variable Definitions for Enrollment and Participation Analyses

Table 3A-1. Data sources and variables used in the Enrollment and Participation Regression Analyses

Variable name by source	Variable description	Value labels
Master Beneficiary Record (MBR)		
Age (days/100)	Age in # of days divided by 100	
(Age) ²	Age squared	
Average Months on SSDI	Average number of months SSDI benefits received	
DI<24 mos. (no SSI)	Binary variable indicating beneficiaries who were on SSDI less than 24 months and not receiving SSI benefits	Yes=1 No =0
Diagnosis	Binary variable indicating beneficiary diagnosis	Affective mood disorder =1 Schizophrenia=0
Ln of Distance from Site	Natural log of driving distance from the beneficiary address (from the MBR) to demonstration site address (from the SMS).	
Gender	Binary variable indicating beneficiary gender	Male=1 Female = 0
Months on Rolls	Beneficiary's months on the SSDI disability rolls based at their recruitment date and the MBR date of entitlement.	
SMI Diagnosis	Binary variable indicating the presence of an SMI diagnosis (primary or secondary) in the MBR	Yes=1 No =0
Primary Diagnosis SMI	Binary variable indicating whether the beneficiary had a primary diagnosis of SMI	Primary diagnosis of SMI=1 No primary diagnosis of SMI=0
Secondary Diagnosis SMI	Binary variable indicating whether beneficiary had a secondary diagnosis of SMI	Secondary diagnosis of SMI=1 No Secondary diagnosis of SMI=0
Primary Insured Amount	Beneficiary's primary insured amount	
Race	Binary variable indicating beneficiary's race	Black=1 Other = 0
Repayee	Binary variable indicating whether the beneficiary had a representative payee	Repayee= 1 Other = 0
SSI	Binary variable indicating whether beneficiary received SSI benefits	Receipt of SSI=1 No receipt of SSI=0
Disability Control File (DCF)		
Sq. Root of Reported Earnings (1-6 mos. pre-recruitment)	Square root of the sum of the beneficiary's self-report of earnings and net income for months 1-6 prior to recruitment date	Sum of reported amounts or 0 if no report.
Sq. Root of Reported Earnings (7-23 mos. pre-recruitment)	Square root of the sum of the beneficiary's self-report of earnings and net income for months 7-23 prior to recruitment date	Sum of reported amounts or 0 if no report.
No Earnings Report (1-6 mos. pre-recruitment)	Binary variable indicating no report of a) earnings or b) self employment net income; in 6 months prior to recruitment date	No report=1 Report=0
Had Active Ticket (w/in 90 days)	Binary variable indicating beneficiary had an active Ticket to Work 90 days before recruitment date	Had ticket=1 No ticket=0

Table 3-1. Data sources and variables used in the Enrollment and Participation analyses (continued)

Variable name by source	Variable description	Value labels
Disability Control File (DCF) (continued)		
Had Active Ticket (ever)	Binary variable indicating beneficiary had an active Ticket to Work at any time before recruitment date	Had ticket=1 No ticket=0
Trial Work End Date (10 yrs. ago)	Binary variable indicating beneficiary had a trial work period end date 10 years or more before contact date	Had trial work period end date=1 No trial work period end date=0
Trial Work End Date (5-10 yrs. ago)	Binary variable indicating beneficiary had a trial work period end date 5 to 10 years before contact date	Had trial work period end date=1 No trial work period end date=0
Trial Work End Date (0-5 yrs. ago)	Binary variable indicating beneficiary had a trial work period end date 0 to 5 years before contact date	Had trial work period end date=1 No trial work period end date=0
Trial Work End Date (0-3 yrs. post recruitment date)	Binary variable indicating beneficiary had a trial work period end date 0 to 3 years after contact date	Had trial work period end date=1 No trial work period end date=0
Study Management System		
2006 (Recruitment Yr.)	Binary variable for whether beneficiary recruitment took place in 2006	Recruited in 2006=1 Not recruited in 2006=0
2007 (Recruitment Yr.)	Binary variable for whether beneficiary recruitment took place in 2007	Recruited in 2007=1 Not recruited in 2007=0
2008 (Recruitment Yr.)	Binary variable for whether beneficiary recruitment took place in 2008	Recruited in 2008=1 Not recruited in 2008=0
Enrolled	Binary variable indicating whether the beneficiary enrolled in the MHTS	Enrolled in the MHTS=1 Not enrolled in the MHTS=0
Recruitment Date	Date the recruitment letter was printed (See text for further explanation).	
Time to Recruit	The number of days from recruitment date to the date when the demonstration site stopped all recruitment	
(Time to Recruit) ²	Time to Recruit squared	
Baseline Interview		
Gender	Categorical variable for beneficiary gender (Male, Female)	
Age	The beneficiary's age at the time of the baseline interview	
Age Group	Categorical variable for beneficiary age (18-35, 36-55)	
Education	Categorical variable for beneficiary education (Less than High School, High School or GED, Some College or Technical, Associate's Degree, Bachelor's Degree, Some Graduate School, Master's Degree, Doctoral Degree, Other/No Response)	
Ethnicity	Categorical variable for beneficiary ethnicity (Hispanic, Not Hispanic, Skipped)	

Table 3-1. Data sources and variables used in the Enrollment and Participation analyses (continued)

Variable name by source	Variable description	Value labels
Baseline Interview (continued)		
Employment History	Percentage of beneficiaries who worked during the 2 years prior to enrollment	
Marital Status	Categorical variable for beneficiary marital status at the time of the baseline interview (Never Married, Married, Living as Married, Separate, Divorced, Widowed, No Response)	
No Medicare (at enrollment)	Binary variable indicating Part A Medicare coverage at enrollment	Coverage =0 No coverage=1
Race	Categorical variable for beneficiary race (White, Black, Asian, Mixed, Other, Refused)	
SF-12	Two composite variables created from the SF-12 to indicate beneficiary physical health (PCS) and mental health (MCS) at the time of the baseline interview	
Total Individual Income	Sum of all of the individual sources income reported by the beneficiary at the time of the baseline interview	
Census Bureau (2000 Census Summary Files)		
Some College (Census Tract)	Percent in tract who had some college education. Created using the Census block-group or tract in which the beneficiary's residence address was located, using the age-gender group within the block-group or tract. Age-groupings used for this purpose were: (1) 18-24 years, (2) 25-34 years, (3) 35-44 years, and (4) 45-64 years.	
Median Income (Census Tract)	Median income of those in tract. Created using Census block-group or tract in which the beneficiary's residence address is located, using the age-gender group within the block-group or tract. Age-groupings used for this purpose were (1) 18-24 years, (2) 25-34 years, (3) 35-44 years, (4) 45-54 years, and (5) 55-64 years.	
U.S. Bureau of Labor Statistics		
County Unemployment Rate - Current	Unemployment rate in the county where the beneficiary lives, as of the month of the recruitment date.	
County Unemployment Rate - Lagged 6 months	Unemployment rate in the county where the beneficiary lives, as of the month 6 months prior to the recruitment date.	

Appendix 3B:
Descriptive Statistics for Participation Analysis Test and Validation Samples

Table 3B-1. Average characteristics from test sample, cases from regression with *potential enrollees* only

Variable	Test sample, <i>potential enrollees</i> (<i>n</i> =7,815)			
	Mean	<i>SD</i>	Minimum	Maximum
Enrolled (yes/no)	0.15	0.35	0.00	1.00
Months on Rolls	118.60	78.00	4.00	454.00
Age (days/100)	169.60	26.84	78.30	207.80
(Age) ^{squared}	29,478.00	8,515.00	6,129.00	43,168.00
Gender (Male)	0.45	0.50	0.00	1.00
SSI (yes/no)	0.19	0.40	0.00	1.00
Repayee (yes/no)	0.16	0.37	0.00	1.00
Time to Recruit	278.50	169.00	3.00	648.00
(Time to Recruit) ^{squared}	106,131.00	109,891.00	9.00	419,904.00
Some College (census tract)	0.27	0.19	0.00	1.00
Median Income (census tract)	10.10	0.34	7.82	11.51
Race (Black)	0.24	0.43	0.00	1.00
Ln of Distance from Site	2.07	0.94	-3.38	5.53
Had Active Ticket (w/in 90 days)	0.04	0.20	0.00	1.00
Had Active Ticket (ever)	0.06	0.24	0.00	1.00
Trial Work End Date (10 yrs. ago)	0.06	0.24	0.00	1.00
Trial Work End Date (5-10 yrs. ago)	0.05	0.23	0.00	1.00
Trial Work End Date (0-5 yrs. ago)	0.05	0.22	0.00	1.00
Trial Work End Date (0-3 yrs. post recruitment date)	0.01	0.10	0.00	1.00
Sq. root of Reported Earnings (1-6 mos. pre-recruitment)	3.31	14.52	0.00	185.10
Sq. root of Reported Earnings (7-23 mos. pre-recruitment)	8.80	27.73	0.00	253.12
No Earnings Report (1-6 mos. pre-recruitment)	0.93	0.25	0.00	1.00

Table 3B-2. Average characteristics from test sample, cases from regression with *potential* and *possibly potential enrollees*

Variable	Test sample, <i>potential</i> and <i>possibly potential enrollees</i> (<i>n</i> =14,513)			
	Mean	<i>SD</i>	Minimum	Maximum
Enrolled (yes/no)	0.08	0.27	0.00	1.00
Months on Rolls	115.54	77.74	3.00	454.00
Age (days/100)	166.75	28.47	78.29	207.77
(Age) ^{squared}	28,617.09	8,906.04	6,129.32	43,168.38
Gender (Male)	0.47	0.50	0.00	1.00
SSI (yes/no)	0.21	0.41	0.00	1.00
Repayee (yes/no)	0.21	0.41	0.00	1.00
Time to Recruit	244.37	164.60	3.00	648.00
(Time to Recruit) ^{squared}	86,811.23	103,805.40	9.00	419,904.00
Some College (census tract)	0.26	0.20	0.00	1.00
Median Income (census tract)	10.08	0.35	7.82	11.51
Race (Black)	0.26	0.44	0.00	1.00
Ln of Distance from Site	2.12	0.92	-3.38	7.70
Had Active Ticket (w/in 90 days)	0.04	0.20	0.00	1.00
Had Active Ticket (ever)	0.06	0.24	0.00	1.00
Trial Work End Date (10 yrs + ago)	0.06	0.24	0.00	1.00
Trial Work End Date (5-10 yrs ago)	0.05	0.22	0.00	1.00
Trial Work End Date (0-5 yrs)	0.06	0.24	0.00	1.00
Trial Work End Date (0-3 yrs post recruitment date)	0.01	0.10	0.00	1.00
Sq. Root of Reported Earnings (1-6 mos. pre-recruitment)	4.51	17.48	0.00	270.76
Sq. Root of Reported Earnings (7-23 mos. pre-recruitment)	10.68	31.63	0.00	571.95
No Earnings Report (1-6 mos. pre-recruitment)	0.92	0.28	0.00	1.00

Table 3B-3. Average characteristics from validation sample, cases from regression with potential enrollees only

Variable	Validation sample, potential enrollees (n=7,933)			
	Mean	SD	Minimum	Maximum
Enrolled (yes/no)	0.14	0.34	0.00	1.00
Months on Rolls	118.79	78.06	3.00	425.00
Age (days/100)	169.26	27.40	80.24	207.11
(Age) ^{squared}	29,397.73	8,667.82	6,438.46	42,894.55
Gender (Male)	0.45	0.50	0.00	1.00
SSI (yes/no)	0.19	0.39	0.00	1.00
Repayee (yes/no)	0.16	0.37	0.00	1.00
Time to Recruit	279.80	168.44	3.00	648.00
(Time to Recruit) ^{squared}	106,654.50	109,636.40	9.00	419,904.00
Some College (census tract)	0.26	0.19	0.00	1.00
Median Income (census tract)	10.10	0.34	7.88	11.51
Race (Black)	0.24	0.43	0.00	1.00
Ln of Distance from Site	2.09	0.94	-3.38	6.74
Had Active Ticket (w/in 90 days)	0.05	0.22	0.00	1.00
Had Active Ticket (ever)	0.08	0.26	0.00	1.00
Trial Work End Date (10 yrs.+ ago)	0.06	0.24	0.00	1.00
Trial Work End Date (5-10 yrs. ago)	0.05	0.22	0.00	1.00
Trial Work End Date (0-5 yrs. ago)	0.05	0.21	0.00	1.00
Trial Work End Date (0-3 yrs. post recruitment date)	0.01	0.10	0.00	1.00
Sq. root of Reported Earnings (1-6 mos. pre-recruitment)	3.63	15.42	0.00	234.32
Sq. root of Reported Earnings (7-23 mos. pre-recruitment)	9.02	29.02	0.00	332.47
No Earnings Report (1-6 mos. pre-recruitment)	0.93	0.26	0.00	1.00

Table 3B-4. Average characteristics from validation sample, cases from regression with *potential* and *possibly potential enrollees*

Variable	Validation sample, <i>potential</i> and <i>possibly potential enrollees</i> (<i>n</i> =14,637)			
	Mean	<i>SD</i>	Minimum	Maximum
Enrolled (yes/no)	0.07	0.26	0.00	1.00
Months on Rolls	114.70	77.74	3.00	425.00
Age (days/100)	166.60	28.60	73.80	208.20
(Age) ^{squared}	28,576.00	8,952.00	5,442.00	43,356.00
Gender (Male)	0.47	0.50	0.00	1.00
SSI (yes/no)	0.20	0.40	0.00	1.00
Repayee (yes/no)	0.21	0.41	0.00	1.00
Time to Recruit	243.70	164.00	3.00	648.00
(Time to Recruit) ^{squared}	86,300.00	103,167.00	9.00	419,904.00
Some College (census tract)	0.26	0.20	0.00	1.00
Median Income (census tract)	10.08	0.35	7.82	11.51
Race (Black)	0.26	0.44	0.00	1.00
Ln of Distance from Site	2.13	0.91	-3.38	6.74
Had Active Ticket (w/in 90 days)	0.05	0.21	0.00	1.00
Had Active Ticket (ever)	0.07	0.25	0.00	1.00
Trial Work End Date (10 yrs.+ ago)	0.06	0.24	0.00	1.00
Trial Work End Date (5-10 yrs. ago)	0.05	0.22	0.00	1.00
Trial Work End Date (0-5 yrs. ago)	0.06	0.24	0.00	1.00
Trial Work End Date (0-3 yrs. post recruitment date)	0.01	0.09	0.00	1.00
Sq. root of Reported Earnings (1-6 mos. pre-recruitment)	4.68	18.05	0.00	234.30
Sq. root of Reported Earnings (7-23 mos. pre-recruitment)	11.08	32.63	0.00	347.00
No Earnings Report (1-6 mos. pre-recruitment)	0.91	0.28	0.00	1.00

Appendix 3C:
Probabilities of Enrollment for Test and Validation Samples

Table 3C-1. Mean beneficiary characteristics for quintiles based on predicted enrollment probability of *potential enrollees* in the test sample

Variable	<i>Potential enrollees only (n=7,815)</i>					
	1st Quintile (n=2,209)	2nd Quintile (n=1,491)	3rd Quintile (n=1,230)	4th Quintile (n=1,182)	5th Quintile (n=1,703)	Top 10% (n=1,017)
Enrolled (yes/no)	0.07	0.09	0.13	0.17	0.28	0.34
Age (years)	48.81	46.68	45.56	44.54	42.91	42.71
Gender (Male)	0.36	0.43	0.43	0.50	0.56	0.54
Race (Black)	0.14	0.21	0.28	0.30	0.34	0.33
Repayee (yes/no)	0.31	0.16	0.12	0.07	0.06	0.05
Distance from Site (miles)	13.23	11.45	10.64	9.66	9.98	10.17
Months on Rolls	149.90	118.84	105.99	99.50	100.22	101.33
SSI (yes/no)	0.25	0.21	0.18	0.14	0.15	0.15
SSDI<24 mos. (no SSI)	0.02	0.03	0.03	0.03	0.04	0.03
Primary Insured Amount	8,342.41	8,573.16	8,531.52	8,791.51	8,425.13	8,383.22
No Medicare (at enrollment)	0.04	0.05	0.05	0.05	0.06	0.05
Time to Recruit	228.70	256.56	291.03	302.75	336.51	348.38
2006 (Recruitment Yr.)	0.06	0.09	0.09	0.10	0.12	0.15
2007 (Recruitment Yr.)	0.39	0.46	0.53	0.57	0.63	0.63
2008 (Recruitment Yr.)	0.56	0.46	0.38	0.33	0.25	0.23
Some College (census tract)	0.26	0.26	0.26	0.28	0.28	0.28
Median Income (census tract)	27,468.92	25,814.54	25,160.28	25,013.58	24,467.07	24,729.38
Had Active Ticket (w/in 90 days)	0.00	0.003	0.005	0.02	0.17	0.25
Had Active Ticket (ever)	0.001	0.01	0.02	0.04	0.24	0.33
Trial Work End Date (10 yrs.+ago)	0.04	0.05	0.06	0.08	0.10	0.10
Trial Work End Date (5-10 yrs. ago)	0.01	0.04	0.05	0.07	0.11	0.12
Trial Work End Date (0-5 yrs. ago)	0.01	0.02	0.03	0.07	0.13	0.17
Trial Work End Date (0-3 yrs. post-recruitment date)	0.0005	0.00	0.00	0.001	0.04	0.06
Reported Earnings (1-6 mos. pre-recruitment)	151.10	106.08	171.96	263.64	421.14	470.69
Reported Earnings (7-23 mos. pre-recruitment)	191.65	281.92	519.06	1,059.13	2,276.58	2,871.24
No Earnings Report (1-6 mos. pre-recruitment)	0.98	0.97	0.96	0.93	0.82	0.78
Diagnosis (Affective Disorder)	0.67	0.72	0.73	0.70	0.67	0.68
Primary Diagnosis SMI	0.79	0.72	0.70	0.67	0.70	0.72
Secondary Diagnosis SMI	0.20	0.21	0.21	0.18	0.21	0.21
Percent with SMI	0.79	0.73	0.71	0.68	0.70	0.72

Table 3C-2. Mean beneficiary characteristics for quintiles based on predicted enrollment probability of potential enrollees plus possibly potential enrollees in the test sample

Variable	<i>Potential and possibly potential enrollees (n=14,513)</i>					
	1st Quintile (n=3,754)	2nd Quintile (n=2,932)	3rd Quintile (n=2,781)	4th Quintile (n=2,393)	5th Quintile (n=2,653)	Top 10% (n=1,657)
Enrolled (yes/no)	0.03	0.04	0.07	0.09	0.19	0.23
Age (years)	45.52	45.47	45.60	45.14	44.02	44.08
Gender (Male)	0.46	0.44	0.46	0.46	0.53	0.52
Race (Black)	0.21	0.25	0.25	0.30	0.31	0.31
Repayee (yes/no)	0.53	0.17	0.11	0.07	0.04	0.04
Distance from Site (miles)	14.25	12.19	11.54	9.72	9.61	9.95
Months on Rolls	134.62	115.68	109.53	103.40	105.62	105.44
SSI (yes/no)	0.30	0.22	0.18	0.16	0.14	0.14
SSDI<24 mos. (no SSI)	0.02	0.04	0.04	0.04	0.03	0.03
Primary Insured Amount	7,879.06	8,320.65	8,565.04	8,550.69	8,617.37	8,678.29
No Medicare (at enrollment)	0.06	0.06	0.06	0.05	0.04	0.04
Time to Recruit	142.36	189.26	258.01	330.68	357.49	366.00
2006 (Recruitment Yr.)	0.01	0.03	0.06	0.12	0.15	0.16
2007 (Recruitment Yr.)	0.14	0.28	0.47	0.62	0.68	0.69
2008 (Recruitment Yr.)	0.84	0.69	0.46	0.26	0.17	0.15
Some College	0.26	0.26	0.26	0.27	0.28	0.28
Median Income (census tract)	26,375.65	25,113.50	24,856.83	25,012.27	25,221.14	25,391.99
Had Active Ticket (w/in 90 days)	0.003	0.01	0.02	0.04	0.16	0.21
Had Active Ticket (ever)	0.004	0.01	0.03	0.06	0.23	0.29
Trial Work End Date (10 yrs.+ ago)	0.04	0.05	0.06	0.06	0.10	0.10
Trial Work End Date (5-10 yrs. ago)	0.02	0.04	0.05	0.06	0.11	0.10
Trial Work End Date (0-5 yrs. ago)	0.04	0.04	0.05	0.07	0.11	0.14
Trial Work End Date (0-3 yrs. post-recruitment date)	0.002	0.0003	0.003	0.01	0.04	0.05
Reported Earnings (1-6 mos. pre-recruitment)	496.21	267.05	213.18	291.06	300.01	309.79
Reported Earnings (7-23 mos. pre-recruitment)	864.36	886.29	816.04	1,266.24	1,895.76	2,181.22
No Earnings Report (1-6 mos. pre-recruitment)	0.93	0.93	0.94	0.91	0.85	0.84
Diagnosis (Affective Disorder)	0.63	0.70	0.73	0.71	0.68	0.68
Primary Diagnosis SMI	0.71	0.66	0.67	0.70	0.74	0.74
Secondary Diagnosis SMI	0.18	0.17	0.19	0.19	0.22	0.21
Percent with SMI	0.71	0.67	0.68	0.70	0.74	0.74

Table 3C-3. Mean beneficiary characteristics for quintiles based on predicted enrollment probability of potential enrollees plus possibly potential enrollees in the validation sample

Variable	<i>Potential and possibly potential enrollees</i> (<i>n</i> =14,637)					
	1st Quintile (<i>n</i> =3,994)	2nd Quintile (<i>n</i> =3,487)	3rd Quintile (<i>n</i> =2,583)	4th Quintile (<i>n</i> =2,092)	5th Quintile (<i>n</i> =2,481)	Top 10% (<i>n</i> =1,574)
Enrolled (yes/no)	0.03	0.04	0.07	0.10	0.18	0.20
Age (years)	44.74	45.59	45.48	45.04	44.91	44.71
Gender (Male)	0.49	0.44	0.46	0.47	0.46	0.46
Race (Black)	0.19	0.22	0.29	0.31	0.33	0.31
Repayee (yes/no)	0.53	0.12	0.09	0.08	0.04	0.03
Distance from Site (miles)	14.05	11.85	10.88	10.66	9.81	9.80
Months on Rolls	132.77	111.68	107.47	105.63	105.07	104.08
SSI (yes/no)	0.29	0.20	0.18	0.13	0.14	0.13
SSDI<24 mos. (no SSI)	0.03	0.03	0.04	0.04	0.02	0.01
Primary Insured Amount	7,663.28	8,543.45	8,572.30	8,693.35	8,670.17	8,614.25
No Medicare (at enrollment)	0.07	0.06	0.06	0.06	0.03	0.02
Time to Recruit	153.61	183.97	270.46	330.36	371.81	391.80
2006 (Recruitment Yr.)	0.01	0.02	0.04	0.13	0.20	0.22
2007 (Recruitment Yr.)	0.18	0.28	0.55	0.61	0.66	0.68
2008 (Recruitment Yr.)	0.82	0.71	0.41	0.26	0.13	0.10
Some College	0.27	0.26	0.27	0.27	0.25	0.25
Median Income (census tract)	25,885.87	25,122.95	25,303.70	25,434.94	25,172.00	25,171.56
Had Active Ticket (w/in 90 days)	0.003	0.01	0.02	0.06	0.18	0.22
Had Active Ticket (ever)	0.004	0.02	0.04	0.10	0.25	0.28
Trial Work End Date (10 yrs. + ago)	0.03	0.04	0.06	0.09	0.11	0.12
Trial Work End Date (5-10 yrs. ago)	0.04	0.05	0.05	0.06	0.07	0.07
Trial Work End Date (0-5 yrs. ago)	0.06	0.05	0.06	0.06	0.08	0.08
Trial Work End Date (0-3 yrs. post-recruitment date)	0.003	0.004	0.005	0.01	0.03	0.04
Reported Earnings (1-6 mos. pre-recruitment)	737.16	196.01	199.01	206.04	208.92	214.14
Reported Earnings (7-23 mos. pre-recruitment)	1,591.44	843.18	1,113.32	965.96	1,283.57	1,310.09
No Earnings Report (1-6 mos. pre-recruitment)	0.91	0.94	0.92	0.92	0.87	0.85
Diagnosis (Affective Disorder)	0.61	0.72	0.69	0.70	0.70	0.71
Primary Diagnosis SMI	0.71	0.66	0.67	0.70	0.75	0.76
Secondary Diagnosis SMI	0.34	0.34	0.32	0.33	0.37	0.39
Percent with SMI	0.71	0.66	0.67	0.70	0.75	0.76

Appendix 4A
Percent Obtained Employment (Any Job) by Site

Appendix 4-A. Percent obtained employment (any job) by site

Stratification	Obtained Any Employment	Statistic	Treatment	Control	Chi-Square	p-value
None		N	1004	1051		
	No	n	399	628		
	No	Percent	39.50%	59.69%	83.79	<.0001
	Yes	n	605	423		
	Yes	Percent	60.50%	40.31%		
Site 01		n	41	45		
	No	n	12	24		
	No	Percent	29.15%	52.56%	4.87	0.0283
	Yes	n	29	21		
	Yes	Percent	70.85%	47.44%		
Site 02		n	19	23		
	No	n	6	12		
	No	Percent	30.96%	51.34%	1.78	0.1824
	Yes	n	13	11		
	Yes	Percent	69.04%	48.66%		
Site 03		n	21	20		
	No	n	6	8		
	No	Percent	27.64%	39.65%	0.66	0.4138
	Yes	n	15	12		
	Yes	Percent	72.36%	60.35%		
Site 04		n	67	74		
	No	n	25	38		
	No	Percent	37.41%	51.43%	2.80	0.0957
	Yes	n	42	36		
	Yes	Percent	62.59%	48.57%		
Site 05		n	64	70		
	No	n	34	47		
	No	Percent	52.71%	66.85%	2.79	0.0966
	Yes	n	30	23		
	Yes	Percent	47.29%	33.15%		
Site 06		n	70	75		
	No	n	28	45		
	No	Percent	40.43%	60.42%	5.79	0.0165
	Yes	n	42	30		
	Yes	Percent	59.57%	39.58%		
Site 07		n	32	31		
	No	n	11	13		
	No	Percent	35.78%	41.64%	0.23	0.6359
	Yes	n	21	18		
	Yes	Percent	64.22%	58.36%		

(Continued)

Appendix 4-A. Percent obtained employment (any job) by treatment and control group

Stratification	Obtained Any Employment	Statistic	Treatment	Control	Chi-Square	p-value
Site 08		n	64	61		
	No	n	22	38		
	No	Percent	33.62%	62.47%	10.40	0.0012
	Yes	n	42	23		
	Yes	Percent	66.38%	37.53%		
Site 09		n	15	14		
	No	n	7	8		
	No	Percent	47.18%	57.85%	0.33	0.5651
	Yes	n	8	6		
	Yes	Percent	52.82%	42.15%		
Site 10		n	48	49		
	No	n	14	30		
	No	Percent	29.60%	61.67%	10.06	0.0016
	Yes	n	34	19		
	Yes	Percent	70.40%	38.33%		
Site 12		n	35	38		
	No	n	20	23		
	No	Percent	57.01%	60.22%	0.08	0.7821
	Yes	n	15	15		
	Yes	Percent	42.99%	39.78%		
Site 13		n	61	68		
	No	n	18	35		
	No	Percent	28.96%	51.57%	6.83	0.0088
	Yes	n	43	33		
	Yes	Percent	71.04%	48.43%		
Site 14		n	35	39		
	No	n	18	28		
	No	Percent	50.61%	71.71%	3.48	0.0624
	Yes	n	17	11		
	Yes	Percent	49.39%	28.29%		
Site 15			72	81		
		n	17	57		
	No	n	22.91%	70.63%	34.91	<.0001
	No	Percent	55	24		
	Yes	n	77.09%	29.37%		
Site 17		n	16	14		
	No	n	6	8		
	No	Percent	36.13%	57.09%	1.32	0.2490
	Yes	n	10	6		
	Yes	Percent	63.87%	42.91%		

(Continued)

Appendix 4-A. Percent obtained employment (any job) by treatment and control group

Stratification	Obtained Any Employment	Statistic	Treatment	Control	Chi-Square	p-value
Site 18		n	10	11		
	No	n	6	7		
	No	Percent	57.68%	63.45%	0.07	0.7886
	Yes	n	4	4		
	Yes	Percent	42.32%	36.55%		
Site 19		n	26	26		
	No	n	9	13		
	No	Percent	35.20%	49.81%	1.14	0.2903
	Yes	n	17	13		
	Yes	Percent	64.80%	50.19%		
Site 20		n	59	61		
	No	n	21	31		
	No	Percent	34.77%	50.91%	3.19	0.0733
	Yes	n	38	30		
	Yes	Percent	65.23%	49.09%		
Site 21		n	26	26		
	No	n	17	20		
	No	Percent	65.55%	77.27%	0.87	0.3488
	Yes	n	9	6		
	Yes	Percent	34.45%	22.73%		
Site 22		n	62	62		
	No	n	29	32		
	No	Percent	46.42%	51.49%	0.32	0.5732
	Yes	n	33	30		
	Yes	Percent	53.58%	48.51%		
Site 23		n	69	72		
	No	n	34	50		
	No	Percent	48.86%	68.99%	5.90	0.0156
	Yes	n	35	22		
	Yes	Percent	51.14%	31.01%		
Site 24		n	47	51		
	No	n	19	30		
	No	Percent	41.45%	58.37%	2.81	0.0973
	Yes	n	28	21		
	Yes	Percent	58.55%	41.63%		
Site 25		n	45	40		
	No	n	20	31		
	No	Percent	43.98%	77.39%	9.72	0.0018
	Yes	n	25	9		
	Yes	Percent	56.02%	22.61%		

Appendix 4B
Subgroup Comparisons for Employment Outcomes

Table 4B-1. Months to first job for beneficiaries who worked at least one job and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Months to First Job	Treatment			Control			t value	p-value	
	N	M	SD	N	M	SD			
<i>Beneficiaries who worked at least 1 job</i>									
		N=605			N=423				
Age: 18 to 34	61	7.61	5.92	40	6.52	6.44	-1.19	0.2368	
Age: 35+	544	7.34	6.20	383	6.70	6.30	-2.13	0.0332	
Gender: Male	285	6.54	5.73	199	6.42	6.26	-0.87	0.3837	
Gender: Female	320	8.12	6.47	224	6.92	6.36	-2.54	0.0113	
Diagnosis: Affective Disorder	417	7.28	5.85	305	6.97	6.40	-1.51	0.1315	
Diagnosis: Schizophrenia	188	7.56	6.82	118	5.96	6.03	-2.11	0.0354	
Education: Less than HS	78	7.56	6.12	49	6.18	6.52	-1.58	0.1158	
Education: HS grad	151	7.58	5.87	110	6.96	6.70	-1.55	0.1213	
Education: More than HS	376	7.24	6.32	264	6.66	6.12	-1.36	0.1729	
<i>Beneficiaries who worked at least 1 competitive job</i>									
		N=526			N=347				
Age: 18 to 34	59	7.83	6.09	33	6.98	6.62	-0.91	0.3662	
Age: 35+	467	7.74	6.05	314	7.24	6.11	-1.43	0.1543	
Gender: Male	251	7.46	6.09	158	7.19	6.37	-0.81	0.4211	
Gender: Female	275	8.02	6.02	189	7.24	5.98	-1.57	0.1166	
Diagnosis: Affective Disorder	371	7.80	5.89	253	7.25	6.02	-1.47	0.1419	
Diagnosis: Schizophrenia	155	7.64	6.44	94	7.13	6.53	-0.79	0.4293	
Education: Less than HS	67	8.16	6.57	37	7.39	7.01	-0.76	0.4473	
Education: HS grad	140	8.40	6.36	86	7.54	6.43	-1.23	0.2183	
Education: More than HS	319	7.38	5.77	224	7.06	5.92	-0.89	0.3733	

Table 4B-2. Total months employed for all beneficiaries, beneficiaries who worked at least one job, and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Total Months Employed	Treatment			Control			t value	p-value
	N	M	SD	N	M	SD		
<i>All beneficiaries</i>		N=1,004			N=1,051			
Age: 18 to 34	86	6.92	7.59	85	4.40	6.75	-3.02	0.0029
Age: 35+	918	6.17	7.47	966	3.58	6.41	-9.35	<0.0001
Gender: Male	465	6.55	7.60	503	3.28	5.90	-7.83	<0.0001
Gender: Female	539	5.96	7.36	548	3.99	6.89	-6.20	<0.0001
Diagnosis: Affective Disorder	693	6.37	7.48	772	3.54	6.39	-8.76	<0.0001
Diagnosis: Schizophrenia	311	5.94	7.48	279	3.94	6.57	-4.52	<0.0001
Education: Less than HS	120	6.39	7.52	127	3.10	5.71	-4.52	<0.0001
Education: HS grad	256	5.76	7.05	288	3.28	5.94	-5.22	<0.0001
Education: More than HS	628	6.39	7.64	636	3.92	6.78	-7.12	<0.0001
<i>Beneficiaries who worked at least 1 job</i>		N=605			N=423			
Age: 18 to 34	61	9.76	7.28	40	9.32	7.08	-0.14	0.8923
Age: 35+	544	10.36	7.07	383	9.01	7.36	-3.33	0.0009
Gender: Male	285	10.63	7.10	199	8.28	6.83	-3.88	0.0001
Gender: Female	320	10.01	7.07	224	9.73	7.69	-0.91	0.3625
Diagnosis: Affective Disorder	417	10.55	6.93	305	8.95	7.38	-3.51	0.0005
Diagnosis: Schizophrenia	188	9.75	7.39	118	9.28	7.22	-0.60	0.5466
Education: Less than HS	78	9.82	7.30	49	8.12	6.74	-1.20	0.2340
Education: HS grad	151	9.74	6.72	110	8.60	6.84	-1.56	0.1191
Education: More than HS	376	10.63	7.18	264	9.40	7.63	-2.55	0.0109
<i>Beneficiaries who worked at least 1 competitive job</i>		N=526			N=347			
Age: 18 to 34	59	9.20	7.13	33	9.83	7.18	0.56	0.5771
Age: 35+	467	9.27	6.63	314	8.20	6.78	-2.67	0.0078
Gender: Male	251	9.18	6.55	158	7.89	6.62	-2.28	0.0231
Gender: Female	275	9.33	6.80	189	8.74	6.98	-1.16	0.2462
Diagnosis: Affective Disorder	371	9.56	6.63	253	8.26	6.78	-2.72	0.0067
Diagnosis: Schizophrenia	155	8.55	6.73	94	8.60	6.98	-0.20	0.8437
Education: Less than HS	67	8.72	7.13	37	7.49	5.82	-0.41	0.6828
Education: HS grad	140	8.20	6.10	86	8.14	6.56	-0.40	0.6927
Education: More than HS	319	9.84	6.76	224	8.58	7.08	-2.60	0.0094

Table 4B-3. Consecutive months of employment at study exit for all beneficiaries, beneficiaries who worked at least one job, and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Consecutive months of employment at study exit	Treatment			Control			t value	p-value	
	N	M	SD	N	M	SD			
<i>All beneficiaries</i>		N=1,004			N=1,051				
Age: 18 to 34	86	3.30	6.75	85	2.38	5.73	-0.09	0.9305	
Age: 35+	918	3.21	6.54	966	1.74	5.23	-7.64	<0.0001	
Gender: Male	465	3.47	6.76	503	1.43	4.65	-6.76	<0.0001	
Gender: Female	539	2.99	6.36	548	2.14	5.78	-3.63	0.0003	
Diagnosis: Affective Disorder	693	3.28	6.55	772	1.81	5.32	-6.29	<0.0001	
Diagnosis: Schizophrenia	311	3.09	6.57	279	1.74	5.13	-3.68	0.0003	
Education: Less than HS	120	3.08	6.40	127	1.61	4.65	-2.03	0.0439	
Education: HS grad	256	2.85	6.05	288	1.54	4.78	-3.34	0.0009	
Education: More than HS	628	3.39	6.78	636	1.95	5.60	-6.12	<0.0001	
<i>Beneficiaries who worked at least 1 job</i>		N=605			N=423				
Age: 18 to 34	61	4.65	7.64	40	5.05	7.51	1.61	0.1103	
Age: 35+	544	5.39	7.73	383	4.39	7.56	-3.48	0.0005	
Gender: Male	285	5.63	7.87	199	3.60	6.84	-3.81	0.0002	
Gender: Female	320	5.03	7.59	224	5.21	8.07	-0.35	0.7257	
Diagnosis: Affective Disorder	417	5.43	7.69	305	4.59	7.67	-2.37	0.0179	
Diagnosis: Schizophrenia	188	5.07	7.79	118	4.10	7.25	-1.56	0.1195	
Education: Less than HS	78	4.73	7.44	49	4.21	6.83	-0.03	0.9786	
Education: HS grad	151	4.82	7.26	110	4.03	7.09	-0.99	0.3237	
Education: More than HS	376	5.64	7.95	264	4.67	7.87	-2.88	0.0041	
<i>Beneficiaries who worked at least 1 competitive job</i>		N=526			N=347				
Age: 18 to 34	59	4.22	7.33	33	5.49	7.73	1.90	0.0607	
Age: 35+	467	4.36	6.89	314	3.52	6.75	-2.60	0.0096	
Gender: Male	251	4.45	7.05	158	3.46	6.66	-1.86	0.0632	
Gender: Female	275	4.24	6.84	189	3.91	7.04	-0.80	0.4253	
Diagnosis: Affective Disorder	371	4.64	7.07	253	3.65	6.87	-2.32	0.0207	
Diagnosis: Schizophrenia	155	3.64	6.58	94	3.87	6.87	0.20	0.8451	
Education: Less than HS	67	4.16	7.06	37	3.41	5.91	-0.14	0.8917	
Education: HS grad	140	3.49	6.08	86	3.59	6.42	0.34	0.7366	
Education: More than HS	319	4.76	7.24	224	3.80	7.19	-2.52	0.0122	

Table 4B-4. Average weekly earnings at main job for all beneficiaries, beneficiaries who worked at least one job, and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Average weekly earnings at main job	Treatment			Control			t value	p-value	
	N	M	SD	N	M	SD			
<i>All beneficiaries</i>		N=1,004			N=1,051				
Age: 18 to 34	86	143.01	131.54	85	95.80	133.90	-3.16	0.0019	
Age: 35+	918	114.11	139.79	966	74.28	141.10	-8.89	<0.0001	
Gender: Male	465	116.71	136.08	503	75.24	128.50	-6.85	<0.0001	
Gender: Female	539	116.48	142.22	548	76.78	151.18	-6.52	<0.0001	
Diagnosis: Affective Disorder	693	125.78	150.13	772	78.58	150.53	-8.36	<0.0001	
Diagnosis: Schizophrenia	311	96.33	109.71	279	69.04	108.75	-4.41	<0.0001	
Education: Less than HS	120	109.04	116.05	127	60.41	101.00	-4.42	<0.0001	
Education: HS grad	256	110.71	127.69	288	62.87	98.79	-5.18	<0.0001	
Education: More than HS	628	120.46	147.86	636	85.21	161.75	-6.66	<0.0001	
<i>Beneficiaries who worked at least 1 job</i>		N=605			N=423				
Age: 18 to 34	61	201.78	109.94	40	202.83	127.68	-0.46	0.6481	
Age: 35+	544	191.67	133.92	383	187.12	170.65	-1.67	0.0952	
Gender: Male	285	189.37	127.90	199	190.06	140.84	-0.39	0.6938	
Gender: Female	320	195.70	135.19	224	187.34	187.71	-2.06	0.0403	
Diagnosis: Affective Disorder	417	208.51	141.41	305	198.76	183.21	-2.10	0.0363	
Diagnosis: Schizophrenia	188	158.17	99.69	118	162.63	112.18	-0.22	0.8279	
Education: Less than HS	78	167.44	105.81	49	157.96	106.61	-0.78	0.4363	
Education: HS grad	151	187.13	114.77	110	164.85	92.71	-1.44	0.1507	
Education: More than HS	376	200.28	142.05	264	204.24	196.21	-0.95	0.3434	
<i>Beneficiaries who worked at least 1 competitive job</i>		N=526			N=347				
Age: 18 to 34	59	200.78	116.35	33	216.65	119.30	0.57	0.5694	
Age: 35+	467	201.15	146.78	314	190.83	181.20	-2.16	0.0312	
Gender: Male	251	190.26	136.75	158	202.72	146.56	0.82	0.4114	
Gender: Female	275	211.21	149.25	189	185.44	197.58	-3.37	0.0008	
Diagnosis: Affective Disorder	371	218.12	155.28	253	201.62	194.71	-2.48	0.0135	
Diagnosis: Schizophrenia	155	161.03	101.61	94	171.17	111.48	0.37	0.7088	
Education: Less than HS	67	176.77	112.57	37	159.03	103.68	-0.90	0.3690	
Education: HS grad	140	187.69	118.13	86	169.11	91.09	-0.92	0.3561	
Education: More than HS	319	212.31	158.34	224	208.35	206.88	-1.43	0.1531	

Table 4B-5. Average hours per week at main job for all beneficiaries, beneficiaries who worked at least one job, and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Average hours per week at main job	Treatment			Control			t value	p-value
	N	M	SD	N	M	SD		
<i>All beneficiaries</i>		N=1,004			N=1,051			
Age: 18 to 34	86	16.30	13.82	85	10.48	13.32	-3.15	0.0019
Age: 35+	918	11.52	12.26	966	7.39	10.96	-8.78	<0.0001
Gender: Male	465	12.22	12.34	503	7.94	11.78	-6.74	<0.0001
Gender: Female	539	11.68	12.59	548	7.36	10.63	-6.47	<0.0001
Diagnosis: Affective Disorder	693	12.31	12.80	772	7.58	11.30	-8.25	<0.0001
Diagnosis: Schizophrenia	311	11.10	11.69	279	7.82	10.91	-4.35	<0.0001
Education: Less than HS	120	13.49	13.54	127	7.11	10.87	-4.55	<0.0001
Education: HS grad	256	11.89	12.47	288	7.44	11.09	-4.88	<0.0001
Education: More than HS	628	11.64	12.25	636	7.87	11.33	-6.69	<0.0001
<i>Beneficiaries who worked at least 1 job</i>		N=605			N=423			
Age: 18 to 34	61	23.00	10.48	40	22.18	10.70	-0.43	0.6705
Age: 35+	544	19.36	9.96	383	18.62	9.67	-1.25	0.2128
Gender: Male	285	19.82	9.82	199	20.06	10.32	0.02	0.9875
Gender: Female	320	19.63	10.31	224	17.97	9.25	-1.87	0.0617
Diagnosis: Affective Disorder	417	20.41	10.17	305	19.17	10.04	-1.68	0.0933
Diagnosis: Schizophrenia	188	18.23	9.68	118	18.41	9.26	<-0.01	0.9981
Education: Less than HS	78	20.72	11.64	49	18.60	9.74	-1.24	0.2166
Education: HS grad	151	20.10	9.76	110	19.51	9.15	-0.25	0.8022
Education: More than HS	376	19.36	9.84	264	18.79	10.12	-1.08	0.2787
<i>Beneficiaries who worked at least 1 competitive job</i>		N=526			N=347			
Age: 18 to 34	59	23.06	11.04	33	24.12	10.49	0.38	0.7054
Age: 35+	467	20.16	10.60	314	18.90	9.99	-1.83	0.0675
Gender: Male	251	20.18	10.52	158	21.62	10.82	1.23	0.2182
Gender: Female	275	20.78	10.85	189	17.55	9.13	-3.40	0.0007
Diagnosis: Affective Disorder	371	21.26	10.84	253	19.38	10.34	-2.27	0.0235
Diagnosis: Schizophrenia	155	18.66	10.09	94	19.48	9.65	0.43	0.6712
Education: Less than HS	67	22.04	12.96	37	18.85	10.62	-1.43	0.1552
Education: HS grad	140	20.32	10.15	86	20.14	9.45	0.02	0.9879
Education: More than HS	319	20.23	10.39	224	19.21	10.35	-1.42	0.1566

Table 4B-6. Highest hourly wage for all beneficiaries, beneficiaries who worked at least one job, and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Highest hourly wage	Treatment			Control			t value	p-value
	N	M	SD	N	M	SD		
<i>All beneficiaries</i>		N=1,004			N=1,051			
Age: 18 to 34	86	7.06	5.44	85	5.86	7.56	-2.43	0.0160
Age: 35+	918	7.71	9.02	966	5.02	8.17	-8.78	<0.0001
Gender: Male	465	7.72	8.76	503	4.70	7.32	-7.09	<0.0001
Gender: Female	539	7.59	8.79	548	5.46	8.79	-5.93	<0.0001
Diagnosis: Affective Disorder	693	8.07	9.22	772	5.24	8.56	-8.14	<0.0001
Diagnosis: Schizophrenia	311	6.73	7.66	279	4.68	6.77	-4.35	<0.0001
Education: Less than HS	120	7.43	8.35	127	4.13	6.40	-4.22	<0.0001
Education: HS grad	256	7.05	8.12	288	4.16	6.37	-5.07	<0.0001
Education: More than HS	628	7.94	9.11	636	5.71	9.05	-6.47	<0.0001
<i>Beneficiaries who worked at least 1 job</i>		N=605			N=423			
Age: 18 to 34	61	9.96	3.47	40	12.41	6.37	1.47	0.1449
Age: 35+	544	12.95	8.29	383	12.66	8.43	-1.27	0.2059
Gender: Male	285	12.52	7.96	199	11.86	7.09	-1.27	0.2032
Gender: Female	320	12.76	8.02	224	13.33	9.13	0.11	0.9126
Diagnosis: Affective Disorder	417	13.38	8.37	305	13.26	8.87	-1.25	0.2124
Diagnosis: Schizophrenia	188	11.05	6.87	118	11.03	6.14	-0.04	0.9654
Education: Less than HS	78	11.42	7.81	49	10.80	5.87	-0.21	0.8374
Education: HS grad	151	11.91	7.28	110	10.90	5.77	-1.00	0.3198
Education: More than HS	376	13.20	8.25	264	13.70	9.28	-0.29	0.7756
<i>Beneficiaries who worked at least 1 competitive job</i>		N=526			N=347			
Age: 18 to 34	59	10.43	4.31	33	11.01	4.67	0.83	0.4082
Age: 35+	467	11.34	5.59	314	12.02	7.82	-0.38	0.7058
Gender: Male	251	10.74	4.85	158	11.40	7.51	-0.76	0.4491
Gender: Female	275	11.70	5.96	189	12.36	7.63	0.41	0.6822
Diagnosis: Affective Disorder	371	11.83	5.90	253	12.66	8.45	-0.39	0.6981
Diagnosis: Schizophrenia	155	9.84	3.97	94	9.97	3.94	0.13	0.8946
Education: Less than HS	67	9.34	3.21	37	10.60	4.88	0.52	0.6068
Education: HS grad	140	10.63	5.20	86	9.88	4.80	-0.92	0.3596
Education: More than HS	319	11.91	5.84	224	12.93	8.58	-0.09	0.9304

Table 4B-7. Job satisfaction for beneficiaries who worked at least one job and beneficiaries who worked at least one competitive job by treatment and control group, stratified by age, gender, diagnosis, and education

Job satisfaction with main job at study end	Treatment			Control			t value	p-value	
	N	M	SD	N	M	SD			
<i>Beneficiaries who worked at least 1 job</i>									
		N=335			N=178				
Age: 18 to 34	32	34.30	17.05	28	37.39	9.57	-0.37	0.6998	
Age: 35+	334	35.53	13.26	175	31.82	15.36	-2.84	0.0048	
Gender: Male	174	35.52	13.84	85	33.23	15.28	-1.27	0.2052	
Gender: Female	192	35.33	13.47	118	32.14	14.50	-2.48	0.0138	
Diagnosis: Affective Disorder	261	35.12	13.38	149	32.14	14.70	-2.27	0.0240	
Diagnosis: Schizophrenia	105	36.15	14.23	54	33.83	15.20	-1.35	0.1792	
Education: Less than HS	42	31.98	15.17	23	36.66	12.35	1.04	0.3034	
Education: HS grad	89	35.42	15.66	54	32.03	15.73	-1.97	0.0505	
Education: More than HS	235	36.05	12.39	126	32.09	14.80	-2.74	0.0065	
<i>Beneficiaries who worked at least 1 competitive job</i>									
		N=251			N=138				
Age: 18 to 34	23	39.11	9.15	23	38.36	6.01	-1.12	0.2685	
Age: 35+	228	38.33	8.20	115	37.27	9.47	-0.62	0.5378	
Gender: Male	117	38.46	8.53	59	38.18	8.79	-0.34	0.7348	
Gender: Female	134	38.34	8.06	79	36.91	9.10	-0.99	0.3227	
Diagnosis: Affective Disorder	188	37.95	8.45	100	37.09	9.07	-0.68	0.4984	
Diagnosis: Schizophrenia	63	39.71	7.65	38	38.42	8.72	-0.70	0.4840	
Education: Less than HS	28	36.78	8.55	14	37.47	9.85	0.20	0.8398	
Education: HS grad	61	39.72	8.41	38	37.54	8.60	-1.52	0.1309	
Education: More than HS	162	38.19	8.14	86	37.41	9.08	-0.45	0.6548	

Appendix 4C
Subgroup Comparisons for Earnings and Income Outcomes

Table 4C-1. Past month's earnings (averaged over 8-post baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
Past month's earnings								
N (n)	1,004	1,051			589	449		
Mean	148.16	97.41	-8.21	<0.0001	251.12	227.93	-3.77 ¹	0.0002
SD	257.84	283.34			294.32	397.97		
Median	23.79	0.00			165.37	93.98		
% with earnings >0					59.00	42.73	54.37 ²	<0.0001
Age: 18 to 34								
N (n)	86	85			58	43		
Mean	166.83	104.50	-2.67	0.0082	246.43	207.08	-1.44 ¹	0.1538
SD	237.42	253.23			251.36	326.55		
% with earnings >0					67.70	50.47	5.26 ²	0.0222
Age: 35+								
N (n)	918	966			531	406		
Mean	146.40	96.78	-7.76	<0.0001	251.63	230.16	-3.49 ¹	0.0005
SD	259.71	286.00			298.84	405.20		
% with earnings >0					58.18	42.05	49.04 ²	<0.0001
Gender: Male								
N (n)	465	503			281	217		
Mean	153.42	84.56	-6.55	<0.0001	252.38	196.61	-4.15 ¹	<0.0001
SD	253.23	246.73			283.77	346.62		
% with earnings >0					60.79	43.01	30.64 ²	<0.0001
Gender: Female								
N (n)	539	548			308	232		
Mean	143.54	109.34	-5.13	<0.0001	249.96	257.39	-1.26 ¹	0.2098
SD	262.01	313.61			304.37	439.82		
% with earnings >0					57.43	42.48	24.28 ²	<0.0001
Diagnosis: Affective Disorder								
N (n)	693	772			408	324		
Mean	162.21	102.66	-7.40	<0.0001	274.11	244.83	-3.64 ¹	0.0003
SD	279.49	299.94			317.92	424.28		
% with earnings >0					59.17	41.93	43.53 ²	<0.0001
Diagnosis: Schizophrenia								
N (n)	311	279			181	125		
Mean	117.19	82.96	-3.61	0.0003	199.96	184.54	-1.41 ¹	0.1585
SD	199.68	231.69			226.70	318.40		
% with earnings >0					58.61	44.95	10.95 ²	0.0009

Table 4C-1. Past month's earnings (averaged over 8-post baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
Education: Less than high school								
<i>N (n)</i>	120	127			72	56		
Mean	142.25	69.61	-2.90	0.0041	237.46	159.26	-1.56 ¹	0.1217
SD	262.91	185.78			306.06	257.36		
% with earnings >0					59.91	43.71	6.49 ²	0.0112
Education: High school graduate								
<i>N (n)</i>	256	288			144	115		
Mean	136.39	71.00	-4.27	<0.0001	240.78	177.81	-1.88 ¹	0.0614
SD	236.40	151.25			271.09	196.06		
% with earnings >0					56.64	39.93	15.21 ²	0.0001
Education: More than high school								
<i>N (n)</i>	628	636			373	278		
Mean	154.12	115.10	-6.301	<0.0001	257.81	262.67	-2.77 ¹	0.0058
SD	265.31	339.78			301.08	473.95		
% with earnings >0					59.78	43.82	32.25 ²	<0.0001

NOTE: Weighted percents may not be consistent with unweighted counts.

¹ t-test

² Chi-square test

Table 4C-2. Past month's earnings (averaged over 8-post baseline interviews) above SGA by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Non-Zero (Conditional)		Chi-square	p-value
	Treatment (N=589)	Control (N=449)		
Earnings above SGA				
<i>n</i>	49	40		
%	8.18	8.76	0.11	0.7394
Age: 18 to 34				
<i>n</i>	5	4		
%	8.61	9.13	0.01	0.9271
Age: 35+				
<i>n</i>	44	36		
%	8.14	8.72	0.10	0.7483
Gender: Male				
<i>n</i>	21	18		
%	7.28	8.20	0.15	0.7004
Gender: Female				
<i>n</i>	28	22		
%	9.02	9.28	0.01	0.9155
Diagnosis: Affective Disorder				
<i>n</i>	40	34		
%	9.66	10.35	0.10	0.7553
Diagnosis: Schizophrenia				
<i>n</i>	9	6		
%	4.90	4.67	0.01	0.9264
Education: Less than high school				
<i>n</i>	6	3		
%	8.23	5.09	0.48	0.4790
Education: High school graduate				
<i>n</i>	14	5		
%	9.48	4.35	2.48	0.1119
Education: More than high school				
<i>n</i>	29	32		
%	7.67	11.33	2.54	0.1091

NOTE: Weighted percents may not be consistent with unweighted counts.

Table 4C-3. Past 3 months' earnings (at study exit) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	<i>t</i> value	<i>p</i> -value	Treatment	Control	Test value	<i>p</i> -value
Past 3 months' earnings								
<i>N</i> (<i>n</i>)	1,004	1,051			340	184		
Mean	858.60	478.87	-8.59	<0.0001	2,538.16	2,739.25	-0.51 ¹	0.6073
<i>SD</i>	1,752.36	1,698.82			2,203.52	3,233.26		
Median	0.00	0.00			1,935.59	1,910.20		
% with earnings >0					33.83	17.48	71.93 ²	<0.0001
Age: 18 to 34								
<i>N</i> (<i>n</i>)	86	85			28	28		
Mean	912.64	879.22	-0.07	0.9443	2,792.71	2,669.91	-0.76 ¹	0.4483
<i>SD</i>	1,795.40	1,917.66			2,154.93	2,565.73		
% with earnings >0					32.68	32.93	<0.01 ²	0.9722
Age: 35+								
<i>N</i> (<i>n</i>)	918	966			312	156		
Mean	853.53	443.27	-9.05	<0.0001	2,515.17	2,751.85	-0.30 ¹	0.7649
<i>SD</i>	1,749.16	1,674.30			2,209.77	3,348.60		
% with earnings >0					33.94	16.11	79.78 ²	<0.0001
Gender: Male								
<i>N</i> (<i>n</i>)	465	503			161	78		
Mean	862.48	402.15	-7.00	<0.0001	2,491.87	2,607.15	-0.34 ¹	0.7308
<i>SD</i>	1,855.22	1,399.25			2,433.58	2,661.91		
% with earnings >0					34.61	15.43	47.64 ²	<0.0001
Gender: Female								
<i>N</i> (<i>n</i>)	539	548			179	106		
Mean	855.20	550.11	-5.22	<0.0001	2,580.50	2,836.82	-0.52 ¹	0.6066
<i>SD</i>	1,657.20	1,937.07			1,971.60	3,608.89		
% with earnings >0					33.14	19.39	26.44 ²	<0.0001
Diagnosis: Affective Disorder								
<i>N</i> (<i>n</i>)	693	772			245	133		
Mean	958.03	499.91	-7.92	<0.0001	2,723.83	2,900.25	-0.72 ¹	0.4708
<i>SD</i>	1,918.00	1,839.02			2,395.00	3,579.35		
% with earnings >0					35.17	17.24	61.27 ²	<0.0001
Diagnosis: Schizophrenia								
<i>N</i> (<i>n</i>)	311	279			95	51		
Mean	639.48	420.95	-3.59	0.0004	2,071.88	2,318.50	0.10 ¹	0.9222
<i>SD</i>	1,300.75	1,236.90			1,564.68	2,042.17		
% with earnings >0					30.86	18.16	12.61 ²	0.0004

Table 4C-3. Past 3 months' earnings (at study exit) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t value	p-value	Treatment	Control	Test value	p-value
Education: Less than high school								
N (n)	120	127			37	22		
Mean	746.90	378.28	-2.62	0.0093	2,422.53	2,211.80	-1.04 ¹	0.3015
SD	1,453.05	1,152.09			1,715.33	1,999.12		
% with earnings >0					30.83	17.10	6.38 ²	0.0113
Education: High school diploma								
N (n)	256	288			82	48		
Mean	753.68	327.70	-4.26	<0.0001	2,366.52	1,995.91	-0.53 ¹	0.5950
SD	1,692.76	945.21			2,282.49	1,492.22		
% with earnings >0					31.85	16.42	17.80 ²	<0.0001
Education: More than high school								
N (n)	628	636			221	114		
Mean	923.40	568.29	-6.94	<0.0001	2,621.47	3,149.41	0.25 ¹	0.8026
SD	1,828.72	2,026.73			2,253.95	3,836.61		
% with earnings >0					35.22	18.04		

NOTE: Weighted percents may not be consistent with unweighted counts.

¹ t-test

² Chi-square test

Table 4C-4. Past month's SSDI (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	<i>t</i> -value	<i>p</i> -value	Treatment	Control	Test value	<i>p</i> -value
SSDI								
<i>N</i> (<i>n</i>)	1,004	1,051			1,003	1,050		
Mean	855.49	853.00	-0.39	0.6947	856.34	853.77	-0.40 ¹	0.6916
<i>SD</i>	340.30	337.75			339.40	336.97		
Median	787.48	784.22			787.54	784.60		
% with income >0					99.90	99.91	0.01 ²	0.9445
Age: 18 to 34								
<i>N</i> (<i>n</i>)	86	85			85	85		
Mean	689.20	680.44	-0.69	0.4927	697.33	680.44	-0.83 ¹	0.4101
<i>SD</i>	254.09	260.94			244.26	260.94		
% with income >0					98.83	100.00	†	†
Age: 35+								
<i>N</i> (<i>n</i>)	918	966			918	965		
Mean	871.08	868.34	-0.40	0.6873	871.08	869.20	-0.37 ¹	0.7145
<i>SD</i>	343.26	339.74			343.26	338.85		
% with income >0					100.00	99.90	†	†
Gender: Male								
<i>N</i> (<i>n</i>)	465	503			464	503		
Mean	867.13	848.89	-0.98	0.3284	869.00	848.89	-1.04 ¹	0.2999
<i>SD</i>	343.69	337.18			341.73	337.18		
% with income >0					99.79	100.00	†	†
Gender: Female								
<i>N</i> (<i>n</i>)	539	548			539	547		
Mean	845.28	856.81	0.38	0.7024	845.28	858.31	0.43 ¹	0.6654
<i>SD</i>	337.28	338.53			337.28	336.98		
% with income >0					100.00	99.83	†	†
Diagnosis: Affective Disorder								
<i>N</i> (<i>n</i>)	693	772			693	771		
Mean	895.85	887.30	-0.80	0.4259	895.85	888.39	-0.76 ¹	0.4495
<i>SD</i>	360.81	353.27			360.81	352.15		
% with income >0					100.00	99.88	†	†

Table 4C-4. Past month's SSDI (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
Diagnosis: Schizophrenia								
N (n)	311	279			310	279		
Mean	766.54	758.58	-0.20	0.8391	769.01	758.58	-0.27 ¹	0.7868
SD	272.22	268.79			269.17	268.79		
% with income >0					99.68	100.00		
Education: Less than high school								
N (n)	120	127			120	126		
Mean	748.10	700.82	-1.36	0.1753	748.10	706.06	-1.26 ¹	0.2078
SD	284.60	282.48			284.60	277.21		
% with income >0					100.00	99.26	†	†
Education: High school diploma								
N (n)	256	288			256	288		
Mean	799.84	789.52	-0.53	0.5998	799.84	789.52	-0.53 ¹	0.5998
SD	301.71	286.98			301.71	286.98		
% with income >0					100.00	100.00	†	†
Education: More than high school								
N (n)	628	636			627	636		
Mean	899.28	912.82	0.55	0.5852	900.72	912.82	0.50 ¹	0.6190
SD	357.81	354.84			356.28	354.84		
% with income >0					99.84	100.00		

NOTE: Weighted percents may not be consistent with unweighted counts.

†Not applicable. Chi-square not calculated.

¹ t-test

² Chi-square test

Table 4C-5. Past month's SSI (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
SSI								
N (n)	1,004	1,051			241	259		
Mean	22.48	25.94	0.18	0.8537	93.41	105.37	1.36 ¹	0.1747
SD	60.65	65.40			89.52	94.71		
Median	0.00	0.00			59.54	79.08		
% with income >0					24.50	24.61	0.00 ²	0.9521
Age: 18 to 34								
N (n)	86	85			25	35		
Mean	31.01	57.47	1.77	0.0778	104.59	139.13	1.38 ¹	0.1721
SD	73.95	93.63			96.85	99.03		
% with income >0					29.65	41.31	2.54 ²	0.1146
Age: 35+								
N (n)	918	966			216	224		
Mean	22.12	23.13	-0.38	0.7041	92.11	100.01	0.78 ¹	0.4359
SD	59.20	61.51			88.67	93.10		
% with income >0					24.02	23.13	0.21 ²	0.6528
Gender: Male								
N (n)	465	503			92	124		
Mean	15.33	23.77	1.82	0.0696	76.22	96.21	1.47 ¹	0.1420
SD	47.00	61.84			76.73	91.83		
% with income >0					20.12	24.71	2.93 ²	0.0903
Gender: Female								
N (n)	539	548			149	135		
Mean	29.50	27.95	-1.32	0.1863	104.10	113.95	0.84 ¹	0.4015
SD	69.97	68.57			95.61	96.92		
% with income >0					28.34	24.52	2.03 ²	0.1566
Diagnosis: Affective Disorder								
N (n)	693	772			162	178		
Mean	23.26	23.63	-0.42	0.6783	96.95	102.82	0.36 ¹	0.7177
SD	62.60	63.42			93.16	96.88		
% with income >0					23.99	22.99	0.21 ²	0.6536
Diagnosis: Schizophrenia								
N (n)	311	279			79	81		
Mean	22.06	32.28	1.13	0.2605	86.10	110.94	1.86 ¹	0.0645
SD	56.25	70.22			81.55	90.19		
% with income >0					25.62	29.09	0.89 ²	0.3467

Table 4C-5. Past month's SSI (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
Education: Less than high school								
N (n)	120	127			38	51		
Mean	33.23	45.67	1.50	0.1354	105.98	113.11	0.26 ¹	0.7958
SD	72.46	83.26			96.62	97.25		
% with income >0					31.36	40.37	2.18 ²	0.1411
Education: High school diploma								
N (n)	256	288			69	74		
Mean	29.68	31.87	-0.34	0.7346	108.59	124.60	1.15 ¹	0.2507
SD	71.21	73.94			96.17	99.30		
% with income >0					27.33	25.57	0.22 ²	0.6448
Education: More than high school								
N (n)	628	636			134	134		
Mean	18.08	19.23	-0.39	0.6964	82.18	91.66	0.57 ¹	0.5698
SD	52.39	55.27			82.63	89.37		
% with income >0					22.00	20.98	0.19 ²	0.6628

NOTE: Weighted percents may not be consistent with unweighted counts.

¹ t-test

² Chi-square test

Table 4C-6. Past month's total individual income (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	<i>t</i> value	<i>p</i> -value	Treatment	Control	Test value	<i>p</i> -value
Past month's total individual income								
<i>N</i> (<i>n</i>)	1,004	1,051			1,004	1,051		
Mean	1,180.52	1,120.96	-4.00	<0.0001	1,180.52	1,120.96	-4.00 [†]	<0.0001
SD	495.14	525.64			495.14	525.64		
Median	1,072.84	987.05			1,072.84	987.05		
% with income >0					100.00	100.00	†	†
Age: 18 to 34								
<i>N</i> (<i>n</i>)	86	85			86	85		
Mean	1,023.76	1,011.10	-0.87	0.3857	1,023.76	1,011.10	-0.87 [†]	0.3857
SD	363.40	490.10			363.40	490.10		
% with income >0					100.00	100.00	†	†
Age: 35+								
<i>N</i> (<i>n</i>)	918	966			918	966		
Mean	1,195.23	1,130.74	-3.95	<0.0001	1,195.23	1,130.74	-3.95 [†]	<0.0001
SD	503.70	527.91			503.70	527.91		
% with income >0					100.00	100.00	†	†
Gender: Male								
<i>N</i> (<i>n</i>)	465	503			465	503		
Mean	1,162.51	1,064.82	-4.01	<0.0001	1,162.51	1,064.82	-4.01 [†]	<0.0001
SD	480.82	452.98			480.82	452.98		
% with income >0					100.00	100.00	†	†
Gender: Female								
<i>N</i> (<i>n</i>)	539	548			539	548		
Mean	1,196.30	1,173.10	-1.68	0.0928	1,196.30	1,173.10	-1.68 [†]	0.0928
SD	507.40	581.34			507.40	581.34		
% with income >0					100.00	100.00	†	†
Diagnosis: Affective Disorder								
<i>N</i> (<i>n</i>)	693	772			693	772		
Mean	1,243.98	1,168.32	-4.23	<0.0001	1,243.98	1,168.32	-4.23 [†]	<0.0001
SD	516.55	554.62			516.55	554.62		
% with income >0					100.00	100.00	†	†
Diagnosis: Schizophrenia								
<i>N</i> (<i>n</i>)	311	279			311	279		
Mean	1,040.68	990.62	-1.66	0.0984	1,040.68	990.62	-1.66 [†]	0.0984
SD	414.15	409.22			414.15	409.22		
% with income >0					100.00	100.00	†	†

Table 4C-6. Past month's total individual income (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t value	p-value	Treatment	Control	Test value	p-value
Education: Less than high school								
N (n)	120	127						
Mean	1,025.07	922.06	-2.06	0.0406	1,025.07	922.06	-2.06 ¹	0.0406
SD	374.63	279.83			374.63	279.83		
% with income >0					100.00	100.00	†	†
Education: High school diploma								
N (n)	256	288						
Mean	1,116.15	1,010.29	-2.85	0.0045	1,116.15	1,010.29	-2.85 ¹	0.0045
SD	469.33	373.38			469.33	373.38		
% with income >0					100.00	100.00	†	†
Education: More than high school								
N (n)	628	636						
Mean	1,237.30	1,211.81	-2.03	0.0423	1,237.30	1,211.81	-2.03 ¹	0.0423
SD	517.40	598.69			517.40	598.69		
% with income >0					100.00	100.00	†	†

NOTE: Weighted percents may not be consistent with unweighted counts.

†Not applicable. Chi-square not calculated.

¹ t-test

Table 4C-7. Past month's total household income (at study exit) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
Past month's total household income								
N (n)	1,004	1,051			997	1,048		
Mean	1,678.30	1,661.56	-1.86	0.0630	1,689.90	1,666.51	-2.03 ¹	0.0427
SD	1,180.98	1,248.01			1,176.95	1,246.50		
Median	1,296.63	1,199.85			1,298.11	1,201.46		
% with income >0					99.31	99.70	1.59 ²	0.2128
Age: 18 to 34								
N (n)	86	85			85	85		
Mean	1,472.36	1,543.28	0.46	0.6462	1,489.73	1,543.28	0.33 ¹	0.7394
SD	1,074.47	1,110.83			1,068.83	1,110.83		
% with earnings >0					98.83	100.00	†	†
Age: 35+								
N (n)	918	966			912	963		
Mean	1,697.62	1,672.08	-2.10	0.0358	1,708.58	1,677.51	-2.24 ¹	0.0255
SD	1,189.26	1,259.70			1,185.41	1,258.05		
% with earnings >0					99.36	99.68	0.99 ²	0.3249
Gender: Male								
N (n)	465	503			462	501		
Mean	1,583.66	1,540.53	-1.81	0.0711	1,593.94	1,547.16	-1.88 ¹	0.0603
SD	1,119.89	1,121.62			1,116.36	1,119.25		
% with earnings >0					99.36	99.57	0.21 ²	0.6528
Gender: Female								
N (n)	539	548			535	547		
Mean	1,761.20	1,773.95	-0.85	0.3980	1,774.01	1,777.06	-1.01 ¹	0.3137
SD	1,227.14	1,347.44			1,222.53	1,346.63		
% with earnings >0					99.28	99.83	1.81 ²	0.1673
Diagnosis: Affective Disorder								
N (n)	693	772			689	771		
Mean	1,836.49	1,762.73	-2.75	0.0061	1,847.12	1,764.91	-2.91 ¹	0.0036
SD	1,294.93	1,320.95			1,291.22	1,320.35		
% with earnings >0					99.42	99.88	2.19 ²	0.1289
Diagnosis: Schizophrenia								
N (n)	311	279			308	277		
Mean	1,329.69	1,383.06	0.15	0.8838	1,342.17	1,393.85	0.12 ¹	0.9085
SD	781.83	970.70			775.06	966.35		
% with earnings >0					99.07	99.23	0.04 ²	0.8409

Table 4C-7. Past month's total household income (at study exit) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	Test value	p-value
Education: Less than high school								
<i>N (n)</i>	120	127			120	127		
Mean	1,435.26	1,269.79	-2.61	0.0096	1,435.26	1,269.79	-2.61 ¹	0.0096
SD	785.84	893.52			785.84	893.52		
% with earnings >0					100.00	100.00	†	†
Education: High school graduate								
<i>N (n)</i>	256	288			250	287		
Mean	1,450.20	1,352.00	-1.93	0.0547	1,484.50	1,356.47	-2.38 ¹	0.0176
SD	926.51	835.43			910.48	833.32		
% with earnings >0					97.69	99.67	4.20 ²	0.0344
Education: More than high school								
<i>N (n)</i>	628	636			627	634		
Mean	1,819.22	1,882.32	0.21	0.8333	1,822.06	1,888.78	0.27 ¹	0.7882
SD	1,311.80	1,410.49			1,310.90	1,408.37		
% with earnings >0					99.84	99.66	0.45 ²	0.5095

NOTE: Weighted percents may not be consistent with unweighted counts.

†Not applicable. Chi-square not calculated.

¹ t-test

² Chi-square test

Table 4C-8. Past month's earnings regression slope (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	t-value	p-value
Past month's earnings								
N (n)	1,004	1,051			589	449		
Mean	13.20	4.25	-7.53	<0.0001	22.38	9.95	-4.08	<0.0001
SD	63.52	55.86			81.29	85.17		
Median	-0.04	-0004			9.54	-0.81		
Age: 18 to 34								
N (n)	86	85			58	43		
Mean	14.26	5.55	-1.32	0.1893	21.06	11.00	-0.50	0.6165
SD	56.88	40.82			68.03	57.33		
Age: 35+								
N (n)	918	966			531	406		
Mean	13.10	4.14	-7.47	<0.0001	22.52	9.84	-4.10	<0.0001
SD								
Gender: Male								
N (n)	465	503			281	217		
Mean	13.22	0.33	-5.70	<0.0001	21.75	0.77	-3.42	0.0007
SD	65.56	52.07			82.75	79.62		
Gender: Female								
N (n)	539	548			308	232		
Mean	13.18	7.89	-4.92	<0.0001	22.96	18.58	-2.37	0.0184
SD	61.72	59.01			80.04	89.43		
Diagnosis: Affective Disorder								
N (n)	693	772			408	324		
Mean	15.67	5.42	-6.33	<0.0001	26.48	12.93	-3.46	0.0006
SD	69.73	61.26			88.94	94.22		
Diagnosis: Schizophrenia								
N (n)	311	279			181	125		
Mean	7.77	1.04	-4.07	<0.0001	13.26	2.31	-2.18	0.0299
SD	46.96	37.18			60.58	55.46		
Education: Less than high school								
N (n)	120	127			72	56		
Mean	13.48	2.71	-3.25	0.0013	22.51	6.20	-1.84	0.0678
SD	50.71	38.00			64.16	57.88		
Education: High school graduate								
N (n)	256	288			144	115		
Mean	11.06	-1.72	-4.37	<0.0001	19.52	-4.31	-3.08	0.0023
SD	59.34	38.93			77.62	61.67		

Table 4C-8. Past month's earnings regression slope (averaged over 8 post-baseline interviews) by treatment and control group, stratified by age, gender, diagnosis, and education (continued)

Variable	Unconditional				Non-Zero (Conditional)			
	Treatment	Control	t-value	p-value	Treatment	Control	t-value	p-value
Education: More than high school								
N (n)	628	636			373	278		
Mean	14.03	7.29	-5.22	<0.0001	23.46	16.65	-2.34	0.0196
SD	67.44	64.67			85.79	96.87		

NOTE: Weighted percents may not be consistent with unweighted counts.

Appendix 4D
Regression Estimates for Formal Earnings

Appendix 4D. Regression estimates (coefficient and *p*-value) of average marginal effects of MHTS and covariates on formal earnings for the 2-year study period.

	Avg. Earnings qts 1-8		Avg. Earnings qts 1-4			Avg. Earnings qts 5-8		
	Full n=2,051	Reduced n=2,057	Full n=2,044	Red. M1 n=2,050	Red. M2 n=2,053	Full n=1,972	Red. M1 n=1,978	Red. M2 n=1,983
Treatment/Control	72.354 0.000	72.272 0.000	50.120 0.000	48.036 0.000	48.643 0.000	99.999 0.000	99.936 0.000	100.253 0.000
Baseline Past Month's Formal Earnings	0.138 0.019	0.141 0.012	0.161 0.017	0.161 0.010	0.162 0.017	0.094 0.109	0.097 0.076	0.093 0.068
Age at Baseline	-0.001 0.817		0.001 0.636			-0.004 0.312		
Male	2.122 0.882		17.338 0.239			-17.875 0.337		
Non-White	16.313 0.192		11.681 0.347			20.622 0.302		
High School Graduate	-5.484 0.767		3.872 0.842			-23.470 0.357		
Some College	54.283 0.112	69.743 0.020	55.584 0.161	60.165 0.059	51.943 0.020	50.526 0.153	83.515 0.008	74.884 0.012
Baseline Health Status- Fair to Poor	-24.486 0.148	-20.681 0.260	-24.888 0.069	-20.105 0.151	-22.856 0.111	-26.395 0.295	-21.812 0.410	
Baseline Physical Limitations in Daily Activities	-35.703 0.034	-33.561 0.061	-25.304 0.090	-21.072 0.185	-26.701 0.056	-46.033 0.048	-44.290 0.053	-54.841 0.020
Baseline # of Hospital Stays	0.067 0.995		2.395 0.840			-4.115 0.785		
Baseline # of ER Visits	-14.408 0.064	-18.605 0.011	-10.432 0.235	-15.072 0.052		-22.274 0.071	-25.503 0.024	-24.680 0.026
Affective Mood Disorder	31.831 0.022	34.092 0.015	25.593 0.068	25.307 0.043	21.178 0.094	44.382 0.053	48.314 0.038	45.393 0.056
Months on Rolls Pre-baseline Interview End Date	-0.353 0.008	-0.385 0.008	-0.415 0.001	-0.402 0.002	-0.393 0.003	-0.321 0.036	-0.400 0.018	-0.385 0.024

	Avg. Earnings qts 1-8		Avg. Earnings qts 1-4			Avg. Earnings qts 5-8		
	Full n=2,051	Reduced n=2,057	Full n=2,044	Red. M1 n=2,050	Red. M2 n=2,053	Full n=1,972	Red. M1 n=1,978	Red. M2 n=1,983
Received Social Security Income	-12.334 0.458		-12.285 0.471			-15.100 0.439		
Natural logarithm of Primary Insurance Amount	29.149 0.215		9.014 0.703			55.119 0.054		46.530 0.052
Square Root of Reported Earnings	0.482 0.094	0.853 0.000	0.174 0.582	0.673 0.000		0.680 0.027	1.027 0.000	1.077 0.000
All 23 months reported earnings - Missing	-46.210 0.242		-65.438 0.158		-80.061 0.004	-40.763 0.276		
Worked in Past 2 Months Pre-baseline	62.347 0.000	66.383 0.000	68.962 0.000	72.191 0.000	70.540 0.000	68.943 0.002	69.852 0.004	71.559 0.005
Trial work period End Date 0-3 years After Contact Date	480.917 0.000	518.366 0.000	351.823 0.000	381.104 0.000	356.613 0.000	600.016 0.000	643.101 0.000	606.424 0.000
Trial work period End Date 0-10 years Pre-contact Date	32.574 0.089	31.217 0.094	26.481 0.100	29.053 0.083	29.290 0.094	39.952 0.138	35.324 0.161	34.195 0.169
Ever Had an Active Ticket Pre-contact Date	-0.127 0.994		1.444 0.909			2.722 0.917		

Appendix 4E
Regression Estimates for Formal and Informal Earnings

Appendix 4E. Regression estimates (coefficient and *p*-value) of average marginal effects of MHTS and covariates on formal and informal earnings for the 2-year study period.

	Avg. Earnings qts 1-8		Avg. Earnings qts 1-4			Avg. Earnings qts 5-8		
	Full n=2,046	Reduced n=2,052	Full n=2,039	Red. M1 n=2,045	Red. M2 n=2,045	Full n=1,967	Red. M1 n=1,973	Red. M2 n=1,973
Treatment/Control	80.697 0.000	82.098 0.000	62.597 0.000	64.945 0.000	64.195 0.000	102.190 0.000	100.928 0.000	100.928 0.000
Baseline Past Month's Formal and Informal Earnings	0.191 0.014	0.191 0.014	0.217 0.007	0.223 0.010	0.225 0.007	0.153 0.100	0.147 0.103	0.147 0.103
Age at Baseline	-0.001 0.701		0.001 0.854			-0.004 0.341		
Male	2.244 0.878		18.863 0.234			-16.887 0.359		
Non-White	11.549 0.357		8.421 0.544			13.632 0.485		
High School Graduate	-10.462 0.639		-3.348 0.887			-20.904 0.449		
Some College	57.584 0.099	68.028 0.005	57.186 0.134	57.167 0.012	60.509 0.009	58.133 0.121	80.517 0.008	80.517 0.008
Baseline Health Status- Fair to Poor	-30.664 0.044	-31.641 0.039	-26.450 0.098	-26.799 0.092	-25.346 0.131	-37.352 0.096	-38.641 0.083	-38.641 0.083
Baseline Physical Limitations in Daily Activities	-40.759 0.028	-41.251 0.019	-30.659 0.069	-31.417 0.038	-30.853 0.041	-49.218 0.040	-48.781 0.037	-48.781 0.037
Baseline # of Hospital Stays	-0.499 0.963		0.121 0.992			-0.232 0.988		
Baseline # of ER Visits	-13.455 0.072	-14.057 0.051	-13.657 0.162	-15.565 0.093	-16.526 0.074	-17.613 0.135	-16.495 0.138	-16.495 0.138
Affective Mood Disorder	35.678 0.018	32.928 0.029	28.775 0.096	23.065 0.166	24.439 0.115	49.248 0.027	49.064 0.036	49.064 0.036

	Avg. Earnings qts 1-8		Avg. Earnings qts 1-4			Avg. Earnings qts 5-8		
	Full n=2,046	Reduced n=2,052	Full n=2,039	Red. M1 n=2,045	Red. M2 n=2,045	Full n=1,967	Red. M1 n=1,973	Red. M2 n=1,973
Months on Rolls Pre-baseline Interview End Date	-0.397 0.006	-0.416 0.006	-0.489 0.000	-0.469 0.000	-0.477 0.001	-0.342 0.040	-0.413 0.026	-0.413 0.026
Receipt of Social Security Income	-10.534 0.542		-13.537 0.492			-9.905 0.606		
Natural logarithm of Primary Insurance Amount	34.280 0.165	35.585 0.049	7.700 0.762	16.243 0.370		64.502 0.031	56.834 0.013	56.834 0.013
Square Root of Reported Earnings in 23 months Pre-baseline	0.486 0.140	0.487 0.155	0.185 0.627	0.188 0.634		0.673 0.038	0.692 0.041	0.692 0.041
All 23 Months Reported Earnings-Missing	-57.517 0.159	-58.737 0.158	-80.221 0.119	-79.737 0.130	-94.516 0.003	-49.919 0.182	-49.878 0.185	-49.878 0.185
Worked in Past 2 Months Pre-baseline	58.431 0.000	59.267 0.000	70.647 0.000	71.401 0.000	73.736 0.000	58.581 0.013	58.083 0.014	58.083 0.014
Trial Work Period End Date 0-3 Years After Contact	485.386 0.000	475.682 0.000	362.642 0.000	358.976 0.001	360.298 0.001	592.229 0.000	573.074 0.000	573.074 0.000
Trial Work Period End Date 0-10 Years Pre-contact Date	38.965 0.046	39.396 0.031	40.446 0.018	45.260 0.016	49.038 0.019	40.500 0.138	38.176 0.115	38.176 0.115
Ever Had an Active Ticket Pre-contact Date	0.541 0.973		1.105 0.934			2.244 0.927		

Appendix 4F
Regression Estimates for Income Variables

Appendix 4F. Regression estimates (coefficient and p-value) of average marginal effects of MHTS and covariates on average monthly income for the 2-year study period.

Dependent Variable: <u>Explanatory Variables</u>	SSDI + SSI		All Public Sector Income		Private Sector Nonearned Income		All Nonearned Income		Total Personal Income	
	Full n=2,010	Reduced n=2,024	Full n=2,004	Reduced n=2,016	Full n=2,045	Reduced n=2,062	Full n=1,992	Reduced n=2,007	Full n=1,985	Reduced n=1,992
Treatment/Control	-11.191 0.089	-11.491 0.097	-14.510 0.129	-15.342 0.107	865.962 0.555	667.900 0.516	-12.546 0.378	-14.157 0.346	52.144 0.002	51.509 0.002
Baseline Past Month SSDI and SSI	0.509 0.000	0.512 0.000	0.481 0.000	0.482 0.000	19.922 0.480	15.263 0.422	0.464 0.000	0.463 0.000	0.461 0.000	0.462 0.000
Age at Baseline	-0.002 0.205		-0.003 0.015	-0.002 0.082	-0.609 0.501	-0.408 0.440	-0.007 0.052	-0.006 0.024	-0.007 0.166	-0.007 0.175
Male	0.316 0.963		-17.273 0.138	-19.076 0.090	-4,424.457 0.468	-3,612.837 0.408	-42.137 0.001	-41.392 0.001	-37.626 0.062	-37.031 0.052
Non-White	8.077 0.224		12.889 0.144	10.703 0.229	-3,601.287 0.471	-2,792.747 0.410	-17.610 0.287		-18.021 0.383	
High School Graduate	18.507 0.110	13.575 0.075	24.374 0.093	16.152 0.088	2,687.408 0.464	1,843.065 0.428	39.014 0.024	41.774 0.011	30.028 0.084	30.984 0.079
Some College	9.089 0.583		14.205 0.487		8,381.881 0.481	6,464.693 0.431	106.130 0.006	108.873 0.006	145.207 0.002	147.789 0.002
Baseline Health Status- Fair to Poor	2.613 0.747		1.452 0.869		-482.145 0.700		-8.466 0.599		-23.687 0.157	-22.982 0.235
Baseline Physical Limitations in Daily Activities	3.713 0.754		9.750 0.462		3,646.933 0.443	2,621.512 0.395	22.257 0.199	18.321 0.337	1.543 0.947	

Dependent Variable:	SSDI + SSI		All Public Sector Income		Private Sector Nonearned Income		All Nonearned Income		Total Personal Income	
	Baseline # of Hospital Stays	-0.678 0.887		-1.635 0.795		-419.352 0.647		6.494 0.468		0.686 0.950
Baseline # of ER Visits	2.855 0.560		4.706 0.490		261.948 0.673		0.729 0.922		-6.605 0.495	
Affective Mood Disorder	16.482 0.045	14.526 0.034	30.909 0.007	29.363 0.004	2,266.952 0.480	1,625.822 0.403	47.912 0.006	48.172 0.006	64.198 0.007	66.117 0.007
Months on Rolls Pre-baseline Interview End Date	0.069 0.257		0.081 0.348		5.961 0.668		0.045 0.736		-0.223 0.057	-0.227 0.050
Receipt of Social Security Income	47.838 0.000	44.908 0.000	80.839 0.000	79.791 0.000	-1,879.205 0.515	-1,234.635 0.496	73.011 0.003	74.166 0.003	69.952 0.010	68.167 0.015
Natural logarithm of Primary Insurance Amount	304.892 0.000	299.337 0.000	329.701 0.000	328.226 0.000	4,157.489 0.442	3,237.615 0.387	348.862 0.000	349.456 0.000	362.588 0.000	362.820 0.000
Square Root of Reported Earnings in 23 months Pre-baseline	-0.249 0.399		-0.479 0.118	-0.483 0.010	-25.835 0.534	-25.508 0.477	-0.652 0.044	-0.409 0.024	1.067 0.024	0.988 0.000
All 23 Months Reported Earnings-Missing	10.090 0.640		-0.848 0.968		-4,886.912 0.529	-2,702.214 0.524	-23.751 0.295		-1.332 0.974	
Worked in Past 2 Months Pre-baseline	19.506 0.168	7.405 0.453	22.494 0.139	22.767 0.080	-1,082.368 0.542		6.949 0.713		36.307 0.097	33.936 0.115

Dependent Variable:	SSDI + SSI		All Public Sector Income		Private Sector Nonearned Income		All Nonearned Income		Total Personal Income	
Trial Work Period End Date 0-3 Years After Contact	-63.933	-72.791	-74.645	-74.253	-2,524.989		-113.082	-107.040	351.515	360.018
	0.016	0.006	0.010	0.010	0.486		0.001	0.001	0.000	0.000
Trial Work Period End Date 0-10 Years Pre-contact Date	-25.966	-35.898	-30.130	-28.538	-660.593		-27.905	-28.007	-13.693	31.217
	0.031	0.009	0.038	0.040	0.640		0.116	0.099	0.599	0.094
Ever Had an Active Ticket Pre-contact Date	3.343		2.578		-1,117.245		-12.896		-15.721	
	0.704		0.793		0.511		0.288		0.292	

Appendix 4G
Subgroup Comparisons for Health and Quality of Life Outcomes

Table 4G-1. Mental health status at baseline and study exit by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Treatment		Control		t-value ¹	p-value
	Baseline	Exit	Baseline	Exit		
Mental health status						
Mean	35.83	38.85	35.96	35.92	-4.86	<0.0001
SD	13.08	13.37	13.00	13.27		
Age: 18 to 34						
Mean	37.97	42.48	37.75	37.58	-2.14	0.0338
SD	12.24	13.44	13.15	12.86		
Age: 35+						
Mean	35.63	38.51	35.80	35.78	-4.42	<0.0001
SD	13.14	13.32	12.98	13.30		
Gender: Male						
Mean	37.48	40.24	36.91	36.42	-3.78	0.0002
SD	13.74	13.06	13.31	13.28		
Gender: Female						
Mean	34.38	37.64	35.07	35.46	-3.11	0.0019
SD	12.29	13.55	12.65	13.26		
Diagnosis: Affective Disorder						
Mean	33.13	36.69	33.82	34.06	-4.50	<0.0001
SD	12.06	13.05	12.30	12.86		
Diagnosis: Schizophrenia						
Mean	41.77	43.61	41.85	41.05	-2.18	0.0294
SD	13.33	12.86	13.01	13.01		
Education: Less than high school						
Mean	36.67	38.55	37.87	35.75	-1.89	0.0601
SD	13.99	13.17	14.05	13.24		
Education: High school diploma						
Mean	36.96	39.97	36.26	36.71	-2.12	0.0342
SD	12.99	13.69	13.18	14.38		
Education: More than high school						
Mean	35.20	38.45	35.43	35.60	-4.02	<0.0001
SD	12.91	13.28	12.67	12.74		

¹The t-test compared the difference between the baseline and followup means for the treatment group to the difference between the baseline and followup means for the control group.

Table 4G-2. Physical health status at baseline and study exit by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Treatment		Control		t-value ¹	p-value
	Baseline	Exit	Baseline	Exit		
Physical health						
Mean	44.27	43.13	43.96	42.92	0.10	0.9243
SD	11.90	11.69	11.86	12.21		
Age: 18 to 34						
Mean	48.41	46.20	50.89	48.19	0.04	0.9680
SD	10.58	11.21	9.26	11.31		
Age: 35+						
Mean	43.89	42.84	43.34	42.45	0.05	0.9626
SD	11.95	11.70	11.88	12.19		
Gender: Male						
Mean	45.90	45.20	46.19	44.99	-0.74	0.4596
SD	11.69	10.90	11.01	11.53		
Gender: Female						
Mean	42.85	41.31	41.89	41.00	0.81	0.4207
SD	11.90	12.06	12.27	12.54		
Diagnosis: Affective Disorder						
Mean	43.36	41.91	42.84	41.99	0.88	0.3777
SD	12.16	12.22	12.17	12.57		
Diagnosis: Schizophrenia						
Mean	46.28	45.81	47.05	45.49	-1.20	0.2324
SD	11.07	9.95	10.39	10.79		
Education: Less than high school						
Mean	44.01	41.58	43.64	41.53	0.30	0.7659
SD	12.14	11.35	11.72	12.58		
Education: High school diploma						
Mean	43.11	42.85	44.86	44.51	-0.14	0.8854
SD	11.42	11.27	11.43	12.39		
Education: More than high school						
Mean	44.80	43.54	43.61	42.48	0.05	0.9595
SD	12.02	11.91	12.08	12.00		

¹ The t-test compared the difference between the baseline and followup means for the treatment group to the difference between the baseline and followup means for the control group.

Table 4G-3. Satisfaction with life at baseline and study exit by treatment and control group, stratified by age, gender, diagnosis, and education

Variable	Treatment (N=1,004)		Control (N=1,051)		t-value ¹	p-value
	Baseline	Followup	Baseline	Followup		
Life satisfaction						
Mean	3.78	4.22	3.82	4.01	-3.79	0.0002
SD	1.55	1.51	1.53	1.58		
Age: 18 to 34						
Mean	4.19	4.70	4.19	4.42	-1.13	0.2619
SD	1.44	1.52	1.42	1.54		
Age: 35+						
Mean	3.75	4.18	3.79	3.98	-3.63	0.0003
SD	1.56	1.50	1.54	1.57		
Gender: Male						
Mean	3.85	4.32	3.92	4.07	-3.07	0.0022
SD	1.62	1.53	1.60	1.58		
Gender: Female						
Mean	3.73	4.13	3.73	3.97	-2.25	0.0249
SD	1.49	1.49	1.46	1.57		
Diagnosis: Affective Disorder						
Mean	3.56	4.02	3.62	3.84	-3.45	0.0006
SD	1.47	1.47	1.47	1.56		
Diagnosis: Schizophrenia						
Mean	4.27	4.66	4.37	4.49	-1.73	0.0848
SD	1.63	1.49	1.56	1.53		
Education: Less than high school						
Mean	4.10	4.18	3.94	3.87	-1.07	0.2842
SD	1.61	1.54	1.78	1.66		
Education: High school diploma						
Mean	3.79	4.38	3.89	4.17	-2.54	0.0113
SD	1.54	1.55	1.53	1.61		
Education: More than high school						
Mean	3.72	4.16	3.76	3.97	-2.67	0.0077
SD	1.54	1.48	1.47	1.54		

¹ The t-test compared the difference between the baseline and followup means for the treatment group to the difference between the baseline and followup means for the control group.

Appendix 5A
IPS Fidelity Scale

SUPPORTED EMPLOYMENT FIDELITY SCALE*

(Formerly called IPS Model Fidelity Scale)

Rater: _____ Site: _____ Date: _____ Total Score: _____

Directions: Circle one anchor number for each criterion.

<u>Criterion</u>	<u>Data Source**</u>	<u>Anchor</u>
Staffing		
1. <u>Caseload size</u> : Employment specialists manage caseloads of up to 25 clients	VL, MIS, DOC, INT	<p>1 = Ratio of 81 or more clients/employment specialist. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Ratio of 61-80 clients/employment specialist.</p> <p>3 = Ratio of 41-60 clients/employment specialist.</p> <p>4 = Ratio of 26-40 clients/employment specialist.</p> <p>5 = Ratio of 25 or less clients/employment specialist.</p> <p>9 = Insufficient data to rate.</p>
2. <u>Vocational services staff</u> : Employment specialists provide only vocational services.	MIS, DOC, INT	<p>1 = Employment specialists provide nonvocational services such as case management 80% of the time or more. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Employment specialists provide nonvocational services such as case management about 60% time.</p> <p>3 = Employment specialists provide nonvocational services such as case management about 40% time.</p> <p>4 = Employment specialists provide nonvocational services such as case management about 20% time.</p> <p>5 = Employment specialists provide only vocational services.</p> <p>9 = Insufficient data to rate.</p>

*Formerly called IPS Model Fidelity Scale

**See end of document for key

3. Vocational generalists: Each employment specialist carries out all phases of vocational service, including engagement, assessment, job placement, and follow-along supports.

VL, MIS,
DOC, INT

- 1 = Employment specialist only provides vocational referral service to vendors and other programs. Or Cannot rate due to no fit.
- 2 = Employment specialist maintains caseload but refers clients to other programs for vocational service.
- 3 = Employment specialist provides one aspect of the vocational service (e.g. engagement, assessment, job development, job placement, job coaching, and follow-along supports).
- 4 = Employment specialist provides two or more phases of vocational service but not the entire service.
- 5 = Employment specialist carries out all phases of vocational service (e.g. engagement, assessment, job development, job placement, job coaching, and follow-along supports).
- 9 = Insufficient data to rate.

ORGANIZATION

1. Integration of rehabilitation with mental health treatment: Employment specialists are part of the mental health treatment teams with shared decision making. They attend regular treatment team meetings (not replaced by administrative meetings) and have frequent contact with treatment team members.

VL, MIS,
DOC, INT

- 1 = Employment specialists are part of a vocational program, separate from the mental health treatment. No regular direct contact with mental health staff, only telephone or one face to face contact per month. Or Cannot rate due to no fit.
- 2 = Employment specialists attend treatment team meetings once per month.
- 3 = Employment specialists have several contacts with treatment team members each month and attend one treatment team meeting per month.
- 4 = Employment specialists are attached to one or more case management treatment teams with shared decision making. Attend weekly treatment team meetings.
- 5 = Employment specialists are attached to one or more case management treatment teams with shared decision making. Attend one or more treatment team meetings per week and have at least three client-related case manager contacts per week.
- 9 = Insufficient data to rate.

- | | | |
|---|----------|--|
| 2. <u>Vocational unit</u> : Employment specialists function as a unit rather than a group of practitioners. They have group supervision, share information, and help each other with cases. | MIS, INT | <p>1 = Employment specialists are not part of a vocational unit. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Employment specialists have the same supervisor but do not meet as a group.</p> <p>3 = Employment specialists have the same supervisor and discuss cases between each other. They do not provide services for each other's cases.</p> <p>4 = Employment specialists form a vocational unit and discuss cases between each other. They provide services for each other's cases.</p> <p>5 = Employment specialists form a vocational unit with group supervision at least weekly. Provide services for each other's cases and backup and support for each other.</p> <p>9 = Insufficient data to rate.</p> |
| 3. <u>Zero exclusion criteria</u> : No eligibility requirements such as job readiness, lack of substance abuse, no violent behavior, minimal intellectual functioning, and mild symptoms. | DOC, INT | <p>1 = Clients are screened out on the basis of job readiness, substance use, history of violence, low level of functioning, etc. Referrals first screened by case managers. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Some eligibility criteria. Screened by vocational staff who make client referrals to other vocational programs.</p> <p>3 = Some eligibility criteria. Screened by vocational staff of the program that will provide the vocational service.</p> <p>4 = All adult clients with severe mental disorders are eligible, including dual disorders of substance abuse and mental illness. Services are voluntary.</p> <p>5 = All clients are encouraged to participate. Referrals solicited by several sources (self-referral, family members, self-help groups, etc.).</p> <p>9 = Insufficient data to rate.</p> |

SERVICES

- | | | |
|--|--------------------------|---|
| <p>1. <u>Ongoing, work-based vocational assessment</u>: Vocational assessment is an ongoing process based on work experiences in competitive jobs.</p> | <p>DOC, INT</p> | <p>1 = Vocational evaluation is conducted prior to job placement with emphasis on office-based assessments, standardized tests, intelligence tests, work samples. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Client participates in a prevocational assessment at the program site (e.g. work units in a day program).</p> <p>3 = Assessment occurs in a sheltered setting where clients carry out work for pay.</p> <p>4 = Most of the assessment is based on brief, temporary job experiences in the community that are set up with the employer.</p> <p>5 = Vocational assessment is ongoing. Occurs in community jobs rather than through a battery of tests. Minimal testing may occur but not as a prerequisite to the job search. Aims at problem solving using environmental assessments and consideration of reasonable accommodations.</p> <p>9 = Insufficient data to rate.</p> |
| <p>2. <u>Rapid search for competitive job</u>: The search for competitive jobs occurs rapidly after program entry.</p> | <p>DOC, INT,
ISP</p> | <p>1 = First contact with an employer about a competitive job is typically more than one year after program entry. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = First contact with an employer about a competitive job is typically at more than nine months and within one year after program entry.</p> <p>3 = First contact with an employer about a competitive job is typically at more than six months and within nine months after program entry.</p> <p>4 = First contact with an employer about a competitive job is typically at more than one month and within six months after program entry.</p> <p>5 = First contact with an employer about a competitive job is typically within one month after program entry.</p> <p>9 = Insufficient data to rate.</p> |

- | | | | |
|----|---|---------------|---|
| 3. | <u>Individualized job search</u> : Employer contacts are based on clients' job preferences (relating to what they enjoy and their personal goals) and needs (including experience, ability, symptomatology, and health, etc., and how they affect a good job and setting match) rather than the job market (i.e., what jobs are readily available). | DOC, INT, ISP | <p>1 = Employer contacts are based on decisions made unilaterally by the employment specialist. These decisions are usually driven by the nature of the job market. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = About 25% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.</p> <p>3 = About 50% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.</p> <p>4 = About 75% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.</p> <p>5 = Most employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.</p> <p>9 = Insufficient data to rate.</p> |
| 4. | <u>Diversity of jobs developed</u> : Employment specialists provide job options that are and are in different settings. | DOC, INT, ISP | <p>1 = Employment specialists provide options for either the same types of jobs for most clients, e.g., janitorial, or jobs at the same diverse work settings most of the time. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 75% of the time.</p> <p>3 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 50% of the time.</p> <p>4 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 25% of the time.</p> <p>5 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings less than 10% time.</p> <p>9 = Insufficient data to rate.</p> |

5. Permanence of jobs developed: Employment specialists provide competitive job options that have permanent status rather than temporary or time-limited status, e.g., TEPs.
- DOC, INT, ISP
- 1 = Employment specialists usually do not provide options for permanent, competitive jobs. Or Cannot rate due to no fit.
- 2 = Employment specialists provide options for permanent, competitive jobs about 25% of the time.
- 3 = Employment specialists provide options for permanent, competitive jobs about 50% of the time.
- 4 = Employment specialists provide options for permanent, competitive jobs about 75% of the time.
- 5 = Virtually all of the competitive jobs offered by employment specialists are permanent.
- 9 = Insufficient data to rate.
6. Jobs as transitions: All jobs are viewed as positive experiences on the path of vocational growth and development. Employment specialists help clients end jobs when appropriate and then find new jobs.
- VL, DOC, INT, ISP
- 1 = Employment specialists prepare clients for a single lasting job, and if it ends, will not necessarily help them find another one. Or Cannot rate due to no fit.
- 2 = Employment specialists help clients find another job 25% time.
- 3 = Employment specialists help clients find another job 50% time.
- 4 = Employment specialists help clients find another job 75% time.
- 5 = Employment specialists help clients end jobs when appropriate and offer to help them all find another job.
- 9 = Insufficient data to rate.

- | | | |
|---|-------------------|---|
| 7. <u>Follow-along supports</u> : Individualized follow-along supports are provided to employer and client on a time-unlimited basis. Employer supports may include education and guidance. Client supports may include crisis intervention, job coaching, job counseling, job support groups, transportation, treatment changes (medication), networked supports (friends/family). | VL, DOC, INT | <p>1 = Follow-along supports are nonexistent. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Follow-along supports are time-limited and provided to less than half of the working clients.</p> <p>3 = Follow-along supports are time-limited and provided to most working clients.</p> <p>4 = Follow-along supports are ongoing and provided to less than half the working clients.</p> <p>5 = Most working clients are provided flexible follow-along supports that are individualized and ongoing. Employer supports may include education and guidance. Client supports may include crisis intervention, job coaching, job counseling, job support groups, transportation, treatment changes (medication), networked supports (friends/family).</p> |
| 8. <u>Community-based services</u> : Vocational services such as engagement, job finding and follow-along supports are provided in natural community settings. | VL, MIS, DOC, INT | <p>9 = Insufficient data to rate.</p> <p>1 = Employment specialist spends 10% time or less in the community. <u>Or</u> Cannot rate due to no fit.</p> <p>2 = Employment specialist spends 11-39% time in community.</p> <p>3 = Employment specialist spends 40-59% time in community.</p> <p>4 = Employment specialist spends 60-69% time in community.</p> <p>5 = Employment specialist spends 70% or more time in community.</p> <p>9 = Insufficient data to rate.</p> |

9. Assertive engagement and outreach: assertive engagement and outreach (telephone, mail, community visit) are conducted as needed.

VL, MIS,
DOC, INT

- 1 = Employment specialists do not provide outreach to clients as part of initial engagement or to those who stop attending the vocational service. Or Cannot rate due to no fit.
- 2 = Employment specialists make one telephone or mail contact to clients as part of initial engagement or to those who stop attending the vocational service.
- 3 = Employment specialist makes one or two outreach attempts (telephone, mail, community visit) as part of initial engagement and also within one month that client stops attending the vocational service.
- 4 = Employment specialist makes outreach attempts (telephone, mail, community visit) as part of initial engagement and at least every two months on a time limited basis when client stops attending.
- 5 = Employment specialists provide outreach (telephone, mail, community visit) as part of initial engagement and at least monthly on a time unlimited basis when clients stop attending the vocational service. Staff demonstrate tolerance of different levels of readiness using gentle encouragement.
- 9 = Insufficient data to rate.

*Data sources:

VL Vocational Logs
 MIS Management Information System
 DOC Document review: clinical records; agency policy and procedures
 INT Interviews with clients, employment specialists, mental health staff
 ISP Individualized Service Plan

2/14/96
 6/20/01, Updated

Fidelity Scale Score Sheet

Rater: _____

Site: _____

Date: _____

Staffing

- 1. Caseload _____
- 2. Vocational services staff _____
- 3. Vocational generalists _____

Organization

- 1. Integration of rehab. with MH treatment
- 2. Vocational unit
- 3. Zero exclusion criteria

Services

- 1. On-going, work-based assessment
- 2. Rapid search for competitive job
- 3. Individualized job search
- 4. Diversity of jobs developed
- 5. Permanence of jobs developed
- 6. Jobs as transitions
- 7. Follow-along supports
- 8. Community-based services
- 9. Assertive engagement and outreach

Total: _____

Items Not Rated Due To Insufficient Data: _____

66-75 = Good Supported Employment Implementation

56-65 = Fair Supported Employment Implementation

55 and below Not Supported Employment

Program Descriptors

Agency name: _____

Location: ___urban ___rural

Targeted population: specify_____

Parent organization type:

- ___mental health center
- ___rehabilitation agency (SMI only)
- ___rehabilitation agency (other)
- ___N/A - free standing agency

VR contact:

- ___none
- ___minimal
- ___regular

Agency's vocational emphasis:

- ___minimal
- ___moderate
- ___major

Number of vocational staff: ___

Number of clients served last year: _____

Recency of program:

- ___less than one year
- ___more than one year

Appendix 6A
Listing of Medications and the Corresponding Physical Condition

Appendix 6A - Listing of Medications and the Corresponding Physical Condition

Physical Condition	Medication (Generic Name)
Anemia	FOLIC ACID IRON(II) SULFATE
Auto-Immune Disorders	ABATACEPT ADALIMUMAB ANAKINRA DEXAMETHASONE ETANERCEPT GOLIMUMAB HYDROXYCHLOROQUINE INFLIXIMAB LEFLUNOMIDE METHOTREXATE METHYLPREDNISOLONE
Cancer	CARBOPLATIN DOCETAXEL IMIQUIMOD LEUPROLIDE MERCAPTOPYRINE RITUXIMAB TAMOXIFEN
Cardio Vascular Diseases	CILOSTAZOL DEXRAZOXANE DIGOXIN DRONEDARONE FONDAPARINUX ISOSORBIDE MONONITRATE NITROGLYCERIN PENTOXIFYLLINE RANOLAZINE WARFARIN
Chronic Lung Disorder	ALBUTEROL BECLOMETASONE DIPROPIONATE BUDESONIDE BUDESONIDE/FORMOTEROL FLUNISOLIDE

Physical Condition	Medication (Generic Name)
	FLUTICASONE
	FORMOTEROL
	IPRATROPIUM AND ALBUTEROL
	MOMETASONE
	MONTELUKAST
	OMALIZUMAB
	PIRBUTEROL
	TIOTROPIUM
	TRIAMCINOLONE
Chronic Pain Conditions	BUPRENORPHINE
	BUTALBITAL
	BUTORPHANOL
	CARISOPRODOL
	CODEINE
	CYCLOBENZAPRINE
	FENTANYL
	HYDROCODONE
	HYDROCODONE AND ACETAMINOPHEN
	HYDROMORPHONE
	MEPERIDINE
	METAXALONE
	METHADONE
	METHOCARBAMOL
	MORPHINE
	OXYCODONE
	OXYCODONE AND ACETAMINOPHEN
	OXYMORPHONE
	PENTAZOCINE
	PROPOXYPHENE
	PROPOXYPHENE AND ACETAMINOPHEN
TRAMADOL	
TRAMADOL AND ACETAMINOPHEN	
Diabetes	EXENATIDE
	GLIMEPIRIDE
	GLIPIZIDE
	GLUCAGON
	GLYBURIDE
	GLYBURIDE AND METFORMIN
	INSULIN
	METFORMIN

Physical Condition	Medication (Generic Name)
	METFORMIN AND PIOGLITAZONE
	METFORMIN AND ROSIGLITAZONE
	MIGLITOL
	NATEGLINIDE
	PIOGLITAZONE
	PIOGLITAZONE HYDROCHLORIDE AND GLIMEPIRIDE
	PRAMLINTIDE
	REPAGLINIDE
	ROSIGLITAZONE
	SITAGLIPTIN
	SITAGLIPTIN AND METFORMIN
Endocrine Other	
	CABERGOLINE
Gastrointestinal Disorders	
	BISACODYL
	CLIDINIUM AND CHLORDIAZEPOXIDE
	DICYCLOMINE
	DIPHENOXYLATE
	DIPHENOXYLATE AND ATROPINE
	ESOMEPRAZOLE
	FAMOTIDINE
	HYOSCYAMINE
	HYOSCYAMINE, ATROPINE, SCOPOLAMINE, AND PHENOBARBITAL
	LACTULOSE
	LANSOPRAZOLE
	LOPERAMIDE
	LUBIPROSTONE
	MESALAMINE
	METHSCOPOLAMINE
	METOCLOPRAMIDE
	NIZATIDINE
	OCTREOTIDE
	OMEPRAZOLE
	PANCRELIPASE
	PANTOPRAZOLE
	POLYETHYLENE GLYCOL
	RABEPRAZOLE
	RANITIDINE
	SIMETHICONE
	SUCRALFATE
	TEGASEROD

Physical Condition	Medication (Generic Name)
HIV	ABACAVIR
	ABACAVIR AND LAMIVUDINE
	ABACAVIR/LAMIVUDINE/ZIDOVUDINE
	ATAZANAVIR
	DARUNAVIR
	EFAVIRENZ
	EFAVIRENZ, TENOFOVIR, EMTRICITABINE
	EMTRICITABINE
	EMTRICITABINE AND TENOFOVIR
	ENFUVIRTIDE
	FOSAMPRENAVIR
	LAMIVUDINE
	LOPINAVER AND RITONAVIR
	NELFINAVIR
	NEVIRAPINE
	RALTEGRAVIR
	RITONAVIR
	TENOFOVIR
	TIPRANAVER
	VALACICLOVIR
ZIDOVUDINE	
ZIDOVUDINE AND LAMIVUDINE	
Hyperlipidemia	ATORVASTATIN
	CHOLESTYRAMINE
	COLESEVELAM
	EZETIMIBE
	EZETIMIBE AND SIMVASTATIN
	FENOFIBRATE
	FENOFIBRIC ACID
	FLUVASTATIN
	GEMFIBROZIL
	LOVASTATIN
	NIACIN
	NIACIN AND SIMVASTATIN
	PRAVASTATIN
	ROSUVASTATIN
	SIMVASTATIN
Hypertension	ALISKIREN
	AMILORIDE
	AMLODIPINE

Physical Condition**Medication (Generic Name)**

AMLODIPINE AND BENAZEPRIL
AMLODIPINE AND VALSARTAN
AMLODIPINE/OLMESARTAN
ATENOLOL
BENAZEPRIL
BETAXOLOL
BISOPROLOL
BUMETANIDE
CANDESARTAN
CAPTOPRIL
CARVEDILOL
DILTIAZEM
DOXAZOSIN
ENALAPRIL
EPROSARTAN
FELODIPINE
FOSINOPRIL
FUROSEMIDE
GUANFACINE
HYDROCHLOROTHIAZIDE
HYDROCHLOROTHIAZIDE/LOSARTAN
HYDROCHLOROTHIAZIDE AND SPIRONOLACTONE
IRBESARTAN
IRBESARTAN AND HYDROCHLOROTHIAZIDE
LABETALOL
LISINOPRIL
LISINOPRIL AND HYDROCHLOROTHIAZIDE
LOSARTAN
LOSARTAN AND HYDROCHLOROTHIAZIDE
METOPROLOL
MOEXIPRIL
NADOLOL
NEBIVOLOL
NIFEDIPINE
NIMODIPINE
OLMESARTAN
OLMESARTAN AND HYDROCHLOROTHIAZIDE
PRAZOSIN
QUINAPRIL
QUINAPRIL AND HYDROCHLOROTHIAZIDE
RAMIPRIL
SOTALOL

Physical Condition	Medication (Generic Name)
	SPIRONOLACTONE
	TELMISARTAN
	TIMOLOL
	TORASEMIDE
	TRANDOLAPRIL
	TRIAMTERENE
	TRIAMTERENE AND HYDROCHLOROTHIAZIDE
	VALSARTAN
	VALSARTAN AND HYDROCHLOROTHIAZIDE
	VERAPAMIL
Liver Disease	
	PEGINTERFERON ALFA-2A
	RIBAVIRIN
Migraines	
	ALMOTRIPTAN
	BUTALBITAL, ACETAMINOPHEN, & CAFFEINE
	ELETRIPTAN
	FROVATRIPTAN
	NARATRIPTAN
	RIZATRIPTAN
	SUMATRIPTAN
	ZOLMITRIPTAN
Neuro- Muscular/Degenerative Disorder	
	AMANTADINE
	BACLOFEN
	BROMOCRIPTINE
	CARBIDOPA
	DEHYDROEPIANDROSTERONE
	DONEPEZIL
	GALANTAMINE
	GLATIRAMER ACETATE
	INTERFERON BETA-1A
	INTERFERON BETA-1B
	LEVODOPA
	LEVODOPA AND CARBIDOPA
	LEVODOPA, CARBIDOPA AND ENTACAPONE
	MEMANTINE
	PRAMIPEXOLE
	RIVASTIGMINE
	ROPINIROLE
	TIZANIDINE

Physical Condition	Medication (Generic Name)
Neuropathy	PREGABALIN
Renal Disease	ALLOPURINOL DARIFENACIN OXYBUTYNIN PENTOSAN POLYSULFATE PHENAZOPYRIDINE SOLIFENACIN TOLTERODINE TROSPIUM
Seizure Disorder	ACETAZOLAMIDE AMIODARONE ETHOSUXIMIDE LEVETIRACETAM PENTOBARBITAL PHENOBARBITAL PHENYTOIN PRIMIDONE TIAGABINE VIGABATRIN ZONISAMIDE
Thyroid Disorders	LEVOTHYROXINE LIOTHYRONINE SODIUM PROPYLTHIOURACIL

Appendix 6B
SCID Diagnostic Frequencies

Appendix 6B SCID Diagnostic Frequencies

SCID Diagnostic Category	SSA Diagnosis		TOTAL
	Affective Disorder	Schizophrenia	
Substance Abuse Disorders	311	141	452
Bipolar	271	45	316
Depressive Disorder	278	32	310
Schizophrenia and Related Disorders	47	170	217
Schizoaffective	72	84	156
Anxiety Disorders	135	19	154
No SCID	60	36	96
Depressive Disorder with Psychotic Features	43	14	57
Psychiatric Symptoms Due to General Medical Condition	9	3	12
Other	10	0	10

Notes:

Includes all Bs with a completed SCID, including withdrawals, admin drop, or deceased

Bs may be included in more than one SCID Diagnostic Category

Appendix 6C
SMM QM Summary

Appendix 6C. SMM Quality Management (QM) Summary - Excludes withdrawals, administrative drops, and deceased

Item/Site	501	502	503	504	505	506	507	508	509	510	512	513	514	515	517	518	519	520	521	522	523	524	525	Total	
Number of Beneficiaries	39	18	20	64	62	69	31	63	14	45	35	61	35	74	16	10	24	57	25	62	66	47	44	981	
Number of Beneficiaries with no Form	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5	0	0	2	0	0	4	13	
Minimum Form per Beneficiary	1	0	4	4	4	1	7	7	5	3	6	6	5	5	0	3	0	2	7	0	4	5	0	0	
Maximum Form per Beneficiary	8	6	8	8	8	7	8	8	8	8	9	8	8	8	4	6	2	5	8	7	8	8	4	9	
Average Form per Beneficiary	7.13	2.56	6.3	6.53	7.03	3.49	7.19	7.83	7	6.11	7.31	7.33	7.83	7	1.81	4.9	1.08	3.93	7.92	3.06	6.67	6.79	1.98	5.8	
Engagement¹																									
Percent (%) of beneficiaries engaged in SMM during ALL reported periods ²	30.77	68.75	25	48.44	79.03	49.23	67.74	46.03	42.86	55.56	54.29	32.79	88.57	44.59	84.62	30		80.7	76	43.33	54.55	59.57	70	57.32	
Percent (%) of beneficiaries engaged in SMM during ANY reported periods	92.31	61.11	100	96.88	100	76.81	100	100	100	100	94.29	95.08	100	95.95	68.75	100	0	98.25	100	79.03	95.45	97.87	75	90.42	
Average Percent that B Engaged	68.85	67.71	78.48	81.34	93.97	61.14	89.13	83.02	72.07	83.19	78.5	71.62	97.59	75.09	76.92	61.5		92.05	94.7	60.61	77.52	82.56	76.25	78.65	
Reasons Not Engaged in SMM³																									
Percent (%) Not on Psychiatric Medications	17.95	5.56	15	9.38	0	20.29	9.68	20.63	21.43	0	8.57	16.39	0	21.62	0	50		0	0	8.06	9.09	12.77	2.27	10.4	
Percent (%) Refusing to let NCC interact with prescriber	5.13	0	0	3.13	0	14.49	0	1.59	7.14	0	8.57	3.28	0	2.7	6.25	0		0	0	0	6.06	4.26	0	3.06	
Percent (%) Refusing to let NCC have access to medical records	0	0	0	0	0	8.7	0	1.59	14.29	2.22	11.43	1.64	0	2.7	6.25	0		0	0	0	1.52	0	0	1.94	
Percent (%) Refusing to meet with NCC to perform scales	53.85	16.67	10	21.88	17.74	40.58	6.45	26.98	21.43	31.11	20	45.9	2.86	48.65	18.75	10		12.28	8	33.87	28.79	29.79	15.91	26.61	
Percent (%) Cannot locate beneficiary	7.69	16.67	5	4.69	12.9	23.19	3.23	4.76	0	2.22	17.14	8.2	2.86	4.05	0	0		0	8	14.52	1.52	10.64	6.82	7.54	
Percent (%) Beneficiary incarcerated	7.69	0	0	0	0	1.45	12.9	1.59	0	0	0	1.64	2.86	0	0	0		0	4	0	1.52	0	0	1.33	
Percent (%) Other	48.72	22.22	25	39.06	6.45	43.48	12.9	30.16	50	24.44	31.43	45.9	2.86	17.57	18.75	40		5.26	24	32.26	36.36	27.66	11.36	26.4	
Medication Related Outcomes																									
Current Psychiatric Symptoms																									
Percent (%) Current Psychiatric Symptoms during ALL reporting periods	0	11.11	0	0	0	4.35	0	6.35	7.14	4.44	0	0	22.86	0	37.5	10	41.7	1.75	8	14.52	3.03	10.64	9.09	6.12	
Percent (%) Current Psychiatric Symptoms during ANY reporting period	69.23	50	35	54.69	12.9	34.78	29.03	90.48	85.71	82.22	42.86	31.15	97.14	55.41	62.5	70	50	56.14	84	59.68	75.76	63.83	29.55	55.66	
Current Medication Side Effects																									
Percent (%) Current Medication Side Effects during ALL reporting periods	0	11.11	0	0	0	1.45	0	1.59	0	2.22	0	0	2.86	0	25	0	29.2	0	0	1.61	0	2.13	0	1.94	
Percent (%) Current Medication Side Effects during ANY reporting period	46.15	22.22	35	12.5	8.06	18.84	6.45	58.73	0	37.78	8.57	8.2	42.86	27.03	43.75	20	33.3	17.54	64	14.52	21.21	46.81	18.18	25.48	
Current Adherence Problems																									
Percent (%) Current Adherence Problems during ALL reporting periods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18.75	0	4.17	0	0	0	0	0	0	0.41	
Percent (%) Current Adherence Problems during ANY reporting period	5.13	5.56	15	6.25	4.84	5.8	3.23	12.7	7.14	2.22	11.43	1.64	22.86	10.81	18.75	0	12.5	15.79	0	3.23	13.64	23.4	0	8.77	
Physical Problems Related to Meds																									
Percent (%) Physical Problems Related to Meds during ALL reporting periods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.5	0	4	0	0	0	0	0.41	
Percent (%) Physical Problems Related to Meds during ANY reporting period	5.13	5.56	10	4.69	4.84	4.35	3.23	6.35	7.14	4.44	5.71	0	17.14	1.35	25	10	12.5	5.26	20	0	3.03	12.77	0	5.61	

1. Based on completed SMM QM Forms. The number of QM forms completed for each beneficiary varied, ranging from 0 to 8.
 2. Excludes forms that did not include the engagement question.
 3. Percent of beneficiaries for which the reason not engaged in SMM was indicated in at least one reporting period.

Appendix 6D
NCC Survey Results

NCC Survey Analysis

1. How would you rate your experience as a nurse care coordinator?

	Frequency	Percent
1. Excellent	11	36.7
2. Above Average	16	53.3
4. Below Average	2	6.7
5. Failure	1	3.3
Total	30	100.0

2. How do you think the prescribers/clinicians you worked with would rate the experience of working with nurse care coordinators?

	Frequency	Percent
1. Extremely useful	3	10.0
2. Very Useful	14	46.7
3. Somewhat Useful	11	36.7
4. Marginally Useful	2	6.7
Total	30	100.0

3. If the NCC position were continued at your practice site, would you take it?

	Frequency	Percent
1. Yes	18	60.0
2. No	6	20.0
3. Maybe	6	20.0
Total	30	100.0

4. In comparison to the "traditional" nursing role, how would you value the NCC role as demonstrated in MHTS?

	Frequency	Percent
1. Valued much more	11	36.7
2. Valued slightly more	9	30.0
3. Valued equally	7	23.3
4. Valued slightly less	2	6.7
5. Valued much less	1	3.3
Total	30	100.0

5. Overall do you think you made a difference in beneficiaries' health care and functioning?

	Frequency	Percent
1. Definitely (100% of beneficiaries)	2	6.7
2. Mostly (>80% of beneficiaries)	24	80.0
3. Moderate (50-79% of beneficiaries)	1	3.3
4. Somewhat (25-50% of beneficiaries)	3	10.0
Total	30	100.0

6. How many beneficiaries did you work with in MHTS?

	Frequency	Percent
1. >75	1	3.3
2. 60-74	8	26.7
3. 45-59	3	10.0
4. 30-44	9	30.0
5. 15-29	7	23.3
6. <15	2	6.7
Total	30	100.0

7. Provide an estimate of how many beneficiaries at your site were NOT actively engaged in SMM services?

	Frequency	Percent
1. <10%	13	43.3
2. 10-30%	14	46.7
3. 31-50%	3	10.0
Total	30	100.0

8. How would you describe the overall workload of a NCC?

	Frequency	Percent
1. Too Much	10	33.3
2. Right Amount	20	66.7
Total	30	100.0

9. How would you describe the SMM workload of a NCC?

	Frequency	Percent
1. Too Much	4	13.3
2. Right Amount	26	86.7
Total	30	100.0

10a. What do you think were your two greatest contributions to beneficiaries' care? (rank 1)

	Frequency	Percent
1. Tracking medications	4	13.3
3. Performing psychiatric scales	3	10.0
4. Providing recommendations to prescribers	1	3.3
5. Providing continuity of care	17	56.7
6. Providing case management	2	6.7
7. Providing medication education	1	3.3
9. Other (Please specify)	2	6.7
Total	30	100.0

Question 10: Rank 1 Other Specify

	Frequency	Percent
Ability to spend much more time with B compared to prescribers	1	3.3
N/A	26	86.7
Providing a point person to organize overall care	1	3.3
Providing support	1	3.3
Referring to available resources	1	3.3
Total	30	100.0

10b. What do you think were your two greatest contributions to beneficiaries' care? (rank 2)

	Frequency	Percent
1. Tracking medications	4	13.3
2. Consolidating medication histories	2	6.7
3. Performing psychiatric scales	4	13.3
4. Providing recommendations to prescribers	2	6.7
5. Providing continuity of care	9	30.0
6. Providing case management	2	6.7
7. Providing medication education	5	16.7
8. Improving physical healthcare	2	6.7
Total	30	100.0

Question 10: Rank 2 Other Specify

	Frequency	Percent
Advocating for the Bs	1	3.3
Encouraging participation in programs available	1	3.3
N/A	28	93.3
Total	30	100.0

11. What do you think was your least important contribution to beneficiaries' care?

	Frequency	Percent
1. Tracking medications	3	10.0
2. Consolidating medication histories	10	33.3
4. Providing recommendations to prescribers	6	20.0
5. Providing continuity of care	1	3.3
6. Providing case management	5	16.7
8. Improving physical healthcare	5	16.7
Total	30	100.0

12. What do you think was your greatest contribution to treatment team functioning?

	Frequency	Percent
1. Providing recommendations to SE staff based on	1	3.3
2. Providing recommendations to staff based on OBH	3	10.0
3. Helping to integrate treatment team activities	26	86.7
Total	30	100.0

13. When providing documentation to prescribers, do you think they looked at it?

	Frequency	Percent
1. Definitely (100% of prescribers)	1	3.3
2. Mostly (>80% of prescribers)	4	13.3
3. Moderate (50-79% of prescribers)	12	40.0
4. Somewhat (25-50% of prescribers)	8	26.7
5. Minimal (<25% of prescribers)	5	16.7
Total	30	100.0

14. Did you provide prescribers with a copy of the scales performed in MHTS?

	Frequency	Percent
1. Definitely (100% of prescribers)	8	26.7
2. Mostly (>80% of prescribers)	4	13.3
3. Moderate (50-79% of prescribers)	7	23.3
4. Somewhat (25-50% of prescribers)	2	6.7
5. Minimal (<25% of prescribers)	7	23.3
6. Not at all (0% of prescribers)	1	3.3
Missing	1	3.3
Total	30	100.0

15. Do you think the prescribers used the psychiatric scale scores to make treatment decisions?

	Frequency	Percent
1. Mostly (>80% of prescribers)	3	10.0
2. Moderate (50-79% of prescribers)	6	20.0
3. Somewhat (25-50% of prescribers)	11	36.7
4. Minimal (<25% of prescribers)	10	33.3
Total	30	100.0

16. How often do you think the prescribers used the psychiatric scales to make treatment decisions?

	Frequency	Percent
1. Mostly (>80% of the time)	1	3.3
2. Moderate (50-79% of the time)	5	16.7
3. Somewhat (25-50% of the time)	11	36.7
4. Minimal (<25% of the time)	11	36.7
5. Not at all (0% of the time)	1	3.3
Missing	1	3.3
Total	30	100.0

17. Do you think the prescribers used your recommendations to make treatment decisions?

	Frequency	Percent
1. Mostly (>80% of prescribers)	5	16.7
2. Moderate (50-79% of prescribers)	11	36.7
3. Somewhat (25-50% of prescribers)	9	30.0
4. Minimal (<25% of prescribers)	5	16.7
Total	30	100.0

18. Do you think you had the administrative support to effectively do your job?

	Frequency	Percent
1. Definitely (100% of the time)	9	30.0
2. Mostly (>80% of the time)	7	23.3
3. Moderate (50-79% of the time)	5	16.7
4. Somewhat (25-50% of the time)	2	6.7
5. Minimal (<25% of the time)	4	13.3
6. Not at all (0% of the time)	1	3.3
Missing	2	6.7
Total	30	100.0

19a. What were the two greatest barriers to fulfilling your role as NCC? (rank 1)

	Frequency	Percent
1. Lack of participation from beneficiaries	13	43.3
2. Lack of participation from prescribers	10	33.3
3. Lack of direct communication with prescribers	2	6.7
4. Lack of integrated treatment teams with all prescribers	4	13.3
5. Lack of documentation or timely documentation	1	3.3
Total	30	100.0

19b. What were the two greatest barriers to fulfilling your role as NCC? (rank 2)

	Frequency	Percent
1. Lack of participation from beneficiaries	3	10.0
2. Lack of participation from prescribers	5	16.7
3. Lack of direct communication with prescribers	7	23.3
4. Lack of integrated treatment teams with all prescribers	10	33.3
5. Lack of documentation or timely documentation	4	13.3
Missing	1	3.3
Total	30	100.0

20. Did you think you were qualified to fulfill the NCC role at the beginning of the study?

	Frequency	Percent
1. Definitely (100% of the time)	12	40.0
2. Mostly (>80% of the time)	10	33.3
3. Moderate (50-79% of the time)	5	16.7
4. Somewhat (25-50% of the time)	2	6.7
6. Not at all (0% of the time)	1	3.3
Total	30	100.0

22. Do you think you were qualified to fulfill the NCC role at the end of the study?

	Frequency	Percent
1. Definitely (100% of the time)	22	73.3
2. Mostly (>80% of the time)	8	26.7
Total	30	100.0

24. Did you use the systematic medication manuals?

	Frequency	Percent
1. All the time (100% of the time)	4	13.3
2. Most of the time (>80% of the time)	10	33.3
3. Moderate amount of the time (50-79% of the time)	9	30.0
4. Sometimes (25-50% of the time)	4	13.3
5. Minimal (<25% of the time)	2	6.7
6. Not at all (0% of the time)	1	3.3
Total	30	100.0

25. Did you find the SMM manuals helpful?

	Frequency	Percent
1. All the time (100% of the time)	7	23.3
2. Most of the time (>80% of the time)	8	26.7
3. Moderate amount of the time (50-79% of the time)	9	30.0
4. Sometimes (25-50% of the time)	2	6.7
5. Minimal (<25% of the time)	2	6.7
6. Not at all (0% of the time)	1	3.3
Missing	1	3.3
Total	30	100.0

26. How often did you interact with SMM consult support?

	Frequency	Percent
1. All the time (every clinical question needing support)	4	13.3
2. Frequently (>80% of every clinical question needing support)	2	6.7
3. Often (50-80% of every clinical question needing support)	3	10.0
4. Occasionally (25-49% of every clinical question needing support)	9	30.0
5. Seldom (<25% of every clinical question needing support)	12	40.0
Total	30	100.0

27. How helpful did you find the SMM consult support?

	Frequency	Percent
1. Definitely helpful (100% of the time)	10	33.3
2. Mostly helpful (>80% of the time)	10	33.3
3. Moderately helpful (50-79% of the time)	6	20.0
4. Somewhat helpful (25-50% of the time)	2	6.7
5. Minimally helpful (<25% of the time)	2	6.7
Total	30	100.0

28. How much time per week did you spend performing SMM?

	Frequency	Percent
1. 30-40 hours per week	2	6.7
2. 20-30 hours per week	9	30.0
3. 10-20 hours per week	16	53.3
4. Less than 10 hours per week	3	10.0
Total	30	100.0

29. Did you find the SMM site visits helpful?

	Frequency	Percent
1. Definitely helpful (100% of the time)	8	26.7
2. Mostly helpful (>80% of the time)	10	33.3
3. Moderately helpful (50-79% of the time)	4	13.3
4. Somewhat helpful (25-50% of the time)	3	10.0
6. Not at all helpful (0% of the time)	1	3.3
Missing	4	13.3
Total	30	100.0

30. Do you think a NCC can effectively do their job with on-site prescribers?

	Frequency	Percent
1. All the time (100% of the time)	8	26.7
2. Most of the time (>80% of the time)	15	50.0
3. Moderate amount of the time (50-79% of the time)	1	3.3
4. Sometimes (25-50% of the time)	2	6.7
5. Minimal (<25% of the time)	2	6.7
Missing	2	6.7
Total	30	100.0

31. Do you think a NCC can effectively do their job with off-site prescribers?

	Frequency	Percent
1. All the time (100% of the time)	2	6.7
2. Most of the time (>80% of the time)	3	10.0
3. Moderate amount of the time (50-79% of the time)	6	20.0
4. Sometimes (25-50% of the time)	9	30.0
5. Minimal (<25% of the time)	9	30.0
Missing	1	3.3
Total	30	100.0

Appendix 6E
NCC Survey Administrator Version Results

NCC Administrator Survey Frequencies

1. How would you rate your experience having a nurse care coordinator (NCC) at your site?

	Frequency	Percent
1. Excellent	10	47.6
2. Above Average	9	42.9
3. Average	2	9.5
Total	21	100.0

2. If offered the opportunity to have a permanent nurse care coordinator position at your site, would you want it?

	Frequency	Percent
1. Yes	14	66.7
2. No	1	4.8
3. Maybe	6	28.6
Total	21	100.0

3. Overall do you think the NCC made a difference in beneficiaries' health care and functioning?

	Frequency	Percent
1. Definitely (100% of beneficiaries)	3	14.3
2. Mostly (>80% of beneficiaries)	14	66.7
3. Moderate (50-79% of beneficiaries)	3	14.3
4. Somewhat (25-50% of beneficiaries)	1	4.8
Total	21	100.0

4a. What do you think was the NCC's two greatest contributions to beneficiaries' care? (Rank 1)

	Frequency	Percent
1. Tracking medications	2	9.5
2. Consolidating medication histories	1	4.8
4. Providing recommendations to prescribers	3	14.3
5. Providing continuity of care	13	61.9
7. Providing medication education	1	4.8
9. Other (Please specify)	1	4.8
Total	21	100.0

4b. What do you think was the NCC's two greatest contributions to beneficiaries' care? (Rank 2)

	Frequency	Percent
1. Tracking medications	1	4.8
2. Consolidating medication histories	2	9.5
3. Performing psychiatric scales	1	4.8
4. Providing recommendations to prescribers	1	4.8
5. Providing continuity of care	2	9.5
6. Providing case management	3	14.3
7. Providing medication education	1	4.8
8. Improving physical healthcare	9	42.9
9. Other (Please specify)	1	4.8
Total	21	100.0

Question 4b: Rank 2 Other Specify

	Frequency	Percent
Improving integrated treatment with SE	1	4.8
n/a	20	95.2
Total	21	100.0

5. What do you think was the NCC's least important contribution to beneficiaries' care?

	Frequency	Percent
1. Tracking medications	3	14.3
2. Consolidating medication histories	3	14.3
3. Performing psychiatric scales	5	23.8
4. Providing recommendations to prescribers	3	14.3
5. Providing continuity of care	2	9.5
6. Providing case management	4	19.0
8. Improving physical healthcare	1	4.8
Total	21	100.0

6. Do you think it could be financially feasible to hire a NCC to perform the current job they are performing in MHTS?

	Frequency	Percent
1. Moderate (50-79% agreement)	4	19.0
2. Somewhat (25-50% agreement)	1	4.8
3. Minimal (<25% agreement)	7	33.3
4. Not at all (0% agreement)	9	42.9
Total	21	100.0

7. In comparison to the "traditional" nursing role, how would you value the NCC role as demonstrated in MHTS?

	Frequency	Percent
1. Valued much more	11	52.4
2. Valued slightly more	4	19.0
3. Valued equally	5	23.8
4. Valued slightly less	1	4.8
Total	21	100.0

8. Do you feel the NCC had the administrative support to effectively do their job?

	Frequency	Percent
1. Definitely (100% of the time)	8	38.1
2. Mostly (>80% of the time)	8	38.1
3. Moderate (50-79% of the time)	4	19.0
4. Somewhat (25-50% of the time)	1	4.8
Total	21	100.0

9a. What were the two greatest barriers the NCC encountered while fulfilling his/her role? (Rank 1)

	Frequency	Percent
1. Lack of participation from beneficiaries	7	33.3
2. Lack of participation from prescribers	5	23.8
3. Lack of direct communication with prescribers	3	14.3
4. Lack of integrated treatment teams with all prescribers	4	19.0
5. Lack of documentation or timely documentation	2	9.5
Total	21	100.0

9b. What were the two greatest barriers the NCC encountered while fulfilling his/her role? (Rank 2)

	Frequency	Percent
1. Lack of participation from beneficiaries	5	23.8
2. Lack of participation from prescribers	2	9.5
3. Lack of direct communication with prescribers	4	19.0
4. Lack of integrated treatment teams with all prescribers	6	28.6
5. Lack of documentation or timely documentation	3	14.3
Missing	1	4.8
Total	21	100.0

Appendix 6F
SMM Implementation Findings by Site

Appendix 6F SMM Implementation NCC Reports and Prescriber Reports

Site	501	502	503	504	505	506	507	508	509	510	512	513	514	515	517	518	519	520	521	522	523	524	525	Total	
Number of Bs	39	18	20	64	62	69	31	63	14	45	35	61	35	74	16	10	24	57	25	62	66	47	44	981	
NCC REPORTS																									
Minimum	3	7	5	6	3	4	7	8	5	4	7	5	7	5	0	5	0	9	8	4	5	7	5	0	
Maximum	20	18	20	24	11	30	22	17	16	28	21	24	21	22	17	18	21	17	16	14	23	24	29	30	
Mean	10.6	11.3	8.7	12.6	7.5	12.5	12.7	11.6	10.4	14.9	14.1	9	13.4	13.2	9.8	9.2	4	12.7	10.3	6.3	11.4	13.3	10.9	11.1	
Bs with 8 or more	36	15	6	61	32	63	30	63	11	41	34	49	34	71	11	6	2	57	25	7	55	46	38	793	
% Bs with 8 or more	92.3	83.3	30	95.3	51.6	91.3	96.8	100	78.6	91.1	97.1	80.3	97.1	95.9	68.8	60	8.3	100	100	11.3	83.3	97.9	86.4	80.8	
Mean among Bs with 8 or more	11.1	12.2	13.8	12.9	8.8	13.1	12.9	11.6	11.6	15.8	14.3	9.5	13.6	13.5	12.3	11.2	14.5	12.7	10.3	10.3	12.4	13.4	11.5	12.4	
Bs with 12 or more	14	9	4	33		35	16	27	5	31	27	3	23	43	7	2	1	40	5	2	32	27	12	398	
Percent Bs 12 or more	35.9	50	20	51.6		50.7	51.6	42.9	35.7	68.9	77.1	4.9	65.7	58.1	43.8	20.0	4.2	70.2	20.0	3.2	48.5	57.4	27.3	40.6	
Mean among Bs with 12 or more	13.5	14.1	16.5	15.3		15.9	15.5	13.7	13.8	17.7	15.4	18.7	15.3	15.9	13.6	16.5	21.0	13.9	14.2	13.0	14.3	16.0	16.2	15.3	
Bs with less than 8	3	3	14	3	30	6	1		3	4	1	12	1	3	5	4	22			55	11	1	6	188	
% Bs with less than 8 below	7.7	16.7	70.0	4.7	48.4	8.7	3.2		21.4	8.9	2.9	19.7	2.9	4.1	31.3	40.0	91.7			88.7	16.7	2.1	13.6	19.2	
Mean among Bs with less than 8	4.3	7.0	6.5	6.7	6.2	6.2	7.0		5.7	5.8	7.0	6.8	7.0	6.0	4.2	6.3	3.1			5.7	6.7	7.0	6.7	5.7	
PRESCRIBER REPORTS																									
Minimum	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	
Maximum	19	13	18	22	5	20	20	20	16	33	15	17	22	19	18	14	8	16	13	11	21	25	32	33	
Mean	6.2	6.6	3.5	5.9	1.4	5.7	10.2	6.5	9.6	11.3	3.2	1.6	11.3	3.4	9.3	4.2	2.4	9.3	8.2	1.3	5.9	9.4	7.1	5.8	
Bs with 6 or more	18	11	3	34	0	29	29	30	13	33	8	3	32	16	11	2	3	52	23	4	36	35	18	365	
% Bs with 6 or more	46.2	61.1	15	53.1	0	42	93.5	47.6	92.9	73.3	22.9	4.9	91.4	21.6	68.8	20	12.5	91.2	92	6.5	54.5	74.5	40.9	37.2	
Mean among Bs with 6 or more	10.1	8.9	14	9.9	0	11.2	10.8	11.4	10.1	14.5	9.4	14	12	10.1	12	12	7	9.9	8.7	7.8	9.7	12	14.7	11.9	
Bs 8 or more	18	11	3	34	0	29	29	30	13	33	8	3	32	16	11	2	3	52	23	4	36	35	18	365	
% Bs with 8 or more	41	38.9	15	42.2	0	37.7	83.9	42.9	78.6	60	14.3	4.92	85.7	13.5	62.5	20	4.17	77.2	68	3.23	36.4	70.2	31.8	37.21	
Mean among Bs with 8 or more	10.5	10.3	14	10.7	0	11.7	11.2	12	10.8	16.2	11.2	14	12.4	12.5	12.6	12	8	10.5	9.29	9.5	11.5	12.3	17	11.94	
Bs with less than 6	21	7	17	30	62	40	2	33	1	12	27	58	3	58	5	8	21	5	2	58	30	12	26	538	
% Bs with less than 6	53.8	38.9	85	46.9	100	58	6.45	52.4	7.14	26.7	77.1	95.1	8.57	78.4	31.3	80	87.5	8.77	8	93.5	45.5	25.5	59.1	54.84	
Mean among Bs with less than 6	2.76	2.86	1.65	1.33	1.4	1.73	1.5	2.06	3	2.58	1.37	0.97	3.67	1.48	3.2	2.25	1.71	3.4	2.5	0.88	1.33	1.75	1.85	1.578	
Bs with 3 to 5	13	4	5	8	13	11	1	12	1	6	6	8	2	15	4	4	8	4	1	5	5	5	9	150	
%Bs with 3 to 5	33.3	22.2	25	12.5	21	15.9	3.23	19	7.14	13.3	17.1	13.1	5.71	20.3	25	40	33.3	7.02	4	8.06	7.58	10.6	20.5	15.29	
Mean among Bs with 3 to 5	4.08	3.75	3.6	3.38	3.54	4.36	3	4.08	3	3.83	4.17	3.75	4.5	3.73	4	4	3.63	4.25	3	3	4	4	4	3.847	

Appendix 6F: SMM Implementation Findings by Site

A-6F-1

Appendix 6G
SMM QA Findings by Site

Summary of SMM QA Reports

Includes all beneficiaries

Appendix 6G: SMM QA Findings by Site

A-6G-1

Westat

Item/Site		501	503	504	505	506	507	508	509	510	512	513	514	515	517	518	519	520	521	522	523	524	525	All Bs	Mean of Site Means	Mean of Site Means*		
Number of Beneficiaries		12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
Item 1: P1A. Timely comprehensive review: Is the most recent summary within last 12 months?	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	1.7	3.9	2.8	2.1	2.5	3.7	2.7	2.0	3.0	5.0	1.5	5.0	2.4	2.3	5.0	5.0	3.4	4.6	4.0	3.4	2.7	2.1	3.0	3.2	3.0		
	Min	1	1	1	1	1	1	1	1	1	1	5	1	5	1	1	5	5	1	1	1	1	1	1	1	1.5		
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.0		
Item 2: P1B. Was a diagnoses present?	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	5.0	4.4	5.0	4.4	5.0	4.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.8	5.0	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.9	
	Min	5	1	5	1	5	1	5	5	5	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	4.4	
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.0	
Item 3: P1C. Illness History	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	3.6	3.9	4.4	3.7	4.0	3.6	4.0	4.0	3.4	3.7	4.1	3.9	4.8	4.3	5.0	4.0	3.0	4.9	3.7	4.4	4.4	4.0	4.0	4.0	4.0	4.0	4.0
	Min	2	2	3	1	3	1	1	3	2	3	1	3	4	3	5	4	1	4	1	3	3	3	1	1	3.0	4.0	
	Max	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5.0	5.0	
Item 4: P1D. Past psychotropic medication treatment	N	11	7	20	14	13	11	21	4	14	3	14	13	17	3	1	1	18	10	12	20	17	11	255				
	Mean	3.9	3.7	3.8	3.8	3.6	3.4	4.3	2.7	4.5	3.8	3.8	4.2	4.0	3.9	5.0	3.4	3.0	4.6	4.0	3.8	3.5	3.0	3.8	3.8	3.8	3.8	
	Min	1	1	1	1	1	1	1	1	1	3.4	3.56	1	2.6	2.76	2.6	5	3.4	1	3	1	1	1	1	1	2.7	3.8	
	Max	5	5	5	5	5	5	5	3.4	5	4.2	4.8	5	5	4.76	5	3.4	5	5	5	5	5	4.54	5	5.0	5.0	5.0	
Item 5: P2A: Timely prescriber summary: Prescriber summary of medications completed	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	4.7	2.7	4.8	3.1	4.4	5.0	5.0	5.0	4.1	3.7	5.0	5.0	5.0	5.0	5.0	5.0	4.8	5.0	3.3	4.4	4.8	3.6	4.5	4.5	4.5	4.5	
	Min	1	1	1	1	1	5	5	5	1	1	5	5	5	5	5	5	1	5	1	1	1	1	1	1	2.7	4.5	
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.0	5.0	
Item 6: P2B. Current psychotropic medication treatment	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	4.1	3.3	3.7	2.7	3.2	4.6	4.4	4.7	4.1	2.9	3.9	4.7	3.9	4.8	5.0	1.0	3.3	4.8	3.3	4.8	4.2	3.0	3.9	3.8	3.9	3.8	
	Min	3	1	1	1	1	3.4	1	4.2	3.4	1	2.6	4.2	1	4.66	5	1	1	2.6	1	3.67	2.6	1	1	1.0	3.9		
	Max	5	5	5	5	5	5	5	5	5	4.2	4.2	5	5	5	5	1	5	5	4.2	5	5	5	5	5.0	5.0		
Item 7: P2C. Was description of side effects of current medications present?	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	3.7	2.7	3.0	1.0	2.9	4.0	3.7	3.0	3.6	2.3	1.5	4.4	4.1	2.3	1.0	1.0	2.8	5.0	2.3	2.4	3.1	3.6	3.0	2.9	3.2		
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.2	
	Max	5	5	5	1	5	5	5	5	5	5	5	5	5	5	5	1	5	5	5	5	5	5	5	5	5.0	5.0	
Item 8: P2D. Was level of current medication adherence present?	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	3.7	3.9	3.6	3.7	4.4	5.0	4.8	5.0	4.1	3.7	4.7	4.4	5.0	5.0	5.0	5.0	4.6	5.0	4.0	5.0	4.8	3.6	4.4	4.4	4.4		
	Min	1	1	1	1	1	5	1	5	1	1	1	1	5	5	5	5	1	5	1	5	1	1	1	1	3.6	4.4	
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.0	5.0	
Item 9: P2E. Patient Education: Prescriber discusses therapeutic options and associated risks	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265				
	Mean	3.7	2.7	2.2	1.2	3.3	4.0	3.5	5.0	3.1	3.2	2.0	4.8	2.5	3.7	5.0	2.3	4.5	4.6	2.9	4.2	3.5	2.9	3.3	3.4	3.3		
	Min	1	1	1	1	1	1	1	5	1	1	1	2.33	1	1	5	2.33	2.33	1	1	1	1	1	1	1.2	3.3		
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	2.33	5	5	5	5	5	5	5	5.0	5.0		

Summary of SMM QA Rep
Includes all beneficiaries

Appendix 6G: SMM QA Findings by Site

A-6G-3

Item/Site	501	503	504	505	506	507	508	509	510	512	513	514	515	517	518	519	520	521	522	523	524	525	All Bs	Mean of Site Means	Mean of Site Means*	
Number of Beneficiaries	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265			
Item 19: P12. Medication Visit Frequency	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265		
	Mean	2.8	3.6	2.8	2.0	2.5	3.2	2.5	2.5	2.7	1.7	2.1	3.8	3.8	1.0	5.0	3.7	3.4	3.5	2.7	2.2	3.2	2.9	3.0	2.9	
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	5	1	1	1	1	1	1	1	1.0	
	Max	5	5	5	5	5	5	5	5	5	3	5	5	5	1	5	5	5	5	5	5	5	5	5	5.0	
Item 20: P13. Treating Refractory Patients	N	3	0	4	4	0	0	1	0	0	0	2	4	1	3	0	0	0	1	1	0	6	0	30		
	Mean	5.0		4.0	5.0			1.0				5.0	5.0	5.0	3.7				5.0	5.0		4.3		4.5	4.4	4.4
	Min	5		1	5			1				5	5	5	1				5	5		1		1	1.0	
	Max	5		5	5			1				5	5	5	5				5	5		5		5	5.0	
Item 21: P13A. Treating Persistently Symptomatic Patients	N	4	1	3	8	1	2	3	0	2	0	4	3	0	2	0	0	4	1	0	2	5	3	48		
	Mean	5.0	1.0	5.0	2.5	5.0	5.0	3.7		5.0		5.0	5.0		5.0			4.0	5.0		3.0	5.0	5.0	4.3	4.3	4.5
	Min	5	1	5	1	5	5	1		5		5	5		5			1	5		1	5	5	1	1.0	
	Max	5	1	5	5	5	5	5		5		5	5		5			5	5		5	5	5	5	5.0	
Item 22: P14. Patient Involvement in Treatment Planning	N	12	7	20	19	13	12	21	4	14	3	15	13	17	3	1	1	20	10	12	20	17	11	265		
	Mean	3.7	2.7	4.4	3.7	4.7	5.0	5.0	5.0	3.6	3.7	3.9	5.0	3.6	5.0	5.0	5.0	5.0	4.6	4.3	4.6	4.5	5.0	4.4	4.4	4.4
	Min	1	1	1	1	1	5	5	5	1	1	1	5	1	5	5	5	5	1	1	1	1	5	1	2.7	
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.0	
Item 23: P15. Patient Medication Adherence Strategies	N	4	2	9	9	6	7	9	1	1	3	8	7	6	3	0	0	2	5	1	12	11	8	114		
	Mean	5.0	3.0	1.4	2.3	1.7	5.0	4.1	5.0	5.0	5.0	4.0	3.9	4.3	3.7			5.0	5.0	5.0	4.7	3.9	4.5	3.8	4.1	4.1
	Min	5	1	1	1	1	5	1	5	5	5	1	1	1	1			5	5	5	1	1	1	1	1.4	
	Max	5	5	5	5	5	5	5	5	5	5	5	5	5	5			5	5	5	5	5	5	5	5.0	
Overall Score	Mean	71.4	61.9	60.1	49.6	67.4	76.4	74.5	68.9	63.8	57.5	66.3	83.1	68.8	80.4	83.8	58.0	67.7	86.0	64.0	71.5	73.7	68.4	68.6		

Appendix 7A
Health Insurance Questionnaire

Health Insurance Questionnaire

Beneficiary ID: _____ Beneficiary Name: _____

Instructions: Fill out the appropriate section(s) of this questionnaire for each type of health insurance coverage identified in the baseline interview.

In addition to answering all of the questions for each relevant section, be sure to photocopy the beneficiary's health insurance card (or all cards if covered by more than one plan), both front and back.

Part 0. Types of Insurance Coverage

According to baseline interview, what type of coverage does beneficiary have? Check all that apply.

- Medicare *Complete Part 1*
- Medicaid *Complete Part 2*
- Private *Complete Part 3*
- Military *Complete Part 3*
- State, County, other Government *Complete Part 3*

↳ **Check all that apply**

- State
- County
- Other Government
- Uninsured *Complete Part 4*
- Insurance Status Unknown *See Part 5*

Part 1. Medicare—Photocopy Medicare card, front and back

1.1. Medicare Member ID#

1.2. **Is beneficiary covered under a Medicare Advantage Plan?** YES NO

Explanation: Is beneficiary covered under a specific Medicare Plan, other than Parts B or D?

Beneficiary would have a card for the Medicare Advantage Plan. The plan name may be something like Aetna Choice PPO, or Human Gold Plus HMO, and may not have “Medicare” in the plan name at all. Any such plan that is based on beneficiary’s Medicare eligibility is considered a Medicare Advantage Plan.

IF YES, items below refer to that Medicare Advantage plan.

IF NO, items below refer to basic Medicare (Part A)

1.3. Insurer Name:

1.4. Full Plan Name:

1.5. Insurance Policy or Member ID#:

1.6. Insurance Group #:

1.7. Insurer Telephone #: (_____) _____ - _____

1.15. Does beneficiary have Medicare Part B? YES NO IF NO, GO TO ITEM 1.20

Medicare Part B Coverage— *Enter Part B Information into SMS as a separate Medicare Part B Insurance Policy*

1.16. Effective Date of Plan B Coverage: ___ ___ / ___ ___ / ___ ___ ___
Month Day Year

1.17. Plan B Monthly Premium: \$ ___ ___ . ___ ___ per month

1.18. Plan B Premium Monthly Due Date: ___ ___ / ___ ___ / ___ ___ ___
Month Day Year

1.19. How does beneficiary pay Plan B monthly premium?

- No monthly premium
- Automatic Deduction from SSDI check
- Receives monthly invoice and mails payment check
- Automatic withdrawal from bank account
- Other (describe):
- Unknown

1.20. Does beneficiary have Medicare Part D? YES NO IF NO, GO TO item 1.31

1.29. How does beneficiary pay Plan D monthly premium?

- No monthly premium
- Automatic Deduction from SSDI check
- Receives monthly invoice and mails payment check
- Automatic withdrawal from bank account
- Other (describe):
- Unknown

1.30. Is Part D Monthly premium included in premium amount in item 1.11? YES NO

1.31. Does beneficiary have Medicare Supplemental Insurance or Medigap? YES NO
IF NO, THEN PART 1 IS DONE

Medigap Coverage—Enter Medigap information into SMS as a separate Medicare
Medigap insurance policy. Photocopy Medigap Card, front and back

1.32. Medigap Insurer Name:

1.33. Full Medigap Plan Name:

1.34. Medigap Policy or Member ID#:

1.35. Medigap Insurer Telephone #: (____) _____ - _____

1.36. Medigap Insurer Mailing Address for Premium Payment:

P.O. Box or Street Address:

City, State, Zip:

1.37. Effective Date of Medigap Coverage: ____ / ____ / ____
Month Day Year

1.38. Medigap Monthly Premium: \$ ____ . ____ per month

Photocopy documentation of premium amount or payment

1.39. Medigap Premium Monthly Due Date: ____ / ____ / ____
Month Day Year

1.40. How does beneficiary pay monthly premium?

- No monthly premium
- Automatic Deduction from SSDI check
- Receives monthly invoice and mails payment check
- Automatic withdrawal from bank account
- Other (describe):
- Unknown

1.41. Does Medigap plan have prescription drug coverage? YES NO

END OF PART 1

Part 2. Medicaid Coverage—*Photocopy Medicaid card, front and back.*

2.1. Medicaid Insurer Name:

2.2. Full Medicaid Plan Name:

2.3. Medicaid Plan Policy or Member ID#:

2.4. Insurer Telephone #: (____) _____ - _____

2.5. Insurer Mailing Address for Premium Payment:

P.O. Box or Street Address:

City, State, Zip:

2.6. Effective Date of Medicaid Coverage: ____ / ____ / ____
Month Day Year

2.7. Medicaid Monthly Premium: \$ ____ . ____ per month

Photocopy documentation of premium amount or payment

2.8. Medicaid Premium Monthly Due Date ____ / ____ / ____
Month Day Year

2.9. How does beneficiary pay monthly Medicaid premium?

No monthly premium

Automatic Deduction from SSDI check

Receives monthly invoice and mails payment check

Automatic withdrawal from bank account

Other (describe):

Unknown

2.10. Does beneficiary have a **Medicaid Spend Down**? YES NO

Explanation: Beneficiary has a Medicaid Spend Down when he or she must spend a certain amount of money each month on medical expenses, e.g., co-payments, prescription medications, and other costs related to medical care, in order to meet Medicaid eligibility requirements.

2.10.1. IF YES, What is spend down amount? \$ _____. ____

2.10.2. IF YES, what expenses contribute to beneficiary's spend down?

Medicaid Managed Care Plan—Photocopy Medicaid Managed Care card, front and back.

2.11. Is the beneficiary enrolled in a Medicaid Managed Care Plan (MMCP)? YES NO
IF NO, THEN PART 2 IS DONE

2.12. Medicaid Managed Care Plan Insurer Name:

2.13. Full Medicaid Managed Care Plan Name:

2.14. Medicaid Managed Care Plan Policy or Member ID#:

2.15. Insurer Telephone #: (_____) _____ - _____

2.16. Insurer Mailing Address for Premium Payment:

P.O. Box or Street Address:

City, State, Zip:

2.17. Effective Date of Medicaid Managed Care Plan Coverage: ____ / ____ / ____
Month Day Year

2.18. Medicaid Managed Care Plan Monthly Premium: \$ _____. ____ per month
Photocopy documentation of premium amount or payment

2.19. Medicaid Managed Care Plan Premium Monthly Due Date: ___ / ___ / ___
Month Day Year

2.20. How does beneficiary pay monthly Medicaid Managed Care premium?

No monthly premium

Automatic Deduction from SSDI check

Receives monthly invoice and mails payment check

Automatic withdrawal from bank account

Other (describe): _____

Unknown

END OF PART 2

3.10. Who is the primary insured/policy holder?

Self

Spouse

Parent

Other Other's relationship to beneficiary

Unknown

3.11. If primary insured is someone other than beneficiary, complete contact info on primary insured:

Name:

Telephone:

Street Address:

City, State, Zip:

3.12. How is monthly premium paid?

- No monthly premium
- Automatic Deduction from SSDI check
- Receives monthly invoice and mails payment check
- Automatic withdrawal from bank account
- Other (describe):
- Unknown

3.13. How many people are covered under this plan, including beneficiary?

- 1 (beneficiary)
- 2 (beneficiary and one other person)
- 3 or more (beneficiary and 2 or more other persons)

3.14. Is this coverage COBRA Continuation?

Explanation: COBRA provides the right to temporary continuation of health insurance coverage at group rates after termination of employment. An individual can sign up for COBRA coverage when he or she elects to continue health care coverage provided through an employer after the job terminates. Beneficiaries may have COBRA coverage through an employer of their own or, more often, through their family members' employer. If a beneficiary is on a family member's employer-sponsored health insurance coverage and the family member terminates employment, the beneficiary may elect to continue COBRA coverage. When an insured elects COBRA coverage, the insured must pay the entire cost of the coverage, including the amount the employer had previously subsidized.

- YES IF YES, When does COBRA Coverage expire? Date ____ / ____ / ____
Month Day Year
- No
- Unknown

END OF PART 3

Part 4. Uninsured

4.1. When did previous health insurance coverage end? Date ____/____/____
Month Day Year

4.2. Did previous coverage end within the last 63 days? YES NO

4.3. Was that coverage from an employer? YES NO **IF NO, STOP HERE**

4.4. Did the beneficiary use COBRA coverage? YES NO

Explanation: COBRA provides the right to temporary continuation of health insurance coverage at group rates after termination of employment. An individual has COBRA coverage when he or she elects to continue health care coverage provided through an employer after the job terminates. Beneficiaries may have COBRA coverage through an employer of their own or, more often, through their family members' employer. If a beneficiary is on a family member's employer-sponsored health insurance coverage and the family member terminates employment, the beneficiary may elect to continue COBRA coverage. When an insured elects COBRA coverage, the insured must pay the entire cost of the coverage, including the amount the employer had previously subsidized.

4.5. How long did the beneficiary use COBRA?

Maryland site ONLY should administer following item.

4.6. How many persons live in beneficiary's household (including beneficiary)? _____ persons

Explanation: This number represents the beneficiary's Household Size.

4.7. Was beneficiary's income in the previous calendar year, as reported on income tax return, less than the threshold for the beneficiary's household size? (See table below.)

YES NO

Household Size	Income Eligibility	Household Size	Income Eligibility
1	\$22,050	5	\$52,650
2	\$29,700	6	\$60,300
3	\$37,350	7	\$67,950
4	\$45,000	8	\$75,600

4.8. **IF YES**, what was actual income, as reported on income taxes, in previous calendar year?
\$ _____

REQUEST COPY OF PREVIOUS YEAR'S TAX RETURN *If beneficiary does not have previous year's tax return, then see RA's manual for alternative documents.*

Explanation: Maryland Health Insurance Plan offers reduced premiums and lower initial deductibles for members who have an annual income below certain levels. In order to qualify, the total household income must be below the income eligibility levels shown, which vary by household size. Household size is the total number of exemptions claimed on beneficiary's tax return.

END OF PART 4

Part 5. Insurance Status Unknown

If the baseline interview says that the insurance status of the beneficiary is unknown, re-ask the beneficiary if he/she is covered by any type of health insurance. Ask to see a copy of any insurance card the beneficiary may have and photocopy the front and back of this card. Try to determine from this conversation and/or by looking at the insurance card (if available) what type of insurance it is, and then go to the appropriate section on this questionnaire. At a minimum, attach the photocopy of the insurance card to the questionnaire.

END OF PART 5

Appendix 7B
MHTS Monthly Encounter Form

MHTS Monthly Encounter Form

Instructions: Fill in site name and ID#, beneficiary name and ID#, billing month and year, and complete items 1-7 below.

Site Name: _____ Site ID# _____

Beneficiary Name: _____ Beneficiary ID# _____ Billing
 Month/Year: ____/____

1. Were there any **face-to-face** encounters with beneficiary this billing month? YES NO *If no, go to item 7*

2. Write the date (day/month) of **Category 1 face-to-face** encounters with beneficiary underneath the appropriate service in the table below, then check the appropriate column to indicate the length of the encounter (15, 30, 45, or 60 minutes).

CATEGORY 1. Supported Employment Related Services					
Case Management		15 minutes	30 minutes	45 minutes	60 minutes
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other SE-Related Services		15 minutes	30 minutes	45 minutes	60 minutes
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What is the **TOTAL** number of **CATEGORY 1** encounters for beneficiary this billing month (from table above)? _____

4. Did beneficiary have any **CATEGORY 2** encounters this month?

YES IF YES, complete **item 5**, the Category 2 encounter table on other side

NO IF NO, go to **item 6** on other side

5. Write the date (day/month) of **Category 2 face-to-face encounters** with beneficiary underneath the appropriate service in the table below, then check the appropriate column to indicate the length of the encounter (15, 30, 45, or 60 minutes). **NOTE:** Do not include SCID, general medical exam, transportation, or essential work-related expenses on this form.

CATEGORY 2. Non-Supported Employment Behavioral Health Services					
Psychotherapy		15 minutes	30 minutes	45 minutes	60 minutes
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assessment and Evaluation		15 minutes	30 minutes	45 minutes	60 minutes
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medication Management		15 minutes	30 minutes	45 minutes	60 minutes
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Behavioral Health Services		15 minutes	30 minutes	45 minutes	60 minutes
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Date:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Answer the following questions to determine which payment schedule to use for this beneficiary this billing month.
- a. Will/did site seek **Medicaid** reimbursement for any Category 1 services for this beneficiary this billing month?
 YES *IF YES, use **Schedule C*** **NO**
- b. Will/did site seek reimbursement from a **3rd party** for any Category 2 services for this beneficiary this billing month?
 YES *IF YES, use **Schedule B*** **NO**
- c. Check the Schedule A, B, or C, that you are using for this beneficiary this month.
- Schedule A.** Beneficiary received at least one Category 2 service this billing month and site will not seek reimbursement from a 3rd party payer for either Category 1 or Category 2 services.
- Schedule B.** Site will seek reimbursement from a 3rd party for Category 2 services received by beneficiary this month, OR beneficiary received no Category 2 services and site will not seek Medicaid reimbursement for Category 1 services.
- Schedule C.** Site will seek Medicaid reimbursement for Category 1 services received by beneficiary this month.

7. Print the name of person completing form and sign.

Name of person completing form

Signature

Appendix 7C
Original and New Supported Employment and
Related Services Payment Schedules

Supported Employment and Related Services Payment Schedules

Face-to-Face Supported Employment and Related Service Contacts	Fee-for-Service				Lump-sum	
	Payments on Schedule A		Payments on Schedule B		Payments on Schedule C	
	Original Schedule A	Revised Schedule A	Original Schedule B	Revised Schedule B	Original Schedule C	Revised Schedule C
6	400	600	325	525	100	200
5	400	550	325	475	100	200
4	400	500	325	425	100	200
3	325	425	250	375	100	200
2	225	350	175	325	100	200
1	125	275	100	250	100	200
0	100	200	100	200	100	200