



Predictors of Change on the SF-12 in Adults Receiving Behavioral Health Services

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Outcome evaluation and management

- Principle: consumers have the right to effective treatment
- How to determine what is effective
 - Measures must be appropriate, cost effective, efficient to administer, score and interpret
 - Value consumer self report



SF-12

- Twelve item self report measure of health status
- Yields two summary scores
 - Physical health
 - Mental health
- In Arizona's public system, uniformly administered at intake, every six months, and discharge



How to interpret the SF-12

- National norms by gender and by age
 - approximately 50
- For MCS in this study, all of the groups scored significantly below the national norm for gender and and for age



Relationship to other measures and characteristics

- Are the findings similar to those of other measures
- Can any other measures predict who will improve?
- Can demographic or clinical characteristics predict who will improve?



Demographic predictors

- Gender
- Arrest record
- Household:
 - Size
 - Income
 - Source of income
- Marital status



Clinical predictors

- Diagnostic category (DSM-IV)
- Presenting problem
- Functional assessment (ALFA)
- SMI status



Service predictors

- Title XIX eligibility (cost of service)
- Type of service (program)



Methodology

- Logistic regression
 - SPSS
 - Yields Odds Ratios
 - Prediction table



Findings

Significantly related to improvement:

- Non-Title XIX eligible
- Alcohol/drug program
- Mood disorder
- Personality disorder
- Intake score on the MCS



Explanations

- Lack of improvement related to:
 - very low income,
 - specific diagnoses
 - Caucasian ethnicity
 - Low intake scores on the MCS
- Improvement related to
 - Low functioning at intake



Conclusions

- SF-12 has utility in identifying individuals who are less likely to improve
- Aggregate vs. individual measure
- Clinical implications



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Table 1. Demographic and clinical characteristics of study sample (N=2065)

Ethnicity	
African American	116
Caucasian	1273
Latino	516
Native	154
Gender	
Male	1078
Female	987
Primary Diagnosis	
Schizophrenia	258
Mood disorder	603
Alcohol/drug	839
Other	365
Service program	
Serious mental illness	480
Alcohol/drug	839
General mental health	655
Children	125
Serious mental illness	
Yes	553
No	1512
Title XIX eligible	
Yes	702
No	1363
Age (mean)	31.000
Household income (mean)	9710.00
Household size (mean)	2.83
Years of education (mean)	8.98

Table 2. Logistic regression analysis of MCS Improvement as a function of demographic and clinical variables.

Variables	B	Wald	Odds ratio	Sig.	95% Confidence Interval for Odds Ratio	
					Lower	Upper
Demographic						
Caucasian	-.238	5.991	.788	.014	.652	.954
Past year arrests	.066	2.967	1.069	.085	.991	1.153
Gender	.080	.605	1.083	.437	.886	1.396
Clinical						
MCS time 1	-.027	50.200	.973	.000	.966	.980
Lowest functioning	.304	4.909	1.356	.027	1.036	1.775
Mood disorder	-.415	11.826	.660	.001	.521	.836
Personality disorder	-.400	9.148	.658	.002	.506	.854
Service						
Title XIX	.259	6.388	1.295	.011	1.060	1.583
Alcohol/drug program	-.318	6.054	.728	.014	.565	.937
Seriously mentally ill	.101	.729	1.107	.393	.877	1.396
(Constant)	1.037	18.254	2.822	.000		