

## **IIR 98-086 Patterns of Health Services Use Associated with Substance Abuse Treatment**

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### **BACKGROUND / RATIONALE:**

Beginning in the mid-1990's, VA treatment services for substance use disorders shifted from a predominantly inpatient location to a predominantly outpatient location. With this move, a wide variety of new and modified outpatient treatment programs have been developed, with variations in length, intensity, and in program characteristics. We know very little about how outpatient substance use treatment intervenes in the trajectory of service use of veterans with substance use disorders, or how associated health care costs are affected. Our study is the first in the VA to investigate overall service utilization, costs, and cost-offsets associated with variations in outpatient substance use treatment.

### **OBJECTIVE(S):**

Our objectives are 1) To identify patient characteristics associated with variations and patterns of medical, psychiatric, and substance use service use before and after outpatient substance use treatment. 2) To identify the association between extent/duration of treatment received and variations in service use before and after outpatient substance use treatment. More specifically, we are grouping patients empirically by duration/frequency of treatment received, including a comparison group identified as having substance use disorders but receiving no substance use treatment in the index year. 3) To identify program characteristics associated with variations and patterns of service use before and after outpatient substance use treatment. 4) To investigate the presence of cost-offsets associated with outpatient substance use treatment, by treatment groups, patient characteristics, and program characteristics.

### **METHODS:**

This project uses a pre/post quasi-experimental design. All veterans receiving primary and secondary diagnoses of alcohol or drug use disorder in the target fiscal years (FYs '98 and '99) will be identified from the Outpatient Care File (OPC). We expect samples of approximately 130,000+ males and 1,500+ females for most analyses in both target years. Service utilization data and patient-level characteristics also will be derived from the Patient Treatment File (PTF) and OPC file, and cost estimates of inpatient days, outpatient clinic visits, surgical procedures, and alternative housing will be generated from the Decision Support System (DSS). Treatment program data (for FY99 only) will be derived from a Drug and Alcohol Program Survey (DAPS-- project directed by Co-Investigator Dr. Humphreys). Veterans will be grouped according to treatment status-- e.g., completed treatment, incomplete treatment, detoxification only, and "no treatment" (i.e., patients with a diagnosis of substance use disorder identified in the course of care for another illness and not treated on substance use units/clinics). Dependent variables will be the change in numbers of inpatient days/outpatient stops between the pre- and post-treatment periods. Cost-estimates for inpatient days, outpatient stops, surgical procedures, and housing will be used to generate cost change scores. Multiple regression analyses and hierarchical linear models will be used to assess the impact of treatment group and both patient- and organizational-level variables on service use and cost changes.

### **FINDINGS / RESULTS:**

We have been analyzing outpatient episodes of care for substance abuse in preparation for our core analyses of services use and cost offset associated with receiving substance use treatment. This has entailed a facility-by-facility investigation of service use patterns in order to best classify treatment completion patterns. While we have not yet begun the core analyses to answer our research questions, we have identified the FY99 cohort of patients who received intensive outpatient treatment for substance use, and we will begin our core analyses very soon. As well, we have been analyzing service use patterns for substance use disorders in primary care clinics (again, part of our classification of treatment-seeking patterns).

### **STATUS:**

We continue to analyze outpatient episodes of care in specialty substance use treatment settings, and core analyses of variations in services use and cost will begin shortly.

### **IMPACT:**

Our results will provide important information to VA policy makers and service providers regarding cost and service use outcomes of the shift to outpatient substance use treatment.

## **PUBLICATIONS:**

### Journal Articles

1. Booth BM, Blow FC, Loveland Cook CA. Persistence of impaired functioning and psychological distress after medical hospitalization for men with co-occurring psychiatric and substance use disorders. *Journal of General Internal Medicine* 2001; 16: 57-65.
2. Walton MA. Diversity in relapse prevention needs: Gender and race comparisons among substance abuse treatment patients. *American Journal of Drug & Alcohol Abuse* 2001; 27: 225-240.

### In Press

3. Curran GM, Booth BM, Kirchner JE, Worley M, Rookey C, Collins K. Depressive Symptomatology and Attrition from Outpatient Substance Abuse Treatment. *Journal of Behavioral Health Services Research*. 2001; In press.

### Conference Presentations / Abstracts

4. Curran GM. ER use among patients with comorbid substance abuse and psychiatric disorders. Research in Practice Conference, National Institute on Drug Abuse. Little Rock 2001.
5. Curran GM, Sullivan G, Williams DK, Han X, Keys J, Kotrla K. Substance Use/Psychiatric Comorbidity and Emergency Room Use. Annual Meetings of the Research Society on Alcoholism. Montreal, Canada 2001.