



THE HOME CARE  
RESEARCH INITIATIVE:  
A PROGRAM OF THE  
ROBERT WOOD JOHNSON  
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# POLICY BRIEF

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## Improving the Quality of Care for Older Adults with Mental Disorders: The Outcomes-Based Treatment Planning System of the NH-Dartmouth Psychiatric Research Center

This research brief provides information about an initiative, supported by the Robert Wood Johnson Foundation, to provide clinicians with an integrated system for assessing client needs, planning effective treatment, and measuring treatment outcomes for the growing population of older adults with mental disorders. The initiative, called the Outcomes-Based Treatment Planning (OBTP) System, aims to provide clinicians and policy makers with important information about the outcomes and effectiveness of treatment. The study investigated whether clinicians' ability to recognize and treat mental illness in older adults could be improved. Further, it investigated whether the consistent use of tools specifically designed for this population could both inform treatment and give policymakers important data concerning treatment effectiveness. The study found that the OBTP system resulted in more comprehensive client assessments, more specific treatments, and better chart documentation of both initial severity and client progress over time.

### The Problem

Older adults with severe mental illness (OSMI) present a particularly difficult and significant public health challenge. In addition to the normal medical conditions associated with aging this group suffers from severe functional and behavioral problems, medical co-morbidity, poor social supports, and diminished family contact and supports associated with their mental disorders. Consequently, OSMI are high users of mental health services and at high risk of institutionalization. However,

- Few clinicians are specifically trained in assessing the needs of the OSMI population, even though individuals with SMI are among the most severely disabled of older persons



## Figure 1: The 22 assessment domains

### **SYMPTOMS:**

Depression  
Anxiety  
Suicide  
Elevated Mood/Mania  
Suspiciousness  
Hallucinations  
Substance Abuse  
Hostile & Dangerous Behaviors  
Memory & Orientation

### **FUNCTIONING:**

Daily Living Skills  
Personal Care Skills  
Social Skills  
Leisure/Community Activities  
Work/Education  
Health Status  
Treatment Self-Management

### **SUPPORTS:**

Support Systems  
Caregiver Burden  
Residential Risk  
Safety  
Neglect & Abuse  
Residential Status

- Little information is available about their unique treatment needs, as research efforts have largely focused upon the needs of SMI adults who are under 60 years of age
- Similarly, there are few data on effective service models or measures of outcomes for this older population

Yet the growing cost of their treatment and residential care poses a major challenge for policymakers.

## The Intervention

The study tested an integrated assessment, treatment planning and outcomes measurement system (the Outcome-Based Treatment Plan or OBTP). It was specifically designed by the NH-Dartmouth Psychiatric Research Center for use by mental health center and home health agency clinicians serving the older adult population.

The OBTP looks at 22 domains relevant to an older adult's health (see Figure 1.). Clinicians use these to review client needs on a quarterly basis. The OBTP also provides guidance to help clinicians assess any suspected problem areas, helps the clinician to determine whether

services are needed, and offers service options as well as a summary list of established guidelines for treating the identified problem. Quarterly reviews allow the clinician to reassess the consumer's status and update the treatment plan as needed; the reviews also allow the tracking of

## Study questions

- 1. Can the use of an integrated set of clinical tools improve the practice behavior of clinicians serving the OSMI by:**
  - a. expanding the breadth and comprehensiveness of their assessments;
  - b. increasing the range and specificity of treatments and services provided by offering treatment options and guidelines; and
  - c. providing a way to measure progress and outcomes using quantifiable anchored measures?
- 2. Can the use of an integrated set of clinical tools by clinicians serving the OSMI result in:**
  - a. significantly greater improvements in mental health status among the OSMI; and
  - b. greater perceived benefit from mental health services by the consumers of those services?

## Figure 2: Components of the OBTP

### a. Assessment Domains

Identifies areas deemed most important to the quality of life of OSMI, for clinician review on a quarterly basis

### b. Sample Screening Questions

Used to help identify potential problems where care and services are needed.

### c. Domain-specific Formal Rating Instruments and Scales

Used to measure severity of need in areas where a problem is suggested.

### d. Quarterly Summary Rating Scales

Allows quarterly ratings of overall severity in the different domains.

### e. Service Planning Target

For identified problem areas, the clinician and client agree upon service planning targets.

### f. OBTP Treatment Options Checklist

Lists the service and treatment options available to address problems.

### g. OBTP Treatment Planning Guide

Provides a listing of potential interventions and services in each domain, and a summary of recommended treatments and protocols.

### h. OBTP Treatment Plan

An optional component, this records and describes service activities, relating treatments to service planning targets.

### i. Senior Outcomes Checklist (SOC-12)

Based on the SF 12, the SOC-12 assesses clients' perceptions of the value of services, providing feedback from consumers about their health status and the helpfulness of services.

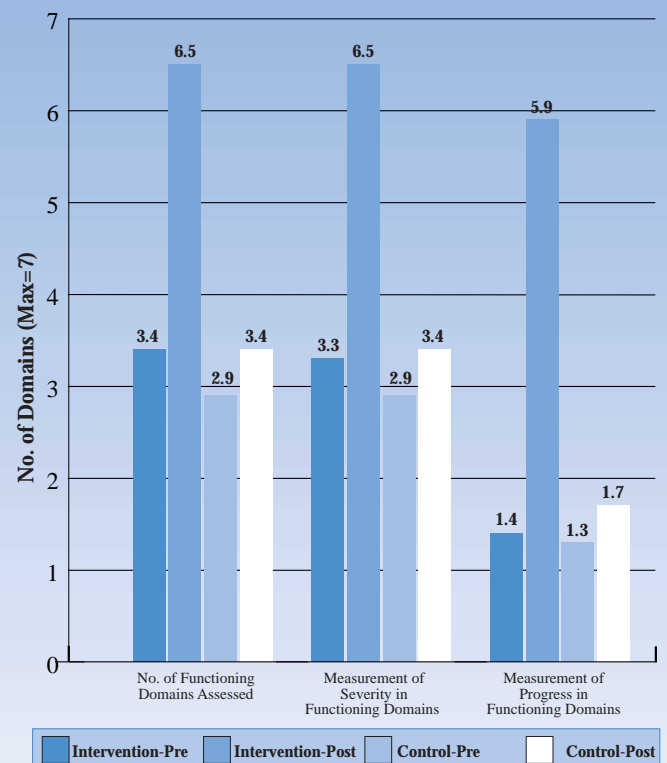
treatment outcomes. The OBTP is thus designed to guide the clinician's assessment and treatment practice but also captures information about change over time. Figure 2 describes its components.

## Study Results

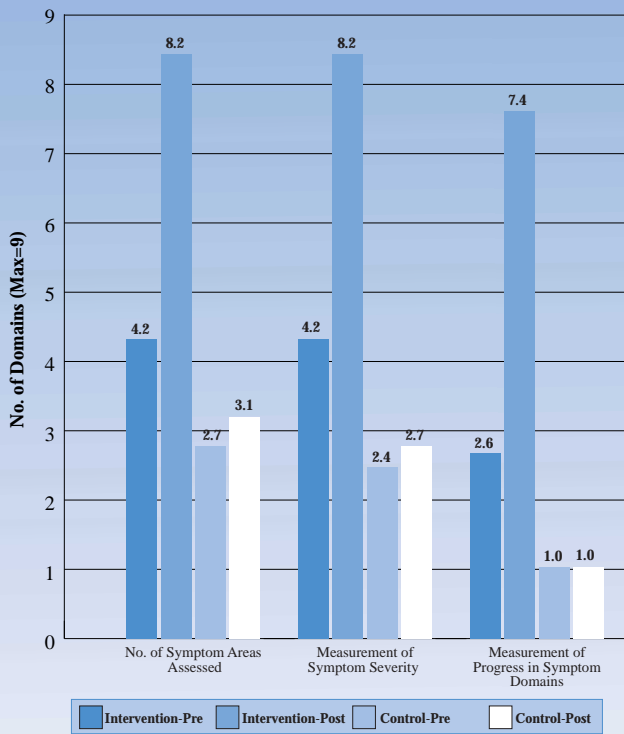
The study found that use of the OBTP improved clinician practices in all three major domains: Functioning, Symptoms and Support (Figures 3, 4 and 5 below). In all three areas, reported results are statistically significant and analyses have controlled for differences at baseline.

In the Functioning, Symptom, and Support domains, the OBTP intervention group showed:

**Figure 3:**  
Pre-Post Change in the Assessment of Functioning (Client Chart Review)



**Figure 4:**  
Pre-Post Change in the  
Assessment of Symptoms (Client Chart Review)



**Improvement in Practice Behaviors** – The use of the OBTP improved clinicians’ practice behavior by leading to more comprehensive and specific assessment of client mental health and functional status.

- Clinicians who used the OBTP assessed a significantly greater number of the 22 domains than did those in the comparison agencies.

**Better Documentation of Problem Severity** –

The use of the OBTP also improved clinicians’ likelihood to document exactly how severe an individual’s problems were.

- The severity of a problem was quantitatively documented post-intervention in more domains in the charts of consumers in the intervention agency compared to those in the comparison agencies.

**Greater Documentation of Progress Over Time** –

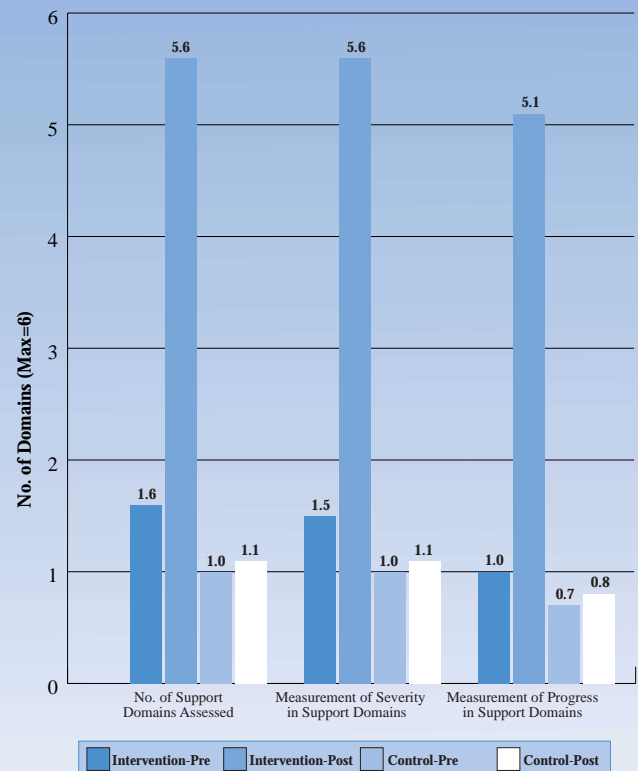
Clinicians using the OBTP were also more likely to document a consumer’s progress over time, providing information on clients’ responses to treatment.

- Charts for the consumers in the intervention agencies showed evidence of documentation of progress over time in more domains at follow-up than was found in charts of consumers in the comparison agencies.

Using the OBTP, clinicians were much more likely to assess the level of support consumers were receiving, the area that was the least likely to be assessed at baseline (See Figure 5).

**More Specifically Targeted Services** – The OBTP should lead providers to identify specific problems

**Figure 5:**  
Pre-Post Change in the  
Assessment of Support Areas (Client Chart Review)



and then to plan and document specifically targeted services. The group using the OBTP showed a broader range and increased specificity in the services planned.

- The patients in the intervention sites had significantly more planned treatments documented in their charts following the intervention period than those in the comparison sites.

### **Improvement in Consumer Outcomes –**

Consumers were asked to complete a simple questionnaire about their mental and physical health after three months of participating in the control or intervention groups.

- Consumers in the intervention group reported significantly better overall well-being.
- There were some indications (not reaching statistical significance) that the intervention group had spent more time calm and peaceful and less time downhearted and blue, and felt that the agency had helped them more with their problems than the comparison group.

### **Ability to Track Outcomes Using the OBTP –**

Because the OBTP assessment tool itself was designed to collect information on patient outcomes, comparable outcome information is not available where the OBTP was not used. Thus, this study cannot indicate whether patients were better off because the OBTP was used. However, the study can tell us about changes in patients for whom the OBTP was used.

- There were significant improvements in areas chosen as service planning targets (depression, anxiety, suspiciousness, social skills, and leisure and community activities) following the intervention.
- However, all other domains showed no significant change after three months.

## **Summary**

In this two-year study of the effects of an integrated system of assessment, treatment planning, and outcome measurement, the Outcomes-Based Treatment Planning system resulted in more comprehensive client assessments, more specific treatments, and better chart documentation of both initial severity and client progress over time. Also, there were indications that consumers in intervention agencies benefited more from services than did those in the comparison group.

### **Study methods**

**The study, a randomized clinical trial, was conducted in 8 community mental health centers (CMHCs) and 5 home health agencies (HHAs) in 3 New England States. 4 CMHCs and 3 HHAs were assigned as intervention agencies, and 4 CMHCs and 2 HHAs were chosen as comparison agencies. Forty-four clinicians participated.**

**Interviews with clinicians were conducted before and after the intervention; charts for 100 clients were also examined at these two points in time; and a self-report questionnaire administered to 133 clients was completed at baseline and 3 months later.**

## Policy Implications

The OBTP can help address the generally low level of understanding among clinicians of older adults with serious mental illness (OSMI). By helping clinicians to assess and treat OSMI more appropriately, the OBTP can lead to improved health and quality of life for this neglected but needy population, and help reduce avoidable service utilization. The information collected by the OBTP could potentially yield improved understanding of this population.

The long-term aim is for the OBTP and aggregate-level information collected by it to be made available via the Internet to clinicians. These resources will

- Inform and guide clinicians in their treatment of OSMI
- Make available uniform protocols and guidelines for assessing and treating OSMI

- Allow clinicians, provider agencies, and payors to track client progress against national norms, using standardized measures and progress reports
- Allow aggregate analysis of treatment effectiveness

The OBTP has been implemented state-wide in New Hampshire's Community Mental Health Centers and pilots are now being planned in Maine and Pennsylvania.

*More information on the OBTP can be found in:* Bartels, SJ, Miles KM, Levine K, Horn S, Sharkey P. (1997). Improving psychiatric care of the older patient. In SD Horn (Ed.), *Clinical Practice Improvement Methodology: Effective Evaluation and Management of Health Care Delivery*, New York: Faulker and Gray, pp.193-217.

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[www.vnsny.org/hcri](http://www.vnsny.org/hcri)

The Home Care Research Initiative, a program of The Robert Wood Johnson Foundation, was established to support research and analysis that will improve the knowledge base underlying home care policy and practice. It is based at the Center for Home Care Policy and Research at the Visiting Nurse Service of NY.

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