OK-COSIG

Quarterly Evaluation Report

Volume 4

Number 4

July 1, 2008 through September 30, 2008

Pages 173 - 220

Andrew L. Cherry, DSW, ACSW
Oklahoma Endowed Professor of Mental Health
University of Oklahoma, School of Social Work, Tulsa Campus,
OU OK-COSIG Project Evaluator

Mary E. Dillon, MSW, Ed.D
OU OK-COSIG Associate Evaluator

Lesa Barnett, BBA, MHR Student,
University of Oklahoma, Tulsa Campus
OU OK-COSIG Assistant Evaluator

Table of Content

Acknowledgement 176
How this quarterly evaluation report is organized 176
Co-Occurring State Incentive Grants Quarterly Progress Report: Formatted to comply with SAMHSA Reporting Requirements 178
OK-COSIG Quarterly Evaluation Report 185
Fourth Quarter of Year 4 185
Accomplishments in the 4th Quarter of Year four 186
Accomplishments and work gathering GPRA data 187
OU Evaluation Team Report 190
The Evaluation Database 191
A comparison between the Mental Health and Substance Abuse Model programs regarding people treated for a Co-occurring Disorder 192
Methodology 193
Data Source 193
Study Sample 193
Procedure 193
Measures 194
Data Analysis 194
Gender differences 195
Differences in Mental Health Model vs. Control Programs: FY 2005-2006 195
Difference in the number of men with an indication of a co-occurring disorder identified by Mental Health Model and Control Programs. 195
Difference in the number of women with an indication of a co-occurring disorder identified by Mental Health Model and Control Programs 199
Difference in the number of men with an indication of a co-occurring disorder identified by Substance Abuse Treatment Model and Control Programs 203
A Comparison of the Model and Control Programs at Baseline: FY 2005-2006 210
Identifying People with a Co-occurring Disorder 210
Treatment Completion 210

Differences between Model programs and Control programs on Treatment Completion (N = 19,241)....211
Days in Treatment....211
Differences between Mental Health Model programs and Control programs on Days in Treatment (N = 15,561)....212
Differences between Substance Abuse TX Model programs and Control programs on Days in Treatment (N = 3,835)....212
A Beginning Analysis of FY 2006-2007 Data....212
Methodology....213
Data Source....213
Procedure....213
Measures....214
Data Analysis....214
Gender differences....214
Age Differences....215
Differences by Race/Ethnicity....215
Relationships....216
Difference in Education....216
Difference in Income....217
Differences in Homelessness....217
Differences in Admission Status....217
Difference in Arrest History....217
Difference in the Number of People with a Serious Mental Illness....218
Difference in GAF scores....218
A Beginning Comparison of the Model programs: FY 2005-2006 and FY 2006-2007....218
Identifying People with a Co-occurring Disorder....218
Days in Treatment....219
Differences between Model programs by year on Days in Treatment....219
Plans for Continued Analysis....220
Postscript....220

Acknowledgement

With the completion of the 4th Quarter of the fourth year of the OK-COSIG project, the work on the project has come to the end. The fifth year is designed to be the follow-up and evaluation period. The cooperation from the Oklahoma Department of Mental Health and Substance Abuse Services, OK-COSIG staff that started from day one and has lasted for four years was superb. The interactions and correspondence between the Evaluation team members and the OK-COSIG staff resulted in 18 comprehensive quarterly and year-end reports. The data collected over the years tells the story of the OK-COSIG project and documents the outcome of these integrative system components, based on what was done, and how it was done.

Additionally, the OK-COSIG project evaluation has benefited and is made possible because of the cooperation and support of Department staff and administrators at all levels. The accomplishments of this 4th Quarter are based on our work together, gathering documents, making observations, and analyzing both qualitative and quantitative data. The work over the four years has accomplished much in the way of making integrated services for people with a co-occurring disorder a reality in Oklahoma.

==

How this quarterly evaluation report is organized

This is the 4th Quarterly Report for the 4th year of the OK-COSIG project. This report is in two parts. It contains the Co-Occurring State Incentive Grants Quarterly Progress Report: SAMHSA Format and a report on the quarterly activities that is similar to past reports. It chronicles interviews, documents, and meeting notes. The SAMHSA Quarterly Progress Report summarizes these data.

Following the SAMHSA Quarterly Progress Report, a brief overview of the work accomplished by the OK-COSIG staff and the OK-COSIG evaluation team in the last three months (July 1, 2008 through September 30, 2008). This will be followed by a list of the support activities that were carried out during the 4th Quarter of this 4th year. Next, the work accomplished on the evaluation of the project will follow. Then the goals and objectives by timeline will be described in terms of their status and the resources that

were being employed to meet the objectives. Finally, additional emerging themes that were identified in the 4th Quarter of this 4th year will be described.

Editorial note: The Quarterly Reports produced during the 4th year of this project will be data for the year-end reports. The year-end reports will be the data used in the previous four quarterly reports. These reports will also form the basis for the final report on the Process Evaluation. To maintain the highest level of accuracy, corrections will be made on quarterly reports as errors are identified or clarifications are needed. These changes will be issued as new pages that will replace the pages with errors. The new pages will retain the old text, but the old text will appear with a ~~strikethrough~~ to indicate that it was changed. The new added text will be underlined. All revision dates will appear at the bottom of the page.

Disclaimer:

This project is supported by funding awarded by the ODMHSAS and SAMHSA. Points of view in this document are those of the author and do not necessarily represent the official position or policies of ODMHSAS.

==

Co-Occurring State Incentive Grants Quarterly Progress Report: Formatted to comply with SAMHSA Reporting Requirements

July 1, 2008 through September 30, 2008

Prepared By:

Andrew L. Cherry, DSW, ACSW
Oklahoma Endowed Professor of Mental Health
University of Oklahoma, School of Social Work, Tulsa Campus,
OU OK-COSIG Project Evaluator

Mary E. Dillon, MSW, Ed.D
OU OK-COSIG Associate Evaluator

Lesa Barnett, BBA, MHR Student,
University of Oklahoma, Tulsa Campus
OU OK-COSIG Assistant Evaluator

Year: 2008,	**Quarter 4th**
Title of Grant:	**Oklahoma State Incentive Grant for Treatment of Persons with Co-occurring Mental Health and Substance Related Disorders**
Grant Number:	**1 KD1 SM56568**
State:	**OKLAHOMA**

Project Contact Information:

Kim Peterson
Director of Treatment Services
ODMHSAS
1200 N.E. 13th Street
Oklahoma City, OK 73117-1022
Office: (405) 522-5778
Fax: (405)-522-3767
Kpeterson@odmhsas.org

I. Project Implementation

This is the 4th Quarterly Report for year four of the Oklahoma-Co-occurring State Incentive Grant. This report is in the *Quarterly Progress Report Format* required by SAMHSA. The interviews, documents, and meeting notes on which this SAMHSA report is based can be found in the *OK-COSIG Quarterly Evaluation Report, Volume 4, Number 4* at http://faculty-staff.ou.edu/C/Andrew.L.Cherry-1.Jr/okcosig_project.htm.

The OK-COSIG project had two interrelated and overarching goals:

Goal 1. Develop, implement and evaluate a standard protocol for the screening and assessment of mental health and substance abuse treatment service recipients in all State funded programs.

Goal 2. Develop, implement and evaluate an integrated treatment model for persons with co-occurring disorders that is accessible, culturally competent, and grounded in evidence-based practices.

These goals with their objectives, activities and timelines were designed to develop the capacity to identify and treat people who present with the co-occurring disorders of mental health, substance abuse, and trauma within Oklahoma's mental health and substance abuse treatment communities.

A major change in the personnel occurred at the end of this quarter. This was the last quarter of the fourth year and the end of the project. As such, all personnel hired and working on the project have been reassigned or moved on to other jobs with the exception of Kim Peterson – Director of Treatment Services (FTE 25%) and Krista Rhodes – Decision Support Services (DSS) Data Analyst.

At the end of the 4th Quarter of year four of the OK-COSIG project, many of the structural barriers to treating people with a co-occurring disorder that have existed over the years between mental health and substance abuse treatment communities have been bridged or weakened. The Infrastructure changes such as the changes in the ODHMSAS State rules governing mental health treatment (Chapter 17) and substance abuse treatment (Chapter 18) continue to stand out as one of the major accomplishments. These rules set the standards for care. The word or terms related to "co-occurring" are used at least "62" times in these two documents. These ODMHSAS Administrative Rules can be viewed at http://www.odmhsas.org/AdminRules.htm.

Another major accomplishment was the integrated contracts that are being used for both mental health and substance abuse treatment facilities.

The trainings provided by the OK-COSIG staff over the last four years have been effective in alerting those in the substance abuse and mental health community to the treatment needs of those with a co-occurring disorder and the concept of integrated treatment for people with a co-occurring disorder. The intermediate level curriculum has been successfully implemented through statewide agencies.

The evaluation efforts in year five will focus on identifying and verifying the changes that have been made since 2004 using data from the Individual Client Information System (ICIS) for fiscal years 2005-2006 and 2006-2007. The data and follow-up interviews related to the Government Performance and Results Act (GPRA) has also been completed. The GRPA website is reporting that the personnel collecting the GRPA data has a follow-up rate of 89.3 %. This was above the mandatory rate of follow-up, which was 80%. The hard work of the people collecting the GRPA data is reflected in this rate. This level of follow-up will also be important in terms of the findings derived from the GRPA data. With this level of follow-up there is less concern about those who were not contacted being representative of a subgroup of participants. The GRPA data will be helpful in answering questions about individual outcomes that cannot be answered using the ICIS data files such as the number of previous hospitalizations and how the people who received services were doing after being discharged.

a. Description of project changes or modifications [since reapplication] in:

(1) Goals and Objectives

There have been no modifications. The project activities related to the grant ended after four years on September 30, 2008. In year five, the work will focus on data collection and data analysis to determine the degree to which the goals and objectives were accomplished.

Goal 1. Develop, implement and evaluate a standard protocol for the screening and assessment of mental health and substance abuse treatment service recipients in all State funded programs.

Objective 1.1 – Develop consensus among providers, service recipients, consumer advocates and other interested parties on a standard screening and assessment protocol for use in mental health and substance abuse treatment settings

During the 4th quarter, a Change Agent Lunch and Awards Ceremony was held on 9-12-2008 at the Reed Center in Midwest City to recognize change agents who participated in the OK-COSIG project. The Change Agents, model programs and others were given certificates of appreciation for their work promoting and implementing integrating services throughout Oklahoma. After the awards ceremony, Kim Peterson conducted a meeting with the change agents called 'Integration Sustainability Dialogue.' The discussion covered a number of important issues related to sustainability. It was decided to continue the Advisory committee so that Change Agents from the different regions can continue to communicate with the Leadership in Oklahoma City and so that the Leadership can stay in contact with those facilities working to provide co-occurring services in the different regions of the State. Kim Peterson is investigating the possibility of providing incentives for this fifth year to help agencies and Change Agents help train other agencies that are trying to become co-occurring capable.

Objective 1.2 – Train all mental health and substance abuse treatment providers in the screening and assessment protocol.

For all intents and purposes, the work on Objective 1.2 has been completed. The vast majority of staff of the 28 model programs has been trained with the Core Level and Intermediate Level curriculum. The Change Agent Master Curriculum was received from Dr. Minkoff and Dr. Cline this quarter. It is a comprehensive curriculum with more than 200 pages of content. This will be used to orient and train new change agents that come on board.

Goal 2. Develop, implement and evaluate an integrated treatment model for persons with co-occurring disorders that is accessible, culturally competent, and grounded in evidence-based practices.

Objective 2.1 - Develop consensus among providers, service recipients, consumer advocates and other interested parties on the elements of an integrated treatment model for persons with co-occurring disorders.

The Change Agent Lunch and Awards Ceremony was part of the ongoing effort to maintain consensus. The support of the model agencies and Change Agents while the other agencies develop a co-occurring capability is important. At this point in the project, the number of model agencies is 28.

Objective 2.2 - Establish joint licensure/certification and funding processes for both mental health and substance abuse staff.

The integrated contract establishes common standards for both mental health and substance abuse treatment facilities. As well, statutory changes that became effective this year will allow the Licensed Alcohol and Drug Counselors (LADC) to address co-occurring issues and to counsel people with a co-occurring disorder. The other professional license statutes have not changed; they are already able to address co-occurring issues in treatment.

Objective 2.3 – Develop contracting procedures that create strategic incentives for the implementation of integrated treatment systems at the provider level.

The new contract for both mental health and substance abuse has been implemented. In the past, this contract was used for mental health agencies. This infrastructure change will go a long way toward improving the quality of care for people with co-occurring disorders and people receiving services for substance misuse. This 'universal contract' will also set the standard of care across the state for both mental health and substance abuse treatment agencies.

In year three, State rules governing mental health treatment (Title 450:17, Chapter 17) and substance abuse treatment (Title 450:18, Chapter 18) were changed to include the

treatment of co-occurring disorders. The rules will make it much more likely that agencies will address the needs of people with a co-occurring disorder.

Objective 2.4 – Train all mental health and substance abuse treatment providers in the use of a comprehensive, integrated system of care model for persons with co-occurring disorders.

The work has been completed on this Objective. The Core-Level trainings and the Intermediate-Level trainings have been developed. The plan is for the Change Agents to conduct co-occurring trainings in the future.

Project timeline for project implementation

The collection of the GPRA data has come to an end on September 30, 2008. The staff members who were specifically hired to enter GPRA completed follow-up interviews on 89% of the people treated for a co-occurring disorder. One staff person was assigned at each of the three pilot sites to collect the GPRA data.

Over the last 48 months of the OK-COSIG project, the majority of the objectives and activities met their targeted timelines and have been completed. These objectives and activities are chronicled in the quarterly reports produced over the last four years and three quarters. They are available online at http://faculty-staff.ou.edu/C/Andrew.L.Cherry-1.Jr/okcosig_project.htm. They are also available at http://www.odmhsas.org/isi/.

(2) Approach and strategies proposed

In the next quarter, the 1st Quarter of the fifth year, the focus will be on the Change Agents and the Advisory meeting scheduled for October 28, 2008 at the Department in Oklahoma City. One staff person (FTE .25%) will be retained as a data person so that the GPRA data is made accessible for the year five evaluation.

Status of Project

(1) Description of activities during this quarter regarding:

- screening and assessment,

The Screening & Assessment subcommittee completed their work on a database of screening and assessment tools.

- workforce development/curriculum development workgroup,

The Core-Level curriculum and the Intermediate Level curricula are available. The Change Agent training curriculum has been received from Dr. Minkoff and Dr. Cline.

- financing,

The standardized contract that will be used for both Mental Health and Substance Abuse agencies will be useful in standardizing treatment and payment.

- the change agent regional committees,

The Tulsa Change Agents met three times this quarter. They meet the first Friday of each month. There are two other change agent groups but they were not active in the 4th quarter.

- evaluation,

The focus this quarter has been on continuing to analyze the ICIS, FY 2005-2006 data to identify outcomes between the Model and Control programs. The analysis has shown that there are positive differences between people being treated at the Model Mental Health agencies and the Control Mental Health agencies. The data management of the FY 2006-2007 data has begun and is near completion. In the next quarter, the first phase of the data analysis should be completed. These findings from these analysis can be found at http://faculty-staff.ou.edu/C/Andrew.L.Cherry-1.Jr/okcosig_project.htm.

One of the overarching impressions, based on the data analysis completed this quarter using the ICIS FY 2005-2006 data, is that people with a co-occurring disorder who are in the Model Mental Health programs (programs that have improved their capacity to treat people with a co-occurring disorder) are spending less time in treatment and completing treatment far more often than people in the Control Mental Health programs providing typical treatment. Moreover, all clients in the Model Mental Health programs have statistically significant better outcomes than the clients in the Control Mental Health programs. However, the dramatic difference between the Model Substance Abuse Treatment programs and the Control Substance Abuse Treatment programs are not as evident.

These findings from the ICIS data FY 2005-2006 and FY 2006-2007 will be compared and contrasted with the GPRA data that was on the Model programs in Oklahoma. The analysis of this data will focus primarily on client outcomes and secondarily on approaches to evaluating outcomes.

(2) Accomplishments

Over the 48 months, the Goals and Objectives for the most part have been accomplished. The Project expanded from the original 7 to 28 programs that are co-occurring capable or are in the process of becoming co-occurring capable. The major infrastructure changes were: 1) changes in the rules and contracts, 2) instituting screening and assessment for people with co-occurring disorders, 3) raising awareness and support for changing to better provide for people with co-occurring disorders, 4) developing curricula and training mental health and substance abuse staff, 5) developing a uniform contract for both mental health and substance abuse agencies, and 6) combining the mental health court and drug court into a specialty courts division. The combined courts will benefit those people with a co-occurring disorder that become involved in the legal system.

(3) Other significant project activities

- The GPRA data has been collected.
- The Oklahoma Department of Mental Health and Substance Abuse Services has completed four years of successful work on the OK-COSIG project.
- The Change Agents will be the major source of training for other Change Agents and agencies that are in the process of becoming co-occurring capable.

c. Difficulties/Problems Encountered

(1) Barriers to accomplishment

- A plan is needed to mentor agencies that are trying to become co-occurring capable programs.

(2) Strategies to overcome barriers

- A plan is being explored to provide incentives to Change Agents and agencies to monitor agencies that are trying to become co-occurring capable programs.

2. Personnel
   a. List all current positions supported by the grant, including any vacancies, with percent of time on the project. The following OK-COSIG staff are working full-time on the project.

      Kim Peterson – Director of Treatment Services (FTE 25%)
      Marsha Boling – Data analysis support person (FTE 25%)

   b. List staff changes, including contractors/consultants, within the reporting period.

      September 30, 2008 was the last day of the OK-COSIG project. The work in year five will be to complete the evaluation of the work on the Project over four years.

      The following personnel were reassigned or moved on to other jobs:
      Amber Rentaria-Hulme – COD Field Representative;

Renea Butler-King – Coordinator of Field Services;
Suzan Esley – Co-Occurring Recovery Coordinator;
Kristina Schwartz (Norman);
Ella Stokes (Tulsa); and
Callie Chunestudy (Tahlequah/Vinita).

c. Describe the impact of the personnel vacancies/changes on project progress and strategies for minimizing negative impact.

Kim Peterson will continue to be the liaison person with the Evaluation Team during year five. Marsha Boling will work with the evaluation team related to the GPRA data.

===

OK-COSIG Quarterly Evaluation Report

Fourth Quarter of Year 4

(Note: The data for the SAMHSA report on the OK-COSIG Project has been developed from Interviews, Documents, Meeting Minutes, Committee Chair Reports, and Notes that are summarized in the following sections.)

This is the 4th Quarterly report of Year 4 on the OK-COSIG project to improve treatment of persons with Co-Occurring Mental Health and Substance Abuse related disorders in Oklahoma. The overarching goal of the OK-COSIG project was to improve the delivery of state-funded services for people in Oklahoma with a co-occurring disorder. The project used two interventions to promote systemic infrastructure change: 1) it developed a standard protocol for screening and assessment of people with a mental health and substance abuse problem, and field test and evaluate a screen; 2) a model was developed to provide integrated treatment that is accessible, culturally competent, and grounded in evidence-based practices. The following sections of the 4th Quarterly Report of Year 4 will delineate the work conducted in the 4th quarter of year 4.

The work in the 4th quarter of year 4 was related to ending the Departments active involvement in the OK-COSIG project and to develop efforts to sustain the infrastructure changes made to improve treatment for people with a co-occurring disorder. The

remaining 5th year will focus on completing the outcome analysis based on key informant interviews and data collected from the ICIS and GPRA systems.

§§§§§§§§§§§§§§§§§

Accomplishments in the 4th Quarter of Year four

Kim Peterson, Director of Treatment Services reported the following accomplishments 4th Quarter of Year 4 of the OK-COSIG project.

A Change Agent Lunch and Awards Ceremony was held on 9-12-2008 at the Reed Center in Midwest City to recognize change agents who participated in the OK-COSIG project. The Change Agents, model programs and others were given certificates of appreciation for their work promoting and implementing integrated services throughout Oklahoma. After the awards ceremony, Kim Peterson conducted a meeting with the change agents called 'Integration Sustainability Dialogue.' The discussion covered a number of important issues related to sustainability.

- It was decided to continue the Advisory committee and to meet quarterly.
- It was suggested that two Change Agents or regional representatives from each region attend the Advisory committee meetings.
- It was suggested that bimonthly regional Change Agent meetings might improve attendance.
- It was suggested that regional Change Agents meetings could help break down barriers between agencies so that clients can move between agencies.
- Change Agents meeting could assist agencies attempting to become co-occurring capable.
- Change Agents would be able to provide technical assistance to agencies attempting to become co-occurring capable.
- Regional meetings are a place to discuss issues that come-up in the regions.
- Relationship building and networking.

- The Regional change agent meeting can help break down barriers between mental health and substance abuse treatment programs.
- The Advisory group can help different regions deal with similar issues.
- The Advisory committee will facilitate the commutation between the Change Agents and the Leadership in Oklahoma City.

As well, Kim Peterson is investigating the possibility of providing incentives for this fifth year to help agencies and Change Agents to help train other agencies that are trying to become co-occurring capable. She is also open to holding the Advisory committee meetings in other parts of the State.

Regional Change Agent Committees

During the 4th Quarter the North Eastern Regional Change Agent committee met three times. The other two Regional Change Agent committees did not meet during the 4th Quarter. The hope is that they will be meeting in year five.

Accomplishments and work gathering GPRA data

The staff gathering Government Performance and Results Act (GPRA) data has completed their work. Their follow-up rate was 89.3%. The mandatory rate was 80%. This high rate of follow-up shows the dedication and hard work of the three people who did the GRPA follow-up work in Norman, Tulsa, and Vinita/Tahlequah. Collection of the GPRA data ended September 30, 2008.

The process was based on three data gathering tasks. Once a person was diagnosed with a co-occurring disorder: 1) data was gathered from the initial intake, 2) data was collected at discharge, and 3) data was collected six months after discharge. During the intake and discharge phases, data concerning the services provided to the client was collected. Demographic data such as gender, race, age range, an extensive drug and alcohol history, and living situation and housing was collected. Data was also collected on case management activity, screenings, treatment and counseling. The data gathered for the GPRA database on each client was comprehensive. The unique thing about the GPRA data is the data collected at the six month time period.

The training of the staff that collected the data was conducted by GRPA trainers. The training focused on the data elements and on how to interview the consumers to best collect the data needed. The training was a three day process consisting of a day of training for each phase of the data gathering process (intake, discharge, and follow-up).

The staff facilitated the collection of face-to-face follow-up data by asking clients for several addresses, phone numbers, and alternate phone numbers of people that they can contact both family members and friends. The staff learned early that it was necessary to have as many contact numbers as possible to be able to collect follow up data effectively.

§§§§§§§§§§§§§§§§

Double Trouble in Recovery Report

Suzan Esley, the Co-occurring Recovery Coordinator sent the following report on the development of Double Trouble in Recovery groups that have been started over the last four years.

The following is a list of the DTR groups with there addresses.

Afton – Closed Meetings
Grand Lake MHC -
138 S. Main St
Tuesday at 11am
Contact Cindy@ (918) 342-9530
Ext. 2443 or 337-8080

Bartlesville - Closed Meetings
Grand Lake MHC
513 SE Quapaw
Tuesday at 1pm
Contact Cindy@ (918) 342-9530
Ext. 2443 or 337-8080

Boley
Starting Point -
HWY 62E
Monday at 1:30pm
Contact Mike @ (405) 227-2339

Claremore - Closed Meetings
Grand Lake MHC
2000 W Blue Starr Drive
Friday at 2pm
Contact Cindy@ (918) 342-9530
Ext. 2443 or 337-8080

Clinton – Closed Meetings
Red Rock BHS
100 N. 31St
Tues, Wed, and Thurs at 1:00
Contact Ginger@ 580.323.6021 x2288

Durant
Mental Health Services of Southern Okla.
1001 W. Main St
Tuesday's
For more information call
(580) 924-7330

Fairland - Closed Meetings
Residential Care
Friday at 10am
Contact Cindy@ (918) 342-9530

Grove - Closed Meetings
House of Hope Inc
HWY 59
Friday at 12pm
Contact Cindy@ (918) 342-9530
Ext. 2443 or 337-8080

Lawton
Coming Soon
For more information
Contact Suzan @ (580) 591-1253

Miami - Closed Meetings
Grand Lake MHC
120 Treaty Road
Friday at 11pm
Contact Cindy@ (918) 342-9530
Ext. 2443 or 337-8080

Norman
Central Oklahoma CMHC
Moved to 700 Asp Street Suite 4
Contact Becky @ (405) 573-3987

Norman - Closed Meetings
Griffin Memorial Hospital
Hope Hall
Friday at 2pm
Contact Juan @ (405) 630-5100 ext 2875

Norman – Open Meetings
Norman Alcohol and Drug Treatment Center
900 E. Main BLDG 54
Sunday @ 8pm
Contact Suzan @ (405) 522-1934

Norman
Transition House
700 Asp St Suite 4
Wednesday 5:30pm
Contact Becky @ (405) 573-3987

OKC - Closed Meetings
Crisis Center
1200 NE 12th
Saturday at 4:30pm
Contact Candy @ 522-8129

OKC
Exodus Foundation
504 S. Dewey Ave
Tuesday at 1pm
Contact Alice @ (405) 208-4238

OKC
Hope CSI
4720 S. Shields Blvd
Wednesday at 1pm
Contact Wanessa @ (405) 634-4400

OKC
Jesus House
3134 W. Sheridan
Monday at 6:30 pm
Contact Penny @ (405) 232-7164

OKC
North Care
1140 N. Hudson
Thursday at 1pm
Contact John @ (405) 272-0660
Ext. 1132

OKC
Specialized Outpatient Services
5208 Classmen Circle
Wednesday at 1pm
Contact Gloria @ (405) 810-1776
Ext 229

Pryor – Closed Meetings
Grand Lake MHC
231 Graham
Thursday at 8:30
Contact Cindy @ (918) 342-9530
Ext 2443 or (918) 337-8080

Sallisaw - Closed Meetings
209 N Walnut Apt "B"
Daily at noon
Contact John @ (918) 774-9511

Tulsa – Closed
Family & Children Services
3604 N Cincinnati
Tuesday at 5:30 pm
Contact Kelli @ (918) 425-4200

Tulsa – Closed Meetings
Women & Children's Center
2442 Mohawk Blvd
Contact Dana @ (918) 430-0975

Tulsa
Associated Center for Therapy
7010 S. Yale Ste 251
Tuesday at 10:30am
Contact Donna @ (918) 492-2554

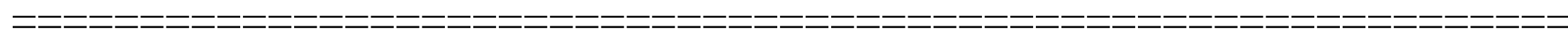
Tulsa
ACT Transition House
For more information contact
Donna @ (918) 492-2554

Tulsa - Closed Meetings
Center for Behavioral Health
2323 S. Harvard
Contact Pam @ (918) 293-2140

Tulsa - Closed Meetings
Domestic Violence Intervention
For more information contact
Remy @ (918) 584-7500

Tulsa
Mental Health Association
COMING SOON
For more information contact
Mark @ (918) 585-1263

Vinita - Closed Meetings
Grand Lake MHC
405 E. Excelsior
Thursday at noon
Contact Cindy @ (198) 342-9530
Ext 244 or (918) 337-8080



OU Evaluation Team Report

The focus of the work by the evaluation team in the 4th Quarter of the fourth year has been on completing the analysis of the ICIS, FY 2005-2006 data. Using this data the variables, the analytical approaches, and the types of analyses that are needed to answer the questions about outcome have for the most part been determined. The data is broken out into several subgroups to better identify changes and effects of the transformation

efforts. Two important subgroups are male and female. A data file is developed for each group. Then the data on the mental health centers and the substance abuse treatment programs are also made into separate data files. Currently the FY 2005-2006 has been organized into eight separate data files. Using this data, the characteristics of people with a co-occurring disorder are compared to people admitted for treatment that do not have a co-occurring disorder at both the mental health and substance abuse treatment Model and Control programs. In the analysis, some significant differences have been identified that suggest that the mental health Model programs are having a major effect on the treatment outcome of people with a co-occurring disorder. These differences are described in detail in the 3rd Quarter Year 4 report and in this quarterly report. See the section below under the header, *A comparison between the Mental Health and Substance Abuse Model programs regarding people treated for a Co-occurring Disorder*.

Data management on the ICIS FY 2006-2007 data file, for the most part has been completed. There are still some questions about variables and responses that need to be resolved but the initial analysis has begun. See the section below under the header, *A Beginning Comparison of the Model programs: FY 2005-2006 and FY 2006-2007*

The primary focus in the next Quarterly report will be to continue to analyze the FY 2006-2007 data. This analysis will provide the year two information on how people with a co-occurring disorder did in the Model agencies as compared to the Control agencies. Just as important, it will allow for the comparison of data from year two to year one data.

The Evaluation Database

The evaluation database has grown over the years. With this quarterly report, we have completed 16 quarterly reports and 3 year-end reports on the OK-COSIG Project. This is a qualitative and quantitative database that details the activities of the implementation team over four years. The report tracks the proposed timeline for completing objectives and provides explanations for objectives and timelines that were not met.

The quantitative analysis done to this point has shown that there are positive differences between people being treated at the Model Mental Health agencies and the Control Mental Health agencies. Some of these findings were presented at the 5th Annual COSIG Grantee Meeting, May 28-30, 2008 in Washington D.C. These findings from the analysis can be found at http://faculty-staff.ou.edu/C/Andrew.L.Cherry-1.Jr/okcosig_project.htm.

§§§§§§§§§§§§§§§§§

A comparison between the Mental Health and Substance Abuse Model programs regarding people treated for a Co-occurring Disorder

In the previous quarterly report (the 3rdnd Quarterly Report Year 4) data analysis in this quarter was a first attempt to look at the difference between the 15 Model programs that have been involved in the OK-COSIG project to develop their co-occurring capacity and 5 Control programs that were not involved in the OK-COSIG project. This analysis examined the information collected on relevant questions on the ODMHSAS Client Data Core to compare the impact of the OK-COSIG project. The hypothesis was that the Model programs would provide more effective treatment and this treatment would result in significantly better outcomes for people with a co-occurring disorder than their counterpart who received typical treatment in the Control programs. This quarterly report can be found at the website: http://faculty-staff.ou.edu/C/Andrew.L.Cherry-1.Jr/okcosig_project.htm.

In this analysis, the Mental Health and Substance Abuse Model programs and the Mental Health and Substance Abuse Control programs will be compared. This will provide more detailed information about the effect of the project on these two types of programs. If there is a significant difference, the difference will be observable in numerous variables (i.e., Client Data Core questions). Accordingly, in this analysis, we were looking for differences between the Mental Health Model programs and the Mental Health Control programs, and the Substance Abuse Model programs and the Substance Abuse Control programs to see if there were variations by program type.

Methodology

Data Source

Data used in this study was collected on 19,241 adults admitted for treatment to 20 agencies (15 Model and 5 Control agencies) providing mental health or substance abuse treatment in Oklahoma. The 15 Model programs (9 mental health programs and 4 substance abuse treatment programs and 2 programs with COD treatment programs) employed treatment interventions to treat people with the co-occurring disorders of mental illness and a substance use disorder. The five (5) Control programs are composed of two (2) mental health programs and three (3) substance abuse treatment programs that provided standard treatment to people with a co-occurring disorder. The data was collected over a one year period (FY 2005-2006). This study sample represents approximately 42% of people admitted for treatment in a state funded or supported facility.

Study Sample

There were 9,863 (51.3%) males and 9,378 (48.7%) females in this sample for a total study population of 19,241. The total state population of women was 50.7% and 49.3% for men in the 2000 census.

Procedure

The data came from the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) Individual Client Information System (ICIS). Agencies that contract with ODMHSAS are required to enter standardized data into the ICIS on clients that they treat. The data was provided through a data sharing agreement with the researchers approved by the University of Oklahoma IRB and the ODMHSAS IRB. The data was stripped of all information that could be used to identify individuals who had been in treatment.

This data reflects the results of the Oklahoma Co-occurring State Incentive Grant (OK-COSIG) project to develop and provide "best practice" treatment for people with co-occurring disorders. Clinicians, staff, and administrators in the Model programs were exposed to the latest concepts of treating people with co-occurring disorders between

October 2004 and September 2005. The data was collected on individuals treated in the year following the first year of reorientation, clinical training, and organizational modification. The data analyzed for this study was collected between October 1, 2005 and September 30, 2006.

Measures

To determine if a person had an indication of a co-occurring disorder, scores of four (4) and above on the ASI subscale psychosis, and scores of 29 and above on the CAR subscale substance misuse were used to identify people with an indication of a co-occurring disorder. Based on this measure, among men admitted for treatment, 3,058 (43.7%) had an indication of a co-occurring disorder while 2,242 (39.1%) of women had an indication of a co-occurring disorder. The Model programs treated 2,800 men (45.5% of men treated) and 1,988 women (33.7% of women treated) with a co-occurring disorder. The Control programs treated 259 men (24% of men treated) and 255 women (17.8% of women treated) who did *not* have an indication of a co-occurring disorder.

The data was collected by individual agencies and entered into the Oklahoma Department of Mental Health and Substance Abuse Services Client Data Core. The data file constructed from the Client Data Core comprised 115 variables.

Data Analysis

The differences between people with an indication of a co-occurring disorder being treated at a mental health and substance abuse model program and people with an indication of a co-occurring disorder being treated at a mental health and substance abuse control program were examined using cross-tabulation, and t-Tests. The chi-square tests were used to compare the two types of programs on nominal variables such as gender, race/ethnicity, admission status, presenting problem, diagnosis, program completion, etc. The t-test was used to identify the differences between the programs on ordinal, interval, and ratio level data such as age, education, income, days in treatment, CAR, and ASI subscale scores, etc.

Gender differences

There were more males (51.3%) than females (48.7%) admitted for treatment. The total study population was 19,241. Among this group of men admitted for treatment, 3,058 (43.7%) had an indication of a co-occurring disorder while 2,242 (39.1%) of women had an indication of a co-occurring disorder.

Differences in Mental Health Model vs. Control Programs: FY 2005-2006

This analysis is broken out by gender. The first section is an analysis of the difference in admissions and treatment among men with a co-occurring disorder treated by the Mental Health Model programs and the Mental Health Control programs. Following this analysis, the second section is an analysis of the difference in admissions and treatment among women with a co-occurring disorder treated by the Mental Health Model programs and the Mental Health Control programs; first the men.

After this section the same type analysis will be described for men and women with a co-occurring disorder treated by the Substance Abuse Model programs and the Substance Abuse Control programs.

Difference in the number of men with an indication of a co-occurring disorder identified by Mental Health Model and Control Programs.

There were 6,940 (92.7%) males treated by the Mental Health Model programs and 543 (7.3%) treated by the Mental Health Control programs for a total of 7,483. Of that number, 6,419 (86%) were assessed for a co-occurring disorder. Among this group of men, 44.6% were identified as having an indication of a co-occurring disorder. The Mental Health Model programs identified 46.2% as having a co-occurring disorder, while the Control programs identified 24.1% as having a co-occurring disorder.

The difference in the percentage of men who presented for treatment at a mental health center and were identified as having an indication of a co-occurring disorder is significantly higher than identified at the Control programs. Almost twice as many men were identified as having an indication of a co-occurring disorder at the Model programs as opposed to the Control programs. This suggests that the Control programs which

provided 'treatment as usual' may be missing half of the men who present for treatment with a co-occurring disorder.

Difference in males treated by Model and Control programs Model Programs (n = 6,940/92.7%) Control Programs (n = 543/7.3%) Total = 7,483 men received treatment. Indication of a Co-occurring disorder Assessed by the ASI or the CAR = 6,419 men Men identified with an indication of a COD in the Model programs = 46.2% Men identified with an indication of a COD in Control programs = 24.1%

Demographically, the average age was 36 years with a standard deviation of 11 years. The range of age was between 18 and 88. Ninety percent of these males were between 20 and 55. Those with an indication of a co-occurring disorder were slightly younger on average than men with no indication of a co-occurring disorder. The vast majorities, 74%, treated in these mental health programs were White, 14.7% were African American, and 7.8% were Native American. Those identifying as Hispanic made up 2.6% (197) of the total population. Of men with an indication of a co-occurring disorder, 11.9% reported being married or living as married while 10.3% of men with no indication of a co-occurring disorder reported being married or living as married. The remainder reported that they were never married, divorced, separated, or widowed.

The number of men not involved in a relationship is significantly lower than the general population in Oklahoma. In 2005, the US Census Bureau reported that 49.8% of people over 15 years of age were married. This suggests that these men are or have experienced 'intimate partner problems'. This is an area that needs attention during the behavioral treatment process.

Difference in Age, Race and Marital status of males treated by Model and Control programs Age Average age = 36 years, standard deviation = 11 years

90% who received treatment were between 20 and 55 years old.

Race
White = 74%
African American = 14.7%
Native American = 7.8%
Hispanic = 2.6%

Marital Status
Men with an indication of a co-occurring disorder who reported being married or living as married = 11.9%

Men with NO indication of a co-occurring disorder who reported being married or living as married = 10.3%

In terms of education, income, homelessness, and health problems, the only real difference was the percentage that was homeless. Both groups had slightly less than 12 years in school (11.63 No COD & 11.53 COD). The average income reported by men with an indication of a co-occurring disorder was $11,448. Men without an indication of a co-occurring disorder had a slightly lower income of $11,144, although the difference was not significant. Among these men, 804 (10.7%) reported being homeless. Notably, chronic homelessness among men with an indication of a co-occurring disorder was significantly higher ($X^2 = 16.30$, df = 1, $p < .000$) at 12%, while 8.9% of men with no indication of a co-occurring disorder were homeless. Slightly over 10% of the men reported chronic health problems.

In terms of admission status, among those who were voluntarily admitted, 39.2% were men with an indication of a co-occurring disorder. Among those who were admitted under emergency detention, 53% had an indication of a co-occurring disorder. In terms of court commitment, the admission rate was approximately 50/50 between men with an indication of a co-occurring disorder and men with no indication of a co-occurring disorder.

The major presenting problems for these men were depression (23.7%), suicide/self-abuse (22.6%), and other psychotic symptoms (21%). Only 11.4% were identified as having an alcohol or substance abuse problem. When paired with the information from the report, *Summary of Violent Deaths in Oklahoma*, complied by the Oklahoma Health Department in August 2008, depression and suicide/self abuse are

serious clinical problems. The Summary reported that 61% of suicides in Oklahoma were among males. Additionally, over 45% of people who committed suicide were reported to be depressed before committing suicide. Considering, 46.3% of men have the presenting problems of depression and suicide/self abuse; this is an area where substantial clinical attention and training is needed.

Discharge type varied among this group of men. Those with an indication of a co-occurring disorder completed treatment significantly more often (54.5%) than those with no indication of a co-occurring disorder (45.5%). Among the men who were discharged or transferred to another treatment facility, only 40.9% had an indication of a co-occurring disorder. Additionally, those who were discharged or left ACA, only 32.5% had an indication of a co-occurring disorder. If the GPRA follow-up data shows that the men who had an indication of a co-occurring disorder also do well at follow-up this will be substantial support for concluding that the Model programs were successful in treating people with a co-occurring disorder.

The number of days men spent in treatment was significantly different for those with or without an indication of a co-occurring disorder ($t = 16.01$, $df = 5,656$, $p < .000$). Those with an indication of a co-occurring disorder spent an average of 46 days in treatment, while those with no indication of a co-occurring disorder spent an average of 96 days in treatment. Men with an indication of a co-occurring disorder spent half the days in treatment than men with *no* co-occurring disorder.

Difference in Frequency of Days in Treatment

Men with a co-occurring disorder (46 days).

Men with NO co-occurring disorder (96 days).

Statistically significant ($t = 16.01$, $df = 5656$, $p < .000$).

Difference in Frequency of Days in Treatment
Mental Health Model Programs (46 days).
Mental Health Control Programs (96 days).
Statistically significant ($t = 16.01$, $df = 5656$, $p < .000$).

A DSM Axis I primary and Axis I secondary diagnosis was given to 4,165 (56%) men. Of that number, Model programs identified 63% (2,521 men) as having a co-occurring disorder. The Control programs identified 34% (49 men) as having a co-occurring disorder. The Mental Health Model programs diagnosed almost twice the number of men with a co-occurring disorder as did the Mental Health Control programs.

Difference in Frequency of Axis I Diagnoses
Mental Health Model Programs (63% COD).
Mental Health Control Programs (34% COD).
Total number of men given a DSM Axis I primary and Axis I secondary diagnosis 4,165 (56%) of 7,483 men treated at the Mental Health programs.

Another diagnosis of concern as it relates to discharge type is men with a diagnosis of an anxiety disorder. Those with an Axis I anxiety disorder had the lowest program completion rate (29.4%). They were discharged or left ACA at a rate of 35%, 11% failed to begin treatment, and 13.3% were given an administrative discharge. Some 18% of those with an Axis I diagnosis of substance abuse were identified as having a co-occurring anxiety disorder. Taking into account, the program completion rate (29.4%) among these men with an anxiety disorder, considerable clinical attention and training is called for to increase program completion.

Difference in the number of women with an indication of a co-occurring disorder identified by Mental Health Model and Control Programs

There were 6,522 (89.7%) females treated by the Mental Health Model programs and 749 (10.3%) treated by the Mental Health Control programs for a total of 7,271. Of

that number, 6,490 (89%) were assessed for a co-occurring disorder. Among this group of women, 31.3% were identified as having an indication of a co-occurring disorder. The Mental Health Model programs identified 33% as having a co-occurring disorder, while the Control programs identified 16.4% as having a co-occurring disorder.

<u>Difference in females treated by Model and Control programs</u>
Model Programs (n = 6,522/89.7%)
Control Programs (n = 749/10.3%)

Total = 7,271 women received treatment.
<u>Indication of a Co-occurring Disorder</u>

Assessed by the ASI or the CAR = 6,490 women

Women identified with an indication of a COD in the Model programs = 33%
Women identified with an indication of a COD in Control Programs = 16.4%

Demographically, the average age was 36.65 years with a standard deviation of 11 years. The range of age was between 18 and 83. Ninety percent of these females were between 20 and 55. Those with an indication of a co-occurring disorder were slightly younger on average than women with no indication of a co-occurring disorder. The vast majorities, 77.4%, treated in these mental health programs were White, 12.8% were African American, and 6.4% were Native American. Those identifying as Hispanic made up 2.8% (204) of the total population. Of women with an indication of a co-occurring disorder, 13.7% reported being married or living as married while 13.1% of women with no indication of a co-occurring disorder reported being married or living as married. The remainder reported that they were never married, divorced, separated, or widowed.

<u>The number of women not involved in a relationship is significantly lower than the general population in Oklahoma. In 2005, the US Census Bureau reported that 49.8% of people over 15 years of age were married. This suggests that these women are or have experienced 'intimate partner problems'. This is an area that needs attention during the behavioral treatment process.</u>

<u>Difference in Age, Race and Marital status of women treated by Model and Control programs</u>

<u>Age</u>
Average age = 36.65 years, standard deviation = 11 years
90% who received treatment were between 20 and 55 years old.

<u>Race</u>
White = 77.4%
African American = 12.8%
Native American = 6.4%
Hispanic = 2.8%

<u>Marital Status</u>
Women with an indication of a co-occurring disorder who reported being married or living as married = 13.7%

Women with NO indication of a co-occurring disorder who reported being married or living as married = 13.1%

In terms of education, income, homelessness, and health problems the only real difference was the percentage that was homeless. Both groups had slightly less than 12 years in school (11.84 No COD & 11.72 COD). The average income reported by women with an indication of a co-occurring disorder was $10,081. Women without a co-occurring disorder had a slightly higher income of $10,702, although the difference was not significant. Among these women, 361 (5.6%) reported being homeless. Chronic homelessness among women with an indication of a co-occurring disorder was significantly higher ($X^2 = 31.631$, df = 1, $p < .000$) at 7.9%, while 4.5% of women with no indication of a co-occurring disorder were homeless. Slightly over 10.1% of the population reported chronic health problems.

In terms of admission status, among those who were voluntarily admitted, 25.2% were women with a co-occurring disorder. Among those who were admitted under emergency detention, 41.9% had an indication of a co-occurring disorder. In terms of court commitment, 58% were women with an indication of a co-occurring disorder. <u>When paired with the information from the report, *Summary of Violent Deaths in Oklahoma*, complied by the Oklahoma Health Department in August 2008, depression and suicide/self abuse are serious clinical problems. Additionally, over 45% of people who committed suicide were reported to be depressed before committing suicide.</u>

The major presenting problems for these women were depression (35.8%), suicide/self-abuse (18.4%), other psychotic symptoms (15.2%), and emotional maladjustment disturbance (13.1%). Only 7.3% were identified as having an alcohol or substance abuse problem.

Discharge type varied among this group of women. Those with an indication of a co-occurring disorder completed treatment more often (66.2%) than those with no indication of a co-occurring disorder (41.5%). Among the women who were discharged or transferred to another treatment facility, only 26.7% had an indication of a co-occurring disorder. Additionally, those who were discharged or left ACA, 21.1% had an indication of a co-occurring disorder.

The number of days women spent in treatment was significantly different for those with or without an indication of a co-occurring disorder ($t = 15.23$, $df = 5,277$, $p < .000$). Those with an indication of a co-occurring disorder spent an average of 62 days in treatment, while those with no indication of a co-occurring disorder spent an average of 122 days in treatment. Women with an indication of a co-occurring disorder spent half the days in treatment than women with *no* co-occurring disorder.

Difference in Frequency of Days in Treatment

Women with a co-occurring disorder (62 days).

Women with NO co-occurring disorder (122 days).

Statistically significant ($t = 15.23$, $df = 5277$, $p < .000$).

A DSM Axis I primary and Axis I secondary diagnosis was given to 3,455 women. Of that number, Model programs identified 46% (1,478 women) as having a co-occurring disorder. The Control programs identified 9% (19 women) as having a co-occurring disorder. The Mental Health Model programs diagnosed more than 5 times as many women with a co-occurring disorder as did the Mental Health Control programs.

Similar to men, the diagnosis of concern as it relates to discharge type is women with a diagnosis of an anxiety disorder. Those with an Axis I anxiety disorder had the lowest program completion rate (20.9%) about 10 percentage points lower than their male counterpart. They were discharged or left ACA at a rate of 37.8%, 13.3% failed to

begin treatment, and 13.8% were given an administrative discharge. Some 12% of those with an Axis I diagnosis of substance abuse were identified as having a co-occurring anxiety disorder. Taking into account, the program completion rate (20.9%) among these women with an anxiety disorder, considerable clinical attention and training is called for to increase program completion.

Difference in Frequency of Axis I Diagnoses
Mental Health Model Programs (46% COD).
Mental Health Control Programs (9% COD).
Total number of women given a DSM Axis I primary and Axis I secondary diagnosis 3,455 (48%) of 7,271 women treated at the Mental Health programs.

Difference in the number of men with an indication of a co-occurring disorder identified by Substance Abuse Treatment Model and Control Programs

There were 1,843 (77.4%) males treated by the Substance Abuse Model programs and 537 (22.6%) treated by the Substance Abuse Control programs for a total of 2,380. Of that number, 537 (22.5%) were assessed for a co-occurring disorder. Among this group of men, 34.4% were identified as having an indication of a co-occurring disorder. The Substance Abuse Model programs identified 36.8% as having a co-occurring disorder, while the Control programs identified 26.2% as having a co-occurring disorder.

The difference in the percentage of men who presented for treatment at a substance abuse treatment center and were identified as having an indication of a co-occurring disorder is significantly higher than identified at the Control programs. Approximately 38% more men were identified as having an indication of a co-occurring disorder at the Model programs as opposed to the Control programs. This suggests that the Control programs which provided 'treatment as usual' may be missing more than a third of the men who present for treatment with a co-occurring disorder.

Difference in males treated by Model and Control programs
Model Programs (n = 1,843/77.4%)
Control Programs (n = 537/22.5%)
Total = 2,380 men received treatment.

Indication of a Co-occurring disorder

Assessed by the ASI or the CAR = 537 men

Men identified with an indication of a COD in the Model programs = 36.8%
Men identified with an indication of a COD in Control programs = 26.2%

Demographically, the average age was 34 years with a standard deviation of 10 years. The range of age was between 18 and 74. Ninety percent of these males were between 20 and 52. Those with an indication of a co-occurring disorder were slightly older on average than men with no indication of a co-occurring disorder. The vast majorities, 79.2%, treated in these substance abuse programs were White, 11.1% were African American, and 7.6% were Native American. Those identifying as Hispanic made up 2.6% (62) of the total population. Of men with an indication of a co-occurring disorder, 10.2% reported being married or living as married while 15.4% of men with *no* indication of a co-occurring disorder reported being married or living as married. The remainder reported that they were never married, divorced, separated, or widowed.

The number of men not involved in a relationship is significantly lower than the general population in Oklahoma. In 2005, the US Census Bureau reported that 49.8% of people over 15 years of age were married. This suggests that these men are or have experienced 'intimate partner problems'. This is an area that needs attention during the behavioral treatment process.

Difference in Age, Race and Marital status of males treated by Model and Control programs

Age
Average age = 34 years, standard deviation = 10 years
90% who received treatment were between 20 and 52 years old.

Race
White = 79.2%
African American = 11.1%
Native American = 7.6%
Hispanic = 2.6%

Marital Status

Men with an indication of a co-occurring disorder who reported being married or living as married = 10.2%

Men with NO indication of a co-occurring disorder who reported being married or living as married = 15.4%

In terms of education, income, homelessness, and health problems there were no significant differences between the two groups. Both groups had slightly more than 12 years in school (12.02 No COD & 12.37 COD). The average income reported by men with an indication of a co-occurring disorder was $13,320. Men without a co-occurring disorder had a lower income of $11,618 but it was not statistically significantly different ($t = -.816$, $df = 455$, $p < .415$). Among these men, 56 (2.4%) reported being homeless. Of that number, 6 men had an indication of a co-occurring disorder while 11 men had no indication of a co-occurring disorder ($X^2 = .006$, $df = 1$, $p < .936$). Only 1% of the population reported chronic health problems.

In terms of admission status, among those who were voluntarily admitted, 34.7% were men with a co-occurring disorder, and 65% had no indication of a co-occurring disorder. Among the court referred, 35.5% had an indication of a co-occurring disorder and 64.5% had no indication of a co-occurring disorder.

The major presenting problems for these men were poly dependence/alcohol and drugs (30%), drugs/other dependency (24.6%), alcohol dependence (14.3%), alcohol abuse (8.9%), and domestic abuse perpetrator (7.7%).

Discharge type varied among this group of men. Those with an indication of a co-occurring disorder completed treatment less often (33.3%) than those with no indication of a co-occurring disorder (66.7%). Among the men who were discharged or transferred to another treatment facility, 48.9% had an indication of a co-occurring disorder. Additionally, of those who were discharged or left ACA, only 35.4% had an indication of a co-occurring disorder.

The number of days these men spent in treatment was not significantly different for those with or without an indication of a co-occurring disorder ($t = .827$, $df = 539$, $p < .408$). Those with an indication of a co-occurring disorder spent an average of 67 days in treatment, while those with no indication of a co-occurring disorder spent an average of 74 days in treatment.

Difference in Frequency of Days in Treatment
Men with a co-occurring disorder (67 days).
Men with NO co-occurring disorder (74 days).
Not Statistically significant ($t = .827$, $df = 539$, $p < .408$).

A DSM Axis I primary and Axis I secondary diagnosis was given to 157 men. Of that number, only 1 man was reported having a diagnosis other than alcohol or substance abuse; it was a mood disorder, and he left ACA. Those with a DSM Axis I primary and Axis I secondary diagnosis were discharged or left ACA at a rate of 22.4% and 3.8% failed to begin treatment.

Difference in the number of women with an indication of a co-occurring disorder identified by Substance Abuse Treatment Model and Control Programs

There were 1,616 (76.7%) females treated by the Substance Abuse Model programs and 491 (23.3%) treated by the Substance Abuse Control programs for a total of 2,107. Of that number, 540 (25.6%) were assessed for a co-occurring disorder. Among this group of women, 39.4% were identified as having an indication of a co-occurring disorder. The Substance Abuse Model programs identified 43.6% as having a co-occurring disorder, while the Control programs identified 25.2% as having a co-occurring disorder.

The difference in the percentage of women who presented for treatment at a mental health center and were identified as having an indication of a co-occurring disorder is significantly higher than women identified at the Control programs. Almost twice as many women were identified as having an indication of a co-occurring disorder at the Model programs as opposed to the Control programs. This suggests that the Control programs which provided 'treatment as usual' may be missing half of the women who present for treatment with a co-occurring disorder.

The difference in the percentage of women who presented for treatment at a substance abuse treatment center and were identified as having an indication of a co-

occurring disorder is significantly higher than identified at the Control programs. Almost three quarters (73%) more women were identified as having an indication of a co-occurring disorder at the Model programs as opposed to the Control programs. This suggests that the Control programs which provided 'treatment as usual' may be missing three quarters of the women who present for treatment with a co-occurring disorder.

Difference in females treated by Model and Control programs
Model Programs (n = 1,616/76.7%)
Control Programs (n = 491/23.3%)

Total = 2,107 women received treatment.

Indication of a Co-occurring disorder

Assessed by the ASI or the CAR = 540 women

Women identified with an indication of a COD in the Model programs = 43.6%
Women identified with an indication of a COD in Control Program = 25.2%

Demographically, the average age was 33.22 with a standard deviation of 9.7 years. The range of age was between 18 and 78. Ninety percent of these females were between 20 and 52. There was no difference in age between women who had an indication of a co-occurring disorder and women who did not have an indication of a co-occurring disorder. The vast majority, 78.1%, treated in these substance abuse programs was White, 11.1% were African American, and 7.8% were Native American. Those identifying as Hispanic made up 3% (63) of the total population. Of women with an indication of a co-occurring disorder, 17.8% reported being married or living as married while 15.6% of women with *no* indication of a co-occurring disorder reported being married or living as married. The remainder reported that they were never married, divorced, separated, or widowed.

The number of women not involved in a relationship is significantly lower than the general population in Oklahoma. In 2005, the US Census Bureau reported that 49.8% of people over 15 years of age were married. This suggests that these women are or have experienced 'intimate partner problems'. This is an area that needs attention during the behavioral treatment process.

Difference in Age, Race and Marital status of females treated by Model and Control programs

Age
Average age = 36 years, standard deviation = 11 years
90% who received treatment were between 20 and 55 years old.

Race
White = 74%
African American = 14.7%
Native American = 7.8%
Hispanic = 2.6%

Marital Status
Women with an indication of a co-occurring disorder who reported being married or living as married = 11.9%

Women with NO indication of a co-occurring disorder who reported being married or living as married = 10.3%

In terms of education, income, homelessness, and health problems, only income was significantly different for the two groups. Both groups had slightly more than 12 years in school (12.02 No COD & 12.37 COD). The average income reported by women with an indication of a co-occurring disorder was $7,499. Women without a co-occurring disorder had an average income of $11,532 which was statistically significant ($t = 2.394$, $df = 334$, $p < .017$). Among these women, 58 (2.8%) reported being homeless. Of that number, 6 women had an indication of a co-occurring disorder while 12 women had *no* indication of a co-occurring disorder ($X^2 = .291$, $df = 1$, $p < .589$). Only .04% reported some type of disability.

In terms of admission status, among those who were voluntarily admitted, 39.2% were women with a co-occurring disorder, and 60.8% had no indication of a co-occurring disorder. Two women were court referred with an indication of a co-occurring disorder, and three women were court referred with no indication of a co-occurring disorder.

The major presenting problems for these women were drug/other dependency (32%), poly dependence/alcohol and drugs (18.5%), abuse victim: physical (12.5%), and drug/other abuse (7.7%).

Discharge type varied among this group of women. Those with an indication of a co-occurring disorder completed treatment less often (38.1%) than those with *no* indication of a co-occurring disorder (61.9%). Among the women who were discharged to another treatment facility, 23% who had an indication of a co-occurring disorder were discharged to an acute hospital setting. Additionally, of those who were discharged or left ACA, only 34.1% had an indication of a co-occurring disorder.

The number of days these women spent in treatment was not significantly different for those with or without an indication of a co-occurring disorder ($t = 1.45$, $df = 525$, $p < .149$). Those with an indication of a co-occurring disorder spent an average of 64 days in treatment, while those with no indication of a co-occurring disorder spent an average of 75 days in treatment.

Difference in Frequency of Days in Treatment
Women with a co-occurring disorder (64days).
Women with NO co-occurring disorder (75 days).
Not statistically significant ($t = 1.45$, $df = 525$, $p < .149$).

A DSM Axis I primary and Axis I secondary diagnosis was given to 110 women. Of that number, only 1 woman was reported having a diagnosis other than alcohol or substance abuse; it was a mood disorder and she was discharged by administrative discharge. The women with a DSM Axis I primary and Axis I secondary diagnosis were discharged or left ACA at a rate of 24.6% and 6.5% failed to begin treatment.

§§§§§§§§§§§§§§§§§

A Comparison of the Model and Control Programs at Baseline: FY 2005-2006

Identifying People with a Co-occurring Disorder

The following table clearly shows that staff in the Model programs are identifying far more men than women who have an indication of a co-occurring disorder. What is interesting about the difference is that the individuals are identified using the psychological subscale of the ASI and the substance abuse subscale of the CAR. This suggests that the substance abuse treatment Model program staff who are administering the ASI are more sensitive to psychiatric issues than staff in the Control programs. The same seems to be true for the staff in the Mental Health Model programs who administer the CAR. Apparently they are more sensitive to alcohol and substance misuse issues than the staff in the Control programs.

Differences between Model programs and Control programs on identifying people with a co-occurring disorder (N = 19,241).

Model and Control Programs	MEN No COD	MEN COD	Women No COD	Women COD
Model	54.5%	45.5%	66.3%	33.7%
Control	75.5%	24.5%	82.2%	17.8%

Treatment Completion

The next table shows that the percentage of people who complete treatment in the Model programs is higher than the people who complete treatment in the Control programs. This is encouraging because the number of men and women who complete treatment in the Control programs is so low. Especially among women with a co-occurring disorder in the Control programs who complete treatment (17%).

Differences between Model programs and Control programs on Treatment Completion (N = 19,241).

Model and Control Programs	MEN No COD	MEN COD	Women No COD	Women COD
Model	57.5%	70.4%	45%	65.5%
Control	25.5%	29%	15%	17%

Days in Treatment

The next two tables break out the Model and Control programs by focus of service. This allows for more scrutiny in terms of possible differences in the days spent in treatment.

The following table shows the difference between Mental Health Model and Control programs. Interestingly, the number of days in treatment for the Model programs is discernibly less than for the Control programs. Men with no indication of a co-occurring disorder spend as much as two times as many days in treatment as their counterparts in the Control program. Men with an indication of a co-occurring disorder spend as much as four times as many days in treatment as their counterparts in the Control programs. The same holds true for women with an indication of a co-occurring disorder.

Differences between Mental Health Model programs and Control programs on Days in Treatment (N = 15,561).

Model and Control Programs	MEN No COD	MEN COD	Women No COD	Women COD
Model	86	41	109	54
Control	192	190	212	222

The table below which shows the days spent in treatment for people being treated at the substance abuse treatment centers does not show a great deal of difference between the Model and Control programs. This suggests that the Mental Health Model programs are having the primary effect of reducing the number of days spent in treatment.

Differences between Substance Abuse TX Model programs and Control programs on Days in Treatment (N = 3,835).

Model and Control Programs	MEN No COD	MEN COD	Women No COD	Women COD
Model	79	70	76	66
Control	55	50	71	54

§§§§§§§§§§§§§§§§§

A Beginning Analysis of FY 2006-2007 Data

This is the beginning analysis of data collected on adults who received treatment from both the Model and Control programs in FY 2006-2007. This analysis is intended

to provide general background on the ICIS data elements. It is also a continuation of the data management process to ensure the veracity of the data and the variables. The data manage work will continue into the 1st quarter of year five.

Methodology

Data Source

Data used in this study was collected on 30,645 adults admitted for treatment to 30 agencies (26 Model and 4 Control agencies) providing mental health or substance abuse treatment in Oklahoma. The 26 Model programs (18 mental health programs and 8 substance abuse treatment programs) used a variation of integrated treatment for people with the co-occurring disorders of mental illness and a substance use disorder, and the four (4) Control programs are two mental health and two substance abuse treatment programs that provided standard treatment. The data was collected over a one year period from October 1, 2006 through September 30, 2007 (FY 2006-2007). In this study sample 26,260 were in mental health programs and 4,385 were in substance abuse treatment programs. This represents a 37% increase over the number of people on which we had data in FY 2005-2006. In FY 2005-2006, there were 15 Model programs and five Control programs. One of the Control programs became a Model program in FY 2006-2007. Additionally, 12 other programs not participating in FY 2005-2006 became Model programs in FY 2006-2007.

Procedure

The data came from the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) Individual Client Information System (ICIS). Agencies that contract with ODMHSAS are required to enter standardized data into the ICIS on clients that they treat. The data was provided through a data sharing agreement with the researchers approved by the University of Oklahoma IRB and the ODMHSAS IRB. The data was stripped of all information that could be used to identify individuals who had been in treatment.

This data reflects the results of the Oklahoma Co-occurring State Incentive Grant (OK-COSIG) project to develop and provide "best practice" treatment for people with co-

occurring disorders. Clinicians, staff, and administrators in the Model programs were exposed to the latest concepts of treating people with the co-occurring disorders between October 2004 and September 2005. The data was collected on individuals treated in the year following the first year of reorientation, clinical training, and organizational modification. The data analyzed for this study was collected between October 1, 2006 and September 30, 2007.

Measures

To determine if a person had an indication of a co-occurring disorder scores of four (4) and above on the ASI subscale psychosis, and a score of 29 and above on the CAR subscale substance misuse were used to identify people with an indication of a co-occurring disorder. Among men admitted for treatment, 4,139 (35.6%) had an indication of a co-occurring disorder while 3,457 (25.7%) of women had an indication of a co-occurring disorder.

The data was collected by individual agencies and entered into the Oklahoma Department of Mental Health and Substance Services, Client Data Core. The data file constructed from the Client Data Core comprised 115 variables.

Data Analysis

The differences between people with an indication of a co-occurring disorder and people with *no* indication of a co-occurring disorder were examined using cross-tabulation, t-Tests, and multiple regression analyses. The chi-square tests were used to compare the two groups on nominal variables such as gender, race/ethnicity, admission status, presenting problem, diagnosis, program completion, etc. The cross-tabulation and t-test were used to identify the differences between the two groups on ordinal, interval, and ratio level data.

Gender differences

There were more females (51.9%) than males (48.1%) admitted for treatment. Among this group of men admitted for treatment, 4,139 (35.6%) had an indication of a

co-occurring disorder while 3,457 (25.7%) of women had an indication of a co-occurring disorder.

Age Differences

As a group people in this sample were approximately 35.75 years of age. People with an indication of a co-occurring disorder were younger (35.45 years of age). People with *no* indication of a co-occurring disorder tended to be older (36.08 years of age). This was a statistically significant difference ($t = 3.89$, $df = 23,498$, $p < .000$).

Differences by Race/Ethnicity

There were few racial/ethnic differences between people with a co-occurring disorder and people seeking treatment with no indication of a co-occurring disorder. Even so, there were three interesting differences.

People who identify as White – Statistically, White women and men are the typical clients admitted to this sample of state funded treatment facilities (77.1%). This is similar to the state population of people who identify as White (75.6%).

People who identify as African Americans – Although conventional thinking is that instead of seeking treatment through state funded mental health or substance abuse facilities, African Americans tend to seek help through their church instead of what could be called "traditional" treatment avenues. Based on this data, however, only being African American would suggest a higher than expected number of men and women admitted for treatment, approximately 12.6% of the sample as opposed to 6.9% of the state population.

People who identify as Asians – The total number of Asians in this population (118) were too small to have confidence in any statistical conclusions. The low percentage seeking treatment, however, could have resulted from a significant number of Asian clients who did not seek treatment for a MH/SA disorder because of the stigma that would befall on their family. Other possible reasons for the low numbers seeking treatment would include: 1) the Asian culture is more family oriented and tends to deal with major issues within the family structure; 2) alcoholism in the Asian culture could be

a smaller portion of the population because alcohol is not easily tolerated physically by most Asians.

People who identify as Hispanics – The total number of Hispanics in this population were too small to have confidence in any statistical conclusions. Hispanics made up approximately 3.1% (964) of people admitted for treatment in this sample. This is less than 50% of the Hispanics living in Oklahoma. Possible reasons for the low numbers seeking treatment would include: 1) the Hispanic culture is more family oriented and tend to deal with major issues within the family structure; 2) treatment settings are not staffed to treat people who speak Spanish, and 3) sanctions related to legal status creates a hostile environment for both legal and non-legal Hispanics residing in Oklahoma.

Relationships

People with a co-occurring disorder (19.5%) were less likely to be involved in a relationship than people with no indication of a co-occurring disorder (23.6%). People with *no* serious mental illness and *no* co-occurring disorder were more likely to be married or living as married (26.3%). People with no indication of a co-occurring disorder, but identified as having a serious mental illness were less likely to be married or living as married (22.4%). People with an indication of a co-occurring disorder, and *no* serious mental illness were likely to be married or living as married (22.5%), while people with a co-occurring disorder *and* a serious mental illness were less likely to be married or living as married (17.6%). This suggests that those with a serious mental illness tend to have fewer relationships than those without a serious mental illness.

Difference in Education

Among the adults admitted for treatment, the average grade in school completed was 11.68. Of this group, 68.8% completed twelve years of school or more. Among those with an indication of a co-occurring disorder, 67.6% completed twelve years of school or more. Those with no indication of a co-occurring disorder had a similar level of education, 68.5% completed twelve or more years of school.

Difference in Income

The per capita income in Oklahoma in 2006 was $32,391. People with no indication of a co-occurring disorder reported an average income of $7,039, and people with an indication of a co-occurring disorder reported an average income of $5,558 (t=5.650, df = 25,074, p<.000).

Differences in Homelessness

People with an indication of a co-occurring disorder (7.1%) were more likely to be homeless than were people with no indication of a co-occurring disorder (4.1%) (X^2=100.798, df = 1, p<.000).

Differences in Admission Status

There were fewer ‘voluntary admissions’ (about 13% less) among people with an indication of a co-occurring disorder. This suggests that people with an indication of a co-occurring disorder were forced into treatment more often than people with no indication of a co-occurring disorder.

Difference in Arrest History

Adults with an indication of a co-occurring disorder, who were arrested 30 days before admission, had significantly more arrests than adults with *no* indication of a co-occurring disorder. People with a co-occurring disorder had a higher arrest rate in the 30 days before admission to treatment. Those with an indication of a co-occurring disorder averaged .05 arrests while those with *no* co-occurring disorder averaged .03 arrests (t = -5.59, df = 23,498, p < .000).

Adults with an indication of a co-occurring disorder, who were arrested six (6) months before admission, had significantly more arrests than adults with *no* indication of a co-occurring disorder. People with a co-occurring disorder had a higher arrest rate six (6) months before admission to treatment. Those with an indication of a co-occurring

disorder averaged .14 arrests while those with no indication of a co-occurring disorder averaged .09 arrests (t = -7.81, df = 23,498, p < .000).

Difference in the Number of People with a Serious Mental Illness

At admission there were 15,990 (67%) adults identified as being seriously mentally ill, and at discharge, there were 13,002 (64.2%) adults identified as being seriously mentally ill. Among adults identified as having a serious mental illness 32.4% (n = 4,211) also had an indication of a co-occurring disorder.

Difference in GAF scores

At admission, adults with an indication of a co-occurring disorder were given significantly lower/worse (average = 41.34) GAF scores than adults with *no* indication of a co-occurring disorder (average = 46.69) (t= 32.28, df = 25,074, p<.000). At discharge, there was a slight difference in the average score, people with an indication of a co-occurring disorder had an average GAF score of 49.45, and people with no indication of a co-occurring disorder had an average GAF score of 50.72. However, this was still a statistically significant difference (t=8.39, df = 21,277, p<.000).

§§§§§§§§§§§§§§§§§

A Beginning Comparison of the Model programs: FY 2005-2006 and FY 2006-2007

Identifying People with a Co-occurring Disorder

The following three tables are preliminary comparisons between the 15 Model programs in FY 2005-2006 and the 26 Model programs serving adults in FY 2006-2007. Comparing the Model programs on the percentage of men and women identified with an indication of a co-occurring disorder, it appears that the Model programs in FY 2006-2007 are not identifying as many men and women with an indication of co-occurring disorders as were identified in FY 2005-2006.

Differences between Model programs by year on identifying people with a co-occurring disorder

Model Programs	MEN No COD	MEN COD	Women No COD	Women COD
Model FY 2005-2006	54.5%	45.5%	66.3%	33.7%
Models FY 2006-2007	63.4%	36.6%	74%	25.8%

In this table it appears that treatment completion has gone up for men and women with an indication of a co-occurring disorder and dropped for men and women with no indication of a co-occurring disorder.

Differences between Model programs by year on Treatment Completion

Model Programs	MEN No COD	MEN COD	Women No COD	Women COD
Model FY 2005-2006	54.5%	45.5%	66.3%	33.7%
Models FY 2006-2007	33.8%	50%	26%	41%

Days in Treatment

This table shows the days in treatment increasing for both men and women. This probably resulted from the new programs that have longer treatment modalities.

Differences between Model programs by year on Days in Treatment

Model Programs	MEN No COD	MEN COD	Women No COD	Women COD

Model FY 2005-2006	98	45	98	45
Models FY 2006-2007	143	91	164	120

Plans for Continued Analysis

To develop a better comparison of the Model programs from baseline to FY 2006-2007, the original 15 Model programs will be compared on both years. This will provide information to show if the original 15 Model programs maintained the level of service and treatment identified in FY 2005-2006. Furthermore, the original 15 Model programs will be compared to the 11 new Model programs on data collected in FY 2006-2007.

===

Postscript

The last four years has been a study in organizational change. At times it was been chaotic and even hectic. Nevertheless, much has changed for ODMHSAS, agency administrators, clinicians and people who have a co-occurring disorder and seek treatment in Oklahoma. There is much to reflect back on and even more to be proud of. Not everything that was planned was completed nor accomplished. Then again, much more was accomplished than was planned for when the proposal was submitted to SAHMSA almost five years ago. The leadership and staff at ODMHSAS, and the administrators and staff at the model programs succeeded in changing the mental health and substance abuse treatment community in Oklahoma.