

Cross Site Tool Development Focusing on Co Occurring Populations

Acknowledgement

This document was prepared with support from the Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment (CSAT) Targeted Capacity Expansion (TCE) grant: Expanding Services to Rural Juvenile Offenders (TI 11977). The opinions expressed in this document are solely those of the author and do not represent official positions of CSAT or the CSAT TCE COFD cluster group.

Abstract

Multi site evaluation designs are frequently used in many large scale studies. The process of questionnaire development by stakeholders from multiple sites can be challenging, as different sites may have varying service populations, missions and evaluation designs. This presentation will focus on a recent SAMHSA Center for Substance Abuse Treatment cross-site cluster group. The Co Occurring and Other Functional Disorders (COFD) cluster group developed and implemented two cross-site questionnaires over eighteen months, including a process evaluation survey, describing key program characteristics and a clinical assessment tool for clients.

The COFD cluster includes a wide range of client demographics (from children to elderly adults), geographic location (rural Alaska to large urban areas), and treatment modalities. The clinical assessment instrument adapted items from the Addiction Severity Index and the Government Performance and Results Act instruments. Modifications were made with stakeholder consensus, including latitude in probes for special populations. One of the tool objectives was to measure key clinical constructs (psychiatric symptoms, addictions and functional impairment) with reliability and validity across a broad array of populations and settings. The development process (including issues of piloting on various populations and wording of items for different cultural groups) will be a focus of the proposed presentation.

Paper

Questionnaire design is always challenging, and the development of a questionnaire for use in multiple sites can often be a very difficult process. Issues of wording, interviewing methods, and cultural impacts can make the use of one tool across multiple sites hard to implement. However, some steps can make questionnaire implementation across multiple sites possible. One group's experience with developing and implementing a multi-site questionnaire will be discussed in this paper.

The sites which implemented the questionnaire tool were all Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment (CSAT) grantees. The grantees were all funded for various substance abuse treatment programs across the United States. Some of the substance abuse treatment modalities included in this group include:

- Community based, medically managed detoxification beds (San Francisco Dept. of Public Health)
- Residential, gender specific adolescent treatment (The Village Adolescent Treatment, Miami Florida)
- Outpatient case management (Commonwealth of Kentucky, focused on a rural Appalachian population)
- In home and program based treatment services for older adults (ADAS Board of Stark County, Canton Ohio)
- Transitional living facilities for individuals with both mental illness and substance abuse disorders (Tennessee Dept. of Mental Health)
- Individualized services for serious, chronic and violent juvenile offenders in a rural setting (Central and Eastern Oregon Juvenile Justice Consortium).

Grantees realized in 1999 that the needs of individuals with co occurring disorders were not receiving the attention which they deserved (COFD Grantees 2001). While CSAT had provided topical areas around population groups such as

adolescents and criminal justice populations, no specific co occurring group existed. After discussion, the grantees asked for a specific “cluster group” devoted to co occurring populations. Cluster groups are designed to promote both interest sharing and collaboration around common interests which may be shared by CSAT TCE grantees. “They inform the Center for Substance Abuse Treatment through research of important factors that impact on delivery of services to a specified group of clients/ target populations” (CSAT 2000). The request to create a co occurring cluster was granted, and the Co Occurring and Other Functional Disorders cluster group was officially formed.

Co occurring disorders are of high interest to mental health and substance abuse practioners and policy makers nationwide. High prevalence rates for co occurring disorders are now being exposed, and the issue of co occurring disorders is gaining in importance. Individuals with co occurring disorders are over represented in the criminal justice system, as well as other social service systems. Burt Pepper and Edward Hendrickson described this situation. “Epidemiological research conducted by the National Institute of Mental Health (Reiger et al., 1990) found high rates of co morbidity between metal and substance abuse disorders (dual disorders) in the general population. This research showed that 29% of individuals with a mental disorder had a coexisting substance abuse disorder, 37% of individuals with an alcohol disorder had a coexisting mental disorder, and 53% of individuals with a drug disorder (other than alcohol) had a coexisting mental disorder.” (pg. 79). The impact of individuals with co occurring issues forces changes in traditional treatment organizations.

The TCE Co Occurring and Other Functional Disorders (or COFD) cluster group met several times, and over the course of a year created a definition for the group. The definition of the cluster group (which builds the population base for tool implementation) is:

“The simultaneous existence of a substance use disorder interacting with one or more independent DSM-IV Axis I or II mental disorders and/or a cognitive/physical/sensory and/or developmental disability. The disorder/

disability is of a type and severity which exacerbates the substance use disorder or other conditions, and/or complicates treatment of the substance use disorder, and/or interferes with functioning in age appropriate roles” (COFD grantees 2001).

After discovering a common interest and treatment focus, the cluster group members took as a goal the development of a specialized instrument, to be used by cluster members. The use of an instrument was to gain more information about the individuals served by cluster members, and was seen as a way to build the overall knowledge base about co occurring disorders. The TCE grantees are required to implement the Government Performance and Results Act (GPRA) tool on all served individuals, and CSAT also allowed the cluster group members to implement additional tools or questionnaires as part of focusing on the specific populations served by the cluster group. This was done as part of a realization that, while the GRPA has benefits, it is not an ideal tool for in depth research on a very specific population.

CSAT refers to the cross site evaluation benefits as, “The cross site evaluations provide information on development in the field, effectiveness of the capacity expansion efforts, and resulting improvement in client outcome. They are providing data that are extremely useful in informing Congress about progress in the field” (CSAT 2000). Practitioners have also noted the need for more information, assessment and screening tools for the co occurring population. Primm comments: “Recent guidelines for treatment of dually diagnosed patients suggested improvement in three areas: assessment, level of coordination and location of care” (pg. 4). For this reason, the first task of the COFD cluster group after developing a cluster definition was to attempt to develop an instrument for use across sites. While additional work in the COFD cluster is occurring in the areas of creating a training reference guide, a cultural diversity guide, and some publication creation, this work is not addressed in this paper.

The first step in the creation of the COFD instrument was to develop group consensus on what was important to the group members, and what should be measured with the proposed instrument. While the population is served by the

COFD members may seem tightly defined (individuals with a substance abuse issue and at least one more issue), high variance in multiple domains was seen between cluster group members. Variance was seen in treatment population groups on issues including:

- Geographic service location (some COFD members provided service in very rural areas while others were located in cities)
- Service demographics (age of clients varied from young adolescents (12 years) to older adults (60+ years))
- Service cultural aspects (Appalachian Americans, African Americans, tribal members)
- Type of service provided (out patient case management, in patient programs, and detox centers among other treatment modalities)
- Length of treatment time (brief contacts to intensive, multi-month programs).

As could be expected, each COFD cluster member had varying views of what was important based on what type of client the cluster member was serving. After much discussion, the COFD group decided to focus on several key areas. These areas were to:

1. Examine the motivation for substance use as it related to functional impairment (e.g. self medication). What is the client's perception of his/her reasons for using substances?
2. Examine the interactive effects of co-occurring disorders on treatment outcomes. What is the interactive effect of drug use and functional impairment on treatment outcomes?
3. Examine service arrays, interventions and objectives for each program. What are significant site characteristics?
4. Examine the role of consumer involvement in treatment outcomes. What is the role of consumer involvement in outcomes?
5. Assess the impact of service integration on treatment effectiveness (adapted from the COFD Vision, Mission and Activities document).

After lengthy discussion of tool focus, length and implementation efforts, the COFD cluster decided to create several different questionnaire tools. One tool was designed to get an overview of each of the specific cluster member sites, and this instrument focused on treatment modality, funding of treatment, clientele served by site and other site specific, non-dynamic factors. The focus point of measurement for this instrument is the program providing service to clients (the program which is funded by CSAT). This tool is referred to as the *process evaluation survey tool*. The process evaluation tool is used to look at areas 3 (service arrays) and 5 (service integration) of the key areas listed above. The existence of this tool allows for higher differentiation of responses from the second questionnaire tool to be discussed, as individual respondent answers to the second questionnaire tool can be sorted and mixed with program components compiled from the process evaluation survey. Member programs in the COFD cluster complete this process survey tool annually.

The second questionnaire tool developed by the COFD cluster is called the *clinical assessment tool*. This is not wholly accurate, as the tool is not meant as a stand alone clinical assessment tool, however, the tool is designed to learn more about the clients served by the cluster members and was built from standardized, existing clinical tools in addition to some novel evaluation approaches. The focus point of measurement is the client receiving services from the TCE funded provider. The clinical assessment tool is given to clients on the same timelines as the GPRA. These timelines are at client intake into program, six months after client intake (irregardless of if the client is still in the program or has moved on), and twelve months after client intake. The focus areas of the COFD cluster which are captured in this tool are 1 (motivation for substance use), and 2 (interactive effects of co occurring disorders on outcomes). A third tool measuring consumer satisfaction is still in development and implementation. This third tool will be implemented around the time of client discharge, and will not be discussed in this paper.

After deciding on focus areas for the new tools, and on how and when the tools would be implemented across cluster sites, a review of existent literature took place by various cluster members. The ASI was currently in use by many cluster member sites, and as a result, was designated for use despite some limitations (RachBeisel et al.) in the new COFD cluster instrument. RachBeisel recaps research which finds the ASI can understate the use of substances by patients with mental illnesses (pg. 1428). This understating of substance use can cause issues when the measurement population is a dually diagnosed population. Additional instruments focusing on client satisfaction (for example, the MHSIP) were reviewed, along with additional clinically focused tools.

After a literature review, the clinical assessment tool was shaped in several focus areas. The first focus area is on overall health of the client. Domain areas include head injuries, major medical illnesses, physical disabilities, blindness, deafness, learning disabilities, and developmental disabilities. This series is 19 questions long, and is asked in a yes/no format (“Have you ever hurt your head, or had a head injury that resulted in being knocked out?”). If a yes response is obtained, probing for further information on the condition occurs and is documented.

The second component of the clinical assessment tool covers current emotional state, moods, and thinking patterns. In this component, the ASI was used and modified with a Likert scale response pattern. Questions cover areas such as serious depression, serious anxiety, hallucinations, trouble controlling violent behavior and serious suicide thoughts. Questions follow the format of “In the past thirty days, have you experienced serious depression? None, Some of the time, A lot of the time, and Most of the time.” Additional yes/no questions cover suicide attempts and medicines prescribed for emotional problems.

The third component covers functionality items for the COFD clients. Questionnaire areas include difficulty managing day to day life, handling household responsibilities, retaining/ obtaining employment, school, leisure time, and developing independence. The response categories for this component are quite lengthy, with eight potential responses (five known to the client with Don’t

know, Not Applicable and Refused known only to the interviewer and used as needed). The question length is also long, and for this reason individual cluster sites were allowed to use language appropriate to their unique clients in this tool component. For example, sites are allowed to ask if the client has difficulty in the area of household responsibilities and to use language including shopping, cooking, laundry, keeping your room clean, other chores, etc.

Component four covers the client's beliefs on drug use, primarily why the client thinks they are using drugs. Specific areas including using to relieve depression, to relieve long term pain, to relieve hallucinations, to feel better about themselves, to relieve cravings, to relieve stress, to self medicate, to gain pleasure, and to win approval from other individuals. A Likert scale is used for answering these components as well, consisting of responses such as Not at all, Some of the time, A lot of the time and Most of the time. This is the final component of the tool.

The cluster tool is implemented on the GPRA timelines of intake, six month and twelve month interview cycles. Retention rates of participants at the six and twelve month timelines are expected to be at eighty percent under CSAT guidelines. This has proven to be a difficult benchmark for many grantees, however, having a retention rate benchmark at this level has provided for significantly higher follow up rates than expected (i.e. sites are focusing on getting follow up interviews to satisfy CSAT as well as simply the COFD cluster). The instrument is implemented in a face to face format, with an evaluator or interviewer asking the respondent the questions on the tool. Some sites have respondents complete questions using a paper/ pencil format, creating variance in how the tool is completed across sites.

The tool was piloted across several sites, and implemented across all grantee sites in July of 2001 (COFD grantees, 2001). Implementation of the clinical tool takes approximately twenty minutes per client. Pilot testing by various COFD member sites resulted in language changes and some response item changes as well as adding shape to the response set which was used to shape the eventual database.

Issues faced in the implementation of the COFD instrument were variances in cluster site staff training and experience (primarily in the staff that would be implementing the tool), the treatment population's potential difficulty expressing symptoms, and the wide variation in the population of individuals who would be screened with the tool itself. Overall management of the instrument and the research process over so many sites was an area of large concern to cluster members. The COFD cluster has learned what Stouthamer-Loeber concisely states. "There is a pressing need for continuous attention to direction, centralization, and the coordination of personnel and tasks" (pg. 2).

Staff training on how to use the COFD tool was handled on an individual site level, with new grantees receiving centralized training in a "train the trainer" model. New grantees are offered a one or two day training, usually in the Washington DC metro area, and are asked to send one or two representatives from the site. At this training, the use of the COFD instrument is covered. One area of training is the potential difficulty of measuring substance use and mental/physical disorders in the treatment population. The issue of the treatment population's difficulty expressing symptoms is captured by R. Peters and M. Bartoi. "Screening, diagnosis and assessment of co-occurring mental health and substance use disorders are often rendered more difficult by symptom interactions between these disorders, including symptom 'mimicking', 'masking', 'precipitation' and 'exacerbation'. Understanding symptom interaction is important in order to provide an accurate description of current disorders" (pg. 19). Additionally complicating the tool implementation was that staff of various programs had various levels of training and familiarity with recognizing co occurring disorders. The issue of how to understand clients and variance in answers was primarily handled through the use of site specific language and prompts, after group cluster discussion.

Training staff members on when to implement the instrument was a discussion point of the COFD cluster. Following standard evaluation/ assessment recommendations, the tool is not implemented when the client is obviously high or otherwise impaired (a vocational hazard in some substance use/abuse treatment

facilities). The interviewer or researcher will re-contact the client at a later time to complete the interview (usually measured in hours as opposed to days). Interviewers are also trained on the importance of creating a good “interview zone” for the client, which includes a brief overview, prior to the interview, which covers confidentiality of information, the purpose of the interview/ survey administration and other site specific issues as needed. Keeping the interview area or room quiet and relatively “hidden” or secluded from the rest of the treatment site is also covered. This is to allow for higher levels of trust between the interview subject and the interviewer.

Data entry of the information gathered using the COFD instrument is done on a quarterly basis. The COFD cluster created a survey instrument, complete with response codes and skips, and this instrument was integrated into the larger TCE database used by all TCE grantees. The database was created by the technical assistance provider for the TCE grants (ACS/ Birch and Davis). Grantees submit data quarterly, and the submitted data undergoes some data cleaning at the point of data submission by grantee. After cleaning, the data is stripped of client identifiers and then re-released back to members of the various clusters. Cluster members are then allowed to do analysis on the stripped data, usually with some qualifications depending on the cluster. The quality of data entry varies across sites, and as a result the importance of high quality data entry is of high concern to COFD members. Data quality is often a discussion point at COFD cluster meetings, and the importance of quality data entry is often covered.

Bibliography

Bohrnstedt, George (1983). Measurement in *Handbook of Survey Research*. Academic Press, Inc.

Center for Substance Abuse Treatment Targeted Capacity Expansion, TCE HIV, and HIV Outreach Grants Program Cluster Group Fact Sheet. Last updated on 12-11-2000.

Center for Substance Abuse Treatment, Targeted Capacity Expansion, COFD Vision, Mission and Activities Overview Sheet. Internal document. Updated in 2000.

Co Occurring Grantees. Update from CSAT's Co Occurring and Other Functional Disorders Cluster Group. In *The Dual Diagnosis Network Quarterly Publication* (Summer 2001). Published by the Dual Diagnosis Recovery Network, Nashville, TN.

Dillman, Don (1994). Writing Good Questions in *How to Conduct your Own Survey*.

Kessler, Ronald, Christopher Nelson, Katherine McGonagle, Mark Edlund, Richard Frank, and Philip Leaf (January 1996). The Epidemiology of Co Occurring Addictive and Mental Disorders: Implications for Prevention and Service Utilization. In *American Journal of Orthopsychiatry* (Volume 66 Number 1).

Oregon Office of Alcohol and Drug Abuse Program (now Oregon Office of Mental Health and Addiction Services). White Paper on Collaboration between the State Office for Alcohol and Drug Abuse Programs and the MHDDS Division's Office of Mental Health Services (1998). OMHAS, Salem, Oregon.

Pepper, Bert and Edward Hendrickson. (1996). Working with Seriously Mentally Ill Substance Abusers. In Community Corrections in America: New Directions and Sounder Investments for Persons with Mental Illness and Co disorders. National Coalition for Mental and Substance Abuse Health Care in the Justice System, Seattle, WA.

RachBeisel, Jill, Jack Scott and Lisa Dixon. Co Occurring Severe Mental Illness and Substance Use Disorders: A Review of Recent Research (November 1999). In *Psychiatric Services* (Volume 50 Number 11).

Rehabilitation Research and Training Center on Drugs and Disability. Oregon: Substance Use Disability (SUD) Among Person with Co Existing Disabilities (2001). Available from the RRTC, Wright State University, Dayton Ohio.

Peters, Roger and Marla Bartoi (1997). Screening and Assessment of Co Occurring Disorders in the Justice System. GAINS Center, University of South Florida: Florida. Available from the GAINS Center, Delmar, New York.

Primm, Annelle (Winter 2000). Assessment and Treatment of Patients with Co Occurring Psychiatric and Substance Abuse Disorders. In The Dual Diagnosis Network Quarterly Publication. Published by the Dual Diagnosis Recovery Network, Nashville, TN.

Stouthamer-Loeber, Magda (1995). Data Collection and Management. Applied Social Research Methods Series, Volume 39. Sage Publications, Newbury Park, CA.

Turner, Charles, Judith Lessler and Joseph Gfroerer. (1992). Future Directions for Research and Practice in *Survey Measurements of Drug Use: Methodological Studies*. US Department of Health and Human Services: Public Health Service: Alcohol, Drug Abuse and Mental Health Administration. DHHS ADM 92-1929. Rockville, MD.

Wholey, Joseph (1991). Evaluation for Program Improvement in *Foundations of Program Evaluation: Theories of Practice* (Shadish, Cook and Leviton Eds.). Sage Publications: Newbury Park, CA.